

New Fresno Courthouse Project

Draft Environmental Impact Report

Prepared for:
Judicial Council of California

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NEW FRESNO COURTHOUSE

Draft Environmental Impact Report

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Acronyms and Abbreviations

2022 Scoping Plan	Final 2022 Scoping Plan for Achieving Carbon Neutrality
µg/m^3	Micrograms Per Cubic Meter
AB	Assembly Bill
ACBMs	Asbestos-Containing Building Materials
ACC II	Advanced Clean Cars II
ACM	Asbestos-Containing Materials
ADT	Average Daily Trips
AERMOD	AMS/EPA Regulatory Model
AF	Acre Feet
AHERA	Asbestos Hazard Emergency Response Act
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ASCE	American Society of Civil Engineers
ASFs	Age sensitivity factors
ASR	Archaeological Resources Study Report
Basin Plan	Water Quality Control Plan
BAU	Business as Usual
BMPs	Best Management Practices
BRT	Bus Rapid Transit
BSG	Below Site Grade
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CBSC	California Building Standards Commission
CC	Cumulatively Considerable
CCAA	California Clean Air Act
CCAP	Climate Change Action Plan
CCR	California Code of Regulations
CDC	Citywide Development Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERS	California Environmental Reporting System
CESA	California Endangered Species Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CH4	Methane
City	City of Fresno
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
County	Fresno County
CO_2	Carbon Dioxide

CO_2e	Carbon Dioxide Equivalents
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CY	Cubic Yards
dB	Decibel
dB(A)	A-Weighted Decibel
DDW	Division of Drinking Water
DOC	California Department of Conservation
DPM	Diesel Particulate Matter
DRRP	Diesel Risk Reduction Plan
DTG	Downtown General
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EV	Electric Vehicle
ºF	Degrees Fahrenheit
Facilities Standards	California Trial Court Facilities Standards
FAX	Fresno Area Express
FCAA	Federal Clean Air Act
FCSP	Fulton Corridor Specific Plan
FCOG	Fresno Council of Governments
FCRTA	Fresno County Rural Transit Agency
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FFD	Fresno Fire Department
FGC	California Fish and Game Code
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FMFCD	Fresno Metropolitan Flood Control District
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GHG	Greenhouse Gases
GPCD	Gallons per Capita per Day
GPR	General Plan Review
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWh	Gigawatt Hours
H_2S	Hydrogen Sulfide
HASP	Health and Safety Plan
HFC	Hydrofluorocarbons
HMP	2024 Fresno County Multi-Jurisdictional Hazard Mitigation Plan
HRA	Health Risk Assessment
HREC	Historical Recognized Environmental Condition
HRER	Historic Resources Evaluation Report
IBC	International Building Code
IPaC	Information for Planning and Consultation
Judicial Council	Judicial Council of California
L/kg-day	Liters per kilogram of body weight per day
LBP	Lead-based Paint

LCI	Land Use and Climate Innovation
Ldn	Day-Night Level
LED	Light-emitting diode
LEED	Leadership in Energy and Environmental Design
Leq	Equivalent Sound Level
LEV	Low-Emission Vehicle
Lmax	Maximum Sound Level
Lmin	Minimum Sound Level
LRA	Local Responsibility Area
LTS	Less Than Significant
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
mg/m^3	Milligrams per cubic meter
MMRP	Mitigation Monitoring and Reporting Program
MRZ	Mineral Resource Zone
$MMTCO_2e$	Million Metric Tons of Carbon Dioxide Equivalents
$MTCO_2e$	Metric Tons of Carbon Dioxide Equivalents
N2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	California Native American Heritage Commission
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NF_3	Nitrogen Trifluoride
NFPA	National Fire Prevention Association
NI	No Impact
NMNH	National Museum of Natural History at the Smithsonian
NOP	Notice of Preparation
NOx	Oxides of Nitrogen
NO_2	Nitrogen Dioxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NZEV	Near-Zero-Emission Vehicle
O_3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
OHP	California Office of Historic Preservation
OSHA	Occupational Safety and Health Administration
Pb	Lead
PCB	Polychlorinated Biphenyls
PF	Public Facilities and Services
PFCs	Perfluorocarbons
PG&E	Pacific Gas & Electric
Phase I ESA	Phase I Environmental Site Assessment
Phase II ESA	Phase II Environmental Site Assessment
PM	Particulate Matter
$PM_{2.5}$	Fine particulate matter; particulate matter 2.5 microns or smaller
PM_{10}	Particulate matter; particulate matter 10 microns or smaller
ppb	Parts per billion
ppm	Parts per million
PPV	Peak Particle Velocity
PS	Potentially Significant
PRC	California Public Resources Code

Project	New Fresno County Courthouse Project
RCNM	Roadway Construction Noise Model
REC	Recognized Environmental Condition
ROG	Reactive Organic Gases
RPS	Renewable Portfolio Standard
RSL	Regional Screening Level
RTIP	Regional Transportation Improvement Program
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
RWRF	Regional Wastewater Reclamation Facility
SB	Senate Bill
SF	Square Feet / Square Foot
SF_6	Sulfur Hexafluoride
SGMA	Sustainable Groundwater Management Act
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SIP	State Implementation Plan
SLCP	Short-Lived Climate Pollutants
SLF	Sacred Lands File
SO_2	Sulfur Dioxide
SO_4	Sulfates
SPL	Sound Pressure Level
SR	State Route
SSJVIC	Southern San Joaquin Vallely Information Center
STLC	Soluble Threshold Limit Concentration
SU	Significant and Unavoidable
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TMP	Transportation Management Plan
TPH	Total Petroleum Hydrocarbons
TTLC	Threshold Limit Concentration
UCMP	University of California Museum of Paleontology
USACE	United State Army Corps of Engineers
USC	United States Code
USCB	United States Census Bureau
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
VDE	Visible Dust Emissions
VMT	Vehicles Miles Traveled
VOC	Volatile Organic Compounds
WOTUS	Waters of the United States
ZEV	Zero Emission Vehicle

Executive Summary

Introduction

This Environmental Impact Report (EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to inform decision makers, representatives of affected and responsible agencies, the public, and other interested parties of the potential environmental effects that may result from implementation of the proposed New Fresno County Courthouse Project (Project). This document is prepared in conformance with CEQA (California Public Resources Code [PRC] §21000, et seq.) and the CEQA Guidelines (Title 14, California Code of Regulations [CCR], §15000, et seq.).

As required by CEQA Guidelines, Title 14, CCR §15123(a), "[a]n EIR shall contain a brief summary of the proposed action and its consequences." This executive summary includes (1) a summary description of the Project, (2) a synopsis of environmental impacts (including significant and unavoidable impacts; if any) and recommended mitigation measures (**Table ES-1**), (3) an identification of the alternatives evaluated, (4) a discussion of the areas of controversy associated with the Project, and (5) a summary of issues to be resolved including the choice among alternatives and whether or how to mitigate significant effects.

Project Description

The Project would consolidate Fresno County Superior Court operations from three downtown locations (the Fresno County Courthouse, the North Annex Jail court facilities, and the "M" Street Courthouse) into a single new courthouse within Courthouse Park at 2200 Fresno Street in the City of Fresno (City). The proposed courthouse building would have approximately 413,000 gross square feet across up to 11 stories above grade and one basement level, with 36 courtrooms and associated support spaces including judicial chambers, clerks' offices, jury assembly and deliberation rooms, temporary in-custody holding, administrative offices, and a loading dock.

The Project site encompasses approximately 2.09 acres within Courthouse Park (Assessor's Parcel Number 466-160-01T). Surrounding uses include government offices and justice facilities, such as the Fresno County Jail and the Public Defender. Secure basement-level parking would be provided for judicial officers only. Public and staff parking are not included in the Project scope; visitors would use existing municipal parking facilities and metered on-street spaces. A sallyport and tunnel connection would facilitate secure in-custody transport to and from the jail across Fresno Street.

Demolition would remove the Fresno County Sheriff Administration Building and the South Annex Jail within Courthouse Park. Construction would be delivered through design-build, so exact plans are not available at the time of this EIR. Conservative estimates are used to accommodate the design-build process.

Project Objective

The Project seeks to:

- Remedy space shortfalls and functional deficiencies in existing Fresno County court facilities.
- Provide contemporary fire, life safety, and accessibility features and separated circulation for the public, judicial officers and staff, and in-custody defendants.
- Consolidate dispersed court operations into a single location capable of serving current needs and accommodating future judgeships.
- Deliver right-sized facilities and modern building systems consistent with the Judicial Council of California's (Judicial Council) facilities guidance and CEQA objectives for clear project purpose.

Required Lead Agency Approvals

As the CEQA lead agency, the Judicial Council has the responsibility for, among other things, preparing and certifying an EIR that addresses the potential environmental impacts of the Project; identifying feasible mitigation measures that could avoid or minimize significant environmental impacts; evaluating a reasonable range of feasible alternatives; adopting findings with regard to each significant environmental impact; providing a statement of overriding considerations for all environmental impacts that cannot be mitigated to a less than significant level; and adopting a Mitigation Monitoring and Reporting Program to ensure that all required mitigation measures are implemented.

The Judicial Council may approve the Project only after consideration and certification of the Final EIR and making appropriate findings. Because the Judicial Council is the lead agency and is acting as the Judicial Branch of state government, local government land use planning and zoning regulations would not apply to the Project. However, the Judicial Council has considered local policies and guidelines in the preparation of this EIR.

Alternatives to the Project

CEQA requires an evaluation of project alternatives based on the comparative merits of "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives" (CEQA Guidelines, Title 14, CCR §15126.6(a)). Thus, the focus of the alternatives analysis should be on alternatives that "could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more significant effects" (CEQA Guidelines, Title 14 CCR §15126.6(c)). "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA Guidelines, Title 14, CCR §15364) . The analysis must also address the "no project" alternative (CEQA Guidelines, Title 14, CCR §15126.6(e)). The CEQA Guidelines further state that the range of alternatives is governed by the "rule of reason," which requires consideration of only those alternatives necessary to permit a reasoned choice and to

foster informed decision-making and public participation (CEQA Guidelines, Title 14, CCR §15126.6(f)). This EIR considers a range of alternatives to the Project in accordance with CEQA Guidelines, Title 14, CCR §15126.6.

1. **No Project Alternative** - Under the No Project Alternative, the Judicial Council would continue to lease and operate from existing Fresno County Courthouse facilities, including the main courthouse, the 'M' Street Courthouse, and the court space within the North Annex Jail. This alternative would not involve demolition or new construction. The existing buildings would continue to house court operations, despite ongoing deficiencies related to seismic safety, fire and life safety, accessibility, and security. Court operations would remain dispersed across multiple buildings.

2. **Existing Courthouse Rehabilitation Alternative -** This alternative was considered but rejected. It involves renovating or retrofitting the three existing facilities (Fresno County Courthouse, north Annex Jail, and M Street Courthouse) located at 1100 Van Ness Avenue, Fresno, CA, 93724 and 2280 Fresno Street, Fresno, CA, 93721. The work would upgrade both exterior and interior components to remove environmental hazards such as ACMs, achieve LEED Silver sustainability standards, and bring each building into compliance with the functional and security requirements of a modern courthouse.

3. **Alternative Site Location Site 1B (Courthouse Park at Van Ness Avenue)** - This alternative proposes construction of a new 36-courtroom, approximately 413,000-square-foot courthouse within Courthouse Park at the northeast corner of Van Ness Avenue and Fresno Street. Site 1B is approximately 2.1 acres and currently vacant, providing sufficient space for the proposed building and required setbacks. The location is within one to two blocks of the Fresno County Jail, District Attorney, and Public Defender offices, and adjacent to existing governmental buildings, allowing convenient access for court-related operations. Demolition would also remove the Fresno County Sheriff Administration Building and the South Annex Jail within Courthouse Park. The site has existing utility infrastructure and minimal need for offsite improvements. The Project would be consistent with the "Downtown General" land use designation and support consolidation of dispersed court functions within the downtown civic area.

4. **Alternative Site Location Site 3 (Eaton Plaza)** - This alternative would locate the new 36-courtroom, approximately 413,000-square-foot courthouse on approximately 2.1 acres within Eaton Plaza, east of the intersection of N Street and Fresno Street. The site includes the plaza, amphitheater, and associated parking areas. The location offers high public visibility and accessibility within downtown Fresno and is within walking distance of other judicial and governmental facilities. This location provides existing utilities, although stormwater infrastructure upgrades may be required to manage additional runoff. This alternative has the potential for cultural resource impacts due to its proximity to a known historic resource the "Old Water Tank". This alternative would conflict with City planning objectives promoting preservation of civic open space.

Environmentally Superior Alternative

CEQA requires that an EIR identify the environmentally superior alternative(s) of a project other than the "no project" alternative (CEQA Guidelines, Title 14, CCR §15126.6(e)(2)). As stated at the beginning of this chapter, the purpose of this alternatives analysis is to consider a reasonable range of alternatives that could feasibly attain most of the basic project objectives and avoid or substantially lessen significant program impacts. From the alternatives evaluated within this EIR, the environmentally superior alternative other than the "No Project" would be the Project . The Project would meet more objectives than Alternative Site Location 1B (Van Ness Avenue) while Alternative Site Location 3 (Eaton Plaza), would have the potential for greater impacts associated with cultural resources based on the proximity of a known historic resource, the "Old Water Tank," potential upgrades to utilities, and conflicts with the local government open space planning objectives.

Summary of Impacts and Mitigation Measures

A summary of the potential environmental impacts of the Project and the measures identified to mitigate these impacts is provided in **Table ES-1** below for each topic addressed within this EIR. The table has been arranged in four columns: the identified impact under each EIR issue area; the level of significance prior to implementation of mitigation (where the levels may be Less than Significant [LTS], No Impact [NI], Potentially Significant [PS], Significant and Unavoidable [SU], and Cumulatively Considerable [CC]); mitigation measures that would avoid or reduce the level of impact; and the level of significance after implementation of mitigation measures.

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.1 Aesthetics			
Have a substantial adverse effect on a scenic vista?	NI	None Required	NI
Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	NI	None Required	NI
In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	LTS	None Required	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	LTS	None Required	LTS
3.2 Agriculture and Forestry Resources			
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	NI	None Required	NI
Conflict with existing zoning for agricultural use, or a Williamson Act contract?	NI	None Required	NI
Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC §12220(g)), timberland (as defined by PRC §4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	NI	None Required	NI
Result in the loss of forest land or conversion of forest land to non-forest use?	NI	None Required	NI
Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	NI	None Required	NI
3.3 Air Quality			
Conflict with or obstruct implementation of the applicable air quality plan?	LTS	None Required	LTS
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	LTS	None Required	LTS
Expose sensitive receptors to substantial pollutant concentrations?	LTS	None Required	LTS
Result in other emissions (such as those leading to odors) adversely	LTS	None Required	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
affecting a substantial number of people?			
3.4 Biological Resources			
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	PS	**BIO-1: Western Mastiff Bat Survey.** No less than 6 months prior to Project initiation, a qualified biologist with at least 5 years' experience conducting surveys or assessments of bat habitat shall conduct a survey and look for evidence of bat use in buildings and trees, as access allows. If evidence of bat use is observed, an evening survey using bat acoustic detectors will be conducted to determine whether bats are roosting on the site, the species, and the location of the roost. If an active roost is detected, construction activities will be modified or revised to avoid disturbing the roost. If disturbance of the roost cannot be avoided, removal or disturbance of the roost shall occur outside of the maternity roost season in accordance with a bat mitigation plan developed by the qualified biologist. The bat mitigation plan shall include methods for humane bat exclusion and no-disturbance buffers, as needed to accomplish the removal or disturbance of the roost. **BIO-2: Nesting Bird Survey.** If demolition and/or construction (including any tree removal) occurs during the typical nesting season (January 31 through August 31) a pre-construction nesting bird survey shall be conducted to document any nests within the vicinity of the Project area (within 250 feet of the Project area for nesting songbirds and within 500 feet of the Project area for nesting raptors). Nesting bird surveys will be performed not more than 7 days prior to the start of Project demolition and/or construction activities. If an active nest is observed, a protective buffer will be established around the nest to avoid any disturbances. During any vegetation removal, if an active nest is identified within the Project area, a biological monitor shall monitor the nest during Project activities to ensure there are no disturbances to the nesting bird and prevent nest failure.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	NI	None Required	NI
Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	NI	None Required	NI
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	NI	None Required	NI
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	NI	None Required	NI
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	NI	None Required	NI
3.5 Cultural Resources			
Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	LTS	None Required	LTS
Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	PS	**CUL-1: Retention of a qualified archaeologist.** A qualified archaeologist shall be retained to implement a monitoring and recovery program during ground-disturbing activity associated with the Project , including grubbing, grading, and excavation activities, where the qualified archaeologist has determined it is necessary. The qualified archaeologist shall meet the Secretary of Interior's Professional Standards for prehistoric and historic archaeology.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Construction Monitoring. An archaeological monitor, working under the supervision of the qualified archaeologist shall observe ground disturbing activities associated with the Project , including grading, and excavation activities where deemed appropriate by the qualified archaeologist. The monitor shall be authorized to halt construction, if necessary, in the immediate area where buried cultural remains are encountered. **Preconstruction Briefing.** Construction personnel shall be briefed by the archaeological monitor or qualified archaeologist on procedures to be followed in the event that unique archaeological resources, historical resources, or human remains are encountered during construction. The qualified archaeologist shall be required to provide a telephone number where they can be reached by the construction contractor, as necessary. **Monitoring Report.** A complete set of daily monitoring logs shall be kept on-site throughout the earth moving activities. Within 90 days of the completion of archaeological monitoring, a monitoring report or memo shall be submitted to the Judicial Council and filed with CCIC. **CUL-2: Human Burials Encountered During Construction.** In the event of an accidental discovery or recognition of human remains during Project construction activities, PRC §5097.98 shall be followed, and the following steps shall be taken: 1. There shall be no further excavation or disturbance of the specific location or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains are Native America, the coroner shall contact the NAHC within	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		24 hours, and the NAHC shall identify the person or persons it believed to be the "most likely descendant" of the deceased Native America. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in PRC §5097.98, or 2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the Project area in a location not subject to further subsurface disturbance: - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission; - The descendent identified fails to make a recommendation; or - The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation of the NAHC fails to provide measures acceptable to the landowner.	
Disturb any human remains, including those interred outside of dedicated cemeteries?	NI	None Required	NI
3.6 Energy			
Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	LTS	None Required	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	LTS	None Required	LTS
3.7 Geology and Soils			
Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	LTS	None Required	LTS
Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	LTS	None Required	LTS
Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	LTS	None Required	LTS
Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	LTS	None Required	LTS
Result in substantial soil erosion or the loss of topsoil?	LTS	None Required	LTS
Located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	LTS	None Required	LTS
Located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	LTS	None Required	LTS
Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not	NI	None Required	NI

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
available for the disposal of wastewater?			
Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	PS	**PALEO-1: Paleontological Mitigation Plan.** A qualified paleontologist meeting professional standards as defined by Murphey et al. (2019) will be retained as the designated Project Paleontologist to oversee a paleontological mitigation program. The Project Paleontologist should draft and oversee the implementation of a Paleontological Mitigation Plan that reviews detailed Project plans and establishes monitoring plans that provide for paleontological monitoring of earthwork and ground-disturbing activities into undisturbed geologic units with high paleontological potential to be conducted by a paleontological monitor meeting industry standards (Murphey et al. 2019). This plan should include provisions for worker training, depths and locations for monitoring, monitoring procedures, a fossil discovery plan in the event a fossil is found during construction, including a plan for assessment and treatment, and requirements for final reporting of the results of the mitigation program. The plan should include a review of geotechnical data, if available, to refine the depth at which Pleistocene-aged sediments are present. **PALEO-2: Paleontological Monitoring.** Full-time paleontological monitoring should be implemented once excavations exceed the depth of previously disturbed sediments or artificial fill across the Project Site. Spot check monitoring may be conducted initially, until the depth of previous disturbance is known. The Project Paleontologist may alter the frequency or depth of monitoring based on subsurface conditions. **PALEO-3: Worker's Environmental Awareness Program.** The Project Paleontologist should develop a Worker's Environmental Awareness Program training outlining the requirements and procedures if inadvertent discovery of fossils is identified during construction, to be delivered by the paleontological monitor.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		This training shall be provided once to each worker involved in ground-disturbing activities before they begin work and shall be documented in training records submitted to the Judicial Council. **PALEO-4: Paleontological Resources Encountered During Construction.** In the event fossils are encountered during construction activities, work should stop in a safe radius of the finds, usually 100 feet, while the Paleontological Technician documents the fossils. The paleontological Principal Investigator shall assess the fossils. Should the fossils meet criteria of scientific importance to be considered a unique paleontological resource, they should be collected and curated in an accredited repository along with associated data and curation fees.	
3.8 Greenhouse Gas			
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	PS	**GHG-1: All Electric Development.** The Judicial Council shall not include natural gas infrastructure to or within the Project site and Project operations shall not use natural gas. **GHG-2: TDM Measures.** The Judicial Council shall include the following TDM measures: • Provide cyclists end-of-trip facilities (i.e., showers, lockers, and similar features) in the project design and operational maintenance. • Provide transit-oriented design. • Implement commute trip reduction marketing. • Provide ridesharing program.	SU Implementation of the Mitigation Measures GHG-1 and GHG-2 would reduce long term operational GHG emissions below the 2030 GHG efficiency threshold, however, GHG emissions would remain above the 2050 GHG efficiency threshold.
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	LTS	None Required	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.9 Hazards and Hazardous Materials			
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	PS	**HAZ-1: Hazardous Materials Surveys.** Prior to demolition, conduct an asbestos and lead survey to identify and quantify potential hazardous materials. The survey is to be completed by a licensed hazardous materials specialist. Survey results should be used for the development of a Hazardous Materials Management Plan (refer to HAZ-2 below). **HAZ-2: Hazardous Materials Management Plan.** Structures to be demolished containing asbestos and lead paint shall be appropriately handled prior to demolition at the Project site and disposed in accordance with a Hazardous Materials Management Plan prepared by the contractor and submitted to the Judicial Council for review and approval prior to initiating demolition activities. The Hazardous Materials Management Plan shall be developed using results from the survey from Haz-1 (above) and in accordance with applicable law and best management practices for the handling and disposal of hazardous materials. Prior to demolition of the Project site hazardous materials or other universal wastes onsite shall be inventoried, packaged, removed, and disposed of in accordance with the Hazardous Materials Management Plan. Hazardous materials used during construction shall be limited to the quantities required for construction and shall be stored and handled in accordance with regulatory requirements. Utility trucks and refueling trucks operating onsite shall have a spill kit onboard at all times. Small spills of petroleum products or other hazardous materials during construction operations shall be reported to the construction supervisor and a spill response form completed with a description of the type and quantity of the spill accompanied by photographs and a description of the disposition of the spill material. Hazardous spill material shall be disposed according to regulatory requirements. In the event of a large spill	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		of hazardous materials equal to or above reportable quantities federal, state, and applicable local reporting requirements shall be followed. **HAZ-3: Site-specific Health and Safety Plan (HASP).** The contractor shall prepare a HASP to protect the health and safety of construction workers and the environment. The HASP shall be prepared in accordance with Title 8 of the CCR State and federal OSHA regulations (29 CFR §1910.120). The HASP shall be made available to construction workers for review prior to starting work at the Project site. The HASP shall identify potential hazards (including stained or odorous soils at any location where earth-moving activities would occur within the proposed development area), chemicals of concern (e.g., VOCs, heavy metals, and gases), personal protective equipment and devices, decontamination procedures, the need for personal or area monitoring, and emergency response procedures. The HASP shall provide direction in the event stained or odorous soil is encountered onsite during construction activities. The HASP shall also require notification of the appropriate federal, state, and local agencies if evidence of previously undiscovered soil contamination (e.g., stained soil, odorous groundwater, or groundwater with a surface sheen). Any contaminated areas shall be remediated in accordance with recommendations made by the RWQCB, DTSC, designated CUPA, and/or other appropriate federal or state regulatory agencies.	
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	PS	Implement HAZ-1. HAZ-2, and HAZ-3	LTS
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	LTS	None Required	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?	PS	Implement HAZ-1. HAZ-2, and HAZ-3	LTS
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	LTS	None Required	LTS
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	PS	Implement TRA-1	LTS
Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	NI	None Required	NI
3.10 Hydrology and Water Quality			
Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	LTS	None Required	LTS
Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	LTS	None Required	LTS
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- of off-site?	LTS	None Required	LTS
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a	LTS	None Required	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
manner which would result in flooding on- or offsite?			
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	LTS	None Required	LTS
Substantially alter the existing drainage pattern of the site or area, including through the alternation of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flows?	NI	None Required	NI
In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	NI	None Required	NI
Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	LTS	None Required	LTS
3.11 Land Use and Planning			
Physically divide an established community?	NI	None Required	NI
Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	NI	None Required	NI
3.12 Mineral Resources			
Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	NI	None Required	NI
Result in the loss of availability of a locally important mineral resource recovery site delineated on a local	NI	None Required	NI

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
general plan, specific plan or other land use plan?			
3.13 Noise			
Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	LTS	None Required	LTS
Generation of excessive groundborne vibration or groundborne noise levels?	LTS	None Required	LTS
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	LTS	None Required	LTS
3.14 Population and Housing			
Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	NI	None Required	NI
Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	NI	None Required	NI
3.15 Public Services			
Result in substantial adverse physical impacts associated with the provision of new or physical altered governmental facilities, need for new or physical altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives related to fire and emergency services?	NI	None Required	NI

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives related to police services?	NI	None Required	NI
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times, or other performance objectives related to schools?	NI	None Required	NI
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives related to parks.	NI	None Required	NI
Result in substantial adverse physical impacts associated with the provision of new or physical altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives related to other public services?	NI	None Required	NI
3.16 Recreation			
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	LTS	None Required	LTS
Does the project include recreational facilities or require the	NI	None Required	NI

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			
3.17 Transportation			
Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	LTS	None Required	LTS
Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	LTS	None Required	LTS
Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	PS	**TRA-1: Transportation Management Plan.** A TMP will be developed to address temporary construction-phase circulation issues. **TRA-2: Driveway Design.** Prior to issuance of building permits, the Applicant shall redesign the underground parking driveway entrance on M Street to comply with applicable City engineering standards and sight distance and vehicular safety requirements, as determined by the City Engineer. The redesign shall ensure adequate vehicle and pedestrian visibility and safe ingress and egress operations. Final design plans shall be reviewed and approved by the City prior to occupancy.	LTS
Result in inadequate emergency access?	LTS	None Required	LTS
3.18 Tribal Cultural Resources			
Cause a substantial adverse change in the significance of a TCR, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe?	NI	None Required	NI
3.19 Utilities and Service Systems			
Require or result in the relocation or construction of new or expanded water, wastewater treatment or	LTS	None Required	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			
Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	LTS	None Required	LTS
Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	LTS	None Required	LTS
Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	LTS	None Required	LTS
Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	LTS	None Required	LTS
3.20 Wildfire			
Substantially impair an adopted emergency response plan or emergency evacuation plan?	NI	None Required	NI
Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	NI	None Required	NI
Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	NI	None Required	NI
Expose people or structures to significant risks, including downslope or downstream flooding	NI	None Required	NI

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			

CC = Cumulatively Considerable; LTS = Less than Significant; NI = No Impact; PS = Potentially Significant; SU = Significant and Unavoidable

1 Introduction

This EIR for the New Fresno County Courthouse Project (Project) has been prepared in accordance with and complies with the California Environmental Quality Act (CEQA) of 1970 as amended (PRC §21000 et seq.) and CEQA Guidelines (CCR, Title 14, §15000 et seq.). Per PRC §21067 of CEQA and CEQA Guidelines, CCR, Title 14, §15367 and 15050 through 15053, the Judicial Council is the lead agency under whose authority this document has been prepared. As an informational document, this EIR is intended for use by the Judicial Council decision makers and members of the general public in evaluating the potential environmental effects of the Project.

This Project EIR provides decision makers and the public with a comprehensive disclosure of the Project's potential environmental effects before any approval action is taken. The document serves as the formal record of environmental analysis for the Judicial Council and supports transparent, informed consideration of the Project. Preparation and circulation of this EIR follow CEQA and the CEQA Guidelines. As the lead agency, the Judicial Council will certify the EIR prior to any decision on the Project. If significant impacts remain after application of feasible mitigation, the Judicial Council would weigh Project benefits against unavoidable effects and, where applicable, adopt findings and a statement of overriding considerations.

1.1 Project Overview

The Project would consolidate Fresno County Superior Court operations from multiple downtown locations into a modern, secure courthouse constructed within Courthouse Park at 2200 Fresno Street. The program anticipates approximately 413,000 gross square feet (SF) distributed across up to 11 stories above grade and one basement level, with 36 courtrooms and associated support spaces such as judicial chambers, clerks' offices, jury assembly and deliberation rooms, temporary in-custody holding, administrative offices, and a loading dock. Secure parking for judicial officers would be accommodated in the basement level.

A sallyport and tunnel connection across Fresno Street would provide secure in-custody transport between the courthouse and the Fresno County Jail. Public and staff parking are not included in the Project scope; visitors would use existing municipal facilities and metered spaces in the vicinity. Demolition activities would remove the Sheriff Administration Building and the South Annex Jail within Courthouse Park to make way for the new courthouse footprint. Construction staging would occur within the Project site to the extent feasible; if additional laydown area is necessary, nearby options would be evaluated consistent with the site constraints and transit infrastructure.

Project objectives focus on remedying space shortfalls and functional deficiencies in existing facilities; meeting contemporary fire, life safety, and accessibility standards; providing separated circulation for the public, judicial officers and staff, and in-custody defendants; and consolidating dispersed operations into a single, efficient location capable of accommodating future judgeships.

1.2 Intended Uses and Purpose of the EIR

An EIR is an informational document used by a lead agency (in this case, the Judicial Council) when considering approval of a project. The purpose of an EIR is to provide public agencies and members of the general public with detailed information concerning the environmental effects associated with the implementation of a project, prior to taking action on a project.

An EIR should analyze the environmental consequences of a project, identify ways to reduce or avoid potential environmental effects resulting from the project, and identify alternatives to the Project that are capable of avoiding or reducing impacts. CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority. This EIR provides information to be used in the planning and decision-making process. It is not the purpose of an EIR to recommend approval or denial of a project.

Prior to approval of the Project, the Judicial Council, as lead agency and the decision-making entity, is required to certify that the EIR has been completed in compliance with CEQA, that the information in this EIR has been considered, and that the EIR reflects the independent judgment of the Judicial Council. CEQA requires decision makers to balance the benefits of a project against its unavoidable environmental consequences. If environmental impacts are identified as significant and unavoidable, the lead agency may still approve the project if it finds that social, economic, legal, technological or other benefits outweigh the unavoidable impacts. The EIR will be used by the Judicial Council during its consideration and potential approval of the Project.

In addition, the Judicial Council as lead agency must adopt a Mitigation Monitoring and Reporting Program (MMRP) describing the mitigation measures that will avoid or reduce significant effects on the environment (PRC §21081.6; CEQA Guidelines, Title 14, CCR §15097) if mitigation is necessary. The MMRP is adopted at the time of project approval and is designed to ensure compliance with the project description and mitigation measures of the EIR during and after project implementation. If the Judicial Council decides to approve the Project, it will be responsible for verifying implementation of any MMRP.

The Judicial Council has adopted facilities standards to guide the development of court facilities in California. The 2023 California Trial Court Facilities Standards (Facilities Standards) address physical durability of facilities, design principles, sustainable design, site design, architectural criteria, and many other topics specific to appellate court facilities. The Facilities Standards are intended to promote buildings that are functional, durable, maintainable, efficient, and provide long-term value to the public, to the judicial branch, to the courthouse occupants, to the community in which they reside, and to the court users and taxpayers of California and to maximize value to the State of California by balancing the aesthetic, functional, and security requirements of courthouse design with the budget realities of initial construction costs and the long-term life cycle costs of owning and operating institutional buildings.

The Facilities Standards have been used by the Judicial Council to inform the public regarding the Judicial Council's intent for the Project and to inform the analysis included throughout this EIR. During the design-build process, there are also design and engineering details, construction documents, and other

details that would continue to be developed during and following the preparation of this EIR. CEQA requires the Judicial Council to provide information early in the process to enable responsible agencies, stakeholders, and the public to provide meaningful information that informs later design, engineering, architectural, and construction details. This EIR serves that purpose.

1.3 Lead and Responsible Agencies

1.3.1 LEAD AGENCY

In conformance with CEQA Guidelines, Title 14, CCR §15050 and 15367, the Judicial Council is the "lead agency" for the Project, defined as the "public agency which has the principal responsibility for carrying out or disapproving a project." The Judicial Council, as lead agency, is responsible for scoping the analysis, preparing the EIR, responding to comments received on the Draft EIR, and all other required aspects of the CEQA process.

1.3.2 RESPONSIBLE AGENCIES

Responsible agencies are state and local public agencies other than the lead agency that have authority to carry out or approve a project or that are required to approve a portion of a project for which a lead agency, such as the Judicial Council, is preparing or has prepared an EIR. Additionally, the Judicial Council is authorized by the California Building Code to act as its own Building Official. Responsible agencies will have the opportunity to review and provide comments during the public review period. The following agencies could be required to act as a responsible agency for the Project:

Agency	Permits and Other Approvals
State	
State Water Resource Control Board	Coverage under State General Stormwater Permit
Central Valley Regional Water Quality Control Board	Construction General Permit National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022 0057-DWQ, (CGP) identified as NPDES No. CAS000002
San Joaquin Valley Air Pollution Control District	Permit to Construct/Operate, Portable Equipment Registration, Dust Control Plan or Construction Notification Form
California Department of General Services, Division of the State Architect	Accessibility requirements

1.4 Public and Agency Comments

Scoping establishes the breadth and focus of environmental analysis, directing attention to issues where potential for significant impact may occur and streamlining topics with no or clearly less-than-significant impacts. Public and agency input received during the scoping period provides essential local knowledge and practical considerations that inform the analysis. For this Project, comments received have pertained

to accessibility for wheelchair users navigating existing facilities; urban vitality and park space quality; active transportation and pedestrian conflicts; and transit easement and frontage conditions along Fresno Street.

1.4.1 NOTICE OF PREPARATION AND SCOPING MEETING

The Judicial Council issued a Notice of Preparation (NOP) and filed the NOP's materials with the Fresno County Clerk and the State Clearinghouse on November 26, 2025. Publication occurred in The Fresno Bee, and a public scoping meeting was held on December 11, 2025, at the Fresno Courthouse Jury Assembly Room. The NOP identified the Project location within Courthouse Park, summarized the proposed program, presented preliminary environmental topics for evaluation, and described the anticipated CEQA schedule. Written comments were accepted through December 29, 2025.

During the NOP period, public comments regarding historic right-of-way vacations and bus shelter easements along Fresno Street, along with references to older dedication and agreement records, were submitted. These items form part of the administrative record and inform the setting, access, and construction staging analyses.

Below is a list summary of the written comments received during the NOP period and at the scoping meeting. Full letters can be found as **Appendix A**. Each item notes the commenter/source and the substantive points raised.

- 12.08.2025 – Rod McNeely. Correct the published scoping meeting date inconsistency; improve notice clarity to avoid confusion during the NOP review window.
- 12.09.2025 – Joseph Pulido. Recognize the historic value of the former courthouse; consider integrating the historic dome/cupola into the new building; pursue architecture that strengthens the downtown experience.
- 12.12.2025 – Jeffrey Whitaker. Elevate accessibility for wheelchair users; note current difficulties with grade transitions and heavy doors; request functional accessible entries and internal circulation in the new facility.
- 12.12.2025 – Rod McNeely. Provide Fresno Street frontage/easement clarifications: 1956 dedication later vacated in 1965; 1952 public street easement associated with bus shelters; reference to a 1989 City–County bus stop facilities agreement; reflect correct right-of-way and easement limits in preliminary site plans.
- 12.24.2025 – Elliott Balch. Support construction within Courthouse Park to sustain downtown activity; analyze "urban decay" only where tied to reasonably foreseeable physical change; design for walkability with high-quality pedestrian routes and reduced pedestrian–vehicle conflicts; consider the park's post project condition as part of the setting; address cultural resources through design quality and monument re-siting; include demolition of the existing courthouse as an integrally related action in the EIR scope.

1.4.2 PUBLIC REVIEW OF THE DRAFT EIR

During the preparation of the EIR and consistent with the requirements of CEQA, a good-faith effort has been made to contact all responsible and trustee agencies; organizations; persons who may have an interest in the Project; and all government agencies, including the Governor's Office of Land Use and Climate Innovation's (LCI) (formerly Office of Planning and Research[1]) State Clearinghouse.

During the public review period for this Draft EIR, written comments from the public, organizations, and agencies regarding environmental issues identified within the EIR and the EIR's accuracy and completeness may be submitted in writing to the lead agency contact below, either via hard copy or via email:

> Alexandra Cervantes, Senior Facilities Analyst
> Environmental Health & Safety
> Judicial Council of California
> 2860 Gateway Oaks Drive, Suite 400, Sacramento, CA 95833
>
> Email: alexandra.cervantes@jud.ca.gov

The Draft EIR is available for review online at:

https://courts.ca.gov/facilities/fresno-county-new-fresno-courthouse

Hard copies of the Draft EIR and technical appendices are available for review at:

> Judicial Council of California
> 2850 Gateway Oaks Drive, Suite 400, Sacramento, CA 95833
> Available during regular business hours: 8:00 a.m. through 4:30 p.m.

1.5 Document Organization

The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of a project might be minimized; and to indicate alternatives to such a project. (PRC §21061.) The EIR must inform members of the public and decision makers of the potentially significant effects of the project on the environment, and whether those effects can be avoided or mitigated to a less than significant level through changes in the project.

[1] Effective July 1, 2024, the California Governor's Office of Planning and Research was renamed the Governor's Office of Land Use and Climate Innovation to better reflect its expanded focus on land use, climate policy, and implementation; the office retains its statutory roles, including CEQA guidance and operation of the State Clearinghouse.

The content and organization of this Draft EIR are designed to meet the requirements of CEQA and the CEQA Guidelines, as well as to present issues, analyses, mitigation, and other information in a logical and accessible way. This Draft EIR is organized as follows:

- **Chapter ES, "Executive Summary,"** provides a summary of the Project description and objectives, the Lead Agency and their responsibility, a summary of alternatives considered, and proposed mitigation measures.
- **Chapter 1, "Introduction,"** describes the Project overview, intended uses and purpose of the EIR, scoping of environmental issues, and EIR organization.
- **Chapter 2, "Project Description,"** describes the Project location, zoning, and surrounding land uses, Project characteristics, demolition, construction and staging, and operation of Project, and approvals needed.
- **Chapter 3, "Environmental Setting, Impacts, and Mitigation Measures,"** describes the approach to the environmental impact analysis and contains individual sections that reflect the CEQA Appendix G recommended environmental resource areas, describe existing conditions, detail the regulatory framework, and assess the potential environmental impacts of the Project. When the analysis identifies potentially significant effects, mitigation measures are presented to lessen the impacts.
- **Chapter 4, "Cumulative Impacts,"** describes the cumulatively significant impacts, if any, considering the incremental effect of implementing the Project when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. (PRC §21083(b)(2); CEQA Guidelines §15064(h)(1).) This cumulative analysis uses the "projections" approach to identify the cumulative setting.
- **Chapter 5, "Other CEQA Requirements,"** describes, if any, the required analysis of growth-inducing impacts, significant irreversible changes, effects found not to be significant, and significant unavoidable impacts.
- **Chapter 6, "Alternatives,"** describes a reasonable range of alternatives to the Project, evaluates the extent to which those alternatives could substantially lessen the Project's significant impacts while attaining most of the Project objectives, and compares the effects of the alternatives to those of the Project. This section also identifies the environmentally superior alternative, as required by CEQA.
- **Chapter 7, "References,"** lists the sources of information cited throughout the Draft EIR.
- **Chapter 8, "Preparers,"** lists the individuals who contributed to preparation of the Draft EIR.
- **Appendices,** provide background and technical information to support analysis of this Draft EIR.

2 Project Description

This chapter presents a description of the Project, including the proposed location; site history, zoning, and surrounding land uses; purpose and objectives; and the elements of the Project.

2.1 Project Location, Zoning, and Surrounding Land Uses

2.1.1 PROJECT LOCATION

The proposed New Fresno County Courthouse would be constructed within the 2.09-acre Site 1a (the Project site), which is part of the larger 7.60-acre site located within the 13.94-acre Courthouse Park parcel at 2200 Fresno Street and identified by Assessor's Parcel Number (APN) 466-160-01T, within the City of Fresno, Fresno County, California (**Figure 1**). Site 1 consists of a 7.60-acre L-shaped portion of the western side of the Courthouse Park parcel and is bound by Fresno Street to the northwest, 'M' Street to the northeast, Tulare Street southeast, and Van Ness Avenue to the southwest. The Project site is located within the northern corner of Site 1, southeast of the intersection of 'M' Street and Fresno Street (**Figure 2**). It encompasses the existing Fresno County Sheriff's Office and South Annex Jail, which is connected via an underground tunnel to the Main Jail located across Fresno Street to the west.

2.1.2 PROJECT SITE HISTORY

The parcel containing Site 1 which includes the Project site, has been developed as Courthouse Park (formerly known as Court House Square) since the late 1800s. Initial development included a three-story courthouse constructed in 1874, with a copper dome added by 1885. A jail has occupied the northeastern portion of the parcel since at least 1888. The current jail building, situated in the northern section of the Project site, was constructed in 1942, with an annex added in 1960. The Fresno County Sheriff's Office building, located in the southern section of the Project site, was constructed in 1970, as part of a broader effort to redevelop downtown Fresno. This redevelopment also included the demolition of the original 1874 County Courthouse, construction of the Fresno Courthouse and its associated underground parking in 1966, located east of Site 1, placement of 22 commemorative statues, and planned landscaping throughout the overall Courthouse Park parcel. One of these commemorative monuments is located within the Project site. The Viva Liberation Monument commemorates the liberation of Europe by Allied Forces during World War II and is a replica of the markers placed approximately every kilometer along the 888-mile "Road to Liberty," the route followed by Allied Forces from the Normandy beaches in France to Bastogne, Belgium. The monument was dedicated on Armistice Day in 1949 by the 40 & 8 veterans' organization and originally contained a time capsule intended to be opened on November 11, 2000, by the oldest surviving member of the organization, as stated on the monument inscription. The monument would be carefully removed, preserved, and relocated to an appropriate location as part of Project implementation.

Figure 1. Project Location

Figure 2. Courthouse Park Facilities

Figure 3. Proposed Courthouse Layouts

2.1.3 PROJECT SITE ZONING AND SURROUNDING LAND USES

The Judicial Council, acting as the Judicial Branch of State Government, is not subject to local land use regulations[2]. However, the Judicial Council considers county and/or city policies and guidelines as appropriate to determine whether the Project would be consistent with the character and surroundings. The Project site is located within the Fulton Corridor Specific Plan (FCSP) area. The Specific Plan includes the Land Use Designations while the Citywide Development Code includes the associated zoning districts. The Project site has both a zoning designation and a land use designation of Downtown General (DTG). The DTG zoning district is intended to support high concentrations of regional activity generators such as government buildings and convention centers within a pedestrian-oriented, mixed-use urban environment, and is one of three zoning designations within the City's 'Downtown District' (City of Fresno 2019). The DTG land use designation applies to areas to the east and northwest of the Downtown core (the Civic Center, Armenian Town and the Fresno Convention Center area, and the portions of Chinatown north of Fresno Street) and is intended to support a wide variety of uses including office, civic, lodging, and residential (City of Fresno 2016).

The Project site is located south of the intersection of 'M' Street and Fresno Street within Courthouse Park, which is owned by the County of Fresno. Courthouse Park is the largest green space in downtown Fresno and houses the County Courthouse along with various other County facilities. Existing buildings within the park include the Fresno Superior Court and Hall of Records, located southeast of the Project site, and the Fresno County Sheriff's Office and South Annex Jail, both situated within the Project site boundaries. An underground parking facility is located east of the Project site, with access from 'M' Street to the north. The overall Courthouse Park parcel features paved walkways, lawns, ornamental trees, and landscaping.

The Citywide Development Code also assigns Activity Classifications to streets within the Downtown District to guide development standards. Fresno Street, located northwest of the Project site, has an Activity Classification of 'B', identifying walkable streets within urban corridors that experience moderate pedestrian activity and support uses such as retail, restaurants, entertainment, and ground-floor residential or office uses. 'M' Street, northeast of the Project site, has an Activity Classification of 'C', which identifies streets that are walkable but less active. Ground-floor residential and office uses are appropriate in these areas, although retail is more limited. According to Table 15-1502 of the Citywide Development Code (CDC), government offices and public or private parking are permitted uses within the DTG zoning district with an Activity Class of 'B' or 'C'. Government offices are defined as "administrative, clerical, or public contact offices of a government agency, including postal facilities and courts, together with incidental storage and maintenance of vehicles" (City of Fresno 2019). Surrounding land is similarly zoned under one of the three designations (Downtown Neighborhood, DTG, and Downtown Core) reserved for the City's 'Downtown District'. Surrounding land uses include public and institutional uses and commercial uses. The Project site is across the street (Fresno Street) from the Fresno County Jail

[2] State government entities are immune from local regulations unless the Legislature expressly waives immunity in a statue or the California Constitution. (*City of Malibu v. Santa Monica Mountains Conservancy* (2002) 98 Cal.App.4th 1379, 1384.

and the Fresno County Public Defender office and is therefore within one to two blocks walking distance from each. The Project site is also within walking distance of the B.F. Sisk Courthouse and the 'M' Street Courthouse. The Fresno County District Attorney office is approximately 0.25 mile south.

2.2 Project Purpose and Objectives

The Project is being led by the Judicial Council to address the growing need for upgraded centralized court facilities in Fresno County. Court functions are currently split among three locations in the downtown Fresno area: the Fresno County Courthouse, North Annex Jail, and 'M' Street Courthouse. Development of the Project would allow the County court to consolidate operations and would also provide space for growth in future new judgeships. The Project will replace the Fresno County Courthouse (28 courtrooms and most of court administration), the court space in the North Annex Jail (2 courtrooms), and the court space in the 'M' Street Courthouse (5 courtrooms) with a new 36-courtroom courthouse of approximately 413,000 SF.

CEQA Guidelines, Title 14, CCR §15124(b) requires that the Project Description contain a clearly written statement of objective, including the underlying purpose of the Project. The Judicial Council has identified the following objectives for the Project:

- Relieve the current space shortfall, increase security, and replace inadequate and obsolete buildings in Fresno County.
- Replace a Federal Emergency Management Agency (FEMA) P-154 High-Risk rated seismically deficient building that is non-compliant with contemporary fire, life, safety, and Americans with Disabilities Act codes.
- Provide additional court space in anticipation of funding for future judgeships.
- Remove from service facilities that contain environmental hazards such asbestos containing materials (ACMs).
- Improve public, staff, and judicial officer safety by providing a modern facility compliant with Judicial Court security standards for separation of in-custody defendants from staff and public.
- Improve Sheriff's ability to efficiently manage in-custody movement by providing adequate holding areas/cells and circulation.
- Consolidate functions and optimize use of court facilities.
- Vacate three facilities which will terminate two county joint occupancy agreements and one private entity lease.
- Avoid future expenditures of over $42 million for unaddressed deferred maintenance and needed security system refresh.

2.3 Proposed Project Characteristics

The Judicial Council is proposing to construct and operate a new consolidated courthouse for the Superior Court of California, County of Fresno, to support criminal, civil, juvenile, drug, behavioral health, and general trial cases. The Project will be delivered through a Design-Build process. Although final plans have not yet been prepared, the Project is anticipated to include site preparation, grading, building construction, paving, and architectural finishing activities. The Project would be located on a 2.09-acre portion of the 7.6-acre L-shaped Site 1, which occupies the western portion of the 13.94-acre parcel, County-owned Courthouse Park property at 2200 Fresno Street in the City of Fresno. The Project site also contains an underground tunnel connection that travels north to the Main Jail, located on the southeast corner of the intersection of 'M' Street and Fresno Street.

The Project site, along with the larger Courthouse Park property, features paved walkways, manicured lawns, and a variety of ornamental trees and plantings. Trees planted along street frontages are largely non-native ornamental species. Within Courthouse Park, tree plantings are diverse and include mature Deodar Cedars (*Cedrus deodara*), Stone Pines (*Pinus pinea*), Chinese Elms (*Ulmus parvifolia*), Ginkos (*Ginko bilobus*), and other ornamental species.

Demolition of the Sheriff Administration and South Annex Jail buildings would be completed as part of the Project. Following demolition, the Judicial Council would construct a new, approximately 413,000 SF, courthouse designed to accommodate current judicial functions and future growth in judgeships. The proposed building would consist of a basement level, podium levels of approximately 43,700 SF each, and tower levels of approximately 27,560 SF each, totaling up to 11 stories above ground and one level below ground (**Figure 1**).

The proposed new courthouse would provide 36 courtrooms, support spaces, and secure parking for judges and officers. The support spaces would include, but are not limited to, judicial chambers, clerks' offices, jury assembly and deliberation rooms, temporary in-custody holding, administrative office space, parking loading dock, and secure prisoner sallyport. The courthouse would include a connection to the existing tunnel to the Fresno County Jail across Fresno St. for transport of prisoners. Secured parking would be provided for judges and officers only; no staff or public parking is included as part of the Project scope. The new courthouse would be staffed by approximately 390 full-time employees and 14 part-time employees daily.

The Project would implement sustainable elements throughout its design, construction, and operation and maintenance. The Project would be designed for sustainability and, at a minimum, to the standards of a Leadership in Energy and Environmental Design (LEED) Silver certified rating. The Project is anticipated to result in an increase of approximately 65,000 SF of paved/impervious surfaces within the Project site as compared to the existing facilities.

In addition, the Project would apply the Facilities Standards to guide massing, scale, and streetscape presence in a manner consistent with a prominent civic building in a downtown context. Design principles in those standards call for human-scale articulation at the sidewalk, sensitive massing for large buildings,

and attention to view corridors, natural surveillance, and access control, which together produce a form that relates to adjacent public spaces and neighboring civic structures such as the Hall of Records. Architectural detailing, step-backs, and a clearly defined podium-to-tower relationship would reduce perceived bulk at street level, while exterior lighting would include fully shielded, 3,000-K LED fixtures.

2.3.1 SITE ACCESS

Regional access to the Project site is provided via State Route (SR) 41, SR-99, and SR-180. Access from SR-41 is provided via interchanges along 'M' Street and Van Ness Avenue, about 3,600 feet to the southeast of the Project site. SR-99 access is provided via interchanges along Fresno Street, about 3,500 feet to the south. SR-180 access is provided via interchanges along Van Ness Avenue and Fulton Street, about 5,000 feet to the northwest. Local vehicular access to the Project site would be provided via Fresno Street, M Street, Tulare Street, and Van Ness Avenue. The Project site is also served by both local and regional public transit, including Fresno Area Express (FAX) and the Fresno County Rural Transit Agency. The Project site is located within 100 feet of Bus Shelter L on Fresno Street and has direct access to FAX Routes 22, 26, 32, 34, and 38, each providing service with headways ranging from one to two hours. The nearest public-use airport is Fresno Yosemite International Airport, located at 5175 East Clinton Way in Fresno, approximately 4.4 miles to the northeast.

Secured parking for judges and officers, as well as a sallyport for in-custody transport vehicles, are proposed within the basement level of the new courthouse building. Vehicular access to the secured parking area would be provided via a proposed driveway along M Street, which would require redesigning the existing underground parking garage entrance to meet safety and visibility standards. Parking stalls for judges and officers are proposed west of the ramp. The sallyport, to be located southwest of the ramp, would serve in-custody transport vehicles. These vehicles would enter by pulling forward into the sallyport, then reverse into a designated bus back-out zone before proceeding forward to exit via the same ramp. A connection to the existing underground tunnel is also proposed, providing a secure pedestrian link between the Fresno County Jail and the in-custody holding area within the new facility.

Visitors to the new courthouse would utilize available off-site public parking owned by the City in the surrounding area. This would include Garage #8, which features 968 parking stalls and is located at 1077 Van Ness Avenue at the corner of Van Ness Avenue and Tulare Avenue. Visitors would be able to walk to the Project site by exiting the garage through the underground pedestrian tunnel and entering Courthouse Park. Other public parking structures within walking distance of the Project site include Garage #9 with 213 parking stalls located approximately 850 feet to the west off of Merced Street, Garage #4 with 313 parking stalls located approximately 1,650 feet to the south off of Tulare Street, and the Water Tower/Federal Lot with 90 parking stalls located approximately 1,200 feet to the northeast off of 'O' Street. Additionally, approximately 140 metered parking spaces are located along Fresno Street, Van Ness Avenue north of Fresno Street, L Street north of Fresno Street, and M Street north of Fresno Street. These metered parking spaces time limits vary from 30-minute parking to 2-hour or 4-hour parking.

The Courthouse Park property contains various paths and walkways that travel within the park and around the outer edges of the Project site. These pathways allow easy access to the existing buildings

that would remain on-site as well as the various surrounding pedestrian facilities to adjacent off-site buildings. Pedestrian access to the new courthouse is proposed along the west side of the building, which is adjacent to Bus Shelter L of the Downtown Courthouse Park Transit Center off of Fresno Street. An existing underground pedestrian tunnel is located under Van Ness Avenue about 500 feet south of the Van Ness Avenue/Fresno Street intersection and allows pedestrians to cross underneath Van Ness Avenue and access an underground parking garage or emerge above ground at Mariposa Street. The Project site is roughly 400 feet away from the entrance of the pedestrian tunnel.

2.3.2 SUPPORTING INFRASTRUCTURE

The Project site is served by existing utilities that would be realigned to support operation of the Project. Utility needs of the Project would not substantially differ from those currently available at the site. The current data provider is AT&T, with use of data and VoIP phones for communication.

2.3.2.1 Stormwater Drainage

The Fresno Metropolitan Flood Control District (FMFCD) provides flood control and urban stormwater management services for the Fresno and Clovis metropolitan areas. The Project site is located within Drainage Area 'FF,' which conveys runoff to a stormwater retention basin at the northeast corner of South West Avenue and West Eden Avenue. Currently, onsite drainage inlets collect and convey stormwater to a 12-inch stormwater pipe along Fresno Street. This existing 12-inch connection is anticipated to accommodate runoff from the Project. The Project generated runoff is not expected to exceed the capacity of the existing drainage system. Stormwater drainage is not expected to be realigned.

2.3.2.2 Potable and Recycled Water

The existing Project site is served by an 8-inch water main on Mariposa Street and a 12-inch water main on Tulare Street. These connections are expected to be used for the Project. Water pressure is not anticipated to be affected, as the Project's demand is similar to that of the existing courthouse. Additionally, the Project would include a new fire suppression sprinkler system. The current water system is expected to have sufficient capacity to meet the required flow for fire protection, but be realigned.

2.3.2.3 Wastewater

An existing 12-inch sewer main currently serves the existing Courthouse via a connection along Tulare Street. The sewer main runs through the alley located northeast of the Fresno County District Attorney building. This same sewer main is anticipated to service the Project. Even with realignment, future wastewater flows are expected to be consistent with existing conditions; therefore, no impacts to the existing sewer collection system are anticipated.

2.3.2.4 Electricity

The Project would be all-electric in support of the California Green Building Standards Code (CALGreen) and achieving California's decarbonization and the Judicial Council's Sustainability Plan for Trial Court

Facilities' goal of carbon neutrality by 2045. Electrified heating systems, renewable energy generation sources, and thermal or battery energy storage systems would all support an all-electric Judicial Council Fresno Courthouse design.

Even with realignment, the existing electrical distribution system in the area should be adequate and capable of servicing the Project and this estimated energy use intensity.

2.3.2.5 Natural Gas

The Project would be all-electric. Existing gas infrastructure for the demolished buildings will be shut off and removed.

2.4 Demolition Activities

Existing Site Development

The Project site has been developed as Courthouse Park (historically referred to as Court House Square) since the late 1800s. Initial development included construction of a three-story courthouse in 1874, which was subsequently modified with the addition of a copper dome by 1885. A jail facility has occupied the northeastern portion of the parcel since at least 1888.

The existing jail building, located in the northern section of the Project site, was constructed in 1942, and an annex was added in 1960. The Fresno County Sheriff's Office building, located in the southern portion of the Project site, was constructed in 1970 as part of a broader downtown redevelopment effort.

Demolition Scope

As part of the proposed New Fresno Courthouse Project, demolition activities would include removal of the existing Sheriff Administration Building and South Annex Jail and underground storage tanks within the Project site. These activities would prepare the Project site for future construction and site development associated with the Project.

Demolition would include the systematic removal and off-haul of aboveground structures, foundations, utilities, underground storage tanks and associated piping, and associated improvements. In addition, the Project would include removal of approximately 40,000 SF of existing paving, full repaving of 2,000 SF of existing drive access road.

All demolition work would occur within the existing developed footprint of the Project site, and no new ground disturbance would extend beyond the Project site boundaries.

Duration and Equipment

Demolition and abatement activities are anticipated to occur over approximately one month, starting and ending in October 2029. Equipment likely to be used during demolition includes dozers, tractors, and

other standard construction equipment provided in **Table 2.4-1**. Activities would generally occur during daytime construction hours consistent with City noise regulations.

Table 2.4-1. Demolition Equipment List

Phase Name	Equipment Type	# of Equipment	Usage (hours/day)	Horsepower	Load Factor
Demolition	Concrete/Industrial Saw	1	8	33	0.73
	Rubber Tired Dozers	1	8	367	0.40
	Tractors/Loaders/Backhoes	3	8	84	0.37

Hazardous Materials Abatement

The Project site includes an approximately 80,000 square foot (SF), multi-story Fresno County Sheriff's Administration Building constructed in 1970 and an approximately 120,000 SF multi-story South Annex Jail constructed in 1942, with an annex added in 1960, located on the northeastern portion of the Project site.

A pre-demolition asbestos, lead-based paint, polychlorinated biphenyls, and visual hazardous materials survey was conducted and report prepared to evaluate the presence of asbestos-containing materials (ACM), lead-based paint (LBP) in fair and/or poor condition, polychlorinated biphenyls (PCB) in building materials, and other hazardous materials that would require special handling and/or disposal in accordance with applicable federal, state, and local regulations, for the Project site.

The Sheriff's Administration Building is currently occupied; therefore, assessment was limited to a desktop review only; no samples were collected. Of note, access was provided to the Sheriff's Administration Building for the purpose of performing a visual universal waste assessment only. The South Annex Jail was vacant; therefore, both desktop survey of existing data, as well as a field survey of the building, were conducted.

2.5 Project Construction and Staging

Construction Scope

Construction would require partial closures of Fresno Street and potentially 'M' Street. Some construction materials would be stored onsite, likely between the north end of the existing South Annex Jail building and the northern property line. However, due to property line limits, the construction contractor will likely need to lease office space close to the Project site, as well as a nearby empty lot for storage. Construction equipment and activities would involve access via multiple routes depending on the activities (e.g., material and equipment source(s), material or equipment point of origin). The following SRs and major and minor arterial roads may be utilized by construction equipment and vehicles: CA-SR 180, CA-SR-99, CA-SR-41, Fresno Street, Van Ness Avenue, Tulare Street, Fulton Street, and 'M' Street. Contractors will generally provide parking for construction personnel offsite in the areas surrounding the

Project site. At peak construction it is anticipated the Project will require up to 300 workers. It is anticipated construction would require the export of approximately 1,000,000 cubic yards (CY) of material and import of approximately 1,000 CY of fill material.

Duration and Equipment

Construction is planned to occur over 48 months and is anticipated to start in October 2029 and be completed by October 2033. Construction will be phased to align with the Office of the State Fire Marshal's permitting guidelines and the Judicial Council Building Official's requirements. Construction is anticipated to occur in the following phases: Site Preparation, Grading, Building Construction, Paving, and Architectural Coating. Site Preparation is expected to begin in October 2029 and conclude in December 2029, followed by Site Grading from December 2029 to February 2030. Building construction would commence in February 2030 and is anticipated to be completed by October 2033. Paving is expected to take place between September and October 2033, while Architectural Coating is anticipated to occur between June and October 2033.

Equipment types and use assumptions by Project construction phase are provided in **Table 2.5-1**.

Table 2.5-1. Construction Equipment List

Phase Name	Equipment Type	# of Equipment	Usage (hours/day)	Horsepower	Load Factor
Site Preparation	Graders	1	8	148	0.41
	Scrapers	1	8	423	0.48
	Tractors/Loaders/Backhoes	1	7	84	0.37
Grading	Graders	1	8	148	0.41
	Rubber Tired Dozers	1	8	367	0.4
	Tractors/Loaders/Backhoes	2	7	84	0.37
Building Construction	Cranes	1	8	367	0.29
	Forklifts	2	7	82	0.20
	Generator Sets	1	8	14	0.74
	Tractors/Loaders/Backhoes	1	6	84	0.37
	Welders	3	8	46	0.45
Paving	Pavers	1	8	81	0.42
	Paving Equipment	1	8	89	0.36
	Cement and Mortar Mixers	1	8	10	0.56
	Tractors/Loaders/Backhoes	1	8	84	0.37
	Rollers	2	8	36	0.38
Architectural Coating	Air Compressors	1	6	37	0.48

2.6 Facilities Operation and Maintenance

Water usage during operation of the Project is anticipated to be approximately 3,600 gallons per day (936,000 gallons per year assuming 260 working days), associated with potable water for the building and approximately 4,400 gallons per day (1,606,000 gallons per year assuming 365 days per year) associated with potable water for maintaining landscaping. The facility is anticipated to generate approximately 3,600 gallons per day of wastewater.

2.7 Project Approvals

Because the Judicial Council is the CEQA lead agency for the Project, and is acting as the Judicial Branch of State government, local government regulations do not apply to the Project. However, the Judicial Council considers County and City policies and guidelines as appropriate. as appropriate to determine whether the Project would be consistent with the Project site's character and surroundings.

The Judicial Council is responsible for certifying the CEQA document and approving the Project.

The Project would disturb an area greater than one acre. Therefore, an NPDES permit from the Central Valley Regional Water Quality Control Board (RWQCB) and preparation of a Stormwater Pollution Prevention Plan (SWPPP) will be required.

3 Environmental Setting, Impacts, and Mitigation Measures

This Project is evaluated based upon its effect on the following categories of environmental resources.

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use / Planning
- Mineral Resources
- Noise
- Population / Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities / Service Systems
- Wildfire
- Mandatory Findings of Significance

A detailed analysis of environmental impacts will be presented for each resource area (listed above) utilizing the model Environmental Checklist Form found in Appendix G of the CEQA Guidelines Title 14, CCR §15063(f). Impacts to the environment for demolition, construction, and operation of the Project will be assessed and described, and the level of significance of impacts will be measured against criteria that have been established by regulation, accepted standards, or other definable criteria.

Each environmental resource area is reviewed by analyzing a series of questions (i.e., Environmental Checklist Form) regarding level of impact posed by the Project. Substantiation is provided to justify each determination. One of four following conclusions is then provided as a determination of the Project's potential effect on each of the major environmental resources.

No Impact. A finding of no impact is made when it is clear from the analysis that the Project would not affect the environment.

Less than Significant Impact. A finding of a less than significant impact is made when it is clear from the analysis that a Project would cause no substantial adverse change in the environment and no mitigation is required.

Less than Significant Impact with Mitigation Incorporated. A finding of a less than significant impact with mitigation incorporated is made when it is clear from the analysis that a Project would cause no substantial adverse change in the environment when mitigation measures are successfully implemented by the Project proponent. In this case, the Project proponent would be responsible for implementing measures identified in an MMRP.

Potentially Significant Impact. A finding of a potentially significant impact is made when the analysis concludes that the Project could cause a substantially adverse change in the environment for one or more of the environmental resources assessed in the checklist.

Significant and Unavoidable Impact. A finding of a significant and unavoidable impact is one that would result in a substantial or potentially substantial adverse effect on the environment, and that could not be reduced to a less than -significant level even with feasible mitigation measures incorporated. Under CEQA, a project with significant and unavoidable impacts may proceed, but the lead agency is required to prepare a "statement of overriding considerations" in accordance with CEQA Guidelines, Title 14, CCR §15093, explaining why specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a Project outweigh the unavoidable adverse environmental effects.

3.1 Aesthetics

This section provides a description of the existing viewsheds, visual character, and visual quality of the Project site and surrounding Project area. The term "Project area" refers to areas where the Project may be visible, including areas in the vicinity of the Project site and further away from the Project site. This section also discusses existing scenic roadways, scenic vistas, and existing light and glare in the Project area.

3.1.1 EXISTING CONDITIONS

Visual Character and Quality

The Project is located in downtown Fresno, immediately next to the existing Fresno County Superior Court, on the Project site where the existing South Annex Jail and Fresno County Sheriff's Office are located. The existing Fresno County Superior Court, South Annex Jail, Fresno County Sheriff's Office, and Hall of Records, and the surrounding grounds that consist of Fresno County Plaza and Courthouse Park are located on one large block that is the equivalent size of four city blocks. The Project site is oriented on a northeast-southwest axis, aligning with Fresno City Hall that is located three blocks northeast of the existing courthouse. However, Fresno City Hall is not very visible from the existing courthouse, and vice versa, due to intervening vegetation that is located along the blocks between the two buildings. The majority of views of the Project site exist from the surrounding streets including M Street, Tulare Street, Van Ness Avenue, and Fresno Street and from the park and plaza surrounding the existing courthouse.

The existing courthouse is located in the middle of the block with the South Annex Jail being located at the northern corner of the block, the Hall of Records at the eastern corner of the block, and the Fresno County Sheriff's Office located directly northwest of the existing courthouse. The existing courthouse is a focal point on the Project site, being centrally located, taller than the other buildings, and with the open Fresno County Plaza that allows for mostly uninterrupted views of the northeast side of the building. Courthouse Park wraps around the existing courthouse building on the three sides, providing shaded green space and aesthetic relief (a visual break or softening element that reduces the monotony, bulk,

hardness, or visual intensity of a building, wall, streetscape, or developed area) within a highly developed area. Ornamental trees within the park largely obscure the South Annex Jail, Fresno County Sheriff's Office, and Hall of Records along Van Ness Avenue and along Fresno Street, south of L Street transit stop, and Tulare Street, south of L Street. Trees planted along street frontages are largely non-native ornamental species. Within Courthouse Park, tree plantings are diverse and include mature Deodar Cedars (*Cedrus deodara*), Stone Pines (*Pinus pinea*), Chinese Elms (*Ulmus parvifolia*), Ginkos (*Ginko bilobus*), and other ornamental species.

The lower portions of the southwest side of the existing courthouse are also largely obscured by ornamental trees within the park, but the courthouse can still be seen rising above the tree canopies along much of Van Ness Avenue between Fresno and Tulare Streets. However, obscured portions of buildings on this block become more visible in the late fall through early spring, when deciduous trees are not in leaf. The Hall of Records acts to obscure views of the existing courthouse from near the intersections of M and Tulare Streets, and the South Annex Jail and Fresno County Sheriff's Office act to obscure views of the existing courthouse from near the intersections of Fresno and L Streets and Fresno and M Streets. The existing courthouse is utilitarian looking with a tall, rectangular form and rectangular lattice facade that is tan, and covers the building's windows. The South Annex Jail and Fresno County Sheriff's Office are also tan and beige in color and utilitarian looking, whereas the Hall of Records building is white and has elements of Art Deco design. Ramps leading to underground parking are visible along Van Ness Avenu and M Street.

The buildings bordering the Project block include a mix of three- to five-story buildings and high-rises of varying architectural styles that contain a variety of land uses such as business offices, restaurants and commercial uses, hotels, banks, and civic/institutional uses. Residential uses surrounding the Project site are limited and include loft spaces in the Pacific Southwest Building and may include living spaces in other high-rise buildings nearby (Pacific Southwest Building 2026). Recreational uses in the Project area include pedestrians, cyclists, and joggers using local streets and sidewalks surrounding the Project site and visitors to the Fresno County Plaza and Courthouse Park.

Scenic Vistas

A scenic vista is a viewpoint that offers long-range, expansive views of a landscape that is highly-valued by the public that are, generally, available due to flat, open landscapes with few obstructions or from elevated vantages with views out and over the landscape. Based on a review of the Fresno General Plan, the City has not identified or designated scenic vistas. In addition, the flat topography and intervening, multi-story buildings, street trees, and landscaping associated with Courthouse Park prevent publicly accessible scenic vista views. However, scenic vista views of the downtown skyline and the foothills of the Sierra Nevada Mountain Range may be offered from multi-story buildings surrounding the Project site. However, these available views are from private property. Private scenic vista views from high-rises include the Project site but the focus of their views are on the surrounding city skyline and distant views of the Sierra Nevada foothills that are available when atmospheric haze is at a minimum and the weather is clear.

Scenic Highways

There are no Officially Designated State Scenic Highways in the City. The nearest Eligible State Scenic Highway is SR 168 that terminates 5.5 miles northeast of the Project site, just south of West Shaw Avenue, in Fresno (California Department of Transportation [Caltrans] 2026). In addition, there are no City-designated scenic corridors associated with the Project site. The nearest City-designated scenic corridors are Van Ness Avenue-Fulton Avenue couplet, which are designated as Scenic Drives that terminate at Divisadero Street, approximately 1.5 miles from the Project (City of Fresno 2022).

Light and Glare

The Project site is largely shaded by ornamental trees within the park. However, the open plaza is brighter when the sun is more directly overhead, due to the lack of trees, but becomes shaded in the late afternoon by the shadow cast by the existing courthouse. Nighttime lighting levels associated with the Project site are moderate because lighting coming from streetlamps, vehicle headlights, and interior light spill coming from buildings at the Project site are filtered by the trees at the Project site. Nighttime lighting from adjacent areas surrounding the Project site is moderately high due to the urbanized nature and include significant sources of light and glare coming from vehicle headlights, streetlights, parking lots, interior light spill from adjacent buildings and glare from structures made with glass, metal, and polished exteriors.

Viewer Groups

Viewer groups associated with the Project site include residents, recreationists, roadway travelers, business, civic, and institutional employees and patrons. Residents are likely to have high sensitivity to their surroundings because of their extended viewing times and sense of ownership of views from their homes. Recreationists are likely to have moderately high sensitivity to changes in views because, although they have intermittent views of the affected sites, they generally regard the natural and built environments as a holistic visual experience and tend to have familiarity with local streets, trails, and recreational destinations. Roadway users would have moderate sensitivity to changes in views because their focus is primarily concentrated on surrounding traffic, road signs, roadway conditions, and the immediate surrounding landscape but views are of moderate duration and seen in passing. Business, civic, and institutional employees and patrons are focused on working, attending to customers/visitors, and attending to the reasons for their visits to these locations and are likely to have moderate sensitivity to changes in views. However, owners and managers of business, civic, and institutional facilities are likely to have moderately high sensitivity to changes in views because of their familiarity with and their personal investment in the area.

3.1.2 REGULATORY SETTING

Federal

There are no federal plans, policies, regulations, or ordinances related to aesthetics that apply to the Project.

State

Scenic Highways

According to the California Department of Transportation "California Scenic Highway Mapping System," there are no officially designated State Scenic Highways located adjacent to, or within view of, the Project site. However, SR-168, which is located immediately 5.5 miles northeast of the Project site, is "eligible" for listing as a scenic highway (Caltrans 2026).

California Trial Court Facilities Standards

The Project design would conform to the Facilities Standards (Judicial Council 2023). The most applicable considerations for the aesthetics analysis are listed below:

- Visibility and dignity of the location for an important civic building.
- Community and regional context: Local community groups' point of view must be considered in the design process. The siting of the court facility should take into consideration and ideally improve the existing context by complying with local restrictions and planning mandates, such as compatibility with neighboring land use and view corridors.
- Site orientation. Sites with a longer east-west axis should be preferred, within plus or minus 15 degrees of geographical east-west, to allow a longer south-facing façade for optimal solar orientation.
- Crime Prevention Through Environmental Design: Natural surveillance, natural and constructed access control, and territoriality.

Treatments, signage, and landscaping promotes a perception that these areas are controlled. In an area that is physically designed to protect designated space, people are more likely to challenge intruders or report suspicious activity, and the design itself causes intruders to stand out.

- Consider airflow and microclimate when siting buildings; in hot climates, maintain airflow around buildings to reduce interior temperatures. Avoid creating enclosed areas, which can block airflow.
- Maximize solar orientation for outdoor seating and to cool the buildings.
- Building shape, size, and scale contribute to a facility's architectural and visual character. To convey human scale, and not overwhelm court users, massing and scale of all new construction shall be considered during planning and design. The following shall apply:
    - Building height and coverage may respect local zoning regulations, although such regulations do not strictly apply to state buildings.
    - Detail architectural elements of large buildings to maintain a sense of scale and sensitivity to the neighborhood context. Consider the visual and environmental effects that new and existing structures will have on the neighborhood, and on existing buildings located in the

sphere of influence caused by shading or reflectance, changes in airflow, and views to and from existing buildings.

Access to and from the courthouse must be safe, convenient, and consistent with universal design principles. If access involves crossing of streets, provide traffic control measures. On extremely busy streets, local government engages in discussion of potential for signalized pedestrian crossing to the courthouse from the parking area.

Additionally, the following Judicial Council lighting strategies would be utilized during Project demolition, construction and operation:

- Light-emitting diode (LED) lighting will be utilized and fluorescent, incandescent, halogen, induction, and high- and low-pressure sodium lighting sources will not. Exterior and interior illumination levels will be consistent with the current IES Lighting Handbook and comply with California Energy Code, Title 24. Exterior lighting must not contribute to light pollution or trespass by emitting light beyond the Project site. Glare and unwanted light for neighbors must be minimized. The LEED standards for Building Design and Construction (Sustainable Sites credit category: Light Pollution Reduction) must be used as a guideline for developing the exterior lighting plan, along with the code-required light pollution reduction measures in the CALGreen. Furthermore, Designers should consider specifying LED light fixtures compliant with the International Dark-Sky Association requirements—specifically, a correlated color temperature of 3,000 kelvin.
- Outdoor lighting shall have photo sensors or an astronomical time clock for control. Exterior luminaires should be specified to minimize the opportunity for vandalism. For example, in-grade landscape lighting with vandal-resistant hardware is preferred over above-grade adjustable landscape accent lights.
- Light bollards are not recommended because of potential damage and maintenance issues.
- Light fixtures shall be provided for all flagpoles.
- Exterior lighting levels shall be reduced rather than turned off during nighttime hours of inactive periods in compliance with CALGreen. Lighting required for emergency lighting or nighttime security shall be exempt.
- Provide a comprehensive nighttime security lighting scheme, to be discussed with the Judicial Council's Emergency Planning and Security Coordination unit and coordinated with the architectural design team, to satisfy both security needs and the architectural design intent establishing the nighttime civic presence of the facility. Provide a written lighting control intent narrative that explains the lighting control systems in common language, for client review and response during each design phase, and revised for submittal as part of the contract documents.

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant.

City of Fresno

The principal tools used by the City to regulate urban design are the Fresno General Plan and Citywide Development Code found in the Fresno Municipal Code. The General Plan governs the distribution and intensity of land uses, sets the principles for evaluating development, and guides the development and growth of the City. The Citywide Development Code establishes specific development criteria for each zoning district (i.e., parking requirements, walls, fencing, setbacks, and building height).

The Fresno General Plan is the City's primary policy planning document. Through its twelve elements, the General Plan provides the framework for the management and utilization of the City's physical, economic, and human resources. Each element contains goals, policies, and implementation measures that guide development within the City. The Fresno General Plan includes the following objectives and policies that pertain to aesthetics and visual resources for the Project:

Urban Form, Land Use, and Design Element

- **Policy UF-1-c: Identifiable City Structure.** Focus integrated and ongoing planning efforts to achieve an identifiable city structure, including:
    - A concentration of buildings, people, and pedestrian-oriented activity in Downtown.
    - Prominent east–west and north–south transit-oriented, mixed-use corridors with strategically located Activity Centers.
    - Existing and new neighborhoods with parks, multi-purpose trails, and tree-lined bike lanes and streets.
- **Policy UF-13-a: Future Planning to Require Design Principles.** Require future planning (Specific Plans, neighborhood plans, Concept Plans) for Development Areas to include urban design principles consistent with the Urban Form, Land Use, and Design Element.
- **Policy UF-1-f: Complete Neighborhoods, Densities, and Development Standards.** Use Complete Neighborhood design concepts, development standards, and project reviews outside the Downtown planning area to support Complete Neighborhoods and General Plan residential density targets.
- **Objective UF-14.** Create an urban form that facilitates multimodal connectivity.
- **Policy UF-14-a: Design Guidelines for Walkability.** Develop and use design guidelines for walkable, pedestrian-scaled environments with connected networks for pedestrians, bicyclists, transit, and autos.

Land Use

- **Policy LU-1-a: Promote Development within Existing City Limits.** Promote new development, infill, and rehabilitation in the Downtown planning area, along BRT corridors, in established neighborhoods south of Herndon Avenue, and on other infill and vacant sites.
- **Objective LU-2.** Plan for infill development that includes varied housing types, building forms, and land uses for current and future residents.
- **Policy LU-3-b: Mixed-Use Urban Corridors.** Support the development of mixed-use corridors connecting Downtown with the Fresno-Clovis Metropolitan Area along major corridors including Blackstone, Shaw, California, and Ventura/Kings Canyon.
- **Policy LU-9-e: Downtown Sightline.** Require new development to preserve existing sightlines to Downtown where feasible.
- **Policy LU-9-f: View Corridors.** Promote new view corridors that highlight the Downtown skyline.

Design Element

- **Objective D-1.** Maintain an urban image that creates a citywide sense of place.
- **Policy D-1-e: Graphic Identity.** Preserve and promote landmarks, monuments, and artwork representing Fresno's heritage and values.
- **Policy D-1-h: Screening of Parking.** Require parking in Activity Centers and corridors to be screened, with principal building entrances located on sidewalks.
- **Policy D-3-a: Green Street Tree Planting.** Create a program for balanced tree planting to enhance shading and visual continuity, with focus on tree-deficient arterial and collector roads.
- **Policy D-4-f: Design Compatibility with Residential Uses.** Ensure non-residential uses are compatible with adjacent homes.

Mobility and Transportation Element

- **Policy MT-3-a: Scenic Corridors.** Preserve and enhance scenic qualities along designated corridors.
- **Policy MT-3-b: Preserve Street Trees.** Preserve street trees along scenic corridors; replace with similar species and patterns unless unsafe.

County of Fresno

The Fresno County General Plan Review and Zoning Ordinance Update General Plan Review (GPR) includes objectives and policies that pertain to aesthetics and visual resources for the Project. The GPR includes a project objective that states:

…“the plan strives throughout all its elements to improve the attractiveness of the County to existing residents, new residents, and visitors through increased prosperity, attractive forms of new development, protection of open space and view corridors, promotion of cultural facilities and activities, efficient delivery of services, and expansion of recreational opportunities.”

The GPR’s approach includes identifying key scenic assets, reviewing proposed development, and securing easements that connect developed lands with open space. Scenic resource policies encourage preservation of important views, mapping and cataloging significant scenic areas, creating a program to manage these resources, and requiring new development to incorporate natural features while reducing impacts on scenic character. Scenic roadway policies promote the designation of scenic routes—such as landscaped drives, scenic drives, and scenic highways—apply principles for managing these corridors, establish criteria for new development along designated routes, and support efforts to obtain scenic highway status from the State of California.

Goal LU-F: To encourage mixed-use pedestrian and transit-oriented development and to establish development standards for residential, commercial, and industrial development in urban and urbanizing areas.

- **Policy LU-F.25**: The County shall require new commercial development to be designed to minimize the visual impact of parking areas on public roadways and maintain compatibility with surrounding land uses.
- **Policy LU.F-27**: The County may allow land designated Community Commercial to develop with urban residential, office commercial, or neighborhood commercial or a combination of these uses… Development should be guided by the following criteria:
    - Visual compatibility with the existing and planned uses on adjacent property should be required.
    - The building height should not exceed the height of surrounding structures.
- **Policy LU.F-28**: The County may allow land designated Central Business Commercial to develop with office commercial and urban residential uses… Development should be guided by the following criteria:
    - The site development of residential units or office complexes should be visually compatible with the existing and planned uses on adjacent property.
    - The building height should not exceed the height of surrounding structures.

Goal OS-K: To conserve, protect, and maintain the scenic quality of Fresno County and discourage development that degrades areas of scenic quality.

- Policy OS-K.1: The County shall encourage the preservation of outstanding scenic views, panoramas, and vistas wherever possible. Methods to achieve this may include encouraging private property owners to enter into open space easements for designated scenic areas.

- Policy OS-K.4: The County should require development adjacent to scenic areas, vistas, and roadways to incorporate natural features of the site and be developed to minimize impacts to the scenic qualities of the site.

3.1.3 IMPACTS ANALYSIS

3.1.3.1 Methodology

Aesthetic resources consist of the objects (artificial and natural, moving, and stationary) and features (e.g., landforms and waterbodies) that are visible in a landscape. These resources add to or detract from the visual appeal of the landscape. A visual change can be perceived by an individual or group as either positive or negative, depending on a variety of factors or conditions (e.g., type of viewer, sensitivity to visual change, distance from the visual change, or seasonal conditions).

Visual character is a description of the landscape components and is defined by the relationships between the existing visible natural and built landscape features. These relationships are considered in terms of dominance, scale, diversity, and continuity. Visual character-defining resources and features include, but are not limited to, the following: landforms, vegetation, buildings, transportation facilities, open space, water bodies, geologic features, historic structures, downtown skylines, and apparent upkeep and maintenance of property. The Project environment includes natural and built elements found within the bounds of the Project site. The Project environment is assessed by identifying how it blends or contrasts with the surrounding natural and built environments, and this is evaluated through form, line, color, and texture (Federal Highway Administration [FHWA] 2015; USFS 1995). The landscape's appearance is described in terms of the dominance of each element.

Viewer groups within the Project area include residents, business employees, and tourists. Sensitivity to visual change varies among viewer types. Sensitivity to views, along with the degree of Project visibility or visual exposure, affects the viewer response. Generally, residents and recreationists are considered as highly sensitive viewers. Viewers are defined by their relationship to the Project area, their visual preferences, and their sensitivity to changes associated with the Project activities and improvements. Visual preferences, or what viewers like and dislike about the Project area’s visual character, factor into an area’s visual quality. Visual quality serves as the baseline for determining the degree of visual impacts and whether a Project’s visual impacts would be adverse, beneficial, or neutral. The viewer’s distance from landscape elements plays an important role in the determination of an area’s visual quality. Landscape elements are considered higher or lower in visual importance based on their proximity to the viewer. Generally, the closer a resource is to the viewer, the more dominant, and therefore visually important, it is to the viewer.

Sensitivity to views is based on viewer exposure and viewer awareness. Exposure is the viewers’ proximity to the Project that is affected by distance and elevation, the number of viewers affected by the Project, and how long viewers see the Project. Distance zones in a viewshed are generally defined as the foreground zone that is 0.25 to 0.5 mile from the viewer, middleground zone that is from the foreground zone to 3 to 5 miles from the viewer, and background zone that is from the middleground to infinity (Litton 1968). Awareness is a factor of how familiar a view is, visual features or focal points that focus viewers’

attention, level of interest or concern that viewers and responsible land management agencies have for a particular visual resource, and legal protections for the resources associated with the Project (FHWA 2015).

For the purpose of this analysis, a scenic vista is defined as a viewpoint that offers long-range, expansive views of a landscape that is highly valued by the public. Scenic vistas generally include panoramic views that are available to viewers either due to flat, open landscapes with few obstructions or from elevated vantages with views out and over the landscape. However, scenic vistas can be directional and, although some scenic vistas may have a 360-degree view, others may be limited in one direction in a manner that reduces the angle of sight, providing for a narrower vista view.

The aesthetic value of an area is a measure of the variety and contrast of the Project area's visual features, the character and quality of those features, and the scope and scale of the scene, combined with the anticipated viewer response. The analysis of aesthetics impacts for this Project uses a qualitative approach for characterizing and evaluating the visual resources of the surrounding areas that could be affected by the Project. This approach was based on the following three steps:

a. An objective inventory of the visual features or visual resources that comprise the landscape (i.e., existing setting).

b. An assessment of the character and quality of the visual resources in the context of the overall character of the regional visual landscape.

c. Consideration of the importance to viewers, or sensitivity of the viewers, to the identified visual resources in the landscape.

The above factors were considered along with the Project components that would be visible during Project operation, which include the proposed new courthouse, proposed lighting system, and new parking area, and the type and duration of anticipated construction and demolition activities. Changes to private views are disclosed in the analysis. However, the threshold for significance is based on changes to public views, as identified below in Item C of the CEQA Guidelines for aesthetic resources.

3.1.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to aesthetics if it would:

a. Have a substantial adverse effect on a scenic vista?

Demolition and Construction

Temporary activities associated with demolition (e.g., building removal, debris handling, fenced staging areas) and building construction (e.g., cranes, hoists, scaffolding, material laydown, and construction trailers) would be visible from adjacent public streets and sidewalks within the downtown street grid. However, the Project site and surrounding downtown context are characterized by flat topography, intervening mid- and high-rise development, and ornamental trees that limit or screen long-range public

views. The City has not designated scenic vistas in downtown Fresno, nor are there identified public view corridors or scenic vistas applicable to the Project site. Because there are no publicly accessible scenic vistas to be obstructed or degraded by the Project, temporary demolition and construction activities would not result in a substantial adverse effect on a scenic vista. Therefore, no impact would occur.

Operation

Upon completion, the courthouse would be a new visual element within the established downtown setting. As described in the environmental setting above, there are no designated scenic vistas and no identified public view corridors applicable to the Project site. Consequently, operation of the Project would not block, degrade, or otherwise adversely affect a scenic vista. Therefore, no impact would occur.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

b. Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Demolition and Construction

There are no officially designated State Scenic Highways adjacent to or with views of the Project site. The nearest eligible (but not designated) State Scenic Highway is SR-168, approximately 5.5 miles northeast of the Project site. Intervening mid- and high-rise development, street trees, and the flat downtown topography preclude views of Project-area activities from any State Scenic Highway or protected viewshed. Demolition (e.g., building removal, debris handling, and site clearing) and subsequent construction (e.g., cranes, scaffolding, materials staging, and temporary fencing) would occur within an urbanized downtown block. Given there are no State Scenic Highways located adjacent to, or within view of, the Project site, temporary demolition and construction activities would not remove or damage scenic resources within a state scenic highway right-of-way or its viewshed. Therefore, no impact would occur.

Operation

There are no officially designated State Scenic Highways adjacent to or with views of the Project site. The nearest eligible (but not designated) State Scenic Highway is SR-168, approximately 5.5 miles northeast of the Project site. Following construction, the new courthouse would not be visible from a State Scenic Highway, and no officially designated State Scenic Highways or designated scenic vistas occur at or near the Project site. The City has not designated scenic vistas in the downtown, and long-range public views are limited due to flat topography, intervening mid-/high-rise buildings, and street trees. Private

upper-story views toward distant foothills may occur from surrounding buildings, but these are not public scenic vistas. As such, Project demolition, construction, and operation would not block or degrade a scenic vista. Therefore, no impact would occur.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

c. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Demolition and Construction

An urbanized area is defined by CEQA Guidelines, Title 14, CCR §21071 as an incorporated city with a population of at least 100,000; an incorporated city with a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons. The United States Census Bureau estimates Fresno's 2020 population to be 542,107 (U.S. Census Bureau 2026). The Project would be located entirely within an urbanized area, surrounded by buildings of similar use such as the Fresno County Superior Court, Fresno County Public Defender office, and Fresno County Jail.

While local policies and plans do not apply to the Project and the Judicial Council is not subject to local land use regulations, there are no significant adverse environmental effects attributable to the Project that are the result of any inconsistency with programs, plans, ordinances, or policies addressing visual character or public views**.** The Project has both a zoning designation and land use designation of DTG which is intended to support high concentrations of regional activity generators such as government buildings and convention centers within a pedestrian-oriented, mixed-use urban environment (City of Fresno 2019). Temporary construction cranes and fencing in the pursuit of an urbanized project would not conflict with the DTG zoning and land use. Analyzing the impact of temporary construction would not be relevant to local rules regarding scenic quality and as such, there are no other applicable land use regulations.

Operation

The Project would be constructed on one of two potential locations within Site 1 that consists of a 7.60-acre L-shaped portion of the western side of the Courthouse Park parcel and is bound by Fresno Street to

the northwest, M Street to the northeast, Tulare Street southeast, and Van Ness Avenue to the southwest (see **Figure 1** above in the Project Description). The Project location encompasses the existing Fresno County Sheriff's Office and South Annex Jail, which is connected via an underground tunnel to the Main Jail located across Fresno Street to the west.

As stated in Chapter 3, Page 43, of the City's General Plan, new buildings with the Land Use designation of DTG would be up to ten stories in height and would be located at or near the sidewalk (City of Fresno 2014). The Project would be up to a total of 12 stories; however, one story would be below ground, and up to 11 stories would be above ground. The Project would be eight stories taller than the existing structures being demolished. In addition, there is a one-story difference between the DTG height limitations and the maximum height of the Project. However, structures of comparable height exist within a 0.25-mile of the Project site, so structures of such a height are a common visual feature near the Project site. The Project would be located near the Fresno Street sidewalk and be in compliance with the DTG sidewalk requirements.

Courthouse Park outside the 2.09-acre Project site would continue to function as an urban open-space amenity. The Project footprint occurs within the developed portion of Courthouse Park where the Sheriff Administration Building and South Annex Jail currently exist; areas of the park beyond the Project site boundaries are not proposed for disturbance. Pedestrian routes that ring the block and traverse Courthouse Park would be maintained or re-established in final design so circulation in and around the park remains intact. Streetscape treatments along Fresno Street, M Street, Tulare Street, and Van Ness Avenue are expected to include street trees and pedestrian-oriented frontage improvements appropriate to the DTG designation and the FCSP's walkability intent. These elements, together with the building's massing controls and lighting strategy, would support a civic presence that fits the visual context without materially changing the character of Courthouse Park beyond the immediate building and plaza areas. Less than significant impacts are anticipated.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Demolition and Construction

Construction activities may require temporary task- and safety-lighting and would create intermittent glare associated with vehicles, equipment, and reflective materials on-site. Work would occur during typical

daytime/evening construction hours consistent with the City of Fresno's construction exception to the noise ordinance (7:00 a.m. to 10:00 p.m., Monday through Saturday; no work on Sunday), unless specific activities require limited work outside those hours for safety or sequencing (see Section 3.13, Noise). If activity must occur outside typical construction hours, the contractor would implement City-approved, task-specific, localized lighting designed to meet worker safety requirements while limiting off-site spill. The Judicial Council is not subject to Fresno Municipal Code (FMC) Chapter 10, Article 1, §10-109(a) and would not seek special authorization from the City for nighttime work.

In keeping with Judicial Council lighting strategies and Title 24/CALGreen practices referenced in the Regulatory Setting, temporary lighting would be configured to minimize light spill and glare, and reduce levels during inactive periods while maintaining required safety lighting. Given the urban downtown setting, intervening mid- and high-rise structures, and ornamental tree canopy within Courthouse Park, temporary construction lighting and intermittent equipment glare would be localized and short-term. Less than significant impacts are anticipated.

Operation

The Project site is located within a well-lit urban area of the City with surrounding ambient lighting sources. The Project would introduce an additional source of lighting from the courthouse and parking areas that would slightly increase ambient light spill coming from the proposed building that would include more stories than the existing buildings that would be demolished. However, the Project would be designed in accordance with LEED and CALGreen standards that require appropriate nighttime illumination that would be shielded, generally directed downward, and appropriate lumens for the area where lighting would be located. Therefore, it is not anticipated that the additional ambient light spill would substantially increase nighttime lighting associated with the Project site, given the moderately high lighting levels surrounding the Project site that would have the ability to absorb this small change. Once construction is complete, these temporary sources would cease, and the Project's permanent exterior lighting would follow Judicial Council guidance for shielded luminaires, dark-sky-oriented practices, and code-compliant controls, avoiding substantial adverse effects on day- or nighttime views (see Section 3.1.2, Regulatory Setting – California Trial Court Facilities Standards). Glare is also not expected to substantially increase because reflectance reduction is included within Project design. Less than significant impacts are anticipated.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

3.2 Agriculture and Forestry Resources

This section provides a description of the existing agriculture and forestry resources of the Project site, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). Next, a brief description of laws, regulations, and ordinances pertinent to the Project is presented. The analysis describes impacts related to Farmland, Williamson Act contracts, forestland, and timberland.

3.2.1 EXISTING CONDITIONS

The Farmland Mapping and Monitoring Program (FMMP), under the California Department of Conservation (DOC), uses soil productivity data from the Natural Resources Conservation Service (NRCS) to map farmland types (DOC 2025a). According to the *Fresno County Important Farmland 2022* map prepared by the DOC FMMP, the Project site and the surrounding area are designated as Urban and Built-Up Land and do not contain any land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (DOC 2022).

Williamson Act Contracts

There are no Williamson Act contracts for the Project site because it is part of a government campus (DOC 2024).

Forest Resources

Forest Resources PRC §12220(g) defines “forest land” as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. According to PRC §4526, “timberland” is defined as land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees.

The Project site is urbanized developed land and is not zoned for forest land or timberland uses. Rather, the Project site is zoned DTG with an existing land use of Public Facility/Court House (Central Area). The surrounding parcels are also zoned for urban uses such as DTG and Downtown Core.

3.2.2 REGULATORY SETTING

Federal

There are no federal plans, policies, regulations, or ordinances related to agriculture and/or forestry that apply to the Project.

State

Williamson Act

The Williamson Act, officially known as the California Land Conservation Act of 1965, is a voluntary program that allows private landowners to enter into contracts with local governments to restrict their land to agricultural or open space use. In exchange, landowners receive significant property tax reductions, as their land is assessed based on its agricultural value rather than market value. These contracts typically last 10 years and automatically renew each year unless a non-renewal notice is filed. The program aims to preserve farmland, discourage urban sprawl, and support the long-term viability of California's agricultural industry (DOC 2025b).

Timber Harvest Productivity Act

The California Timberland Productivity Act, now Title 14, CCR §933.10, was enacted by the California State Legislature in 1982 and designed to preserve the state's forest resources and promote the long-term viability of the timber industry. The California Timberland Productivity Act required counties to identify and zone qualifying lands as Timberland Production Zones, which are specifically designated for the growing and harvesting of timber. Specific criteria for determining timberland capability includes the ability to grow at least 15 cubic feet of wood fiber per acre annually.

Forest Practice Rules

The Forest Practice Rules are the regulatory framework that implements the provisions of the Z'berg-Nejedly Forest Practice Act of 1973, ensuring that timber harvesting in California is conducted in a manner that protects public trust resources such as soil, water, wildlife, and forest ecosystems. These rules are enforced by the California Department of Forestry and Fire Protection (CAL FIRE) and are applicable to all commercial timber operations on privately owned lands, with limited exemptions (CAL FIRE 2024).

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant. There are no local plans, policies, regulations, or ordinances related to agriculture and/or forestry that apply to the Project.

3.2.3 IMPACTS ANALYSIS

3.2.3.1 Methodology

Evaluation of potential impacts of the Project on agricultural and forest resources was based on the Project's potential changes to or loss of existing local agricultural and forest/timber resources in comparison to the standards of significance listed below. For the purposes of determining impact significance associated with the loss of forest/timber resources, a significant impact would occur if the loss of forest/timber land area due to the Project would be substantial in consideration of the amount of

forest/timber land area statewide in California. Soil data from the NRCS was used to characterize the amount of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance within the Project site boundaries.

3.2.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to agriculture and forestry resources if it would:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Demolition, Construction, and Operation

The Project site is currently developed including landscaping around the existing Courthouse Park. According to the *Fresno County Important Farmland 2022* map prepared by the DOC's FMMP, the Project and the surrounding area are designated as Urban and Built-Up Land and do not contain any land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (DOC 2022). Therefore, the Project would not result in conversion of Farmland to non-agricultural use, and there would be no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Demolition, Construction, and Operation

The Project site is not zoned for agriculture nor enrolled in a Williamson Act contract. According to the DOC's Williamson Act Enrollment Finder online map, there are no lands under Williamson Act contract in the vicinity of the Project site or elsewhere within downtown Fresno (DOC 2024). Therefore, the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and there would be no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC §12220(g)), timberland (as defined by PRC §4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

Demolition, Construction, and Operation

According to the County and the City's zoning maps, the Project is not within land designated as forest land or timberland (County of Fresno 2026, City of Fresno 2024). Therefore, there would be no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

Demolition, Construction, and Operation

The Project site is zoned DTG and designated to support a high concentration of regional activity generators such as governmental buildings and convention centers within a pedestrian-oriented, mixed-use urban setting. As part of the Fresno County Superior Court, there are no agricultural or forest land uses or active timber operations within the Project site or surrounding area, which consist of previously disturbed urban land. Thus, the Project would not result in the loss of forest land or conversion of forest land to a non-forest use, and there would be no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Demolition, Construction, and Operation

The Project is located within the urbanized downtown area of Fresno, which contains no farmland or forest land. Furthermore, the Project site is planned for governmental buildings and convention centers consistent with the DTG zoning. Therefore, the proposed development at the Project site would not result in off-site conversion of Farmland or forest land to other uses, and there would be no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

3.3 Air Quality

The following discussion is based on the Air Quality and Greenhouse Gas Impact Assessment prepared for the Project and included as **Appendix B** to this EIR.

3.3.1 EXISTING CONDITIONS

The Project is located within the San Joaquin Valley Air Basin (SJVAB) and within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). Air pollution in the SJVAB can be attributed to both anthropogenic (i.e., human-related) and non-anthropogenic (i.e., natural) activities that can produce emissions. Air pollution from significant anthropogenic activities in the SJVAB includes a variety of industrial-based sources and on- and off-road mobile sources (SJVAPCD 2015).

Climate and Meteorology

Climate and meteorology are important considerations for air quality. Local dispersion and regional transport of air pollutants directly relate to prevailing meteorological factors. Wind directions and speeds, and vertical temperature structure (inversions) are the primary determinants of transport and dispersion effects.

The SJVAB has an “inland Mediterranean” climate and is characterized by long, hot, dry summers and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone [O_3]), and the SJVAB averages over 260 sunny days per year. The SJVAB is generally shaped like a bowl: it is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary and rise 8,000–14,000 feet in elevation; the Coast Ranges are along the western boundary, rising to 3,000 feet; and the Tehachapi Mountains are along the southern boundary at 6,000–8,000 feet in elevation (SJVAPCD 2015).

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the SJVAB form natural horizontal barriers to the dispersion of air contaminants. The wind generally flows south-southeast through the valley, through the Tehachapi Pass and into the Southeast Desert Air Basin portion of Kern County. As the wind moves through the SJVAB, it mixes with the air pollution generated locally, transporting air pollutants from the north to the south in the summer and in a reverse flow in the winter (SJVAPCD 2015).

Strong temperature inversions occur throughout the SJVAB in the summer, fall, and winter. The result is a relatively high concentration of air pollution in the valley during inversion episodes. These inversions cause haziness, which in addition to moisture may include suspended dust, a variety of chemical aerosols emitted from vehicles, particulates from wood stoves, and other pollutants. In the winter, these conditions can lead to carbon monoxide hotspots along heavily traveled roads and at busy intersections. During summer’s longer daylight hours, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy for the photochemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NOx), which results in the formation of O_3 (SJVAPCD 2015).

Because of the prevailing daytime winds and time-delayed nature of O_3, concentrations are highest in the southern portion of the SJVAB. Summers often have periods of hazy visibility and occasionally unhealthful air. Winter air quality impacts tend to be localized and can consist of, but are not exclusive to, odors from agricultural operations; soot or smoke around residential, agricultural, and hazard-reduction wood burning; or dust near mineral resource recovery operations (SJVAPCD 2015).

Criteria Air Pollutants

Criteria air pollutants include O_3, CO, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and particulate matter (PM) measured both in units of smaller than 2.5 microns in diameter ($PM_{2.5}$) and in units smaller than 10 microns in diameter (PM_{10}) (United States Environmental Protection Agency [USEPA] 2025a). In addition, sulfates (SO_4), H_2S, vinyl chloride, and visibility reducing particles, are not considered criteria pollutants by the Federal Clean Air Act (FCAA) but are pollutants of concern for the state.

Ozone. Most ground-level O_3 is formed as a result of complex photochemical reactions in the atmosphere between ROGs, NOx, and oxygen. ROGs and NOx are considered precursors to the formation of O_3, a highly reactive gas that can damage lung tissue and affect respiratory function (USEPA 2025b). O_3 can damage the respiratory tract, causing inflammation and irritation, and it can induce symptoms, such as coughing, chest tightness, shortness of breath, and worsening of asthmatic symptoms. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. Exposure to high concentrations of O_3 (above the current ambient air quality standard) leads to lung inflammation, lung tissue damage, and a reduction in the amount of air inhaled into the lungs. Health effects include potential increased susceptibility to respiratory infections and reduced ability to exercise. Health effects are more severe in people with asthma and other respiratory ailments. People who work or play outdoors are at a greater risk for harmful health effects from O_3. Children and adolescents are also at greater risk because they are more likely than adults to spend time engaged in vigorous activities (USEPA 2025c). While O_3 in the lower atmosphere is considered a damaging air pollutant, O_3 in the upper atmosphere is beneficial, as it protects Earth from harmful ultraviolet radiation. However, atmospheric processes preclude ground-level O_3 from reaching the upper atmosphere (USEPA 2025b).

Carbon Monoxide. CO is a colorless, odorless, poisonous gas produced by the incomplete combustion of fossil fuels. Elevated levels of CO can result in harmful health effects, especially for the young and elderly, and can also contribute to global climate change (USEPA 2025d). When inhaled, CO enters the bloodstream and binds more readily to hemoglobin, the oxygen-carrying protein in blood, than oxygen, thereby reducing the oxygen-carrying capacity of blood and reducing oxygen delivery to organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected, but only at higher levels of exposure. Exposure to CO can cause chest pain, headaches, and reduced mental alertness. At high concentrations, CO can cause heart difficulties in people with chronic diseases and can impair mental abilities. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and, with prolonged enclosed exposure, death.

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas primarily produced as a result of the burning of fossil fuels. NO_2 can also lead to the formation of O_3 in the lower atmosphere. NO_2 can cause respiratory ailments, especially in the young and elderly, and can lead to degradations in the health of aquatic and terrestrial ecosystems (USEPA 2025e). Direct inhalation of NO_2 can cause a wide range of health effects, including irritation of the lungs, lung damage, and lowered resistance to respiratory infections, such as influenza. Short-term exposures (e.g., less than 3 hours) to low levels of NO_2 may lead to changes in airway responsiveness and lung function in individuals with preexisting respiratory illnesses. These exposures may also increase respiratory illnesses in children. Long-term exposures to NO_2 may lead to increased susceptibility to respiratory infection and may cause irreversible lung damage. Other health effects associated with NO_2 include an increase in the incidence of chronic bronchitis and lung irritation.

Sulfur Dioxide. SO_2 is primarily emitted from the combustion of coal and oil by steel mills, pulp and paper mills, and non-ferrous smelters. High concentrations of SO_2 can aggravate existing respiratory and cardiovascular diseases in asthmatics and others who suffer from emphysema or bronchitis. High concentrations of SO_2 can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. Health effects from exposure to emissions of SO_2 include aggravation of lung diseases, especially bronchitis, and constricting of breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. Short-term exposures of individuals to elevated SO_2 levels during moderate activity may result in health effects, including breathing difficulties that can be accompanied by symptoms, such as wheezing, chest tightness, or shortness of breath. Other health effects that have been associated with longer-term exposures to high concentrations of SO_2, in conjunction with high levels of PM, include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs' defenses. SO_2 also contributes to acid rain, which in turn, can lead to the acidification of lakes and streams (USEPA 2025f, CARB 2025a).

Lead. Sources of Pb include pipes, fuel, and paint, although the use of Pb in these materials has declined dramatically over the years. Historically, the main source of Pb was automobile emissions. Pb can be inhaled directly or ingested by consuming Pb-contaminated food, water, or dust. Fetuses and children are most susceptible to Pb poisoning, which can result in heart disease and nervous system damage (USEPA 2025g). Through regulations, the USEPA has gradually reduced the Pb content of gasoline. This program has essentially eliminated violations of the Pb standard in urban areas except those areas with Pb point sources. Exposure to Pb occurs mainly through inhalation of air and ingestion of Pb in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to Pb may cause neurological impairments, such as seizures, mental retardation, and behavioral disorders. Even at low doses, Pb exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ. Recent studies also show that Pb may be a factor in high blood pressure and subsequent heart disease. Pb can also be deposited on the leaves of plants, presenting a hazard to grazing animals and humans through ingestion (USEPA 2025g).

Particulate Matter. Airborne PM is not a single pollutant but rather is a mixture of many chemical species. PM is a complex mixture of solids and aerosols composed of small droplets of liquid, dry solid fragments, and solid cores with liquid coatings. Particles vary widely in size, shape, and chemical composition; and they may contain inorganic ions, metallic compounds, elemental carbon, organic

compounds, and compounds from Earth's crust. Particles are defined by their diameter for air quality regulatory purposes. Those with a diameter of 10 microns or less (PM_{10}) are inhalable into the lungs and can induce adverse health effects. Fine PM is defined as particles that are 2.5 microns or less in diameter ($PM_{2.5}$) and is a portion of PM_{10}. Emissions from combustion of gasoline, oil, diesel fuel, or wood produce much of the $PM_{2.5}$ pollution found in outdoor air and a significant proportion of PM_{10}. PM_{10} also includes dust from construction sites, landfills and agriculture, wildfires and brush or waste burning, industrial sources, wind-blown dust from open lands, pollen, and fragments of bacteria.

PM may be either directly emitted from sources (primarily particles) or formed in the atmosphere through chemical reactions of gases (secondary particles) such as SO_2, NOx, and certain organic compounds (USEPA 2025h).

PM_{10} and $PM_{2.5}$ particles are small enough—about one-seventh the thickness of a human hair or smaller to be inhaled and lodged in the deepest parts of the lung, where they evade the respiratory system's natural defenses and can be trapped in the nose, throat, and upper respiratory tract. Health effects from exposure to PM_{10} and $PM_{2.5}$ occur when the body reacts to these foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases; heart and lung disease; and coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of PM in the air. PM_{10} and $PM_{2.5}$ can aggravate respiratory disease and cause lung damage, cancer, and premature death. Sensitive populations, including children, the elderly, exercising adults, and those suffering from chronic lung disease, such as asthma or bronchitis, are especially vulnerable to the effects of PM. Of greatest concern are recent studies that link PM exposure to the premature death of people who already have heart and lung disease, especially the elderly. Acidic PM can also damage humanmade materials and is a major cause of reduced visibility in many parts of the United States. Non-health-related effects include reduced visibility and soiling of buildings (CARB 2025b).

Sulfates. Sulfates are a category of chemicals that contain the fully oxidized ionic form of sulfur (SO_4^{2-}) in combination with metal or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur.

CARB's sulfate standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in oxygen intake, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. When acidic pollutants and particulates are also present, SO_2 tends to have an even more toxic effect. Sulfate particles are usually acidic and contribute to acid rain (CARB 2025c). There are currently no adopted National Ambient Air Quality Standards (NAAQS) for sulfates.

Hydrogen Sulfide (H_2S). H_2S is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. H_2S in the atmosphere would likely oxidize into SO_2 that can cause acid rain. At low concentrations, H_2S, which has a characteristic "rotten egg" smell, may cause irritation to the eyes, mucous membranes, and respiratory system, dizziness, and headaches. At high concentrations, H_2S is extremely hazardous, especially in enclosed spaces (CARB 2025d). There are currently no adopted NAAQS for H_2S.

Vinyl Chloride. Vinyl chloride is a sweet-smelling colorless gas at ambient temperature. Landfills, publicly owned treatment works, and polyvinyl chloride production are the major identified sources of vinyl chloride emissions in California. Polyvinyl chloride can be fabricated into several products, such as pipes, pipe fittings, and plastics. In humans, epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of liver angiosarcoma, which is a rare cancer, and have suggested a relationship between exposure cancers of the lung and brain (CARB 2025e). There are currently no adopted NAAQS for vinyl chloride.

Visibility Reducing Particles. Visibility reducing particles consist of suspended PM, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. Except for Lake County, which is designated to be in attainment, California's attainment status with respect to visibility reducing particles is currently designated as unclassified (CARB 2025f). There are currently no adopted NAAQS for visibility reducing particles.

Ambient Air Quality Standards and Attainment Status

The USEPA and CARB designate air basins where ambient air quality standards are exceeded as "non-attainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National non-attainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Attainment status is based on the NAAQS and the California Ambient Air Quality Standards (CAAQS). Each standard has a different definition of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard of 9.0 parts per million (ppm) is not to be exceeded more than once per year; therefore, an area can be in attainment of the federal 8-hour CO standard with up to one exceedance per year. In contrast, the federal annual standard for $PM_{2.5}$ is met if the three-year annual average of $PM_{2.5}$ concentration is less than or equal to the standard of 12 micrograms per cubic meter ($\mu g/m^3$).

The FCAA identifies two types of NAAQS. Primary standards provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings (USEPA 2025a). The CAAQS, which in many cases are more stringent than the NAAQS, include pollutants for which national standards do not exist. **Table 3.3-1** presents the applicable NAAQS and CAAQS.

Table 3.3-1. California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]	National Standards[2]	
			Primary	Secondary
Ozone (O_3)	8-hour	0.070 ppm (137 $\mu g/m^3$)	0.070 ppm (137 $\mu g/m^3$)	Same as Primary Standards
	1-hour	0.09 ppm (180 $\mu g/m^3$)	--	
Carbon monoxide (CO)	8-hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	--
	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	

Pollutant	Averaging Time	California Standards[1]	National Standards[2]	
			Primary	Secondary
Nitrogen dioxide (NO_2)	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary Standard
	1-hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	
Sulfur dioxide (SO_2)	Annual arithmetic mean	--	0.030 ppm (80 µg/m^3)	--
	24-hour	0.04 ppm (105 µg/m^3)	0.14 ppm (80 µg/m^3)	--
	3-hour	--	--	0.5 ppm (1300 µg/m^3)
	1-hour	0.25 ppm (655 µg/m^3)	--	--
Respirable Particulate Matter Smaller than 10 Microns in Diameter (PM_{10})	Annual arithmetic mean	20 µg/m^3	--	Same as Primary Standards
	24-hour	50 µg/m^3	150 µg/m^3	
Respirable Particulate Matter Smaller than 2.5 Microns in Diameter ($PM_{2.5}$)[3]	Annual arithmetic mean	12 µg/m^3	9.0 µg/m^3	15 µg/m^3
	24-hour	No separate standard	35 µg/m^3	Same as Primary Standards
Sulfates	24-hour	25 µg/m^3	--	--
Lead (Pb)	30-day average	1.5 µg/m^3	--	--
	Calendar quarter	--	1.5 µg/m^3	Same as Primary Standard
	Rolling 3-month average	--	0.15 µg/m^3	
Hydrogen sulfide (H_2S)	1-hour	0.03 ppm (42 µg/m^3)	--	--
Vinyl chloride (chloroethene)	24-hour	0.01 ppm (26 µg/m^3)	--	--
Visibility reducing particles	8-hour	In 1989, the Air Resources Board converted the general statewide 10-mile visibility standard to instrumental equivalents, which are extinction of 0.23 per kilometer	--	--

-- = no standard established; µg/m3 = micrograms per cubic meter; mg/m3 = milligrams per cubic meter; ppm = parts per million
Notes:
1. CO, SO2 (1- and 24-hour), NO2, O3, PM10, and visibility reducing particles standards are not to be exceeded.
2. Not to be exceeded more than once a year except for annual standards.
3. On February 7, 2024, the USEPA issued a pre-publication version of the Final Rule to lower the primary annual NAAQS for PM2.5 from 12.0 µg/m3 to 9.0 µg/m3 (USEPA 2024d).
Sources: CARB 2024a.

The current attainment designations for the SJVAPCD are shown in **Table 3.3-2**. The SJVAPCD is designated as non-attainment for state and federal eight-hour O_3, state one-hour O_3, state PM_{10}, and federal and state $PM_{2.5}$.

Table 3.3-2. SJVAPCD Area Attainment Status

Pollutant	Designation/Classification of Federal Standards	Designation/Classification of State Standards
Ozone – One hour	No Federal Standard	Non-attainment
Ozone – Eight Hour	Non-attainment[1]	Non-attainment
PM_{10}	Attainment	Non-attainment
$PM_{2.5}$	Non-attainment	Non-attainment
Carbon Monoxide	Unclassifiable/Attainment	Unclassified/Attainment
Nitrogen Dioxide	Unclassifiable/Attainment	Attainment
Sulfur Dioxide	Unclassifiable/Attainment	Attainment
Lead	Unclassifiable/Attainment	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment
Source: SJVAPCD 2025.		

Ambient Air Quality

SJVAPCD operates a regional monitoring network that measures the ambient concentrations of criteria pollutants. Local air quality can be evaluated by reviewing relevant air pollution concentrations near the Project. **Table 3.3-3** summarizes published monitoring data from the Fresno-Drummond Street Monitoring Station at 4706 E Drummond Ave, Fresno, California, for the years 2022 to 2024 from CARB's Air Quality Data Statistics for O_3, PM_{10}, and NO_2. Additionally, data from the Fresno-2482 Foundry Park Avenue Monitoring Station at 2482 Foundry Park Ave, Fresno, California for $PM_{2.5}$ is presented (CARB 2025g). Other monitoring stations in Fresno County do not measure CO or SO_2; therefore, CO and SO_2 ambient concentrations are not included in the table.

Table 3.3-3. Fresno-Drummond Street Monitoring Station Data

Air Pollutant	Averaging Time	Item	2022	2023	2024
Ozone (ppm)	1 Hour	Maximum Measured Concentration	0.111	0.102	0.109
		Number of days over State Standard	3	3	8
	8 Hour	Maximum Measured Concentration	0.089	0.088	0.086
		Number of days over National Standard	8	24	35

Air Pollutant	Averaging Time	Item	2022	2023	2024
		Number of days over State Standard	8	20	35
Nitrogen Dioxide (ppb)	1-Hour	Maximum Measured Concentration	58.3	58.1	58.9
		Number of days over National Standard	0	0	0
		Number of days over State Standard	0	0	0
		Annual Average Concentration	12	10	9
PM_{10} (ug/m^3)	24-Hour	Federal Maximum Measured Concentration	73.4	131.1	181.9
		Number of days over National Standard	0	0	1
		State Maximum Measured Concentration	166.5	130.0	151.3
		Number of days over State Standard	133	120	113
		Annual Average Concentration	31.2	42.7	45.4
$PM_{2.5}$ (ug/m^3)	24-Hour	Maximum Measured Concentration	54.6	51.3	57.2
		Number of days over National Standard	21	7	8
		Annual Average Concentration	14.7	12.5	13.5

ppb = parts per billion; ppm = parts per million; $\mu g/m^3$ = micrograms per liter; * = insufficient data available to determine the value
Source: CARB 2024a.

Odors

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from the psychological (i.e., irritation, anger, or anxiety) to the physiological (i.e., circulatory and respiratory effects, nausea, vomiting, and headache).

The ability to detect odors varies considerably among the population and is subjective. Some individuals can smell very minute quantities of specific substances; others have varying sensitivities to odors; and people may have different reactions to the same odor (e.g., bakery, gasoline). It is important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience, e.g., a description of flowery or sweet. Intensity refers to the strength of the odor and depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases, the odor intensity weakens, and it eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant drops below a human's detection threshold.

Neither the state nor the federal governments have adopted rules or regulations for the control of odor sources. Potential odors may be subject to SJVAPCD Rule 4102, Nuisance.

Toxic Air Contaminants

Toxic air contaminants (TACs) are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; but due to their high toxicity, they may pose a threat to public health even at very low concentrations. Because there is no threshold level below which adverse health impacts are not expected to occur, TACs differ from criteria pollutants for which acceptable levels of exposure can be determined and for which state and federal governments have set ambient air quality standards. TACs, therefore, are not considered “criteria pollutants” under either the FCAA or the California Clean Air Act (CCAA) and are not subject to NAAQS or CAAQS ambient air quality standards. Instead, USEPA and CARB regulate hazardous air pollutants and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology to limit emissions. In conjunction with air district rules, these federal and state statutes and regulations establish the regulatory framework for TACs. At the national level, USEPA has established national emission standards for hazardous air pollutants (NESHAP) in accordance with the requirements of the FCAA and subsequent amendments. These are technology-based, source-specific regulations that limit allowable emissions of hazardous air pollutants.

Within California, TACs are regulated primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. The following provides a summary of the primary TACs of concern within the State of California and related health effects.

Diesel Particulate Matter

Diesel particulate matter (DPM) was identified as a TAC by CARB in August 1998. DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute approximately 42 percent of the statewide total, with an additional 55 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources, contributing about three percent of emissions, include shipyards, warehouses, heavy equipment repair yards, and oil and gas production operations. Emissions from these sources are from diesel-fueled internal combustion engines. Stationary sources that report DPM emissions also include heavy construction, manufacturers of asphalt paving materials and blocks, and diesel-fueled electrical generation facilities (CARB 2025b).

In October 2000, CARB issued a report entitled *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, which is commonly referred to as the Diesel Risk Reduction Plan (DRRP). The DRRP provides a mechanism for combating the DPM problem. The goal of the DRRP is to reduce concentrations of DPM. The key elements of the DRRP are to clean up existing engines through engine retrofit emission control devices, to adopt stringent standards for new diesel engines, and to lower the sulfur content of diesel fuel through advanced technology emission control devices on diesel engines. When fully implemented, the DRRP will significantly reduce emissions from both old and new diesel-fueled motor vehicles and from stationary sources that burn diesel fuel. In addition to these strategies, CARB continues to promote the use of alternative fuels and electrification. As

a result of these actions, DPM concentrations and associated health risks in future years are projected to decline (CARB 2025b). In comparison to year 2010 inventory of statewide DPM emissions, CARB estimates that emissions of DPM in 2035 will be reduced by more than 50 percent.

DPM is typically composed of carbon particles (also called “soot” or “black carbon”) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds (VOCs) and NOx. NOx emissions from diesel engines are important because they can undergo chemical reactions in the atmosphere leading to formation of $PM_{2.5}$ and O_3.

In California, diesel exhaust particles have been identified as a carcinogen accounting for an estimated 70 percent of the total known cancer risks in California. DPM is estimated to increase statewide cancer risk by 520 cancer occurrences per million residents exposed over an estimated 70-year lifetime. Non-cancer health effects associated with exposure to DPM include premature death, exacerbated chronic heart and lung disease, including asthma, and decreased lung function in children. Short-term exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks (CARB 2025b).

Individuals most vulnerable to non-cancer health effects of DPM are children whose lungs are still developing and the elderly who often have chronic health problems. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to DPM (CARB 2025b). In addition to its health effects, DPM significantly contributes to haze and reduced visibility.

Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals with useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings constructed prior to 1977 when it was banned for use in buildings. Exposure to naturally occurring asbestos can occur during soil disturbing activities in areas with deposits present (USEPA 2025i).

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and

the chronically ill, especially those with cardiovascular diseases. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The nearest sensitive receptors to the Project Site include the residential units to the north of the Project Site, along M Street, and to the east, along Tulare Street. The closest residential unit is an apartment approximately 750 feet from the Project's eastern boundary.

3.3.2 REGULATORY SETTING

Air quality within the Project area is regulated by several jurisdictions, including the USEPA, CARB, and SJVAPCD. Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation. Although USEPA regulations may not be superseded, both state and local regulations may be more stringent.

Federal

United States Environmental Protection Agency

At the federal level, the USEPA has been charged with implementing national air quality programs. The USEPA's air quality mandates are drawn primarily from the FCAA, which was enacted in 1970. Congress substantially amended the FCAA in 1977 and again in 1990.

Federal Clean Air Act

The FCAA required USEPA to establish NAAQS and set deadlines for their attainment. Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects, such as visibility restrictions. NAAQS are summarized in **Table 3.3-1**.

National Emission Standards for Hazardous Air Pollutants

Pursuant to the FCAA of 1970, the USEPA established the NESHAPs. These are technology-based source-specific regulations that limit allowable emissions of hazardous air pollutants. Among these sources include asbestos-containing building materials (ACBMs). NESHAPs include requirements pertaining to the inspection, notification, handling, and disposal of ACBMs associated with the demolition and renovation of structures.

Non-Road Diesel Rule

The USEPA has established a series of increasingly strict emissions standards for new off-road diesel equipment, on-road diesel trucks, and locomotives. New construction equipment used for the Project, including heavy-duty trucks and off-road construction equipment, would be required to comply with the emissions standards.

State

California Air Resources Board

CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the CCAA of 1988. Other CARB duties include monitoring air quality in conjunction with air monitoring networks maintained by air pollution control districts and air quality management districts, establishing CAAQS, which in many cases are more stringent than the NAAQS, and setting emissions standards for new motor vehicles. The emission standards established for motor vehicles differ depending on various factors including the model year, and the type of vehicle, fuel, and engine used. The CAAQS are set to be protective of human health and are summarized in **Table 3.3-1**. These standards apply to the same criteria pollutants as the FCAA and also include sulfates, visibility reducing particulates, hydrogen sulfide, and vinyl chloride.

California Clean Air Act

The CCAA requires that all air districts in the state endeavor to achieve and maintain CAAQS for O_3, CO, SO_2, and NO_2 by the earliest practical date. The CCAA specifies that districts focus attention on reducing the emissions from transportation and area wide emission sources, and the act provides districts with authority to regulate indirect sources of emissions. Each district plan is required to either (1) achieve a five percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each non-attainment pollutant or its precursors, or (2) to provide for implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

Assembly Bills 1807 and 2588 – Toxic Air Contaminants

Within California, TACs are regulated primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics Hot Spots Information and Assessment Act of 1987). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB designates a substance as a TAC.

Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

Low-Emission Vehicle Program and Zero-Emission Vehicle Program

CARB first adopted Low-Emission Vehicle (LEV) program standards in 1990. The first LEV program standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represented continuing progress in emission reductions. As the state's passenger vehicle fleet continued to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan (SIP). In 2012, CARB

adopted the LEV III amendments to California's LEV regulations. These amendments include more stringent emission standards for both criteria pollutants and GHGs for new passenger vehicles.

The Advanced Clean Cars II (ACC II) regulation builds on the Advanced Clean Cars rule adopted in 2012. ACC II decreases emissions by increasing electric vehicle (EV) sales via two programs. First, the Zero-Emission Vehicle (ZEV) program requires ZEVs, defined as battery-electric vehicles (BEVs) or fuel-cell-electric vehicles (FCEVs), to comprise an increasing portion of annual vehicle sales. Under the ZEV program, original equipment manufacturers must increase sales of ZEVs from 35 percent in 2026 to 100 percent in 2035. Second, ACC II further strengthened the LEV program discussed above, with more stringent emission standards beginning with model year 2025.

On-Road Heavy-Duty Vehicle Program

CARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Title 13, CCR §1956.8 contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. CARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.

In addition, the CARB's Truck and Bus regulation was established to meet federal attainment standards. This regulation requires heavy-duty diesel vehicles that operate in California to reduce TAC emissions from their exhaust. Diesel exhaust is responsible for 70 percent of the cancer risk from airborne toxics. Therefore, as of January 1, 2023, nearly all trucks and buses are required to have 2010 or newer model year engines to reduce PM and NOx emissions.

In-Use Off-Road Diesel-Fueled Fleets Regulation

CARB has adopted the In-Use Off-Road Diesel-Fueled Fleets Regulation with the intent to reduce PM and NOx emissions from existing off-road heavy-duty diesel vehicles in California. In general, the regulation imposes limits on vehicle idling; requires all vehicle usage to be reported to CARB; restricts the addition of older vehicles into fleets; requires the phase-out of the oldest and least efficient engines; and, starting in 2024, requires the procurement and use of renewable diesel.

Advanced Clean Truck Act

To reduce emissions, the Advanced Clean Truck Act (ACT) requires original equipment manufacturers of medium- and heavy-duty vehicles to sell ZEVs or near-zero-emissions vehicles (NZEVs), such as plug-in electric hybrids, at an increasing percentage of their annual sales from 2024 to 2035. A ZEV is a vehicle that produces zero tail-pipe emissions, including BEVs and hydrogen fuel cell vehicles. A NZEV is a vehicle with an internal combustion engine and an electric energy storage system, including plug-in hybrid vehicles and hydrogen internal combustion engine vehicles. The ACT includes a cap-and-trade system, capping the number of fossil fuel vehicles sold by stipulating annual sales percentage requirements. Manufacturers can comply with the ACT by generating compliance credits through the sale of ZEVs or NZEVs or through the trading of compliance credits.

California State Implementation Plan

The FCAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The FCAA Amendments dictate that states with areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the FCAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the FCAA. State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register.

California Renewables Portfolio Standard Program

Established in 2002 under Senate Bill (SB) 1078 and accelerated by SB 107 (2006) and SB 2 (2011), California's Renewable Portfolio Standard (RPS) required investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent of their electricity from renewable energy sources by 2020. In 2015, SB 350 further increased the RPS to 50 percent by 2030. The legislation also included interim targets of 40 percent by 2024 and 45 percent by 2027. The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) are jointly responsible for implementing the program. Pacific Gas & Electric (PG&E) is on track to meeting these obligations, and currently delivers 93 percent GHG emissions free clean energy with the plan to be net zero by 2040 and climate positive (carbon negative) by 2050. SB 100, signed into law in September 2018, requires California utilities to increase the percentages of renewable energy sold to retail customers. The new targets are for 50 percent renewable resources by December 31, 2026, 60 percent by December 31, 2030, and 100 percent from eligible renewable energy resources and zero-carbon resources by 2045.

Judicial Council Policy on Asbestos Management for Court Facilities

In 2018, the Judicial Council adopted a policy with requirements to manage asbestos hazards related to renovation or demolition in court facilities. The policy generally requires compliance with applicable federal and state statutes, as well as notification of all Facilities Services staff and employees that may be affected (Judicial Council 2018).

Regional

San Joaquin Valley Air Pollution Control District

Although the Judicial Council is not generally subject to regional or local land use plans and regulations, it is subject to plans and regulations implementing delegated federal authority. SJVAPCD is the agency primarily responsible for helping ensure that NAAQS and CAAQS are not exceeded, and that air quality conditions are maintained in the SJVAB, within which the Project is located. Responsibilities of the SJVAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing

permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the FCAA and the CCAA.

Current Air Quality Plans

The SJVAPCD is responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the SJVAB. The main purpose of an AQMP is to bring the area into compliance with federal and state air quality standards. The SJVAPCD does not have one single AQMP for criteria pollutants; rather, the SJVAPCD addresses each criteria pollutant with its own Plan. The SJVAPCD has the following AQMPs:

- 2004 Revision to the California State Implementation Plan for Carbon Monoxide
- 2007 PM_{10} Maintenance Plan
- 2013 Plan for the Revoked 1-Hour Ozone Standard
- 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards
- 2022 Plan for the 2015 8-Hour Ozone Standard
- 2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard
- 2024 Plan for the 2012 $PM_{2.5}$ Standard

The SJVAPCD's AQMPs incorporate the latest scientific and technological information and planning assumptions, including updated emission inventory methodologies for various source categories. The SJVAPCD's AQMPs included the integrated strategies and measures needed to meet the NAAQS, implementation of new technology measures, and demonstrations of attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards.

The SJVAPCD's current air quality plans are discussed below.

Carbon Monoxide Plans. CARB approved the 2004 Revision to the California SIP for Carbon Monoxide on July 22, 2004 to demonstrate how ten areas of the state, including SJVAB, would maintain CO standards.

Ozone Plans. The SJVAPCD adopted the 2022 Plan for the 2015 8-Hour Ozone standard in December 2022 to meet FCAA requirements and ensure attainment of the USEPA's 8-hour Ozone threshold of 70 ppb. In June 2023, SJVAPCD adopted the 2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard to request redesignation of the SJVAB to attainment for the 1-hour federal O_3 standard and demonstrate a maintenance plan to ensure attainment through 2036.

SJVAPCD's Governing Board approved the 2016 Plan for the 2008 8-Hour Ozone Standard on June 16, 2016. The comprehensive strategy in this plan will reduce NO_X emissions by over 60 percent between 2012 and 2031 and will bring the San Joaquin Valley into attainment of USEPA's 2008 8-hour O_3 standard as expeditiously as practicable, no later than December 31, 2031.

Particulate Matter Plans. The USEPA designated the SJVAB as an attainment/maintenance area for PM_{10} and non-attainment for $PM_{2.5}$. SJVAPCD adopted the 2007 PM_{10} Maintenance Plan in September 2007 to help ensure SJVAB's continued attainment of the USEPA's PM_{10} standard. The 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards was adopted in 2018 and addresses the USEPA federal 1997

annual $PM_{2.5}$ standard of 15 µg/m³ and 24-hour $PM_{2.5}$ standard of 65 µg/m³; the 2006 24-hour $PM_{2.5}$ standard of 35 µg/m³; and the 2012 annual $PM_{2.5}$ standard of 12 µg/m³. This plan demonstrates attainment of the federal $PM_{2.5}$ standards as expeditiously as practicable. The most recent $PM_{2.5}$ plan is the 2024 Plan for the 2012 $PM_{2.5}$ Standard and was adopted in 2024. This plan addresses the 2012 annual $PM_{2.5}$ standard of 12 µg/m³ and demonstrates expeditious attainment of the 2012 $PM_{2.5}$ standard by 2030.

Rules and Regulations

SJVAPCD rules and regulations that may apply to projects that will occur during buildout of the Project include, but are not limited to, the following:

Rule 2010 – Permits Required. The purpose of this rule is to require any person constructing, altering, replacing or operating any source operation which emits, may emit, or may reduce emissions to obtain an Authority to Construct or a Permit to Operate. This rule also explains the posting requirements for a Permit to Operate and the illegality of a person willfully altering, defacing, forging, counterfeiting, or falsifying any Permit to Operate.

Rule 2201 – New and Modified Stationary Source Review Rule. The purpose of this rule is to provide for the following:

- The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards; and
- No net increase in emissions above specified thresholds from new and modified Stationary Sources of all non-attainment pollutants and their precursors.

Rule 2280 – Portable Equipment Registration. Portable equipment used at project sites for less than six consecutive months must be registered with the SJVAPCD. The SJVAPCD will issue the registrations 30 days after receipt of the application.

Rule 4002 – National Emission Standards for Hazardous Air Pollutants. This rule incorporates the National Emission Standards for Hazardous Air Pollutants from Part 61, Chapter I, Subchapter C, Title 40, Code of Federal Regulations (CFR) and the National Emission Standards for Hazardous Air Pollutants for Source Categories from 40 CFR Part 63, Chapter I, Subchapter C.

Rule 4102 – Nuisance. The purpose of this rule is to protect the health and safety of the public and applies to any source operation that emits or may emit air contaminants or other materials.

Rule 4601 – Architectural Coatings. The purpose of this rule is to limit ROG emissions (also called VOC emissions) from architectural coatings. Emissions are reduced by limits on ROG content and providing requirements on coatings storage, cleanup, and labeling.

Rule 4623 – Storage of Organic Liquids. The purpose of this rule is to limit ROG emissions from the storage of organic liquids.

Rule 4624 – Transfer of Organic Liquids. The purpose of this rule is to limit ROG emissions from the transfer of organic liquids.

Rule 4641 – Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit ROG emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations may be subject to Rule 4641.

Rule 8011 – General Requirements. Fugitive Dust Emission Sources. Fugitive dust regulations are applicable to outdoor fugitive dust sources. Operations, including construction operations, must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII. According to Rule 8011, the SJVAPCD requires the implementation of control measures for fugitive dust emission sources. For projects in which construction-related activities would disturb equal to or greater than 1 acre of surface area, the SJVAPCD recommends that demonstration of receipt of an SJVAPCD-approved Dust Control Plan or Construction Notification Form, before issuance of the first grading permit, be made a condition of approval.

Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities. The purpose of this rule is to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities. The following best management practices (BMPs) are included:

- Pre-water site sufficient to limit visible dust emissions (VDE) to 20% opacity.
- Phase work to reduce the amount of disturbed surface area at any one time.
- Apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity
- Construct and maintain wind barriers sufficient to limit VDE to 20% opacity.
- Apply water or chemical/organic stabilizers/suppressants, sufficient to comply with the conditions of a stabilized surface. If an area having 0.5 acres or more of disturbed surface area remains unused for seven or more days, the area must comply with the conditions for a stabilized surface area as defined in section 3.58 of Rule 8011.
- An owner/operator shall limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour.
- Cease outdoor construction, excavation, extraction, and other earthmoving activities that disturb the soil whenever VDE exceeds 20% opacity.

Rule 9510 – New Source Review. Rule 9510 requires certain development projects to mitigate exhaust emissions from construction equipment greater than 50 horsepower to 20 percent below statewide average NOx emissions and 45 percent below statewide average PM_{10} exhaust emissions. This rule also requires applicants to reduce baseline emissions of NOx and PM_{10} emissions associated with operations by 33.3 percent and 50 percent, respectively, over a period of 10 years.

Regulation VIII – Fugitive PM_{10} Prohibitions. Rules 8011-8081 are designed to reduce PM_{10} emissions (e.g., dust or dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

SJVAPCD CEQA Guidance and Thresholds

SJVAPCD also provides guidance and thresholds for CEQA air quality and GHG analyses. In particular, SJVAPCD's 2015 Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) states the following:

> *The District's Air Quality Attainment Plans include measures to promote air quality elements in county and city general plans as one of the primary indirect source programs. The general plan is the primary long-range planning document used by cities and counties to direct development. Since air districts have no authority over land use decisions, it is up to cities and counties to ensure that their general plans help achieve air quality goals. Section 65302.1 of the California Government Code requires cities and counties in the San Joaquin Valley to amend appropriate elements of their general plans to include data, analysis, comprehensive goals, policies, and feasible implementation strategies to improve air quality in their next housing element revisions.*
>
> *The Air Quality Guidelines for General Plans (AQGGP), adopted by the District in 1994 and amended in 2005, is a guidance document containing goals and policy examples that cities and counties may want to incorporate into their general plans to satisfy Section 65302.1. When adopted in a general plan and implemented, the suggestions in the AQGGP can reduce vehicle trips and miles traveled and improve air quality. The specific suggestions in the AQGGP are voluntary. The District strongly encourages cities and counties to use their land use and transportation planning authority to help achieve air quality goals by adopting the suggested policies and programs.*

Local

Because the Judicial Council is the CEQA lead agency for the Project, acting as the Judicial Branch of State Government, local government regulations do not apply to the Project. However, the Judicial Council considers local policies and guidelines, as appropriate. There are no local plans, policies, regulations, or ordinances related to air quality that apply to the Project.

3.3.3 IMPACTS ANALYSIS

3.3.3.1 Methodology

Criteria Pollutant Emission Methods

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod quantifies direct GHG

emissions, such as construction and operational activities and vehicle use, and indirect emissions, such as energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, CalEEMod identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user. CalEEMod version 2022.1.1.43 was used to estimate construction and operational impacts of the Project.

Modeling Assumptions

The Project would involve demolition of the existing Sheriff Administration Building and South Annex Jail buildings (approximately 87,000 SF) and 40,000 SF of existing paving. The Project would construct a new 413,000 SF courthouse and secure parking. The entire Project (courthouse and parking) was modeled as a Government Office Building within CalEEMod. See **Appendix B**, Section 4.2 for detailed construction modeling assumptions for the Project.

Long-term operational emissions of criteria air pollutants and precursors were also calculated using CalEEMod for both the Project and the existing Project site to determine the net operational impact. As discussed above, the Project site is currently developed and operates with the Sheriff Administration Building and South Annex Jail buildings (approximately 87,000 SF). For both operational CalEEMod models, the default vehicle trips, fleet mix, energy consumption, and all other inputs were assumed. The Project CalEEMod model assumed a buildout year of 2033, the earliest possible year for operation while the existing operational CalEEMod model calculates the emissions for the year 2025.

Health Risk Assessment Methods

This section describes the methodology used for the Project construction health risk assessment (HRA).

To estimate the concentration of DPM from Project activities, an air dispersion model was prepared. An air dispersion model is a mathematical formulation used to estimate the air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. This assessment relied on the USEPA's American Meteorological Society (AMS)/EPA Regulatory Model (AERMOD) Version 22112 air dispersion model applied in the Lakes Software AERMOD View Version 13.0.0 interface. The AERMOD model was used to estimate the concentration of DPM at sensitive receptor locations from potential sources of project-generated TACs. DPM is the primary pollutant of concern associated with construction equipment exhaust and consists of a range of TACs. The AERMOD model provides a refined methodology for estimating health impacts by utilizing long-term, measured representative meteorological data for the Project site.

The modeling analysis considers the spatial distribution and elevation of each emitting source in relation to the sensitive receptors. Direction-dependent calculations were obtained by identifying the Universal Transverse Mercator coordinates for each source location. Terrain elevations were obtained for the Project site using the AERMAP model, which is the AERMOD terrain data pre-processor. The air dispersion model assessment used meteorological data recorded from the SJVAPCD's Fresno Station, which is located approximately 4.7 miles northeast of the Project site. The meteorological data used was preprocessed in AERMET for use with AERMOD and included data for the most recent years available (2018-2022).

After using AERMOD to determine the concentration of PM at sensitive receptor locations, the associated health risks were calculated using the CARB's Hotspot Analysis Reporting Program Version 2 Risk Assessment Standalone Tool, which calculates the cancer and non-cancer health impacts using the Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015).

Modeling Assumptions

The estimated concentration of exhaust PM_{10} was used as a proxy to represent emissions of DPM. The PM_{10} emissions from construction were determined using the results of the CalEEMod modeling conducted for the Project. Construction emissions were assumed to be distributed evenly over the Project site by applying an area source in AERMOD. The concentration of the PM_{10} was calculated at the maximally exposed residential receptor which was then input into CARB's Hotspot Analysis Reporting Program Version 2 Risk Assessment Standalone Tool 2 model to calculate the health risks. The exposure period was set to three years to encompass the entire construction period. Consistent OEHHA guidance, exposure was assumed to occur during the third trimester, infant, and child stages of life. Detailed parameters and complete calculations are contained in **Appendix B**.

3.3.3.2 Thresholds of Significance

Where available and determined to be appropriate for the Project, the Judicial Council may reference the significance criteria established by the applicable air quality management or air pollution district to make the following determinations.

The final determination of whether a project is significant is within the purview of the lead agency pursuant to CEQA Guidelines, Title 14, CCR §15064(b). If the lead agency finds that the project has the potential to exceed its established air pollution thresholds, the project should be considered to have significant air quality impacts. The SJVAPCD has adopted quantitative air pollution thresholds to assist lead agencies in determining the significance of project emissions. The SJVAPCD thresholds are presented in **Table 3.3-4**.

Table 3.3-4. SJVAPCD Criteria Pollutant Thresholds of Significance

Pollutant	Construction Emissions (tons/year)	Operational Emission (tons/year)
Carbon monoxide (CO)	100	100
Oxides of nitrogen (NOx)	10	10
Reactive organic gas (ROG)	10	10
Sulfur oxides (SO_X)	27	27
Particulate matter 10 microns diameter or less (PM_{10})	15	15
Fine particulate matter 2.5 microns diameter or less ($PM_{2.5}$)	15	15

Source: SJVAPCD 2015.

To address the potential for air pollutant hotspots, SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard. SJVAPCD also has adopted thresholds of significance for health risks from exposure to TACs. A project would result in a significant impact if the project would increase the cancer risk for the person with maximum exposure potential by 20 in a million or result in a non-cancer hazard index greater than 1.

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to air quality if it would:

a. Conflict with or obstruct implementation of the applicable air quality plan?

The CEQA Guidelines indicate that a significant impact could occur if a project would conflict with or obstruct implementation of the applicable air quality plan. The SJVAPCD GAMAQI proposes the following criteria for determining project consistency with the current AQMPs:

- Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMPs?
- Will the project conform to the assumptions in the AQMPs?
- Will the project comply with applicable control measures in the AQMPs?

The use of criteria listed above is a standard approach for CEQA analysis of projects in the SJVAPCD's jurisdictions and other air districts for the following reasons:

- Significant contribution to existing or new exceedances of the air quality standards would be inconsistent with the goal of attaining the air quality standards.
- AQMP emissions inventories and attainment modeling are based on growth assumptions for the area within the SJVAPCD's jurisdiction.
- AQMPs rely on a set or air district-initiated control measures and implementation of federal and state measures to reduce emissions within their jurisdictions, with the goal of attaining the air quality standards.

The Judicial Council finds the SJVAPCD analysis persuasive and adopts the SJVAPCD thresholds of significance for the purposes of determining air quality impacts for this Project.

AQMPs are plans for reaching attainment of the NAAQS and CAAQS. The assumptions, inputs, and control measures are analyzed to determine whether the SJVAB can reach attainment for the ambient air quality standards. To show attainment of the standards, SJVAPCD analyzes the growth projections in the valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both state

and SJVAPCD regulations and other local programs and measures. The applicable AQMPs include the 2004 Carbon Monoxide Plan, the 2022 8-Hour Ozone Plan, the 2023 1-Hour Ozone Maintenance Plan, the 2007 PM_{10} Maintenance Plan, the 2018 $PM_{2.5}$ Plan, and 2024 $PM_{2.5}$ Plan.

Contribution to Air Quality Violations

A measure of determining whether a project is inconsistent with the AQMPs is whether the project would result in increased frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. Because of the region's non-attainment status for O_3, $PM_{2.5}$, and PM_{10}, if Project-generated emissions of either of the O_3 precursor pollutants (ROG and NOx), PM_{10}, or $PM_{2.5}$ would exceed the SJVAPCD's significance thresholds, then the Project would be considered to conflict with the attainment plans.

As shown in Impact AIR-2, emissions of ROG, NOx, PM_{10}, and $PM_{2.5}$ from construction and operation of the Project would not exceed the SJVAPCD's significance thresholds. As shown in Impact AIR-3, the Project would not expose sensitive receptors to a substantial pollutant concentration. Therefore, the Project would not contribute to air quality violations.

Consistency with Assumptions in Air Quality Plans

The primary way of determining consistency with the AQMPs' assumptions is determining consistency with the applicable general plan to see that the Project's population density and land use are consistent with the growth assumptions used in the AQMPs for the SJVAB.

As required by California law, general plans contain a land use element that details the types and quantities of land uses that the city or county estimates will be needed for future growth and designates locations for land uses to regulate growth. The Fresno Council of Governments (FCOG) uses the growth projections and land use information in adopted general plans and other sources to estimate future average daily trips and vehicles miles traveled (VMT), which are then provided to SJVAPCD to estimate future emissions in the AQMPs. Existing and future pollutant emissions computed in the AQMPs are based on land uses from area general plans. AQMPs detail the control measures and emission reductions required for reaching attainment of the air standards based on these growth and emission estimates.

The applicable general plan for the area around the Project site is the Fresno General Plan, which was adopted in 2014, prior to the SJVAPCD's adoption of the applicable AQMPs. Per the Fresno General Plan, the land use designation for the area around the Project site is DTG. The DTG designation allows for the development of courthouses; therefore, the Project is consistent with the Fresno General Plan. The Project is expected to generate 5,212 average daily trips and most of the operational labor force is expected to be from surrounding local communities. The Project would employ up to 390 full-time employees and 14 part-time employees daily, which is within the Fresno General Plan's employment projections of 108,000 by 2035 (City of Fresno 2014). Accordingly, as shown in **Table 3.3-6**, long-term emissions associated with operational vehicle trips would be below SJVAPCD's thresholds and would not conflict with any assumptions of the applicable AQMPs. For example, the AQMPs assumes the regional

fleet will trend towards cleaner technology with CARB incentive programs like the Low Emission Vehicle Program and Zero-Emission Vehicle Program. Therefore, the Project would be consistent with the buildout assumptions included in the County's General Plan and would also be consistent with the modeling used to prepare the AQMPs. Impacts would be less than significant.

Control Measures

The AQMP contains several control measures that are enforceable requirements through the adoption of rules and regulations. A detailed description of rules and regulations that apply to the Project is provided in Section 2.2. The Project would not conflict with or obstruct implementation of the applicable AQMP. For example, construction and decommissioning activities would be consistent with Regulation VIII and the BMPs disclosed within Rule 8021.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. If emissions fall below thresholds, then a project's impacts are not considered cumulative considerable and would not result in an adverse air quality impact (SJVAPCD 2015). The SJVAPCD GAMAQI, adopted in 2015, contains thresholds for ROG and NOx, SOx, CO, PM_{10}, and $PM_{2.5}$ (**Table 3.3-4**).

Construction Emissions

Project emissions during construction are generated from off-road construction equipment, worker vehicle trips, and hauling trips. As shown in **Table 3.3-5**, the emissions from construction fall below SJVAPCD thresholds, and impacts would be less than significant.

Table 3.3-5. Construction Emissions

Emissions Source		Emissions (tons/year)					
		ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Project Construction	Year 2029	0.04	0.33	0.42	<0.01	0.13	0.04
	Year 2030	0.14	1.16	1.54	<0.01	0.08	0.05
	Year 2031	0.13	1.10	1.50	<0.01	0.03	0.03
	Year 2032	0.13	1.07	1.50	<0.01	0.03	0.02
	Year 2033	1.07	0.94	1.36	<0.01	0.02	0.02
	Mobile (2029-2032)[1]	0.67	8.78	5.75	0.05	1.72	0.51
Significance Thresholds		**10**	**10**	**100**	**27**	**15**	**15**
Any Year Exceed Thresholds?		**No**	**No**	**No**	**No**	**No**	**No**

Notes:
[1] Mobile emissions were calculated using emission factors for 2029 with EMFAC 2021 with EPA approved adjustment factors.
Source of Emissions: CalEEMod Output (Appendix B).
Source of Thresholds: SJVAPCD 2015.

Operation and Maintenance Emissions

Emissions during operation of the Project would be generated during routine site maintenance, including landscaping and repainting, and employee, jurors, defendants, and the public's trips to and from the Project site. As shown in **Table 3.3-6**, the net operational emissions fall below SJVAPCD thresholds; therefore, the Project impacts would be less than significant.

Table 3.3-6. Operational Emissions

Source	Emissions (tons/year)					
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Mobile	4.17	5.22	22.97	0.06	5.94	1.54
Area	1.97	0.01	1.62	<0.01	<0.01	<0.01
Energy	0.04	0.81	0.68	<0.01	0.06	**0.06**
Project Total	6.18	6.04	25.27	0.07	6.00	1.60
Existing Total	(1.64)	(1.56)	(7.22)	*(0.02)*	*(1.26)*	*(0.34)*
Net Total	**4.54**	**4.48**	**18.05**	0.05	**4.74**	**1.26**
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Any Year Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod Output (Appendix B).
Source of Thresholds: SJVAPCD 2015.
Notes:
[1] Mobile emissions were calculated using emission factors for 2029 from EMFAC 2021 with EPA approved adjustment factors.
Emissions were quantified using CalEEMod based on Project details and estimated operating year for the Project. Totals may not sum exactly due to rounding.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

c. Expose sensitive receptors to substantial pollutant concentrations?

This discussion addresses whether the Project would expose sensitive receptors to localized concentrations of air pollutants or TACs during construction or operation. According to CARB, some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics.

The closest sensitive receptors are residences located approximately 750 feet east of the Project site.

Construction

During construction, the potential exists for sensitive receptors in the Project area to be exposed to localized impacts from criteria pollutants (i.e., CO, NO_2, PM), asbestos, fugitive dust, Valley Fever, and DPM. The potential impacts are evaluated below.

Localized Impacts

Emissions occurring at or near the Project site have the potential to create a localized impact, also referred to as an “air pollutant hotspot.” Localized emissions are considered significant when, combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard.

SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

It should be noted that localized impacts only account for on-site emissions. Most on-road mobile sources from construction worker trips, vendor trips, and hauling trips would be generated off-site on existing roadways. Therefore, the localized emissions account for all on-site sources (off-road construction equipment, architectural coating) and mobile source emissions generated within 0.25 miles of the Project site to account for any on-site vehicle movement and idling. As shown in **Table 3.3-7**, on-site construction

emissions would be less than 100 pounds per day for the local criteria pollutants of concern (i.e., CO, NO_2, PM). Based on SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation. Impacts would be less than significant.

Table 3.3-7. Localized Concentrations of Emissions for Construction

Emissions Source	Emissions (pounds per day)			
	NOx[1]	**CO**	**PM_{10}**	**$PM_{2.5}$**
Construction Maximum	84.20	80.60	4.34	2.06
Significance Thresholds	**100**	**100**	**100**	**100**
Any Year Exceed Significance Thresholds?	**No**	**No**	**No**	**No**

Source of Emissions: CalEEMod Output (Appendix B).
Source of Thresholds: SJVAPCD 2015.
Notes:
[1] NOx emissions used as a proxy for NO_2.

Asbestos

According to the United States Geological Survey (USGS), no naturally occurring asbestos is present within the Project area (USGS 2011). Therefore, development of the Project is not anticipated to expose receptors to NOA. Impacts would be less than significant.

Exposure to asbestos can occur during demolition or remodeling of buildings constructed prior to 1977, when asbestos was banned for use in buildings. The existing on-site buildings were constructed between 1942 and 1970 and, as a result, have the potential to include ACBMs. The Project would be required to comply with the provisions in the Judicial Council's Policy on Asbestos Management for Court Facilities (Judicial Council 2018). Provisions of this policy include:

- Informing all entities of the potential hazard.
- A written program that complies with applicable federal, state, and local laws and regulations, as well as asbestos-related labor and business laws, and regulations regarding asbestos management, storage, and disposal.
- Fugitive dust control measures.
- Work conducted must follow the written program.
- All entities must follow the Asbestos Notification Requirements.

Compliance with Judicial Council's Policy on Asbestos Management for Court Facilities would minimize sensitive receptors' exposure to substantial concentrations of asbestos including worker safety and fugitive dust measures, and the impact would be less than significant.

Fugitive Dust

The potential for localized PM_{10} and $PM_{2.5}$ health impacts is a concern for sensitive receptors. The closest sensitive receptor is located approximately 750 feet east of the Project site. Most of this fugitive dust would remain localized and would be deposited near the Project site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from the Project site. The Project would comply with SJVAPCD's Regulation VIII by preparing and complying with a Dust Control Plan that incorporates BMPs for reducing fugitive dust. BMPs required under SJVAPCD Rule 8021 are listed above. With implementation of these BMPs, potential impacts to sensitive receptors resulting from fugitive dust would be less than significant.

Valley Fever

Valley Fever, or *coccidioidomycosis*, is an infection caused by inhalation of the spores of the fungus *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities. The San Joaquin Valley is considered an endemic area for Valley Fever.

Construction activities would generate fugitive dust that could contain *C. immitis* spores. The Project would minimize the generation of fugitive dust during construction activities by complying with SJVAPCD's Regulation VIII and implementing the BMPs contained therein. BMPs include using water or chemical stabilizers to reduce opacity to less than 20 percent to prevent airborne dust that carries valley fever. Additionally, construction contractors would be subject to the Occupational Safety and Health Administration's (OSHA) standards for worker protection, including Construction Standard for Personal Protective Equipment (29 CFR §1926 Subpart E) (OSHA 2026). With implementation of these BMPs and OSHA standards, potential impacts to sensitive receptors resulting from Valley Fever would be less than significant.

Diesel Particulate Matter

Construction activities have the potential to generate DPM emissions related to the number and types of diesel-powered equipment typically associated with construction. Off-road, heavy-duty diesel equipment used for site grading and other construction activities result in the generation of DPM, which is a primary pollutant of concern when evaluating the health risk posed to sensitive receptors. According to CARB, the concentration of DPM is a factor of distance from the source of emissions. Because of the proximity of sensitive receptors there is the potential for DPM emissions to result in a health impact. Accordingly, a construction HRA was prepared to determine if a potential health risk would occur as a result of Project construction.

The construction HRA evaluated DPM (represent as exhaust PM_{10}) emissions generated during construction of the Project and the related health risk impacts for sensitive receptors located within 1,000 feet of the Project boundary. A project would result in a significant impact if it would individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 20 in one million or an increased non-cancer risk of greater than 1.0 on the hazard index (SJVAPCD 2015).

The nearest sensitive receptors are residents occupying an apartment complex approximately 750 feet east of the Project site. To estimate the potential cancer risk associated with construction of the Project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to concentrations at the receptor locations of interest (i.e., receptors at nearby residences).

As discussed above, AERMOD dispersion model was used to predict concentrations of DPM at sensitive receptors within 1,000 feet of the Project site. To model emissions, a release height of three meters was chosen to represent the release height of construction equipment. Emissions from off-road construction equipment and on-road vehicle travel were distributed throughout the modeled area source. AERMOD modeling was performed to assess the risks posed to nearby receptors from the on-site construction. On-site modeling was assumed to occur as an area source.

The current OEHHA guidance recommends that cancer risks be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, it recommends evaluating the risks for the third trimester of pregnancy to age zero (third trimester exposure), ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposure, an ASF of three for child exposure, and an ASF of one for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilograms of body weight per day (L/kg-day). As recommended, 95th percentile breathing rates are used for the third trimester and infant exposure, and 80th percentile breathing rates are used for child and adult exposure. These age-specific breathing rates are 361 L/kg-day for the third trimester receptor, 1,090 L/kg-day for the infant receptors, 572 L/kg-day for child receptors, and 233 L/kg-day for adult receptors (OEHHA 2015). According to OEHHA, the cancer risk for a residential receptor is assumed to start in the third trimester of life. Project construction would occur over approximately 4.04 years and would include the third trimester, the infant, and the first 1.79 year of the child stages of life to account for the entire construction period.

Results of the construction health risk analysis are summarized in **Table 3.3-8**. The calculations and AERMOD output data used in the assessment are included in **Appendix B**.

Table 3.3-8. Health Risks from Project Construction at the Maximally Exposed Sensitive Receptor

Health Impact Metric	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index (construction)[1]
Closest Sensitive Receptor	8.9	0.004
Threshold	**20**	**1**
Exceeds Threshold?	**No**	**No**

Notes:
[1] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM10 exhaust) by the REL of 5 µg/m3.
Source: Appendix B.

As shown in **Table 3.3-8**, construction of the Project would not expose nearby receptors to cancer and noncancer risks that exceed the SJVAPCD's threshold of significance. Therefore, the impact related to DPM exposure during construction would be less than significant.

Operation

The potential for sensitive receptors in the Project area to be exposed to localized impacts from criteria pollutants (i.e., CO, NO_2, PM), fugitive dust, Valley Fever, and DPM are evaluated below.

Localized Impacts

Localized impacts could occur in areas with a single large source of emissions, such as a fuel power plant, or with multiple sources concentrated in a small area, such as a distribution center. The Project proposes to develop a courthouse. **Table 3.3-9** demonstrates the daily operational emissions from the Project and demonstrates that during operation, the Project would not exceed localized concentrations for the local criteria pollutants of concern (i.e., CO, NO_2, PM).

Table 3.3-9. Localized Concentrations of Emissions for Operations

Emissions Source	Emissions (pounds per day)			
	NOx[1]	**CO**	**PM_{10}**	**$PM_{2.5}$**
Operation Maximum	30.35	97.26	2.06	0.83
Significance Thresholds	**100**	**100**	**100**	**100**
Any Year Exceed Significance Thresholds?	**No**	**No**	**No**	**No**

Source of Emissions: CalEEMod Output (Appendix B).
Source of Thresholds: SJVAPCD 2015.
Notes:
[1] NOx emissions used as a proxy for NO_2.

Fugitive Dust and Valley Fever

During operation, dust emissions are anticipated to be negligible because most of the Project area would be occupied by buildings, landscaping, and pathways. Thus, the potential for the Project to generate fugitive dust, including dust that may expose sensitive receptors to Valley Fever during operations would be similar to existing conditions and less than significant.

Diesel Particulate Matter

The greatest potential during long-term operations for exposure to TACs is from the use of heavy-duty diesel trucks and stationary generators that use diesel fuel. Given the nature of the Project, vehicle trips to and from the Project site during operations would primarily be from courthouse staff and members of the public. As a result, the Project would attract very few diesel-fueled truck trips. Additionally, the Project may include an emergency, back-up stationary generator on-site. However, the generator would only operate during routine testing and maintenance operations and, as a result, would not generate DPM that would impact nearby sensitive receptors. The back-up generator would be permitted by SJVAPCD prior

to installation. For these reasons, once operational, the Project would not be expected to expose nearby sensitive receptors to substantial amounts of DPM.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

While offensive odors rarely cause any physical harm, they can still be unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and SJVAPCD. The occurrence and severity of odor impacts depends on numerous factors, including nature, frequency, and intensity of the source, the wind speed and direction, and the sensitivity of the receptor. The nearest sensitive receptors to the Project site are the residents occupying an apartment complex approximately 750 feet to the east.

Construction

Construction activities associated with the Project could result in short-term odorous emissions from diesel exhaust associated with diesel-fueled equipment. However, these emissions would be intermittent and would dissipate rapidly from the source. In addition, this diesel-powered equipment would only be present on-site temporarily during construction activities. In general, construction activities would not create objectionable odors affecting a substantial number of people, and the impact would be less than significant.

Operation

Land uses typically considered as associated with the production of odors during operations include wastewater treatment facilities, waste disposal facilities, and agricultural operations. The Project does not include any land uses that are typically associated with emitting objectionable odors. However, the Project would be subject to SJVAPCD Rule 4102, Nuisance. Thus, although not anticipated, if odor complaints are made after the Project is developed, the SJVAPCD would address such odors, and any potential odor effects would be minimized or eliminated.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

3.4 Biological Resources

The following discussion is primarily based on the Biological Resources Technical Report (Stantec 2025) prepared for the Project and included as **Appendix C** to this EIR.

3.4.1 EXISTING CONDITIONS

Local Setting and Existing Land Use

The Project area is situated in the western portion of the 13.94-acre Courtyard Park parcel (the parcel) in the City of Fresno, Fresno County, California. It is in the highly developed and urban City center, situated in a 1,500-acre area between SR-99, SR-180, and SR-41 (**Appendix C – Figure 1**).

The parcel has been developed as Courthouse Park (formerly known as Court House Square) since the late 1800s. Initial development included a three-story courthouse constructed in 1874, with a copper dome added by 1885. A jail has occupied the northeastern portion of the parcel since at least 1888. The current jail building, located in the northern section of the Project area, was constructed in 1942, with an annex added in 1960. The Fresno County Sheriff's Office building, located in the southern section of the Project area, was constructed in 1970, as part of a broader effort to redevelop downtown Fresno. This redevelopment also included the demolition of the original 1874 County Courthouse, construction of the Fresno Courthouse and its associated underground parking in 1966, located east of Site 1, placement of 22 commemorative statues, and planned landscaping throughout the overall Courthouse Park parcel (**Appendix C – Figure 2**).

Courthouse Park is the largest green space in downtown Fresno and houses the County Courthouse along with various other County facilities. Existing buildings within the park include the Fresno Superior Court and Hall of Records, located southeast of the Project Area, and the Fresno County Sheriff's Office and South Annex Jail, both situated within the Project Area boundaries. An underground parking facility is located east of the Project Area, with access from M Street to the north. The overall Courthouse Park parcel features paved walkways, lawns, ornamental trees, and landscaping (**Appendix C – Representative Photographs**).

Physical Conditions

The overall topography is extremely low gradient with elevations ranging from approximately 285 to 300 feet above mean sea level. The regional climate is typical of the Central Valley and is characterized by a Mediterranean climate with cool, wet winters and hot, dry summers. Precipitation in the region primarily occurs as rain. The average annual rainfall is approximately 10.89 inches and typically occurs between October and April. The Project Area climate typically exhibits a nine-month growing season from February through November. Most herbaceous growth occurs during spring and ceases as soil moisture depletes in early summer. Air temperatures range from an average January high of 54.6 degrees Fahrenheit (ºF) to an average July high of 98.3 ºF. The annual average high temperature is 76.5 ºF (Western Regional Climate Center 2025).

Vegetation Communities

Vegetation types in the Project Area were classified based on descriptions provided in *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988), as well as the *California Natural Community List* (California Department of Fish and Wildlife [CDFW] 2025b), which is adapted from the technical approach and vegetation alliance classification system described in *A Manual of California Vegetation,* Online Edition (California Native Plant Society [CNPS] 2025b).

Vegetation within the Project area is characterized as developed/disturbed, with impervious surfaces (driveways, parking, storage), compacted soils, and various ornamental trees. No aquatic features were observed within the Project Area. Specific vegetation communities present in the Project area are discussed in detail below.

Urban Vegetation

Urban vegetation can be classified into five general areas: tree grove, street strip, shade tree/lawn, lawn, and shrub cover. Urban areas typically have a small diversity of trees, shrubs, and grasses, but greater productivity than natural grasslands due to abundant water and fertilizer (McBride and Reid 2008). Examples include residential landscapes, golf courses, parks, and school grounds. Non-native landscape species and invasive weeds are common.

Ornamental non-native vegetation species known to occur within the Project area include mature deodar cedars, Italian stone pine, Chinese elm, and ginkgo (PlaceWorks 2024). Invasive species, including non-native grasses, were also observed in the Project area.

Invasive plants (i.e., noxious weeds) are undesirable, non-native plants that commonly invade disturbed sites. Most species were introduced from Europe and Asia, and many are known to negatively affect native wildlife habitat and plant communities. When disturbance results in the creation of habitat openings or in the loss of intact native vegetation, invasive plants may colonize the Project site and spread, often out-competing native species. Once established, they are very difficult to eradicate.

All pertinent non-native plant species were reviewed to determine their status as invasive plants according to the ratings in the California Invasive Plant Inventory produced by California Invasive Plant Council (Cal-IPC) (Cal-IPC 2025). Cal-IPC categorizes non-native invasive plants into three categories of overall negative ecological impact in California as “high”, “moderate”, and “limited”.

Invasive species with a Cal-IPC rating of “high”, “moderate”, or “limited” were not observed within Site 1 during PlaceWork’s field reconnaissance survey but were observed within staging area 3 during Stantec’s field reconnaissance survey (Stantec 2025). Invasive species observed within the Project area include *Bromus* spp., redstem filaree (*Erodium cicutarium*), and puncture vine (*Tribulus terrestris*) (Stantec 2025). No rating information is available for the *Bromus spp.,* but the redstem filaree and puncture vine both have a Cal-IPC rating of “limited”, which is defined as follows:

> *These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other*

attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic (Cal-IPC 2025).

Sensitive Natural Communities

Habitats are considered "sensitive" by the CDFW if they are identified on the List of Vegetation Alliances and Associations as being highly imperiled or classified by CDFW in the California Natural Diversity Database (CNDDB) as natural communities of special concern – Ranks S1 to S3. No sensitive natural communities are present within the Project area as the Project is located within a heavily urbanized and developed area (CDFW 2025a).

Wetlands and other Waters

Wetlands and other waters are protected under various federal and state laws. According to mapping results from the National Wetlands Inventory and the National Hydrography Dataset databases and the field reconnaissance surveys conducted for the Project, no aquatic features are present within the Project Area (United States Fish and Wildlife Service [USFWS] 2025c, USGS 2025, PlaceWorks 2024, Stantec 2025).

Habitat Connectivity

Habitat corridors are segments of land that provide linkages for wildlife movement between different habitats while also providing cover. Corridors also function as avenues along which plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and populations can be replenished from other areas. Habitat corridors often consist of riparian areas along streams, rivers, or other natural features. The Project Area is surrounded by urban development and does not provide habitat corridors for any plant or animal species.

Special-Status Plant Species

Regionally occurring special-status plant species were identified based on a review of pertinent literature, the USFWS Information for Planning and Consultation (IPaC) resource list, and CNDDB and CNPS database records (USFWS 2025a, CDFW 2025a, CNPS 2025a). Ten special status plant species were identified by the above databases to potentially occur within the Study Area, which includes the Project area and a surrounding 500-foot buffer. The Study Area is further detailed in **Figure 3 of Appendix C**. For each species identified as having potential to occur, habitat requirements were assessed and compared to the habitats in the Study Area to determine if suitable habitat is present. Of the ten species, none were found to have a potential to occur in the Project area, due to the lack of suitable habitat and the heavily developed and urbanized nature of the Project area. Additionally, all documented observations were historic (greater than 50 years old) and no special-status plants were observed during the field survey's conducted by PlaceWorks in Site 1 (PlaceWorks 2024) and by Stantec in staging area 3 (Stantec 2025).

Special-Status Animal Species

Regionally occurring special-status animal species were identified based on a review of pertinent literature, the USFWSspecies list, CNDDB database records, and the reconnaissance-level biological field survey results (USFWS 2025a, CDFW 2025a, PlaceWorks 2024). Twenty-two (22) special-status animal species were identified by the above databases to potentially occur within the Study Area (**Appendix C**). For each species, habitat requirements were assessed and compared to existing information about habitats present in the Project area to determine the species' potential to occur. Based on habitat assessments conducted during the field reconnaissance surveys, only one of the 22 animal species identified was determined to have a moderate potential to occur – western mastiff bat (*Eumops perotis californicus)*; for the remaining 21 special status animal species, habitat was determined to be absent within the Project area.

The western mastiff bat, a CDFW protected species, was found to have a moderate potential to occur within the Project Area because the Project is located within the range of the species, suitable foraging and roosting habitat exists within the Project Area, and there are documented occurrences within five miles of the Study Area (CDFW 2025a). Though no western mastiff bats were observed during the 2023 reconnaissance survey (PlaceWorks 2024), the survey was conducted during the day. However, with the presence of suitable roosting habitat (i.e., tall buildings for roosting) and foraging opportunities (i.e., the presence of greenspace, night lighting, and a large water foundation) in the Courthouse Park, this suggests there is also potential suitable habitat for the species main food source – moths.

3.4.2 REGULATORY SETTING

Federal

Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 was established to protect and recover endangered and threatened species and the ecosystems upon which they depend. According to the FESA, designating a species as "endangered" indicates a species is in danger of extinction throughout all or a significant portion of its range. In addition, the FESA defines a species as "threatened" if that species is likely to become endangered within the foreseeable future. The USFWS maintains a list of endangered and threatened species. The USFWS and the National Marine Fisheries Service administer FESA and are responsible for consulting with other federal agencies pursuant to FESA. Consultation with the USFWS would be necessary if a Project action has the potential to affect federally listed species, their habitat, or areas of Designated Critical Habitat. This consultation would proceed under Section 7 of the FESA if a federal action is required for the Project or it would proceed under Section 10 of the FESA if there is no required federal action.

Clean Water Act

The objective of the Clean Water Act (CWA) of 1977, as amended, is to maintain and restore the chemical, physical, and biological integrity of the nation's waters. The discharge of dredged or fill material into waters of the United States (WOTUS), including jurisdictional wetlands, is regulated under Section

404 of the CWA by the United States Army Corps of Engineers (USACE) via a permitting process. Surface water quality is further regulated by the USEPA; in California this authority is delegated to the State Water Resources Control Board (SWRCB) or the Central Valley RWQCB. Applicants for Section 404 permits are also required to comply with Section 401 of the CWA by obtaining Water Quality Certification through the State.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. This treaty prohibits "take," which has been variously defined to include harming any migratory bird listed under the MBTA, including nests, eggs, and/or young.

State

California Endangered Species Act

The California Endangered Species Act (CESA) prohibits "take" of plants or animals listed as endangered or threatened and protects native species of fish, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, that are threatened with extinction or experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation. "Take" is defined in Section 86 of the California Fish and Game Code (FGC) as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA authorizes the CDFW to issue incidental take permits for state-listed species when specific criteria are met.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act, Sections 1601 to 1602 of the California FGC, authorizes the SWRCB to oversee water rights and water quality policy, and the SWRCB has established nine RWQCBs to protect and enhance water quality at the regional and local levels. In addition to preparing Water Quality Certifications to designate beneficial uses of water bodies in each region, the RWQCBs issue a permit, referred to as a Waste Discharge Requirement, for activities that result in pollutant or nuisance discharges that may affect surface or groundwater, including isolated wetlands not subject to the jurisdiction of the USACE.

California Fish and Game Code

The California FGC has several provisions for the protection of Waters of the State, and special-status plant, fish, and wildlife resources, including their habitat. The applicable California FGCs are as follows:

Sections 1600-1616 (Streambed Alteration): The CDFW is responsible for the protection and conservation of fish and wildlife resources in California. Under Section 1602, CDFW has the authority to issue Lake or Streambed Alteration Agreements for construction activities that substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the CDFW as providing resources for fish or wildlife.

Sections 1900-1913 (Native Plant Protection Act): The Native Plant Protection Act of 1977 prohibits the taking, possessing, or sale within the State of any plants that the CDFW has determined are rare, threatened, or endangered. The CDFW has the authority to enforce the provisions of this act and authorize measures to salvage native plants that may otherwise be affected by project activities, if deemed appropriate.

Sections 3500-3516 (Game Birds and Birds of Prey): The CDFW protects game birds, birds of prey, migratory birds, and fully protected birds and their nests, eggs, and young from take or possession, except as otherwise provided by the code (e.g., incidental take under CESA).

Sections 3511, 4700, 5050, and 5515 (Fully Protected Species): California statutes accord a "fully protected" status to specific birds, mammals, reptiles, amphibians, and fish. These species cannot be "taken," and no process exists for issuance of incidental take permits for fully protected species.

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as lead agency, considers local policies in evaluating whether the Project 's impacts would be significant.

Fresno County General Plan

The Fresno County General Plan serves as a blueprint for land use and development within Fresno County (Fresno 2024). Part 2 of the plan defines the Open Space and Conservation Element, which focuses on protecting natural resources, preserving open space areas, managing the production of commodity resources, protecting and enhancing cultural resources, and providing recreational opportunities (Fresno County 2024). Specific goals and policies that relate to biological resources that have potential to occur in the Project area include the following:

- Goal OS-E: To help protect, restore, and enhance habitats in Fresno County that support fish and wildlife species so that populations are maintained at viable levels.
- Goal OS-F: To preserve and protect the valuable vegetation resources of Fresno County.

Goal OS-E includes coordinating with regulatory agencies to ensure appropriate mitigation measures and agency concerns are adequately addressed. Nesting, breeding, and foraging areas as well as other unique wildlife habitats are included as important habitat and habitat components (Fresno County 2024). Specific to nesting birds, surveys are called out for development projects on sites where tree or vegetation/habitat removal is necessary. Buffers for active nests are also discussed (Fresno County 2024).

Goal OS-F includes a discussion of landmark trees, detailing that the County shall ensure that landmark trees are preserved and protected wherever possible (Fresno County 2024).

City of Fresno General Plan

The City of Fresno General Plan establishes a comprehensive and long-term strategy for development within Fresno. With respect to biological resources, Objective POSS-5 of the Parks, Open Space and Schools Element of the General Plan calls for providing long-term preservation, restoration, enhancement, and enjoyment of plant, wildlife, and aquatic habitat (City of Fresno 2014).

In 2021, the City released an MMRP to support their General Plan Environmental Impact Report (LSA 2021). This MMRP includes mitigation measures to protect biological resources that are consistent with the Federal and State regulatory requirements outlined in the preceding sections of this report.

Fresno Municipal Code

Article 3, *Street Trees and Parkways*, of Chapter 13 of the Fresno Municipal Code contains the public tree policy, tree beautification and preservation regulations, and Special Tree List authorization. Section 13-304, *Tree Beautification*, establishes and defines the Master Tree Plan requirements, Parkway Tree requirements, and other requirements related to new and existing development and the provision of parkway trees. Section 13-305, *Tree Preservation*, outlines tree removal and maintenance requirements, tree permit conditions, and payment of fees in-lieu of replacing a removed tree. Lastly, Section 13-306, *Special Tree List*, outlines the Special Tree List requirements and tree removal requests for Special Trees.

The Public Works Director is authorized to develop and maintain a Special Tree List. Such list is intended to include those trees of special interest to the City, including, but not limited to, landmark trees or trees of outstanding size or beauty. The City Council may also designate trees on the Special Tree List by resolution.

3.4.3 IMPACTS ANALYSIS

3.4.3.1 Methodology

Literature and Database Review

The Project is located within the *Fresno South, California* USGS 7.5-minute quadrangle. CNDDB and CNPS database searches for special-status species included the *Fresno South* USGS 7.5-minute quadrangle and eight surrounding quadrangles: *Herndon, Fresno North, Clovis, Kearney Park, Malaga, Raisin, Caruthers, and Conejo.* A 5-mile radius search of CDFW's CNDDB was conducted based on habitat types and migration distances for potential special-status plant and animal species that have potential to occur within the Study Area (CDFW 2025a; **Appendix C – Figure 4**). Calflora and CNPS's online inventory databases were used to obtain detailed habitat information for rare plant species. The USFWS's IPaC database was also queried for federally endangered, threatened, candidate, and proposed animal and plant species that have potential to occur in the Study Area. Detailed location-specific Information about habitat types and special-status species that could occur within the Study Area was obtained from the following sources:

- CDFW CNDDB plant and animal records (CDFW 2025a)

- CNPS online *Inventory of Rare and Endangered Plants* (CNPS 2025a)
- Manual of California Vegetation, Online Edition (CNPS 2025b)
- Calflora (Calflora 2025)
- USFWS) IPaC resource list of endangered and threatened species that may occur in the Project Area (USFWS 2025a)
- USFWS Designated Critical Habitat within the Project Area (USFWS 2025b)
- USFWS National Wetlands Inventory (USFWS 2025c)
- USGS National Hydrography Dataset Plus V2 (USGS 2025)

Other information sources consulted to determine which special-status species could potentially occur in the Study Area included:

- *New Fresno Courthouse Due Diligence Review: Site 1* report, prepared by PlaceWorks which included a desktop review and 2023 field reconnaissance survey of Site 1 (PlaceWorks 2024)
- Google Earth Imagery (Google Earth 2024)
- Results from a field reconnaissance survey conducted by Stantec in November 2025. The survey included photo documentation of the green spaces within the Project Area (**Appendix C**) and a reconnaissance-level habitat assessment of staging area 3 (Stantec 2025)
- Biological Resources Technical Memorandum for the City of Fresno Water and Sewer Improvements Project, Fresno County, California (Rincon 2025)

Field Surveys Conducted

Two field reconnaissance surveys have been conducted for the Project. Both surveys focused on confirming existing conditions developed from a desktop review and determining the potential for any sensitive status plant and animal species and/or habitat. The first survey was conducted within Site 1 by PlaceWorks on July 12, 2023. The second survey was conducted within the adjacent staging area by Stantec biologists on November 18, 2025. No special status species were observed during either of the surveys; however, western mastiff bat and nesting raptor and/or other migratory birds were determined to have potential to occur. Ornamental trees were also observed during the surveys.

3.4.3.2 Threshold of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to biological resources if it would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Demolition, Construction, and Operation

Based on the conclusions of the Biological Resources Technical Report (**Appendix C**), limited natural habitat capable of supporting special-status species occurs within the Project area. The Project area has been extensively disturbed by previous development, resulting in the removal of native vegetation and the creation of conditions unsuitable for most special-status species known to occur in the Fresno region.

Western mastiff bats may be found roosting in trees or on existing structures within the Project area and the larger Courthouse Park parcel. Inadvertent destruction or disturbance of active roosts, including maternal roosts, would be a potentially significant impact and a violation of the CEQA.

Bird species may nest within trees, other vegetation, or on existing structures within the Project site and the larger Courthouse Park parcel during nesting season (typically between January 31 and August 31). Inadvertent destruction of active nests of native birds would be a potentially significant impact and a violation of the federal MBTA and California FGC.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

BIO-1: Western Mastiff Bat Survey. No less than 6 months prior to Project initiation, a qualified biologist with at least 5 years' experience conducting surveys or assessments of bat habitat shall conduct a survey and look for evidence of bat use in buildings and trees, as access allows. If evidence of bat use is observed, an evening survey using bat acoustic detectors will be conducted to determine whether bats are roosting on the site, the species, and the location of the roost. If an active roost is detected, construction activities will be modified or revised to avoid disturbing the roost. If disturbance of the roost cannot be avoided, removal or disturbance of the roost shall occur outside of the maternity roost season in accordance with a bat mitigation plan developed by the qualified biologist. The bat mitigation plan shall include methods for humane bat exclusion and no-disturbance buffers, as needed to accomplish the removal or disturbance of the roost.

BIO-2: Nesting Bird Survey. If demolition and/or construction (including any tree removal) occurs during the typical nesting season (January 31 through August 31) a pre-construction nesting bird survey shall be conducted to document any nests within the vicinity of the Project area (within 250 feet of the Project area for nesting songbirds and within 500 feet of the Project area for nesting raptors). Nesting bird surveys will be performed not more than 7 days prior to the start of Project demolition and/or construction activities. If an active nest is observed, a protective buffer will be established around the nest to avoid any disturbances. During any vegetation removal, if an active nest is identified within the Project area, a

biological monitor shall monitor the nest during Project activities to ensure there are no disturbances to the nesting bird and prevent nest failure.

Level of Significance After Mitigation

Less than Significant Impact.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Demolition, Construction, and Operation

Based on the conclusions of the Biological Resources Technical Report (**Appendix C**), the Project site does not contain any riparian habitat or other sensitive natural communities. The Project site and surrounding area are developed with urban land uses that do not constitute natural communities.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No Mitigation Required.

Level of Significance After Mitigation

No Impact.

c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Demolition, Construction, and Operation

Based on the conclusions of the Biological Resources Technical Report (**Appendix C**), there are no wetlands located on or in the vicinity of the Project site. A review of the USFWS's National Wetlands Inventory Wetlands Mapper and the National Hydrography Dataset indicates that no wetlands have been previously documented on or adjacent to the Project.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Demolition, Construction, and Operation

Based on the conclusions of the Biological Resources Technical Report (**Appendix C**), there are no wildlife corridors or nursery sites present in the Project Area, and wildlife species are unlikely to use the Project site as a migratory corridor due to the highly urbanized nature of the surrounding area. There are no rivers, creeks, or other waterways capable of supporting fish species present on the Project site.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No Mitigation Required.

Level of Significance After Mitigation

No Impact.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Demolition and Construction

Local policies and plans do not apply to the Project, and the Judicial Council is not subject to local land use regulations. The City Municipal Code includes policies related to the protection of ornamental trees and emphasizes preservation of landmark trees wherever possible. For example, Section 13-305 of the City Municipal Code (Tree Preservation) requires a permit for maintenance or removal of trees on streets and property within public rights-of-way, and on other property under the ownership and control of the City. Within Courthouse Park, tree plantings are diverse and include mature deodar cedar (*Cedrus deodara*), Italian stone pine (*Pinus pinea*), Chinese elm (*Ulmus parvifolia*), ginkgo (*Ginkgo biloba*), and other ornamental species. None of these ornamental trees present within the boundaries of the Project fall under any protected tree list because there is currently no list of City-protected trees, per conversations with the Public Works Department. In addition, no sensitive natural communities, critical habitat, or special-status species were observed within the Project site during the biological field survey. Thus, there are no significant adverse environmental effects attributable to the Project that are the result of any inconsistency with programs, plans, ordinances, or policies addressing tree preservation and there would be no impact.

Operation

Operation of the Project would include traditional courthouse and judiciary activities that would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. There would be no impact from operation of the Project.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Demolition, Construction, and Operation

There are no applicable habitat conservation plans, or natural community conservation plans covering the Project site or surrounding areas.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

3.5 Cultural Resources

This section describes the existing environment for cultural resources within and around the Project site and evaluates the potential for impacts related to cultural resources to occur as a result of development of the Project. The term “cultural resources” refers to built environment resources (e.g., buildings, structures, objects, districts) and archaeological resources. The analysis in this section is based on the Historic Resources Evaluation Report (HRER) and the Archaeological Resources Study Report (ASR) prepared for the Project (**Appendix D** and **E**, respectively).

3.5.1 HISTORIC CONTEXT

Prehistoric Context

The archaeological record for much of the Central Valley is fragmented, but 21st century advances in research methods and technological improvements have revealed some broad temporal patterns. Many surface sites have been destroyed by human activities relating to agriculture and development, and many subsurface sites have been “obliterated or buried” by ongoing alluvial processes, like flooding (Rosenthal et al. 2007: 149). Many of the surface sites, in particular, that have been destroyed were mound sites proximal to waterways; these would have been important settlement sites. Nevertheless, a century of archaeological research has yielded sufficient information to create a rough chronological framework.

The archaeological record of the Central Valley, and the San Joaquin Valley in particular, is divided into three time periods, with many periods themselves being subdivided. The simplified chronology here includes the Paleo-Indian (13500-10500 BP [years before present]), the Archaic (10500-850 BP, divided into Lower, Middle, and Upper), and the Emergent Period (850-180 BP). 180 BP (1770 AD) generally represents the date of historic contact with Euroamerican settlers. For a complete discussion of the chronology and characteristic features of the precontact Central Valley, see Rosenthal et al. 2007, from which this summary is principally drawn.

Ethnographic Context

Prior to Euroamerican settlement, the Fresno area has traditionally been home to Southern Valley Yokuts, an Indigenous language and cultural group. Population estimates for the Central Valley, prior to European arrival in the Americas, hover in the 100,000 range (Rosenthal et al. 2007).

The Southern Valley Yokuts language belongs to the Penutian language stock (Golla 2007). A branch of Penutian, called Yok-Utian, has two sub-branches, consisting of Miwok-Ohlone (spoken by groups in the Bay Area, and parts of the northern Sierra Nevada) and Yokuts (Northern and Southern) (Golla 2007:76). Linguistic differences between these and other California groups suggest that Yokuts-speakers have resided in the Central Valley for between 4000-5000 years, perhaps coeval with the Windmiller Pattern observed in the region archaeologically (see above).

Historic Background

The first courthouse in Fresno County was constructed just outside of the original county seat in Millerton in 1867, but it did not last long as a functioning courthouse. The county seat was moved from Millerton to Fresno in 1874. A new grand courthouse, designed by A. A. Bennett, was completed in Fresno in 1876. The 1876 courthouse was a three-story building with a footprint that measured 60 feet by 95 feet. The building was constructed of brick and clad in concrete. The building was topped with a notable slender domed cupola. The courthouse was expanded in 1890 with the addition of two wings, a copper-coated dome, and a Neoclassical style entryway. A fire in 1895 melted the new copper-coated dome, but it was quickly replaced by a new, smaller, fireproof dome. In addition to the improvements made to the courthouse in the 1890s, a 5-acre courthouse park was established encompassing the courthouse. Known as Courthouse Square, the park had walkways, trees, and memorials. Minor improvements and maintenance were made to the courthouse over the next 60 years in order to maintain the building (McDevitt 2001: 194-195).

In the early 1960s, the Fresno County Board of Supervisors decided they wanted to replace the 1876 courthouse that had stood for almost 100 years. Multiple reasons were cited for this decision, including concerns over seismic safety and federal funding availability. Protests came from Fresno citizens who did not wish to see the courthouse demolished and replaced. It took nearly four years, but ultimately the Board of Supervisors were successful. The 1876 courthouse was demolished in April 1966 (McDevitt 2001: 194-195). A new courthouse was designed by David H. Horn, inspired by the unorthodox architectural works of Edward D. Stone and Minoru Yamasaki (The Fresno Bee, January 3, 1963). The new courthouse was designed like an early twentieth century skyscraper, containing a base, a shaft, and a cornice, with concrete block screens surrounding the exterior walls and concrete columns. It was constructed in 1966, the same year that the old courthouse was demolished. The new courthouse's design and inspiration intended to use symmetry and connections to the history of architecture to bring formality to the building, something that the designers believed modern architecture had lost (McDevitt 2001: 38). When the new courthouse was constructed, it was intended that a new complex of government buildings would be constructed to occupy the surrounding sites (The Fresno Advertising Club, October 29, 1966). Shortly after construction, a new government building, the new Fresno County Sheriff's Office, was built in Courthouse Square in 1968-1969 (Fresno County Sheriff's Office). Besides the construction of additional memorial installations in Courthouse Square, few changes have occurred since the mid-1980s.

3.5.2 EXISTING CONDITIONS

A Southern San Joaquin Vallely Information Center (SSJVIC) record search indicated four previously recorded archaeological resources within the Project site; one is a historic district with archaeological components, and the other three are isolated historic-era archaeological resources. One resource, P-10-007026, Town of Fresno, is a historic district identified during sewer trench excavations adjacent to the Project Area. Due to the highly disturbed environment of creation and maintenance of hardscaping and built features and heavy vehicular and pedestrian traffic, pedestrian survey did not relocate these previously recorded resources, and no new resources were identified.

The SSJVIC record search indicated no previously recorded built environment resources within the Project site, however, there were two previously recorded buildings within Courthouse Square, where the Project site is located. They include the existing Fresno County Courthouse (P-10-007405) and the Fresno County Hall of Records (P-10-004344). Both buildings were previously evaluated and recommended eligible for listing on the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). There will be temporary indirect impacts to the other buildings in Courthouse Square during construction of the Project , however, as both buildings are outside of the Project site there will be no overall impact to either of them from the Project. New built environment resources identified include the Fresno County Sheriff's Office and South Annex Jail, both of which are within the Project site and were surveyed and evaluated as part of the technical reporting for this effort.

3.5.3 REGULATORY SETTING

Federal

National Register of Historic Places

The National Historic Preservation Act of 1966, as amended, requires federal agencies or those they fund or permit to consider the effects of their actions on historic properties. The Advisory Council on Historic Preservation Section 106 implementing regulations (36 CFR §800) define "historic properties" as follows:

> *Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that meet the National Register criteria (36 CFR §800.16[l]).*

To determine whether an undertaking could affect NRHP-eligible properties, cultural resources, including archaeological, ethnographical, and architectural properties, must be inventoried and evaluated for listing in the NRHP. For a property to be considered for inclusion in the NRHP, it must normally be at least 50 years old and meet the criteria for evaluation set forth in 36 CFR §60.4, as follows:

A) *That are associated with events that have made a significant contribution to the broad patterns of our history; or*

B) *That are associated with the lives of persons significant in our past; or*

C) *That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or that possess high artistic values or that represent a significant and distinguishable entity whose components may lack individual distinction; or*

D) *That have yielded, or may be likely to yield, information important in prehistory or history.*

As described above, a resource must possess integrity in addition to historical significance. The aforementioned seven aspects are defined as follows:

Location: the place where the historic property was constructed or the place where the historic event took place.

Design: the composition of elements that constitute the form, plan, space, structure, and style of a property.

Setting: the physical environment of a historic property that illustrates the character of the place.

Materials: the physical elements combined in a particular pattern or configuration.

Workmanship: the physical evidence of the crafts of a particular culture or people during any given period of history.

Feeling: the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.

Association: the direct link between a property and the event or person for which the property is significant.

NRHP analysis is based upon all pertinent cultural resources guidance and best practices including that of 36 CFR §800 and technical bulletins including *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*.

State

CEQA PRC §21082.2, and CEQA Guidelines

CEQA requires the lead agency to consider the effects of a project on historical resources. CEQA Guidelines, Title 14, CCR §15064.5 provides specific guidance for determining the significance of impacts on historical resources (CEQA Guidelines, Title 14, CCR §15064.5(b)) and unique archaeological resources (CEQA Guidelines, Title 14, CCR §15064.5(b) and CEQA PRC §21083.2). Under CEQA, these resources are called “historical resources” whether they are of historic or pre-European contact age. CEQA PRC §21084.1 defines *historical resources* as those listed, or eligible for listing, in CRHR, or those listed in the historical register of a local jurisdiction (county or city) unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. NRHP-listed “historic properties” in California are considered historical resources for the purposes of CEQA and are also listed in the CRHR. The CRHR criteria for listing such resources are based on, and are very similar to, the NRHP criteria. CEQA PRC § 21083.2 and CEQA Guidelines, Title 14, CCR §15064.5(c) provide further definitions and guidance for archaeological sites and their treatment.

California Register of Historical Resources (PRC §5024.1)

PRC §5024.1 establishes the CRHR. The register lists California properties considered to be significant historical resources. The CRHR also includes all properties listed or determined eligible for listing in the NRHP, including properties evaluated and determined eligible under Section 106. The criteria for listing in the CRHR, criteria 1–4, are similar to those of the NRHP:

- Criterion 1: Resources associated with important events that have made a significant contribution to the broad patterns of our history.
- Criterion 2: Resources associated with the lives of persons important to our past.
- Criterion 3: Resources that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master.
- Criterion 4: Resources that have yielded, or may be likely to yield, information important in prehistory or history.

The CRHR regulations govern the nomination of resources to the CRHR (Title 14, CCR §4850). The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

Unique Archaeological Resources

State CEQA Guidelines, Title 14, CCR §15064.5(c) specifies how CEQA applies to archaeological sites, including archaeological sites that are historical resources, unique archaeological resources, or neither.

PRC §21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. It contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information.
2. It has a special and particular quality, such as being the oldest of its type or the best available example of its type.
3. It is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA Guidelines, Title 14, CCR §15064.5(d) and (e) specify responsibilities and respectful treatment of human remains, including Native American human remains, that are found or likely to be found within a project site.

Human Remains – Health and Safety Code 7050.5

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, Section 7050.5 of the Health and Safety Code states that there shall be no further excavation or disturbance of the Project site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains were discovered has determined whether the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the California Native American Heritage Commission (NAHC) within 24 hours of this identification. CEQA Guidelines, Title 14, CCR §15064.5(d) and (e) specify responsibilities regarding

human remains as well as the respectful treatment of human remains, including Native American human remains, that are found or likely to be found within a project site.

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant. Local guidelines for the recordation of City Historic Resources and the Fresno Local Register of Historic Resources were reviewed.

City of Fresno Historic Preservation Ordinance

The City has their own historic preservation guidelines, which are outlined in the City's Code of Ordinances under Chapter 12 Impact Fees, Historic Resources, and other Miscellaneous Topics, Article 16 Historic Preservation Ordinance. The Historic Preservation Ordinance is enforced and overseen by the Historic Preservation Commission, a body of seven people appointed by the Mayor and confirmed by the City Council. Under the Historic Preservation Ordinance, any building, structure, object or site can be designated as a historic resource if it is found by the Commission and Council to meet the following criteria:

(1) It has been in existence more than fifty years and it possesses aspects of integrity to convey its significance based upon location, design, setting, materials, workmanship, feeling or association, and:

   a. It is associated with events that have made a significant contribution to the broad patterns of our history; or

   b. It is associated with the lives of persons significant in our past; or

   c. It embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, or possesses high artistic values; or

   d. It has yielded or may be likely to yield, information important in prehistory or history.

(2) It has been in existence less than fifty years, it meets the criteria of subdivision (1) of subsection (a) of this section and is of exceptional importance within the appropriate historical context, local, state or national.

There are also designation criteria for local historic districts, National Register Historic Districts, heritage properties, and contributors to historic districts, as well as guidance on the full designation process overseen by the Commission and Council.

3.5.4 IMPACTS ANALYSIS

This section describes the impact analysis relating to cultural resources for the Project. It describes the methods used to determine the impacts of the Project and lists the thresholds used to conclude whether

an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each significant impact discussion.

3.5.4.1 Methodology

The SSJVIC, an affiliate of the California Office of Historic Preservation (OHP), is the official state repository of cultural resources records and reports for Fresno County. On April 21, 2025, SSJVIC staff at Stantec's request conducted a records search for the Project Area and a 1-mile radius at the SSJVIC. As part of the records search, the following local and state inventories were reviewed:

- Five Views: An Ethnic Historic Site Survey for California (OHP 1988)
- California Points of Historical Interest (OHP 2024a)
- California Historical Landmarks (OHP 2024b). On November 17, 2025, Stantec archaeologist Francisco Vargas, B.A., conducted archaeological survey of the Project Area. Stantec architectural historian Rebecca Riggs, M.A., conducted architectural survey of the Project Area on November 18 and 19, 2025.

In addition, a geoarchaeological analysis and review of available historical maps was completed to assess the potential for the Project Area to contain intact subsurface cultural resources.

3.5.4.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to cultural resources if it would:

a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Demolition, Construction, and Operation

Information regarding baseline conditions for cultural resources within the Project is based on *New Fresno Courthouse Due Diligence Review: Site 1* (Placeworks 2024) and a records search conducted in April 2025 of the Project site and one-mile buffer at the SSJVIC of the California Historical Resources Information System.

Built Environment

The HRER completed for this effort documented and evaluated the Fresno County Sheriff's Office and South Annex Jail. Both were recommended not eligible for listing in the NRHP or CRHR; therefore, there will be no impact to historic resources within the Project Area because there are no historic resources present.

A previous preliminary evaluation of the Fresno County Courthouse in 2023 recommended PRC § the building not eligible for listing in the NRHP or CRHR. The building was recommended to the City of Fresno as potentially eligible for designation as a contributor to a locally designated Civic Center Historic

District pursuant to the City's Historic Preservation Ordinance. The City never designated a local historic district, and none has been recommended for inclusion in the NRHP or CRHR. Because the City has elected not to list the courthouse building in a local register alone or as part of a district, and it was not recommended as eligible for inclusion in the NRHP or CRHR, the building is not a historic resource and impacts to the building are not analyzed. Additionally, all buildings in Courthouse Square have been recommended not eligible except for the Hall of Records, so the Judicial Council has determined there is not a historic district.

No other built resources in Court House Square were evaluated as part of this study, including existing monuments and statues. It is not likely that any of the monuments and statues would be eligible as individual resources for listing in the NRHP or CRHR and they will not be impacted by the Proposed Project.

Results of the SSJVIC records search and due diligence review identified one historic-period archaeological district and two associated isolated historic-period deposits and historic-period trolley grade that have not been evaluated but could be eligible for the CRHR within the Project site. However, specific locations of any resources are not identified in the Project area. Therefore, a substantial adverse change in the significance of archaeological sites that qualify as historical resources is unlikely (CEQA Guidelines, Title 14, CCR §15064.5(b)(1).

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Demolition, Construction, and Operation

According to the CEQA Guidelines, archaeological sites that do not qualify as historical resources shall be assessed to determine if they qualify as "unique archaeological resources" (PRC §21083.2; State CEQA Guidelines, Title 14, CCR §15064.5[c][3]).

Results of the SSJVIC records search and due diligence review identified one historic-period archaeological district and two associated isolated historic- period deposits and historic- period trolley grade that have not been evaluated but could be eligible for the CRHR within the Project site. However, specific locations of any resources are not identified in the Project area. Therefore, a substantial adverse change in the significance of archaeological sites that qualify as a unique archaeological resources or historical resources is unlikely, but could occur from demolition, destruction, relocation, or alteration such

that the significance of the resource would be materially impaired (CEQA Guidelines, Title 14, CCR §15064.5(b)(1).

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measure

CUL-1: Retention of a qualified archaeologist. A qualified archaeologist shall be retained to implement a monitoring and recovery program during ground-disturbing activity associated with the Project , including grubbing, grading, and excavation activities, where the qualified archaeologist has determined it is necessary. The qualified archaeologist shall meet the Secretary of Interior's Professional Standards for prehistoric and historic archaeology.

Construction Monitoring. An archaeological monitor, working under the supervision of the qualified archaeologist shall observe ground disturbing activities associated with the Project , including grading, and excavation activities where deemed appropriate by the qualified archaeologist. The monitor shall be authorized to halt construction, if necessary, in the immediate area where buried cultural remains are encountered.

Preconstruction Briefing. Construction personnel shall be briefed by the archaeological monitor or qualified archaeologist on procedures to be followed in the event that unique archaeological resources, historical resources, or human remains are encountered during construction. The qualified archaeologist shall be required to provide a telephone number where they can be reached by the construction contractor, as necessary.

Monitoring Report. A complete set of daily monitoring logs shall be kept on-site throughout the earth moving activities. Within 90 days of the completion of archaeological monitoring, a monitoring report or memo shall be submitted to the Judicial Council and filed with CCIC.

CUL-2: Human Burials Encountered During Construction. In the event of an accidental discovery or recognition of human remains during Project construction activities, PRC §5097.98 shall be followed, and the following steps shall be taken:

1. There shall be no further excavation or disturbance of the specific location or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains are Native America, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believed to be the "most likely descendant" of the deceased Native America. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in PRC §5097.98, or

2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the Project area in a location not subject to further subsurface disturbance:

    - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission;
    - The descendent identified fails to make a recommendation; or
    - The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation of the NAHC fails to provide measures acceptable to the landowner.

Level of Significance After Mitigation

Less than Significant Impact with Mitigation.

c. Disturb any human remains, including those interred outside of dedicated cemeteries?

Demolition, Construction, and Operation

As discussed above, results of the SSJVIC records search and due diligence review identified archaeological sites within the Project site. However, none include precontact resources, and a geoarchaeological sensitivity study indicate that the Project Area is within an area with low potential for encountering buried precontact cultural resources As such, it is not anticipated that the Project would impact any human remains.

Level of Significance Before Mitigation

No impact

Mitigation Measures

No mitigation required

Level of Significance After Mitigation

No Impact.

3.6 Energy

3.6.1 EXISTING CONDITIONS

The City receives its electricity from PG&E. According to the CEC's most recently available electricity consumption data, total electricity consumption in Fresno County in 2024 was 7,968 gigawatt hours (GWh) (3,133 GWh for the residential sector and 4,835 GWh for the nonresidential sector) (CEC, 2025a). The Project is located within the City's ZIP code 93721, which in Q4 of 2024 had a combined residential electricity use of 2.5 GWh (PG&E, 2025). Non-residential electricity data at the ZIP code level is not publicly available.

3.6.2 REGULATORY SETTING

Federal

There are no federal plans, policies, regulations, or ordinances related to energy that apply to the Project.

State

Sustainability Plan for Trial Court Facilities

Approved in 2020, the Judicial Council's Sustainability Plan for Trial Court Facilities is a plan to assist the Judicial Council with meeting present and future resource needs by reducing trial court facilities' GHG emissions, energy usage and utility costs and ensuring compliance with state sustainability initiatives.

California Renewable Portfolio Standard

California's PRS program was established in 2002 by SB 1078 (Sher 2002) with the initial requirement that 20% of electricity retail sales must be served by renewable resources by 2017. The program was accelerated in 2015 by SB 350 which mandated a 50% RPS by 2030. SB 350 includes interim annual RPS targets with three-year compliance periods and requires 65% of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 was signed into law, which again increases the RPS to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045 (CPUC 2025).

Clean Energy and Pollution Reduction Act of 2015 (SB 350)

SB 350 increases California's renewable electricity procurement goal from 33% by 2020 to 50% by 2030. This objective will increase the use of RPS-eligible resources, including solar, wind, biomass, geothermal and others. SB 350 also requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. To help meet these goals and reduce GHG emissions, large utilities will be required to develop and submit integrated resource plans. These plans detail how utilities will meet their customers' resource needs, reduce GHG emissions, and ramp up the use of clean energy resources (CEC 2025a).

California Energy Efficiency Standards for Nonresidential Buildings

California's Building Energy Efficiency Standards were adopted by the CEC in 1976 and have been updated periodically as directed by statute. In 1975, the California Department of Housing and Community Development adopted rudimentary energy conservation standards under State Housing Law authority that were a precursor to the first generation of the standards. However, the Warren-Alquist Act was passed one year earlier with explicit direction to the CEC, formally titled the State Energy Resources Conservation and Development Commission, to adopt and implement the standards. The CEC's statute created separate authority and specific direction regarding what the standards are to address, what criteria are to be met in developing the Energy Code, and what implementation tools, aids, and technical assistance are provided. The standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. PRC §25402 (a)-(b) and §25402.1 emphasize the importance of building design and construction flexibility by requiring the CEC to establish performance standards, in the form of an "energy budget" by building type in terms of the energy consumption per square foot of floor space (CEC 2025b).

California Green Building Standards Code

The California Green Building Standards Code—Title 24, CCR Part 11—known as CALGreen, is the first-in-the-nation mandatory green building standards code. In 2007, California Building Standards Commission (CBSC) developed green building standards in an effort to meet the goals of California's landmark initiative AB 32, which established a comprehensive program of cost-effective reductions of GHGs to 1990 levels by 2020. CBSC has the authority to propose CALGreen standards for nonresidential structures that include new buildings or portions of new buildings, additions and alterations, and all occupancies where no other state agency has the authority to adopt green building standards applicable to those occupancies (California Department of General Services 2018).

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local energy regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant.

Fresno General Plan

The approved City of Fresno General Plan is a set of policies and programs that form a blueprint for the physical development of the City (City of Fresno, 2014). The following **Table 3.6-1** is a summary of the policies included in the City's approved General Plan that are related to energy and applicable to the Project . For a full description of each of the elements within the approved General Plan, refer to the Plan and its elements at: https://www.fresno.gov/planning/general-plan-development-code/#housing-element (City of Fresno, 2014).

Table 3.6-1 Fresno General Plan Policies Relevant to Project Energy Consumption

Objective	Policy / Action Relevant to Energy
Element: Resource Conservation	
RC-2	RC-2-a: Link Land Use to Transportation RC-2-b: Provide Infrastructure for Mixed-Use and Infill
RC-4	RC-4-a: Support Regional Efforts RC-4-c: Evaluate Impacts with Models RC-4-d: Forward Information RC-4-e: Support Employer-Based Efforts RC-4-f: Municipal Operations and Fleet Actions RC-4-g: FAX Actions RC-4-i: Methane Capture RC-4-j: All Departments
RC-5	RC-5-b: Greenhouse Gas Reduction Plan RC-5-c: GHG Reduction through Design and Operations
RC-7	RC-7-c: Best Practices for Conservation RC-7-e: Retrofit City Facilities & Incentives
RC-8	RC-8-a: Existing Standards and Programs RC-8-b: Energy Reduction Targets RC-8-c: Energy Conservation in New Development RC-8-d: Incentives RC-8-e: Energy Use Disclosure RC-8-f: City Heating and Cooling RC-8-g: Revolving Energy Fund RC-8-h: Solar Assistance RC-8-i: Renewable Target RC-8-j: Alternative Fuel Network RC-8-k: Energy Efficiency Education
Element: Urban Form, Land Use, and Design	
UF-1	UF-1-c: Identifiable City Structure
UF-12	UF-12-a: Bus Rapid Transit (BRT) Corridors UF-12-b: Activity Centers UF-12-d: Appropriate Mixed-Use UF-12-e: Access to Activity Centers UF-12-f: Mixed-Use in Activity Centers UF-12-g: Impacts on Surrounding Uses
UF-13	UF-13-a: Future Planning to Require Design Principles
UF-14	UF-14-a: Design Guidelines for Walkability UF-14-b: Local Street Connectivity UF-14-c: Block Length
LU-2	LU-2-a: Infill Development and Redevelopment LU-2-b: Infill Development for Affordable Housing LU-2-c: Infill Design Toolkit LU-2-d: Infrastructure Upgrades
LU-3	LU-3-b: Mixed-Use Urban Corridors LU-3-c: Zoning for High Density on Major BRT Corridors
LU-5	LU-5-f: High Density Residential Uses
LU-6	LU-6-b: Commercial Development Guidelines LU-6-g: Lodging Facilities Location
LU-8	LU-8-b: Access to Public Facilities
D-1	D-1-g: Reducing Surface Parking

Objective	Policy / Action Relevant to Energy
D-3	D-3-a: Green Street Tree Planting D-3-b: Funding for Green Street Tree Planting Program D-3-c: Local Streets as Urban Parkways
D-4	D-4-b: Incentives for Pedestrian-Oriented Anchor Retail D-4-g: Development Code Update for Design Concepts
Element: Mobility and Transportation	
MT-1	MT-1-e: Ensure Interconnectivity Across Land Uses MT-1-g: Complete Streets Concept Implementation MT-1-h: Update Standards for Complete Streets MT-1-i: Local Street Standards MT-1-j: Transportation Improvements Consistent with Community Character MT-1-l: Level of Service in the Downtown Area MT-1-o: LOS Deviations Outside Activity Centers
MT-2	MT-2-b: Reduce Vehicle Miles Traveled and Trips MT-2-c: Reduce VMT through Infill Development MT-2-d: Street Redesign where Excess Capacity Exists MT-2-f: Optimization of Roadway Operations MT-2-g: Transportation Demand Management
MT-3	MT-3-b: Preserve street trees lining scenic corridors
MT-4	MT-4-a: Active Transportation Plan MT-4-b: Bikeway Improvements MT-4-c: Bikeway Linkages MT-4-d: Prioritization of Bikeway Improvements MT-4-h: Bicycle Parking Facilities MT-4-i: Bicycling and Public Transportation MT-4-j: Street Maintenance for Bicycle Safety MT-4-k: Bicycle Safety, Awareness, and Education
MT-5	MT-5-a: Sidewalk Development
MT-6	MT-6-a: Link Residences to Destinations MT-6-g: Path and Trail Development MT-6-l: Environmentally Sensitive Path and Trail Design
MT-8	MT-8-a: Street Design Coordinated with Transit MT-8-b: Transit Serving Residential and Employment Nodes MT-8-e: Regional Coordination MT-8-g: High Speed Train MT-8-h: High Speed Train Station Area Planning MT-8-i: Legislative Support
MT-9	MT-9-a: Equitable Transit Provision MT-9-b: Transit Service Productivity Evaluation MT-9-c: Addressing Unmet Transit Needs MT-9-d: Long-Range Transit Options MT-9-e: Area Specific Transit Improvements MT-9-f: Encourage Telecommuting
MT-10	MT-10-a: Updating Parking Standards MT-10-b: Shared Parking MT-10-c: Transportation Demand Management Guidelines MT-10-d: Parking Maximums MT-10-f: Parking Benefit Districts
MT-11	MT-11-b: Railroad Improvements

Objective	Policy / Action Relevant to Energy
Element: Parks, Open Space, and Schools	
POSS-1	POSS-1-g: Regional Urban Forest
POSS-3	POSS-3-c: Link Parks with Walkways POSS-3-f: Park Design Guidelines
POSS-5	POSS-5-a: Habitat Area Acquisition POSS-5-c: Buffers for Natural Areas POSS-5-d: Guidelines for Habitat Conservation
POSS-7	POSS-7-h: Interlink City and San Joaquin River Parkway Trail Networks
Element: Healthy Communities	
HC-3	HC-3-d: Green Standards for Affordable Housing

(City of Fresno, 2014)

3.6.3 IMPACTS ANALYSIS

3.6.3.1 Methodology

The below impact determinations were developed through a review of Project-specific design features, construction practices, and operational characteristics in relation to applicable state and local energy regulations and standards. Consideration was also given to the Project's commitment to sustainable design, anticipated energy demand during all phases, and the regulatory context governing energy efficiency and renewable energy use in California.

3.6.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to energy if it would:

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

As designed, the Project would implement sustainable elements throughout its design, construction, and operation and maintenance. It would also be designed for sustainability and, at a minimum, to the standards of a LEED Silver certified rating. The Project is anticipated to result in an increase of approximately 65,000 SF of paved/impervious surfaces within the Project site as compared to the existing facilities.

Demolition and Construction

Energy use associated with the Project includes fuel (e.g., gasoline and diesel) and electricity. Sources of this use include construction-related vehicle and equipment energy use, transportation energy use from people traveling to and from the Project site during operations, as well as operational facility energy use.

Energy use during demolition and construction activities would occur within two general categories: fuel use by vehicles and other equipment to conduct construction activities and fuel use from vehicles used by workers commuting to and from the Project site. Construction is planned to occur over 48 months (between October 2029 and October 2033) and would involve site preparation, grading, building erection,

paving, and finishing. There are no known conditions in the Project that would require nonstandard equipment or construction practices that would increase fuel-energy consumption above typical equipment fuel consumption rates. Construction activities would be temporary and would adhere to all construction BMPs.

Operation

Operational energy consumption would be associated with electricity to run various appliances and equipment, including space and water heaters, air conditioners, ventilation equipment, lights, and numerous other electronic devices. The new courthouse would consolidate functions currently dispersed across multiple facilities, which is anticipated to reduce overall energy consumption associated with redundant building systems and transportation between sites. As described in the Project Description (Section 2.0), the new building would be designed to achieve, at minimum, LEED Silver certification, incorporating high-efficiency HVAC, lighting, and water systems, as well as advanced building envelope features. Furthermore, the Judicial Council intends to comply with the All-Electric Building standard within the Energy Code for the City. These measures would substantially reduce operational energy demand compared to older, less efficient facilities. The Project would also benefit from California's increasingly renewable electricity grid, as required by the state's Renewable Portfolio Standard and related legislation. No evidence suggests that the Project would employ processes or systems that would result in wasteful or unnecessary energy use during any phase. The Proposed Project is served by PG&E, which provides electric service to approximately 16 million people throughout a 70,000-square mile service area in northern and central California. The Proposed Project's electricity demand would be nominal compared to overall demand in the service area. Therefore, the projected electrical demand would not significantly impact PG&E's level of service. For these reasons, impacts are anticipated to be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The applicable state plans that address renewable energy and energy efficiency include CALGreen which is found in the California Energy Code (Title 24, CCR Part 11). CALGreen is the nation's first state-mandated green building code. The code places emphasis on energy efficiency. The Proposed Project would be required to meet the energy requirements of 2022 CALGreen and the 2022 California Energy Code and would benefit from the efficiencies associated with these regulations as they relate to building heating, ventilating, and air conditioning mechanical systems, water heating systems, and lighting.

Demolition and Construction

Demolition and construction activities would be temporary and would not interfere with the implementation of state or local energy policies. Construction would comply with applicable energy efficiency standards, including those set forth in the California Energy Code and CALGreen, which require energy- and water-efficient practices for new non-residential buildings.

Operation

During operation, the Project would be subject to the latest California Building Energy Efficiency Standards and would be designed to meet or exceed the requirements of the CALGreen Code. The Project's commitment to achieving at least LEED Silver certification further supports consistency with state and local energy goals. The building's design would incorporate features that facilitate reduced energy consumption and support the use of renewable energy sources, consistent with the objectives of the Renewable Portfolio Standard, SB 350, and SB 100. The Project would not preclude the use of renewable energy technologies or participation in utility-sponsored renewable energy programs.

While local policies and plans do not apply to the Project and the Judicial Council is not subject to local land use regulations, there are no significant adverse environmental effects attributable to the Project that are the result of any inconsistency with programs, plans, ordinances, or policies addressing energy. The Project's design and operational characteristics are consistent with the energy-related policies of the City of Fresno General Plan, such as RC-8-c: Energy Conservation in New Development, RC-5-c: Greenhouse Gas Reduction through Design and Operations, RC-8-i: Renewable Target, MT-2-b: Reduce Vehicle Miles Traveled and Trips, and UF-14-a: Design Guidelines for Walkability. The Project would not introduce barriers to the attainment of state or local energy objectives, nor would it result in actions that would impede progress toward increased energy efficiency or renewable energy use. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

3.7 Geology and Soils

3.7.1 EXISTING CONDITIONS

Site Geology and Paleontology

The Project site is in the Great Valley geomorphic province (central portion of the San Joaquin Valley). The Great Valley is bordered on the east by the Sierra Nevada Mountain Range consisting mostly of crystalline rocks, and on the west by the Diablo Range tier of the Coast Range Mountains consisting of sedimentary and metamorphosed sedimentary rocks. The Sierra Nevada block has been tilted westward, caused by faulting and uplifting of the eastern edge of the range. The western boundary of the Sierra Nevada block is overlain by sedimentary deposits of the valley (Moore Twining Associates 2026).

The Coast Ranges, forming a barrier between the Great Valley and the Pacific Ocean, evolved as a result of folding, faulting, and accretion of diverse geologic terrain. The Coast Ranges are composed mostly of sedimentary and metamorphic rocks that are sharply deformed into complex structures which are broken by numerous faults, the San Andreas Fault being the most notable structural feature (Moore Twining Associates 2026).

Small, intermittent streams enter the valley from the semi-arid mountains of the Diablo Range (Coast Ranges) but soon are lost on alluvial fans. Perennial rivers flow from the larger drainage areas of the Sierra Nevada Range. Large, coalescing alluvial fans have developed along each side of the valley. The larger and more gently sloping fans on the valley's east side are built up principally by deposits from granitic rock sources, whereas the smaller and more steeply sloping fans on the valley’s west side are comprised of sediment originating as sedimentary rocks of the Coast Range. As a result, the valley floor consists mainly of two kinds of alluvial materials that differ widely in provenance and their respective engineering properties (Moore Twining Associates 2026).

Geologic mapping indicates that the Project site is underlain by recent alluvial fan deposits of the Great Valley (Moore Twining Associates 2026).

Project-Specific Soils

Soils mapped at the Project site by the Natural Resource Conservation Service are silty sands. Based on the Preliminary Geotechnical Engineering and Geologic Hazards Investigation Report (Geotechnical Study), dated January 16, 2026, existing fill was encountered in subsurface borings (Moore Twinning Associates 2026). The fill extended to depths ranging from approximately 2 to 6 feet below site grades (BSG) consisting of very loose silty sands with trace gravel, silty gravel, and poorly graded sand. Below the fill, the borings generally encountered silty sands to depths of approximately 6 to 15 feet. The silty sands were underlain by interbedded layers of clayey sands, poorly graded sands with silt, poorly graded sands, sandy lean clays (or lean clays with sand), sandy silts, and additional silty sands extending to the maximum depth explored, about 81.5 feet BSG. Laboratory testing of silty sand resulted in an expansion index value of 0 and lean clay resulted in an expansion index value of 28.

3.7.2 REGULATORY SETTING

Federal

Clean Water Act (Erosion Control)

The Federal CWA (33 United States Code [USC] 1251 et seq.), formally known as the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the WOTUS. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point-source and certain nonpoint source discharges to surface water. Such discharges are regulated by the NPDES permit process (Federal CWA Section 402). Projects that disturb one acre or more are required to obtain coverage under the NPDES General Permit for Stormwater Discharges Associated with Construction Activity (Construction General Permit) administered by the SWRCB, Order No. 2022-0057-DWQ (SWRCB 2022). The Construction General Permit requires the development and implementation of a SWPPP, which includes best BMPs to regulate stormwater runoff, including measures to prevent soil erosion. Requirements of the CWA and associated Construction General Permit are described in further detail in *Section 4.8, Hydrology and Water Quality* of this EIR.

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act was enacted in 1977 to "*reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program.*" To accomplish this, the Act established the National Earthquake Hazards Reduction Program. This program was significantly amended in November 1990, which refined the description of agency responsibilities, program goals, and objectives.

National Earthquake Hazards Reduction Program's mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. The National Earthquake Hazards Reduction Program designates FEMA as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under National Earthquake Hazards Reduction Program help inform and guide planning and building code requirements such as emergency evacuation responsibilities and seismic code standards such as those to which the Project would be required to adhere.

State

Alquist-Priolo Earthquake Fault Zoning Act – Affected Local Agencies

The state legislation protecting the population of California from the effects of fault-line ground-surface rupture is the Alquist-Priolo Earthquake Fault Zoning Act (California PRC 1972, 1997), passed in the wake of the 1971 Sylmar (or San Fernando) Earthquake, which resulted in extensive surface fault ruptures that damaged numerous structures. This Act is intended to a) prevent the construction of buildings intended for human occupancy on the surface traces of active faults, and b) to increase safety

and minimize the loss of life resulting from earthquakes by facilitating seismic retrofitting to strengthen buildings against ground shaking. At the direction of this Act, in 1972 the State Geologist became responsible for delineating Earthquake Fault Zones (called Special Studies Zones prior to 1994) around active and potentially active fault traces to reduce fault-rupture risks to structures for human occupancy. The zones are revised periodically and extend 200 to 500 feet on either side of identified active fault traces. The CGS has prepared nearly 600 maps delineating Earthquake Fault Zones, which are provided to cities and counties in planning, zoning, and building regulation functions.

Seismic Hazards Mapping Act – Affected Local Agencies

One of the state legislations protecting the public from geo-seismic hazards other than surface faulting, such as strong ground shaking, liquefaction, landslides, and other ground failures, is the Seismic Hazards Mapping Act (California 1991). This Act's regulations apply to public buildings intended for human occupancy and a large percentage of private buildings intended for human occupancy. This Act became effective in 1991 with the purpose of identifying and mapping seismically hazardous areas to assist cities and counties in preparing the safety elements of their general plans and to encourage land use management policies and regulations that reduce seismic hazards. Under the terms of this Act, cities and counties must require a geotechnical report defining and delineating any seismic hazard prior to the approval of a project in a state-identified seismic hazard zone.

At the direction of this Act, the State Geologist became responsible for preparing maps delineating Liquefaction Zones of Required Investigation and Earthquake-Induced Landslide Zones of Required Investigation in the Los Angeles Basin and San Francisco Bay areas.

California Building Standards Code

Title 24, CCR Part 2, the California Building Standards Code (CBC), outlines regulations for building, planning, and construction in the state, including occupancy classification, structural design, building materials, and fire-resistance requirements. The current 2025 CBC, effective date of January 1, 2026, is based on the 2024 International Building Code (IBC) (IBC, 2021). The CBC is a compilation of three types of building standards from three different origins:

- Building standards that have been adopted by state agencies without change from building standards contained in national model codes;
- Building standards that have been adopted and adapted from national model codes to address California's ever-changing conditions; and
- Building standards, authorized by the California Legislature, that constitute amendments not covered by national model codes, that have been created and adopted to address particular California concerns.

All occupancies in California are subject to national model codes adopted into Title 24, and occupancies are further subject to amendments adopted by state agencies. Although the Project is subject to amendments adopted by state agencies, it is not subject to ordinances implemented by local jurisdictions' governing bodies.

Chapter 16 of the CBC deals with structural design requirements governing seismically resistant construction (Section 1604), including factors and coefficients used to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design (Sections 1613.5 through 1613.7). Chapter 18 includes the requirements for foundation and soil investigations (Section 1803); excavation, grading, and fill (Section 1804); allowable load-bearing values of soils (Section 1806); and the design of footings, foundations, and slope clearances (Sections 1808 and 1809), retaining walls (Section 1807), and pier, pile, driven, and cast-in-place foundation support systems (Section 1810). Chapter 33 includes requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes (Section 3304). CBC includes (but is not limited to) grading requirements for the design of excavations and fills and for erosion control. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in the California Occupational Safety and Health Administration regulations (Title 8 CCR). The CBC is revised every three years.

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant. There are no local plans, policies, regulations, or ordinances related to geology and soils that apply to the Project.

3.7.3 IMPACTS ANALYSIS

3.7.3.1 Methodology

Geology and Soils Methodology

The geology and soil analyses are based on a review of published information and reports regarding regional geology and soils. Information was obtained from governmental agencies and websites including Department of Conservation web maps, and a Project-specific Geotechnical Study (Moore Twining Associates 2026).

Paleontological Methodology

Paleontological resources are evidence of ancient life, and as such are non-renewable. This includes the remains of the body of an organism, such as bones, skin impressions, shell, or leaves, as well as traces of an organism's activity, such as footprints or burrows, called trace fossils. In addition to the fossils themselves, geologic context is an important component of paleontological resources and includes the stratigraphic placement of the fossil as well as the lithology of the rock to assess paleoecologic setting, depositional environment, and taphonomy.

While CEQA does not define a significance threshold for paleontological resources, the standards of the Society of Vertebrate Paleontology (SVP) are often used to establish scientific importance of fossils, to assess what constitutes a "unique" paleontological resource for the purposes of CEQA. The SVP defines significant paleontological resources as:

> identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years). [SVP 2010: 11].

It should be noted that the threshold for scientific importance varies with factors including geologic unit, geographic area, and the current state of scientific research (Murphey et al. 2019). Many paleontological studies have developed criteria for assessing the scientific importance of paleontological resource discoveries (e.g., Eisentraut and Cooper 2002; Murphey et al. 2019; Scott and Springer 2003). In general, these studies assess fossils as scientifically important if one or more of the following criteria apply:

- The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct.
- The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events, through biochronology or biostratigraphy and the correlation with isotopic dating.
- The fossils provide ecological data, such as the development of biological communities, the interaction between paleobotanical and paleozoological biotas, or the biogeography of lineages.
- The fossils demonstrate unusual or spectacular circumstances in the history of life.
- The fossils provide information on the preservational pathways of paleontological resources, including taphonomy, diagenesis, or preservational biases in the fossil record.
- The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.
- The fossils inform our understanding of anthropogenic effects to global environments or climate.

Because paleontological resources occur within a geologic unit and fossil localities can only be identified once they are exposed through natural or artificial means, paleontologists evaluate the potential for a geologic unit to yield paleontological resources as a means of assessing a project's potential impacts. The SVP (2010) provides four ranks of paleontological potential:

- High Potential. Rock units from which vertebrate or scientifically important invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources.
- Low Potential. Rock units that are poorly represented by fossil specimens in institutional collections or, based on general scientific consensus, only preserve fossils in rare circumstances (e.g., basalt flows or Recent colluvium) have low paleontological potential.

- No Potential. Some rock units have no potential to contain fossils, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites).
- Undetermined Potential. Rock units for which little information is available in the literature or museum records concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential.

3.7.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to geology and soils if it would:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

The Alquist-Priolo Earthquake Fault Zoning Act mitigates fault rupture hazards by prohibiting the location of structures for human occupancy across the trace of an active fault. An active fault is defined by the California Geologic Survey (CGS) as one that experienced surface displacement within Holocene time (about the last 11,700 years) (CGS 2025a). The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to delineate "Earthquake Fault Zones" along faults that are "sufficiently active" and "well defined." The boundary of an "Earthquake Fault Zone" is generally 500 feet from major active faults and from 200 to 300 feet from well-defined minor faults. These maps are distributed to all affected cities, counties, and State agencies for their use in developing planning policies and controlling renovation or new construction.

The Project is not identified as being within an Alquist-Priolo Earthquake Fault Zone. The Geotechnical Study prepared for the Project evaluated seismic hazard at the Project site (Moore Twining Associates 2026). The nearest Alquist-Priolo Earthquake Fault Zone is the Nunez Fault zone located approximately 52.5 miles to the southwest of the Project site. Additionally, the San Andreas Fault zone is located approximately 68 miles to the southwest of the Project site. Considering the distance to the nearest known active fault, the potential for surface fault rupture due to a known active fault is considered low.

Demolition and Construction

Compliance with the seismic design requirements specified by the CBC would reduce the potential impacts from seismic ground shaking and ground failure on building occupants and structures and impacts would be less than significant.

Operation

Operation of the Project would include traditional courthouse and judiciary activities. The Project site is not located within an Alquist-Priolo earthquake fault zone, and the courthouse building would be developed in accordance with the 2025 CBC; therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

ii. Strong seismic ground shaking?

As with much of California, the Project would continue to be subject to ground shaking generated from activity on regional faults. The Project is not within an earthquake fault zone but has the potential to be subject to seismic ground shaking and failure during major earthquakes along the San Andreas Fault located 68 miles to the southwest. The intensity of the ground shaking would depend on the distance to the epicenter and the geology of the areas between the epicenter and the Project site.

In accordance with the 2025 CBC (Title 24, CCR), seismic structure design requirements would be based on the Seismic Design Category for the proposed structures, which is based on the Occupancy Category for the structure and on the level of expected soil modified seismic ground motion.

Demolition and Construction

Compliance with the seismic design requirements specified by the CBC would reduce the potential impacts from seismic ground shaking and ground failure on building occupants and structures and impacts would be less than significant.

Operation

Operation of the Project would include traditional courthouse and judiciary activities. The Project site is not located within an Alquist-Priolo Earthquake fault zone. The primary approach to mitigating potential impacts of seismic ground shaking during operation is to design the building in accordance with the current seismic design code and using data collected during the Geotechnical Study, which includes recommendations for seismic design parameters per the 2025 CBC and American Society of Civil Engineers (ASCE) 7-22 minimum design loads for buildings and other structures. Additionally, the Geotechnical Report found the Project site is considered suitable for the proposed development. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

iii. Seismic-related ground failure, including liquefaction?

Seismic-induced liquefaction is a phenomenon whereby loose, saturated, granular sediments lose a significant portion of their shear strength due to the generation of excess pore water pressure resulting from cyclic loading during an earthquake event. Liquefaction can result in loss of foundation support, failures due to lateral spreading, and differential compaction of affected soils. The requisite condition for liquefaction is the presence of loose, cohesionless, granular soils below the water table.

If granular sandy materials consolidate or vent to the surface (known as “sand boils”) during and following liquefaction, ground settlement, and surface deformation may occur. In addition to liquefaction of sandy materials, soft clayey soil can also undergo cyclic softening or strength loss as a result of cyclic loading.

This parcel has not been evaluated by the CGS (CGS 2025b) for liquefaction hazards. The nearest liquefaction zone is the Livermore Quadrangle, located approximately 124 miles to the northwest of the Project site. During the geotechnical investigation, no loose poorly graded clean sand or soft clayey soil was encountered (Moore Twining Associates 2026). Loose silty sand was encountered in the first 13 to 18 feet BSG; however, the Project’s building foundations would be constructed below this soil layer. Additionally, groundwater was not encountered during the geotechnical investigation. Based on those results, the potential risk of liquefaction and sand boils on the Project site was determined to be low, and the risk of cyclic softening was determined to be insignificant.

Demolition and Construction

The risk of seismic-related ground failure, including liquefaction, during demolition and construction activities is considered very low. Additionally, the building structures to be demolished would be unoccupied. Therefore, impacts would be less than significant.

Operation

Operation of the Project would include traditional courthouse and judiciary activities. The risk of liquefaction is considered very low based on the results of the Geotechnical Study (Moore Twining Associates 2026). The primary approach to mitigating potential impacts of seismic-related ground failure during operation is to design the building in accordance with the current seismic design code and using data collected during the Geotechnical Study, which includes recommendations for seismic design

parameters per the 2025 CBC and ASCE 7-22 minimum design loads for buildings and other structures. With implementation of these design parameters, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

iv. Landslides?

This parcel has not been evaluated by the CGS for landslide hazards (CGS 2025b). The nearest Earthquake-Induced Landslide Zone is located approximately 16 miles to the west of the Project site. However, given the relatively flat surface and there being no major landforms in the Project area, it is highly unlikely there is potential for landslides on the Project site. Furthermore, the Geotechnical Study found the potential of landside hazards to be insignificant (Moore Twining Associates 2026). Therefore, there would be a less-than-significant impact.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

b. Result in substantial soil erosion or the loss of topsoil?

Implementation of the Project would result in exposure of soils during demolition and construction. Earth-moving activities, including trenching, excavating, stockpiling, and grading would occur. Each earth-moving and ground-disturbing activity mobilizes the soil and increases the chance of erosion.

Demolition and Construction

All demolition and construction activities would be required to comply with CBC Chapter 70 standards, which would include implementation of appropriate measures during grading activities to reduce soil erosion. Additionally, Project development activities would require preparation and compliance with a SWPPP, as soil disturbance would exceed one acre. The SWPPP would consider a full range of erosion

control BMPs. Considering that Project development activities would be performed in accordance with erosion control standards, impacts from soil erosion during demolition and construction are anticipated to be less than significant.

Operation

During operation of the courthouse, the Project site would be covered with pavement or landscaping and vegetation and implement drainage design per CBC standards, resulting in a less than a significant impact.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

The Geotechnical Study identified fill materials up to approximately 6 BSG across portions of the Project site, underlain by silty sand to approximately 15 feet. The silty sands were underlain by interbedded layers of clayey sands, poorly graded sands with silt, poorly graded sands, sandy lean clays (or lean clays with sand), sandy silts, and additional silty sands extending to the maximum depth explored, about 81.5 feet BSG (Moore Twining Associates 2026).

Landslides

This parcel has not been evaluated by the CGS for Landslides hazards. The nearest Earthquake-Induced Landslide Zone is located approximately 16 miles to the west of the Project site. Given the relatively flat surface and there being no major landforms in the Project area, it is highly unlikely that there is a potential for landslides (USGS 2025c). Additionally, the Geotechnical Study found the potential of landside hazards to be insignificant (Moore Twining Associates 2026). Therefore, impacts related to demolition, construction, or operations would be less than significant.

Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or “free” face such as an open body of water, channel, or excavation. This movement is generally due to failure along a weak plane and may often be associated with liquefaction. As cracks develop within the weakened material, blocks of soil displace laterally toward the open face.

The Geotechnical Study concluded that, based on the risk of liquefaction being low, the risk of lateral spreading is also low (Moore Twining Associates 2026). Therefore, impacts related to demolition, construction, or operations would be less than significant.

Subsidence

Subsidence related to compaction settlement, or seismic densification, occurs when loose granular soils above the water table increase in density due to earthquake shaking. Soil densification can result in differential settlement because of variations in soil composition, thickness, and initial density. The Geotechnical Study found that the Project site is not in an area where subsidence resulting from groundwater or oil withdrawal has been documented and is not within an area of groundwater pumping, peat loss, or oil extraction. The Geotechnical Study concluded that the potential for regional subsidence is not considered a significant concern of the Project site (Moore Twining Associates 2026). Therefore, impacts related to demolition, construction, or operations would be less than significant.

Liquefaction or Collapse

This parcel has not been evaluated by the CGS (CGS 2025b) for liquefaction hazards. The nearest liquefaction zone is the Livermore Quadrangle, located approximately 124 miles to the northwest of the Project site. During the Geotechnical Study, no loose poorly graded clean sand or soft clayey soil was encountered. Loose silty sand was encountered in the first 13 to 18 feet BSG; however, the Project's building foundations would be constructed below this soil layer. Additionally, groundwater was not encountered and estimated to occur at 100 feet below ground surface or greater (Moore Twining Associates 2026). Based on those results, risk of liquefaction and sand soils was determined to be low and the risk of cyclic softening was determined to be insignificant. Project development would be performed in accordance with current seismic design code and using data collected during the Geotechnical Study, which includes recommendations for seismic design parameters per the 2025 CBC and ASCE 7-22. Therefore, impacts associated with demolition, construction, and operation would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

A NRCS Web Soil Survey search was conducted for the Project site. The Web Soil Survey search identified that the Project site contains soil classified as Delhi Loamy Sands, 3 to 9 slopes. Delhi Loamy Sands have a low shrink-swell potential and has a clay content of 0-5%. Additionally, the Geotechnical Study indicated that soils on the Project site have a very low to low expansive index ranging from 0 to 28 (Moore Twining Associates 2026).

Demolition, Construction, and Operation

The CBC and other related construction standards apply seismic requirements and address certain grading activities. The CBC includes common engineering practices requiring special design and construction methods that reduce potential expansive soil–related impacts. Compliance with CBC regulations includes the design and construction of building foundations to resist soil movement. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Demolition, Construction, and Operation

The Project would connect to the existing City's wastewater system and would not require the construction and use of septic tanks or alternative wastewater disposal system. Therefore, there would be no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The following discussion is primarily based on the Paleontological Resource Assessment prepared for this Project and included as **Appendix F** of this EIR.

The Project site is located within the City of Fresno in the central portion of Fresno County within the San Joaquin Valley of California. The San Joaquin Valley lies within the Great Valley geomorphic province. The San Joaquin Valley is primarily comprised of Cenozoic and Mesozoic sediments up to 5 miles thick, capped with younger Pleistocene- to Holocene-aged alluvial deposits. Geologic mapping by Matthews and Burnett (1965) indicates the surface of the Project site consists of the Modesto Formation, with exposures of the underlying Riverbank Formation at the surface within 0.5 miles of the Project site.

The Modesto Formation is the uppermost of the older alluvial units that comprise the top of the Great Valley sequence, dating from the late Pleistocene, approximately 12,000 to at least 42,000 years ago. The online database of the University of California Museum of Paleontology (UCMP) contains four localities attributed to the Modesto Formation in Fresno County, two vertebrate localities, one plant locality, and one invertebrate locality. Additionally, the UCMP has records of two localities and 167 specimens from Pleistocene-aged localities not assigned to a formal geologic unit; these may be representative of the Modesto or Riverbank Formations. The National Museum of Natural History at the Smithsonian (NMNH) database did not contain records of localities attributed to the Modesto Formation but does contain records of one bivalve specimen from the Pleistocene-aged sediments in Fresno County. The online database of the American Museum of Natural History did not have records of localities attributed to the Modesto Formation in Fresno County. Additionally, a review of the scientific literature and paleontological mitigation reports reveal additional scientifically significant Pleistocene-aged fossils have been documented from localities attributed to the Modesto Formation within the region. Given the documentation of scientifically significant and diverse Pleistocene taxa from the Modesto Formation in the Great Valley, this unit is assessed as having high (FPMS 4) paleontological potential.

The Riverbank Formation is mapped approximately 0.5 miles southeast of the Project site. The Riverbank Formation underlies the Modesto Formation and is likely present beneath the Project site at unknown depths. These deposits are much older than the Modesto Formation, dating from 130,000 to 450,000 years ago. The online database of the UCMP contains two localities attributed to the Riverbank Formation in Fresno County, which preserve mammal and plant fossils, the specimens from which are not catalogued. The NMNH database did not contain records of localities attributed to the Riverbank Formation. Additionally, a review of the scientific literature and paleontological mitigation reports shows a diverse and scientifically important fossil fauna has been recovered from the Riverbank Formation. Given the documentation of significant and diverse Pleistocene taxa from the Riverbank Formation in the Great Valley, this unit is assessed as having high (FPMS 4) paleontological potential.

Demolition and Construction

The Project would be located where the current South Annex Jail and Sheriff's office currently reside (to be demolished by Fresno County). Construction activities would require ground disturbance and may encounter fossils in the Modesto and Riverbank Formations. In general, activities limited to the shallow subsurface, like landscaping, are unlikely to encounter undisturbed sensitive units. More substantial excavations, such as for the underground parking are more likely to encounter sensitive units, depending on the presence and depth of previous disturbance. Therefore, impacts would be potentially significant.

Operation

It is not anticipated that the Project operations will pose indirect adverse impacts to paleontological resources, as the Project would not entail increased exposure or erosion of native sediments beyond the duration of the ground disturbance during construction. Impacts would be less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

The ability to apply mitigation is tied to the nature of the ground-disturbing activity. Paleontological monitoring is the most common mitigation tool, during which a trained paleontologist observes construction activities and halts construction temporarily to inspect the exposed sediments. If fossils are observed, the paleontologist will recognize them and stop work so that they can be assessed and, if found to meet criteria for scientific importance, salvage them for conservation and curation in a museum.

Construction monitoring therefore requires a paleontologist to be able to observe either cuts into the ground, such as the sidewalls of trenches, a graded ground surface, or spoils piles, such as from drilling or trenching. The mitigation measures consider this to reduce potential impacts on paleontological resources to less than significant.

PALEO-1: Paleontological Mitigation Plan. A qualified paleontologist meeting professional standards as defined by Murphey et al. (2019) will be retained as the designated Project Paleontologist to oversee a paleontological mitigation program. The Project Paleontologist should draft and oversee the implementation of a Paleontological Mitigation Plan that reviews detailed Project plans and establishes monitoring plans that provide for paleontological monitoring of earthwork and ground-disturbing activities into undisturbed geologic units with high paleontological potential to be conducted by a paleontological monitor meeting industry standards (Murphey et al. 2019). This plan should include provisions for worker training, depths and locations for monitoring, monitoring procedures, a fossil discovery plan in the event a fossil is found during construction, including a plan for assessment and treatment, and requirements for final reporting of the results of the mitigation program. The plan should include a review of geotechnical data, if available, to refine the depth at which Pleistocene-aged sediments are present.

PALEO-2: **Paleontological Monitoring.** Full-time paleontological monitoring should be implemented once excavations exceed the depth of previously disturbed sediments or artificial fill across the Project

Site. Spot check monitoring may be conducted initially, until the depth of previous disturbance is known. The Project Paleontologist may alter the frequency or depth of monitoring based on subsurface conditions.

PALEO-3: Worker's Environmental Awareness Program. The Project Paleontologist should develop a Worker's Environmental Awareness Program training outlining the requirements and procedures if inadvertent discovery of fossils is identified during construction, to be delivered by the paleontological monitor. This training shall be provided once to each worker involved in ground-disturbing activities before they begin work and shall be documented in training records submitted to the Judicial Council.

PALEO-4: **Paleontological Resources Encountered During Construction.** In the event fossils are encountered during construction activities, work should stop in a safe radius of the finds, usually 100 feet, while the Paleontological Technician documents the fossils. The paleontological Principal Investigator shall assess the fossils. Should the fossils meet criteria of scientific importance to be considered a unique paleontological resource, they should be collected and curated in an accredited repository along with associated data and curation fees.

Level of Significance After Mitigation

Less than Significant Impact.

3.8 Greenhouse Gas

The following discussion is based on the Air Quality and Greenhouse Gas Impact Assessment prepared for the Project and included as **Appendix B** to this EIR.

3.8.1 EXISTING CONDITIONS

To fully understand global climate change, it is important to recognize the naturally occurring "greenhouse effect" and to define the GHGs that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space, and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect.

Greenhouse Gases

Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and sulfur hexafluoride (SF_6). Primary GHGs attributed to global climate change, are discussed in the following subsections.

Carbon Dioxide. CO_2 is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial processes, such as mineral production and metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere (USEPA 2025a).

Methane. CH_4 is a colorless and odorless gas. CH_4 is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. CH_4 is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (e.g., enteric fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about 12 years (USEPA 2025b).

Nitrous Oxide. N_2O is a clear, colorless gas with a slightly sweet odor. N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological

sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years (USEPA 2025c).

Hydrofluorocarbons. HFCs are manufactured chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HFC-22, or Freon 22, used in air conditioning applications. The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 260 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes of less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years) (USEPA 2025d).

Perfluorocarbons. PFCs are colorless, highly dense, chemically inert, and nontoxic. There are seven PFC gases: perfluoromethane (CF_4), perfluoroethane (C_2F_6), perfluoropropane (C_3F_8), perfluorobutane (C_4F_{10}), perfluorocyclobutane (C_4F_8), perfluoropentane (C_5F_{12}), and perfluorohexane (C_6F_{14}). Natural geological emissions have been responsible for the PFCs that have accumulated in the atmosphere in the past; however, the largest current source is aluminum production, which releases CF_4 and C_2F_6 as byproducts. The estimated atmospheric lifetimes for CF_4 and C_2F_6 are 50,000 and 10,000 years, respectively (USEPA 2025e).

Nitrogen Trifluoride. NF_3 is an inorganic, colorless, odorless, toxic, nonflammable gas used as an etchant in microelectronics. NF_3 is predominantly employed in the cleaning of the plasma-enhanced chemical vapor deposition chambers in the production of liquid crystal displays and silicon-based thin film solar cells. In 2009, NF_3 was listed by California as a potential GHG to be listed and regulated under AB 32, Section 38505 Health and Safety Code. NF_3 has an atmospheric lifetime of 740 years (USEPA 2025f).

Sulfur Hexafluoride. SF_6 is an inorganic compound that is colorless, odorless, nontoxic, and generally nonflammable. SF_6 is primarily used as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80 percent of all SF_6 produced worldwide. Leaks of SF_6 occur from aging equipment and during equipment maintenance and servicing. The use of SF_6 in electric power systems has decreased dramatically in recent years; for example, according to the USEPA, an old circuit breaker can contain up to 2,000 pounds of SF_6 while modern breakers usually contain less than 100 pounds. Best practices to reduce the potential for SF_6 leaks include training staff to handle SF_6 properly; implement leak detection and repair strategies; and decommissioning equipment appropriately. SF_6 has an atmospheric life of 3,200 years (USEPA 2025g).

Black Carbon. Black carbon is the most strongly light-absorbing component of PM emitted from burning fuels such as coal, diesel, and biomass. Black carbon contributes to climate change both directly by absorbing sunlight and indirectly by depositing on snow and by interacting with clouds and affecting cloud formation. Black carbon is considered a short-lived species, which can vary spatially and, consequently, it is very difficult to quantify associated global warming potentials. The main sources of black carbon in California are wildfires, off-road vehicles (e.g., locomotives, marine vessels, tractors, excavators, dozers), on-road vehicles (e.g., cars, trucks, and buses), fireplaces, agricultural waste burning, and prescribed

burning of forest or wildlands. California has been an international leader in reducing emissions of black carbon, including programs that target reducing PM from diesel engines and burning activities (CARB 2025a).

Global Warming Potential

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weigh each gas by its global warming potential.

Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. Based on a 100-year time horizon, CH_4 traps over 25 times more heat per molecule than CO_2; and N_2O absorbs roughly 298 times more heat per molecule than CO_2. Additional GHGs with high global warming potential include NF_3, SF_6, PFCs, and black carbon.

Sources of Greenhouse Gas Emissions

On a global scale, GHG emissions are predominantly associated with activities related to energy production from fossil fuel sources; changes in land use, such as deforestation and land clearing; industrial sources; agricultural activities; transportation; waste and wastewater generation; and commercial and residential land uses. Worldwide, energy production including the burning of coal, natural gas, and oil for electricity and heat is the largest single source of global GHG emissions.

United States of America

In 2022, GHG emissions in the United States. totaled 6,343 million metric tons of CO_2e ($MMTCO_2e$). Within the United States, the largest contributor to GHG emissions is the transportation sector (28 percent). The next largest contributors are from electricity production (25 percent) and industry (23 percent), followed by the commercial and residential sectors (13 percent) and the agricultural sector (10 percent). Transportation emissions primarily come from burning fossil fuels for our cars, trucks, ships, trains, and planes. Over 90 percent of the fuel used for transportation is petroleum-based, which includes primarily gasoline and diesel. The bulk of emissions generated from energy production come from burning fossil fuels, mostly coal and natural gas. Industry emissions are also primarily generated from fossil fuels burned for heat, the use of certain products that contain GHGs, and the handling of waste. Similar to industry sector emissions, commercial and residential uses arise primarily from fossil fuels for heat, the use of certain products that contain GHGs, and the handling of waste. Agricultural emissions come from livestock such as cows, agricultural soil, and rice production. The land use and forestry sector within the United States serves as a carbon sink. Carbon sinks absorb CO_2 from the atmosphere. Land areas across the United States absorbed approximately 13 percent of the 2022 GHG emissions (USEPA 2025h). In 2023, GHG emissions in the United States totaled 6,197 $MMTCO_2e$, while this data has been released via a Freedom of Information request, the USEPA has not formally adopted the 2023 emissions report (USEPA 2025i).

California

In 2023, GHG emissions within California totaled 360.4 MMT CO_2e. Similar to national emissions, in California, the transportation sector is the largest contributor. Transportation emissions account for approximately 37 percent of the total statewide GHG emissions. The majority of transportation emissions are derived from passenger vehicles and heavy-duty trucks. Emissions associated with industrial uses are the second largest contributor, totaling roughly 19 percent. Industrial emissions are driven by fuel combustion from sources that include refineries, oil and gas extraction, cement plants, and the portion of cogeneration emissions attribution to thermal energy output. Electricity generation (in state and imports) totaled roughly 16 percent. Emissions from the electricity generation sector have declined over the years due to the increase in renewable generation that continues to replace fossil power (CARB 2025b).

3.8.2 REGULATORY SETTING

There are considerable regulatory actions regarding GHGs and climate change at the federal, state, regional, and local level. The following includes the key regulations that may be relevant to the Project. As noted previously, although the Judicial Council is not generally subject to regional or local land use plans and regulations, it is subject to plans and regulations implementing delegated federal authority.

Federal

Federal Clean Air Act

As noted previously, the principal air quality regulatory mechanism at the federal level is the FCAA and, in particular, the 1990 amendments to the FCAA and the NAAQS that it establishes. The FCAA does not specifically regulate GHG emissions; however, the U.S. Supreme Court has determined that GHGs are pollutants that can be regulated under the FCAA. There are currently no federal regulations that set ambient air quality standards for GHGs.

The USEPA is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO_2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions. USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the Green Power Partnership program for encouraging the use of renewable energy) play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

In 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the FCAA. USEPA adopted a Final Endangerment Finding for six defined GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6). The Endangerment Finding was required before USEPA could regulate GHG emissions under Section 202(a)(1) of the FCAA. USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not

themselves impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

State

Executive Order S-3-05

Executive Order (EO) S-3-05 was established by Governor Arnold Schwarzenegger in June 2006; the order establishes statewide emission reduction targets through the year 2050, as follows:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The EO does not include any specific requirements that pertain to the Project; however, future actions taken by the state to implement these goals may affect the Project depending on the specific implementation measures that are developed. The 2050 reduction target has not been codified, and the California Supreme Court has ruled that CEQA lead agencies are not required to use it as a significance threshold.

Assembly Bill 32 and Senate Bill 32

In line with EO S-3-05, AB 32, passed in 2006, required that GHGs emitted in California be reduced to 1990 levels by the year 2020. GHGs, as defined under AB 32, include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

> *Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.*

CARB approved the 1990 GHG emissions level of 427 $MMTCO_2e$ on December 6, 2007. Therefore, to meet the state's target, emissions generated in California in 2020 were required to be equal to or less than 427 $MMTCO_2e$. In order to set a framework for the state to meet this target, CARB was tasked with creating a Scoping Plan (as described below). California announced in July 2018 that the state emitted 427 $MMTCO_2e$ in 2016 and achieved AB 32 goals (CARB 2018).

SB 32 was signed into law on September 8, 2016. SB 32 states that "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit no later than December 31, 2030."

Assembly Bill 1279: The California Climate Crisis Act

On September 16, 2022, AB 1279, also known as the California Climate Crisis Act, codified the carbon neutrality goal established by EO B-55-18. AB 1279 establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045, and maintain net negative GHG emissions thereafter. AB 1279 would also ensure that by 2045 the statewide anthropogenic GHG emissions are reduced by at least 85 percent below 1990 levels. The bill would require CARB to ensure that an updated Scoping Plan identifies and recommends measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO_2 removal and carbon capture, utilization, and storage technologies to complement AB 1279's emissions reduction requirements.

Climate Change Scoping Plans

The Scoping Plan is a blueprint for how the state plans to meet the required GHG reductions under AB 32, SB 32, and AB 1279. CARB is required under AB 32 to update the Scoping Plan at least once every five years. The most recent Scoping Plan is the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) that was adopted in December 2022 and serves as the third update to the initial plan adopted in 2008 (2008 Scoping Plan). The 2008 Scoping Plan addressed how the state can achieve the AB 32 reduction targets by 2020. An updated plan was adopted in 2014 (2013 Scoping Plan) to assess progress towards the 2020 reduction goal and address short-lived climate pollutants (SLCPs). The 2017 Scoping Plan also addressed progress towards the 2020 reduction goal and created a pathway for the state to meet the 2030 reduction goal set under SB 32.

Finally, the 2022 Scoping Plan assesses progress toward achieving the SB 32 2030 target and laying out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities (CARB 2022). The 2022 Scoping Plan also includes a discussion about the use of natural and working land use sectors for sequestration, carbon storage, and potential emission sources during wildfires. The estimated GHG emission reductions from the 2022 Scoping Plan are provided in **Table 3.8-1.**

Table 3.8-1. Estimated Statewide Greenhouse Gas Emissions Reductions in the 2022 Scoping Plan

Emissions Scenario	GHG Emissions ($MMTCO_2e$)
2019	
2019 State GHG Emissions	404
2030	
2030 Business-As-Usual (BAU) Forecast	312
2030 GHG Emissions without Carbon Removal and Capture	233

Emissions Scenario	GHG Emissions ($MMTCO_2e$)
2030 GHG Emissions with Carbon Removal and Capture	226
2030 Emissions Target Set by SB 32 (1990 levels by 2030)	260
Reduction below BAU necessary to Schieve 1990 levels by 2030	52
2045	
2045 BAU Forecast	266
2045 GHG Emissions without Carbon Removal and Capture	72
2045 GHG Emissions with Carbon Removal and Capture	-3

Source: CARB 2022.

The 2022 Scoping Plan accounts for existing and recent direction in EOs and State Statutes, which identify policies, strategies, and regulations in support of and implementation of the 2022 Scoping Plan. These EOs and State Statutes include AB 1279, SB 100, SB 905, and EO N-79-20 (see below). Ultimately, achieving the targets set by SB 32 and AB 1279 will require continued commitment to and successful implementation of existing policies and programs as well as new policy tools and technical solutions to further reduce GHG emissions.

Senate Bill 375: The Sustainable Communities and Climate Protection Act of 2008

SB 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits more than 40 percent of the total GHG emissions in California. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

In 2018, CARB updated the SB 375 Greenhouse Gas Emission Reduction Targets, setting updated GHG reduction targets for metropolitan planning organizations for 2020 and 2035 (CARB 2025b). The Bay Area reduction targets for per capita vehicular emissions were 10 percent by 2020 and 19 percent by 2035.

Senate Bill 1368: Emission Performance Standards

Enacted in 2006, SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant.

Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the state. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 pounds of CO_2 per megawatt-hour.

Senate Bill 1078: Renewable Electricity Standards

SB 1078 (September 12, 2002) required California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, the governor signed EO S-14-08, which established the RPS target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. EO S-21-09 directed CARB to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. In 2011, the state legislature adopted this higher standard in SB X1-2. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas.

Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

SB 350 (October 7, 2015) reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for EV charging stations.

Senate Bill 100: California Renewables Portfolio Standard Program

SB 100 (September 10, 2018) revised the RPS goals to achieve the 50 percent renewable resources target by December 31, 2026, and to achieve a 60 percent target by December 31, 2030. The bill requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; and 60 percent by December 31, 2030. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order S-3-05: Global Warming Impacts

EO S-3-05 was signed on June 1, 2005. The EO sets the following GHG emission reduction targets: (1) by 2010, California shall reduce GHG emissions to 2000 levels; (2) by 2020, California shall reduce GHG

emissions to 1990 levels; and (3) by 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

Executive Order B-30-15

EO B-30-15 was signed on April 29, 2015. The EO established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030. Additionally, the EO ordered all state agencies with jurisdiction over GHG sources to implement measures to achieve these GHG emissions reductions and it directed CARB to update the Scoping Plan to meet the 2030 goal.

California Green Building Standards Code

CALGreen (Title 24, CCR Part 11) includes standards for energy efficiency, water efficiency, material conservation, and environmental quality in new residential and nonresidential structures. CALGreen was created in 2008 under SB 1473 in order to support California's GHG reduction goals under AB 32. CALGreen is updated on a triennial basis with minor revisions every 18 months.

Judicial Council's Water Conservation Policy

Adopted in 2015, the Judicial Council's Water Conservation Policy identifies best practices to encourage water conservation in all capital projects and courthouse facilities. The best practices that may be applicable to the Project include using non-potable water for dust control during construction, installing efficient indoor plumbing fixtures, and requiring climate-appropriate landscape planning (Judicial Council 2015).

Regional

Because the Judicial Council is the CEQA lead agency for the Project, and is acting as the Judicial Branch of State government, local government regulations do not apply to the Project. However, the Judicial Council considers local policies and guidelines, as appropriate.

San Joaquin Valley Air Pollution Control District

In August 2008, SJVAPCD's governing board adopted the Climate Change Action Plan. The Climate Change Action Plan directed the SJVAPCD Air Pollution Control Officer to develop guidance to assist lead agencies, Project proponents, permit applicants, and interested parties in assessing and reducing the impacts of Project-specific GHG emissions on global climate change.

On December 17, 2009, the SJVAPCD governing board adopted *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*, and the *District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. SJVAPCD concluded that the existing science is inadequate to support quantification of the impacts that Project-specific GHG emissions have on global climate change. SJVAPCD found the effects of Project-specific emissions to be cumulative; and without mitigation, their incremental contribution to global climate change could be considered cumulatively considerable. SJVAPCD found that this cumulative impact is

best addressed by requiring all projects to reduce their GHG emissions, whether through Project design elements or mitigation.

Local

Because the Judicial Council is the CEQA lead agency for the Project, acting as the Judicial Branch of State government, local government regulations do not apply to the Project. However, the Judicial Council considers local policies and guidelines as appropriate. There are no local plans, policies, regulations, or ordinances related to greenhouse gas that apply to the Project.

3.8.3 IMPACTS ANALYSIS

3.8.3.1 Methodology

CalEEMod version 2022.1.1.43 was used to estimate construction and operational emissions associated with the Project. Refer to Section 3.3.3.1 of this EIR and **Appendix B** for additional information.

3.8.3.2 Thresholds of Significance

Where available and determined to be appropriate for the Project, the Judicial Council may reference the significance criteria established by the applicable air quality management or air pollution district to make the following determinations.

The SJVAPCD's guidance for valley land use agencies in addressing GHG emission impacts for new projects under CEQA presents a tiered approach to analyzing project significance with respect to GHG emissions. On November 20, 2015, the California Supreme Court issued its decision on the *Center for Biological Diversity v. California Department of Fish and Wildlife* on the Newhall Ranch project case. The Court determined that there is no substantial evidence to link a specific project's achievement of CARB's scoping plan's statewide average reduction below BAU to the conclusion that the Project's reduction would meet AB 32's 2020 goals. Furthermore, since the release of SJVAPCD's guidance, SB 32 was enacted, which requires the state to further reduce GHG emissions beyond the goals established in AB 32. As a result, the SJVAPCD's 29 percent reduction in emissions as compared to a BAU standard is outdated and was not used for this analysis.

CEQA Guidelines, Title 14, CCR §15064.4 provides guidance for determining the significance of impacts from GHGs as follows:

> (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
>
> (1) Quantify greenhouse gas emissions resulting from a project; and/or
>
> (2) Rely on a qualitative analysis or performance-based standards.

> (b) In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment:
>
> > (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
> >
> > (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
> >
> > (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., Section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the state's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.
>
> (c) A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

For development projects, an effective way to evaluate the project's generation of GHG emissions is to evaluate whether a subject project "incorporates efficiency and conservation measures sufficient to contribute its portion of the overall GHG reductions necessary" for the State to achieve its own mandates (Center for Biological Diversity, et al. v. Department of Fish and Wildlife 2015).

The intent of the 2022 Scoping Plan, and the State legislation on which it is built, is to decouple the State's population and economic growth from carbon emissions, thereby accommodating continued growth in California but in a way that achieves a lower rate of GHG emissions (CARB 2022). With a reduced rate of emissions per resident and employee, California can accommodate expected population growth and achieve economic development objectives, while also abiding by legislative emissions targets.

An efficiency target can be developed that mirrors statewide emissions reduction legislation and applicable EOs for the target year. To create an efficiency target, the statewide emissions target for a specified target year can be divided by the forecast population and employment statewide for the same year. This yields an emissions "budget" for each California resident/employee and allows a community to assess whether or not its emissions rate is consistent with the statewide emissions budget.

If a project or plan demonstrates that the rate of GHG emissions is efficient enough to provide its share of State emissions reduction targets, the impact is not cumulatively considerable (Center for Biological Diversity, et al. v. Department of Fish and Wildlife 2015). Therefore, for evaluation of the Project's generation of GHG emissions, this analysis uses a GHG efficiency metric that is tailored for new development, to the Project , and to the Project location to assess the GHG efficiency of the Project, and whether the Project provides for its share of emissions reductions embodied within SB 32 in the short-term and EO S-3-05 for the consideration of the State's long-term emissions reductions goals.

Table 3.8-2 presents the land use-related statewide emissions and employment figures and calculates the proposed 2030 and 2050 GHG efficiency targets to quantitatively evaluate the Project 's GHG emissions. Adjusted emissions remove GHG emissions associated with residential land uses as the Project does not include any residential land uses. For the purposes of analysis in this EIR, the 2030 GHG efficiency threshold was calculated to be 11.63 metric tons of carbon dioxide equivalents (MTCO2e) per employee and the 2050 GHG efficiency threshold was calculated to be 3.31 MTCO2e per employee.

Table 3.8-2. Greenhouse Gas Efficiency Threshold

Metric	1990 State Inventory	2030 Project-specific GHG Efficiency Threshold	2050 Project-specific GHG Efficiency Threshold
Statewide Emissions ($MMTCO_2e/yr$)	431	258	86
Adjusted Land Use-Related Emissions ($MMTCO_2e/yr$)[1]	401	241	80
Percent Mass Emissions Reduction	n/a	40 percent below 1990	80 percent below 1990
Statewide Employment[2] (service population)	n/a	20,715,080	24,153,880
Per Employee Emissions Efficiency Threshold ($MTCO_2e/SP$)	**n/a**	**11.63**	**3.31**

Sources: CARB 2007 and Employment Development Department (EDD) 2025.
Notes:
[1] GHG emissions associated with residential uses were removed.
[2] Employment projects for 2030 and 2050 are calculated using a linear forecast from 2023 (19,511,500 employees) and 2033 (21,230,900 employees) data.

Additionally, the Project would be required to comply with CARB's 2022 Scoping Plan. To determine whether the Project would conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing GHG emissions, the Project was evaluated for consistency with the applicable state plan. While SJVAPCD has a CAAP, SB 32 was issued after the CAAP was adopted, which requires the state to further reduce GHG emissions beyond the goals laid out in AB 32 and therefore the CAAP is outdated.

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to greenhouse gas if it would:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The following emissions estimate is consistent with CEQA Guidelines, Title 14, CCR §15064.4(a). CalEEMod was used to estimate the Project's GHG emissions during construction and operation.

Constructions Emission Inventory

Construction GHGs would be emitted temporarily by off-road construction equipment, vehicle travel by workers, material hauling from the Project site, and material deliveries to the Project site. The estimated construction GHG emissions are shown in **Table 3.8-3**. Because construction GHG emissions are temporary, they are typically amortized over the life of the Project and added to operational emissions. The Project is anticipated to have a lifetime of 30 years.

Table 3.8-3. Construction Greenhouse Gas Emissions

Construction Year	Metric Tons of Carbon Dioxide Equivalents (MTCO2e)
Construction—2029	77.52
Construction—2030	264.56
Construction—2031	261.18
Construction—2032	261.90
Construction—2033	230.15
Construction—Mobile (2029-2033)	5,379.39
Total	**6,477.70**
Amortized over 30 years[1]	**215.92**

Source: CalEEMod Output (Appendix B).
Notes:
[1] GHG emissions are amortized over the 30-year life of the Project.

Operational Emission Inventory

Operational or long-term emissions occur over the life of the Project. Operational activities of the Project would generate GHG emissions primarily from employees, jurors, defendants, and the public's trips to and from the Project site, energy usage, landscaping equipment, handling of solid waste, and emissions associated with water and wastewater. Net operational GHG emissions associated with the Project are shown in **Table 3.8-4** and demonstrate that implementation of the Project would result in an increase of GHG emissions and would exceed the Project's 2030 GHG efficiency threshold in 2033 (Project buildout) and the Project's 2050 GHG efficiency threshold in 2050. Therefore, the impact is potentially significant.

Table 3.8-4. Operational Greenhouse Gas Emissions

Source	Emissions of Metric Tons of Carbon Dioxide Equivalents (MT CO_2e) Per Year (2033)	Emissions of Metric Tons of Carbon Dioxide Equivalents (MT CO_2e) Per Year (2050)
Mobile	6,012.82	5,666.72
Area	6.05	6.05
Energy	947.92	877.64
Water	114.00	111.65
Waste	119.90	119.90
Refrigerants	0.17	0.17
Total Operational Emissions	*7,200.86*	*6,782.13*
Amortized Construction Emissions	215.92	215.92
Project Total	7,416.78	**6,998.05**
Existing Total	(1,723.30)	(1,723.30)
Net Project Total	5,693.48	**5,274.75**
Project Service Population	404	404
Project GHG Efficiency (MT CO2e per service population)	**14.09**	**13.06**
GHG Efficiency Threshold (MT CO2e per service population)	**11.63**	**3.31**
Exceed Threshold?	**Yes**	**Yes**

Source: CalEEMod Output (Appendix B).

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

GHG-1: All Electric Development. The Judicial Council shall not include natural gas infrastructure to or within the Project site and Project operations shall not use natural gas.

GHG-2: TDM Measures. The Judicial Council shall include the following TDM measures:

- Provide cyclists end-of-trip facilities (i.e., showers, lockers, and similar features) in the project design and operational maintenance.
- Provide transit-oriented design.
- Implement commute trip reduction marketing.
- Provide ridesharing program.

As shown in **Table 3.8-5**, implementation of the Mitigation Measures GHG-1 and GHG-2 would reduce long term operational GHG emissions below the 2030 GHG efficiency threshold, however, GHG emissions would remain above the 2050 GHG efficiency threshold.

Table 3.8-5. Mitigated Operational Greenhouse Gas Emissions

Source	Emissions of Metric Tons of Carbon Dioxide Equivalents (MT CO_2e) Per Year (2033)	Emissions of Metric Tons of Carbon Dioxide Equivalents (MT CO_2e) Per Year (2050)
Mobile	4,311.38	4,063.21
Area	6.05	6.05
Energy	70.28	0
Water	114.00	111.65
Waste	119.90	119.90
Refrigerants	0.17	0.17
Total Operational Emissions	*4,621.78*	*4,300.98*
Amortized Construction Emissions	215.92	215.92
Project Total	4,837.7	4,516.90
Existing Total	(1,723.30)	(1,723.30)
Net Project Total	3,114.40	2,793.60
Project Service Population	404	404
Project GHG Efficiency (MT CO2e per service population)	**7.71**	**6.91**
GHG Efficiency Threshold (MT CO2e per service population)	**11.63**	**3.31**
Exceed Threshold?	**No**	**Yes**

Source: CalEEMod Output (Appendix B).

It should be noted that, although the emissions reductions achieved through implementation of Mitigation Measures GHG-1 and GHG-2 do not result in a level of emission that meets the 2050 GHG efficiency threshold, operational emissions may be further reduced by the following Project attributes that cannot be quantified at this time, including:

- The Project would be designed and constructed to a LEED silver rating, at a minimum, which would include additional energy and resource efficiency measures that could reduce related GHG emissions.
- The Judicial Council shall offer jurors public transportation passes at no cost to the juror, to support increased use of public transit as a mode of travel by visitors to and from the Project site, thereby reducing VMT and related mobile-source GHG emissions.

Level of Significance After Mitigation

Significant and Unavoidable

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

A project would have a significant impact with respect to GHG emissions and global climate change if it would substantially conflict with the provisions of CEQA Guidelines, Title 14, CCR §15064.4(b). Pursuant to CEQA Guidelines Appendix G, a significant GHG impact is identified if the project could conflict with applicable GHG reduction plans, policies, or regulations.

CARB's 2022 Scoping Plan sets a framework for California to meet the reduction targets of SB 32 and AB 1279. The 2022 Scoping Plan builds upon previous iterations of state scoping plans to achieve carbon neutrality and reduce anthropogenic GHG emissions by 85 percent of year 1990 levels no later than 2045, as directed by AB 1279. **Table 3.8-6** evaluates Project consistency with the GHG reduction strategies identified in the 2022 Scoping Plan. As shown therein, the Project would be consistent with all applicable measures and, as a result, would support the overall carbon neutrality goal established by the 2022 Scoping Plan.

Table 3.8-6. Project Consistency with 2022 Scoping Plan Greenhouse Gas Reduction Strategies

Measure	Consistency Determination
Deploy ZEVs and reduce driving demand	**Consistent.** The Project is in close proximity to Fresno Area Express bus lines. Additionally, the Project site is easily accessible by pedestrians. Moreover, the Project would consolidate courts from several different courthouses in one centralized location, reducing vehicle trips associated with multiple facilities. The Project would not directly deploy ZEVs, however consistent with the 2025 CALGreen, or applicable code at the time of construction, the proposed secure parking would include electric vehicle (EV)-capable spaces and EV chargers. Additionally, the Project would implement Mitigation Measure GHG-2.
Generate clean electricity	**Consistent.** The Project would not directly generate clean electricity. However, the Project would purchase electricity from PG&E, which is subject to the RPS. The RPS would require utilities to provide 100% GHG free sources of electricity to consumers by 2045. PG&E offers 100% GHG free electricity via two plans, 100% solar choice and Green Saver, according to their 2024 power content label. Additionally, PG&E's base plan provides 98% GHG free electricity (PG&E 2025).
Decarbonize Buildings	**Consistent.** The Project would be constructed in compliance with the applicable CALGreen standards and would meet at least LEED Silver certification. Moreover, the Project would replace older, less efficient buildings and consolidate functions reducing energy consumption associated with multiple facilities. Additionally, with implementation of Mitigation Measure GHG -1, the Project would be all-electric and would not include any natural gas connections.
Reduce non-combustion emissions (Methane)	**Consistent.** The Project would not include any land uses that generate significant levels of methane, such as landfills or dairy farms.

Measure	Consistency Determination
Reduce non-combustion emissions (Hydrofluorocarbons [HFCs])	**Consistent.** The Project would comply with all applicable SJVAPCD and state regulations governing SLCPs, including HFCs.
Compensate for remaining emissions	**Not Applicable.** This measure is aimed at the state government to reduce statewide emissions to meet AB 1279 goals.

Source: CARB 2022b.

This analysis finds that the Project would be consistent with the applicable strategies recommended in the 2022 Scoping Plan.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No Mitigation Required.

Level of Significance After Mitigation

Less than Significant Impact.

3.9 Hazards and Hazardous Materials

This section evaluates the potential effects on the public or environment from the storage and use of hazardous materials for the Project. This section also discusses reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. It presents the laws, regulations, and standards related to hazardous materials, describes existing conditions, identifies potential impacts on the public and environment from routine transport, use, and disposal of hazardous materials, and presents mitigation measures to reduce potentially significant impacts.

3.9.1 EXISTING CONDITIONS

A Phase I Environmental Site Assessment (Phase I ESA, **Appendix G**) was completed for the Project by PlaceWorks in July 2023. The Phase I ESA identified two Recognized Environmental Conditions (RECs) associated with the Project: a 10,000-gallon gasoline underground storage tank (UST) installed to the east of the South Annex Jail building and a 20,000-gallon diesel UST to the north of the Fresno County Sheriff's Department administration building. Additionally, one Historical Recognized Environmental Conditions (HRECs) associated with a former 10,000-gallon gasoline tank that was removed in 1990 and was a Leaking Underground Storage Tank (LUST) Cleanup Site that was remediated. The report also noted that two other facilities were identified, but outside the Project site, including gasoline dispensers in the underground parking garage and emergency standby engine powering an emergency generator in the Hall of Records. Based on the findings of the Phase I ESA, PlaceWorks recommended a Phase II ESA to assess the two RECs identified (PlaceWorks 2024).

A Phase II ESA (**Appendix H**) was prepared by Moore Twining Associates, Inc., dated January 12, 2026, for the Project. The purpose of the Phase II investigation was to assess for the presence of petroleum hydrocarbons in subsurface soil and soil gas in the vicinity of the existing gasoline and diesel UST locations and to assess near surface soil along the footprint of the existing onsite buildings for the presence of lead. During the Phase II investigation, six soil borings were advanced and soil samples were collected to analyze for total petroleum hydrocarbons (TPH). In addition, 25 surface soil samples were collected along the footprints of the onsite buildings to analyze for lead, and five temporary gas wells were installed to analyze TPH and VOCs (Moore Twining Associates, Inc. 2026).

Soil sample analytical results from the sampling revealed no detectible concentrations of TPH and VOCs in the subsurface samples except for negligible concentrations of TPH motor oil, toluene and methylene chloride, but they did not exceed residential or commercial/ industrial human health regional screening levels (RSL). In addition, no heavy metals analyzed exceeded their residential or commercial/ industrial human health RSLs, total threshold limit concentrations (TTLC) or trigger concentration (10 times their soluble threshold limit concentration [STLC]) for hazardous waste soil classification, with two exceptions. Lead was detected in two sample locations exceeding ten times the soluble threshold limit concentrations for waste soil disposal characterization. The samples were then analyzed for soluble threshold limit concentrations using the California Waste Extraction test. The results of this test were below the hazardous waste soluble threshold limit concentrations screening criteria.

The fuel dispenser area in the underground parking garage and associated fuel conveyance lines extending from the gasoline UST were not evaluated, as the fuel dispenser area and fuel conveyance lines are not on the Project site. Although it is unlikely that any leaks from the dispensers and product piping would reach underlying soils, as infrastructure is primarily located above ground and a second level is present below the fueling area in the parking garage. Vapor data from the fueling area does not appear to have been collected, nor from the area of the above ground vent, to full assess vapor exposure risks, however, Stantec was informed that all equipment is operated within regulatory compliance.

VOCs were detected in seventeen soil gas samples; however, only two exceeded residential screening levels, and none were above a commercial screening level. Based on the findings, the Phase II stated that no significant releases of fuel were found in the areas sampled during the investigation that would present an elevated risk to human health and environment for the proposed property use (commercial). Additional environmental assessments for the areas investigated are not warranted at this time (Moore Twining Associates, Inc. 2026).

A Pre-Demolition Asbestos, Lead-Based Paint, Polychlorinated Biphenyls, and Visual Hazardous Materials Survey Report (**Appendix I**) dated July 2, 2026, was prepared by Stantec. The purpose of the report was to evaluate the presence of ACM, LBP in fair and/or poor condition, polychlorinated biphenyls PCB in building materials, and other hazardous materials that would require special handling and/or disposal in accordance with applicable federal, state, and local regulations. The Sheriff's Administration Building is currently occupied; therefore, assessment was limited to a desktop review only; no samples were collected for the Sheriff's Administration Building. Of note, access was provided to the Sheriff's Administration Building for the purpose of performing a visual universal waste assessment. The South Annex Jail was vacant; therefore, both desktop survey of existing data, as well as a field survey of the building, were conducted. Stantec surveyed the Project site on April 22-23, 2026, and had bulk material samples tested for ACMs, LBPs, and PCBs. The survey included:

- Visual inspection of the survey areas to identify accessible suspect ACM;
- Collection and analyzing bulk samples of select suspect materials for determination of asbestos content;
- Visual inspection and collection of paint chip samples of painted surfaces observed to be in a fair or poor/deteriorated (i.e., flaking or peeling) condition for lead content following criteria outlined in applicable sections of Chapter 7 and Appendix 13.2 of the United States Housing and Urban Development (HUD) guidelines;
- Collection of bulk samples of building materials for PCB content as outlined in the United States Environmental Protection Agency's (EPA) October 24, 2012, PCB Bulk Product Waste Reinterpretation memorandum;
- Sample analysis by an accredited laboratory; and
- Visual inspection of the survey areas to identify any other hazardous materials (i.e., universal wastes).

Based on the desktop review and field survey of accessible areas of the South Annex Jail, ACMs and LBP were identified within the facility. Identified ACMs included roofing materials, sealants, ceiling materials, fireproofing, vinyl floor tile and associated adhesive, and other miscellaneous building materials containing chrysotile and amosite asbestos. Lead-based paint was identified on the basement elevator reservoir room floor, and additional painted surfaces were found to contain detectable concentrations of lead requiring worker protection measures during disturbance activities.

No PCB-containing building materials were identified based on visual observations; however, older electrical equipment and lighting components may require management in accordance with applicable PCB regulations.

Additional hazardous materials and universal wastes observed throughout the Sheriff's Administration Building and South Annex Jail included fluorescent light tubes potentially containing mercury, fluorescent light ballasts, thermostats, refrigerant-containing equipment, batteries, smoke detectors, electronic waste, compressed gas cylinders, water treatment chemicals, sharps containers, and bloodborne pathogen waste.

Based on these findings, demolition or renovation activities at the Project site will require appropriate hazardous materials abatement, waste characterization, handling, recycling, and disposal in accordance with applicable federal, state, and local regulations prior to or during demolition activities. Additional intrusive investigation for both the Sherrif's Administration Building and South Annex Jail may be warranted in areas that were inaccessible during the survey. The nearest elementary and middle school is Kepler Neighborhood School, a K-8 charter school, located approximately 0.25 miles to the northwest of the Project site. Cyber High is located across Van Ness Avenue; however, this is an online program. The next closest high school is Edison High School, which is part of the Fresno Unified School District, located 1.28 miles southwest of the Project site. The Fresno Unified School District headquarters is located across M Street.

The closest airport, private airstrip, or helipad to the Project site is the Fresno Chandler Executive Airport, approximately 1.41 miles southwest of the Project. The Project is located within the Airport Influence Area, Traffic Pattern Zone (Safety Zone 6), of the Fresno Chandler Executive Airport (FCOG 2023).

According to the California Environmental Reporting System (CERS), the Project is not within or adjacent to any hazardous materials sites compiled, nor is it located on an abandoned solid waste disposal site known to the County (Department of Toxic Substances Control [DTSC] 2026). However, DTSC's EnviroStor database and the SWRCB online GeoTracker database was utilized to identified hazardous sites in the vicinity of the Project site. According to EnviroStor, the Project is not a listed site and no federal superfund, state response, voluntary cleanup, school cleanup, evaluation, school investigation, military evaluation, tiered permit, or corrective action sites exist within 1000 feet of the Project site. The Fresno County Employee Credit Union is a historical site located 0.12 miles northwest of the Project site and has been part of the Central Valley RWQCB as of November 29, 1989 (DTSC 2025). According to GeoTracker, the Fresno County Jail (ID#TD060190260) was a LUST Cleanup Site in relation to an unauthorized release from a LUST in 1990. The Central Valley RWQCB Region F was the lead agency, and the listed potential contaminant of concern was gasoline. The case was closed August 1, 2011.

Three other closed LUST cleanup sites are located within 1000 feet of the Project site: (1) Fresno City Police Department (located directly across M street, (2) Fresno Clinton B.P. (located approximately 0.09 miles northeast of the Project site) and (3) Fresno County Credit Union Property (approximately 0.12 miles northwest of the Project site). No open sites are located within 1000 feet of the Project site (SWRCB 2025).

3.9.2 REGULATORY SETTING

Federal

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 established a program administered by the USEPA to regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. The Resource Conservation and Recovery Act was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the “cradle to grave” system of regulating hazardous wastes.

Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as “Superfund,” was enacted by Congress on December 11, 1980. This law (42 United States Code [USC] 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for clean-up when no responsible party can be identified. CERCLA also enables the revision of the National Contingency Plan. The National Contingency Plan (40 CFR §300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The National Contingency Plan also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.

Federal Occupational Safety and Health Administration

The federal OSHA’s mission is to ensure the safety and health of U.S. workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA staff establishes and enforces protective standards and reaches out to employers and employees through technical assistance and consultation programs. OSHA standards are listed in 29 CFR §1910. 29 CFR §1926.62 addresses safety and health regulations for construction involving lead. 29 CFR §1910.1001 and §1926.1101 address asbestos exposure for general industry and for the construction industry respectively.

United States Environmental Protection Agency, National Emissions Standard for Hazardous Air Pollutants, 40 CFR §61

Under this regulation, no visible emissions are allowed during facility demolition or renovation activities, which involve regulated asbestos-containing materials. For this reason, all facilities must be surveyed for asbestos-containing materials prior to demolition or renovation. The EPA, and/or the local air quality management district, which has delegated authority from the EPA NESHAP, must be notified prior to any building demolition, even if no asbestos-containing materials are present. Assessments are made by the inspector as to the condition of each material and whether or not the materials are "friable." The EPA NESHAP regulation defines “friable” materials as:

*Materials that, when dry, **can** be crumbled, pulverized or reduced to a powder using hand pressure.*

Conversely, a non-friable material **cannot**, when dry, be crumbled, pulverized, or reduced to a powder.

Generally, undamaged vinyl asbestos floor tiles/adhesives, carpet mastic, plaster, roofing materials, wallboard, concrete, electrical insulation, cove base adhesives, fire doors, and exterior facing materials and similar materials are considered to be "non-friable." These materials present a low risk of asbestos fiber release unless impacted by maintenance, construction, demolition, or another activity that disturbs the material.

Materials such as acoustical ceiling texture and many thermal system insulations, ceiling tile and similar materials are considered to be "friable" materials that may become damaged more readily through less intrusive contact. Many of these materials result in a much higher airborne concentration of asbestos than do non-friable materials. Therefore, extra care should be taken not to disturb this type of material.

The EPA defines a homogeneous area as a surface material, thermal system insulation, or miscellaneous material that is uniform in color and texture. The use or application of the homogeneous area is also used to identify suspect ACMs. The EPA and DOSH define ACM as any material that contains more than one percent (by weight) of asbestos (>1%). Only one sample from a homogeneous area with an asbestos concentration >1% is required to collectively identify that material as an ACM. The EPA additionally categorizes ACM as follows:

- Category I non-friable ACM - asbestos containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos as determined using the PLM/DS method.
- Category II non-friable ACM - any material, excluding Category I non-friable ACM, containing more than 1% asbestos as determined using the PLM/DS method that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- Regulated asbestos-containing material (RACM) - (a) Friable asbestos material, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the

forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

Potential asbestos exposure in construction is regulated when construction, alteration, repair, maintenance, renovation or demolition of structures, substrates, or portions thereof contain asbestos (Title 8, CCR §1529 [Asbestos in Construction Standard (a)(1)(C)]). Additionally, in California, materials containing greater than one-tenth of one percent (>0.1%) asbestos by weight are regulated as ACCMs. For the purpose of this report, materials with any detectable concentration of asbestos are considered positive.

USEPA Asbestos Hazard Emergency Response Act (AHERA), 40 CFR §763, Subpart E

The AHERA requires performance of asbestos surveys and the development of Asbestos Management Plans for all K-12 public and non-profit private schools in the United States and its territories. Although this regulation applies to such schools only, the procedures mandated under AHERA are considered the industry standard and are applied to all surveys performed by Stantec in accordance with Federal OSHA mandates in 29 CFR §1926.1101, Subsections (k) (1), (2), and (5) and DOSH California Code of Regulations, Title 8, Section 1529.

Other Regulations

Other federal regulations overseen by the USEPA relevant to hazardous materials and environmental contamination include 40 CFR §100 to 149 -- Water Programs, 40 CFR §239 to 259 -- Solid Wastes, and 40 CFR §260 to 279 -- Hazardous Waste. These regulations designate hazardous substances under the CWA; determine the reportable quantity for each substance that is designated as hazardous; and establish quantities of designated substances equal to or greater than the reportable quantities that may be discharged into WOTUS.

State

California Assembly Bill 3713, Health and Safety Code Div. 20, Ch. 10.4, Sec. 25915-25924

The state of California has enacted legislation that requires building owners, employers, lessees, etc. to notify tenants, employees, and contractors of the presence of asbestos in both friable and non-friable forms. In addition, preventive maintenance activities must be developed and communicated to these parties. Notification is required 15 days after the identification of ACM in the building, and annually thereafter.

Asbestos and Lead – California Code of Regulations

In California, potential asbestos exposure in construction is regulated when construction, alteration, repair, maintenance, renovation or demolition of structures, substrates, or portions thereof contain asbestos (Title 8, CCR §1529 (a)(1)(C)). Additionally, in California, materials containing greater than one-tenth of one percent (>0.1%) asbestos by weight are regulated as ACMs.

Title 17, Division 1, Chapter 8 (Title 17) pertains to all public and residential buildings in California and is enforced by the California Department of Public Health. Pursuant to Title 17 and EPA regulations, LBP is defined as paint or other surface coatings containing an amount of lead equal to or greater than one milligram per square centimeter (1.0 mg/cm2) or half of one percent (≥0.5% or ≥5,000 ppm) by weight. Title 17 also defines a lead hazard as deteriorated LBP, disturbing LBP or presumed LBP without containment, or any other nuisances which may result in persistent or quantifiable lead exposure. Additionally, worker exposure to materials containing lead during construction work is regulated by the Federal OSHA [29 CFR §1926.62(a)] and the California Division of Occupational Safety and Health (Title 8, CCR §1532.1(a)). These regulations require worker protection during construction "…where lead or materials containing lead are present."

California Department of Toxic Substance Control. Universal Waste Rule Control Number R-97-08

The DTSC, a department of California Environmental Protection Agency, has the regulatory and enforcement authority for hazardous waste's deposited or transported in California. DTSC regulates "hazardous wastes" as generated wastes containing more than one percent (>1%) asbestos that have been determined to be "friable." DTSC uses the same methods for determining percentage of asbestos and friability, as does the EPA. However, local agencies and DOSH may regulate waste handling and packaging even if the material contains one percent or less or is determined to be non-friable. The DTSC Universal Waste Rule allows for the safe handling, transport, and recycling of common hazardous materials. This rule aims to manage waste more efficiently and effectively. The DTSC Universal Waste Fact sheet provides an overview of universal waste and the regulations for their management.

California Division of Occupational Safety and Health Standard 1529

Pursuant to California Division of Occupational Safety and Health Standard 1529, an ACM is any material containing greater than one percent (>1%) asbestos. However, for worker classifications, the California Division of Occupational Safety and Health follows the California Health and Safety Code definition of ACCMs which are defined as any materials with an asbestos content greater than one-tenth of one percent (>0.1%). The California Division of Occupational Safety and Health set forth licensing and work requirements for disturbance of ACMs and ACCMs. The requirements have been divided into four classes of work: Class I, Class II, Class III, and Class IV work. The classes are distinguished by the potential of materials to release fibers when damaged. The agency also prescribes specific engineering controls and work practices for each Class of work:

- Class I – This Class refers to removal of ACMs identified as TSI or surfacing (sprayed-on or troweled-on) materials. These materials are generally considered friable.
- Class II – This Class refers to removal of ACMs identified that are not TSI or surfacing materials. These materials are generally considered non-friable.
- Class III – This Class refers to repair and maintenance operations of all identified ACMs.
- Class IV – This Class refers to incidental contact with identified ACMs such as custodial staff.

California Division of Occupational Safety and Health Standard 1532

Pursuant to Title 8, CCR §1532.1, construction employers are responsible for recognizing lead hazards and submitting samples of suspect materials to an EPA lead accredited laboratory for analysis.

When lead is present on construction jobs, the following is required:

- Housekeeping methods (including high efficiency particulate air "HEPA" vacuuming, wet clean-up, or other effective methods) must be implemented to remove lead dust on surfaces;
- Hand and face washing facilities with soap and water must be provided for workers;
- Workers must receive training on lead hazards and how to protect themselves; and
- Employee breathing-zone air sampling must be conducted to assess the amount of lead breathed by workers to determine protective measures and the type of respirator required for employee protection.

Special protective measures are required for highly hazardous tasks, commonly referred to as trigger tasks, until employee airborne exposures to lead are determined to be below levels specified in §1532.1. Pre-job notification is required for all jobs involving trigger tasks. Written notification must be made to the local DOSH district office at least 24 hours before the job starts. Trigger tasks are described below:

- Level 1 – Any of the following with lead-containing coating or materials: spray painting, manual demolition, manual scraping, or sanding, use of a heat gun, or power tool cleaning with dust collection system. Minimum required protection is a half-face respirator with N-100, R-100, or P-100 filters.
- Level 2 – Any of the following with lead-containing coating or materials: using lead-containing mortar, lead burning, rivet busting, power tool cleaning without dust collection system, clean-up activities using dry expendable abrasives, or abrasive blasting enclosure movement or removal. Minimum required protection is an air-supplied hood or helmet or loose-fitting hood or helmet powered air-purifying respirator with N-100, R-100, or P-100 filters.
- Level 3 – Abrasive blasting, welding, cutting, or torch burning on structures where lead-containing coatings or materials are present. Minimum required protection is a half-mask supplied air respirator in a positive pressure mode.

All trigger tasks require respirators, protective equipment, and clothing; clothing change areas; initial blood testing for lead and zinc protoporphyrin; basic lead hazard, respirator, and safety training; and warning signs.

If air sampling shows exposures to workers are above the permissible exposure limit (PEL), the following additional controls are required:

- Respirators appropriate to the levels of exposures measured;

- Clean areas for eating and clothing change;
- Showers;
- Full worker training;
- Medical monitoring with routine blood testing for lead and zinc protoporphyrin; and
- Certification by the CDPH for workers and supervisors working on jobs at residential and publicly accessible buildings.

Regional

San Joaquin Valley Air Pollution Control District

Although the Judicial Council is not generally subject to regional or local land use plans and regulations, it is subject to plans and regulations implementing delegated federal authority. SJVAPCD is the agency primarily responsible for helping ensure that NAAQS and CAAQS are not exceeded, and that air quality conditions are maintained in the SJVAB, within which the Project is located. Responsibilities of the SJVAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the FCAA and the CCAA.

Regional Water Quality Control Board, 5F / Central Valley

The Land Disposal Program regulates the discharge to land of certain solid and liquid wastes. These wastes include municipal solid waste, hazardous wastes, designated wastes, and nonhazardous and inert solid wastes. In general, these wastes cannot be discharged directly to the ground surface without impacting groundwater or surface water and therefore must be contained to isolate them from the environment. The regulations applicable to these discharges and hazardous waste are found in Chapter 15 of Title 23, CCR. These regulations have both prescriptive and performance standards for waste containment, monitoring, and closure. The requirements are implemented through the adoption of Waste Discharge Requirements for the disposal facilities.

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether

the Project's impacts would be significant. There are no local plans, policies, regulations, or ordinances related to hazards and hazardous materials that apply to the Project.

3.9.3 IMPACTS ANALYSIS

3.9.3.1 Methodology

The methodology for this section relied on a combination of site visits, desktop review, regulatory database searches, and review of Project design information. Project site visits were performed as part of the Phase I ESA (PlaceWorks 2024), Phase II ESA (Moore Twining Associates, Inc. 2026) to identify and characterize existing hazardous materials conditions within the Project site and surrounding area in addition to database review and historical land use evaluation. Subsurface sampling and laboratory testing was also conducted as part of the Phase II ESA. Data sources included:

- DTSC EnviroStor;
- SWRCB GeoTracker;
- USEPA CERCLIS/ Superfund listings, as applicable;
- California Emergency Management Agency hazardous materials incident and facility information;
- Local agency records, including Hazardous Materials Management Plans and emergency response plans, where available;
- Aerial photographs, historical land use maps, and assessor records to identify potential historical uses associated with hazardous materials; and,
- Project plans and specifications identifying proposed uses, materials, and operational activities.

Additionally for the South Annex Jail, a Pre-Demolition Asbestos, Lead-Based Paint, Polychlorinated Biphenyls, and Visual Hazardous Materials Survey Report (Stantec 2026) dated July 2, 2026, was prepared by Stantec to evaluate the presence of ACM, LBP in fair and/or poor condition, PCB in building materials, and other hazardous materials that would require special handling and/or disposal in accordance with applicable federal, state, and local regulations. The Sheriff's Administration Building continues to be occupied, and therefore only a visual assessment and universal waste survey were performed for this structure at this time. Prior to demolition, a Pre-Demolition Asbestos, Lead-Based Paint, Polychlorinated Biphenyls, and Visual Hazardous Materials Survey shall be conducted for this building.

These analyses assume compliance with all applicable federal, state, and local regulations governing hazardous materials and hazardous waste. The conclusions are based on available information at the time of preparation and may be refined if additional site-specific data becomes available.

3.9.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to hazards and hazardous materials if it would:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Demolition

The existing Sheriff's Administration Building and South Annex Jail and their associated infrastructure would be demolished and removed from the Project site. The Phase II ESA showed no elevated contamination in soil. Prior to demolition, hazardous materials and universal waste at the site would be removed and disposed of off-site in accordance with regulatory requirements. ACMs would be removed by a licensed abatement contractor prior to demolition and lead paint would be stabilized by licensed contractors prior to demolition. These activities would be conducted in accordance with applicable regulatory requirements.

Construction

Hazardous materials used during construction of the Project will include gasoline, diesel fuel, motor oil, hydraulic fluid, solvents, cleaners, sealants, welding flux, various lubricants, paint, and paint thinner. The types of paint to be used will be dictated by the types of equipment and structures that must be coated and by manufacturer specifications.

The quantities of hazardous materials that will be used onsite during construction will be limited to the quantities required to complete construction of the Project. The potential exists for fuels, oil, and grease to drip from construction equipment. The volume of incidental drips of petroleum products is not anticipated to require clean up or disposal of hazardous materials. Spills of fuel may occur during onsite refueling operations if refueling operations are not conducted properly. It is not anticipated that spills related to refueling operations would be large and would be limited to the immediate area and cleaned up at the time of the spill using spill kits stationed on the fuel truck. It is unlikely that the volume of refueling spills will travel beyond the immediate area of the spill and impact offsite receptors.

Operation

Operation of the Project would include traditional courthouse and judiciary activities that would not involve the use of hazardous materials and would not create a significant hazard to the public or the environment. Traditional courthouse and judiciary activities would involve the routine use of small quantities of commonly used materials, including cleaning and maintenance products, office supplies, and fuel for emergency backup generators. These materials are commonly associated with public facilities and are subject to existing regulatory requirements governing storage, handling, and use. Given the limited quantities involved and the controlled nature of their use, Project operations would not create a significant hazard to the public or the environment.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

HAZ-1: Hazardous Materials Surveys for the Sheriff's Administration Building. Prior to demolition, conduct an asbestos and lead survey to identify and quantify potential hazardous materials. The survey is to be completed by a licensed hazardous materials specialist. Survey results should be used for the development of a Hazardous Materials Management Plan (refer to HAZ-2 below).

HAZ-2: Hazardous Materials Management Plan. Structures to be demolished containing asbestos and lead paint shall be appropriately handled prior to demolition at the Project site and disposed in accordance with a Hazardous Materials Management Plan prepared by the contractor and submitted to the Judicial Council for review and approval prior to initiating demolition activities. The Hazardous Materials Management Plan shall be developed using results from the survey from Haz-1 (above) and hazard survey for the South Annex Jail (**Appendix I**) and in accordance with applicable law and best management practices for the handling and disposal of hazardous materials. Prior to demolition of the Project site hazardous materials or other universal wastes onsite shall be inventoried, packaged, removed, and disposed of in accordance with the Hazardous Materials Management Plan.

Hazardous materials used during construction shall be limited to the quantities required for construction and shall be stored and handled in accordance with regulatory requirements. Utility trucks and refueling trucks operating onsite shall have a spill kit onboard at all times. Small spills of petroleum products or other hazardous materials during construction operations shall be reported to the construction supervisor and a spill response form completed with a description of the type and quantity of the spill accompanied by photographs and a description of the disposition of the spill material. Hazardous spill material shall be disposed according to regulatory requirements. In the event of a large spill of hazardous materials equal to or above reportable quantities federal, state, and applicable local reporting requirements shall be followed.

HAZ-3: Site-specific Health and Safety Plan (HASP). The contractor shall prepare a HASP to protect the health and safety of construction workers and the environment. The HASP shall be prepared in accordance with Title 8 of the CCR State and federal OSHA regulations (29 CFR §1910.120). The HASP shall be made available to construction workers for review prior to starting work at the Project site. The HASP shall identify potential hazards (including stained or odorous soils at any location where earth-moving activities would occur within the proposed development area), chemicals of concern (e.g., VOCs, heavy metals, and gases), personal protective equipment and devices, decontamination procedures, the need for personal or area monitoring, and emergency response procedures. The HASP shall provide direction in the event stained or odorous soil is encountered onsite during construction activities. The HASP shall also require notification of the appropriate federal, state, and local agencies if evidence of previously undiscovered soil contamination (e.g., stained soil, odorous groundwater, or groundwater with a surface sheen). Any contaminated areas shall be remediated in accordance with recommendations made by the RWQCB, DTSC, designated CUPA, and/or other appropriate federal or state regulatory agencies.

Level of Significance After Mitigation

Less than Significant Impact with Mitigation.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Demolition and Construction

As stated above, demolition activities would include removal of the existing Sheriff Administration Building and South Annex Jail. Given that the Project would demolish existing long-standing structures that contain ACMs and LBPs identified in the Pre-Demolition Asbestos, Lead-Based Paint, Polychlorinated Biphenyls, and Visual Hazardous Materials Survey Report, workers and the public may be exposed to asbestos and lead via inhalation of demolition dust. Soil sampling during the Phase II determined the concentrations to below the hazardous waste STLC screening criteria for lead of 5 mg/L. Additionally, the Phase II concluded that no significant releases of fuel were found in the areas sampled during the investigation. Based on the presence of ACMs and LBPs, the Project has the potential to create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous demolished materials into the environment should proper hazardous materials surveys or subsurface soil impacts be encountered during demolition. Compliance with existing regulations and implementation of Mitigation Measures HAZ-1, HAZ-2, and HAZ-3 would minimize reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment related to demolition and construction activities on the Project site; and would therefore reduce impacts to less than significant.

Operation

Operation of the Project would include traditional courthouse and judiciary activities that would not involve the use of hazardous materials. Operations would have no impact.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

HAZ-1, HAZ-2, HAZ-3

Level of Significance After Mitigation

Less than Significant Impact with Mitigation.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Demolition, Construction, and Operation

The nearest elementary and middle school is Kepler Neighborhood School, a K-8 charter school, located approximately 0.25 miles to the northwest of the Project site. Cyber High is located across Van Ness Avenue; however, this is an online program. Demolition and construction associated with the Project would result in low amounts of hazardous emissions from equipment and activities; however, these low-

level emissions would be temporary, localized impacts and not likely to travel a one-quarter mile distance. Operation of the Courthouse would not emit hazardous emissions or handle hazardous and/or acutely hazardous materials, substances, or waste. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Demolition and Construction

The Project site is not located on a list of hazardous materials site compiled pursuant to Government Code §65962.5. According to GeoTracker the Fresno County Jail (ID#TD060190260) was a LUST Cleanup Site in relation to an unauthorized release from a former UST in 1990. The UST was removed and the release was remediated. The case received no further action and was closed on August 1, 2011. The Phase I ESA also identified two existing USTs, one 10,000-gallon gasoline UST installed to the east of the South Annex Jail building and one 20,000-gallon diesel UST to the north of the Fresno County Sheriff's Department administration building. The UST and associated piping would be removed as part of demolition. These activities would be conducted in accordance with applicable regulatory requirements.

Based on the Phase II ESA findings, it was concluded that no significant releases of fuel were found in the areas sampled during the investigation that would present an elevated risk to human health and environment for the proposed property use (commercial), and that additional environmental assessments for the areas investigated are not warranted at this time; therefore, impacts would be less than significant.

Operation

Operation of the Project would include traditional courthouse and judiciary activities that would not involve the use of hazardous materials. Operations would have no impact.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Demolition, Construction, and Operation

The closest airport, private airstrip, or helipad to the Project site is the Fresno Chandler Executive Airport, located approximately 1.41 miles southwest of the Project. The Project is located within the Fresno Chandler Executive Airport's "Airport Influence Area" Traffic Pattern Zone, also known as Safety Zone 6 (FCOG 2023). The Project site is not within the airport's Vulnerable Occupant Review Area. Development within the Traffic Pattern Zone (Safety Zone 6) has no limits on dwelling units per acre and non-residential intensity; the only prohibited uses are "Hazards to Flight" and outdoor stadiums and similar uses with very high-intensity uses (FCOG 2023). The Fresno County Airport Land Use Compatibility Plan includes Development Conditions that projects within the Traffic Pattern Zone must follow, including airport disclosure notices and airspace review for objects greater than 100 feet tall. The Project would follow these Development Conditions.

Excessive noise hazards as a result of construction are addressed in Section 3.13, Noise. Safety hazards associated with airports, such as bird strikes, are minimal because the Project would not introduce any new wildlife hazards. Following the previously identified regulations and the Development Conditions identified in the Fresno County Airport Land Use Compatibility Plan would ensure that demolition, construction, and operation of the Project would not result in a safety hazard for people residing or working on the Project site. Therefore, the Project would not introduce or increase the risk of a safety hazard or excessive noise to the people residing or working in the Project area and the impact would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No Mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Demolition and Construction

Project demolition and construction activities are not expected to result in lane closures and emergency access to/from the Project site would be maintained at all times. The Project would be designed, constructed, and maintained in accordance with applicable standards, resulting in the provision of adequate vehicular access that would provide for adequate emergency access and evacuation. A Transportation Management Plan (TMP) would be prepared to minimize traffic-related impacts during the Project's construction phase. The TMP would outline construction traffic levels, routes, as well as traffic control adjacent to the Project site. The TMP would also include an evaluation of short-term construction-related impacts to Project vicinity roadways and provide mitigations, where applicable. For example, construction activities that may temporarily restrict vehicular traffic along M Street and Fresno Street would be required to implement adequate and appropriate standards to facilitate the passage of persons and vehicles through/around any required road closures. Adherence to these standards would reduce potential impacts related to this issue.

Operation

Existing emergency access to the Project site is maintained via multiple surrounding streets (Fresno Street, M Street, Tulare Street, and Van Ness Avenue). The Project design includes a secure sallyport and underground parking with controlled access. No barriers to emergency response are anticipated. Coordination with the City Fire Department would be required as part of the County permitting process consistent with applicable fire codes including setbacks, fire suppression, site access, emergency vehicle turn-around, and water supply/storage requirements.

In the event of an emergency, staff and visitors would be directed to specific evacuation routes to avoid conflicts with emergency response plans. Therefore, potential impacts regarding conflicts with emergency response plans during construction would be less than significant with implementation of TRA-1.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

TRA-1: Transportation Management Plan. The TMP shall include measures to maintain safe and efficient circulation during all construction phases. Prior to commencement of construction activities, the Applicant shall prepare and implement a Transportation Management Plan (TMP) for City review and approval. The TMP shall at minimum

- Identify construction traffic routes,
- Anticipated construction vehicle volumes,
- Temporary roadway modifications,
- Lane closures, pedestrian and bicycle access provisions, and
- Traffic control measures.

Level of Significance After Mitigation

Less than Significant Impact with Mitigation.

g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Demolition, Construction, and Operation

The Project site is not located within a wildfire hazard zone as specified by the CAL FIRE FHSZ Viewer (CAL FIRE 2025a). Areas surrounding the Project site consist of urban development with minimal ground cover or vegetation. Because of the lack of abundant vegetation and existing commercial and residential development surrounding the Project site, onsite and adjacent areas do not have the capability to support a wildfire. The Project does not involve the installation of roads or fuel breaks. While the Project involves the installation and minor upgrades to infrastructure, the Project components do not exacerbate wildfire risk. No impact would occur, and no mitigation is required.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No Mitigation required.

Level of Significance After Mitigation

No Impact.

3.10 Hydrology and Water Quality

3.10.1 EXISTING CONDITIONS

Regional Hydrology

The western slopes of the Sierra Nevada drain to the west through the City via the San Joaquin and Kings Rivers. The Kings River is connected to the San Joaquin River by the James Bypass, a manmade canal. The San Joaquin River is 366 miles long and spans from the Sierra Nevada Mountains to the San Francisco Bay via the San Joaquin Valley. Much of the water that flows through the San Joaquin River has a variety of uses including municipal and domestic water supply, agricultural, industrial, recreational, freshwater and wildlife habitat, and migration and spawning grounds (City of Fresno 2021). Based on review of the Sustainable Groundwater Management Act (SGMA) data viewer portal, and USGS Watershed Boundary Dataset, the Project is located within the Upper Dry watershed. The regional flood control agency is the FMFCD. The FMFCD provides flood control protection in a 399-square mile watershed located between the Kings and San Joaquin Rivers, a subsection of the Upper Dry watershed. To provide flood protection of urbanized areas, the FMFCD operates three dams and seven large detention basins and is served by a system of more than 700 miles of pipeline and more than 150 stormwater retention basins.

The Project site overlies the Kings Subbasin (DWR Groundwater Basin 5-022.08). The FMFCD manages the north portion of the Kings Subbasin through its Groundwater Management Plan. In addition, the North Kings Groundwater Sustainability Agency (GSA), which FMFCD is a participating agency, produce the Groundwater Sustainability Plan (GSP) to meet the requirements of the SGMA. The Kings subbasin is located in the Great Valley geomorphic province. The subbasin is an alluvial basin bounded by the San Joaquin River to the North, Kings River to the south, the Sierra Nevada Mountains to the northeast, and the Westside and Delta-Mendota Subbasin to west-southwest. The aquifer system is comprised of unconfined and confined groundwater in the western parts of the subbasin and in the east significant clay beds separate shallower unconfined water from deeper confined groundwater.

Through its various surface water resources and several decades of proactive groundwater recharge activities, the North Kings GSA plan area has not experienced significant overdraft conditions like elsewhere in the Kings Subbasin. Drought and other challenges, however, have contributed to a gradual decline in overall groundwater conditions that will be addressed through the implementation of the GSP for the North Kings region. The North Kings GSA is projected to reach sustainability by 2040 if groundwater flows from within the North Kings GSA plan area to areas governed by neighboring GSAs and basins are reduced and projects are developed to mitigate present and future projected impacts. Management actions included in the GSP to address groundwater sustainability consist of education and outreach, well head requirements, groundwater allocation, and groundwater pumping restrictions.

Project Site Hydrology and Drainage

The Project site and nearby surrounding areas do not contain streams, rivers, or ephemeral drainage features and so implementation of the Project would not alter the existing course of any streams or rivers. The Project includes redevelopment of the existing Project site with a similar use that would have an

equivalent amount of impervious surface subject to stormwater flows via surface sheet flow. Operation of the Project would not substantially alter the existing drainage pattern of the Project site or area in a manner which would result in substantial erosion or siltation on- or off-site.

Based on information obtained from the Geotechnical Study (**Appendix J**) completed at the Project site, groundwater was estimated to occur at 100 feet below ground surface or greater. Groundwater beneath the Project site has not been evaluated, but data collected from soil borings indicated limited impacts to depths up to 25 feet below ground surface and does not suggest contamination would extend to groundwater (Moore Twining Associates 2026).

City Water Supply and Water Quality

The City's Water Division is responsible for distributing potable water to the City's residential, commercial, and industrial customers. The City's water use in 2020 averaged 198 gallons per capita per day (GPCD) based on 121,993-acre feet (AF) of water production and a service area population of 550,217. Commercial and Institutional/Governmental customers accounted for approximately 13.9% (16,971 AF) of the water use in 2020. The City is far below its 2020 daily per capita water use target of 247 GPCD due to the extensive conservation efforts implemented by the City in the past decade. The projected water use for Commercial and Institutional/Governmental customers in 2035 is 22,587 AF (City of Fresno 2021).

Fresno meets its water demand from two sources: groundwater and treated surface water. The City has a network of over 270 municipal wells and currently operates approximately 202 municipal supply wells within the Kings Subbasin of the San Joaquin Valley Groundwater Basin (City of Fresno 2021). Four active groundwater wells are located within one mile of the Project, none of which are located in the Project site (City of Fresno 2021). While groundwater quality generally meets primary and secondary drinking water standards, the presence of contaminant plumes and Nitrate-Nitrogen concentrations poses an ongoing risk to the municipal water supply (City of Fresno 2021). No potable water supply wells have been identified on the Project site, however, the location of State Well #CA1000088_001_001 is listed in GeoTracker as being located 349 feet from the Fresno County Jail.

Surface water is treated at the Northeast Surface Water Treatment Facility and the Southeast Surface Water Treatment Facility. The Northeast Surface Water Treatment Facility has a treatment capacity of 30 million gallons per day (MGD) and the Southeast Surface Water Treatment Facility is permitted to treat 54 MGD but has the capacity to treat up to 80 MGD in the future (City of Fresno 2026). The Southeast Surface Water Treatment Facility is 6.6 miles east of the Project and a recycled water master plan distribution line runs along Tulare Street, south of the Project (City of Fresno 2023). Additional recycled water lines are proposed on Fresno Street and Van Ness Avenue.

3.10.2 REGULATORY SETTING

Federal

Clean Water Act

The CWA (33 U.S.C. §1251 et seq.), formally the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the WOTUS. The CWA required states to set standards to protect, maintain, and restore water quality through the regulation of point-source and certain nonpoint source discharges to surface water. Those discharges are the regulated by the NPDES permit process (CWA Section 402). In California, NPDES permitting authority is delegated to, and administered by, the nine RWQCBs. The Project site is within the Central Valley RWQCB. Projects that disturb one or more acres, including the Project, are required to obtain NPDES coverage under the Construction General Permit.

Clean Water Act: Section 402, National Pollutant Discharge Elimination System (NPDES).

The NPDES permit program was established as part of the CWA to regulate municipal and industrial discharges to surface WOTUS. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint source stormwater runoff. NPDES permits generally identify limits on the concentrations and/or mass emissions of pollutants in effluent discharged into receiving waters; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pre-treatment, pollution prevention, self-monitoring, and other activities. The discharge prohibitions and limitations in an NPDES permit are designed to ensure the maintenance of public health and safety, protection of receiving water resources, and safeguarding of the water's designated beneficial uses.

In November 1990, EPA published regulations establishing NPDES permit requirements for municipal and industrial stormwater discharges. Phase I of the permitting program applied to municipal discharges of stormwater in urban areas where the population exceeded 100,000 persons.[1] Phase II of the NPDES stormwater permit regulations became effective in March 2003 and required NPDES permits be issued for construction activity for projects that disturb between 1 and 5 acres.

California's RWQCBs are responsible for implementing the NPDES permit system (refer to additional details in the subsection "State Regulations" below).

Clean Water Act: Section 303, Water Quality Standards, and Implementation Plans

Section 303(d) of the CWA (33 USC 1250, et seq., at 1313(d)) requires states to identify "impaired" water bodies as those which do not meet water quality standards. States are required to compile this information in a list and submit the list to the USEPA for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of this listing process, states are required to prioritize waters and watersheds for future development of TMDL requirements. The SWRCB and RWQCBs have ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to develop

TMDL requirements. Kings River and San Joaquin River are listed on the CWA Section 303(d) List of Limited Water Quality Segments requiring TMDLs (SWRCB 2026).

Federal Emergency Management Agency National Flood Insurance Program

FEMA administers the National Flood Insurance Program (NFIP, 42 USC. 4016(a)) to provide flood insurance to individuals within communities that adopt and enforce NFIP regulations that limit development in floodplains; federally-backed flood insurance is only available within NFIP communities. FEMA also develops and issues flood insurance rate maps (FIRMs) that identify which land areas are subject to flooding. Flood hazard zones in the community are identified within the FIRMs, at the minimum, for the 1-in-100 annual exceedance probability flood event and sometimes other flood events. The design standard for flood protection covered by the FIRMs is established by FEMA with the minimum level of flood protection for new development determined to be the 1-in-100 annual exceedance probability (AEP) (i.e., the 100-year flood event). As developments are proposed and constructed, FEMA is also responsible for issuing revisions to FIRMs, such as Conditional Letters of Map Revision (CLOMR) and Letters of Map Revision (LOMR) through the local agencies that work with the NFIP.

State

Porter-Cologne Water Quality Control Act

Porter-Cologne, passed in 1969, requires protection of water quality by appropriate designing, sizing, and construction of erosion and sediment controls. Porter-Cologne established the SWRCB and divided California into nine regions, each overseen by a RWQCB. The SWRCB is the primary state agency responsible for protecting the quality of the state's surface and groundwater supplies and has delegated primary implementation authority to the nine RWQCBs.

Porter-Cologne assigns responsibility for implementing the CWA Sections 401 through 402 and 303(d) to the SWRCB and the nine RWQCBs. Porter-Cologne requires the development and periodic review of water quality control plans (basin plans) that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters, provide the technical basis for determining waste discharge requirements, identify enforcement actions, and evaluate clean water grant proposals. The basin plans are updated every three years. Compliance with basin plans is primarily achieved through implementation of the NPDES, which regulates waste discharges as discussed above. The RWQCB regulates water quality in the City, including at the Project site.

Regional Water Quality Control Board, Central Valley Region

The Central Valley Water Board regulates surface water and groundwater quality in the Central Valley region. The area under the RWQCB's jurisdiction comprises all of the Central Valley segments ranging from Modoc County in the north to Kern County in the south. In its efforts to protect the region's surface waters and groundwater, the RWQCB addresses region-wide water quality concerns through the creation and triennial update of a Water Quality Control Plan (Basin Plan) and adopts, monitors compliance with, and enforces waste discharge requirements and NPDES permits.

The Basin Plan is a master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the Central Valley region and the Sacramento and San Joaquin River Basins, and the Tulare Lake Basins. The plan describes the beneficial uses to be protected in these waterways, water quality objectives to protect those uses, and implementation measures to make sure those objectives are achieved. On December 30, 2024, the Central Valley Water Board adopted Resolution No. R5-2024-0060, the 2024 Triennial Review and Workplan for the Sacramento and San Joaquin Rivers Basins and the Tulare Lake Basin. The Project site is located within the Tulare Lake Hydrologic Basin Planning Area.

General Construction Stormwater Permit

Section 402 of the CWA authorizes the SWRCB to issue a NPDES General Construction Storm Water Permit (Order No. 2022-0057-DWQ: General Permit No. CAS000002), referred to as the "General Construction Permit." Projects that disturb one or more acres, including the Project, are required to obtain NPDES coverage. NPDES regulations for the Project area are administered by the Central Valley RWQCB.

Construction activities can comply with and be covered under the General Construction Permit provided they:

- Develop and implement a SWPPP which specifies BMPs that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving off-site into receiving waters.
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation.
- Perform inspections of all BMPs.
- Certify and submit all permit-related compliance documents via the Storm Water Multiple Application and Report Tracking System (SMARTS). Dischargers shall certify and submit these documents which include, but are not limited to, Permit Registration Documents (PRDs) including Notice(s) of Intent (NOI), SWPPPs, as well as Annual Reports, and Notices of Termination (NOTs).

Sustainable Groundwater Management Act

In 2014, the California Legislature enacted a three-bill law (AB-1739, SB-1168, and SB-1319), known as the SGMA. The SGMA was created to provide a framework for the sustainable management of groundwater supplies, and to strengthen local control and management of groundwater basins throughout the state with little state intervention. The SGMA is intended to empower local agencies to adopt groundwater sustainability plans that are tailored to the resources and needs of their communities, such that sustainable management would provide a buffer against drought and climate change, and ensure reliable water supplies regardless of weather patterns. The SGMA and corresponding regulations require that each high- and medium-priority groundwater basin is operated to a sustainable yield, balancing natural and artificial groundwater recharge with groundwater use to ensure undesirable results such as

chronic lowering of groundwater levels, loss of storage, water quality impacts, land subsidence, and impacts to hydraulically connected streams do not occur. The SGMA is considered part of the statewide, comprehensive California Water Action Plan that includes water conservation, water recycling, expanded water storage, safe drinking water, and wetlands and watershed restoration. The SGMA protects existing surface water and groundwater rights and does not affect current drought response measures.

The SGMA requires local public agencies and GSAs to develop and implement GSPs in high- and medium-priority groundwater basins throughout the State of California. GSPs are not required for low- or very low-priority basins. DWR identified the Kings subbasin as a high-priority basin and a critically over drafted basin (North Kings GSA 2025).

Groundwater Management Plan for the Kings Subbasin

The Kings Subbasin has seven GSAs, which prepare individual GSPs. The Project site is within the North Kings GSA. The North Kings GSA developed the Groundwater Sustainability Plan 2025 Update. The Groundwater Sustainability Plan 2025 Update describes North Kings GSA's groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The North Kings GSA is projected to reach sustainability by 2040 if groundwater flows from within the North Kings GSA plan area to areas governed by neighboring GSAs and basins are reduced and projects are developed to mitigate present and future projected impacts. Management actions included in the GSP to address groundwater sustainability consist of education and outreach, well head requirements, groundwater allocation, and groundwater pumping restrictions.

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant. There are no local plans, policies, regulations, or ordinances related to hydrology and water quality that apply to the Project.

3.10.3 IMPACTS ANALYSIS

3.10.3.1 Methodology

Potential impacts related to hydrology and water quality were evaluated based on a review of publicly available information regarding watersheds, surface waters, groundwater, soil characteristics, flooding hazards, and stormwater control and treatment requirements in the Project area. The information obtained from these sources was reviewed and summarized to document existing conditions and to identify the potential environmental effects of the Project.

3.10.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to hydrology and water quality if it would:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Demolition and Construction

The Project would involve demolition of the existing Sheriff Administration Building and South Annex Jail buildings (approximately 87,000 SF) and 40,000 SF of existing paving. The Project would construct a new 413,000 SF courthouse and secure parking within the 2.09 acres Project site.

Since the Project would disturb an area greater than one acre, an NPDES permit will be required from the Central Valley RWQCB through enrollment in SMARTS. NPDES permit coverage is accomplished by submitting a NOI, permit fees, and all necessary documents to the Central Valley RWQCB. Preparation and submittal of a SWPPP prior to the commencement of grading activities and implementation of the SWPPP during construction activities would also be required.

The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorize non-stormwater discharges from the construction site during construction activities. BMPs may include programs, technologies, processes, practices, and devices that control, prevent, remove, or reduce pollution. The SWPPP would also address BMPs developed specifically to reduce pollutants in stormwater discharges following the completion of construction activities.

Compliance with the regulatory controls discussed above, which include implementation of a SWPPP with site-specific BMPs during Project construction would minimize risk of erosion and sedimentation from alteration and addition of new impervious surfaces at the Project site during demolition and construction. Therefore, demolition and construction impacts would be less than significant.

Operation

The Project would implement standard design criteria to manage stormwater runoff and protect water quality of receiving waterbodies by reducing the overall volume of runoff from impervious surfaces and pollutants to the maximum extent practicable. The Project would implement stormwater drainage that is designed to mitigate post-development flows to a level that is no greater than existing conditions.

The Project would connect to existing municipal water and wastewater systems. The sewer main runs through the alley located northeast of the Fresno County District Attorney building. This same sewer main is anticipated to service the Project. Future wastewater flows are expected to be consistent with existing conditions; therefore, the Project is not anticipated to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. No on-site wastewater treatment or discharge is proposed. Therefore, operational impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The Project would use existing municipal water supplies and is not expected to involve any groundwater extraction. While Project activities would increase impervious surfaces, the Project site is already urbanized and served by stormwater infrastructure. Therefore, the Project demolition, construction, and operation is not expected to deplete groundwater supplies or interfere substantially with groundwater recharge and impact would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in a substantial erosion or siltation on- or off-site;

Demolition and Construction

Demolition and construction of the Project would involve land disturbances that temporarily alter Project site drainage and expose Project site soils to erosion. However, as stated previously, with implementation of a SWPPP throughout construction, using site-specific BMPs, impacts would be less than significant.

Operation

The Project site and surrounding areas do not contain streams, rivers, or ephemeral drainage features; therefore, implementation of the Project would not alter the existing course of any streams or rivers. As discussed above, the Project would implement stormwater drainage that is designed to mitigate post-

development flows to a level that is no greater than existing conditions; therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Demolition and Construction

Project construction does not include a component with the potential to increase surface runoff in a manner that would result in on- or off-site flooding. Additionally, a SWPPP will be prepared and implemented during Project construction to reduce surface runoff. Demolition and construction impacts would be less than significant.

Operation

The Project would increase impervious surface area, but existing stormwater infrastructure is expected to accommodate the additional runoff. The Project would implement standard design criteria to manage stormwater runoff by reducing the volume of stormwater runoff to the maximum extent practicable. The Project would implement stormwater drainage that is designed to mitigate post-development flows to a level that is no greater than existing conditions. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Demolition and Construction

Demolition and construction of the Project would involve land disturbances, such as grading and excavation, that temporarily alter Project site drainage, expose Project site soils to erosion, and contribute to degradation of downstream surface waters. As stated previously, with implementation of a SWPPP throughout the construction period, and site-specific BMPs. In addition, the Project would be required to comply with the City of Fresno grading plan check process and NPDES Construction General Permit Region-wide MS4. Compliance with the grading plan check process requires that all new development drains properly and is routed to the appropriate location. Additionally, these regulations would result in appropriate handling of stormwater on site to reduce potential for substantial increased runoff and minimize potential for downstream flooding. Participation in the Region-wide MS4 permit would reduce water quality impacts to surface and groundwater by ensuring that discharged water meets the water quality standards and goals established in the Central Valley RWQCB's Basin Plan through the implementation of BMPs described above. The runoff generated by the Project during demolition and construction is not anticipated to exceed the capacity of existing and planned stormwater drainage systems. This impact would be less than significant.

Operation

The Project would increase impervious surface area, but existing stormwater infrastructure is expected to accommodate the additional runoff. The Project site is already served by a 12-inch stormwater pipe along Fresno Street and has a permanent drainage service (Drainage Area FF). It is anticipated the stormwater runoff from the Project site would flow through this existing stormwater pipe to Drainage Area FF and eventually to the stormwater retention basin at the northeast corner of South West Avenue and West Eden Avenue. The Project would implement and maintain standard FMFCD and City design criteria to manage stormwater runoff and protect water quality of receiving waterbodies by reducing the volume of stormwater runoff and pollutant concentrations to the maximum extent practicable. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

iv. impede or redirect flood flows?

The Project does not involve grading or structures that would alter flood flow paths. The Project is not within a special flood hazard area according to FEMA's National Flood Hazard Layer Viewer (FEMA 2026). The Project is not anticipated to increase the rate or amount of surface runoff, or the volume of flood flows, and is not anticipated to result in increased flooding on or off the Project site. Because the Project site is not located within a 100-year flood hazard zone and the resulting use of the Project site would be similar to its current use, the Project would have no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

A tsunami is a series of waves generated in a body of water by a pulsating or abrupt disturbance that vertically displaces water. When encountering shorelines, these ocean waves can reach great heights. Seiches are oscillations in enclosed or restricted bodies of water such as lakes, bays, reservoirs, or rivers, that are caused by a number of factors, most often wind or seismic activity. There are no bodies of water near the Project site that would be subject to a seiches or tsunami. The Project site is located approximately 109 miles from the closest shoreline and the Project site is not located adjacent to or near any lakes or reservoirs, with the nearest reservoir (Millerton Lake or Friant Dam) located approximately 18.7 miles to the north. The Project is not within a special flood hazard area according to FEMA's National Flood Hazard Layer Viewer, therefore, the Project would have no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project site overlies the Tulare Lake Hydrologic Basin Planning Area which is managed by Central Valley RWQCB through its Water Quality Control Basin Plan. The Basin Plan contains water-quality objectives applicable to surface and groundwater resources.

The Project would involve demolition of the existing Sheriff Administration Building and South Annex Jail buildings (approximately 87,000 SF) and 40,000 SF of existing paving. The Project would construct a new 413,000 SF courthouse and secure parking within the 2.09 acre Project site. The Project does not include the construction or use of septic tanks or alternative wastewater disposal systems.

Demolition and Construction

Demolition and construction of the Project would involve land disturbances that temporarily alter Project site drainage and expose Project site soils to erosion. Runoff could carry increased levels of sediment as well as oil and grease (resulting from construction activities or past contamination) that could affect water quality in the watershed. However, these impacts would be mitigated through implementation of a SWPPP and site-specific BMPs, and as discussed in Section 3.9 no significant releases of fuel were found in the areas sampled during the investigation that would present an elevated risk to human health. Water use during construction and demolition activities would be negligible. Impacts to groundwater beneath the Project site is not anticipated. Therefore, impacts would be less than significant.

Operation

The Project would implement standard design criteria to manage stormwater runoff and protect water quality of receiving waterbodies by reducing the discharge of pollutants found in stormwater resulting from the proposed development to the maximum extent practicable, and by reducing increased flows from impervious surfaces that could cause erosion and degrade habitat. The Project would increase impervious surface area, but existing stormwater infrastructure is expected to accommodate the additional runoff. The Project site is already served by a 12-inch stormwater pipe along Fresno Street and has a permanent drainage service (Drainage Area FF). It is anticipated the stormwater runoff from the Project site would flow through this existing stormwater pipe to Drainage Area FF and eventually to the stormwater retention basin at the northeast corner of South West Avenue and West Eden Avenue. The Project would implement and maintain standard FMFCD and City design criteria to manage stormwater runoff and protect water quality of receiving waterbodies by reducing the volume of stormwater runoff and pollutant concentrations to the maximum extent practicable.

The Project does not include the construction or use of septic tanks or alternative wastewater disposal systems that could impact water quality. In addition, the Project would not involve pumping of groundwater beneath the Project site. Potable water would be provided by the City. The City currently provides domestic water service to the Project site and would continue to provide services to the new courthouse facility. The Project would include connection to the existing water mains for domestic and fire water service and rely upon existing City fire hydrants. The Project would not risk overdraft of the Kings

Subbasin based on current capacity. Therefore, based on the above, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

3.11 Land Use and Planning

3.11.1 EXISTING CONDITIONS

The proposed new courthouse would be constructed within the 2.09-acre Project site, which is part of the larger 7.60-acre site, which is located within the 13.94-acre Courthouse Park parcel at 2200 Fresno Street and identified by APN 466-160-01T, within the City of Fresno, Fresno County, California. The Project site is located southeast of the intersection of 'M' Street and Fresno Street. It encompasses the existing Fresno County Sheriff's Office and South Annex Jail, which is connected via an underground tunnel to the Main Jail located across Fresno Street to the west. The Project site is also within walking distance of the B.F. Sisk Courthouse and the M Street Courthouse. The Fresno County District Attorney office is approximately 0.25 miles south of the Project site.

Because the Judicial Council is the CEQA lead agency for the Project, and is acting as the Judicial Branch of State government, local government regulations do not apply to the Project. However, the Judicial Council considers local policies and guidelines as appropriate. The Project site is located within the FCSP area which was adopted by the City to guide development and revitalization in a portion of downtown Fresno. The Specific Plan includes the Land Use Designations while the Citywide Development Code includes the associated zoning districts. The Project site has both a zoning designation and a land use designation of DTG. Surrounding land is similarly zoned under one of the three designations (Downtown Neighborhood, DTG, and Downtown Core) reserved for the City's 'Downtown District'. Surrounding land uses include public and institutional uses and commercial uses.

3.11.2 REGULATORY SETTING

Because the Judicial Council is the CEQA lead agency for the Project, and is acting as the Judicial Branch of State government, local government regulations do not apply to the Project. However, the Judicial Council considers County and City policies and guidelines as appropriate.

Federal

There are no federal plans, policies, regulations, or ordinances related to land use and planning that apply to the Project.

State

There are no state plans, policies, regulations, or ordinances related to transportation that apply to the Project.

Local

County of Fresno General Plan

The County of Fresno General Plan provides goals regarding Urban Development Patterns in the Agriculture and Land Use Element. This element includes the following goals and policies relevant to the Project's land use resources:

- **Goal LU-G:** To direct urban development within city spheres of influence to existing incorporated cities and to ensure that all development in city fringe areas is well planned and adequately served by necessary public facilities and infrastructure while taking into consideration state-mandated directives such as the Regional Housing Needs Allocation which may necessitate the approval of urban development within or outside spheres of influence that are not currently planned for urban development.

City of Fresno Municipal Code – Chapter 15 Citywide Development Code

The purpose of the CDC is to implement the General Plan and, if applicable, operative plans, to protect and promote the public health, safety, peace, comfort, convenience, prosperity, and general welfare of the City. The CDC includes the associated zoning districts. The Project site has a zoning designation of DTG. The DTG zoning district is one of three zoning designations within the City's 'Downtown District.' The purpose of the DTG is to support a high concentration of regional activity generators such as governmental buildings and convention centers within a pedestrian-oriented, mixed-use urban setting.

The CDC also assigns Activity Classifications to streets within the Downtown District to guide development standards. Fresno Street, located northwest of the Project site, has an Activity Classification of 'B', identifying walkable streets within urban corridors that experience moderate pedestrian activity and support uses such as retail, restaurants, entertainment, and ground-floor residential or office uses. M Street, northeast of the Project site, has an Activity Classification of 'C', which identifies streets that are walkable and comfortable for pedestrians, but less active. Ground-floor residential and office uses are appropriate in these areas, although retail is more limited. According to Table 15-1502 of the CDC, Use Regulations – Downtown Districts, government offices and public or private parking are permitted uses within the DTG zoning district with an Activity Class of 'B' or 'C'. Government offices are defined as "administrative, clerical, or public contact offices of a government agency, including postal facilities and courts, together with incidental storage and maintenance of vehicles" (Municode 2025).

Fulton Corridor Specific Plan

The FCSP is used by the Mayor and Administration, the City Council, the Planning Commission, and all City departments to guide decisions about the Plan Area's future, to evaluate development proposals, and to make funding and budgetary decisions. The Specific Plan includes the land use designations, and the Project site has a land use designation of DTG. The Specific Plan provides a summary of all downtown designations including the intent and purpose, intended physical character, intended frontage and streetscape, intended parking, and intended land use range (City of Fresno 2016).

3.11.3 IMPACTS ANALYSIS

3.11.3.1 Methodology

To identify potential Project impacts for land use and planning, the following documents were reviewed to identify existing conditions in the City:

- City of Fresno Municipal Code

- City of Fresno General Plan
- County of Fresno General Plan
- FCSP

3.11.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to land use and planning if it would:

a. Physically divide an established community?

Demolition, Construction and Operation

The Project would be located where the existing South Annex Jail and Sheriff's administration building are currently located. The new courthouse would be of similar use to the surrounding facilities and businesses in the area and would be located within the 13.94-acre Courthouse Park parcel. The Project is within the FCSP area and has both a zoning designation and a land use designation of DTG. No existing residential uses are located on the Project site. The Project would not entail the displacement of any residential uses, or the use of any designated for residential uses, or the use of any land designated for residential uses. Because the courthouse is consistent with the DTG land use designation and fits within the character of Courthouse Park, it would not divide an established community. Therefore, the Project would have no impact and would not disrupt or physically divide an established community.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

While local policies and plans do not apply to the Project and the Judicial Council is not subject to local land use regulations, there are no significant adverse environmental effects attributable to the Project that are the result of any inconsistency with programs, plans, ordinances, or policies addressing land use policies. The Project is consistent with the surrounding development and does not conflict with the adopted plans for the purpose of avoiding or mitigating an environmental effect as described below.

Demolition, Construction, and Operation

The purpose of the Project is to address the growing need for upgraded centralized court facilities in Fresno County. Court functions are currently being split among three locations in the downtown Fresno area: the Fresno County Courthouse, North Annex Jail, and 'M' Street Courthouse. Development of the Project would allow the County court to consolidate operations and would also provide space for growth in future new judgeships. The Project would replace the Fresno County Courthouse (28 courtrooms and most of the court administration offices), the court space in the North Annex Jail (2 courtrooms), and the court space in the 'M' Street Courthouse (5 courtrooms) with a new 36-courtroom courthouse of approximately 413,000 SF.

The Project and consolidation of court facilities is consistent with applicable land use policies in the City of Fresno General Plan objectives such as the objective to " "Resolve existing public infrastructure and service deficiencies, make full use of existing infrastructure, and invest in improvements to increase competitiveness and promote economic growth" (City of Fresno 2014). In addition, the Project would be consistent with applicable land use policies outlined in the Fresno County General plan objectives such as Goal LU-G which aims to direct urban development within city spheres of influence to existing incorporated cities and to ensure that all development in city fringe areas is well planned and adequately served by necessary public facilities and infrastructure. The Project's objectives include relieving the current space shortfall, increasing security, replacing inadequate and obsolete buildings in Fresno County and consolidating functions and optimizing the use of court facilities. The Project would provide additional court space in anticipation of funding for future judgeships and aims to improve public, staff, and judicial officer safety by providing a modern facility compliant with Judicial Court security standards for separation of in-custody defendants from staff and public. The Project would be consistent with land use policies because it would replace a seismic deficient facility that is non-compliant with contemporary fire, life, safety, and ADA codes and would remove from service facilities that contain environmental hazards such ACMs. In addition, the Project aims to improve public, staff, and judicial officer safety by providing a modern facility compliant with Judicial Court security standards for separation of in-custody defendants from staff and public and improve Sheriff's ability to efficiently manage in-custody movement by providing adequate holding areas/cells and circulation.

The Project site is being constructed on developed property and is consistent with the surrounding development. Demolition, Construction, and Operation do not conflict with the adopted plans for the purpose of avoiding or mitigating an environmental effect. Therefore, the Project would have no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

3.12 Mineral Resources

3.12.1 EXISTING CONDITIONS

The proposed new courthouse would be constructed within the 2.09-acre Project site, which is part of the larger 7.60-acre site which is located within the 13.94-acre Courthouse Park parcel at 2200 Fresno Street identified by APN 466-160-01T, within the City of Fresno, Fresno County, California.

Fresno County has an abundance of minerals and therefore has been a leading producer of minerals. Aggregate products (sand and gravel) and petroleum are the county's most significant extractive resources (County of Fresno 2024). Within Fresno County, there are 1,354 records of mining claims on public land managed by the Bureau of Land Management and 335 records of mines listed by the USGS. Chromium, Tungsten, Gold, Copper, and Silver mines are located in Fresno County; however, only nine mines remain active. The nearest active site is the Fred Santoni Lonestar Mill which is a processing plant located approximately two miles southeast of the Project site. The primary commodity is gold and the secondary commodity is silver (The Diggings 2025).

The Project area has no known mineral resources of potential value and is not within a mapped Mineral Resource Zone (MRZ), defined by the Surface Mining and Reclamation Act (CGS 2025). Although Fresno County and City of Fresno General Plans recognize the importance of mineral resources, the Fresno County and City of Fresno General Plans do not address or list any areas of mineral resources within the City (City of Fresno 2014, Fresno County 2024).

3.12.2 REGULATORY SETTING

Federal

The Mining and Minerals Policy Act of 1970

The Mining and Minerals Policy Act of 1970 established that promoting private enterprise in mining is a matter of national interest. It encourages private enterprise in the following ways:

- Developing stable and economically sound domestic mining and mineral related industries.
- Ensuring the orderly and efficient use of mineral resources to meet industrial, security, and environmental needs.
- Advancing research to promote wise and efficient use of resources.
- Advancing research and development of mining and reclamation methods to reduce the impact of mining on the environment.

This act formally recognized the significance of mining and mineral resources and recognized that public policy should evaluate these resources.

State

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 is a California statute designed to manage the State's mineral resources. Its primary goal is to establish a policy that supports both the responsible production and conservation of these resources, while minimizing environmental impacts. The Surface Mining and Reclamation Act provides a framework for evaluating mineral resources through a classification system known as MRZs, which identify the known or potential presence and significance of mineral deposits (DOC 1975).

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant. There are no local plans, policies, regulations, or ordinances related to mineral resources that apply to the Project.

3.12.3 IMPACTS ANALYSIS

3.12.3.1 Methodology

Mineral resources are analyzed based on baseline conditions in the Project area, which include known mineral resources in the Project area.

3.12.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to mineral resources if it would:

a. Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

Demolition, Construction, and Operation

The Project would be located in an existing developed and urbanized area (i.e., where the current South Annex Jail and Sheriff's office reside). Construction activities would require ground disturbance and, pending the final Project site layout and depth of foundation, may disturb areas beyond what have been previously disturbed. According to the California Department of Conservation, the Project area has no known mineral resources of potential value and is not within a mapped MRZ, defined by the Surface Mining and Reclamation Act (CGS 2025). The Project is not located within an area containing known mineral resources. The Project site is not designated for extractive use in the Fresno County General Plan, City of Fresno General Plan, the FCSP, or CDC. Additionally, no mineral resource extraction, recovery, or processing activities occur on or adjacent to the Project site. Implementation of the Project would therefore have no impact on the availability of known mineral resources in the Project vicinity currently available for extraction.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Demolition, Construction, and Operation

As stated above, the Project area has no known mineral resources of potential value and is not within a mapped MRZ. The Project site is located within a substantially urbanized area surrounded by similarly urbanized uses, limiting its potential for mineral resource conservation or extraction. As discussed further in Section 4.11, Land Use and Planning, the Project site is zoned by the City as DTG and is located within the FCSP area. The Project site is not classified as an area of locally important mineral resource recovery and is not located within the Mining (M) Overlay District established in the Citywide Development Code (City of Fresno 2019). Therefore, there would be no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

3.13 Noise

This section includes a description of ambient noise conditions, a summary of applicable regulations related to noise and vibration, and an analysis of the potential impacts resulting from the implementation of the Project. Mitigation measures are recommended, as necessary, to reduce potentially significant noise and vibration impacts.

3.13.1 EXISTING CONDITIONS

Noise Fundamentals and Terminology

Noise is generally defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. Because noise is an environmental pollutant that can interfere with human activities, evaluation of noise is necessary when considering the environmental impacts of a project.

Sound is mechanical energy transmitted by pressure waves over a medium such as air or water. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level (SPL) is the most common descriptor used to characterize the loudness of an existing sound level.

Although the decibel (dB) scale, a logarithmic scale, is used to quantify sound intensity, it does not accurately describe how sound intensity is perceived by human hearing. The perceived loudness of sound is dependent upon many factors, including SPL and frequency content. The human ear is not equally sensitive to all frequencies in the entire spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called A-weighting, written as dB(A) and referred to as A-weighted decibels. There is a strong correlation between A-weighted sound levels and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. **Table 3.13-1** summarizes typical A-weighted sound levels for different common noise sources.

Table 3.13-1. Typical A-Weighted Sound Levels

Common Outdoor Activities	Noise Level (dB(A))	Common Indoor Activities
Jet flyover at 1,000 Feet	-110-	Rock band
Gas lawnmower at 3 Feet	-100-	
Diesel truck at 50 Feet at 50 miles per hour	-90-	Food blender at 3 Feet
Noisy urban area, daytime	-80-	Garbage Disposal at 3 Feet
Gas lawnmower, 100 Feet	-70-	Vacuum Cleaner at 10 Feet
Commercial area		

Common Outdoor Activities	Noise Level (dB(A))	Common Indoor Activities
Heavy traffic at 300 Feet	-60-	Normal Speech at 3 Feet
Quiet urban daytime	-50-	Large business office Dishwasher in next room
Quiet urban nighttime Quiet suburban nighttime	-40-	Theater, large conference room (Background)
Quiet rural nighttime	-30-	Library
	-20-	Bedroom at night, concert hall (Background Noise)
	-10-	Broadcast/recording studio
	-0-	

Source: Caltrans 2013

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (Leq), the minimum and maximum sound levels (Lmin and Lmax), percentile-exceeded sound levels (such as L10, L20), the day-night sound level (Ldn), and the community noise equivalent level (CNEL). Ldn and CNEL values often differ by less than 1 dB. As a matter of practice, Ldn and CNEL values are considered to be equivalent and are treated as such. **Table 3.13-2** further defines these sound levels and other sound measurements and terminology used in this analysis.

Table 3.13-2. Definition of Sound Measurements

Sound Measurements	Definition
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.
A-Weighted Decibel (dB(A))	An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
Maximum Sound Level (Lmax)	The maximum sound level measured during the measurement period.
Minimum Sound Level (Lmin)	The minimum sound level measured during the measurement period.
Equivalent Sound Level (Leq)	The equivalent steady-state sound level that in a stated period of time would contain the same acoustical energy.

Sound Measurements	Definition
Percentile-Exceeded Sound Level (Lxx)	The sound level exceeded xx % of a specific time period. L10 is the sound level exceeded 10% of the time. L90 is the sound level exceeded 90% of the time. L90 is often considered to be representative of the background noise level in a given area.
Day-Night Level (Ldn)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10:00 PM to 7:00 AM.
CNEL	The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the A-weighted sound levels occurring during the period from 7:00 PM to 10:00 PM and 10 dB added to the A-weighted sound levels occurring during the period from 10:00 PM to 7:00 AM.
Peak Particle Velocity (Peak Velocity or PPV)	A measurement of ground vibration defined as the maximum speed (measured in inches per second) at which a particle in the ground is moving relative to its inactive state. PPV is usually expressed in inches/second. Typically used when discussing structural damage, historic resources, and building protection thresholds.
Frequency: Hertz (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.

Source: FHWA 2006

With respect to how humans perceive and react to changes in noise levels, a 1 dB(A) increase is imperceptible, a 3 dB(A) increase is barely perceptible, a 6 dB(A) increase is clearly noticeable, and a 10 dB(A) increase is subjectively perceived as approximately twice as loud (Caltrans 2013). These subjective reactions to changes in noise levels were developed on the basis of test subjects' reactions to changes in the levels of steady-state pure tones or broadband noise and to changes in levels of a given noise source. These statistical indicators are thought to be most applicable to noise levels in the range of 50 to 70 dB(A), as this is the usual range of voice and interior noise levels (Caltrans 2013). Numbers of agencies and municipalities have developed or adopted noise level standards, consistent with these and other similar studies to help prevent annoyance and to protect against the degradation of the existing noise environment.

For a point-source such as a stationary compressor or construction equipment, sound attenuates based on geometry at a rate of 6 dB per doubling of distance. For a line source such as free-flowing traffic on a freeway, sound attenuates at a rate of 3 dB per doubling of distance. Atmospheric conditions including wind, temperature gradients, and humidity can change how sound propagates over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface, such as grass, attenuates at a slightly greater rate than sound that travels over a hard surface, such as pavement. The increased attenuation is typically in the range of 1 to 2 dB per doubling of distance. Barriers, such as buildings and topography that block the line of sight between a source and receiver, also increase the attenuation of sound over distance (Caltrans 2013).

Decibel Addition

Because decibels are logarithmic units, SPLs cannot be added or subtracted through ordinary arithmetic. On the dB scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, their combined sound level at a given distance would be 3 dB higher than one source under the same conditions (Caltrans 2013). For example, if one source produces a sound pressure level of 70 dB(A), two identical sources would combine to produce 73 dB(A). The cumulative sound level of any number of sources can be determined using decibel addition.

Vibration Standards

Vibration is like noise such that it involves a source, a transmission path, and a receiver. While related to noise, vibration differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system that is vibrating (Caltrans 2020).

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocity in inches per second (in/sec PPV). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of in/sec PPV.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. **Table 3.13-3** describes the reaction of people and damage to building from continuous or frequent intermittent vibration levels.

Table 3.13-3. Guideline Vibration Annoyance Potential Criteria

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect.
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structures.
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected.
0.1	Strongly perceptible	Virtually no risk of damage to normal buildings.
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to newer residential structures.

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.5	Severe – Vibration Considered Unpleasant	Architectural damage and possible minor structural damage.

Notes:

Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seal equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2020.

The operation of heavy construction equipment, particularly pile driving, and other impact devices, such as pavement breakers, create seismic waves that radiate along the surface of the ground and downward into the earth. These surface waves can be felt as ground vibration. Vibration from the operation of this equipment can result in effects ranging from annoyance of people to damage of structures. Varying geology and distance will result in different vibration levels containing different frequencies and displacements. In all cases, vibration amplitudes will decrease with increasing distance. Perceptible groundborne vibration is generally limited to areas within a few hundred feet of construction activities (Caltrans 2020).

Vibration Source Levels for Construction Equipment are listed in Table 7-4 of the 2018 Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual lists vibration source levels for the construction equipment most likely to generate high levels of ground vibration (FTA 2018). High vibratory construction equipment that would be used during Project construction includes vibratory rollers, bulldozers, and trucks. **Table 3.13-4** summarizes the typical reference vibration levels generated by this equipment.

Table 3.13-4. Vibration Source Levels for Construction Equipment

Equipment	PPVref at 25 Feet
Vibratory roller	0.210
Large bulldozer	0.089
Loaded trucks	0.076
Small bulldozer	0.003

Source: FTA 2018

Vibration amplitude attenuates over distance and is a complex function of how energy is imparted into the ground and the soil conditions through which the vibration is traveling. The following equation can be used to estimate the vibration level at a given distance for typical soil conditions (FTA 2018). “PPVref” is the reference PPV from Table 5 and “Distance” is the distance between the source and the receptor:

$$PPV = PPVref \times (25/Distance)^{1.5}$$

Sensitive Receptors

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than commercial or industrial activities. Ambient noise levels can also affect the perceived desirability or livability of a development.

The proposed new courthouse would be constructed within the 2.09-acre Site 1a (the Project site), which is part of the larger 7.60-acre Site 1 which is located within the 13.94-acre Courthouse Park parcel at 2200 Fresno Street and identified by Assessor's Parcel Number (APN) 466-160-01T, within the City of Fresno, Fresno County, California (Figure 2.1-1). Site 1 consists of a 7.60-acre L-shaped portion of the western side of the Courthouse Park parcel and is bound by Fresno Street to the northwest, M Street to the northeast, Tulare Street southeast, and Van Ness Avenue to the southwest. The Project site is located within the northern corner of Site 1, southeast of the intersection of M Street and Fresno Street (Figure 2.1-1). It encompasses the existing Fresno County Sheriff's Office and South Annex Jail, which is connected via an underground tunnel to the Main Jail located across Fresno Street to the west.

The nearest sensitive receptors to the Project site include the residential units to the north of the Project site, along M Street, and to the east, along Tulare Street. The closest residential use is an apartment building approximately 750 feet from the Project's eastern boundary.

Existing Ambient Noise Levels

The City, including the Project site, is exposed to noise generated by several sources. As noted in the Fresno General Plan, "Fresno has special noise considerations because it has grown up around two major rail corridors, and many freight trains run through the heart of the city daily. Fresno contains three airports and has four State highways that traverse it, as well as major streets at half-mile and one-mile grid intervals, carrying large volumes of passenger vehicle and truck traffic. Industrial and public facilities in and around the city also generate noise from processing materials and from the operation of equipment such as large pumps and backup generators. Residential and commercial uses also contribute noise from smaller equipment, such as swimming pool pumps, air conditioning units, and compressors for refrigeration."

The ambient noise levels at the Project site were therefore determined through a community noise survey. The community noise survey was conducted between November 18, 2025 and November 19, 2025 and consisted of documenting noise levels at the Project site and taking short term (15-minute) noise measurements during daytime and nighttime hours at four (4) locations around the Project site. The locations of the measurements are noted in **Table 3.13-5** below.

Table 3.13-5. Ambient Noise Measurement Locations

Measurement Number	Measurement Location
Measurement M1:	Corner of Fresno Street and M Street
Measurement M2	West Corner of Project site Along Fresno Street

Measurement Number	Measurement Location
Measurement M3	East Corner of Project site Along M Street
Measurement M4	In Surrounding Neighborhood Near 1339 M Street

The loudest source of noise at the Project site was local traffic on Fresno and M Streets. The traffic on the local roadways is comprised of primarily vehicles, but also contains louder sources of noise, such as buses, trucks, and motorcycles. Other sources of noise at the Project site include aircraft flyovers, trash truck and street sweeper activity, distant train activity, sidewalk traffic, and nature-based noises.

All measurements were taken with a fully calibrated Larson Davis 821 sound level meter. The sound level meter was manned for all measurements. The microphone for all measurements was located about 5 feet above local ground for all measurements. A description of the measurement location, the short-term measurement results, and the estimated Ldn at each measurement location is shown below in **Table 3.13-6**. All Ldn levels were calculated using the equations in the "Determining Existing Noise" section of the Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual.

Table 3.13-6 Measured Short-Term Noise Levels Around Site

Measurement Location	Leq, dB(A)		Estimated Ldn, dB(A)
	Daytime Hours (7 AM to 10 PM)	Nighttime Hours (10 PM to 7 AM)	
Measurement M1: Corner of Fresno Street and M Street	76	62	73
Measurement M2: West Corner of Project site Along Fresno Street	66	62	67
Measurement M3: East Corner of Project site Along M Street	63	63	67
Measurement M4: In Surrounding Neighborhood Near 1339 M Street	60	65	69

Based on the measured data, ambient noise levels near the closest noise sensitive receptor (residential along Tulare Street) are anticipated to be approximately 63 dB(A) daytime Leq and 67 dB(A) Ldn, similar to Measurement Location M3.

3.13.2 REGULATORY SETTING

Federal

Federal noise standards are not directly applicable to the Project or to the Judicial Council, but the research that supports the development of federal community noise standards is helpful in understanding human response to different noise levels and is summarized below for the reader's edification.

United States Environmental Protection Agency Noise Control Act

The Federal Noise Control Act of 1972 (Public Law 92-574) established a requirement that all federal agencies administer their programs to promote an environment free of noise that would jeopardize public health or welfare[3]. Although the USEPA was given a major role in disseminating information to the public and coordinating federal agencies, each federal agency retains authority to adopt noise regulations pertaining to agency programs[4].

In 1974, in response to the requirements of the Federal Noise Control Act, the EPA identified indoor and outdoor noise level limits to protect public health and welfare (communication disruption, sleep disturbance, and hearing damage). Outdoor and indoor noise exposure limits of 55 dB(A) Ldn and 45 dB(A) Ldn, respectively, are identified as desirable to protect against speech interference and sleep disturbance for residential, educational, and healthcare areas. The sound level criterion identified to protect against hearing damage in commercial and industrial areas is 70 dB(A) 24-hour Leq (both outdoors and indoors).

The EPA's Office of Noise Abatement and Control was established to coordinate federal noise control activities. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at lower levels of government. Consequently, in 1982 many responsibilities for regulating noise control policies were transferred to state and local governments. The EPA continues to coordinate the programs of all federal agencies relating to noise research and noise control.

Federal Transit Administration Transit Noise and Vibration Impact Assessment

Federal Transit Administration (FTA) procedures for the evaluation of noise from transit projects are specified in the document entitled, "Transit Noise and Vibration Impact Assessment" (FTA 2018). The FTA Noise Impact Criteria address the following categories:

- Category 1: Buildings or parks, where quiet is an essential element of their purpose.

[3] The USEPA was given the responsibility for providing information to the public regarding identifiable effects of noise on public health and welfare, publishing information on the levels of environmental noise that will protect the public health and welfare with an adequate margin of safety, coordinating federal research and activities related to noise control, and establishing federal noise emission standards for selected products distributed in interstate commerce. The Noise Control Act also directed that all federal agencies comply with applicable federal, State, interstate, and local noise control regulations.

[4] The USEPA can, however, require other federal agencies to justify their noise regulations in terms of the Noise Control Act policy requirements.

- Category 2: Residences and buildings where people normally sleep. This includes residences, hospitals, and hotels where nighttime sensitivity is assumed to be of utmost importance.
- Category 3: Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, churches, and active parks.

The Ldn noise level descriptor is used to characterize noise exposure for residential areas (Category 2). For other noise-sensitive land uses, such as outdoor amphitheaters and school buildings (Categories 1 and 3), the maximum hourly Leq during the facility's operating period is used. Noise impacts are identified based on absolute predicted noise levels and increases in noise associated with the subject Project.

Impacts relating to noise generated during construction activities is addressed in Section 7 in the FTA Transit Noise and Vibration Impact Assessment document. **Table 3.13-7** (FTA Table 7-3) gives the following noise level limit criteria for construction noise impact depending on the use of the receptor:

Table 3.13-7. Detailed Analysis Construction Noise Criteria

Land Use	$L_{eq.equip(8hr)}$, dB(A)		$L_{dn.equip(30day)}$, dB(A) 30-day average
	Day	Night	
Residential	80	70	75
Commercial	85	85	80*
Industrial	90	90	85*

*Use a 24-hour $L_{eq(24hr)}$ instead of $L_{dn.equip(30day)}$.
Source: Table 7-3 of the FTA Transit Noise and Vibration Impact Assessment Document

Construction noise levels experienced at a receptor higher than the ones listed in **Table 3.13-7** (FTA Table 7-3) would have a potential impact and would be subject to appropriate noise control measures, where feasible.

With respect to vibration, the range of interest is from approximately 0.0003 in/sec PPV, which is the typical background vibration-velocity level, to 0.1 in/sec PPV, which is the general threshold where minor damage can occur in fragile buildings. Groundborne vibration is normally perceptible to humans at approximately 0.0018 in/sec PPV. For most people, a vibration-velocity level of 0.0056 in/sec PPV is the approximate dividing line between barely perceptible and distinctly perceptible levels (FTA 2018).

U.S. Department of Transportation and U.S. EPA Vibration Guidelines

To address the human response to groundborne vibration, the FTA of the U.S. Department of Transportation has set forth guidelines for maximum-acceptable vibration criteria for different types of land uses. These include 0.0018 in/sec PPV based on RMS velocity amplitude for land uses where low ambient vibration is essential for interior operations (e.g., hospitals, high-tech manufacturing, laboratory facilities); 0.01 in/sec PPV for residential uses and buildings where people normally sleep; and 0.014

in/sec PPV for institutional land uses with primarily daytime operations (e.g., schools, churches, clinics, offices) (FTA 2018).

Standards have also been established to address the potential for groundborne vibration to cause structural damage to buildings. These standards were developed by the Committee of Hearing, Bio Acoustics, and Bio Mechanics at the request of the USEPA (FTA 2018). For fragile structures, the Committee of Hearing, Bio Acoustics, and Bio Mechanics recommends a maximum limit of 0.25 in/sec PPV (FTA 2018).

State

In 1971, the state required cities and counties to include noise elements in their general plans (Government Code §65302 et seq.). The State of California General Plan Guidelines (Office of Land Use and Climate Innovation [LCI] 2017) identify guidelines for the noise elements of local general plans, including a sound level/land use compatibility chart. The noise element guidelines identify the "normally acceptable", "conditionally acceptable", "normally unacceptable", and "clearly unacceptable" Ldn ranges for varying land use categories. Overlapping noise level ranges are intended to indicate local conditions (existing sound levels and community attitudes toward dominant sound sources) should be considered in evaluating land use compatibility at specific locations. The State's guidance for land use/noise compatibility is summarized in **Table 3.13-8**.

Table 3.13-8. State of California Land Use Noise Compatibility Guidelines

Land Use Category	Normally Acceptable[1]	Conditionally Acceptable$_2$	Normally Unacceptable[3]	Clearly Unacceptable[4]
Residential-Low Density Single-Family, Duplex, Mobile Home	<60	55-70	70-75	75+
Residential-Multiple Family	<65	60-70	70-75	75+
Transient Lodging, Motel, Hotel	<65	60-70	70-80	80+
School, Library, Church, Hospital, Nursing Home	<70	60-70	70-80	80+
Auditorium, Concert Hall, Amphitheater		<70	65+	
Sports Arenas, Outdoor Spectator Sports		<75	70+	
Playground, Neighborhood Park	<70		67.5-75	72.5+
Golf Courses, Stable, Water Recreation, Cemetery	<75		70-80	80+
Office Building, Business Commercial, and Professional	<70	67.5-77.5	75+	
Industrial, Manufacturing, Utilities, Agriculture	<75	70-80	75+	

CNEL = Community Noise Equivalent Level; dBA = A-weighted decibels; L_{dn}= day-night average noise level.

Notes:

1. Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

2. New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
3. New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.
4. New construction or development should generally not be undertaken.

Source: LCI 2017

Also, a part of the General Plan Guidelines is a discussion regarding the balance between environmental noise and other planning objectives. There are design strategies that can reduce adverse exposure to noise even in areas with relatively higher ambient noise levels (LCI 2017).

California Department of Transportation

For the protection of fragile, historic, and residential structures, Caltrans recommends for highway construction analysis a threshold of 0.2 in/sec PPV for normal residential buildings and 0.08 in/sec PPV for old or historically significant structures (Caltrans 2020). These standards are more stringent than the recommended guidelines established by the FTA, presented above. **Table 3.13-9** shows the general thresholds for structural responses to vibration levels.

Table 3.13-9. Structural Response to Vibration Levels, Peak Vibration Threshold (in/sec PPV)

Structure and Condition	Peak Vibration Threshold (in/sec PPV) Transient Sources	Peak Vibration Threshold (in/sec PPV) Continuous / Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial / commercial buildings	2.0	0.5

in/sec = inches per second; PPV = peak particle velocity

Source: Caltrans 2020.

Local

Because the Judicial Council is the CEQA lead agency for the Project, and is acting as the Judicial Branch of State government, local government regulations do not apply to the Project. However, the Judicial Council considers policies and guidelines, as appropriate. This section discusses regional and local noise and land use planning (e.g., goals, policies, and implementation plans) for informational purposes and to provide context for the impact analysis below.

City of Fresno General Plan

Chapter 9 “Noise and Safety” in the Fresno General Plan document “identifies existing noise sources within the Planning Area and establishes policies, standards and programs to mitigate potential impacts through design and performance measures. This element contains policies that guide the location of industrial land uses and transportation facilities, since they are common sources of excessive noise levels, as well as the location of noise sensitive uses, such as residences, schools, churches, and hospitals.”

The City of Fresno General Plan lists the following policies relevant to noise related to commercial properties:

NS-1-I **Mitigation by New Development.** Require an acoustical analysis where new development of industrial, commercial or other noise generating land uses (including transportation facilities such as roadways, railroads, and airports) may result in noise levels that exceed the noise level exposure criteria established by **Table 3.13-10** and **Table 3.13-11** (Tables 9-2 and 9-3 in the Fresno General Plan) to determine impacts, and require developers to mitigate these impacts in conformance with **Table 3.13-10** and **Table 3.13-11** as a condition of permit approval through appropriate means. For reference, **Table 3.13-10** and **Table 3.13-11** (Tables 9-2 and 9-3 in the Fresno General Plan) are as follows:

Table 3.13-10. Transportation Noise (Non-Aircraft) Sources

Land Use	Outdoor Activity	Interior Spaces	
	Ldn/CNEL, dB	Ldn/CNEL/dB	Leq dB2
Residential	65	45	-
Transient Lodging	65	45	-
Hospitals, Nursing Homes	65	45	-
Theaters, Auditoriums, Music Halls	-	-	35
Churches, Meeting Halls	65	-	45
Office Buildings	-	-	45
Scholls, Libraries, Museums	-	-	45

Notes:

1. Where the location of outdoor activity is unknown or is not applicable, the exterior noise level standard shall be applied to the property line of the receiving land use.

2. As determined for a typical worst-case hour during periods of use.

Table 3.13-11. Stationary Noise Sources

	Daytime (7 AM – 10 PM)	Nighttime (10 PM – 7AM)
Hourly Equivalent Sound Level (Leq), dBA	50	45
Maximum Sound Level (Lmax), dBA	70	60
Notes: 1. The Department of Development and Resource Management Director, on a case-by-case basis, may designate land uses other than those shown in this table to be noise-sensitive, and may require appropriate noise mitigation measures. 2. As determined at outdoor activity areas. Where the location of outdoor activity areas is unknown or not		

Noise mitigation measures may include:

- The screening of noise sources such as parking and loading facilities, outdoor activities, and mechanical equipment;
- Providing increased setbacks for noise sources from adjacent dwellings;
- Installation of walls and landscaping that serve as noise buffers;
- Installation of soundproofing materials and double-glazed windows; and
- Regulating operations, such as hours of operation, including deliveries and trash pickup.

Alternative acoustical designs that achieve the prescribed noise level reduction may be approved by the City, provided a qualified Acoustical Consultant submits information demonstrating that the alternative designs will achieve and maintain the specific targets for outdoor activity areas and interior spaces. As a last resort, developers may propose to construct noise walls along roadways when compatible with aesthetic concerns and neighborhood character. This would be a developer responsibility, with no City funding.

NS-1-j **Significance Threshold.** Establishes, as a threshold of significance for the City's environmental review process, that a significant increase in ambient noise levels is assumed if the Project would increase noise levels in the immediate vicinity by 3 dB Ldn or CNEL or more above the ambient noise limits established in this General Plan Update.

Commentary*: When an increase in noise would result in a "significant" impact (increase of three dBA or more) to residents or businesses, then noise mitigation would be required to reduce noise exposure. If the increase in noise is less than three dBA, then the noise impact is considered insignificant and no noise mitigation is needed.*

NS-1-n **Best Available Technology.** Require new noise sources to use best available control technology to minimize noise emissions.

Fresno, California Code of Ordinances

Section 15-2506 “NOISE” in the Fresno Code of Ordinances applies to noise sources resulting from and relating to new development or the expansion of a use or activity. The following paragraphs apply to noise generated and received by commercial properties:

A. Acoustic Study.

    1. An acoustic study shall be required for any proposed project which could create or be subject to noise exposure in excess of the standards set by **Table 3.13-10** and **Table 3.13-12** (Tables 15-2506-B and 15-2506-C in the Fresno Code of Ordinances). Noise attenuation measures determined from the results of the acoustic study shall be applied in order to meet said standards.

    2. An acoustic study shall also be required when a project proposes to be located in an area where existing and/or future transportation-related noise exposure levels are identified as requiring study in **Table 3.13-12** (Table 15-2506-C).

    3. Any required acoustic study shall be paid for by the project applicant and shall be prepared by a qualified acoustical consultant as determined by, and managed under the supervision of, the Review Authority.

B. Transportation Noise Standards. The standards listed in **Table 3.13-10** (Table 15-2506-B) represent maximum allowable noise exposure from transportation-related (vehicles and trains) noise sources.

C. **Land Use Compatibility for New Development Proposed near Transportation Noise Sources. Table 3.13-12** (Table 15-2506-C) establishes the range of acceptable and unacceptable transportation noise exposure levels in order to determine whether a project is allowed to be sited near a transportation noise source and if noise attenuation measures would be required.

    1. **A: Satisfactory.** The project may be permitted without requiring noise attenuation.

    2. **B: Analysis Required.** The project is required to provide an analysis that details noise reduction measures that shall be integrated into the project design in order to reduce noise exposure to a conforming level.

    3. **C: Acoustic Study Required.** The project is required to perform an acoustic study (see Subsection A of this section) and incorporate the resulting noise attenuation measures to reduce noise exposure to a conforming level.

    4. **D: Not Allowed.** The project shall not be permitted.

    5. **E: Restricted.** Only the specified project types shall be permitted.

Table 3.13-12. Land Use Compatibility for New Development Proposed near Transportation Noise Sources

Noise-Sensitive Land Use	Day/Night Average Sound Level (Ldn or CNL, dB)	Requirements and Limitations
Residential, Transient Lodging, Medical Care Facility, Religious Assembly Facility, Meeting Hall, School, Library, Museum	Less than 65	A: Satisfactory
	65 to 70	B: Analysis and integration of noise reduction measures in project design
	70 to 75	C: Acoustic study and noise attenuation measures required
	Over 75	D: Not allowed
Theater, Auditorium, Concert Hall, Amphitheater	Less than 70	B: Analysis and integration of noise reduction measures in project design
	Over 70	D: Not allowed
Office Building	Less than 70	A: Satisfactory
	70 to 75	B: Analysis and integration of noise reduction measures in project design
	Over 75	C: Acoustic study and noise attenuation measures required
Industrial	Less than 75	A: Satisfactory
	Over 75	C: Acoustic study and noise attenuation measures required
Outdoor sports and recreation, parks	Less than 65	A: Satisfactory
	65 to 80	C: Acoustic study and noise attenuation measures required
	Over 80	E: Limited to open space; avoid uses involving concentrations of people or animals

D. **Stationary Noise Standards.**

1. New or expanded development of noise-sensitive uses shall not be permitted if noise levels, due to existing stationary noise sources, would exceed the standards of **Table 3.13-11** (Table 15-2506-D). Such projects shall be permitted with the incorporation of noise attenuation measures stipulated in an acoustic study per Subsection A to reduce the noise exposure to compliant levels.

2. New or expanded development of major noise-generating stationary uses shall not be permitted if noise levels impinging on existing adjacent noise-sensitive uses would exceed the standards of **Table 3.13-11** (Table 15-2506-D). Such projects shall be permitted with the incorporation of noise attenuation measures stipulated in an acoustic study per Subsection A to reduce the noise exposure to compliant levels.

3. The Director shall determine uses that qualify as "noise-sensitive."

4. When ambient noise levels exceed or equal the levels in this table, mitigation shall only be required to limit noise to the ambient plus five dB.

E. **Best Available Technology.** New noise sources shall use the best available control technology to minimize noise emissions.

F. **Noise Attenuation Measures.** Any project subjected to an acoustic study may be required, as a condition of approval, to incorporate noise attenuation measures deemed necessary to ensure that noise standards are not exceeded.

1. Noise attenuation measures identified in an acoustic study shall be incorporated into the project to reduce noise impacts to satisfactory levels.

2. Emphasis shall be placed upon site planning and project design measures.

3. Operation-related measures may be incorporated, such as regulating the hours of operation, deliveries, etc.

4. The use of noise barriers (i.e., walls) shall be considered only after all feasible design-related and operation-related noise measures have been incorporated into the project.

Section 15-2507 “VIBRATION” in the Fresno Code of Ordinances states the following: “No vibration shall be produced that is transmitted through the ground and is discernible without the aid of instruments by a reasonable person at the lot lines of the site. Vibrations from temporary construction, demolition, and vehicles that enter and leave the subject parcel (e.g., construction equipment, trains, trucks, etc.) are exempt from this standard.”

Noise generated by demolition and construction activities is addressed in the Fresno Code of Ordinances under Section 10-109 “EXCEPTIONS” as follows:

The provisions of this article shall not apply to:

a) Construction, repair or remodeling work accomplished pursuant to a building, electrical, plumbing, mechanical, or other construction permit issued by the city or other governmental agency, or to site preparation and grading, provided such work takes place between the hours of 7:00 a.m. and 10:00 p.m. on any day except Sunday.

3.13.3 IMPACTS ANALYSIS

3.13.3.1 Methodology

Short-term ambient noise level measurements were used to provide baseline noise conditions at nearby sensitive receptors and within the Project site vicinity. For the purpose of this analysis, potential sensitive receptors were determined by reviewing aerial photography of the project vicinity and from Project site observations.

Impacts from Project related traffic were estimated using the information in the transportation analysis prepared by Stantec contained in Section 3.17 of this document and the 2023 annual average daily traffic (ADT) and peak hour volumes for California highways published on the Caltrans Traffic Census Program website (Caltrans 2023).

Noise from the Project's stationary mechanical systems, such as air handling units and exhaust fans, and operational activities were analyzed based on Project site conditions.

The FHWA Roadway Construction Noise Model (RCNM) was used to estimate the impact from short-term construction activities. The RCNM is used as the FHWA's national standard for predicting noise generated from construction activities. The RCNM analysis includes the calculation of noise levels at a defined distance for a variety of construction equipment. The spreadsheet inputs include acoustical use factors and distance to receptors and calculates the expected Lmax values and Leq values at a selected receptor. The RCNM output files are provided in **Appendix L**.

Groundborne vibration levels associated with construction-related activities for the Project were evaluated utilizing typical groundborne vibration levels associated with construction equipment. Potential groundborne vibration impacts related to structural damage and human annoyance were evaluated, taking into account the distance from construction activities to nearby structures and typically applied criteria for structural damage and human annoyance.

3.13.3.2 Thresholds of Significance

EPA and Caltrans Guidelines

As noted previously in this section, with respect to how humans perceive and react to changes in noise levels, a 1 dB(A) increase is imperceptible, a 3 dB(A) increase is barely perceptible, a 6 dB(A) increase is clearly noticeable, and a 10 dB(A) increase is subjectively perceived as approximately twice as loud (Caltrans 2013). These levels are based on the EPA established guidelines (EPA 1978) for assessing the impact of an increase in noise levels. These guidelines have been used for several years as industry standards to determine the potential impact of noise increases on communities. Most people will tolerate a small increase in background noise (up to about 5 dB(A)) without complaint, especially if the increase is gradual over a period of years (such as from gradually increasing traffic volumes). Increases greater than 5 dB(A) may cause complaints and interference with sleep. Increases above 10 dB(A) (heard as a doubling of judged loudness) are likely to cause complaints and should be considered a serious increase. **Table 3.13-13** defines each of the traditional impact descriptions, their quantitative range, and the qualitative human response to changes in noise levels.

Table 3.13-13. EPA / Caltrans Impact Guidelines

Increase over Existing or Baseline Sound Levels	Impact Per USEPA Region Guidelines	Qualitative Human Perception of Difference in Sound Levels
0 dB to 5 dB	Minimum impact	Imperceivable or Slight difference

Increase over Existing or Baseline Sound Levels	Impact Per USEPA Region Guidelines	Qualitative Human Perception of Difference in Sound Levels
6 dB to 10 dB	Significant impact	Significant Noticeable difference—complaints possible
Over 10 dB	Serious impact	Loudness changes by a factor of two or greater. Clearly audible difference—complaints likely

dB = decibels;

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to noise if it would:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Demolition and Construction

Short Term

Two types of short-term noise impacts could occur during demolition / construction activities. The first type of short-term noise impact is traffic noise from construction crew vehicular and truck commutes on the access roads leading to and from the Project site.

As noted in previous sections, construction equipment and activities would involve access via multiple routes depending on the activities (e.g., material and equipment source(s), material or equipment point of origin). The following SRs and major and minor arterial roads may be utilized by construction equipment and vehicles: CA-SR 180, CA-SR-99, CA-SR-41, Fresno Street, Van Ness Avenue, Tulare Street, Fulton Street, and 'M' Street. These roadways already contain a great deal of traffic volume, including vehicles, trucks, and buses.

Typically, traffic volumes have to double before the associated increase in noise levels is noticeable (3 dB(A) Ldn) along roadways (Caltrans 2013). Existing traffic noise levels along the adjacent roadways are steady. For example, the 2023 peak hour traffic volume along CA-SR-41 near the Project site is 8,700 vehicles (Caltrans 2023). Construction-related traffic would not double existing traffic volumes and would not increase the traffic noise by 3 dB(A). Therefore, construction-related traffic impacts would be less than significant.

The second type of short-term noise impact is related to noise generated during demolition / construction. Each construction stage has its own mix of equipment, and consequently, its own noise characteristics. The various construction operations would change the character of the noise generated at the Project site and therefore, the noise level as construction progresses. The loudest stages of construction typically involve earthmoving and grading equipment.

The demolition / construction of the Project would be conducted in six (6) stages, and each stage will use different construction equipment. The main types of noise-producing equipment for each construction stage are shown in **Table 3.13-14**.

Table 3.13-14. Demolition / Construction Stage Equipment

Demolition / Construction Stage	Demolition / Construction Equipment	
Demolition	• Tractor • Backhoe • Concrete Saw	• Front-End Loader • Rubber-Tired Dozer • Haul Trucks (2)
Site Preparation	• Grader • Tractor	• Scraper
Grading	• Grader • Tractor • Haul Trucks (4)	• Rubber-Tired Dozer • Front-End Loader
Building Construction	• Crane • Generator • Welders (3)	• Gradall Forklifts (2) • Tractor
Paving	• Tractor • Rollers (2)	• Pavers (2) • Cement Mixer
Architectural Coating	• Air Compressor	

Table 3.13-15 lists the types of demolition / construction equipment and the maximum and average operational noise level as measured at 750 feet from the operating equipment. The 750-foot distance represents the approximate distance between the Project site boundary and the closest noise-sensitive receptor (residential along Tulare Street).

Table 3.13-15. FHWA Roadway Construction Noise Model Source Noise Levels

Demolition / Construction Equipment Source at the Project Site	Distance to Nearest Sensitive Receptor, feet	Sound Level at Receptor		
		Lmax, dB(A)	Acoustical Use Factor (%)	Leq, dB(A)
Backhoe	750	54.0	40	50.1
Cement Mixer	750	55.3	40	51.3
Crane	750	57.0	16	49.1
Compressor (air)	750	54.1	40	50.2

Demolition / Construction Equipment Source at the Project Site	Distance to Nearest Sensitive Receptor, feet	Sound Level at Receptor		
		Lmax, dB(A)	Acoustical Use Factor (%)	Leq, dB(A)
Concrete Saw	750	66.1	20	59.1
Dozer	750	58.1	40	54.2
Forklift (Gradall)	750	59.9	40	55.9
Front End Loader	750	55.6	40	51.6
Generator	750	57.1	50	54.1
Grader	750	61.5	40	57.5
Haul Truck	750	52.9	40	48.9
Paver / Paving Equipment	750	53.7	50	50.7
Roller	750	56.5	20	49.5
Scraper	750	60.1	40	56.1
Tractor	750	60.5	40	56.5
Welder	750	50.5	40	46.5

Source: Stantec 2024.

A worst-case condition for construction activity would assume all noise-generating equipment was operating at the same time and at the same distance from the closest noise-sensitive receptor. Using this assumption, the RCNM program calculated the following combined Leq and Lmax noise levels from each stage of demolition / construction as shown in **Table 3.13-16**.

Table 3.13-16. Calculated Noise Level from Each Demolition / Construction Stage

Demolition / Construction Stage	Distance to Closest Noise Sensitive Receptor, ft	Calculated Lmax, dB(A)	Calculated Leq, dB(A)
Demolition	750	68.4	62.8
Site Preparation	750	65.5	61.5
Grading	750	66.4	62.4
Building Construction	750	66.5	62.3
Paving	750	64.5	60.0

Demolition / Construction Stage	Distance to Closest Noise Sensitive Receptor, ft	Calculated Lmax, dB(A)	Calculated Leq, dB(A)
Architectural Coating	750	54.1	50.2

Source: Stantec 2024., RCNM Version 1.1 2008

As shown in **Table 3.13-16** above, all calculated worst-case construction noise levels from the Project are below the 80 dB(A) daytime criterion in Section 3.13.3.1, the Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual. All calculated worst-case construction noise levels from the Project are also below the City's 70 dB(A) daytime maximum for stationary noise sources (**Table 3.13-11**: Noise Exposure from Stationary Noise Sources).

The Judicial Council is not subject to the City Municipal Code and the California Trial Court Facilities Standards has no limit on construction operations, but the calculated noise levels are still below FTA and City construction noise criterion. Therefore, the impacts from short-term demolition / construction would be less than significant.

Operation

Exterior Traffic Noise Impacts

Traffic noise depends primarily on vehicle speed (tire noise increases with speed), proportion of medium and large truck traffic (trucks generate engine, exhaust, and wind noise in addition to tire noise), and number of speed control devices, such as traffic lights and stop signs (accelerating and decelerating vehicles and trucks can generate more noise).

Changes in traffic volumes can also have an impact on overall traffic noise levels. For example, it takes 25 percent more traffic volume to produce an increase of only 1 dB(A) in the ambient noise level. For roads already heavy with traffic volume, an increase in traffic numbers could even reduce noise because the heavier volumes could slow down the average speed of the vehicles. A doubling of traffic volume results in a 3 dB(A) increase in noise levels.

The transportation analysis provided in Section 3.17 in this document was used to describe future noise levels due to traffic added from the Project. Section 3.17 states "No significant increase in operations is proposed as part of the consolidation of court operations. Staff, jurors and visitors to the new courthouse would continue to utilize the available off-site public parking structures and surface parking spaces provided in the surrounding area. Therefore, existing trip characteristics would not change as a result of the Project.". Given existing trip characteristics with the Project will be unchanged over existing traffic levels, the noise generated by traffic will also be unchanged. Therefore, the Project should not cause increased traffic noise levels over the current conditions, and there would be no impact.

Landscape and Building Maintenance Activities

Landscape maintenance activities include the use of leaf blowers and power tools and could result in intermittent average noise levels of approximately 73 dB(A) at 50 feet (Walker and Banks 2019). Based

on an equipment noise level of 73 dB(A), the use of such equipment, assuming a noise attenuation rate of 6 dB per doubling of distance from the source, would result in exterior noise levels of approximately 49 dB(A) at the closest noise sensitive receptor (750 feet from the Project site).

As indicated in **Table 3.13-6** average daytime noise levels in the vicinity of the closest noise sensitive receptor are approximately 63 dB(A) Leq. Landscape maintenance activities would not result in a substantial permanent increase (more than 3 dB(A)) in ambient noise levels at the closest noise sensitive receptor. Therefore, this impact would be less than significant.

Fixed Source Noise

Mechanical, and sometimes electrical, equipment is often mounted on building rooftops, located on the ground around the Project site, or located within mechanical equipment rooms inside the building with louvers to the exterior. The noise sources could take the form of fans, pumps, air compressors, chillers, cooling towers, and generators. This equipment would generate noise that may radiate to the neighboring properties. Noise from mechanical equipment associated with operation of the Project is required to comply with the California Building Standards Code requirements pertaining to noise attenuation. Therefore, the on-site equipment would be designed incorporating measures such as shielding and/or appropriate attenuators to reduce noise levels that may affect nearby properties.

When the actual on-site equipment for the building is designed and selected, the equipment would be designed to incorporate measures as needed, such as shielding, barriers, and/or attenuators, to reduce noise levels that may affect nearby properties. Therefore, the impacts from fixed-source noises to the neighboring properties would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact

b. Generation of excessive groundborne vibration or groundborne noise levels?

Demolition and Construction

During demolition and construction of the Project, equipment such as trucks, bulldozers, and rollers may be used as close as 750 feet from the nearest sensitive receptor (residential along Tulare Street). Equipment used during project demolition and/or construction could generate vibration levels between 0.00002 in/sec PPV and 0.0013 in/sec PPV at 750 feet, as shown below in **Table 3.13-17**. All the groundborne vibration levels are below the FTA vibration threshold at which human annoyance could occur of 0.10 in/sec PPV. Additionally, demolition and construction activities would be temporary in nature

and would likely occur during normal daytime working hours. Also based on **Table 3.13-4**, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. Therefore, the impacts from construction vibration would be less than significant.

Table 3.13-17. Calculated Vibration Levels for Construction Equipment

Type of Equipment	Peak Particle Velocity at 750 Feet, PPV (in/sec)	Threshold at which Human Annoyance Could Occur, PPV (in/sec)	Potential for Proposed Project to Exceed Threshold
Large Bulldozer	0.0005	0.10	None
Loaded Trucks	0.0005	0.10	None
Small Bulldozer	0.00002	0.10	None
Vibratory Roller	0.0013	0.10	None

Source: FTA 2018.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Demolition, Construction, and Operation

The closest airport, private airstrip, or helipad to the Project site is the Fresno Chandler Executive Airport, located approximately 1.41 miles southwest of the Project. The Project is located within the Fresno Chandler Executive Airport‘s “Airport Influence Area” Traffic Pattern Zone, also known as Safety Zone 6 (FCOG 2023). Safety Zone 6 is outside any identified noise contours, which are included in the Fresno County Airport Land Use Compatibility Plan to reflect aircraft operational noise only and are intended to guide land use compatibility decisions related to airport activity within the immediate area. Noise contours do not regulate non-aircraft noise sources, such as equipment used during Project demolition, construction, and operation. People residing and working in the Project area are outside the airport’s 65 CNEL noise contour for airport operations, and thus, would not be subjected to intensive Fresno Chandler Executive Airport operational noise and Project noise at the same time (together of which, could be

excessive). Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels and impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

3.14 Population and Housing

3.14.1 EXISTING CONDITIONS

According to the most recently available statistics from the U.S. Census Bureau (USCB), the City had a population of 550,105 in July 2024. The owner-occupied housing unit rate was 49.7 percent, and the median value of homes was $348,500. There were approximately 179,684 total households with a persons-per-household rate of 2.97. 62.4 percent of the population over 16 years of age were in the civilian labor force. The median household income was $66,804, and per capita income was $31,012. Approximately 20.9 percent of persons within the City were in poverty (USCB 2025).

According to Fresno County 2023-2060 growth projections prepared by the FCOG in 2024, Fresno County is projected to gain nearly 118,000 residents by 2060. The City would experience the largest increase of 55,450 people, with an estimated demand for 37,600 new housing units, the majority of which would be single-family housing units (FCOG 2024).

3.14.2 REGULATORY SETTING

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant.

Federal

There are no federal plans, policies, regulations, or ordinances related to population and housing that apply to the Project.

State

There are no state plans, policies, regulations, or ordinances related to transportation that apply to the Project.

Local

Fresno General Plan – Housing Element

The Fresno General Plan outlines a long-range vision for the physical development of the city that reflects the aspirations of the community. The Plan's Housing Element provides residents, public officials, and the general public with an understanding of the city's housing needs and the goals, policies and programs that have been developed to help meet those needs and how they are consistent with other policies of this General Plan. The Housing Element further provides analysis of i) the city's existing, projected and special housing needs; ii) a land inventory for residential development; iii) household characteristics; iv) adequate sites to provide for the needs of households at all income levels; v) governmental and nongovernmental constraints; and vi) a statement of the communities' goals, polices, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing (City of Fresno 2014).

3.14.3 IMPACTS ANALYSIS

3.14.3.1 Methodology

To identify potential Project-related impacts to population and housing and existing conditions, the following information sources were reviewed:

- Fresno General Plan, Housing Element and Economic Development Element
- U.S. Census Bureau population statistics for the City of Fresno
- FCOG RTP/SCS

3.14.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to population and housing if it would:

a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Demolition, Construction, and Operation

The Project would not induce substantial unplanned population growth in the Project area, either directly or indirectly, during any phase of Project implementation. Demolition activities would be confined to the removal of existing government facilities (i.e., Sheriff's Administration and South Annex Jail buildings) on the Project site and would not introduce new housing or commercial development. Utility needs for the Project would not substantially differ from those currently available at the site, all utility work would occur within already developed rights-of-way and would not extend infrastructure into previously unserved areas or facilitate additional off-site development. Accordingly, the Project would not indirectly induce population growth through extension of roads, utilities, or other infrastructure.

Construction would generate temporary employment opportunities for construction workers; however, the existing regional labor pool would be expected to accommodate this demand without necessitating an influx of new residents or the development of additional housing. During operations, the new courthouse would consolidate judicial functions currently dispersed across multiple locations within downtown Fresno. The Project does not include residential units, commercial space, or infrastructure extensions that would facilitate substantial unplanned population growth, directly or indirectly. Staffing levels at the new facility would be similar to those currently required for courthouse operations, and no permanent increase in employment or associated housing demand is anticipated. For these reasons, the Project would not result in direct or indirect population growth and result in no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Demolition, Construction, and Operation

The Project would not result in the removal or demolition of any residential units, as no such units currently exist on the Project site. The Project would not displace any residential uses or involve land designated for residential development. Additionally, the Project would not result in the displacement of people. The Project site is currently developed with government facilities and does not contain any residential uses or housing units. Demolition would be limited to the removal of the Sheriff's Administration and South Annex Jail buildings, neither of which serve as residences. Construction and operation of the new courthouse would not require the removal or relocation of any housing, nor would it necessitate the construction of replacement housing elsewhere. The Project would not displace any individuals or families, and no adverse effects on the local housing supply are anticipated. Therefore, no impacts are anticipated.

Level of Significance Before Mitigation

No Impact

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

3.15 Public Services

3.15.1 EXISTING CONDITIONS

Fire

The Fresno Fire Department (FFD) has been serving the City community since 1877. There are 20 stations in the community. The FFD provides full-time fire suppression, fire prevention, urban search and rescue, hazardous material response, and airport firefighting capabilities. The Project site is located within the response area for Fire Station No. 3, which is located at 1406 Fresno Street (near E street and Fresno Street) approximately 0.5 miles west of the Project site. Station No. 3 houses an engine, a ladder truck, an ICS/FIRESCOPE type 3 brush engine, a mobile ventilation unit, and the Community Emergency Response Team vehicle. Station No. 3 serves downtown Fresno, including most of the high-rise district, the Fulton Mall, and much of southwest Fresno. In addition, the Fire Station Headquarters and training facilities are located approximately 0.24 miles southwest of the Project site (City of Fresno 2025a). The City of Fresno Fire department has equipment sufficient for high-rise buildings and aerial equipment is available (City of Fresno 2026).

Police

The City is comprised of Six Police Districts. The Project site is located within the southwest District and within sector 1D (City of Fresno 2025e). Police services are supplemented by the Police Department's Investigative Services Division, which is responsible for follow-up investigation on cases involving crimes against persons and property crimes, evaluation of crime and public safety intelligence information utilizing the Intelligence Unit, and pro-active investigation of vice/narcotics related crimes. The Police Department's Support Division encompasses Traffic Enforcement and Accident Prevention, Communications, and Records Bureaus, as well as a Volunteer Services and Reserve Officers Unit. The Police Department's Professional Standards Division oversees the Commission of Accreditation for Law Enforcement Act compliance, as well as the Internal Affairs, Fiscal Affairs, Grant, and Policy and Procedure Units and the Accountability and Compliance, Training, and Personnel Bureaus (City of Fresno 2014). The Fresno Police Department Headquarters are located directly across M Street from the Project site.

The California Highway Patrol Fresno Area serves the central San Joaquin Valley area and is a part of the California Highway Patrol's Central Division. The Fresno Area covers the sixth largest county spanning an area of over 6,000 square miles with officers patrolling over 4,045 miles of freeways and unincorporated roadways in and around the cities of Clovis, Reedley, Sanger, Selma, Kingsburg, Kerman, Fresno, Parlier, Orange Cove, Mendota, Fowler, Firebaugh, and Del Rey. The Fresno office is located at 1380 E. Fortune Ave, Fresno, CA, which is located 3.37 miles southeast of the Project site (California Highway Patrol 2026).

The Fresno County Sherrif and Coroner's Office serve Fresno County, California. The Sheriff's Office has 1,300 employees and is responsible for patrolling 6,000 square miles of Central California, including the City. The agency provides a range of services, including crime prevention, investigation, and

enforcement, as well as detention and corrections services through its jail facilities. The Office is located within the Courthouse Park parcel at 2200 Fresno Street (CountyOffice.org 2026).

Schools

Most of the City, including the Project area, is served by the Fresno Unified School District, which is comprised of 104 schools (Fresno Unified School District 2025). In 2014, the Fresno Unified School District included 70,704 students(City of Fresno 2014). The nearest elementary and middle school is Kepler Neighborhood School, a K-8 charter school , located approximately 0.25 miles to the northwest of the Project site. Cyber High is located across Van Ness Avenue; however, this is an online program. The next closest high school is Edison High School, which is part of the Fresno Unified School District, located 1.28 miles southwest of the Project site. The Fresno Unified School District headquarters is located across M Street.

Parks

Parks, After School, Recreation and Community Services Department maintains the 1,500 acres of open space within the City and offers the public access to well-maintained green space to enjoy leisure recreation (City of Fresno 2025c).

The City of Fresno General Plan classifies parks into five categories based on typical size and service area: Pocket Park, Neighborhood Park, Community Park, Regional Park, and Trail/Greenway/Parkway. Courthouse Park is classified by the City of Fresno General Plan as a Neighborhood Park meaning it is 2.01 to 10 acres and services an area of up to a one-mile radius (City of Fresno 2014). However, the City GIS viewer no longer lists the park as a Neighborhood Park. According to the City GIS Viewer, the nearest park to the Project site is the Eaton Plaza Neighborhood Park, located approximately 0.10-mile to the northeast (City of Fresno 2025b).

Other Public Facilities

The City of Fresno, Parks, After School, Recreation and Community Services Department offers several trails for the community. The closest public facility to the Project area is a Class I Bicycle/Pedestrian Path, located approximately 0.2 miles northwest of the Project site, along Tuolumne Avenue (City of Fresno 2025b).

The Fresno County Library includes 34 branches. The main branch is located at 2420 Mariposa Street, Fresno, approximately 0.1 mile east of the Project site. Fresno County Library is a part of the San Joaquin Valley Library System which is a cooperative network of 10 public library jurisdictions in the counties of Fresno, Kern, Kings, Madera, Mariposa, Merced and Tulare. In addition to standard library services, the library hosts events and programs for the community (Fresno County Public Library 2025).

3.15.2 REGULATORY SETTING

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether

the Project's impacts would be significant. There are no local plans, policies, regulations, or ordinances related to public services that apply to the Project.

3.15.3 IMPACTS ANALYSIS

3.15.3.1 Methodology

To identify potential Project impacts for public services, the following documents were reviewed to identity existing conditions within the City.

- City of Fresno General Plan
- County of Fresno General Plan
- City of Fresno Departments Website
- City of Fresno GIS Viewer

3.15.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to public services if it would:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire Protection?

Demolition, Construction, and Operation

The Project site is located within a developed urbanized area already served by existing fire protection services. The Project is not expected to generate demand beyond existing service capacity or cause any change to response times. Demolishing, constructing and operating the new courthouse would not result in the need for any new facilities to maintain performance objectives for fire protection. In addition, the Project would comply with applicable requirements of the State Fire Marshall. Therefore, the Project would have no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

ii. Police Protection?

Demolition, Construction, and Operation

The Project site is adjacent to the Fresno County Sheriff's Office and other law enforcement facilities. The Project consolidates existing court functions currently dispersed across multiple facilities and does not introduce new uses that would significantly increase demand for police services. As such, the existing law enforcement services in the area would adequately meet the demand for police protection services. Demolishing, constructing and operating the new courthouse would not require additional services beyond those currently provided. Therefore, the Project would have no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

iii. Schools?

Demolition, Construction, and Operation

The Project is a public facility and would not generate new student populations or significantly affect school enrollment. The Project would not result in any population increases or an increase in housing. Therefore, the Project would have no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

iv. Parks?

Demolition, Construction, and Operation

The Project is a public facility that would consolidate existing court operations already located in the downtown Fresno area. It would not introduce new residential developments or substantially increase the local population. While the Project would include staff and visitor use, those users are not new residents and would not result in increased permanent demand on local park facilities. The Project is located within Courthouse Park, a landscaped civic area owned by Fresno County. While the Project involves construction within this area, it does not reduce access to existing public parks or create a deficit in parkland. Therefore, there would be no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

v. Other public facilities?

Demolition, Construction, and Operation

The Project is a public facility designed to consolidate existing judicial functions currently dispersed across three downtown Fresno locations. It does not introduce new residential development or permanent population growth and therefore would not generate substantial new demand for other public facilities (e.g., libraries, community centers, or administrative offices). The Project is not anticipated to adversely affect the City's overall ability to provide services Citywide, nor would it create any significant increase in demand for such services through demolition, construction, and operation. Additionally, the Project includes secure parking and sallyport access to facilitate law enforcement operations, and existing public services and infrastructure in the downtown core are adequately sized to accommodate the Project without requiring the construction of new or physically altered public facilities. Therefore, there would be no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

3.16 Recreation

3.16.1 EXISTING CONDITIONS

The City of Fresno General Plan states that the City maintains approximately 1,617 acres of open space, nearly 230,000 SF of building space dedicated to recreational and educational purposes distributed among 104 sites. Other facilities include 9 community pools, four splash parks, 518 picnic tables, 153 barbeque grills, three amphitheaters, 54 baseball/softball fields, 53 football/soccer fields, 40 basketball courts, 11 volleyball courts, 40 tennis courts, seven skate parks, and five dog parks. The City's park system also provides and maintains 115 acres of paths and trails for pedestrians and bicyclists (City of Fresno 2014).

3.16.2 REGULATORY SETTING

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant. There are no local plans, policies, regulations, or ordinances related to recreation that apply to the Project.

3.16.3 IMPACTS ANALYSIS

3.16.3.1 Methodology

Recreational resources are analyzed based on baseline conditions in the Project Area, including parks, trails, open space, and recreational programs.

3.16.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to recreation if it would:

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Demolition, Construction, and Operation

The Project includes a public facility that would replace existing facilities in the area and would not generate new demand for recreational resources. The Project is not located near any State or regional parks or recreational facilities. According to the City GIS Viewer, the nearest park to the Project is the Eaton Plaza Neighborhood Park located approximately 0.10 mile to the northeast. As such, it is not anticipated to increase the use of existing neighborhood or regional parks or other recreational facilities. While the Project may result in minor increases in use of the surrounding greenspace within the Courthouse Park parcel, any such use is expected to be minimal and would not result in substantial

physical deterioration of the area as the Project would primarily generate demand for the Courthouse itself. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Demolition, Construction, and Operation

The Project involves a public facility that would replace existing facilities in the area and is not expected to generate new demand for recreational resources. The Project site does not have any trails or recreation resources onsite nor does the Project require the construction or expansion of recreational facilities.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

3.17 Transportation

The Project site is located southwest of the intersection of 'M' Street and Fresno Street within Courthouse Park in the City of Fresno. Regional access to the Project site is provided via SR-41, SR-99 and SR-180. Local vehicular access to the Project site is provided via Fresno Street, M Street, Tulare Street, and Van Ness Avenue.

A total of 47 secured parking spaces will be provided within the building: 41 for judicial officers, two for executive staff and four for law enforcement. Vehicular access to the secured parking area would be provided via a proposed driveway along M Street. A vehicular connection to the existing underground tunnel that provides a secure link between the Fresno County Jail and the in-custody holding area within the new facility is also proposed. Jurors and visitors to the new courthouse would continue to utilize off-site public parking in the surrounding area.

The Institute of Transportation Engineers *Trip Generation Manual*[5] does not have specific trip generation rates for courthouse buildings. Therefore, vehicle trip generation estimates were developed for the Project using counts collected at the Gordon D. Schaber Courthouse in Sacramento on Tuesday February 8, 2011. Trip rates per court staff (as independent variable) were calculated by dividing the total number of people entering and exiting the courthouse by the total number of staff. A survey conducted to determine the travel mode choice indicated that 85 percent of staff arrive by personal vehicle, with the remaining 15 percent using alternate travel modes. **Table 3.17-1** below summarizes the trip rates per staff and trip generation estimates for the Project. As shown, the Project is expected to generate 5,212 ADT, with 982 trips occurring during the AM peak hour and 339 trips during the PM peak hour.

Table 3.17-1. Trip Generation Summary

		AM Peak Hour			PM Peak Hour		
	ADT	In	Out	Total	In	Out	Total
Sacramento Courthouse Baseline (512 staff)							
Total Trips	7,712	1,230	205	1,435	46	433	469
Total Trip Rate	15.06	2.4	0.4	2.8	0.1	0.8	0.9
Vehicle Trips	6,605	1,067	178	1,245	41	391	432
Vehicle Trip Rate	12.9	2.08	0.35	2.43	0.08	0.76	0.84
Fresno Courthouse Project (404 staff)							
Vehicle Trips	5,212	841	141	982	32	307	339

ADT = Average Daily Traffic.

[5] Trip Generation Manual does not have specific trip generation rates for courthouse buildings. Therefore, a Traffic Memorandum was prepared for the proposed New Fresno Courthouse and provides a comprehensive evaluation of existing transportation conditions, circulation characteristics, multimodal access, trip generation, and potential CEQA transportation impacts associated with the project site. The Traffic Memorandum, including the supporting technical analysis prepared by Fehr & Peers (January 2018), is provided in **Appendix K.** Trip rates per court staff (as independent variable) were calculated by dividing the total number of people entering and exiting the courthouse by the total number of staff. A survey conducted to determine the travel mode choice indicated that 85% arrive by personal vehicle, with the remaining 15% using alternate travel modes. Given that the Sacramento courthouse in a downtown area in close proximity to the freeway system, the trip characteristics are expected to be similar to the Project.

It is important to note that these Project trips are not new to the area. The Project would consolidate existing courthouse operations by replacing the Fresno County Courthouse and the court space in the North Annex Jail (both located in the Courthouse Park next to the Project site), and the court space in the 'M' Street Courthouse (located one block or approximately 1,000 feet northwest of the Project site). No increase in operations is proposed as part of the consolidation of court operations. Staff, jurors and visitors to the new courthouse would continue to utilize the available off-site public parking structures and surface parking spaces provided in the surrounding area. Therefore, existing trip characteristics would not change as a result of the Project.

3.17.1 EXISTING CONDITIONS

Roadway System

The transportation system in Fresno includes motorized and nonmotorized travel modes. This circulation system is considered multimodal, which provides alternatives to the automobile such as bicycle facilities, pedestrian facilities, rail, trails, and transit. The roadway network in Fresno is generally a traditional grid-based network of north/south and east/west streets, except for the downtown area, where the grid-based network is northeast/southwest. The existing roadway segment functional classifications based on the 2014 Master Environmental Impact Report Circulation Element are briefly described below.

State Facilities

SR-41 is a north-south highway that extends from SR-1 at the Pacific Coast near Morro Bay to Oakhurst in the Sierra Nevada Mountains. Within the study area SR-41 is a six-lane freeway with interchanges with SR-99 and SR-180 and provides regional access to the Courthouse Park via the Interchange with Van Ness Avenue in Downtown Fresno.

SR-99 is a northwest to southeast freeway that links Sacramento to Bakersfield in Kern County. SR-99 extends through Fresno from the southeastern city limits to the northwestern city limits. The freeway contains six lanes and provides regional access to Courthouse Park primarily via the Interchange with Fresno Street.

SR-180 is an east-west highway that extends from SR-33 to the Sierra Nevada Mountains and connects southeast and southwest Fresno with Downtown Fresno. In the study area the facility is a six-lane freeway that provides regional access to the Courthouse Park primarily via the interchanges with Van Ness Avenue and Fulton Street

Local Facilities

Fresno Street, Tulare Street and Van Ness Avenue are classified as Collector and have two travel lanes in each direction, a raised median with turning lanes and on-street parking. M Street is classified as a one-way Collector and contains two southbound travel lanes and on-street parking in the study area.

Active Transportation

Active transportation refers to non-motorized means of travel such as walking or biking. Pedestrian facilities in the study area consist of a sidewalk network along the Downtown collector street grid and crosswalks at signalized intersections. Signalized mid-block pedestrian crossings are provided on all sides of Courthouse Park. Located within Courthouse Park, the Project site contains various paths and walkways. The pathways travel within the park and around the outer edges of the Project site and connect to the surrounding network of pedestrian facilities. An underground pedestrian tunnel is located at the edge of Courthouse Park between bus shelters A and B, under Van Ness Avenue, about 500 feet south from the Van Ness Avenue/Fresno Street intersection. This connection allows pedestrians to cross underneath Van Ness Avenue and access an underground parking garage, or emerge above ground at Mariposa Street. The Project site is roughly 400 feet away from the entrance of the pedestrian tunnel.

There are currently no dedicated bicycle facilities in the study area except for a Class II (striped on-street) bike lane along M Street in the southbound direction. Due to the lack of bicycle facilities, bicyclists utilize the existing pedestrian pathways in and around the park for travel. The City of Fresno Active Transportation Plan (December 2016) includes improvements to build a Class II bicycle facility along the northern side of M street and along both sides of Van Ness Avenue north of Fresno Street. Planned facilities also include a Class III (unstriped on-street) bike route along Van Ness Avenue between Fresno Street and Tulare Street, and a Class IV (separated) bikeway along Tulare Street.

Transit Facilities

The Courthouse Park area is served by both local and regional public transit, including the FAX and the Fresno County Rural Transit Agency (FCRTA). The Downtown Transit Mall located at Courthouse Park is a major transfer location between FAX Routes 1, 22, 26, 28, 30, 32, 34, and 38 as well as the FCRTA intercity bus routes. The current configuration of the Downtown Transit Mall has two bus shelters that front Van Ness Avenue (A Shelter and B Shelter) and one bus shelter (L Shelter) on Fresno Street. Bus headways range from one to two hours. FAX bus stops are also located on M Street and Tulare Street.

Public Parking

Public parking is provided by Parking Garage #8 (1077 Van Ness Ave Garage), where the public can exit the garage through the underground pedestrian tunnel to enter Courthouse Park. Other public parking structures within walking distance of the Project site include Garage #9 with 213 parking stalls located approximately 850 feet to the west off of Merced Street, Garage #4 with 313 parking stalls located approximately 1,650 feet to the south off of Tulare Street, and the Water Tower/Federal Lot with 90 parking stalls located approximately 1,200 feet to the northeast off of ‘O’ Street. Additionally, approximately 140 metered parking spaces are located along Fresno Street, Van Ness Avenue north of Fresno Street, L Street north of Fresno Street, and M Street north of Fresno Street. These metered parking spaces time limits vary from 30-minute parking to 2-hour or 4-hour parking.

3.17.2 REGULATORY SETTING

Federal

There are no federal plans, policies, regulations, or ordinances related to transportation that apply to the Project.

State

California Department of Transportation

The Caltrans is responsible for operating and maintaining the State highway system. In the project vicinity, SR-41, SR-99, and SR-180, along with all the freeway on- and off-ramps and their intersections with local streets, fall under Caltrans jurisdiction. Caltrans provides administrative support for transportation programming decisions made by the California Transportation Commission (CTC) for state funding programs. The State Transportation Improvement Program (STIP) is a multi-year capital improvement program that sets priorities and funds transportation projects envisioned in long-range transportation plans.

Under PRC §21099, once CEQA Guidelines were certified for determining the significance of transportation impacts based on vehicle miles traveled (VMT) the previous level of service (LOS) analysis is not to be used to determine the significance of transportation impacts. CEQA Guidelines, Title 14, CCR §15064.3 implements this CEQA requirement and the VMT analysis in this section was prepared in accordance with the CEQA Guidelines and the LCI Technical Advisory on Evaluating Transportation Impacts in CEQA (April 2018).

VMT screening criteria is used to identify if a project is expected to have a less than significant impact without conducting a project-level VMT analysis. The screening criteria outlined in the LCI Technical Advisory is based on factors such as project size, project type and project location. More specifically, categories include small project screening, neighborhood-serving retail screening, affordable housing screening, and transit supportive projects screening. The VMT threshold and criteria used for the Project site, as adopted by FCOG, is summarized in **Table 3.17-2**..

Table 3.17-2. Project VMT Screening Threshold

VMT Screening
Development Projects: • The project is located within 0.5 mile of a Transit Priority Area/High Quality Transit Area. • The project is a local-serving retail project, 50,000 SF or less. • The Project generates less than 500 ADT. • The project is a public facility, such as a police or fire station. • The project is a residential or employment project located in areas with low VMT.

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant.

Fresno Council of Governments (FCOG)

The FCOG is an association of local governments in Fresno County. FCOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues. In addition to preparing the region's long-range transportation plan, FCOG assists in planning for transit, bicycle networks, clean air, and airport land uses.

FCOG Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS)

The 2026 RTP/SCS is currently in development. The existing (2022) FCOG RTP/SCS is a federally mandated long-range fiscally constrained transportation plan for Fresno County. It includes only those projects which can be delivered with funds expected to be available and that will help attain and maintain air quality standards. The RTP/SCS also includes an integrated land use and transportation plan to meet GHG emission reduction targets set forth by CARB. To receive federal funding, transportation projects nominated by cities, counties, and agencies must be consistent with the RTP/SCS. The RTP/SCS provides a comprehensive assessment of all forms of transportation available in Fresno County and of the needs for travel and goods movement through 2040. The RTP/SCS includes the following relevant policies:

- Develop a regional streets and highways system that has a balanced mix of high speed and local corridors which are functional and flexible for intermodal use, providing connectivity to the region, state and nation.
- Integrate transportation modes through a coordinated transportation systems management process.
- Develop bicycle and pedestrian facilities as viable alternatives to single-occupancy vehicle use.
- Manage the highways, streets and roads network in a manner designed to increase operational efficiency, reduce air pollution and provide adequate mobility for both people and goods.

FCOG Regional Transportation Improvement Program (RTIP, 2024))

The Regional Transportation Improvement Program (RTIP) is a program of highway, local road, transit, and active transportation projects that a region plans to fund with State and Federal revenue programmed by the California Transportation Commission in the State Transportation Improvement Program (STIP). The program of projects in the RTIP is a subset of those projects in the RTP, a federally mandated master transportation plan which guides a region's transportation investments over a 20-to-25-year period. The RTP is based on all reasonably anticipated funding, including federal, state, and local sources. Updated

every four to five years, the RTP is developed through an extensive public participation process in the region and reflects the unique mobility, sustainability, and air quality needs of each region.

FCOG Fresno Bus Rapid Transit (BRT) Master Plan (2008)

The FCOG Bus Rapid Transit (BRT) Master Plan studies the possibility of BRT service in the Fresno-Clovis Metropolitan Area. The study recommends BRT service in the Ventura Avenue/Kings Canyon Road corridor and the Blackstone Avenue/Abby Street corridor with service routed through Downtown to connect the two corridors.

City of Fresno

City of Fresno Active Transportation Plan (2024)

The 2024 Fresno Active Transportation Plan updates the previous 2017 plan to address the City's growth and evolving transportation needs. The Active Transportation Plan emphasizes the City's commitment to active transportation by introducing new strategies based on the latest data and community input. The plan aims to increase the use of active transportation while promoting environmental sustainability, public health, and social equity. The Active Transportation Plan has seven goals and objectives:

- **Goal 1. Safety Enhancement**
  Objective: Reduce the number of injuries and fatalities for pedestrians and bicycles and users of mobility devices.
- **Goal 2. Connectivity, Accessibility and Comfort**
  Objective: Create a comprehensive, connected network of pedestrian and bicycle routes that link homes, workplaces, schools, parks, transit, and other key destinations that are comfortable and convenient.
- **Goal 3. Equity and Inclusivity**
  Objective: Ensure that active transportation options are accessible to all community members, regardless of age, ability, income, or background.
- **Goal 4. Economic Vitality & Quality of Life**
  Objective: Support local economies by improving access to businesses and reducing transportation costs for residents, and enhancing the overall quality of life by creating a more livable and vibrant community.
- **Goal 5. Education, Encouragement & Enforcement**
  Objective: Raise awareness and encourage the use of active transportation options.
- **Goal 6. Data Collection and Performance Monitoring**
  Objective: Track progress and adjust strategies based on data and community feedback.
- **Goal 7. Ongoing Maintenance**
  Objective: Maintain or improve the quality of bicycle and pedestrian infrastructure.

City of Fresno Downtown Transportation and Infrastructure Study (DTIS, 2007)

The City of Fresno Downtown Transportation and Infrastructure Study builds upon prior planning efforts to integrate and coordinate these plans and outline a strategy to implement transportation improvements. The recommendations from this study include:

- Consolidating rail traffic onto the Union Pacific Railroad (UPRR) corridor
- Increasing the importance of public transit as an access mode to Downtown
- Transitioning away from pulse operations at the current Courthouse Transit Center to a more urban street corridor service with bus stops on both curb faces of Van Ness Avenue
- Implement a Downtown Circulator linking parking, outlying employment and destination sites and the Downtown Core
- Supporting transit priority treatments, improved pedestrian facilities, and improve wayfinding in Downtown Fresno

City of Fresno General Plan - Chapter 4. Mobility and Transportation Element (Updated 2021)

The purpose of the Mobility and Transportation Element is to provide an efficient, multi-modal transportation system that will meet the needs of all residents throughout the planning period. The Element is based on a fundamental philosophy that travel needs can be met through a comprehensive program of transportation planning, land use planning, growth management strategies, and a new Complete Streets concept. This Element includes objectives and policies for all modes and all users of streets and highways, transit, sidewalks and trails, and bicycle transportation modes, as well as parking, goods movement strategies, and the City's airports. The Element includes the following relevant policies:

- *General Plan Goal 9.II.* Emphasize and plan for all modes of travel on local and Major Streets in Fresno. Facilitate travel by walking, biking, transit, and motor vehicle with interconnected and linked neighborhoods, districts, major campuses and public facilities, shopping centers and other service centers, and regional transportation such as air, rail, bus and highways.
- *MT-1-k. Multi-Modal Level of Service Standards.* Develop and use a tiered system of flexible, multi-modal Level of Service standards for streets designated by the Circulation Diagram (Figure MT-1). Strive to accommodate a peak hour vehicle LOS of D or better on street segments and at intersections, except where Policies MT-1-m through MT-1-p provide greater specificity. Establish minimum acceptable service levels for other modes and use them in the development review process.
- *MT-1-m. Standards for Planned Bus Rapid Transit Corridors and Activity Centers*. Give priority to maintaining pedestrian service first, followed by transit service and then by vehicle LOS, where conflicts between objectives for service capacity between different transportation modes occur.

Identify pedestrian-priority and transit-priority streets where these modes would have priority in order to apply a multi-modal priority system, as part of the General Plan implementation.

- *MT-2-g. Transportation Demand Management and Transportation System Management*. Pursue implementation of Transportation Demand Management and Transportation System Management strategies to reduce peak hour vehicle traffic and supplement the capacity of the transportation system.
- *MT-2-m. Use VMT Analysis for CEQA*. Use VMT as the criteria for evaluating transportation impacts under CEQA, pursuant to Senate Bill 743. Level of Service (LOS) may still be used for planning purposes and implementation of Capital Improvement Projects, however VMT shall be used for determining mitigation under CEQA beginning in July of 2020.
- *MT-4-i. Bicycling and Public Transportation*. Promote the integration of bicycling with other forms of transportation, including public transit. Continue to provide bike racks or space for bicycles on FAX bus.
- *MT-8-f. Multi-modal Downtown Transportation Facility*. Support the development of a multi-modal transportation facility in Downtown.

3.17.3 IMPACTS ANALYSIS

3.17.3.1 Methodology

The analysis included in this section is in accordance with the LCI (formerly OPR) Technical Advisory, consistent with CEQA Guidelines, Title 14, CCR §15064.3.

3.17.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to transportation if it would:

a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Demolition, Construction, and Operation

While local policies and plans do not apply to the Project and the Judicial Council is not subject to local land use regulations, there are no significant adverse environmental effects attributable to the Project that are the result of any inconsistency with programs, plans, ordinances, or policies addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.

The Project site is well-integrated into the existing circulation system. It is within walking distance of multiple bus routes, including ADA-compliant pedestrian infrastructure, and is adjacent to planned bicycle improvements per the City of Fresno Active Transportation Plan. Pedestrian access into the courthouse is proposed along the west side of the building along Courthouse Park, adjacent to Bus Shelter L. The Project site is served by both local and regional public transit, including FAX and the Fresno County Rural

Transit Agency. The Downtown Transit Mall located at Courthouse Park is a major transfer location between FAX Routes 1, 22, 26, 28, 30, 32, 34, and 38 as well as the FCRTA intercity bus routes.

Regional access to the Project site is provided via SR-41, SR-99 and SR-180. Access from SR-41 is provided via interchanges along M Street and Van Ness Avenue, about 0.6 miles to the southeast of the Project site. SR-99 access is provided via interchanges along Fresno Street, about 0.6 miles to the south. SR-180 access is provided via interchanges along Van Ness Avenue and Fulton Street, about 1 mile to the northwest. Local vehicular access to the Project site is provided via Fresno Street, M Street, Tulare Street, and Van Ness Avenue via interchanges along Van Ness Avenue and Fulton Street, about 5,000 feet away from the Project site.

Staff parking will continue to be provided in the restricted Courthouse Park underground employee parking lot. Public parking will continue to be provided by Parking Garage #4 (1919 Tulare Street, free parking for jurors) and Parking Garage #8 (1077 Van Ness Ave Garage, visitors), where the public exit the garage through the underground pedestrian tunnel to Courthouse Park. Other public parking structures within walking distance of the Project site include Garage #9 with 213 parking stalls located approximately 850 feet to the west off of Merced Street, and the Water Tower/Federal Lot with 90 parking stalls located approximately 1,200 feet to the northeast off of ‘O’ Street. Additionally, approximately 140 metered parking spaces are located along Fresno Street, Van Ness Avenue north of Fresno Street, L Street north of Fresno Street, and M Street north of Fresno Street. These metered parking spaces time limits vary from 30-minute parking to 2-hour or 4-hour parking.

The consolidation of court services to one central location with a direct connection to the Fresno County Jail would reduce vehicular trips and vehicular and pedestrian trip lengths by eliminating routine inter-facility prisoner transport, reducing mid-day travel between dispersed court buildings by staff and justice partners, and shortening travel distances for court users who currently must access multiple downtown locations to complete related court functions. Reducing vehicular trips would be consistent with City policies and not in conflict with the General Plan, any program plan, ordinance, or policy addressing the circulation system. The Project does not propose to amend or adjust roadway classifications, the roadway network, transit routes, or bicycle networks as identified in the FCOG RTP/SCS, FCOG RTIP, FCOG Fresno BRT Master Plan, the City’s Active Transportation Plan, or the City’s General Plan.

Therefore, the Project would have a less than significant impact.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

Demolition, Construction, and Operation

According to CEQA Guidelines §15064.3 Subdivision (b)(1), VMT exceeding an applicable threshold of significance may indicate a significant impact. The regulation states that "projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact." This Project meets these criteria and is presumed to have a less than significant impact.

While local policies and plans do not apply to the Project and the Judicial Council is not subject to local land use regulations, there are no significant adverse environmental effects attributable to the Project that are the result of any inconsistency with programs, plans, ordinances, or policies addressing VMT. The City has screening criteria (**Table 3.17-2**.) to identify if a project is expected to have a less than significant impact and is exempt from conducting a full VMT analysis. The Project also meets three of the City's screening criteria:

- *The project is located within 0.5 mile of a Transit Priority Area/High Quality Transit Area.*
- *The project is a public facility, such as a police or fire station.*
- *The project is a residential or employment project located in areas with low VMT.*

Based on the City of Fresno VMT/Employee Screening Map, the Project is located in an area (Downtown Fresno) with low VMT (less than the threshold of 22.3 VMT/employee).

Based on both of the measures above, the Project is presumed to have a less than significant impact on VMT and is exempt from conducting a full VMT analysis.

Construction-related VMT is addressed in the context of air quality and GHGs as part of a separate study. Construction VMT is temporary and is not applicable to the transportation thresholds of significance recommended in the LCI Technical Advisory, which are based on a measurement of the operational average VMT per capita.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Demolition, Construction, and Operation

The Project does not propose to amend or adjust the study area roadway geometry, intersection and mid-block pedestrian crossing geometry or control, or propose changes to the study area pedestrian and bicycle networks.

Secured parking for executive staff and judges is proposed in the Project site basement. Driveway access to this underground parking lot is proposed along M Street between the driveway exit for the existing Sheriff's Office/North Annex Jail parking stalls along Fresno Street and the existing entrance ramp for the underground employee parking lot. The proposed underground parking driveway on M Street would require a redesign of the existing underground parking garage entrance to ensure safety and visibility requirements are satisfied as required by mitigation measure TRA-2.

Construction is planned to occur over 48 months and is anticipated to start in October 2029 and be completed by October 2033. Construction is anticipated to occur in the following phases: Site Preparation, Grading, Building Construction, Paving, and Architectural Coating. It is expected that lane closures of Fresno Street and potentially 'M' Street would be required during construction phases. Some construction materials would be stored onsite, likely between the north end of the existing South Annex Jail building and the northern property line. However, due to property line limits, the construction contractor will likely need to lease office space close to the Project site, as well as a nearby empty lot for storage.

Construction equipment and activities would involve access via multiple routes depending on the activities (e.g., material and equipment source(s), material or equipment point of origin). The following State Routes and major and minor arterial roads may be utilized by construction equipment and vehicles: SR-180, SR-99, SR-41, Fresno Street, Van Ness Avenue, Tulare Street, Fulton Street, and 'M' Street. Contractors will generally provide parking for construction personnel offsite in the areas surrounding the Project site. At peak construction it is anticipated the Project will require up to 300 workers. It is anticipated construction would require the export of approximately 1,000,000 CY of material and import of approximately 1,000 CY of fill material.

A TMP is recommended to minimize temporary traffic-related impacts during the Project's construction phase. The TMP would outline construction traffic levels, routes, as well as traffic control adjacent to the Project site. The TMP would also include an evaluation of short-term construction-related impacts to Project vicinity roadways and provide mitigations, where applicable, to minimize hazards during construction due to temporary changes in the geometric design.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

TRA-1: Transportation Management Plan. The TMP shall include measures to maintain safe and efficient circulation during all construction phases. Prior to commencement of construction activities, the Applicant shall prepare and implement a Transportation Management Plan (TMP) for City review and approval. The TMP shall at minimum

- Identify construction traffic routes,
- Anticipated construction vehicle volumes,
- Temporary roadway modifications,
- Lane closures, pedestrian and bicycle access provisions, and
- Traffic control measures.

TRA-2: Driveway Design. Prior to issuance of building permits, the Applicant shall redesign the underground parking driveway entrance on M Street to comply with applicable City engineering standards and sight distance and vehicular safety requirements, as determined by the City Engineer. The redesign shall ensure adequate vehicle and pedestrian visibility and safe ingress and egress operations. Final design plans shall be reviewed and approved by the City prior to occupancy.

Level of Significance After Mitigation

Less than Significant Impact.

d. Result in inadequate emergency access?

Existing emergency access to the Project site is maintained via multiple surrounding streets (Fresno Street, M Street, Tulare Street, and Van Ness Avenue). The Project design includes a secure sallyport and underground parking with controlled access. No barriers to emergency response are anticipated. Coordination with the City Fire Department would be required as part of the City permitting process consistency with applicable fire codes including setbacks, fire suppression, site access, emergency vehicle turn-around, and water supply/storage requirements.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

3.18 Tribal Cultural Resources

This section describes the existing environment for tribal cultural resources within and around the Project site and evaluates the potential for impacts related to tribal cultural resources to occur as a result of development of the Project. Section *4.4 Cultural Resources*, addresses impacts on built environment and archaeological/historical cultural resources. The term tribal cultural resources refers to sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are (1) included in or determined eligible for inclusion in the CRHR, (2) included in a qualifying local register of historic resources, or (3) other resources that have been determined by a lead agency to be significant pursuant to the criteria for listing in the CRHR while considering the significance of the resource to a California Native American tribe. Included in this section are brief descriptions of the ethnographic and contemporary setting of the Project site.

3.18.1 EXISTING CONDITIONS

Ethnographic Setting

Prior to Euroamerican settlement, the Fresno area has traditionally been home to Southern Valley Yokuts, an Indigenous language and cultural group. Population estimates for the Central Valley, prior to European arrival in the Americas, hover in the 100,000 range (Rosenthal et al. 2007).

Ethnographically, Yokuts groups are known for dense settlements and complex sociopolitical organization, even compared with other Indigenous Californian groups (Bettinger 2015). In terms of subsistence, the San Joaquin River and its many tributaries were the lifeblood of Yokuts survival. Salmon were among the most important fish, as were white sturgeon and river perch. Waterfowl, such as geese and ducks, were also a key resource (Wallace 1978). Wild plant foods like acorn were of “prime significance” (Wallace 1978:464), as were tule roots and a variety of seeds.

With the emergence of the Mission period in 1776, the lifeways of Indigenous Californians were rapidly and massively disrupted. Starting in the 1800s, Valley Yokuts-speakers were recruited, both voluntarily and by force, to labor at Missions San Jose and Santa Clara (Arkush 2011). Many native Californians, including Yokuts, were driven out of their traditional homelands by Euroamerican settlers seeking fertile farmland. From 1851-1852, the U.S. government negotiated 18 treaties in California though lobbying from Euroamerican groups led the U.S. senate to reject ratification. In 1853, Congress authorized the establishment of five reservations in California to be established in conjunction with military posts, with more reservations being authorized in subsequent years despite squatters living on tribal lands, attempts to remove reservations, and government corruption and mismanagement (Castillo 1978:109-110, 112, 116). On January 12, 1891, Congress passed the Relief of Mission Indians Act in California, later amended in 1898, to address land that had been granted to native Californians during the Mission period and removed from their possession after Mexican secularization in 1834. This act resulted in small land allotments known as rancherias being assigned to clusters of native Californians in northern California. In 1851, the BIA implemented the “Termination” policy which sought to end services to native Californians and transfer all authority over federal Indian reservations to the State. This resulted in 23 rancherias and reservations being terminated between 1958 and 1970, though 17 rancherias have since reversed the

termination processed (Castillo 2026). As of 2024, at least eight California Native American tribes represent Yokuts-speakers.

Today, many Yokuts groups are working to continue and revitalize their traditional cultural practices and continue to pursue self-determination. Longstanding cultural practices include prescribed burns for landscape management. Tribal gaming has been an important source of economic sovereignty for some of the Yokuts governments that have been acknowledged or recognized by the United States government. However, some of the Yokuts-speaking California Native American tribes still have not been acknowledged or recognized by the United States. The Picayune Rancheria of Chukchansi (Southern) Yokuts has a tribal gaming facility near Fresno, and has been active in pursuing and supporting language and cultural revitalization.

3.18.2 REGULATORY SETTING

Federal

There are no federal plans, policies, regulations, or ordinances related to tribal cultural resource that apply to the Project.

State

CEQA defines a “tribal cultural resource” as any one of the following (PRC §21074):

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either (1) included in or eligible for inclusion in the CRHR, or (2) included in a local register of historical resources.
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. The lead agency shall consider the significance of the resource to a California Native American tribe.
- A cultural landscape that meets the requirements listed above and is geographically defined in size and scope.

Archaeological sites, including those that qualify as historical resources (PRC §21084.1), unique archaeological resources (PRC §21083.2(g)), and non-unique archaeological resources (PRC §21083.2(h)), may qualify as tribal cultural resources.

Prior to the release of a Negative Declaration, Mitigated Negative Declaration, or EIR, the agency must initiate consultation with tribes that are traditionally and culturally affiliated with the geographic area of the proposed project if (1) the tribe requested of the agency, in writing, to be informed through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe; and (2) the tribe responds, in writing, within 30 days of receipt of the formal notification of a proposed project and requests consultation with the agency (PRC §21080.3.1(b)).

Consultation is concluded when the agency and tribe(s) agree to measures to avoid or mitigate significant effects on all tribal cultural resources, or if either party concludes that mutual agreement cannot be reached after a good-faith and reasonable effort (PRC §21080.3.2(b)).

Health and Safety Code Section 70750.5 and Public Resources Code Section 5097.98

California Health and Safety Code Section 7050.5 requires that, in the event human remains are discovered during ground-disturbing activities, all work shall cease within the vicinity of the find and the county coroner shall be notified. The coroner must determine whether the remains are subject to their authority within two working days of notification. If the coroner determines that the remains are not subject to their authority and recognizes or has reason to believe the remains are those of a Native American individual, the coroner is required to notify the NAHC within 24 hours.

PRC §5097.98 establishes the procedures that apply following notification of the Native American Heritage Commission. Upon notification, the NAHC designates the most likely descendants, who are granted the opportunity to inspect the discovery site and make recommendations for the treatment or disposition of the remains and any associated grave goods. Ground-disturbing activities in the vicinity of the discovery must not resume until consultation with the most likely descendants has been completed and, where feasible, an agreement has been reached regarding the treatment of the remains.

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant. There are no local plans, policies, regulations, or ordinances related to tribal cultural resources that apply to the Project.

3.18.3 IMPACTS ANALYSIS

3.18.3.1 Methodology

The following section analyzes potential impacts on tribal cultural resources that may be caused by the Project. In accordance with PRC §21084.2, the analysis considers the potential for Project activities to cause a substantial adverse change in the significance of a tribal cultural resource. The NAHC is a state agency that maintains the Sacred Lands File (SLF), an official list of sites that have cultural and religious importance to California Native American tribes. To identify areas within the Project site that may be considered sensitive by local Indigenous tribal groups, the NAHC was contacted. The NAHC responded on February 14, 2025, with a negative result from its search of the SLF. The NAHC included in the response a list of 12 tribal representatives from six tribal groups that may be traditionally and culturally affiliated with the Project site. Invitation to consult letters pursuant to PRC §21080.3.1 were sent to the 12 representatives from the following six tribal groups on May 5, 2025. The letters included a brief description of the proposed project and its location, contact information for the Project, and a notification that the California Native American tribe had 30 days to request consultation.

- Amah Mutsun Tribal Band

- Kitanemuk & Yowlumne Tejon Indians
- Northern Valley Yokut / Ohlone Tribe
- Table Mountain Rancheria
- Tule River Indian Tribe
- Wuksachi Indian Tribe/Eshom Valley Band

The Judicial Council received communication from two of the above tribal groups: the Northern Valley Yokut / Ohlone Tribe and Table Mountain Rancheria. On June 9, 2025, the Judicial Council received communication via phone from the Northern Valley Yokut / Ohlone Tribe that stated in summary:

> No formal consultation, although they would like to be kept informed of the Project, especially results of TCR search in the area.

The Table Mountain Rancheria's May 13, 2025, letter did not request tribal consultation, although they would like to be kept informed in the unlikely event cultural resources are identified.

The Judicial Council sent follow-up emails to all 12 tribal representatives reminding tribal representatives of the 30-day deadline to request consultation. No additional responses were received. On July 18, 2025, the Judicial Council sent formal closure letters to all six tribes and 12 representatives, that the consultation process had concluded, pursuant to PRC §21080.3.1 and PRC §21084.3 (i.e., statutes implemented by AB 52). No California Native American tribe provided the Judicial Council with a written request for consultation during the period to request consultation.

3.18.3.2 Thresholds of Significance

The Project would have a significant effect if it would result in any of the conditions listed below.

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Demolition, Construction, and Operation

Implementation of the Project would involve demolition, grading, excavation, and other ground-disturbing activities that have the potential to encounter previously undiscovered tribal cultural resources. As discussed above, the NAHC Sacred Lands File search returned negative results for the Project site, indicating that no known sacred lands or tribal cultural resources have been identified within the Project area. In addition, pursuant to PRC §21080.3.1 consultation requirements, the Judicial Council contacted tribes traditionally and culturally affiliated with the Project area. While two tribal groups responded requesting to remain informed regarding the Project and any future discoveries, no tribe requested formal consultation and no tribal cultural resources were identified during the consultation process.

The Project site is located within a highly urbanized portion of Downtown Fresno that has been subject to substantial prior disturbance associated with historic development, demolition, utility installation, construction of the existing courthouse facilities, underground parking, roadways, and other infrastructure improvements. Existing conditions within the Project area substantially reduce the likelihood that intact tribal cultural resources remain within previously disturbed soils.

Based on the negative Sacred Lands File search results, the absence of identified tribal cultural resources within the Project site, the results of AB 52 outreach and consultation efforts, and the highly disturbed nature of the Project area, implementation of the Project would not cause a substantial adverse change in the significance of a known tribal cultural resource as defined by PRC §21074.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

3.19 Utilities and Service Systems

3.19.1 EXISTING CONDITIONS

The City provides many services to residents and businesses such as stormwater drainage, water, and wastewater. The Project site is served by existing utilities, some of which would be realigned within previously disturbed areas within the Project footprint to support the Project as detailed below.

Stormwater Drainage

The FMFCD provides flood control and urban stormwater management services for the Fresno and Clovis metropolitan areas. On average, FMFCD's regional stormwater basin system captures 92 percent of annual rainfall, of which, 70 to 85 percent of the captured stormwater runoff is recharged into the local groundwater aquifer via a retention basin (FMFCD 2020). A retention basin also removes 50 to 80 percent of the typical stormwater pollutants (FMFCD 2020). The FMFCD's regional retention basin system serves 90 percent of the urban area (including the Project's existing conditions). The Project site is located within Drainage Area FF, which conveys runoff to a stormwater retention basin at the northeast corner of South West Avenue and West Eden Avenue, approximately 2.17 miles west of the Project site. Drainage Area FF discharges directly to a terminal stormwater basin and does not discharge to a receiving water. Currently, onsite drainage inlets collect and convey stormwater to a 12-inch stormwater pipe along Fresno Street. The Project site does not lack complete or adequate storm drain infrastructure (City of Fresno 2023a). There are no proposed basins or future stormwater pipelines within the Project site (FMFCD 2013).

Water Supply

The City's Water Division is responsible for distributing potable water to the City's residential, commercial, and industrial customers. The City's water use in 2020 averaged 198 gallons per capita per day (GPCD) based on 121,993 acre feet (AF) of water production and a service area population of 550,217. Commercial and Institutional/Governmental customers accounted for approximately 13.9% (16,971 AF) of the water use in 2020. The City is far below its 2020 daily per capita water use target of 247 GPCD due to the extensive conservation efforts implemented by the City in the past decade. The projected water use for Commercial and Institutional/Governmental customers in 2035 is 22,587 AF (City of Fresno 2021).

Fresno meets its water demand from two sources: groundwater and treated surface water. The City has a network of over 270 municipal wells and currently operates approximately 202 municipal supply wells within the Kings Subbasin of the San Joaquin Valley Groundwater Basin (City of Fresno 2021). Four active groundwater wells are located within one mile of the Project, none of which are located in the Project site (City of Fresno 2021). While groundwater quality generally meets primary and secondary drinking water standards, the presence of contaminant plumes and Nitrate-Nitrogen concentrations poses an ongoing risk to the municipal water supply (City of Fresno 2021).

Surface water is treated at the Northeast Surface Water Treatment Facility and the Southeast Surface Water Treatment Facility. The Northeast Surface Water Treatment Facility has a treatment capacity of 30 MGD and the Southeast Surface Water Treatment Facility is permitted to treat 54 MGD but has the

capacity to treat up to 80 MGD in the future (City of Fresno 2026). The Southeast Surface Water Treatment Facility is 6.6 miles east of the Project and a recycled water master plan distribution line runs along Tulare Street, south of the Project (City of Fresno 2023a). Additional recycled water lines are proposed on Fresno Street and Van Ness Avenue.

Aging infrastructure is one of the City's deficits, approximately 30% of the water supply utility networks in Downtown Fresno are over 50 years old and approximately 5% are over 100 years old. These networks are nearing or past their intended life design and are subject to capacity, reliability, and potential failure issues (City of Fresno 2023a). The existing water lines along Fresno Street and Tulare Street were installed after 1950, but the water line along Van Ness Avenue was built pre-1950 (City of Fresno 2023a). However, none of the existing pipes connecting to the Project's existing facilities are identified for upgrades in order to ensure adequate capacity to serve the projected sewer demands.

Sanitary Sewage System

The City's Wastewater Management Division is responsible for the collection, conveyance, treatment, and reclamation of wastewater generated by the residential, commercial, and industrial sewer customers in the Fresno-Clovis metropolitan area. The Wastewater Management Division owns and operates two water reclamation facilities: 1) the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF) and 2) the North Fresno Wastewater Reclamation Facility, both of which can produce Title 22 recycled water for use within the City's service area. The North Fresno Wastewater Reclamation Facility is located in the northern portion of the City and receives and treats sewage from the nearby residential, commercial, and golf course master planned community. Wastewater from homes and businesses in the rest of the City (including the Project's existing facilities) travels through approximately 1,600 miles of sanitary sewer lines maintained by the Wastewater Management Division to the RWRF located southwest of the City (City of Fresno 2025b). The RWRF is a biological, secondary level treatment plant, treating a peak of 68 MGD of wastewater yearly (City of Fresno 2025b). The flows received at RWRF peaked at 81,100 AF in 2006 and have been steadily decreasing since, with the average influent flow about 63,000 AF since 2015 (City of Fresno 2021). For example, RWRF collected 63,652 AF of wastewater in 2020 (City of Fresno 2021). The City treats and provides this recycled water to commercial and industrial clients, and submits regular reports to the Central Valley RWQCB, as required, for compliance with applicable regulations (City of Fresno 2025a).

An existing 12-inch sewer main currently serves the existing Courthouse via a connection along Tulare Street. The sewer main runs through the alley located northeast of the Fresno County District Attorney building and eventually feeds into the RWRF.

Electricity and Natural Gas

PG&E currently supplies both electricity and natural gas to the existing facility at which the Project would be located. PG&E is a large utility company which provides natural gas and electric service to approximately 16 million people throughout a 70,000-square-mile service area in northern and central California.

Solid Waste

Mid Valley Disposal is responsible for the collection of municipal solid waste, recyclables, and green waste for commercial customers for the southern section of the City, which includes the Project site. Mid Valley Disposal has exclusive franchise for collecting and hauling commercial and multi-family solid waste and recycling material in the City (City of Fresno 2023b). The City's Solid Waste Management Division is only responsible for the collection of municipal solid waste, recyclables, and green waste for residential customers (not including the Project). The County of Fresno operates the American Avenue Disposal Site, which serves as the County's regional landfill for public and commercial solid waste haulers (such as Mid Valley Disposal). The American Avenue Disposal Site is estimated to be operational until 2031 (City of Fresno 2025d).

Telephone and Data Service

AT&T provides data services and VoIP provides telecommunications.

3.19.2 REGULATORY SETTING

Federal

Clean Water Act

The USEPA established primary drinking water standards in CWA Section 304 and states are required to ensure that potable water for the public meets these standards. Standards for 81 individual constituents have been established under the Safe Drinking Water Act of 1974 (SDWA), as amended in 1986. Under the CWA, stormwater discharges are regulated through NPDES municipal stormwater permits. In California, the SWRCB and its nine RWQCBs oversee implementation of the CWA, and the Central Valley RWQCB issues and enforces the NPDES.

State

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Sections 10610-10656) requires that all urban water suppliers with at least 3,000 customers prepare urban water management plans and update them every five years. The act requires that urban water management plans include a description of water management tools and options used by that entity that will increase resources and minimize the need to import water from other regions.

Clean Water Act

The SWRCB Division of Drinking Water (DDW), is responsible for implementing the federal Safe Drinking Water Act (SDWA) and California statutes and regulations related to drinking water. DDW inspects and provides regulatory oversight for public water systems throughout California. RWQCBs retain responsibility for protecting beneficial uses of the state's waters, including groundwater and municipal drinking water supplies, as well as other designated uses.

2025 California Building and Fire Code

The newly updated 2025 California Building and Fire Code (Title 24, CCR Part 9) establishes regulations for new and existing buildings, structures, and premises. The provisions of the Building Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout the State of California (CBSC 2025).

Statewide General Waste Discharge Requirements

The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ), as administered by the SWRCB, remain applicable to state agencies that own and operate more than one mile of pipe conveying untreated or partially treated wastewater to publicly owned treatment facilities. Agencies are required to develop, implement, and periodically update a Sewer System Management Plan, with sections submitted electronically to the SWRCB via the California Integrated Water Quality System. The City owns and maintains the wastewater collection system that serves the City and other participating agencies and has its own Sewer System Management Plan.

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) established statewide goals for solid waste diversion. Since 2016, SB 1383 has set more ambitious targets, requiring jurisdictions to divert 75% of organic waste from landfills by 2025 and implement programs for edible food recovery. Cities and counties must maintain and annually update solid waste, recycling, and household hazardous waste plans, prioritizing source reduction, recycling, composting, and environmentally safe disposal. Compliance is monitored by CalRecycle through annual reporting and enforcement actions.

Energy Efficiency Standards

Title 24, Part 6 of the California Building Code establishes energy efficiency standards for new construction, additions, alterations, and repairs. The standards are updated triennially; the current 2025 Building Energy Efficiency Standards became effective January 1, 2026. These standards require higher energy performance, electrification readiness, and integration of renewable energy and battery storage systems. California's climate legislation, including SB 32 and SB 100, mandates continued reductions in GHG emissions, with a statewide goal of carbon neutrality by 2045. Building permit applications must comply with the latest adopted standards at the time of submittal. In addition, Title 24, Part 11 requires a minimum 65 percent diversion of non-hazardous construction and demolition waste for most nonresidential projects, unless superseded by a more stringent local ordinance.

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant.

Fresno County General Plan

Fresno County's General Plan discusses utilities and service systems in the Public Facilities and Services (PF) Element. The PF Element includes goals and policies organized into sections, six of which are relevant to utilities and service systems: General Public Facilities and Services; Water Supply and Delivery; Wastewater Collection, Treatment, and Disposal; Storm Drainage and Flood Control; Landfills, Transfer Stations, and Solid Waste Processing Facilities; and Utilities. Fresno County's General Plan lists the following policies relevant to utilities related to the Project:

- **PF-D.5 Reduced Wastewater System Demand:** The County shall promote efficient water use and reduced wastewater system demand by:
    - a. Requiring water conserving design and equipment in new construction;
    - b. Encouraging retrofitting with water conserving devices; and
    - c. Designing wastewater systems to minimize inflow and infiltration, to the extent economically feasible.
- **PF-E.11 Natural Site Drainage Patterns**: The County shall encourage project designs that minimize drainage concentrations and maintain, to the extent feasible, natural site drainage patterns.
- **PF-F.1 Solid Waste Source Reduction:** The County shall continue to promote maximum use of solid waste source reduction, reuse, recycling, composting, and environmentally-safe transformation of wastes.
- **PF-J.3 On-site Underground Utility Lines:** The County shall require all new residential development along with new urban commercial and industrial development to underground utility lines on-site.

City of Fresno General Plan

The City of Fresno's General Plan Chapter 6: Public Utilities and Services Element describes the planning, provision, and maintenance of water, wastewater, solid waste systems, and other facilities present within the City. The City of Fresno General Plan lists the following policies relevant to utilities related to the Project:

- **Objective PU-4:** Ensure provision of adequate trunk sewer and collector main capacities to serve existing and planned urban development, consistent with the Wastewater Master Plan.
- **Objective PU-5:** Preserve groundwater quality and ensure that the health and safety of the entire Fresno community is not impaired by use of private, on-site disposal systems.
- **Policy PU-5-b:** Non-Regional Treatment. Discourage, and when determined appropriate, oppose the use of private wastewater (septic) disposal systems, community wastewater disposal systems, or other non-regional sewage treatment and disposal systems within or adjacent to the

Metropolitan Area if these types of wastewater treatment facilities would cause discharges that could result in groundwater degradation.

- **Policy PU-7-a:** Reduce Wastewater. Identify and consider implementing water conservation standards and other programs and policies, as determined appropriate, to reduce wastewater flows.
- **Policy PU-8-c: Conditions of Approval.** Set appropriate conditions of approval for each new development proposal to ensure that the necessary potable water production and supply facilities and water resources are in place prior to occupancy.
- **Policy PU-8-g: Review Project Impact on Supply:** Mitigate the effects of development and capital improvement projects on the long-range water budget to ensure an adequate water supply for current and future uses.
- **Objective PU-9:** Provide adequate solid waste facilities and services for the collection, transfer, recycling, and disposal of refuse.

Fulton Corridor Specific Plan

The FCSP describes the City's commitment to retaining, restoring, and enhancing the level of service and quality of service provided for water, sewer, and recycled water services. The FCSP has six Infrastructure Strategies to accomplish this commitment, which include:

- Enable the Downtown area to thrive with additional surface water supply and recycled water supply facilities.
- Bolster the City's burgeoning recycled water program and supplement its alternative water resources.
- Implement Low Impact Development stormwater design guidelines that integrate into complete streets, open space, and high-density development.
- Promote local renewable power generation. Develop a more energy independent community and reduce the carbon footprint of the Plan Area.
- Minimize resource consumption by all new structures, renovated buildings, and infrastructure facilities to reduce costs and support the local economy, and improve the natural environment.

3.19.3 IMPACTS ANALYSIS

3.19.3.1 Methodology

The following reports and data sources document utilities and service systems relevant to the Project site and were reviewed for this analysis:

- Available literature, including documents published by federal, state, Fresno County, and the City; and,
- Relevant elements from the Fresno County General Plan, City of Fresno General Plan, and FCSP.

Construction and operation activities associated with the Project were evaluated against the utilities and service systems information gathered from these sources to determine whether new or expanded utilities are required to support the Project or if existing utilities have sufficient capacity to support Project activities and would only require realignment.

There are three phases of the Project that may impact utilities and service systems: 1) demolition of existing structures at the Project site, 2) construction of the new Fresno Courthouse, and 3) operation of the new Fresno Courthouse. Potential impacts are described below.

3.19.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the Project would have a significant impact related to utilities and service systems if it would:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Demolition and Construction

The existing utilities and level of service are sufficient for the Project, although they may require realignment within previously disturbed areas within the Project footprint. Stormwater drainage would not be realigned for the Project, but water, wastewater, electric power, and telecommunications realignments would occur within existing paved areas or previously disturbed rights-of-ways. Natural gas infrastructure would be removed from the demolished buildings entirely and not installed in the new courthouse, as the Project would be all-electric.

While realignment may be necessary to meet operational needs, no major relocations, new off-site facilities, or new ground disturbance extending beyond the Project site boundaries are proposed. Demolition of the existing courthouse buildings and park hardscape would require temporary utility shutoffs, minor utility removals, and protection-in-place of active lines at Courthouse Park. These activities would generate temporary construction impacts such as ground disturbance, short-term traffic control, noise, and dust. These impacts are typical of construction activities and would occur only during the demolition and construction period between October 2029 and October 2033. No expansion of the Northeast Surface Water Treatment Facility, Southeast Surface Water Treatment Facility, or RWRF are proposed or required as part of this Project. With standard construction BMPs required under the State Construction General Permit, and applicable City specifications, temporary impacts due to the

realignment of existing water, wastewater, electric power, and natural gas utilities would be less than significant.

Operation

Long-term Project operations would result in energy and water usage and would generate wastewater. Operational energy consumption would be associated with electricity required to operate appliances and equipment, such as space and water heaters, air conditioners, ventilation equipment, lights, and other electronic devices. The Project is expected to utilize the same level of service for water, sewer, stormwater, electricity, telecommunications, and gas systems as the existing facilities on the Project site. Therefore, the Project-generated stormwater runoff is not expected to deviate from existing levels and thus, not exacerbate the existing drainage system which the City has previously identified as sufficient (City of Fresno 2023a).

The Project would require a new fire suppression sprinkler system; however, the existing water supply system is anticipated to have sufficient capacity to meet the required flow for fire protection. The existing sewer main is also anticipated to service the Project. Future wastewater flows are expected to be consistent with existing conditions; therefore, no impacts to the existing sewer collection system are anticipated. The existing electrical distribution system in the area should be adequate and capable of servicing the Project . Routine utility demands would not trigger new off-site capital projects. Data services and telecommunications would continue to be provided by AT&T and VoIP during operation. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Demolition and Construction

Water use during demolition and construction would consist of dust control, soil conditioning, and equipment needs. Volumes are temporary and relatively small compared to available municipal supplies and would be coordinated through standard construction water service procedures. Temporary construction demand would not affect supply reliability. Impacts would be less than significant.

Operation

The Project site is served by existing 8-inch and 12-inch water mains, and the anticipated demand (8,000 gallons per day of potable water) is comparable to existing government operations (i.e., Fresno County Superior Court, Fresno County Sheriff's Office, South Annex Jail, and Hall of Records) on the Project parcel (APN 466-160-01T). The facility is anticipated to generate approximately 3,600 gallons per day of wastewater. The City's 2020 Urban Water Management Plan estimates future water use for eight land use categories: Single-Family Residential, Multifamily Residential, Commercial, Public Facility, Industrial, Open Space/Landscape Irrigation, Mixed Use, and Downtown. Institutional and Governmental water usage (including the existing courthouse operations and the Project) is included in the Commercial use type (City of Fresno 2021). The Project's demand represents a very small fraction of regional supplies and water demand for Commercial land use categories (22,587 acre-feet for 2035) and does not alter dry-year reliability conclusions because the existing operations are similar to the Project. In addition, no new water rights or major supply facilities would be required beyond the distribution improvements to the water and wastewater systems within existing paved areas or previously disturbed rights-of-ways. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

c. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Demolition, Construction, and Operation

Sanitary wastewater during construction would be limited to portable facilities serviced off-site for workers. Construction dewatering is not expected because the anticipated water table is 100 feet below grade, but would be managed under applicable permits separate from sanitary flows. The Project would connect to an existing 12-inch sewer main currently serving the courthouse. During operations, the facility is anticipated to generate approximately 3,600 gallons per day of wastewater, which remains consistent with existing conditions. Onsite sewer is anticipated to connect into the existing system on the Project site and utilize the existing piping that ultimately connects to the RWRF.

The City's Wastewater Management Division currently provides wastewater treatment services to the Project site and would continue to provide services to the new courthouse facility. Wastewater to the Project site is conveyed through a wastewater collection system to the RWRF. The RWRF has a

permitted peak wet weather flow capacity of 68 MGD (City of Fresno 2025b). The City anticipates a decrease in flows received at RWRF (City of Fresno 2021). The Project is anticipated to generate 3,600 gallons per day of wastewater. The Project does not include the construction or use of septic tanks or alternative wastewater disposal systems. The existing and planned output of wastewater from the Project would be approximately 0.0053 percent of the peak wet weather flow capacity (68 MGD), which is the maximum expected flow to the system. As such, increased wastewater generation resulting from the Project would not have a significant impact on RWRF's capacity to service its existing commitments and it would be anticipated that the City would determine that the RWRF has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Demolition and Construction

Demolition and construction activities would generate construction and demolition debris, including materials such as concrete, asphalt, wood, and metals. State law requires diversion of certain construction and demolition materials. For example, California's CALGreen Code (Title 24, Part 11) requires a minimum 65 percent diversion of non-hazardous construction and demolition waste for nonresidential demolition projects. CALGreen Title 24, Part 11 also defers to local regulations for recycling of construction and demolition materials; the City requires recycling for any City-issued building, relocation, or demolition permit that generate at least 8 CY of material by volume (which the Project would produce). Thus, the Project would recycle a majority of its demolition and construction materials. Mid Valley Disposal provides solid waste collection for the Project and there are six City-approved disposal facilities for construction and demolition debris (City of Fresno 2020). The volume of construction and demolition waste generated by the Project would represent a small fraction of available landfill capacity for six facilities. CALGreen Title 24, Part 11 also requires the preparation and implementation of a Construction Waste Management Plan and submission of documentation (weight tickets, facility reports, etc.) for maintain compliance. The Judicial Council would comply with these local requirements for waste management. With Project compliance to these standards, impacts would be less than significant.

Operation

During operations, the Project would generate municipal solid waste typical of office and public service uses. Mid Valley Disposal would collect and transport solid waste to the Mid Valley Disposal Transfer Station, with ultimate disposal at the American Avenue Disposal Site. The projected waste generation from courthouse operations would not exceed the capacity of local infrastructure or conflict with state or local solid waste reduction goals. The Project would be subject to the requirements of the California Integrated Waste Management Act (AB 939) and SB 1383, which mandates diversion of organic waste and recycling. Compliance with these statutes would be required as a condition of service. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Demolition and Construction

Demolition and construction activities would be subject to California Integrated Waste Management Act (AB 939) requirements, as well as applicable statues and regulations and CalRecycle regulations. Contractors would be required to separate and properly dispose of construction and demolition debris, including hazardous materials if encountered, at permitted facilities such as the Mid Valley Disposal Transfer Station. State law mandates diversion of certain materials from landfill, and local infrastructure supports compliance with these requirements. No aspect of the Project would conflict with or prevent adherence to applicable federal, State, or local solid waste management statutes.

Operation

During operations, the Project would continue to participate in the local solid waste collection program, which is managed by Mid Valley Disposal and regulated by the City and County. The Project would be subject to ongoing requirements under AB 939 and SB 1383, which mandates diversion of recyclables and organic waste. No component of the Project would interfere with or prevent compliance with applicable solid waste management and reduction regulations.

Level of Significance Before Mitigation

Less than Significant Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than Significant Impact.

3.20 Wildfire

The following section addresses potential impacts related to wildfire associated with historic and current land use of the Project site and surrounding uses. This section first provides a description of existing environmental setting information and identifies wildfire potential within the Project site based on State and local mapping. Next, a brief description of laws, regulations, and ordinances pertinent to the Project is presented. The analysis describes impacts related to wildfire risks. The potential for impacts on emergency response plans is also addressed in this section and Section 3.9 “Hazards and Hazardous Materials” of this EIR. Service levels by fire personnel and other emergency responders are addressed in Section 3.15, “Public Services,” of this EIR.

3.20.1 EXISTING CONDITIONS

Environmental Setting

The Project site is not located in a Fire Hazard Severity Zone (FHSZ), indicating the lowest level of wildfire risk based on lack of natural fuels, flat topography, and urban development (CAL FIRE 2025a). Potential fuels in the Project site include landscaping and the existing office building and other structures. The Project site is within an urban area, but not within the wildland urban interface, where development meets flammable vegetation, increasing risks of fire spread and ember intrusion. The overall topography is extremely low gradient with elevations ranging from approximately 285 to 300 feet above mean sea level. Wind data from the nearest long-term meteorological stations indicate that average wind speeds in the Fresno urban core are low to moderate (between 0 and 10 miles per hour) and are not characterized by episodic, high-velocity downslope or foehn wind events that are commonly associated with rapid wildfire spread in other regions of California (Weather Underground 2026).

Fire History

No wildfires over ten acres have occurred onsite, according to CAL FIRE’s Fire and Resource Assessment Program. The 2024 Fresno June Lightning Complex Fire is the most recent nearby recorded fire, occurring approximately 30 miles east of the Project site (CAL FIRE 2025b).

Fire Protection

The Project site is within a Local Responsibility Area (LRA), meaning fire protection falls under the City of Fresno Fire Department. The nearest station is the City Fire Department Headquarters, located 0.3 miles southwest from the Project site at 911 H St, Fresno, CA 93721. Approximately 28% of all calls for the City Fire Department are for vegetation fires, vehicle fires, and debris fires (City of Fresno General Plan).

3.20.2 REGULATORY SETTING

Federal

National Fire Protection Association Standards

The National Fire Prevention Association (NFPA) is a global, non-profit organization that promotes safety standards, education, training, and advocacy on fire and electrical-related hazards. NFPA codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by the American National Standards Institute (NFPA 2024). NFPA standards are recommended guidelines in fire protection but are not laws or "codes" unless adopted or referenced as such by the California Fire Code (CFC) or local fire agency. Specific standards applicable to wildland fire hazards include, but are not limited to:

- NFPA 1 - Fire Code 2024
- NFPA 1141 - Fire Protection Infrastructure for Land Development in Wildlands
- NFPA 1142 - Water Supplies for Suburban and Rural Fire Fighting
- NFPA 1143 - Wildland Fire Management
- NFPA 1144 - Reducing Structure Ignition Hazards from Wildland Fire
- NFPA 1710 - Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations

State

Fire Safety During Construction and Demolition (CFC Chapter 33)

CFC Chapter 33 outlines general fire safety precautions for all structures and all occupancies during construction and demolition operations. In general, these requirements seek to maintain required levels of fire protection, limit fire spread, establish the appropriate operation of equipment, and promote prompt response to fire emergencies. There is an emphasis on owner responsibility and the need to create and implement a site safety plan. Features regulated include fire protection systems, fire fighter access to the site and building, water supply, means of egress, hazardous materials storage and use, and temporary heating equipment and other ignition sources.

2025 California Building and Fire Code

The newly updated 2025 California Building and Fire Code (Title 24, CCR Part 9) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure

throughout the State of California (CBSC 2025). The updated Part 7 (California Wildland-Urban Interface Code) replaces the previous Chapter 7A and imposes stricter wildfire-resistance requirements (such as fire-rated, ember-resistant vents) for buildings in wildland urban interface zones.

California Health and Safety Code

Additional state fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code. They include regulations for building standards as set forth in the California Building Code, fire protection and notification systems, fire protection devices such as extinguishers, smoke alarms, high-rise buildings, childcare facility standards, and fire suppression training.

California Public Resource Code Sections 4290 and 4291

California Public Resource Code Sections 4290 and 4291 require property owners to conduct maintenance to reduce fire danger. Required fire maintenance includes, but is not limited to, maintaining 100 feet of defensible space along all sides of a structure or up to the property line; removing dead or dying vegetative materials, trees, and/or shrubs; constructing fire breaks or other appropriate vegetation management techniques around fire-sensitive land uses (i.e., hospitals, adult residential care facilities, schools, storage tanks, and hazardous materials facilities); and maintaining vegetative clearings near electrical transmission or distribution lines.

CAL FIRE Strategic Plan

The 2024 Strategic Fire Plan for California focuses on fire prevention, suppression, and natural resource management to reduce wildfire hazards and protect lives, property, and ecosystems (CAL FIRE 2024).

Local

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant.

Fresno County Multi-Jurisdictional Hazard Mitigation Plan

The 2024 Fresno County Multi-Jurisdictional Hazard Mitigation Plan (HMP) aims to reduce or eliminate long-term risk to people and property from hazards. The City is one of 18 participating jurisdictions (including Fresno County) and is covered in its own Jurisdictional Annex. The HMP provides a risk assessment that identifies and profiled hazards that pose a risk to Fresno County and participating jurisdictions (i.e., the City), assesses the vulnerability of the City to these hazards, and examines the existing capabilities to mitigate them. the Jurisdictional Annex details the hazard mitigation planning elements specific to the City. Wildfire is considered Highly Likely to occur, a Critical hazard, and of Medium significance. However, the HMP states there are no critical facilities in wildfire threat zones in the City (Fresno County 2024). According to the HMP, almost all of the City parcels at risk are in the San Joaquin River corridor, where development is very restricted due to flood risk and bluff instability.

Fresno County General Plan

Fresno County's General Plan discusses fire hazards in the Health and Safety Element (HS). These elements includes goals and policies applicable to the Project:

- **Goal HS-B.** To minimize the risk of loss of life, injury, and damage to property and natural resources resulting from fire hazards.
- **Goal HS-C.** To minimize the risk of loss of life, injury, and damage to property and natural resources resulting from fire hazards.

City of Fresno General Plan

The City of Fresno's General Plan Chapter 9: Noise and Safety Element identifies the natural and man-made public health and safety hazards that exiting within the City. Wildland fire is considered a potential hazard for small areas in northern Fresno, but the Element considers the City largely urbanized with minimal wildfire threats. Policies related to fire protection and response are outlined in Chapter 6: Public Utilities and Services Element. The following objectives from the Public Utilities and Services Element are applicable to the Project:

- PU-2. Ensure that the Fire Department's staffing and equipment resources are sufficient to meet all fire and emergency service level objectives and are provided in an efficient and cost effective manner.
- PU-3. Enhance the level of fire protection to meet the increasing demand for services from an increasing population.

3.20.3 IMPACTS ANALYSIS

3.20.3.1 Methodology

The following reports and data sources document wildfire risk in the Project site and were reviewed for this analysis:

- Available literature, including documents published by federal, state, Fresno County, and the City; and,
- Applicable elements from the Fresno County General Plan and the City of Fresno General Plan.

Construction and operation activities associated with the Project were evaluated against the wildfire risk information gathered from these sources to determine whether any increased wildfire risks would occur.

There are three phases of the Project that will be exposed to wildfire risk: 1) demolition of existing structures at Project site, 2) construction of the new Fresno Courthouse, and 3) operation of the new Fresno Courthouse. Potential impacts are described below.

3.20.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the Project would have a significant impact related to wildfire if it would:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

The Project site is not located in a FHSZ, indicating the lowest level of wildfire risk based on lack of natural fuels, flat topography, and urban development (CAL FIRE 2025a). The nearest FHSZ is over eight miles north of the Project site along the San Joaquin River. Therefore, the Project has no impact related to wildfire. The discussion below is provided in support of, and to further substantiate, this conclusion.

Demolition and Construction

Section 3.9, Hazards and Hazardous Materials, evaluates whether Project-related construction activities would substantially impair or physically interfere with an adopted emergency response or evacuation plan. The Project is located within an urbanized area with established emergency response infrastructure. It does not involve changes to roadways or access routes that would interfere with emergency plans. Emergency evacuation and access is considered feasible given the Project site's proximity to the City of Fresno Fire Department Headquarters. Nearby emergency responders have measures that can be deployed to aid in the movement of the demolition/construction personnel from danger. For instance, during evacuation events, State and/or local emergency responders provide active traffic control at intersections, close roads, provide detours for through traffic, and actively manage available travel lanes to facilitate evacuation away from the emergency. Such measures would be initiated in the event an evacuation is deemed necessary. Coordination with the City Fire Department would be required as part of the permitting process to demonstrate consistency with applicable fire codes including setbacks, fire suppression, site access, emergency vehicle turn-around, and water supply/storage requirements. Conformance with the City's Municipal Code and 2025 California Building Code and Fire Code, overseen by the City Fire Department, would reduce potential fire risk impacts to acceptable levels. Thus, there are no impacts regarding conflicts with emergency response plans during demolition and construction.

Operation

Fresno County's Office of Emergency Services (OES) coordinates emergency preparedness and response through the Fresno County Operational Area Master Plan, which provides a framework for countywide emergency coordination, including with incorporated cities. The County of Fresno has an adopted 2024 Fresno County Multi-Jurisdictional HMP, which profiles hazards that pose a risk to the community and the existing capabilities to mitigation them. The 2024 Fresno County Multi-Jurisdictional HMP does not include designated evacuation routes or a formal evacuation plan with detailed routing or procedures. The City of Fresno has an Emergency Operation Plan which includes evacuation procedures and routes, but limits public distribution of the complete EOP for public safety reasons (annexes, security procedures, etc.). Given no adopted emergency evacuation routes or detailed evacuation plans would be obstructed or interfered with by Project activities without property detouring and mitigation, the Project

would not substantially impair an adopted emergency response plan or emergency evacuation plan and have no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The Project site is not located in a FHSZ, indicating the lowest level of wildfire risk based on lack of natural fuels, flat topography, and urban development (CAL FIRE 2025a). The nearest FHSZ is over eight miles north of the Project site along the San Joaquin River. Therefore, the Project has no impact related to wildfire. The discussion below is provided in support of, and to further substantiate, this conclusion.

Demolition, Construction, and Operation

Since slopes at or above 15 percent would be a primary driver of increased fire spread and activity, the flat topography and minimal elevation change indicates there are no slopes that could exacerbate fire risk (Butler, Anderson, and Catchpole 2007). Wind data from the nearest long-term meteorological stations indicate that average wind speeds in the Fresno urban core are low to moderate (between 0 and 10 miles per hour) and are not characterized by episodic, high-velocity downslope or foehn wind events that are commonly associated with rapid wildfire spread in other regions of California (Weather Underground 2026). Areas surrounding the Project site consist of urban development with minimal ground cover or vegetation. The Project consists of the demolition of existing Fresno County Superior Courthouse facility and construction of a new courthouse in its general footprint and does not propose any design elements that would exacerbate fire-related risks. Because of the lack of abundant vegetation and the existing commercial and residential development surrounding the Project site, onsite and adjacent areas do not have the capability to support a wildfire. Therefore, the Project does not have the potential to expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impact would occur.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The Project site is not located in a FHSZ, indicating the lowest level of wildfire risk based on lack of natural fuels, flat topography, and urban development (CAL FIRE 2025a). The nearest FHSZ is over eight miles north of the Project site along the San Joaquin River. Therefore, the Project has no impact related to wildfire. The discussion below is provided in support of, and to further substantiate, this conclusion.

Demolition, Construction, and Operation

The Project site is not located within a wildfire hazard zone as specified by the CAL FIRE FHSZ Viewer (CAL FIRE 2025a). Areas surrounding the Project site consist of urban development with minimal ground cover or vegetation. Because of lack of abundant vegetation and existing commercial and residential development surrounding the Project site, onsite and adjacent areas do not have the capability to support a wildfire. Therefore, the Project components do not exacerbate wildfire risk and no impact would occur.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The Project site is not located in a FHSZ, indicating the lowest level of wildfire risk based on lack of natural fuels, flat topography, and urban development (CAL FIRE 2025a). The nearest FHSZ is over eight miles north of the Project site along the San Joaquin River. Therefore, the Project has no impact related to wildfire. The discussion below is provided in support of, and to further substantiate, this conclusion.

Demolition, Construction, and Operation

The Project site is not located within a wildfire hazard zone as specified by the CAL FIRE FHSZ Viewer (CAL FIRE 2025a). Areas surrounding the Project site consist of urban development with minimal ground cover or vegetation. The Project is not located near a hillslope or in an area subject to downstream flooding or landslides. As such, the Project does not include any design elements that would expose people or structures to significant risks, including downslope or downstream flooding or landslides, resulting from runoff, post-fire slope instability, or drainage changes. No impact would occur.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

No Impact.

4 Cumulative Impacts

4.1 Introduction

CEQA Guidelines, Title 14, CCR §15130(a) requires a discussion of the cumulative impacts of a project with the project's incremental effect is cumulatively considerable. Cumulatively considerable, as defined in CEQA Guidelines, Title 14, CCR §15065(a)(3), means that the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." CEQA Guidelines, Title 14, CCR §15355 defines a cumulative impact as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over time.

CEQA Guidelines, Title 14, CCR §15130 identifies two basic methods for establishing the cumulative environment in which a project is considered: the use of a list of past, present, and probable future projects or the use of adopted projections from general plan, specific plan, other regional planning document, or a certified EIR for such a planning document. This cumulative analysis uses the "projections" approach to identify the cumulative setting.

A list of planning documents and projects associated with these plans are provided in **Table 4.1-1** below. Probable future projects are those in the Project vicinity that have the possibility of interacting with the Project to generate a cumulative impact and either:

1. Are partially occupied or under construction;
2. Have received final discretionary approvals;
3. Have applications accepted as complete by local agencies and are currently undergoing environmental review;
4. Have been discussed publicly by an applicant or otherwise have become known to the lead agency, provided sufficient information is available about the project to allow at least a general analysis of environmental impacts and an evaluation that project implementation is likely.

The analysis also considers planning efforts that address regional environmental issues, such as conservation and water quality improvement programs, and potential effects associated with climate change. These plans, programs, and effects are discussed in relevant resource discussions below.

Table 4.1-1. Projects Contributing to Cumulative Impacts

Planning Document	Description
Fresno County General Plan	The Fresno County General Plan (General Plan) was adopted by the County Board of Supervisors on February 20. 2024. The General Plan serves as the primary, long-range policy framework guiding the County's physical growth, land development, and resource protection through the plan horizon year of 2042 and beyond. The County sees its primary role as being the protector of prime agricultural lands, open space, recreational opportunities, and environmental quality. Additionally, the County serves as the coordinator of countywide efforts to promote economic development. The General Plan contains goals, policies, and implementation programs that constitute the formal policy for land use and development in the County. In accordance with state law, the General Plan is the basis for determining acceptable land uses and other infrastructure needs. Consequently, the zoning code, Specific Plans, and individual public and private development proposals must be consistent with the General Plan goals, policies, and implementation programs. The General Plan addresses issues across eight topical elements: economic development, agriculture and land use, transportation, public facilities and services, open space and conservation, health and safety, environmental justice, and housing (adopted March 15, 2016 as a separate document).
Fulton Corridor Specific Plan	The Fulton Corridor Specific Plan (FCSP) was adopted by the City of Fresno on October 20, 2016, and establishes a comprehensive framework for revitalization and redevelopment in Downtown Fresno. The FCSP outlines a vision for reinvigorating downtown by encouraging higher-density development, adaptive reuse of historic structures, and a mix of residential, commercial, and entertainment uses. The plan includes detailed development standards and design guidelines to ensure high-quality architecture, pedestrian-oriented streetscapes, and cohesive urban form. It emphasizes placemaking, public realm improvements, and activation of ground-floor uses to enhance street life and economic vitality. In addition to land use and design policies, the FCSP addresses transportation and circulation improvements, including reconfiguration of Fulton Street, enhanced pedestrian and bicycle connectivity, and integration with transit services. The FCSP area comprises approximately 655 acres and is generally bounded to the north by Divisadero Street, to the west by State Route 99, to the south by State Route 41, and to the east by N Street and O Street.

4.2 Cumulative Projects Communications Summary

CEQA Guidelines, Title 14, CCR §15130(a) requires a discussion of cumulative impacts when a project's incremental effect is cumulatively considerable. CEQA Guidelines, Title 14, CCR §15065(a)(3) defines "cumulatively considerable" as the incremental effects of an individual project that are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. CEQA Guidelines, Title 14, CCR §15355 further defines a cumulative impact as two or more individual effects that, when considered together, are considerable or that compound or increase environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects occurring over time.

CEQA Guidelines, Title 14, CCR §15130 identifies two methods for establishing the cumulative setting in which a project is evaluated: (1) a list of past, present, and probable future projects producing related or cumulative impacts, or (2) a summary of projections contained in an adopted general plan, specific plan, regional planning document, or certified environmental impact report (EIR). This EIR utilizes the "projections" approach to evaluate cumulative conditions because no formal cumulative project list was provided by local agencies and because publicly available planning documents and development tracking resources provide the most comprehensive representation of anticipated growth and development trends in the Project area.

The cumulative analysis considers the environmental effects associated with regional growth projections, ongoing urban development, infrastructure improvements, and planned public and private development activities within the City of Fresno and Fresno County. The analysis also considers applicable regional planning efforts addressing environmental resources, including air quality management planning, transportation planning, water quality management, and statewide climate change regulatory programs.

Consistent with CEQA Guidelines, Title 14, CCR §15130(b)(1)(B), this cumulative analysis relies on projections contained within adopted and publicly available planning documents, including, but not limited to, the City of Fresno General Plan, Fresno County General Plan, regional transportation planning documents, publicly available development application records, and planning commission materials. These planning efforts collectively represent reasonably foreseeable future development within the Project vicinity and broader area of influence.

4.3 Cumulative Projects Communications Summary

In accordance with CEQA Guidelines, Title 14, CCR §15130, Stantec Consulting Services Inc. (Stantec), on behalf of the Judicial Council, conducted outreach to applicable local agencies between January and February 2026 to identify past, present, and reasonably foreseeable future projects for consideration in the cumulative impact analysis for the Project . Agency coordination included communication with the City of Fresno Planning Division and Fresno County regarding projects that may contribute to cumulative environmental impacts within the Project vicinity and broader area of influence.

Outreach efforts requested information regarding projects that were under construction, recently approved, undergoing environmental review, or otherwise reasonably foreseeable pursuant to CEQA Guidelines, Title 14, CCR §15130(b)(1)(A). In addition to direct agency coordination, Stantec reviewed publicly available planning and development resources maintained by the City and County to supplement cumulative project identification efforts and inform the cumulative analysis.

City of Fresno Outreach Summary

On January 20, 2026, Stantec contacted the City of Fresno Planning Division by phone and email and requested information regarding projects within the City that: (1) are partially occupied or under construction; (2) have received final discretionary approvals; (3) have applications accepted as complete and are currently undergoing environmental review; or (4) have otherwise become known to the lead agency.

On January 20, 2026, Saul Perez, Planner II with the City of Fresno Planning Division, responded via email stating that the City did not maintain an easily accessible list of active and recently completed projects and requested clarification regarding the geographic scope of the request and project location. Stantec responded and clarified that the Project is located within Downtown Fresno and requested any relevant projects the City was able to identify.

On January 22, 2026, Stantec submitted a follow-up email requesting any information identified by the City. On January 23, 2026, Mr. Perez responded and stated the City didn't have any projects worth considering in the area and directed Stantec to the City of Fresno's publicly available "Plans & Projects Under Review" webpage as the primary source of current project information. No projects were identified by City of Fresno for the cumulative project list.

County of Fresno Outreach Summary

On February 10, 2026, Stantec contacted Steven White with Fresno County by phone and email requesting guidance regarding projects recommended for inclusion in the cumulative impact analysis for the Project . During the phone discussion, County staff indicated that the County did not have any projects within the Project vicinity that would warrant consideration in the cumulative analysis.

On February 10, 2026, Stantec also submitted a separate email request to Raymond Hunter, Department Head and Director of General Services (ISD), Fresno County, requesting the same cumulative project information. Mr. Hunter responded and referred Stantec to Aaron Smith, Facilities Service Manager, for additional coordination and project-specific information.

Following the referral, Stantec contacted Mr. Smith by phone and email to request cumulative project information. On February 17, 2026, Stantec conducted an additional follow-up phone call and left a voicemail after no response was received from the initial outreach efforts. No projects were identified by City of Fresno for the cumulative project list.

Because neither the City nor County had identified any cumulative projects, this EIR relies primarily on the projections approach pursuant to CEQA Guidelines, Title 14, CCR §15130(b)(1)(B), supplemented by publicly available development information and adopted planning documents.

4.4 Cumulative Context

The geographic area that could be affected by implementation of the Project varies depending on the type of environmental resources being considered. **Table 4.2-1** presents the general geographic areas associated with the different resources addressed in this analysis. For the purpose of the cumulative context, the term "Project area" refers to the areas within the vicinity of the Project site and/or further away, depending on the resource topic under.

Table 4.2-1. Geographic Scope

Resource Topic	Geographic Area
Aesthetics	Local (Site and surrounding public viewpoints)

Resource Topic	Geographic Area
Air Quality	Regional (pollutant emissions that affect the air basins) and immediate Project vicinity (pollutant emissions that are highly localized)
Agriculture and Forestry Resources	Local and regional
Biological Resources	Local and regional
Cultural Resources	Local (limited to Site), with regional implications
Energy	Local and regional
Geology and Soils	Local
Greenhouse Gases	Global
Hazards and Hazardous Materials	Local (immediate Project area)
Hydrology and Waer Quality	Local and regional
Land Use and Planning	Local
Mineral Resources	Local
Noise	Local (immediate Project area) with the exception of transportation noise, which is local and regional
Population and Housing	Local and regional
Public Services	Local and regional
Recreation	Local and regional
Transportation	Local and regional
Tribal Cultural Resources	Local (limited to Site), with regional implications
Utilities and Service Systems	Local and regional
Wildfire	Local and regional

4.5 Planning Documents and Development Projections Contributing to Potential Cumulative Impacts

In lieu of a formal cumulative project list, this EIR relies on adopted plans, publicly available planning resources, and regional development projections to characterize the cumulative setting and reasonably foreseeable future development conditions. These planning documents and resources collectively identify anticipated urban growth, redevelopment activity, infrastructure improvements, transportation system changes, and public facility development that may contribute to cumulative environmental conditions within the Project area. Relevant planning documents and resources reviewed for purposes of the cumulative analysis include, but are not limited to, the following:

- County of Fresno General Plan; and
- Fulton Corridor Specific Plan (FCSP).

These planning documents and publicly available resources provide the basis for evaluating cumulative environmental conditions and reasonably foreseeable development trends in accordance with CEQA Guidelines, Title 14, CCR §15130(b)(1)(B).

4.6 Analysis of Cumulative Impacts

For purposes of this EIR, the Project would result in a cumulatively considerable contribution if either of the following conditions would occur:

The cumulative effects of related projects, growth projections, and regional development activities are not significant, but the incremental impact of the Project, when combined with those effects, would result in a new cumulatively significant impact; or

The cumulative effects of related projects, growth projections, and regional development activities are already significant, and implementation of the Project would make a cumulatively considerable contribution to those effects.

Unless otherwise specified, the standards of significance used to evaluate cumulative impacts are the same as those identified for Project-specific impacts in Sections 3.1 through 3.20 of this EIR.

This cumulative analysis assumes implementation of all applicable mitigation measures identified throughout this EIR. The analysis evaluates whether, following implementation of Project-specific mitigation measures, the residual impacts of the Project would remain cumulatively considerable when viewed in connection with regional growth projections, ongoing development activity, and other reasonably foreseeable future actions within the applicable geographic scope for each resource topic.

Because the Project consists of redevelopment within an urbanized area of Downtown Fresno and because the cumulative setting is characterized through adopted planning projections rather than a defined list of nearby cumulative projects, the analysis focuses on whether implementation of the Project would substantially contribute to regional environmental trends, infrastructure demands, or resource impacts identified in applicable planning documents and regulatory programs.

Significance criteria, unless otherwise specified, are the same for cumulative impacts and Project impacts for each environmental topic area. This cumulative analysis assumes the adoption of all mitigation measures identified in Sections 3.1 through 3.20 to mitigate the Project's impacts. This chapter analyzes whether, after adoption of Project-specific mitigation, the residual impacts of the Project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the Project) cumulatively significant effects.

4.6.1 AESTHETICS

Implementation of the Project in conjunction with anticipated development within the Fulton Corridor Specific Plan area and Downtown Fresno would contribute to ongoing urban redevelopment and modernization within the Project vicinity. Development of the Project would alter the visual character of the site through demolition of the existing facilities and construction of a new courthouse complex, associated parking, landscaping, lighting, and security features. The Project would contribute to cumulative changes in visual character through the introduction of a modern public institutional facility within the Downtown Fresno area. However, the Project would be consistent with the surrounding urban context and planned civic and governmental land uses identified in applicable planning documents.

The Project site is located within a highly urbanized downtown setting characterized by civic, governmental, commercial, transportation, and mixed-use development. Future development anticipated under the FCSP and Fresno County General Plan would continue to support redevelopment, urban revitalization, infrastructure improvements, and modernization within Downtown Fresno and the broader County planning area. The Project would be consistent with the revitalization, urban design, placemaking, circulation, and redevelopment objectives identified in the FCSP, including goals related to pedestrian-oriented development, modernization of downtown civic uses, and cohesive urban form. Although the Judicial Council is not subject to local zoning requirements, the Project would be generally consistent with applicable land use designations and planning objectives for the downtown area.

As discussed in Section 3.1, Aesthetics, the Project would not substantially degrade the existing visual character or quality of the site or surrounding area. Future cumulative development within Downtown Fresno would also be subject to applicable City design standards, development review procedures, and lighting requirements intended to maintain visual quality and compatibility with surrounding development. Therefore, the Project would not contribute considerably to a significant cumulative impact related to visual character, scenic resources, or scenic quality.

No designated state scenic highways are located adjacent to or within view of the Project site. Therefore, implementation of the Project in combination with cumulative development would not result in a cumulatively considerable impact related to scenic resources visible from a state scenic highway.

Construction and operation of the Project would introduce additional sources of nighttime lighting within the downtown area. However, lighting would be designed in accordance with Judicial Council standards, CALGreen requirements, and applicable best management practices intended to minimize light spillover, glare, and light trespass. Because the Project site is located within an existing urban environment characterized by substantial ambient lighting, and because future development would similarly be subject to applicable lighting standards, cumulative impacts related to light and glare would be less than cumulatively considerable.

4.6.2 AGRICULTURE AND FORESTRY RESOURCES

Implementation of the Project in conjunction with cumulative development anticipated under the FCSP and Fresno County General Plan would not result in significant cumulative impacts related to agricultural or forestry resources. The Project site is located within an urbanized area of Downtown Fresno and does not contain Prime Farmland, Unique Farmland, Farmland of Statewide Importance, forest land, timberland, or timberland zoned Timberland Production.

Development anticipated under the Fresno County General Plan and the FCSP would primarily occur within designated urbanized areas, redevelopment corridors, and planned growth areas intended to support coordinated land use and infrastructure planning. Although cumulative regional growth could result in conversion of agricultural land in portions of Fresno County, the Project itself would not contribute to such conversion because it would involve redevelopment of an existing developed site within the urban core.

As discussed in Section 3.2, Agriculture and Forestry Resources, the Project would not conflict with existing zoning for agricultural use or Williamson Act contracts and would not result in the loss of forest land or timber resources. Accordingly, the Project would not make a cumulatively considerable contribution to impacts affecting agricultural or forestry resources.

4.6.3 AIR QUALITY

Implementation of the Project in conjunction with cumulative development within the San Joaquin Valley Air Basin would contribute to regional emissions of criteria pollutants and associated air quality impacts. Development anticipated under the Fresno County General Plan and the FCSP would generate temporary construction emissions and long-term operational emissions associated with redevelopment, transportation activity, building operations, and increased urban activity within Downtown Fresno and the broader County planning area.

As discussed in Section 3.3, Air Quality, construction and operation of the Project would generate emissions of criteria pollutants and ozone precursors. The San Joaquin Valley Air Basin is currently designated nonattainment for state and federal ozone and particulate matter standards; therefore, cumulative air quality impacts within the air basin are considered significant.

The Project would implement applicable SJVAPCD regulations and recommended control measures to reduce construction and operational emissions. In addition, the Project would be consistent with regional growth assumptions used in applicable air quality planning documents and transportation plans. Although cumulative air quality impacts in the region would remain significant, the Project's incremental contribution would not be cumulatively considerable because Project emissions would remain below applicable SJVAPCD significance thresholds with implementation of required mitigation measures and standard regulatory requirements.

Construction activities associated with cumulative regional development could result in temporary localized impacts related to fugitive dust and diesel particulate matter. However, all future development projects would be required to comply with applicable SJVAPCD regulations and control measures. Therefore, cumulative impacts related to localized air quality and sensitive receptors would be less than cumulatively considerable.

4.6.4 BIOLOGICAL RESOURCES

Implementation of the Project in conjunction with cumulative development anticipated within the City of Fresno and surrounding region would contribute to continued urbanization and habitat disturbance within the region. However, the Project site is located within a fully developed urban area and does not support sensitive natural communities, jurisdictional waters, or substantial habitat for special-status species.

As discussed in Section 3.4, Biological Resources, implementation of the Project would not result in significant impacts to sensitive biological resources with implementation of applicable mitigation measures and regulatory compliance requirements. Future cumulative development occurring within the region would generally occur within areas identified for redevelopment, revitalization, infrastructure improvements, and coordinated growth under the Fresno County General Plan and the FCSP.

Although cumulative regional development may contribute to incremental habitat fragmentation and loss in undeveloped portions of Fresno County, the Project would not contribute substantially to those impacts because it would involve redevelopment of an existing developed site within the urban core. The Project would not interfere substantially with wildlife movement, conflict with adopted habitat conservation plans, or adversely affect sensitive biological resources.

Therefore, the Project would not make a cumulatively considerable contribution to significant cumulative impacts related to biological resources.

4.6.5 CULTURAL RESOURCES

Implementation of the Project in conjunction with redevelopment and revitalization activities anticipated under the FCSP and Fresno County General Plan could result in impacts to historical, archaeological, and tribal cultural resources through ground disturbance, demolition, and redevelopment activities. Because Downtown Fresno contains historically developed urban areas with the potential for previously unidentified cultural resources, cumulative impacts related to cultural resources could occur.

As discussed in Section 3.5, Cultural Resources, the Project would implement mitigation measures and regulatory compliance procedures to address the potential discovery of archaeological resources, human remains, and tribal cultural resources during construction activities. In addition, the Project includes evaluation of on-site historical resources and would comply with applicable state and federal requirements related to historic properties.

Future development and redevelopment projects implemented pursuant to the Fresno County General Plan and FCSP would similarly be subject to CEQA review and applicable resource protection requirements. With implementation of identified mitigation measures and compliance with existing regulations, the Project would not make a cumulatively considerable contribution to impacts affecting historical, archaeological, or tribal cultural resources.

4.6.6 ENERGY

Implementation of the Project in conjunction with cumulative development within Fresno and the surrounding region would increase demand for electricity, natural gas, and transportation fuels. Population growth, commercial development, public facility expansion, and regional transportation activities anticipated under applicable planning documents would contribute to long-term increases in regional energy demand.

As discussed in Section 3.6, Energy, the Project would incorporate energy-efficient building systems, sustainable design features, and compliance with Title 24 Building Energy Efficiency Standards and CALGreen requirements. The Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

Although cumulative regional growth would increase overall energy demand, energy providers plan for anticipated growth through long-range infrastructure planning and service forecasting. Because the Project would be designed to minimize energy consumption and would represent a relatively small

contribution to regional energy demand, the Project would not make a cumulatively considerable contribution to significant cumulative energy impacts.

4.6.7 GEOLOGY AND SOILS

Implementation of the Project in conjunction with cumulative development within the region would result in additional ground disturbance and construction activities that could expose people and structures to seismic hazards, unstable soils, and erosion-related impacts. However, geologic and soil conditions are generally site-specific and are addressed through compliance with applicable engineering standards and building regulations.

As discussed in Section 3.7, Geology and Soils, the Project would comply with applicable California Building Code requirements and geotechnical recommendations to reduce risks associated with seismic shaking, liquefaction, expansive soils, and erosion hazards. Future cumulative development projects would similarly be required to comply with applicable building and engineering standards.

Because compliance with existing regulations and implementation of project-specific engineering measures would reduce geologic and soils impacts to less than significant levels, the Project would not contribute considerably to significant cumulative geology and soils impacts.

4.6.8 GREENHOUSE GASES

Implementation of the Project in conjunction with cumulative statewide and regional development would contribute to greenhouse gas emissions associated with construction activities, energy consumption, vehicle trips, and material usage. Climate change is inherently a cumulative environmental issue because GHG emissions from numerous sources collectively contribute to global atmospheric concentrations.

As discussed in Section 3.8, Greenhouse Gas Emissions, the Project would incorporate sustainable design features, energy-efficient systems, and transportation-related measures intended to reduce operational GHG emissions. The Project would also be consistent with applicable statewide 2030 GHG reduction goals and regulatory programs, including Senate Bill 32 and related California Air Resources Board Scoping Plan measures.

Although cumulative GHG impacts remain significant at the global level, the Project's incremental contribution would not be cumulatively considerable because Project emissions would be reduced through implementation of applicable regulatory requirements, sustainable design measures, and energy efficiency standards. The Project would therefore not conflict with statewide plans adopted for the purpose of reducing GHG emissions.

4.6.9 HAZARDS AND HAZARDOUS MATERIALS

Implementation of the Project in conjunction with cumulative urban redevelopment within Fresno could involve the use, transport, and disposal of hazardous materials associated with demolition, construction, and ongoing operations. Redevelopment of older urban properties may also involve the disturbance or removal of hazardous building materials and contaminated soils.

As discussed in Section 3.9, Hazards and Hazardous Materials, the Project would comply with all applicable federal, state, and local regulations governing hazardous materials handling, storage, transportation, and disposal. Any identified hazardous materials or contaminated media encountered during construction would be managed in accordance with applicable regulatory requirements.

Future cumulative development projects within the region would similarly be required to comply with hazardous materials regulations and environmental health and safety standards. Therefore, implementation of the Project would not make a cumulatively considerable contribution to significant cumulative hazards or hazardous materials impacts.

4.6.10 HYDROLOGY AND WATER QUALITY

Implementation of the Project in conjunction with cumulative development within the City of Fresno and surrounding watershed areas would increase impervious surface coverage and demand for stormwater infrastructure and water supply services. Construction and redevelopment activities associated with regional growth could also contribute to erosion, sedimentation, and pollutant discharges.

As discussed in Section 3.10, Hydrology and Water Quality, the Project would comply with applicable National Pollutant Discharge Elimination System (NPDES) permit requirements, stormwater management regulations, and low impact development standards intended to minimize runoff-related impacts and protect water quality. The Project would also implement best management practices during construction activities.

Future cumulative development projects would similarly be required to comply with applicable stormwater regulations and water quality protection requirements. Because the Project would not substantially alter drainage patterns, degrade water quality, or exceed wastewater treatment requirements, the Project would not make a cumulatively considerable contribution to significant cumulative hydrology or water quality impacts.

4.6.11 LAND USE AND PLANNING

Implementation of the Project in conjunction with redevelopment and infill activities anticipated under the FCSP and Fresno County General Plan would contribute to continued urbanization and intensification within the downtown area. The Project would involve redevelopment of an existing urban site with a governmental public facility use that is compatible with surrounding civic, institutional, commercial, and mixed-use development.

As discussed in Section 3.11, Land Use and Planning, the Project would not physically divide an established community or conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating environmental impacts. The Project would support ongoing public investment and redevelopment objectives within Downtown Fresno.

Future cumulative development anticipated under the Fresno County General Plan and FCSP would occur within areas designated for redevelopment, infill development, transportation improvements, and coordinated urban growth. Because the Project would be consistent with regional planning objectives and

would not result in land use incompatibilities, implementation of the Project would not make a cumulatively considerable contribution to significant cumulative land use impacts.

4.6.12 MINERAL RESOURCES

Implementation of the Project in conjunction with cumulative regional development would not result in significant impacts related to mineral resources. The Project site is located within an urbanized portion of Fresno and is not designated as a regionally important mineral resource recovery area.

As discussed in Section 3.12, Mineral Resources, the Project would not result in the loss of availability of known mineral resources of statewide or local significance. Future cumulative development within the urbanized portions of Fresno would similarly occur outside of active mineral extraction areas.

Accordingly, the Project would not contribute considerably to significant cumulative impacts related to mineral resources.

4.6.13 NOISE

Implementation of the Project in conjunction with cumulative development within Downtown Fresno would increase temporary construction-related noise and long-term operational noise associated with traffic, building operations, and urban activity. Construction activities associated with cumulative regional development could result in periodic increases in ambient noise levels within developed portions of the City.

As discussed in Section 3.13, Noise, construction of the Project would result in temporary increases in noise and vibration levels; however, these impacts would be reduced through implementation of mitigation measures and compliance with applicable construction standards and operational requirements. Operational noise associated with the Project would be consistent with the existing urban environment.

Future cumulative development projects would similarly be required to comply with local noise ordinances and applicable operational standards. Because Project-related noise impacts would be temporary or reduced to less than significant levels with mitigation, and because the Project site is located within a developed urban area characterized by existing transportation and urban noise sources, the Project would not make a cumulatively considerable contribution to significant cumulative noise impacts.

4.6.14 POPULATION AND HOUSING

Implementation of the Project in conjunction with cumulative development anticipated under regional planning documents would contribute incrementally to population growth and employment increases within Fresno. However, the Project primarily consists of replacement and consolidation of existing governmental and judicial functions and would not directly induce substantial population growth or new housing demand.

As discussed in Section 3.14, Population and Housing, the Project would not displace substantial numbers of housing units or people, nor would it induce substantial unplanned population growth. Future regional growth anticipated under applicable planning documents has been accounted for in local and regional planning projections.

Accordingly, the Project would not make a cumulatively considerable contribution to significant cumulative impacts related to population or housing.

4.6.15 PUBLIC SERVICES

Implementation of the Project in conjunction with cumulative regional development would increase demand for public services, including police protection, fire protection, schools, parks, and other governmental services. However, the Project would itself serve an important public function through provision of judicial and court-related services within Fresno County.

As discussed in Section 3.15, Public Services, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities. Future cumulative development anticipated under regional planning documents would similarly be planned through ongoing public infrastructure and service planning efforts.

Because the Project would not substantially increase demand for public services beyond planned service capacities, the Project would not make a cumulatively considerable contribution to significant cumulative public service impacts.

4.6.16 RECREATION

Implementation of the Project in conjunction with cumulative regional growth could incrementally increase demand for recreational facilities and public open space. However, the Project would not include residential development and would not substantially increase the local residential population.

As discussed in Section 3.16, Recreation, the Project would not increase the use of existing neighborhood or regional parks such that substantial physical deterioration would occur, nor would it require construction of new recreational facilities.

Future cumulative growth projected under applicable planning documents has been accounted for in regional park and recreation planning efforts. Therefore, the Project would not make a cumulatively considerable contribution to significant cumulative recreation impacts.

4.6.17 TRANSPORTATION

Implementation of the Project in conjunction with cumulative regional development would contribute to increased vehicle trips and transportation system demand within Fresno and the surrounding region. Planned growth and redevelopment anticipated under applicable planning documents would result in continued increases in roadway usage, transit demand, bicycle activity, and pedestrian circulation.

As discussed in Section 3.17, Transportation, the Project would generate vehicle trips associated with courthouse operations and employee, visitor, and service access. However, transportation impacts would be evaluated based on VMT consistent with Senate Bill 743. The Project site is located within an urbanized downtown area served by existing roadway, transit, bicycle, and pedestrian infrastructure.

Because the Project would be located within an infill area with access to multimodal transportation options and would not result in a significant transportation impact under applicable VMT thresholds, the Project would not make a cumulatively considerable contribution to significant cumulative transportation impacts.

4.6.18 TRIBAL CULTURAL RESOURCES

Implementation of the Project in conjunction with cumulative urban redevelopment activities within Fresno could result in impacts to tribal cultural resources through ground disturbance and excavation activities. Because tribal cultural resources may exist beneath previously developed urban areas, cumulative impacts could occur if such resources are inadvertently disturbed during construction.

As discussed in Section 3.18, Tribal Cultural Resources, the Project would implement mitigation measures and consultation procedures intended to reduce impacts to tribal cultural resources, including inadvertent discovery protocols and consultation conducted pursuant to Assembly Bill 52.

Future cumulative development projects within the region would similarly be subject to CEQA review and tribal consultation requirements, as applicable. With implementation of mitigation measures and compliance with existing regulations, the Project would not make a cumulatively considerable contribution to significant cumulative impacts related to tribal cultural resources.

4.6.19 UTILITIES AND SERVICE SYSTEMS

Implementation of the Project in conjunction with cumulative development within Fresno and surrounding areas would increase demand for utilities and service systems, including water supply, wastewater treatment, storm drainage, electricity, natural gas, and solid waste disposal services.

As discussed in Section 3.19, Utilities and Service Systems, the Project would connect to existing utility infrastructure and would not require substantial expansion of off-site utility facilities beyond planned improvements. Utility providers plan for anticipated regional growth through long-range infrastructure planning and capital improvement programs.

Future cumulative development would similarly rely on planned infrastructure improvements and utility system expansion. Because the Project would not exceed wastewater treatment requirements, landfill capacity, or available utility service capacities, implementation of the Project would not make a cumulatively considerable contribution to significant cumulative utility or service system impacts.

4.6.20 WILDFIRE

The Project site is located within a highly urbanized area of Downtown Fresno and is not located within or adjacent to a state responsibility area or high fire hazard severity zone. Therefore, implementation of the Project in conjunction with cumulative regional development would not expose people or structures to substantial wildfire-related risks.

As discussed in Section 3.20, Wildfire, the Project would not impair emergency response or evacuation plans, require installation or maintenance of infrastructure that could exacerbate wildfire risk, or expose structures to significant wildfire hazards.

Because the Project site is located within an urban environment outside of identified wildfire hazard areas, the Project would not contribute considerably to significant cumulative wildfire impacts.

5 Other CEQA Requirements

This chapter provides a discussion of growth-inducing effects and a summary of significant and unavoidable impacts, as required by the CEQA.

5.1 Growth-Inducing Impacts

5.1.1 INTRODUCTION TO GROWTH-INDUCING IMPACTS

CEQA (CEQA Guidelines, Title 14 CCR §15126.2(d)) requires an examination of the direct and indirect impacts of the Project, including the potential of the Project to induce growth leading to changes in land use patterns, population densities, and related impacts on environmental resources. Specifically, CEQA states that the EIR shall:

> [D]iscuss ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring the construction of new facilities that could cause significant environmental effects…also discuss characteristics of some projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Direct growth inducement would result if a project involved construction of new housing. Indirect growth inducement would result, for example, if implementing a project resulted in any of the following:

- Substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises); or
- Removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area) or adding new urban development adjacent to undeveloped land.

Growth inducement itself is not an environmental impact, but it may lead to foreseeable environmental impacts. These environmental impacts may include increased demand on other community and public services and infrastructure, increased traffic and noise, degradation of air or water quality, degradation or loss of plant or animal habitats, or conversion of agricultural and open space land to urban uses.

5.1.2 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

The purpose of the Project is to construct a courthouse to consolidate current government facilities/ functions including the Fresno County Courthouse, north Annex Jail, and M Street Courthouse operations

into one facility. The Project involves the acquisition of a 2.09-acre Project site owned by Fresno County in downtown Fresno, which is within approximately 1,500 feet of all three existing operations.

The new courthouse would employ approximately 390 full-time and 14 part-time existing staff relocated from existing Superior Court of Fresno County facilities. Staffing levels at the new facility would be expected to be similar to those currently required for courthouse operations. The Project includes additional court space for existing staff allocations. No new employees or judges are planned following Project completion.

Although the existing Superior Court of Fresno County is a major source of employment to the City, court facilities are currently located within the City's downtown area and the consolidation of court operations would not result in adverse impacts to local economic activities. Relocation of existing courthouse jobs is also not expected to create an increase in the need for housing, as the relocation of the M Street Courthouse is less than 1,500 feet from the existing location and the Fresno County Courthouse and north Annex Jail are within the same parcel. The Project would provide space for additional judgeships, but there is no present or foreseeable funding for those positions at this time and they represent a small number of jobs. Therefore, the Project would not result in indirect growth inducement. The necessary utility realignments would not change the Project's service needs. No new roadways or lane expansions are proposed. Therefore, the Project would not extend infrastructure in a manner that could facilitate offsite growth. The Project would not be growth-inducing.

5.2 Significant and Unavoidable Impacts

5.2.1 PROJECT-LEVEL SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines, Title 14, CCR §15216.2(b) requires the EIR to include a discussion of any significant environmental impacts that cannot be avoided if the Project is implemented.

Chapter 4 of this EIR provides a detailed analysis of all significant and potentially significant environmental impacts from implementation of the Project; identifies feasible mitigation measures, as appropriate, that could avoid or reduce these significant and potentially significant impacts; and presents a determination whether the identified mitigation measures would reduce these impacts to less than -significant levels. In addition, Chapter 5 of this EIR provides an analysis of the significant cumulative impacts resulting from the combined effects of the Project and other lead agencies' planned projects. If a potentially significant or significant impact cannot be reduced to a less than -significant level, it is considered a significant and unavoidable adverse impact.

5.2.2 CUMULATIVELY SIGNIFICANT AND UNAVOIDABLE IMPACTS

As discussed throughout Section 4.0, implementation of the Project in combination with cumulative development anticipated under the Fresno County General Plan and Fulton Corridor Specific Plan would generally result in less than cumulatively considerable impacts with implementation of identified mitigation measures and compliance with applicable regulations and standards.

However, air quality and greenhouse gas emissions are inherently cumulative environmental issues because pollutants and greenhouse gases generated by numerous past, present, and reasonably foreseeable future projects collectively contribute to regional and global environmental conditions. The San Joaquin Valley Air Basin is currently designated nonattainment for state and federal ozone and particulate matter standards, and cumulative air quality impacts associated with regional growth and development are considered significant and unavoidable. Although the Project would implement applicable SJVAPCD regulations, best management practices, and mitigation measures to reduce construction and operational emissions, cumulative regional air quality impacts would remain significant and unavoidable.

Similarly, greenhouse gas emissions generated by cumulative statewide and regional development contribute incrementally to global climate change. While the Project would incorporate sustainable design measures, energy-efficient systems, and compliance with applicable state greenhouse gas reduction requirements, the cumulative effects of greenhouse gas emissions at the global scale remain significant and unavoidable.

Based on the analyses contained in this EIR, the Project's contribution to cumulative air quality and greenhouse gas emissions impacts would be less than cumulatively considerable with applicable regulatory requirements, sustainable design measures, and energy efficiency standards. No other resource topics were determined to result in cumulatively significant and unavoidable impacts.

6 Alternatives

6.1 CEQA Requirements for Alternatives Analysis

CEQA requires an evaluation of project alternatives based on the comparative merits of “a range of reasonable alternatives to the Project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives” (CEQA Guidelines, Title 14, CCR §15126.6(a)). Thus, the focus of the alternatives analysis is on alternatives that “could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more significant effects” (CEQA Guidelines, Title 14, CCR §15126.6(c)). "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA Guidelines, Title 14, CCR §15364) .

The analysis must also address the “no project” alternative (CEQA Guidelines, Title 14, CCR §15126.6(e)). The CEQA Guidelines further state that the range of alternatives is governed by the “rule of reason,” which requires consideration only of those alternatives necessary to permit a reasoned choice and to foster informed decision-making and public participation (CEQA Guidelines, Title 14, CCR §15126.6 (f)(3)).

This EIR considers a range of alternatives to the Project in accordance with CEQA Guidelines, Title 14, CCR §15126.6. Based on the requirements of CEQA Guidelines §15126.6 and the Project’s objectives (repeated below), the following alternatives to the Project were identified:

1. **No Project Alternative:** Under the No Project Alternative, the Judicial Council would continue to lease and operate from existing Fresno County Courthouse facilities, including the main courthouse, the ‘M’ Street Courthouse, and the court space within the North Annex Jail. This alternative would not involve demolition or new construction. The existing buildings would continue to house court operations, despite ongoing deficiencies related to seismic safety, fire and life safety, accessibility, and security. Court operations would remain dispersed across multiple buildings.

2. **Existing Courthouse Rehabilitation Alternative:** This alternative involves renovating or retrofitting the three existing facilities (Fresno County Courthouse, north Annex Jail, and M Street Courthouse) located at 1100 Van Ness Avenue, Fresno, CA, 93724 and 2280 Fresno Street, Fresno, CA, 93721. The work would upgrade both exterior and interior components to remove environmental hazards such as ACMs, achieve LEED Silver sustainability standards, and bring each building into compliance with the functional and security requirements of a modern courthouse.

3. **Alternative Site Location 1B (Courthouse Park at Van Ness Avenue):** This alternative proposes construction of a new 36-courtroom, approximately 413,000-square-foot courthouse within Courthouse Park at the northeast corner of Van Ness Avenue and Fresno Street. Site 1B

is approximately 2.09 acres, providing sufficient space for the proposed building and required setbacks. Demolition of the County owned Sheriff's Administration Building would be required. The location is within one to two blocks of the Fresno County Jail, District Attorney, and Public Defender offices, and adjacent to existing governmental buildings, allowing convenient access for court-related operations. The Alternative site has existing utility infrastructure and minimal need for offsite improvements. The Project would comply with the DTG land use designation and support consolidation of dispersed court functions within the downtown civic area.

4. **Alternative Site Location Site 3 (Eaton Plaza):** This alternative would locate the new 36-courtroom, approximately 413,000-square-foot courthouse on approximately 2.1 acres within Eaton Plaza Park, east of the intersection of N Street and Fresno Street. The Alternative site includes the plaza, amphitheater, and associated parking areas. The location offers high public visibility and accessibility within downtown Fresno and is within walking distance of other judicial and governmental facilities. This alternative has the potential for cultural resource impacts due to its proximity to a known historic resource the "Old Water Tank". This location provides existing utilities, although stormwater infrastructure upgrades may be required to manage additional runoff. This alternative would partially align with Fresno's DTG land use designation but would conflict with City and County planning objectives promoting preservation of civic open space.

6.2 Project Objectives

The Project is being led by the Judicial Council to address the growing need for upgraded centralized court facilities in Fresno County. Court functions are currently being split among three locations in the downtown Fresno area: the Fresno County Courthouse, North Annex Jail, and 'M' Street Courthouse. Development of the Project would allow the County court to consolidate operations and would also provide space for growth in future new judgeships. The Project will replace the Fresno County Courthouse (28 courtrooms and most of court administration), the court space in the North Annex Jail (2 courtrooms), and the court space in the 'M' Street Courthouse (5 courtrooms) with a new 36-courtroom courthouse of approximately 413,000 SF.

CEQA Guidelines, Title 14, CCR §15124(b) requires that the Project Description contain a clearly written statement of objectives, including the underlying purpose of the Project. The Judicial Council has identified the following objectives for the Project:

- Relieve the current space shortfall, increase security, and replace inadequate and obsolete buildings in Fresno County.
- Replace a Federal Emergency Management Agency (FEMA) P-154 High-Risk rated seismically deficient building that is non-compliant with contemporary fire, life, safety, and Americans with Disabilities Act codes.
- Provide additional court space in anticipation of funding for future judgeships.

- Remove from service facilities that contain environmental hazards such asbestos containing materials (ACMs).
- Improve public, staff, and judicial officer safety by providing a modern facility compliant with Judicial Court security standards for separation of in-custody defendants from staff and public.
- Improve Sheriff's ability to efficiently manage in-custody movement by providing adequate holding areas/cells and circulation.
- Consolidate functions and optimize use of court facilities.
- Vacate three facilities which will terminate two county joint occupancy agreements and one private entity lease.
- Avoid future expenditures of over $42 million for unaddressed deferred maintenance and needed security system refresh.

6.3 Project Significant Impacts

The Project's operational greenhouse gas emissions would exceed the applicable 2050 GHG efficiency threshold even after implementation of feasible mitigation measures. As shown in Table 3.8-5, implementation of Mitigation Measures GHG-1 (All Electric Development) and GHG-2 (Transportation Demand Management Measures) would substantially reduce Project emissions by eliminating onsite natural gas use and reducing mobile-source emissions associated with vehicle trips. With mitigation, the Project would achieve consistency with the applicable 2030 GHG efficiency threshold; however, the Project would continue to exceed the more stringent 2050 efficiency threshold of 3.31 MT CO2e per service population, with mitigated emissions estimated at 6.91 MT CO2e per service population in 2050.

Although additional Project design features and operational practices may further reduce emissions over time, including LEED Silver design features and provision of public transit incentives for jurors, the extent of these reductions cannot be reliably quantified at this stage of Project design. Furthermore, no additional feasible mitigation measures have been identified that would reduce the Project's long-term operational emissions to a level below the applicable 2050 threshold while still allowing the Project to fulfill its core objectives as a regional courthouse facility serving Fresno County.

The primary source of remaining GHG emissions would be mobile-source emissions associated with employee, juror, visitor, and operational trips to and from the courthouse. Because the Project is intended to serve a regional population and accommodate essential judicial functions, a substantial portion of vehicle travel demand cannot feasibly be eliminated. While the Project incorporates transportation demand management measures and transit-supportive design features, the Judicial Council has limited control over transportation choices made by courthouse employees, jurors, defendants, attorneys, law enforcement personnel, and members of the public accessing mandatory court services.

In addition, although California's statewide regulatory programs, renewable energy transition efforts, and future advances in vehicle electrification are expected to reduce regional GHG emissions over time,

CEQA requires evaluation based on currently available information and enforceable mitigation measures. Because the Project would continue to exceed the applicable 2050 GHG efficiency threshold after implementation of all feasible mitigation measures, the Project's contribution to cumulative greenhouse gas emissions would remain significant and unavoidable.

6.4 Alternatives Considered but Rejected for Detailed Analysis in this EIR

CEQA Guidelines, Title 14, CCR §15126.6, subdivision (c) describes selection of a reasonable range of alternatives and the requirement to include those that could feasibly accomplish most of the basic project objectives while avoiding or substantially lessening one or more of the significant effects. The analysis should identify any alternatives that were considered by the lead agency but were rejected as infeasible. CEQA requires a brief explanation of the reasons underlying the lead agency's determination to eliminate alternatives from further analysis.

A number of alternatives were considered but excluded from further consideration due to a range of reasons, as outlined below.

6.4.1 EXISTING COURTHOUSE REHABILITATION ALTERNATIVE

This alternative would involve renovating or retrofitting the three existing facilities: Fresno County Courthouse, north Annex Jail, and M Street Courthouse. The Fresno County Courthouse, located at 1100 Van Ness Avenue, Fresno, CA, 93724, is within the same parcel as the north Annex Jail, located at 2280 Fresno Street, Fresno, CA, 93721. The M Street Courthouse is located two blocks north of the two facilities at 2317 Tuolumne Street, Fresno, CA, 93721. The outside structure and interiors of the three existing facilities would be renovated or retrofitted to address the existence of environmental hazards such as asbestos and ACMs, achieve sustainable building and energy efficiency standards for a LEED Silver certified rating, and comply with the requirements of a modern courthouse.

This alternative has been rejected for further analysis for the following reasons: renovation could not meet the Judicial Council's Safety and Security standards based on current facility construction which could not be reconstructed to achieve the standards; renovation could not resolve the existing Fresno County Courthouse's FEMA P-154 High Risk seismic deficiency rating; and renovation would not resolve operational inefficiencies from older buildings and dispersed locations. The Judicial Council's Site Selection and Design does not prefer sites with seismic deficiency. The current site arrangement, with no sallyport away from public view, is inconsistent with the Project objectives because it does not properly separate in-custody defendants from staff and the public. This alternative also does not provide adequate space to house the full needs of court services and the desired additional court space. The costs of renovating or retrofitting existing buildings and inefficiencies in ongoing operations would likely be higher than new construction.

6.5 Alternatives Analyzed in this EIR

In addition to a No Project Alterative, the following alternatives, which meet most of the basic objectives of the Project (Tit. 14, CCR §15126.6(a)), are summarized in this section.

The CEQA Guidelines require the analysis of a “no project” alternative and, depending on the circumstances, evaluation of alternative location(s) for the Project , if feasible. Based on the alternative’s analysis, an environmentally superior alternative is to be designated. In general, the environmentally superior alternative is the alternative with the least adverse impacts on the environment. If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify another environmentally superior alternative among the other alternatives.

CEQA Guidelines, Title 14, CCR §15126.6(d) states that the analysis of alternatives need not be presented in the same level of detail as the assessment of the Project . Rather, the EIR is required to provide sufficient information to allow for meaningful evaluation, analysis, and comparison with the Project . If an alternative would cause one or more significant impacts in addition to those of the Project , analysis of those impacts is to be discussed, but in less detail than for the Project.

6.5.1 NO PROJECT ALTERNATIVE

6.5.1.1 Description

Under the No Project Alternative, the Judicial Council would continue to lease and operate from existing Fresno County Courthouse facilities, including the main courthouse, the ‘M’ Street Courthouse, and the court space within the North Annex Jail. This alternative would not involve demolition or new construction. The existing buildings would continue to house court operations, despite ongoing deficiencies related to seismic safety, fire and life safety, accessibility, and security. Court operations would remain dispersed across multiple buildings.

6.5.1.2 Potential Environmental Impacts

The No Project Alternative would result in no action if the Judicial Council does not approve the Project or a Project alternative. Following are the potential environmental impacts that would result from the No Project Alternative.

6.5.1.3 Potential Environmental Impacts Less than those of the Project

The below resource areas could have a potential environmental impact **less** than those of the Project.

Aesthetics. The three existing facilities are located within a well-lit urban portion of Downtown Fresno with surrounding significant sources of light and glare coming from vehicle headlights, streetlights, parking lots, interior light spill from adjacent buildings and glare from structures made with glass, metal, and polished exteriors. Current courthouse services would continue to operate out of the three existing facilities. While there would be no change in the current aesthetics, retention of the three existing courthouse buildings long-term could lead to their dilapidation over time, which could create an aesthetic

issue. Addressing this concern would be necessary at a later date to determine the appropriate path forward.

Air Quality. The three existing facilities would generate air emissions associated with off-gassing paints and asphalt and electricity for outdoor lighting and would remain in place unchanged. The current courthouse services would also continue at these three existing facilities, thereby resulting in the continuation of existing operational emissions associated with building operations and employee and visitor trips to and from the respective courthouse facilities. No construction emissions would result from the No Project Alternative.

Biological Resources. No trees would be removed from the Project site; vegetation would remain unchanged. Current courthouse services would continue to operate out of the three existing facilities.

Cultural Resources. With no Project construction, the potential (however small) to encounter buried archaeological deposits, significant adverse changes to these resources, or disruption of human remains outside of dedicated cemeteries would be negated. The existing facilities and Courthouse Park would remain in place unchanged. Current courthouse services would continue to operate out of the three existing facilities.

Geology, Soil, and Paleontological Resources. With no Project demolition or construction, there is no potential grading activities, topsoil loss, or potential impact of paleontological resources or sites. The three existing facilities would remain in place unchanged. Current courthouse services would continue to operate out of the three existing facilities. However, the existing buildings would not be up-to-date with the current seismic design code per the 2025 CBC and ASCE 7-22.

Hazards and Hazardous Materials. The No Project Alternative would not demolish existing long-standing structures that have the potential to contain ACMs and LBPs. Therefore, the workers and the public would not have the potential to be exposed to asbestos and lead via inhalation of demolition dust, although exposure is anticipated to be below toxic levels. Current courthouse services would continue to operate out of the three existing facilities.

Noise and Vibration. The three existing facilities would remain in place unchanged; no demolition or construction would occur. Current courthouse services would continue to operate out of the three existing facilities. No short-term demolition / construction activities that would result in noise (although determined to be less than significant) would occur.

Tribal Cultural Resources. With no Project construction, the potential (however small) to encounter buried tribal cultural deposits, significant adverse changes to these resources, or disruption of human remains outside of dedicated cemeteries would be negated. The three existing facilities would remain in place unchanged; no demolition or construction would occur. Current courthouse services would continue to operate out of the three existing facilities.

No mitigation would be required for the No Project Alternative. The No Project Alternative would not have potentially significant impacts that are greater than existing conditions.

6.5.1.4 Potential Environmental Impacts Similar to those of the Project

The No Project Alternative would have **similar** (or equal) impacts as the Project to **agriculture and forestry resources; greenhouse gases; hydrology and water quality; land use and planning; mineral resources; noise; population and housing; public services; recreation; transportation; utilities and service systems;** and **wildfire** as the three existing facilities would remain in place unchanged; no demolition or construction would occur. Current courthouse services would continue to operate out of the three existing facilities, thereby resulting in the continuation of existing employee and visitor trips to and from the respective courthouse facilities. In addition, retention of the existing buildings long-term could lead to additional decline over time, which could create a hazards issue.

6.5.1.5 Potential Environmental Impacts Greater to those of the Project

The below resource area would have a potential environmental impact **greater** than those of the Project.

Energy. Under the No Project Alternative, the three existing facilities would remain in place unchanged; no demolition or construction would occur. Therefore, the No Project Alternative would not be up to date with applicable state plans that address renewable energy and energy efficiency, such as CALGreen and the 2025 California Energy Code, and California Building Energy Efficiency Standards. The No Project Alternative would not achieve at least LEED Silver certification; therefore, it would not support consistency with state and local energy goals.

6.5.2 SITE LOCATION 1B (COURTHOUSE PARK AT VAN NESS AVENUE) ALTERNATIVE

6.5.2.1 Description

This alternative involves building a new courthouse in a different location in Courthouse Park. This alternative proposes construction of a new 36-courtroom, approximately 413,000-square-foot courthouse within Courthouse Park at the northeast corner of Van Ness Avenue and Fresno Street. Site 1B is approximately 2.09 acres, providing sufficient space for the proposed building and required setbacks. Demolition of the County owned Sheriff's Administration Building would be required. This alternative would be built above the Below-Grade Public Parking and require a 25-foot setback against the Below-Grade Parking Easement and the Bus Stop Easement. The location is within one to two blocks of the Fresno County Jail, District Attorney, and Public Defender offices, and adjacent to existing governmental buildings, allowing convenient access for court-related operations. The Project site has existing utility infrastructure and minimal need for offsite improvements. The Project would comply with the DTG land use designation and support consolidation of dispersed court functions within the downtown civic area.

6.5.2.2 Potential Environmental Impacts

The Judicial Council may choose to approve the Site Location 1B (Courthouse Park at Van Ness Avenue) Alternative. Following are the potential environmental impacts that would result from the Site Location 1B (Courthouse Park at Van Ness Avenue) Alternative.

6.5.2.3 Potential Environmental Impacts Less than those of the Project

The below resource areas could have a potential environmental impact **less** than those of the Project.

Cultural Resources. With no demolition and construction under the existing facilities, the potential (however small) to encounter buried archaeological deposits, significant adverse changes to these resources, or disruption of human remains outside of dedicated cemeteries would be negated. The new Site 1B facilities would be constructed over an existing underground parking facility and reduce the amount of disturbed soil.

Geology, Soil, and Paleontological Resources. With no demolition and construction under the existing facilities and the new facilities to be constructed over an existing underground parking facility, the potential (however small) for grading activities, topsoil loss, or potential impact of paleontological resources or sites is lessened. However, the existing buildings would not be up to date with the current seismic design code per the 2025 CBC and ASCE 7-22.

Tribal Cultural Resources. With no demolition and construction under the existing facilities, the potential (however small) to encounter buried tribal cultural deposits, significant adverse changes to these resources, or disruption of human remains outside of dedicated cemeteries would be negated. The new Site 1B facilities would be constructed over an existing underground parking facility and reduce the amount of disturbed soil.

6.5.2.4 Potential Environmental Impacts Similar to those of the Project

The Site Location 1B (Courthouse Park at Van Ness Avenue) Alternative would have similar impacts as the Project to **aesthetics; agriculture and forestry resources; air quality; biological resources; energy; greenhouse gases; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; noise; population and housing; public services; recreation; transportation; utilities and service systems;** and **wildfire** as the land use would be consistent and restricted to the same parcel. This alternative would retain demolition, construction, and operation of a courthouse. This alternative would also require the implementation of Project mitigation measures to reduce impacts to less than significant. Mitigation is as follows:

Mitigation Measures

BIO-1: Western Mastiff Bat Survey. No less than 6 months prior to Project initiation, a qualified biologist with at least 5 years' experience conducting surveys or assessments of bat habitat shall conduct a survey and look for evidence of bat use in buildings and trees, as access allows. If evidence of bat use is observed, an evening survey using bat acoustic detectors will be conducted to determine whether bats are roosting on the Project site, the species, and the location of the roost. If an active roost is detected, construction activities will be modified or revised to avoid disturbing the roost. If disturbance of the roost cannot be avoided, removal or disturbance of the roost shall occur outside of the maternity roost season in accordance with a bat mitigation plan developed by the qualified biologist. The bat mitigation plan shall include methods for humane bat exclusion and no-disturbance buffers, as needed to accomplish the removal or disturbance of the roost.

BIO-2: Nesting Bird Survey. If demolition and/or construction (including any tree removal) occurs during the typical nesting season (January 31 through August 31) a pre-construction nesting bird survey shall be conducted to document any nests within the vicinity of the Project area (within 250 feet of the Project area for nesting songbirds and within 500 feet of the Project area for nesting raptors). Nesting bird surveys will be performed not more than 7 days prior to the start of Project demolition and/or construction activities. If an active nest is observed, a protective buffer will be established around the nest to avoid any disturbances. During any vegetation removal, if an active nest is identified within the Project area, a biological monitor shall monitor the nest during Project activities to ensure there are no disturbances to the nesting bird and prevent nest failure.

GHG-1: All Electric Development. The Judicial Council shall not include natural gas infrastructure to or within the Project site and Project operations shall not use natural gas.

GHG-2: TDM Measures. The Judicial Council shall include the following TDM measures:

- Provide cyclists end-of-trip facilities (i.e., showers, lockers, and similar features) in the project design and operational maintenance.
- Provide transit-oriented design.
- Implement commute trip reduction marketing.
- Provide ridesharing program.

HAZ: 1: Hazardous Materials Surveys. Prior to demolition, conduct an asbestos and lead survey to identify and quantify potential hazardous materials. The survey is to be completed by a licensed hazardous materials specialist. Survey results should be used for the development of a Hazardous Materials Management Plan (refer to HAZ-2 below).

HAZ-2: Hazardous Materials Management Plan. Structures to be demolished containing asbestos and lead paint shall be appropriately handled prior to demolition at the Project site and disposed in accordance with an Asbestos and Lead Paint Management Plan prepared by the contractor and submitted to the Judicial Council for review and approval prior to initiating demolition activities. Prior to demolition of the Project Site, hazardous materials or other universal wastes onsite shall be inventoried, packaged, removed, and disposed of in accordance with a Hazardous Materials Management Plan prepared by the contractor and submitted to the Judicial Council for review and approval prior to initiating demolition activities and submittal to CERS.

Hazardous materials used during construction shall be limited to the quantities required for construction and shall be stored and handled in accordance with regulatory requirements. Utility trucks and refueling trucks operating onsite shall have a spill kit onboard at all times. Small spills of petroleum products or other hazardous materials during construction operations shall be reported to the construction supervisor and a spill response form completed with a description of the type and quantity of the spill accompanied by photographs and a description of the disposition of the spill material. Hazardous spill material shall be disposed according to regulatory requirements. In the event of a large spill of hazardous materials equal

to or above reportable quantities federal, state, and applicable local reporting requirements shall be followed.

HAZ-3: Site-specific Health and Safety Plan (HASP). Preparation of a site-specific HASP to protect the health and safety of construction workers and the environment. The HASP shall be prepared in accordance with Title 8 of the CCR State and federal OSHA regulations (29 CFR §1910.120). The HASP shall be made available to construction workers for review prior to starting work at the Project site. The HASP shall identify potential hazards (including stained or odorous soils at any location where earth-moving activities would occur within the proposed development area), chemicals of concern (e.g., VOCs, heavy metals, and gases), personal protective equipment and devices, decontamination procedures, the need for personal or area monitoring, and emergency response procedures. The HASP shall provide direction in the event stained or odorous soil is encountered onsite during construction activities. The HASP shall also require notification of the appropriate federal, state, and local agencies if evidence of previously undiscovered soil contamination (e.g., stained soil, odorous groundwater, or groundwater with a surface sheen). Any contaminated areas shall be remediated in accordance with recommendations made by the RWQCB, DTSC, Fresno County Department of Public Health (i.e., designated CUPA), and/or other appropriate federal or state regulatory agencies.

TRA-1: Transportation Management Plan. A TMP will be developed to minimize temporary traffic-related impacts during the Project's construction phase. The TMP would outline construction traffic levels, routes, as well as traffic control adjacent to the Project site. The TMP would also include an evaluation of short-term construction-related impacts to Project vicinity roadways and provide mitigations, where applicable.

TRA-2: Driveway Design. Design of the Project site underground parking driveway on M Street will incorporate redesign of the existing underground parking garage entrance to ensure safety and visibility requirements are satisfied.

6.5.2.5 Potential Environmental Impacts Greater to those of the Project

Site Location 1B (Courthouse Park at Van Ness Avenue) Alternative would have no potential environmental impacts **greater** than those of the Project.

6.5.3 SITE LOCATION 3 (EATON PLAZA) ALTERNATIVE

6.5.3.1 Description

This alternative involves building a new courthouse on a different property on approximately 2.1 acres within Eaton Plaza Park, east of the intersection of N Street and Fresno Street. The state-owned property includes a plaza, amphitheater, and associated parking areas. The location offers high public visibility and accessibility within downtown Fresno and is within walking distance of other judicial and governmental facilities. This location provides existing utilities, although stormwater infrastructure upgrades may be required to manage additional runoff.

6.5.3.2 Potential Environmental Impacts

The Judicial Council may choose to approve the Site Location 3 (Eaton Plaza) Alternative. Following are the potential environmental impacts that would result from the Site Location 3 (Eaton Plaza) Alternative.

6.5.3.3 Potential Environmental Impacts Less than those of the Project

Hazards and hazardous materials. Impact would be **less** than the Project. The demolition of landscaped open space, gathering areas, and an amphitheater-style plaza area would produce less solid waste than the demolition of two buildings. Therefore, the workers and the public would not have the potential to be exposed to ACMs and LBPs via inhalation of demolition dust, although exposure is anticipated to be below toxic levels.

6.5.3.4 Potential Environmental Impacts Similar to those of the Project

The Site Location 3 (Eaton Plaza) Alternative would have similar impacts as the Project to **agriculture and forestry resources; biological resources; cultural resources; geology, soils, and paleontology; hydrology and water quality; mineral resources; noise; population and housing; tribal cultural resources;** and **wildfire** as the Project would also be restricted to an urban parcel within downtown Fresno. This alternative would retain the construction and operation of a courthouse, but have a reduced demolition scope. This alternative would also require the implementation of Project mitigation measures to reduce impacts to less than significant. Mitigation is as follows:

BIO-1: Western Mastiff Bat Survey. No less than 6 months prior to Project initiation, a qualified biologist with at least 5 years' experience conducting surveys or assessments of bat habitat shall conduct a survey and look for evidence of bat use in buildings and trees, as access allows. If evidence of bat use is observed, an evening survey using bat acoustic detectors will be conducted to determine whether bats are roosting on the Project site, the species, and the location of the roost. If an active roost is detected, construction activities will be modified or revised to avoid disturbing the roost. If disturbance of the roost cannot be avoided, removal or disturbance of the roost shall occur outside of the maternity roost season in accordance with a bat mitigation plan developed by the qualified biologist. The bat mitigation plan shall include methods for humane bat exclusion and no-disturbance buffers, as needed to accomplish the removal or disturbance of the roost.

BIO-2: Nesting Bird Survey. If demolition and/or construction (including any tree removal) occurs during the typical nesting season (January 31 through August 31) a pre-construction nesting bird survey shall be conducted to document any nests within the vicinity of the Project area (within 250 feet of the Project area for nesting songbirds and within 500 feet of the Project area for nesting raptors). Nesting bird surveys will be performed not more than 7 days prior to the start of Project demolition and/or construction activities. If an active nest is observed, a protective buffer will be established around the nest to avoid any disturbances. During any vegetation removal, if an active nest is identified within the Project area, a biological monitor shall monitor the nest during Project activities to ensure there are no disturbances to the nesting bird and prevent nest failure.

CUL-1: Retention of a qualified archaeologist. A qualified archaeologist shall be retained to implement a monitoring and recovery program during ground-disturbing activity associated with the Project , including grubbing, grading, and excavation activities, where the qualified archaeologist has determined it is necessary. The qualified archaeologist shall meet the Secretary of Interior's Professional Standards for prehistoric and historic archaeology.

Construction Monitoring. An archaeological monitor, working under the supervision of the qualified archaeologist shall observe ground disturbing activities associated with the Project , including grading, and excavation activities where deemed appropriate by the qualified archaeologist. The monitor shall be authorized to halt construction, if necessary, in the immediate area where buried cultural remains are encountered.

Preconstruction Briefing. Construction personnel shall be briefed by the archaeological monitor or qualified archaeologist on procedures to be followed in the event that unique archaeological resources, historical resources, or human remains are encountered during construction. The qualified archaeologist shall be required to provide a telephone number where they can be reached by the construction contractor, as necessary.

Monitoring Report. A complete set of daily monitoring logs shall be kept on-site throughout the earth moving activities. Within 90 days of the completion of archaeological monitoring, a monitoring report or memo shall be submitted to the Judicial Council and filed with CCIC.

CUL-2: Human Burials Encountered During Construction. In the event of an accidental discovery or recognition of human remains during Project construction activities, PRC §5097.98 shall be followed, and the following steps shall be taken:

3. There shall be no further excavation or disturbance of the specific location or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains are Native America, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believed to be the "most likely descendant" of the deceased Native America. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in PRC §5097.98, or

4. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the Project area in a location not subject to further subsurface disturbance:

    - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission;

    - The descendent identified fails to make a recommendation; or

- The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation of the NAHC fails to provide measures acceptable to the landowner.

PALEO-1: Paleontological Mitigation Plan. A qualified paleontologist meeting professional standards as defined by Murphey et al. (2019) will be retained as the designated Project Paleontologist to oversee a paleontological mitigation program. The Project Paleontologist should draft and oversee the implementation of a Paleontological Mitigation Plan that reviews detailed Project plans and establishes monitoring plans that provide for paleontological monitoring of earthwork and ground-disturbing activities into undisturbed geologic units with high paleontological potential to be conducted by a paleontological monitor meeting industry standards (Murphey et al. 2019). This plan should include provisions for worker training, depths and locations for monitoring, monitoring procedures, a fossil discovery plan in the event a fossil is found during construction, including a plan for assessment and treatment, and requirements for final reporting of the results of the mitigation program. The plan should include a review of geotechnical data, if available, to refine the depth at which Pleistocene-aged sediments are present.

PALEO-2: Paleontological Monitoring. Full-time paleontological monitoring should be implemented once excavations exceed the depth of previously disturbed sediments or artificial fill across the Project site. Spot check monitoring may be conducted initially, until the depth of previous disturbance is known. The Project Paleontologist may alter the frequency or depth of monitoring based on subsurface conditions.

PALEO-3: Worker's Environmental Awareness Program. The Project Paleontologist should develop a Worker's Environmental Awareness Program training outlining the requirements and procedures if inadvertent discovery of fossils is identified during construction, to be delivered by the paleontological monitor. This training shall be provided once to each worker involved in ground-disturbing activities before they begin work and shall be documented in training records submitted to the Judicial Council.

PALEO-4: Paleontological Resources Encountered During Construction. In the event fossils are encountered during construction activities, work should stop in a safe radius of the finds, usually 100 feet, while the Paleontological Technician documents the fossils. The paleontological Principal Investigator shall assess the fossils. Should the fossils meet criteria of scientific importance to be considered a unique paleontological resource, they should be collected and curated in an accredited repository along with associated data and curation fees.

6.5.3.5 Potential Environmental Impacts Greater to those of the Project

The below resource areas would have a potential environmental impact **greater** than those of the Project.

Aesthetics. Demolition of an existing public plaza and amphitheater and construction of an approximately 11-story building would involve removal of an established civic open-space resource and replacement with a substantially different land use, resulting in a greater degree of alteration to visual character. By contrast, demolition of two obsolete government buildings and replacement with a new government building would occur within an area already developed for governmental purposes and would maintain the site's longstanding institutional function. Conversion of a public plaza and amphitheater to a large vertical

structure would represent a more substantial departure from existing conditions and would therefore be expected to result in comparatively greater environmental change.

Air Quality. Removal of an existing public plaza and amphitheater and construction of an approximately 11-story building would alter existing emission patterns by introducing new long-term onsite activity and circulation in an area that currently functions primarily as open space. Such a change could generate operational emissions associated with increased building energy use and vehicle activity where such sources are currently minimal.

Cultural Resources. Site Location 3 (Eaton Plaza) Alternative would have potential environmental impacts greater than those of the Project for cultural resources, with a known historical resource “Old Water Tank”, due to its proximity to the alternative.

Energy. Development of an 11-story structure on an existing plaza and amphitheater site would introduce new long-term energy demand in an area that currently has negligible operational energy consumption. While both the Project and the Alternative would involve construction-related energy use, redevelopment of existing facilities would maintain energy demand within an established service area and could offset existing inefficiencies, whereas conversion of open civic space to an intensive vertical building would represent a net new introduction of operational energy demand.

Greenhouse Gases. Construction of an 11-story building on an existing plaza and amphitheater site would convert a low-intensity use with minimal associated greenhouse gas emissions into an intensive land use generating both construction- and operation-related emissions. Development of a public open-space site would represent a greater change from existing emissions patterns.

Land Use and Planning. Removal of an existing public plaza and amphitheater would conflict with the Fresno Parks Vision Plan and the Fresno Parks Master Plan, which aim to increase the amount of parks in the City.

Public Services. Development of a large courthouse structure on an existing public plaza and amphitheater site would shift a passive civic space into an intensive institutional use, thereby increasing demand for public services such as police protection, emergency response, and building safety services in an area that currently does not generate comparable service demand. Conversion of a plaza and amphitheater would result in a greater change in service demand relative to current conditions.

Recreation. Removal of an existing public plaza and amphitheater would eliminate a recreational and civic gathering resource that is currently available to the public, representing a direct reduction in recreational opportunities. Development of a plaza and amphitheater site would involve a greater degree of change to recreational availability and use.

Transportation. Development of an 11-story building on a plaza and amphitheater site would shift the area from intermittent, event-based use to continuous daily occupancy, potentially altering trip generation, pedestrian circulation, and parking demand relative to existing conditions. Conversion of a civic open-space site would represent a more substantial change in transportation demand and operational conditions compared to the Project site, which is well-integrated into the existing circulation system.

Utilities and Service Systems. Construction of a large courthouse building on an existing plaza and amphitheater site would introduce new demands on water supply, wastewater, and other utility systems to an area that currently supports limited utility usage. In contrast, replacement of existing government buildings would occur within areas already served by utility infrastructure designed for intensive institutional use. From a CEQA perspective, redevelopment of existing facilities would largely utilize established service system capacity and connections, whereas development of a plaza and amphitheater site would represent a greater shift in utility demand relative to current conditions.

This alternative would also require the implementation of Project mitigation measures to reduce impacts to less than significant. Mitigation is as follows:

GHG-1: All Electric Development. The Judicial Council shall not include natural gas infrastructure to or within the Project site and Project operations shall not use natural gas.

GHG-2: TDM Measures. The Judicial Council shall include the following TDM measures:

- Provide cyclists end-of-trip facilities (i.e., showers, lockers, and similar features) in the project design and operational maintenance.
- Provide transit-oriented design.
- Implement commute trip reduction marketing.
- Provide ridesharing program.

TRA-1: Transportation Management Plan. A TMP will be developed to minimize temporary traffic-related impacts during the Project's construction phase. The TMP would outline construction traffic levels, routes, as well as traffic control adjacent to the Project site. The TMP would also include an evaluation of short-term construction-related impacts to Project vicinity roadways and provide mitigations, where applicable.

TRA-2: Driveway Design. Design of the Project site underground parking driveway on M Street will incorporate redesign of the existing underground parking garage entrance to ensure safety and visibility requirements are satisfied.

6.6 Environmentally Superior Alternative

CEQA Guidelines requires that an EIR identify the environmentally superior alternative among the alternatives evaluated, other than the "No Project" Alternative (CEQA Guidelines, Title 14, CCR §15126.6[e][2]). As stated previously in this chapter, the purpose of the alternatives analysis is to consider a reasonable range of alternatives capable of feasibly attaining most of the basic Project objectives while avoiding or substantially lessening significant environmental impacts.

As required by CEQA, the No Project Alternative is considered environmentally superior overall because it would avoid demolition and construction activities associated with the Project and Project alternatives. Under the No Project Alternative, no new courthouse would be constructed and the existing courthouse

facilities would remain in operation. As discussed in Section 6.5.1, the No Project Alternative would avoid construction-related impacts associated with aesthetics, air quality, biological resources, cultural resources, greenhouse gas emissions, geology and soils, hazards and hazardous materials, noise and vibration, and tribal cultural resources. However, the No Project Alternative would not meet most of the basic Project objectives because it would continue operation of outdated and functionally deficient courthouse facilities that do not adequately address seismic safety, fire and life safety, accessibility, operational efficiency, and security concerns. In addition, the No Project Alternative would continue use of older facilities that are not consistent with current energy efficiency standards, CALGreen requirements, or the 2025 California Energy Code.

Because the No Project Alternative is environmentally superior overall, CEQA Guidelines, Title 14, CCR §15126.6(e)(2) requires identification of the environmentally superior alternative among the remaining action alternatives.

Of the action alternatives evaluated, the Project is considered the environmentally superior alternative. The Project would satisfy all Project objectives while resulting in fewer or less severe environmental impacts than the Site Location 3 (Eaton Plaza) Alternative and generally comparable impacts to the Site Location 1B (Courthouse Park at Van Ness Avenue) Alternative.

The Site Location 1B (Courthouse Park at Van Ness Avenue) Alternative would have environmental impacts generally similar to the Project because both alternatives involve demolition, construction, and operation of a new courthouse facility within the existing downtown governmental core. Site Location 1B would have somewhat reduced impacts associated with cultural resources, geology and soils, paleontological resources, and tribal cultural resources because the courthouse would be constructed over an existing underground parking structure, thereby reducing the extent of ground disturbance. However, the Site Location 1B Alternative would still require demolition of existing governmental facilities, implementation of similar mitigation measures, and construction-related impacts comparable to the Project . In addition, Site Location 1B is farther from the Fresno County Jail than the Project site, reducing efficiency associated with secure in-custody transport and limiting optimization of the existing tunnel connection between courthouse operations and the jail facilities.

The Site Location 3 (Eaton Plaza) Alternative would meet many of the Project objectives by providing a new courthouse facility within Downtown Fresno on state-owned property; however, it would result in greater environmental impacts than the Project in several resource areas. Development of Eaton Plaza would require removal of an existing public plaza, amphitheater, and civic open space resource and replacement with an approximately 11-story institutional building. Compared to the Project, this alternative would result in greater impacts related to aesthetics, air quality, cultural resources, energy, greenhouse gas emissions, land use and planning, public services, recreation, transportation, and utilities and service systems. In particular, the Eaton Plaza Alternative has the potential for greater impacts to cultural resources due to the proximity of the historic Old Water Tank resource. The alternative would also remove an existing public gathering and recreational space that currently serves Downtown Fresno. Additionally, the Eaton Plaza site is located farther from the Fresno County Jail, limiting the ability to efficiently connect secure in-custody transport operations and reducing operational efficiency.

The Project, as described in Chapter 2, would consolidate court operations into a modern courthouse facility within the established governmental core of Downtown Fresno while minimizing disruption to existing civic open space resources and maintaining proximity to related judicial and detention facilities. Although the Project would require implementation of mitigation measures to reduce environmental impacts to less-than-significant levels, it would best balance achievement of the Project objectives with minimization of environmental impacts.

Accordingly, between the action alternatives evaluated in this EIR, the Project is identified as the environmentally superior alternative.

7 References

Executive Summary

None.

Chapter 1 Introduction

None.

Chapter 2 Project Description

City of Fresno. 2016. Available online at: https://www.fresno.gov/wp-content/uploads/2023/04/161020FCSPFinallowres1.pdf Accessed December 2025.

Chapter 3 Environmental Setting, Impacts, and Mitigation Measures

Aesthetics

Caltrans (California Department of Transportation). 2026. *Statewide Scenic Highway Map*. Available: https://experience.arcgis.com/experience/47e2009986264718a5a13a2c81382774. Accessed: January 20, 2026.

City of Fresno. 2022. City of Fresno General Plan. Adopted: December 18, 2014. Last updated: October 12, 2022

_____. 2016. Fulton Corridor Specific Plan. Accessed January 13, 2026 from: https://www.fresno.gov/wp-content/uploads/2023/04/161020FCSPFinallowres1.pdf

FHWA (Federal Highway Administration). 2015. *Guidelines for the Visual Impact Assessment of Highway Projects*. (FHWA-HEP-15-029.) Washington, D.C.: U.S. Department of Transportation. Accessed January 2026 from: https://www.environment.fhwa.dot.gov/env_topics/other_topics/VIA_Guidelines_for_Highway_Projects.pdf

FirstCarbon Solutions (FCS). 2016. *DRAFT Environmental Impact Report City of Fresno Downtown Neighborhoods Community Plan, Fulton Corridor Specific Plan, and Downtown Development Code*. Available at: https://www.fresno.gov/wp-content/uploads/2023/04/The-Environment-Impact-Report.pdf

Judicial Council of California. 2023. *California Trial Court Facilities Standards 2023.* Accessed May 2026, at: https://courts.ca.gov/system/files/file/2023_ctcfs_24_09_19.pdf.

Pacific Southwest Building. 2026. *The Lofts*. Available: https://pacificsouthwestbuilding.com/#lofts. Accessed: January 22, 2026.

US Census Bureau. 2026. Place: Fresno City, California – Populations and People, 2020 Decennial Census. Available: https://data.census.gov/profile/Fresno_city,_California?g=160XX00US0627000. Accessed: January 20, 2026.

U.S.D.A. Forest Service. 1995. *Landscape Aesthetics: A Handbook for Scenery Management. Agriculture Handbook No. 701*. Accessed January 2026, at: https://ia803201.us.archive.org/14/items/LandscapeAesthetics/LandscapeAesthetics.pdf.

Agriculture and Forestry Resources

California Department of Conservation. 2025a. Farmland Mapping & Monitoring Program. Available online at: https://www.conservation.ca.gov/dlrp/FMMP/. Accessed December 15, 2025.

California Department of Conservation. 2025b. Williamson Act Program. Available online at: https://www.conservation.ca.gov/dlrp/lca. Accessed December 15, 2025.

California Department of Conservation. 2024. Williamson Act Enrollment Finder. Available online at: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/index.html. Accessed December 15, 2025.

California Department of Conservation. 2022. California Important Farmland Finder. Available online at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed December 15, 2025.

California Department of Forestry and Fire Protection. 2024. California Forest Practice Rules 2024. Title 14, California Code of Regulations Chapters 4, 4.5 and 10. Available online at: https://cdnverify.bof.fire.ca.gov/media/qs5p1yk4/2024-forest-practice-rules-and-act-final.pdf. Accessed December 15, 2025.

Air Quality

CARB. 2025a. Sulfur Dioxide & Health. Available online at: https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health. Accessed January 2026.

_____. 2025b. Overview: Diesel Exhaust & Health. Available online at: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed January 2026.

_____. 2025c. Sulfate & Health. Available online at: https://ww2.arb.ca.gov/resources/sulfate-and-health. Accessed January 2026.

_____. 2025d. Hydrogen Sulfide & Health. Available online at: https://ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health. Accessed January 2026.

_____. 2025e. Vinyl Chloride & Health. Available online at: https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed January 2026.

_____. 2025f. Visibility-Reducing Particles & Health. Available online at: https://ww2.arb.ca.gov/resources/visibility-reducing-particles-and-health. Accessed January 2026.

_____. 2025g. iADAM: Air Quality Data Statistics. Available online at: https://www.arb.ca.gov/adam/index.html. Accessed January 2026.

———. 2024. Table of Ambient Air Quality Standards. Available online at: https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Accessed January 2026.

_____. 2005. Air Quality and Land Use Handbook: A Community Health Perspective. Available online at: https://ww2.arb.ca.gov/sites/default/files/2023-05/Land%20Use%20Handbook_0.pdf. Accessed January 2026.

Centers for Disease Control. 2020. Coccidioidomycosis. Available online at: https://www.cdc.gov/fungal/diseases/coccidioidomycosis/index.html. Accessed January 2026.

City of Fresno. 2014. Fresno General Plan. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf. Accessed January 2026.

Judicial Council. 2018. Judicial Council Policy on Asbestos Management for Court Facilities. Available online at: https://courts.ca.gov/system/files/jcc_policy_asbestos_mgmt_for_court_facilities.pdf. Accessed January 2026.

Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program. Available online at: https://oehha.ca.gov/sites/default/files/media/downloads/crnr/2015guidancemanual.pdf. Accessed January 2026.

OSHA. 2026. Valley Fever (Coccidioidomycosis) Standards. Available online at: Valley Fever (Coccidioidomycosis) - Standards | Occupational Safety and Health Administration. Accessed January 2026.

SJVAPCD. 2025. Ambient Air Quality Standards & Valley Attainment Status. Available online at: https://www.valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainmnet-status/. Accessed January 2026.

_____. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Available online at: https://www.valleyair.org/transportation/GAMAQI.pdf. Accessed January 2026.

USEPA. 2025a. Criteria Air Pollutants. Available online at: https://www.epa.gov/criteria-air-pollutants?msclkid=402121eaa62811ec9f3a5e32e281714a. Accessed January 2026.

_____. 2025b. Ground-Level Ozone Basics. Available online at: https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics#wwh. Accessed January 2026.

_____. 2025c. Health Effects of Ozone Pollution. Available online at: https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed January 2026.

_____. 2025d. Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution. Available online at: https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution#What%20is%20CO. Accessed January 2026.

_____. 2024e. Basic Information about NO2. Available online at: https://www.epa.gov/no2-pollution/basic-information-about-no2#What%20is%20NO2. Accessed January 2026.

_____. 2025f. Sulfur Dioxide Basics. Available online at: https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#what%20is%20so2. Accessed January 2026.

_____. 2025g. Learn About Lead. Available online at: https://www.epa.gov/lead/learn-about-lead. Accessed January 2026.

_____. 2025h. Particulate Matter (PM) Basics. Available online at: https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM. Accessed January 2026.

_____. 2025i. Learn About Asbestos. Available online at: https://www.epa.gov/asbestos/learn-about-asbestos#asbestos. Accessed January 2026.

USGS. 2011. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Available online at: https://pubs.usgs.gov/of/2011/1188/. Accessed January 2026.

Biological Resources

Calflora. 2025. A non-profit database providing information on wild California plants. Berkeley, CA Available online at: https://www.calflora.org/search.html. Accessed November 2025.

California Department of Fish and Wildlife (CDFW). 2025a. Rarefind 5. California Natural Diversity Database (CNDDB). Biogeographic Data Branch, California Department of Fish and Wildlife. Available online at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed November 2025.

CDFW. 2025b. California Natural Community List. Biogeographic Data Branch, California Department of Fish and Wildlife. Updated February 27, 2025. Available online at: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities. Accessed November 2025.

California Invasive Species Council (Cal-IPC). 2025a. California Invasive Plant Inventory. Cal-IPC Publication 2006-02. Cal-IPC: Berkeley, California. Available online at: www.cal-ipc.org. Accessed November 2025.

California Native Plant Society (CNPS). 2025a. Inventory of Rare And Endangered Plants (Online Edition, V8-02). Sacramento, California. Available online at: http://www.rareplants.cnps.org. Accessed November 2025.

City of Fresno. 2014. Fresno General Plan. Development and Resource Management Department. City of Fresno. Adopted December 18, 2014.

Fresno County. 2024. Fresno County General Plan: Comprehensive General Plan Review and Revision. February 2024. Available Online at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/public-works-and-planning/development-services/planning-and-land-use/general-plan/fcgpr_general-plan_county_final_2024_02.pdf. Accessed January 2026.

Google Earth. 2024. Imagery from February 11, 2024. Available online at: earth.google.com/web/. Accessed November 2025.

LSA Associates, Inc (LSA). 2021. *General Plan EIR - Mitigation Monitoring and Reporting Program*. Fresno, California. September 2021. Available online at: https://www.fresno.gov/wp-content/uploads/2023/10/J35.5-GP-PEIR-MMRP-September-2021.pdf. Accessed January 2026.

Mayer, K. E. and Laudenslayer, W. F. 1988. A Guide to Wildlife Habitats of California.

McBride, J. R. and C. Reid. 2008. Urban. California Wildlife Habitat Relationships Systems. Available online at: https://wildlife.ca.gov/Data/CWHR/Wildlife-Habitats. Accessed November 2025.

PlaceWorks. 2024. *New Fresno Courthouse Due Diligence Review: Site 1*. January 2024.

Rincon Consultants, Inc. (Rincon). 2025. Biological Resources Technical Memorandum for the City of Fresno Water and Sewer Improvements Project, Fresno County, California. April 29, 2025. Available online at: https://ceqanet.lci.ca.gov/2025100590. Accessed January 2026.

Stantec. 2025. Field Reconnaissance Survey – Personal Comms. and Photographic Documentation. November 18, 2025.

United States Fish and Wildlife Service (USFWS). 2025a. Information for Planning and Consultation (IPaC) resource list. Available online at: https://ecos.fws.gov/ipac/. Accessed November 2025.

USFWS. 2025b. Critical Habitat for Threatened & Endangered Species Mapper. Available online at: https://fws.maps.arcgis.com/home/webmap/viewer.html. Accessed November 2025.

USFWS. 2025c. USFWS National Wetlands Inventory (NWI). Available online at: https://www.fws.gov/wetlands/. Accessed November 2025.

United States Geological Survey (USGS). 2025. National Hydrography Dataset Plus V2. Available online at: https://www.epa.gov/waterdata/nhdplus-national-hydrography-dataset-plus. Accessed November 2025.

Western Regional Climate Center 2025. Cooperative Climatological Data Summaries. NOAA Cooperative Stations – temperature and Precipitation. Regional Climate Center. FRESNO YOSEMITE INTL AP, CALIFORNIA (043257). Available online at: https://wrcc.dri.edu/Climate/west_coop_summaries.php. Accessed November 2025.

Cultural Resources

Castillo, Edward D. 1978. The Impact of Euro-American Exploration and Settlement. In California, edited by Robert F. Heizer, pp.99-127. Handbook of North American Indians Vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, DC.

_____. 2026. California Indian History: Short Overview of California Indian History. Native American Heritage Commission. Accessed May 19, 2026, https://nahc.ca.gov/native-americans/california-indian-history/

The Fresno Advertising Club. “Dedication Ceremonies: Fresno County Courthouse” Souvenir Program. October 29, 1966.

The Fresno Bee. “Architect is Ready to Design New Fresno Federal Building.” January 6, 1963.

Fresno County Sheriff’s Office. “Former Sheriffs: Melvin Arther Willmirth.” Available online at https://www.fresnosheriff.org/admin/info/former-sheriffs.html. Accessed on November 29, 2025.

McDevitt, Ray. Courthouses of California, an Illustrated History. California Historical Society: San Francisco, California, 2001ources and Heyday Books: Berkeley, California, 2001.

Energy

California Department of General Services. 2018. CALGreen. Building Standards Commission. Accessed November 12, 2025 from: https://www.dgs.ca.gov/BSC/CALGreen

California Public Utilities Commission (CPUC). 2025. Renewables Portfolio Standard (RPS) Program. Accessed November 12, 2025 from: https://www.cpuc.ca.gov/rps

California Energy Commission (CEC). 2025a. California Electricity Consumption Dashboard. Accessed December 19, 2025 from: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0

_____. 2025b. California Natural Gas Consumption Dashboard. Accessed December 19, 2025 from: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1

_____.2025c. Clean Energy and Pollution Reduction Act - SB 350. Accessed November 12, 2025 from: https://www.energy.ca.gov/rules-and-regulations/energy-suppliers-reporting/clean-energy-and-pollution-reduction-act-sb-350

_____. 2025d. 2025 Nonresidential Compliance Manual: for the 2025 Building Energy Efficiency Standards. Accessed November 12, 2025 from: https://www.energy.ca.gov/publications/2025/2025-nonresidential-compliance-manual-2025-building-energy-efficiency-standards

City of Fresno. 2020. Fresno General Plan Program Environmental Impact Report. City of Fresno Planning and Development Department. Available at: https://www.fresno.gov/wp-content/uploads/2023/03/Fresno-GP-Public-Review-Draft-Program-EIR.pdf

Pacific Gas & Electric (PG&E). 2025. PG&E Energy Data Request-Public Data Sets. Accessed December 19, 2025 from: https://pge-energydatarequest.com/public_datasets.

Geology and Soils (Paleontology)

CGS. 2025a. Alquist-Priolo Earthquake Fault Zones. Available online at: https://www.conservation.ca.gov/cgs/alquist-priolo. Accessed January 2026.

_____. 2025b. Earthquake Zones of Required Investigation. Available Online at: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/#data_s=id%3AdataSource_4-191d8e6d993-layer-25%3A5339377. Accessed January 2026.

_____. 2025c. Landslides. Available Online at: https://www.conservation.ca.gov/cgs/landslides Accessed January 2026.

City of Fresno. 2014. Fresno General Plan. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf. Accessed January 2026.

Eisentraut, P., and J. Cooper. 2002. Development of a model curation program for Orange County's archaeological and paleontological collections. Prepared by California State University, Fullerton and submitted to the County of Orange Public Facilities and Resources Department/Harbors, Parks and Beaches (PFRD/HPB).

Fresno County. 2018. Fresno County Multi-Jurisdictional Hazard Mitigation Plan. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/FresnoCountyHMPFinal.pdf. Accessed January 2026.

Moore Twining Associates. 2026. Preliminary Geotechnical Engineering and Geologic Hazards Investigation Report for Site Acquisition Phase – Site 1A.

Murphey, P., G. Knauss, L. Fisk, T. Demere, and R. Reynolds. 2019. Best practices in mitigation paleontology. Proceedings of the San Diego Society of Natural History 47: 1-43.

Natural Resources Conservation Service. 2025. Web Soil Survey. Available Online at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Accessed January 2026.

Scott, E., and K. Springer. 2003. CEQA and fossil preservation in southern California. The Environmental Monitor 4-10.

Greenhouse Gases

CARB. 2025a. GHG Short-Lived Climate Pollutant Inventory. Available online at: https://ww2.arb.ca.gov/ghg-slcp-inventory. Accessed January 2026.

_____. 2025b. SB 375 Regional Plan Climate Targets. Available online at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed January 2026.

_____. 2022. 2022 Scoping Plan. Available online at: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp_1.pdf. Accessed January 2026.

_____. 2018. Climate Pollutants Fall Below 1990 Levels for the First Time. Available online at: https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time. Accessed January 2026.

_____. 2007. Staff Report California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit. Available online at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed January 2026.

EDD. 2025. 2023-2033 Industry Employment Projections. Available online at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Flabormarketinfo.edd.ca.gov%2Ffile%2Findproj%2Fcal%24indproj2023-2033.xlsx&wdOrigin=BROWSELINK. Accessed January 2026

Judicial Council. 2015. Water Conservation Policy. Available online at: https://www.courts.ca.gov/documents/jc-20150626-itemK.pdf. Accessed January 2026.

PG&E. 2025. Power Content Label. Available online at: https://www.pge.com/assets/pge/docs/about/corporate-responsibility-and-sustainability/2024-pcl-pacific-gas-and-electric-company.pdf. Accessed January 2026.

USEPA. 2025a. Carbon Dioxide Emissions. Available online at: https://www.epa.gov/ghgemissions/carbon-dioxide-emissions. Accessed January 2026.

_____. 2025b. Methane Emissions. Available online at: https://www.epa.gov/ghgemissions/methane-emissions. Accessed January 2026.

_____. 2025c. Nitrous Oxide Emissions. Available online at: https://www.epa.gov/ghgemissions/nitrous-oxide-emissions. Accessed January 2026.

_____. 2025d. Fluorinated Gas Emissions. Available online at: https://www.epa.gov/ghgemissions/fluorinated-gas-emissions. Accessed January 2026.

_____. 2025e. Sulfur Hexafluoride (SF6) Basics. Available online at: https://www.epa.gov/eps-partnership/sulfur-hexafluoride-sf6-basics. Accessed January 2026.

_____. 2025f. Inventory of U.S. Greenhouse Gas Emissions and Sinks. Available online at: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed January 2026.

_____. 2025g. Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2023. Available online at: https://library.edf.org/AssetLink/145ky510ew61fk1tq5c2klp5kq5yp33j.pdf. Accessed January 2026.

Hazards and Hazardous Materials

California Department of Forestry and Fire Protection. 2025a. Fire Hazard Severity Zone Viewer. Available online at: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/. Accessed January 2026.

County of Fresno. 2026a. Hazardous Materials Management Plans. https://www.fresnocountyca.gov/Departments/Public-Health/Environmental-Health/Hazardous-Materials-Business-Plans. Accessed January 2026.

County of Fresno. 2026b. Hazmat Compliance – The Designated CUPA. https://www.fresnocountyca.gov/Departments/Public-Health/Environmental-Health/HazMat-Compliance-The-Designated-CUPA. Accessed January 2026.

DTSC. 2026. Envirostor. https://www.envirostor.dtsc.ca.gov/public/. Accessed January 2026.

Fresno Council of Governments. 2023. Fresno County Airport Land Use Compatibility Plan (ALUCP). https://www.fresnocog.org/wp-content/uploads/2025/06/2023-ALUCP.pdf. Accessed January 2026.

Moore Twining Associates, Inc. 2026. Phase II Environmental Site Assessment Judicial Council of Courthouse Park Redevelopment 2200 Fresno Street (Southwest Corner of the Intersection of Fresno and M Streets) Fresno, California.

PlaceWorks. 2024. New Fresno Courthouse Due Diligence Review: Site 1.

SWRCB. 2026. GeoTracker, https://geotracker.waterboards.ca.gov/. Accessed January 2026.

Hydrology and Water Quality

City of Fresno. 2026. Water Facilities and Infrastructure. Available online at: https://www.fresno.gov/publicutilities/water-division/water-facilities/. Accessed January 2026.

City of Fresno. 2023. Draft Environmental Impact Report City of Fresno Downtown Neighborhoods Community Plan, Fulton Corridor Specific Plan, and Downtown Development Code. Available online at: https://www.fresno.gov/wp-content/uploads/2023/04/The-Environment-Impact-Report.pdf. Accessed December 29, 2025.

City of Fresno. 2021. 2020 Urban Water Management Plan. Fresno, CA. Available: https://www.fresno.gov/publicutilities/wp content/uploads/sites/16/2021/06/Fresno-2020-UWMP_Public-Draft_2021-06-29.pdf. Accessed January 2026.

Federal Emergency Management Agency (FEMA). 2026. FEMA's National Flood Hazard Layer (NFHL) Viewer. Available online at: https://www.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed January 2026.

Moore Twining Associates. 2026. Preliminary Geotechnical Engineering and Geologic Hazards Investigation Report for Site Acquisition Phase – Site 1A.

SWRCB. 2024. 2024 California Integrated Report Map. Available online at: https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=f0e4ac76fd0e4a53bebead89339ef3c9. Accessed January 2026.

Land Use and Planning

City of Fresno. 2014. Fresno General Plan. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf Accessed December 2025.

_____. 2016. Available online at: https://www.fresno.gov/wp-content/uploads/2023/04/161020FCSPFinallowres1.pdf Accessed December 2025.

County of Fresno. 2024. County of Fresno General Plan. Available online at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/public-works-and-planning/development-services/planning-and-land-use/general-plan/fcgpr_general-plan_county_final_2024_02.pdf Accessed January 2026.

Municode. 2025. Fresno, California – Code of Ordinances. Available online at: https://library.municode.com/ca/fresno/codes/code_of_ordinances?nodeId=14478. Accessed December 2025.

Mineral Resources

CGS (California Geological Survey). 2025. SMARA Mineral Land Classification. California Department of Conservation. Available online at: https://www.conservation.ca.gov/cgs/minerals/mineral-land-classification-smara Accessed December 2025.

City of Fresno. 2014. Fresno General Plan. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf Accessed December 2025.

County of Fresno. 2024. County of Fresno General Plan. Available online at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/public-works-and-planning/development-services/planning-and-land-use/general-plan/fcgpr_general-plan_county_final_2024_02.pdf Accessed January 2026.

DOC (Department of Conservation). 1975. Surface Mining and Reclamation Act of 1975. Available Online at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=2.&title=&part=&chapter=9.&article=1. Accessed December 2025.

Municode. 2025. Fresno, California – Code of Ordinances. Available online at: https://library.municode.com/ca/fresno/codes/code_of_ordinances?nodeId=14478. Accessed December 2025.

The Diggings. 2025. Mining in Fresno County, California. Available online at: https://thediggings.com/usa/california/fresno-ca019. Accessed December 2025.

Noise

Caltrans. 2013. Technical Noise Supplement to the Noise Analysis Protocol. Available online at: https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch2.6/2014-12-19_Caltrans_TrafficNoiseAnalysisProtocol_Part1.pdf. Accessed January 2026.

_____. 2020. Transportation and Construction Vibration Guidance Manual. Available online at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed January 2026.

_____. 2026. Traffic Census Program. Available online at: https://dot.ca.gov/programs/traffic-operations/census. Accessed January 2026.

City of Fresno. 2014. Fresno General Plan, Noise and Safety. Available at: https://www.fresno.gov/wp-content/uploads/2023/03/9-Noise-and-Safety-02-03-21.pdf. Accessed January 2026.

USEPA (U.S. Environmental Protection Agency). 1978. Quiet Communities Act. Available online at: https://www.govtrack.us/congress/bills/95/s3083/text. Accessed January 2026.

FCOG (Fresno Council of Governments). 2023. Appendix C: Fresno-Chandler Executive Airport. Available online at: https://www.fresnocog.org/wp-content/uploads/2025/01/Appendix-C-Fresno-Chandler-Executive-Airport-FCH.pdf. Accessed January 2026.

FHWA (Federal Highway Administration). 2006. FHWA Highway Construction Noise Handbook. Available online at: https://www.nrc.gov/docs/ML0832/ML083250584.pdf. Accessed January 2026.

FTA (Federal Transit Administration). 2018. Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. Prepared by John A. Volpe National Transportation Systems Center. Available online at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed January 2026.

LCI (Office of Land Use and Climate Innovation). 2017. State of California General Plan Guidelines. Governor's Office of Planning and Research. Available online at: https://www.lci.ca.gov/wp-content/uploads/OPR_COMPLETE_7.31.17.pdf. Accessed January 2026.

Municode. 2026. Fresno, California – Code of Ordinances. Available online at: https://library.municode.com/ca/fresno/codes/code_of_ordinances?nodeId=14478. Accessed January 2026.

Walker, Erica and Banks, Jamie L. 2019. Characteristics of Lawn and Garden Equipment Sound: A Community Pilot Study. J Environ Toxicol Stud. 2017 Dec;1(1):10.16966/2576-6430.106. doi: 10.16966/2576-6430.106. Epub 2017 Nov 3. PMID: 31448365; PMCID: PMC6707732. Available online at: https://pmc.ncbi.nlm.nih.gov/articles/PMC6707732/. Accessed January 2026.

Population and Housing

City of Fresno. 2014. Fresno General Plan. Available at: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf

Fresno Council of Governments. 2024. Fresno County 2023-2060 Growth Projections. Available at: https://www.fresnocog.org/wp-content/uploads/2023/11/2024-Fresno-COG-2023-2060-Growth-Projections-adopted-Nov_21_2024.pdf

___. 2018. Regional Transportation Plan. Available at: https://www.fresnocog.org/wp-content/uploads/2017/02/2018-RTP-Cover-Intro-table-of-contents-etc.Final-Draft.pdf

United States Census Bureau (USCB). 2026. QuickFacts - Fresno city, California. Accessed January 13, 2026 from: https://www.census.gov/quickfacts/fact/table/fresnocitycalifornia/LFE041223#LFE041223

Public Services

California Highway Patrol. 2026. (435) Fresno. Available online at: https://www.chp.ca.gov/find-an-office/central-division/435-fresno/ Accessed January 2026.

City of Fresno. 2014. Fresno General Plan. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf Accessed December 2025.

_____. 2025a. Fresno Fire Department. Available online at: https://www.fresno.gov/fire/. Accessed December 2025.

_____. 2025b. Fresno GIS Viewer. Available online at: https://experience.arcgis.com/experience/2b2f1f8322fb426db97ed50fc1693786?views=End. Accessed December 2025.

_____. 2025c. Parks and Recreation. Available online at: https://www.fresno.gov/parks/. Accessed December 2025.

_____. 2025d. Parks, Trails, and Facilities. Available online at: https://www.fresno.gov/parks/parks-trails-facilities/#woodward-park. Accessed December 2025.

_____. 2025e. Police Department. Available online at: https://www.fresno.gov/police/. Accessed December 2025.

_____. 2026. Fire Department. Phone call.

CountyOffice.org. 2026. Fresno County Sheriffs Office in Fresno, California. Available online at: https://www.countyoffice.org/fresno-county-sheriffs-office-fresno-ca-55d/ Accessed January 2026.

Fresno County Public Library. 2025. Fresno County Public Library. Available online at: https://fresnolibrary.org/index.html. Accessed December 2025.

Fresno Unified School District. 2025. Fresno Unified School District. Available online at: https://www.fresnounified.org/about/schools. Accessed December 2025.

Recreation

City of Fresno. 2014. Fresno General Plan. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf Accessed December 2025.

_____. 2025a. Fresno GIS Viewer. Available online at: https://experience.arcgis.com/experience/2b2f1f8322fb426db97ed50fc1693786?views=End. Accessed December 2025.

_____. 2025b. Parks and Recreation. Available online at: https://www.fresno.gov/parks/. Accessed December 2025.

_____. 2025c. Parks, Trails, and Facilities. Available online at: https://www.fresno.gov/parks/parks-trails-facilities/#woodward-park. Accessed December 2025.

County of Fresno. 2024. County of Fresno General Plan. Available online at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/public-works-and-planning/development-services/planning-and-land-use/general-plan/fcgpr_general-plan_county_final_2024_02.pdf Accessed January 2026.

Transportation

City of Fresno. 2007. Downtown Transportation and Infrastructure Study. Available online at: https://www.fresnocog.org/wp-content/uploads/files/TransitDocs/Fresno%20Downtown%20Transportation%20and%20Infrastructure%20Study-Final.pdf. Accessed January 2026.

_____. 2021. General Plan Element, Mobility and Transportation. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp4-Mobility-and-Transportation-9-30-2021.pdf. Accessed January 2026.

_____. 2024. Active Transportation Plan. Available online at: https://www.fresno.gov/publicworks/active-transportation-plan/#top. Accessed January 2026.

FCOG (Fresno Council of Governments). 2008. Bus Rapid Transit Master Plan.

_____. 2022. Regional Transportation Plan & Sustainable Communities Strategy. Available online at: https://www.planfresno.com/planfresno/uploads/2022/06/RTP-SCS-Cover-and-Introduction-pages.pdf. Accessed January 2026.

_____. 2024. Regional Transportation Improvement Program Fiscal Years 2024/25 through 2028/29. Available online at: https://www.fresnocog.org/wp-content/uploads/2023/11/Final-2024-Regional-Transportation-Improvement-Program-01.04.2024.pdf.

Fehr & Peers. 2018. Supplemental Transportation Analysis for the Judicial Council of California Courthouse Project at Lot 41 – Railyards in Sacramento, CA.

Institute of Transportation Engineers. 2025. Trip Generation Manual, 12th Edition. Available online at: https://www.ite.org/technical-resources/topics/trip-and-parking-generation-v2/trip-generation-info/.

LCI (Office of Land Use and Climate Innovation). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. State of California General Plan Guidelines. Governor's Office of Planning and Research. Available online at: https://mtc.ca.gov/sites/default/files/20190122-743_Technical_Advisory.pdf?cb=2a6007b7. Accessed January 2026.

Tribal Resources

Arkush, B.S. 2011. Native Responses to European Intrusion: Cultural Persistence and Agency among Mission Neophytes in Spanish Colonial Northern California. *Historical Archaeology, 45*, 62-90.

Bettinger, Robert L. 2015. Orderly Anarchy: Sociopolitical Evolution in Aboriginal California. University of California Press, January 7, 2015. Social Science.

Castillo, Edward D. 1978. The Impact of Euro-American Exploration and Settlement. In California, edited by Robert F. Heizer, pp.99-127. Handbook of North American Indians Vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, DC.

_____. 2026. California Indian History: Short Overview of California Indian History. Native American Heritage Commission. Accessed May 19, 2026, https://nahc.ca.gov/native-americans/california-indian-history/.

Rosenthal, J.S. & White, G.G. & Sutton, Mark. 2007. The Central Valley: A view from the catbird's seat. California Prehistory: Colonization, Culture, and Complexity. 147-163.

Wallace, W. J. 1978. *Northern Valley Yokuts: Vol. Vol. 8* (pp. 462–470). Smithsonian Institution : For sale by the Supt. of Docs., U.S. G.P.O. https://ehrafworldcultures.yale.edu/cultures/ns29/documents/023

Utilities and Service Systems

City of Fresno. 2025a. Water Division. Available online at: https://www.fresno.gov/publicutilities/water-division/. Accessed December 29, 2025.

City of Fresno. 2025b. Sewer and Wastewater Division. Available online at: https://www.fresno.gov/publicutilities/sewer-wastewater/. Accessed December 29, 2025.

City of Fresno. 2025d. Trash Disposal & Recycling. Solid Waste Management Division. Available online at: https://www.fresno.gov/publicutilities/trash-disposal-recycling/. Accessed December 29, 2025.

City of Fresno. 2023a. Draft Environmental Impact Report City of Fresno Downtown Neighborhoods Community Plan, Fulton Corridor Specific Plan, and Downtown Development Code. Available online at: https://www.fresno.gov/wp-content/uploads/2023/04/The-Environment-Impact-Report.pdf. Accessed December 29, 2025.

City of Fresno. 2023b. Second Amendment to Franchise Agreement. Available online at: https://documents.fresno.gov/WebLink/DocView.aspx?id=17319071&dbid=0&repo=LF-Repository)&cr=1. Accessed December 29, 2025.

City of Fresno. 2021. 2020 Urban Water Management Plan. Available online at: https://wuedata.water.ca.gov/getfile?filename=/public%2Fuwmp_attachments%2F3320789933%2FFresno%202020%20UWMP.pdf. Accessed December 29, 2025.

City of Fresno. 2020. Construction & Demolition Approved Disposal Facilities. Available online at: https://www.fresno.gov/wp-content/uploads/2023/05/DPUSW191004-Construction-Demolition-Approved-Disposal-Facilities-PDF.pdf. Accessed December 29, 2025.

City of Fresno. 2016. Fulton Corridor Specific Plan. Available online at: https://www.fresno.gov/wp-content/uploads/2023/04/161020FCSPFinallowres1.pdf. Accessed December 29, 2025.

City of Fresno. 2014. General Plan Chapter 6 Public Utilities and Services. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/General-Plan-6-Public-Utilities-and-Services-7-19.pdf. Accessed December 15, 2025.

County of Fresno. 2026. Zoning. Web AppBuilder for ArcGIS. Available online at: https://gisportal.co.fresno.ca.us/portal/apps/webappviewer/index.html?id=b921843d343d4df998b5b3c6a301756a. Accessed January 6, 2026.

County of Fresno. 2024. Fresno County General Plan Policy Document. General Plan Review. Available online at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/public-works-and-

planning/development-services/planning-and-land-use/general-plan/fcgpr_general-plan_county_final_2024_02.pdf. Accessed December 29, 2025.

Fresno Metropolitan Flood Control District. 2020. Fresno-Clovis Storm Water Quality Management Program FY 2019-20 Annual Report. Available online at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Fresno-Clovis-Storm-Water-Quality-Management-Program-2019-2020-Annual-Report.pdf. Accessed December 29, 2025.

Fresno Metropolitan Flood Control District. 2013. Fresno-Clovis Storm Water Quality Management Program. Available online at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Stormwater-Quality-Management-Plan.pdf. Accessed December 29, 2025.

HighSpeedInternet.Com. 2026. Internet Providers in Fresno, CA. Available online at: https://www.highspeedinternet.com/ca/fresno. Accessed January 6, 2026.

Wildfire

Butler, B.W., W.R. Anderson, and E.A. Catchpole. 2007. Influence of Slope on Fire Spread Rate. 26-30 March 2007; Destin, FL. Proceedings RMRS-P-46CD. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 662 p. CD-ROM. Available at: https://www.fs.usda.gov/rm/pubs/rmrs_p046/rmrs_p046_075_082.pdf. Accessed April 8, 2026.

California Department of Forestry and Fire Protection. 2025a. Fire Hazard Severity Zone Viewer. Available online at: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/. Accessed December 15, 2025.

California Department of Forestry and Fire Protection. 2025b. Historical California Wildfires. Available online at: https://gis.data.cnra.ca.gov/maps/CALFIRE-Forestry::california-historical-fire-perimeters. Accessed December 15, 2025.

California Department of Forestry and Fire Protection. 2024. CAL FIRE Strategic Plan 2024. Available online at: https://www.fire.ca.gov/about/cal-fire-strategic-plan-2024. Accessed December 15, 2025.

City of Fresno. 2014. General Plan Chapter 6 Public Utilities and Services. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/General-Plan-6-Public-Utilities-and-Services-7-19.pdf. Accessed December 15, 2025.

County of Fresno. 2024. Fresno County Multi-Jurisdictional Hazard Mitigation Plan. Available online at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/resources/hazard-mitigation-plan/draft-2024-fresno-county-hazard-mitigation-plan.pdf. Accessed December 15, 2025.

National Fire Protection Association. 2024. NFPA 1 Fire Code. Available online at: https://www.nfpa.org/product/nfpa-1-fire-code/p0001code. Accessed December 15, 2025.

Weather Underground. 2026. Fresno, CA Weather Conditions. Available online at: https://www.wunderground.com/weather/us/ca/fresno. Accessed April 8, 2026.

Chapter 4 Cumulative Impacts

None.

Chapter 5 Other CEQA Requirements

None.

Chapter 6 Alternatives

None.

8 List of Preparers

8.1 Judicial Council of California (Lead Agency)

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8.2 Stantec (EIR Preparation)

Crystahl Taylor ..... Project Manager, CEQA Lead

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Crystahl Taylor ..... Introduction

Henry Mooney ..... Introduction

Lauren Fah ..... Project Description

Crystahl Taylor ..... Project Description

Henry Mooney ..... Aesthetics

Jen Stock ..... Aesthetics

Lisel Ballmer ..... Agriculture and Forestry Resources

Matthew McPherson ..... Air Quality, Greenhouse Gas

Kaitlyn Heck ..... Air Quality, Greenhouse Gas

Dannique Aalbu ..... Biological Resources

Alisa Reynolds ..... Cultural Resources, Tribal Cultural Resources

Jenna Santy ..... Cultural Resources, Tribal Cultural Resources

Rebecca Riggs ..... Cultural Resources, Tribal Cultural Resources

Alisa Reynolds ..... Historic Resources

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Alyssa Bell ..... Paleontology

Matthew McPherson ..... Greenhouse Gases

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Matthew McPherson ..... Hydrology and Water Quality

Zoe Dascalos ..... Land Use and Planning

Zoe Dascalos ..... Mineral Resources

Tracie Ferguson ..... Noise

Henry Mooney ..... Population and Housing

Zoe Dascalos ..... Public Services

Zoe Dascalos ..... Recreation

Dennis Lammers ..... Transportation

Lisel Ballmer ..... Utilities and Service Systems

Lisel Ballmer ..... Wildfire

Crystahl Taylor ..... Cumulative Impacts

Lisel Ballmer ..... Other CEQA Requirements

Lisel Ballmer ..... Alternatives

APPENDICES

Appendix A NOP Scoping Letters Received

Cervantes, Alexandra

From: Cervantes, Alexandra
Sent: Wednesday, December 10, 2025 7:37 AM
To: AT&T ONLINE SERVICE
Subject: RE: New construction of Fresno Courthouse

Hello,

The Judicial Council of California acknowledges receipt of your comment on the Notice of Preparation of an Environmental Impact Report (EIR) for the New Fresno Courthouse and will consider all information and comments received in preparing the draft EIR.

Thank you,

Facility Services
Judicial Council of California
2860 Gateway Oaks Drive, Suite 400, Sacramento, CA 95833
https://courts.ca.gov/facilities/fresno-county-new-fresno-courthouse

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From: AT&T ONLINE SERVICE <josephpulido@att.net>
Sent: Tuesday, December 9, 2025 6:29 PM
To: Cervantes, Alexandra <alexandra.cervantes@jud.ca.gov>
Subject: New construction of Fresno Courthouse

EXTERNAL EMAIL

I would like to comment regarding the new construction of the Fresno courthouse. In 1966 I witnessed the demolition of our beloved majestic courthouse in downtown Fresno. As someone who grew up in Fresno it was devastating to see it torn down. Fresno never preserves our historic buildings, homes and avenues. Our Historic Society is in name only; they never preserve anything. For example:

1. Historic Courthouse demolished
2. Armenian homes that burned down, they were going to be preserved but the Historic Society did not take enough steps to care for them.
3. Names of major avenues changed which were historically valuable, all avenues over 100 years old. All changed to Cesar Chavez Avenue.
   - King Canyon Avenue to National Park
   - California Avenue
   - Ventura Avenue

I am sure there are many more demolitions of historic sites in Fresno I am not aware of. Years ago, there was a news article regarding the dome/copula from the old courthouse still in the Fresno area. I do not know the location.
Would it be possible to build a new courthouse and incorporate and use the historic dome/copula? If this is included it would look historic on the outside and modern on the inside. This would enhance the downtown area. The current courthouse in the 60s era design is so unattractive it should have been torn down years ago. We need something to enhance our downtown area, and individuals would go downtown more often. I definitely would go if there was something nice to look at, just like the historic courthouse in Sacramento, so majestic, beautiful and wonderful for the Sacramento downtown area which I have toured. Hopefully, Fresno would have the same.
Thank you and hopefully you would consider my thought regarding the new construction of the Fresno courthouse.
Margaret

Cervantes, Alexandra

From: Jeffrey Whitaker <Jeffbsn@outlook.com>
Sent: Friday, December 12, 2025 10:22 AM
To: Cervantes, Alexandra
Subject: Fresno Courthouse

EXTERNAL EMAIL

I'm sure you will design this new courthouse to be ADA compliant; this is my major promotion. Me being in a wheelchair the current courthouse is very hard to navigate due to it being on a 'hill' and once I'm in the courthouse level 6th, 5th, 3rd, and B1 are hard to enter through the dble wooden doors.

Cervantes, Alexandra

From: Rod McNeely <rmcneely@ppeng.com>
Sent: Friday, December 12, 2025 5:03 PM
To: Cervantes, Alexandra
Cc: Brayden Lovik
Subject: RE: New Fresno County Courthouse EIR - site plan comments
Attachments: JCC Fresno Courthouse_NOP Site Plan with Easement notes.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

EXTERNAL EMAIL

Hi Alexandra,
It was nice to meet you last night. Based on review of the preliminary NOP site plans, I have a few comments that could be beneficial to JCC and the Criteria Architect team. These are not necessarily EIR scoping comments as they related more to the JCC's Site Acquisition study.

My firm has been involved in various projects at Courthouse Park, so we have good understanding of the campus. As I reviewed one of our files related to a City bus stop improvement project, I came across a 2014 preliminary title report and a bus stop easement document associated with the Fresno Street bus shelter improvements.

First, the title report documented a public right of vacation associated with the Fresno Street frontage near the proposed courthouse site. I know the NOP Site Plan are very preliminary, but I am concerned that the plan may not correctly reference the Fresno Street right of way based on the data that I have from 2014..

Second, based on our involvement with a Fresno Street bus shelter project, we have copies of the City's easement documents for the Fresno Street bus shelters. One of these documents refers to a 1989 unrecorded agreement between City and County for bus stop shelters. This area is in addition to a 35' wide street easement area along the Fresno Street frontage.

Both comments are graphically illustrated on the attached exhibit. You are welcome to share this with a JCC PM for the Site Acquisition and Criteria Architect phase.
We have more information, if JCC finds this helpful.

Rod McNeely, P.E.
Office: (559) 449-2700

From: Cervantes, Alexandra <Alexandra.Cervantes@jud.ca.gov>
Sent: Tuesday, December 9, 2025 1:11 PM
To: Rod McNeely <rmcneely@ppeng.com>
Cc: Brayden Lovik <BLovik@ppeng.com>
Subject: RE: New Fresno County Courthouse EIR - error in listed

Hello,

Thank you for informing us of the incorrect date. We are working on revising the notice and updating our documents to reflect Thursday.

Respectfully,

Alexandra Cervantes, Senior Facilities Analyst
Environmental Health & Safety
Judicial Council of California
2860 Gateway Oaks Drive, Suite 400, Sacramento, CA 95833
alexandra.cervantes@jud.ca.gov, www.courts.ca.gov

From: Rod McNeely <rmcneely@ppeng.com>
Sent: Monday, December 8, 2025 8:59 AM
To: Cervantes, Alexandra <Alexandra.Cervantes@jud.ca.gov>
Cc: Brayden Lovik <BLovik@ppeng.com>
Subject: New Fresno County Courthouse EIR - error in listed

EXTERNAL EMAIL

Hello Alexandra,
I reviewed the NOP for the New Fresno County Courthouse EIR. Unfortunately, the NOP includes *an incorrect reference* to the date of the public scoping meeting. The meeting is identified as Wednesday, December 11, 2025 at the Fresno Courthouse, Jury Assembly Room. Given that Wednesday is December 10th, this notice is not clear if the meeting is on Wednesday or Thursday. I also see this incorrect data referenced on the SCH website.

As you are aware, correct public noticing of a public scoping meeting within the NOP timeframe is important process to follow. There are several ways to remedy this clerical error, which should be addressed immediately.

I'm glad to discuss if you have any questions.

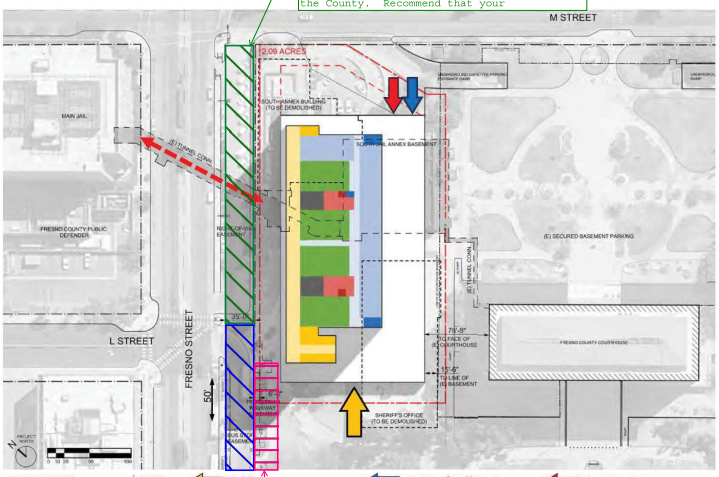
Rod McNeely, P.E.
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Site 1A - Preferred

This parallel parking frontage area was dedicated for public street purposes in 1956, then subsequently vacated in 1965. This acquisition area does not include the area, which would remain under control of the County. Recommend that your

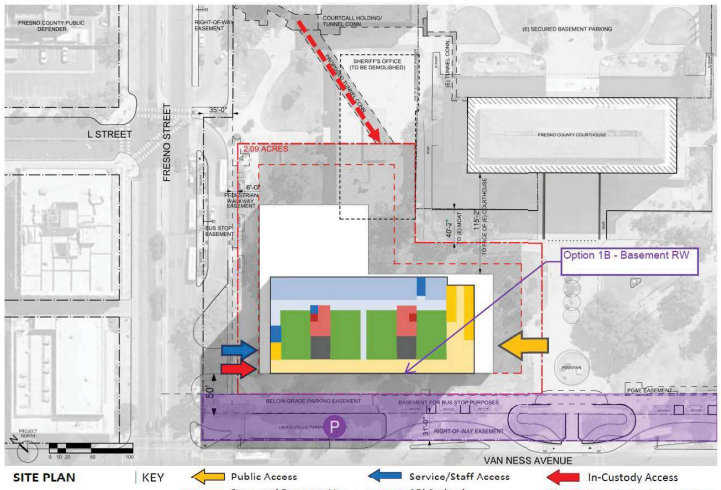


SITE PLAN | KEY

Public Acc… | Proposed … | Below-gra… | …cess | …Connection

The area possibly identified as a Bus Stop Easement is a 1952 Public Street Easement. Additionally, there is an unrecorded Agreement from 1989 between City and County for City bus stop facilities over a 26' wide x 139.50' long area conceptually illustrated here.

Site 1B - Alternative



SITE PLAN | KEY

Public Access | Proposed Property Line | Below-grade | Service/Staff Access | 25' Setback | Buildings to be Demolished | In-Custody Access | Potential Jail Connection | P Public Parking



Notes
1. Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet
2. Data Sources: Stantec 2025. Judicial Council of California - PREFERRED 1A. COURTHOUSE PARK, Fresno St. | Pg. 17 | Sept. 25, 2023. ALTERNATE 1B. COURTHOUSE PARK, Van Ness Ave. | Pg. 15 | Sept. 14, 2023.
3. Background: Sources: Esri, GEBCO, NOAA, National Geographic, Garmin, HERE, Geonames.org, and other contributors
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Stantec

Project Location	Prepared by DL on 2025-04-30
City of Fresno	TR by SET on 2025-04-30
Fresno County, California	IR by SR on 2025-04-30
Client/Project	185806843

Judicial Council of California
New Fresno Courthouse Project

Figure No.
3

Title
Proposed Site Plan

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

V:\185\Active\185806843_JCC_Fresno_Courthouse\02_data\gis_cad\arcFigure3_ProposedCourthouseLayout_20250430.mxd Revised: 2025-04-30 By: rallow

December 24, 2025

Alexandra Cervantes, Senior Facilities Analyst
Environmental Health and Safety
Judicial Council of California
2860 Gateway Oaks Drive, Suite 400
Sacramento, CA 95833
Sent via email: Alexandra.Cervantes@jud.ca.gov

Dear Ms. Cervantes:

Thank you for the opportunity to comment on the scope of the environmental review for the New Fresno Courthouse Project of the Judicial Council of California.

The Downtown Fresno Partnership (DFP) is a §501(c)(6) nonprofit association whose purpose is to improve and promote the economic well-being of Downtown Fresno. DFP operates the public-private Downtown Fresno Property and Business Improvement District whose 352 assessed properties include the Courthouse and Courthouse Park. DFP's board is mostly elected by property owners in addition to seats for County and City of Fresno officials.

DFP supports construction of a new Superior Courthouse at the current site of the Sheriff's Department headquarters and Jail Annex, within Courthouse Park. DFP supports maximizing the value of Courthouse Park as high-quality green space for the Downtown community, both before and after construction of the new Courthouse and removal of the current Courthouse. DFP is committed to working actively with the County, State, and other agencies and community partners to help secure funding for and facilitate park planning, community engagement, event activation, and built improvements.

The New Courthouse Project has the potential to greatly impact not only the project site, but life in Downtown Fresno. The Courthouse drives activity and value in commercial real estate in nearby blocks, while Courthouse Park is Downtown's most important green space, and the site of significant cultural resources. Considering this, the Project's Environmental Impact Report (EIR) should consider impacts and benefits to:

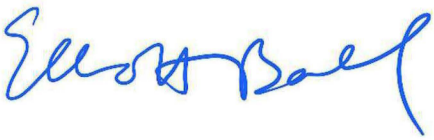
- Urban decay, by keeping the Courthouse in Courthouse Park, the location best accessible by a short walk to the most surrounding commercial office space as well as restaurants, cafes, and other retail, which help these locations remain economically viable.
- Active transportation/walkability, by ensuring high-quality pedestrian paths of travel on major routes along the park's perimeter as well as to/from the Courthouse, with a minimum of pedestrian/automobile conflicts.
- The quality of park space, in Courthouse Park as it will appear after the project is built, benefited by the proposed replacement of existing buildings that consume valuable park space.
- Cultural resources, both in the design quality of the new Courthouse and in potential reorganization of the monument locations affected by the project.

The "Project Objectives" section of the Notice of Preparation states that the project "would replace a seismically deficient facility that is non-compliant with contemporary fire, life, safety, and ADA codes." If the current facility is obsolete and should be removed, then it seems its demolition should be part of the scope of the project for environmental review purposes. Though it is unclear whether the demolition is part of currently appropriated funding, it is reasonably foreseeable consequence of the project if the building is obsolete.

Indeed the demolition, if anticipated, is integrally related to the project. The current facility's future absence should inform the siting and design of the new building. The opening of the current site would create an opportunity to plan upfront for the park space created, and the optimal siting of affected historical markers and monuments.

Thank you again for the opportunity to comment. DFP looks forward to remaining engaged in the planning and environmental review processes for the New Courthouse Project, and if possible, being a resource to help facilitate community engagement as well.

Sincerely,



Elliott Balch
President & CEO
Downtown Fresno Partnership

Cervantes, Alexandra

From: Elliott Balch <elliott@downtownfresno.org>
Sent: Wednesday, December 24, 2025 2:18 PM
To: Cervantes, Alexandra
Subject: EIR scoping comment letter
Attachments: Courthouse project scoping letter - 2025-12-24.pdf

EXTERNAL EMAIL

Alexandra,

Please find comments on the New Fresno Courthouse Project from our organization attached.

We look forward to remaining engaged with you on this exciting project.

Thank you and Merry Christmas!

Elliott Balch *he/him/él*
President & CEO
DOWNTOWN FRESNO PARTNERSHIP
2020 Tulare Street, Fresno, California 93721
Office (559) 490-9966 x106 | Cell (559) 977-5372

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RECEIVED
JAN - 7 2025



Alexandra Cervantes, Senior Facilities Analyst
Environmental Health & Safety
Judicial Council of California
2860 Gateway Oaks Drive, Suite 400
Sacramento. CA 95833

Please fold, staple, stamp, and mail

Comment Card

New Fresno Courthouse
Scoping Meeting for Environmental Impact Report

Written comments can be submitted at the comment meeting, mailed to the Judicial Council (mailing address is on the back of this card), or emailed to Alexandra.Cervantes@jud.ca.gov by close of business on Monday, December 29, 2025. Information related to this Project is available for review on the Judicial Council's website at: https://courts.ca.gov/facilities/fresno-county-new-fresno-courthouse
(Please print clearly)

Name: BILL PARKER Date: 12-29-2025

Organization / Address:

Phone: (559) 930-1722 Email: bparker732@aol.com

I SUGGEST THAT THE NEW COURTHOUSE BE LOCATED ON THE 'M STREET' PLAZA AND ALIGNED WITH THE EXISTING GOVERNMENT BUILDINGS ON THE MARIPOSA STREET CORRIDOR. (NOT THE PROPOSED SITE AT THE CORNER OF M & FRESNO STREETS)

THIS LOCATION WOULD BE VISUALLY PLEASING AND FURTHER CREATE THE M STREET CORRIDOR OF EXISTING MID & HIGH RISE BUILDINGS - AND WOULD CENTER THE NEW COURTHOUSE BUILDING ON THE COURTHOUSE PARK - AND AT THE SITE OF THE ORIGINAL HISTORIC (DEMOLISHED) COURTHOUSE.

All comments become part of the public record.



SUGGESTED NEW FRESNO COUNTY SUPERIOR COURT HOUSE LOCATION. THIS PLAZA AREA WAS THE SITE OF THE HISTORIC FRESNO COURTHOUSE AND WOULD BE IN ALIGNMENT WITH THE CIVIC CENTER / MARIPOSA STREET GOVERNMENT CORRIDOR PLAN.

Appendix B Air Quality and Greenhouse Gas Impact Assessment

New Fresno Courthouse Project

Air Quality and Greenhouse Gas Technical Study

Stantec

Prepared for:
Judicial Council of California
2860 Gateway Oaks Dr., Suite 400
Sacramento, CA 95833

Prepared by:
Stantec Consulting Services Inc.
300 North Lake Ave, Suite 400
Pasadena, California 91101

July 2, 2026

Project/File:
185806843

Stantec Consulting Services Inc.

Disclaimer

The conclusions in the Report titled Fresno Courthouse Project Air Quality and Greenhouse Gas Technical Study are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

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Prepared by: Matthew McPherson

Signature

Matthew McPherson

Reviewed by: Kaitlyn Heck

Signature

Kaitlyn Heck

Approved by: Crystahl Taylor

Signature

Crystahl Taylor

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Appendix A Air Quality and GHG Emission Output Files
Appendix B AERMOD and HARP Output Files

Acronyms / Abbreviations

Acronym / Abbreviation	Full Name
2022 Scoping Plan	Final 2022 Scoping Plan for Achieving Carbon Neutrality
µg/m^3	Micrograms Per Cubic Meter
AB	Assembly Bill
ACBMs	Asbestos-Containing Building Materials
ACC	Advanced Clean Cars
AERMOD	AMS/EPA Regulatory Model
AQMP	Air Quality Management Plan
ASFs	Age sensitivity factors
BAU	Business as Usual
BMPs	Best Management Practices
BPS	Best Performance Standards
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
California DOJ	California Department of Justice
CALGreen	California Green Building Standards Code
CalRecycle	Department of Resources Recycling and Recovery
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCAP	Climate Change Action Plan
CCR	California Code of Regulations
CDC	Centers for Disease Control
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH_4	Methane
City	City of Fresno
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CRC	California Resources Corporation

Acronym / Abbreviation	Full Name
CY	Cubic Yards
DPM	Diesel Particulate Matter
DRRP	Diesel Risk Reduction Plan
EISA	Energy Independence & Security Act
EO	Executive Order
EPCA	Energy Policy & Conservation Act
FCAA	Federal Clean Air Act
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GHG	Greenhouse Gases
GWP	Global Warming Potential
HARP 2	Hotspot Analysis Reporting Program Version 2
HAP	Hazardous Air Pollutants
HFC	Hydrofluorocarbons
HHDT	Heavy heavy duty trucks
L/kg-day	Liters per kilogram of body weight per day
LCFS	Low Carbon Fuel Standard
LEV	Low-Emission Vehicle
MEIR	Maximally Exposed Individual Receptor
mg/m^3	Milligrams per cubic meter
MMT	Million Metric Tons
mph	Miles per hour
MSL	Mean Sea Level
$MTCO_2e$	Metric Tons of Carbon Dioxide Equivalents
MW	Megawatt
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NOA	Naturally Occurring Asbestos
NF_3	Nitrogen Trifluoride
NO_X	Oxides of Nitrogen
NO_2	Nitrogen Dioxide
O_3	Ozone

Acronym / Abbreviation	Full Name
OEHHA	Office of Environmental Health Hazard Assessment
Pb	Lead
PCFs	Perfluorocarbons
PG&E	Pacific Gas & Electric
PM	Particulate Matter
$PM_{2.5}$	Fine particulate matter; particulate matter 2.5 microns or smaller
PM_{10}	Particulate matter; particulate matter 10 microns or smaller
ppb	Parts per billion
ppm	Parts per million
Project	New Fresno City Courthouse Project
Project Site	2200 Fresno Street, Fresno, California
Pvc	Polyvinyl chloride
RAST	Risk Assessment Standalone Tool
ROG	Reactive Organic Gases
RPS	Renewable Portfolio Standard
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCFM	Standard Cubic Feet per Minute
SF	Square Feet
SF_6	Sulfur Hexafluoride
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
TAC	Toxic Air Contaminants
VDE	Visible Dust Emissions
VOC	Volatile Organic Compounds
ZEV	Zero Emission Vehicle

1 Introduction

1.1 Purpose of Analysis

The purpose of this Air Quality and Greenhouse Gas Impact Assessment is to provide a discussion of air pollutants, health risks posed to nearby sensitive receptors, and greenhouse gas (GHG) emissions from construction and operation of the Fresno Courthouse Project (Project). This evaluation relies on guidance and thresholds established by the United States Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the San Joaquin Valley Air Pollution Control District (SJVAPCD).

1.2 Project Description

The Project would involve demolition of the existing Sheriff Administration Building and South Annex Jail buildings and construction of a modern, 36-courtroom, approximately 413,000-square-foot courthouse (Project) on the 2.09 acres of the 7.6-acre L-shaped Site 1 at 2200 Fresno Street, Fresno, California (Project Site), Figure 1. The building would be delivered through a design-build process, with separate secure and public access, and secure parking for judicial officers and law enforcement. The new courthouse would consolidate Superior Court operations currently split across multiple facilities, improving efficiency, security, and public service. It would include all case types and filings, judicial chambers, jury services, clerk and administrative offices, and dedicated secure circulation pathways. Specific Project components are detailed below.

1.2.1 Demolition , Site Preparation, and Grading

The Project would demolish the existing Sheriff Administration Building and South Annex Jail buildings (approximately 87,000 square feet) and 40,000 square feet of existing paving. It is anticipated that site preparations and grading would require the export of approximately 1,000,000 cubic yards (CY) of material and import of approximately 1,000 CY of fill material.

1.2.2 Building Program and Design

The Project would construct a new, approximately 413,000 square foot, 36 courtroom courthouse, up to 11 stories in height, delivered via a design-build method. The proposed building design would organize public functions on the ground level, with courtrooms and support spaces on upper floors. Circulation would be separated for the public, staff/judicial officers, and in-custody defendants, with secure holding and transport pathways and a sallyport (controlled entryway) providing direct access to holding areas.

1.2.3 Access and Parking

Local vehicular access to the Project Site would be provided via Fresno Street, M Street, Tulare Street, and Van Ness Avenue. Pedestrian access to the new courthouse is proposed along the west side of the building, which is adjacent to Bus Shelter L of the Downtown Courthouse Park Transit Center off of Fresno Street. Secured parking for judges and officers, as well as a sallyport for in-custody transport vehicles, are proposed within the basement level of the new courthouse building. Vehicular access to the secured parking area would be provided via a proposed driveway along M Street. Visitors to the new courthouse would utilize available off-site public parking owned by the City in the surrounding area.

1.2.4 Construction Schedule and Staging

Construction is planned to occur over 48 months with an anticipated start date in October 2029 and construction completion in October 2033. Construction laydown and staging would occur within the Project Site to the extent feasible. However, due to property line limits, the construction contractor will likely need to lease office space close to the Project Site, as well as a nearby empty lot for storage. It is assumed that the emissions from travel between the office space, storage lot, and Project site would be negligible and therefore were not included within the modeling.

Figure 1 Project Location



2 Air Quality

2.1 Environmental Setting

The Project is located within the San Joaquin Valley Air Basin (SJVAB) and within the jurisdiction of the SJVAPCD. Air pollution in the SJVAB can be attributed to both anthropogenic (i.e., human-related) and non-anthropogenic (i.e., natural) activities that can produce emissions. Air pollution from significant anthropogenic activities in the SJVAB include a variety of industrial-based sources and on- and off-road mobile sources (SJVAPCD 2015).

2.1.1 Climate, Topography, Wind, and Meteorology

The SJVAB has an "inland Mediterranean" climate and is characterized by long, hot, dry summers and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone [O_3]), and the SJVAB averages over 260 sunny days per year. The SJVAB is generally shaped like a bowl: it is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada are along the eastern boundary and rise 8,000–14,000 feet in elevation; the Coast Ranges are along the western boundary, rising to 3,000 feet; and the Tehachapi Mountains are along the southern boundary at 6,000–8,000 feet in elevation (SJVAPCD 2015).

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the SJVAB form natural horizontal barriers to the dispersion of air contaminants. The wind generally flows south-southeast through the valley, through the Tehachapi Pass and into the Southeast Desert Air Basin portion of Kern County. As the wind moves through the SJVAB, it mixes with the air pollution generated locally, transporting air pollutants from the north to the south in the summer and in a reverse flow in the winter (SJVAPCD 2015).

Strong temperature inversions occur throughout the SJVAB in the summer, fall, and winter. The result is a relatively high concentration of air pollution in the valley during inversion episodes. These inversions cause haziness, which in addition to moisture may include suspended dust, a variety of chemical aerosols emitted from vehicles, particulates from wood stoves, and other pollutants. In the winter, these conditions can lead to carbon monoxide hotspots along heavily traveled roads and at busy intersections. During summer's longer daylight hours, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy for the photochemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NOx), which results in the formation of O_3 (SJVAPCD 2015).

Because of the prevailing daytime winds and time-delayed nature of O_3, concentrations are highest in the southern portion of the SJVAB. Summers often have periods of hazy visibility and occasionally unhealthful air. Winter air quality impacts tend to be localized and can consist of, but are not exclusive to, odors from agricultural operations; soot or smoke around residential, agricultural, and hazard-reduction wood burning; or dust near mineral resource recovery operations (SJVAPCD 2015).



2.1.2 Criteria Air Pollutants

Criteria air pollutants include O_3, CO, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and particulate matter (PM) measured both in units of smaller than 2.5 microns in diameter ($PM_{2.5}$) and in units smaller than 10 microns in diameter (PM_{10}) (USEPA 2025a). In addition, sulfates (SO_4), H_2S, vinyl chloride, and visibility reducing particles, are not considered criteria pollutants by the Federal Clean Air Act (FCAA) but are pollutants of concern for the state.

2.1.2.1 Ozone (O_3)

Most ground-level O_3 is formed as a result of complex photochemical reactions in the atmosphere between ROGs, NOx, and oxygen. ROGs and NOx are considered precursors to the formation of O_3, a highly reactive gas that can damage lung tissue and affect respiratory function (USEPA 2025b). O_3 can damage the respiratory tract, causing inflammation and irritation, and it can induce symptoms, such as coughing, chest tightness, shortness of breath, and worsening of asthmatic symptoms. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. Exposure to high concentrations of O_3 (above the current ambient air quality standard) leads to lung inflammation, lung tissue damage, and a reduction in the amount of air inhaled into the lungs. Health effects include potential increased susceptibility to respiratory infections and reduced ability to exercise. Health effects are more severe in people with asthma and other respiratory ailments. People who work or play outdoors are at a greater risk for harmful health effects from O_3. Children and adolescents are also at greater risk because they are more likely than adults to spend time engaged in vigorous activities (USEPA 2025c). While O_3 in the lower atmosphere is considered a damaging air pollutant, O_3 in the upper atmosphere is beneficial, as it protects Earth from harmful ultraviolet radiation. However, atmospheric processes preclude ground-level O_3 from reaching the upper atmosphere (USEPA 2025b).

2.1.2.2 Carbon Monoxide (CO)

CO is a colorless, odorless, poisonous gas produced by the incomplete combustion of fossil fuels. Elevated levels of CO can result in harmful health effects, especially for the young and elderly, and can also contribute to global climate change (USEPA 2025d). When inhaled, CO enters the bloodstream and binds more readily to hemoglobin, the oxygen-carrying protein in blood, than oxygen, thereby reducing the oxygen-carrying capacity of blood and reducing oxygen delivery to organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected, but only at higher levels of exposure. Exposure to CO can cause chest pain, headaches, and reduced mental alertness. At high concentrations, CO can cause heart difficulties in people with chronic diseases and can impair mental abilities. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and, with prolonged enclosed exposure, death.

2.1.2.3 Nitrogen Dioxide (NO_2)

NO_2 is a brownish, highly reactive gas primarily produced as a result of the burning of fossil fuels. NO_2 can also lead to the formation of O_3 in the lower atmosphere. NO_2 can cause respiratory ailments, especially in the young and elderly, and can lead to degradations in the health of aquatic and terrestrial ecosystems (USEPA 2025e). Direct inhalation of NO_2 can cause a wide range of health effects, including irritation of the lungs, lung damage, and lowered resistance to respiratory infections, such as influenza. Short-term exposures (e.g., less than 3 hours) to low levels of NO_2 may lead to changes in airway responsiveness and lung function in individuals with preexisting respiratory illnesses. These exposures may also increase respiratory illnesses in children. Long-term exposures to NO_2 may lead to increased susceptibility to respiratory infection and may cause irreversible lung damage. Other health effects associated with NO_2 include an increase in the incidence of chronic bronchitis and lung irritation.

2.1.2.4 Sulfur Dioxide (SO_2)

SO_2 is primarily emitted from the combustion of coal and oil by steel mills, pulp and paper mills, and non-ferrous smelters. High concentrations of SO_2 can aggravate existing respiratory and cardiovascular diseases in asthmatics and others who suffer from emphysema or bronchitis. High concentrations of SO_2 can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. Health effects from exposure to emissions of SO_2 include aggravation of lung diseases, especially bronchitis, and constricting of breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. Short-term exposures of individuals to elevated SO_2 levels during moderate activity may result in health effects, including breathing difficulties that can be accompanied by symptoms, such as wheezing, chest tightness, or shortness of breath. Other health effects that have been associated with longer-term exposures to high concentrations of SO_2, in conjunction with high levels of particulate matter, include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs' defenses. SO_2 also contributes to acid rain, which in turn, can lead to the acidification of lakes and streams (USEPA 2025f, CARB 2025a).

2.1.2.5 Lead (Pb)

Sources of Pb include pipes, fuel, and paint, although the use of Pb in these materials has declined dramatically over the years. Historically, the main source of Pb was automobile emissions. Pb can be inhaled directly or ingested by consuming Pb-contaminated food, water, or dust. Fetuses and children are most susceptible to Pb poisoning, which can result in heart disease and nervous system damage (USEPA 2025g). Through regulations, the USEPA has gradually reduced the Pb content of gasoline. This program has essentially eliminated violations of the Pb standard in urban areas except those areas with Pb point sources. Exposure to Pb occurs mainly through inhalation of air and ingestion of Pb in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to Pb may cause neurological impairments, such as seizures, mental retardation, and behavioral disorders. Even at low doses, Pb exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ. Recent studies also show that Pb may be a factor in high blood pressure



and subsequent heart disease. Pb can also be deposited on the leaves of plants, presenting a hazard to grazing animals and humans through ingestion (USEPA 2025g).

2.1.2.6 Particulate Matter (PM)

Airborne PM is not a single pollutant, but rather is a mixture of many chemical species. PM is a complex mixture of solids and aerosols composed of small droplets of liquid, dry solid fragments, and solid cores with liquid coatings. Particles vary widely in size, shape, and chemical composition; and they may contain inorganic ions, metallic compounds, elemental carbon, organic compounds, and compounds from Earth's crust. Particles are defined by their diameter for air quality regulatory purposes. Those with a diameter of 10 microns or less (PM_{10}) are inhalable into the lungs and can induce adverse health effects. Fine particulate matter is defined as particles that are 2.5 microns or less in diameter ($PM_{2.5}$) and is a portion of PM_{10}. Emissions from combustion of gasoline, oil, diesel fuel, or wood produce much of the $PM_{2.5}$ pollution found in outdoor air and a significant proportion of PM_{10}. PM_{10} also includes dust from construction sites, landfills and agriculture, wildfires and brush or waste burning, industrial sources, wind-blown dust from open lands, pollen, and fragments of bacteria.

PM may be either directly emitted from sources (primarily particles) or formed in the atmosphere through chemical reactions of gases (secondary particles) such as SO_2, NOx, and certain organic compounds (USEPA 2025h).

PM_{10} and $PM_{2.5}$ particles are small enough—about one-seventh the thickness of a human hair or smaller—to be inhaled and lodged in the deepest parts of the lung, where they evade the respiratory system's natural defenses and can be trapped in the nose, throat, and upper respiratory tract. Health effects from exposure to PM_{10} and $PM_{2.5}$ occur when the body reacts to these foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases; heart and lung disease; and coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of PM in the air. PM_{10} and $PM_{2.5}$ can aggravate respiratory disease and cause lung damage, cancer, and premature death. Sensitive populations, including children, the elderly, exercising adults, and those suffering from chronic lung disease, such as asthma or bronchitis, are especially vulnerable to the effects of PM. Of greatest concern are recent studies that link PM exposure to the premature death of people who already have heart and lung disease, especially the elderly. Acidic PM can also damage humanmade materials and is a major cause of reduced visibility in many parts of the United States. Non-health-related effects include reduced visibility and soiling of buildings (CARB 2025b).

2.1.2.7 Sulfates

Sulfates are a category of chemicals that contain the fully oxidized ionic form of sulfur (SO_4^{2-}) in combination with metal or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur.



CARB's sulfate standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in oxygen intake, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. When acidic pollutants and particulates are also present, SO_2 tends to have an even more toxic effect. Sulfate particles are usually acidic and contribute to acid rain (CARB 2025c). There are currently no adopted National Ambient Air Quality Standards (NAAQS) for sulfates.

2.1.2.8 Hydrogen Sulfide (H_2S)

H_2S is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. H_2S in the atmosphere would likely oxidize into SO_2 that can cause acid rain. At low concentrations, H_2S, which has a characteristic "rotten egg" smell, may cause irritation to the eyes, mucous membranes, and respiratory system, dizziness, and headaches. At high concentrations, H_2S is extremely hazardous, especially in enclosed spaces (CARB 2025d). There are currently no adopted NAAQS for H_2S.

2.1.2.9 Vinyl Chloride

Vinyl chloride is a sweet-smelling colorless gas at ambient temperature. Landfills, publicly owned treatment works, and polyvinyl chloride (PVC) production are the major identified sources of vinyl chloride emissions in California. PVC can be fabricated into several products, such as PVC pipes, pipe fittings, and plastics. In humans, epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of liver angiosarcoma, which is a rare cancer, and have suggested a relationship between exposure cancers of the lung and brain (CARB 2025e). There are currently no adopted NAAQS for vinyl chloride.

2.1.2.10 Visibility Reducing Particles

Visibility reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. Except for Lake County, which is designated to be in attainment, California's attainment status with respect to visibility reducing particles is currently designated as unclassified (CARB 2025f). There are currently no adopted NAAQS for visibility reducing particles.

2.1.3 Attainment Status

The USEPA and CARB designate air basins where ambient air quality standards are exceeded as "non-attainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National non-attainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Attainment status is based on the NAAQS and the California Ambient Air Quality Standards (CAAQS). Non-attainment-Transitional is a designation given by the state to indicate exceedance of the state standard no more than three times at any monitoring location within the district in a single calendar year. Each standard has a different definition, or



"form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring value exceeds the threshold per year. In contrast, the federal annual standard for $PM_{2.5}$ is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

The FCAA identifies two types of NAAQS. Primary standards provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings (CARB 2024a). The CAAQS are equal to or more stringent than the NAAQS and include pollutants for which national standards do not exist. Table 1 presents the applicable CAAQS and NAAQS.

Table 1. California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]	National Standards[2]	
			Primary	Secondary
Ozone (O_3)	8-hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary Standards
	1-hour	0.09 ppm (180 µg/m^3)	--	
Carbon monoxide (CO)	8-hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	--
	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	
Nitrogen dioxide (NO_2)	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	
	1-hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	Same as Primary Standard
Sulfur dioxide (SO_2)	24-hour	0.04 ppm (105 µg/m^3)		--
	3-hour	--	--	0.5 ppm (1300 µg/m^3)
	1-hour	0.25 ppm (655 µg/m^3)	75 ppb	--
Respirable Particulate Matter Smaller than 10 Microns in Diameter (PM_{10})	Annual arithmetic mean	20 µg/m^3	--	Same as Primary Standards
	24-hour	50 µg/m^3	150 µg/m^3	
Respirable Particulate Matter Smaller than 2.5 Microns in Diameter ($PM_{2.5}$)	Annual arithmetic mean	12 µg/m^3	9.0 µg/m^3	15 µg/m^3
	24-hour	No separate standard	35 µg/m^3	Same as Primary Standards
Sulfates	24-hour	25 µg/m^3	--	--
Lead (Pb)	30-day average	1.5 µg/m^3	--	--
	Rolling 3-month average	--	0.15 µg/m^3	Same as Primary Standard
Hydrogen sulfide (H_2S)	1-hour	0.03 ppm (42 µg/m^3)	--	--
Vinyl chloride (chloroethene)	24-hour	0.01 ppm (26 µg/m^3)	--	--

Pollutant	Averaging Time	California Standards[1]	National Standards[2]	
			Primary	Secondary
Visibility reducing particles	8-hour	In 1989, the Air Resources Board converted the general statewide 10-mile visibility standard to instrumental equivalents, which are extinction of 0.23 per kilometer.	--	--

Notes:
[1] CO, SO_2 (1- and 24-hour), NO_2, O_3, PM_{10}, and visibility reducing particles standards are not to be exceeded.
[2] Not to be exceeded more than once a year except for annual standards.
-- = no standard established
$\mu g/m^3$ = micrograms per cubic meter
mg/m^3 = milligrams per cubic meter
ppm = parts per million
Source: CARB 2024a.

The current attainment designations for the SJVAPCD are shown in Table 2. The SJVAPCD is designated as non-attainment for state and federal eight-hour O_3, state one-hour O_3, state PM_{10}, and federal and state $PM_{2.5}$.

Table 2. SJVAPCD Area Attainment Status

Pollutant	Designation/Classification of Federal Standards	Designation/Classification of State Standards
Ozone – One hour	No Federal Standard	Non-attainment
Ozone – Eight Hour	Non-attainment[1]	Non-attainment
PM_{10}	Attainment	Non-attainment
$PM_{2.5}$	Non-attainment	Non-attainment
Carbon Monoxide	Unclassifiable/Attainment	Unclassified/Attainment
Nitrogen Dioxide	Unclassifiable/Attainment	Attainment
Sulfur Dioxide	Unclassifiable/Attainment	Attainment
Lead	Unclassifiable/Attainment	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

Source: SJVAPCD 2025.

2.1.4 Ambient Air Quality

SJVAPCD operates a regional monitoring network that measures the ambient concentrations of criteria pollutants. Local air quality can be evaluated by reviewing relevant air pollution concentrations near the Project. Table 3 summarizes published monitoring data from the Fresno-Drummond Street Monitoring Station at 4706 E Drummond Ave, Fresno, California, for the years 2022 to 2024 from CARB's Air Quality Data Statistics for O_3, PM_{10}, and NO_2. Additionally, data from the Fresno-2482 Foundry Park Avenue Monitoring Station at 2482 Foundry Park Ave, Fresno, California for $PM_{2.5}$ is presented (CARB 2025g). Other monitoring stations in Fresno County do not measure CO or SO_2; therefore, CO and SO_2 ambient concentrations are not included in the table.

Table 3. Fresno-Drummond Street Monitoring Station Air Quality Data

Air Pollutant	Averaging Time	Item	2022	2023	2024
Ozone	1 Hour	Max 1 hour (ppm)	0.111	0.102	0.109
		Days above state standard (0.09 ppm)	3	3	8
	8 Hour	Max 8 hour (ppm)	0.089	0.088	0.086
		Days above state standard (0.070 ppm)	8	24	35
		Days above national standard (0.070 ppm)	8	20	35
		Days above national standard (0.075 ppm)	4	12	18
PM_{10}	24-Hour	Federal max 24 hours (µg/m^3)	73.4	131.1	181.9
		Measured days above federal 24-hour standard	0	0	1
		State max 24 hours (µg/m^3)	166.5	130.0	151.3
		Measured days above state 24-hour standard	133	120	113
		Annual average	31.2	42.7	45.4
$PM_{2.5}$	24-Hour	Max 24 hours (µg/m^3)	54.6	51.3	57.2
		Measured days above 24-hour standard	21	7	8
		Annual average	14.7	12.5	13.5
NO_2	1-hour	Max 1 hour (ppb)	58.3	58.1	58.9
		Annual average	12	10	9
		Days above state standard (180 ppb)	0	0	0
		Days above national standard (100 ppb)	0	0	0

Source: California Air Resources Board. 2025g. iADAM: Air Quality Data Statistics.
Key:
µg/m^3 = micrograms per liter
$PM_{2.5}$ = particulate matter less than 2.5 microns in aerodynamic diameter
PM_{10} = particulate matter between 2.5 and 10 microns in aerodynamic diameter
ppm = parts per million

2.1.5 Odors

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from the psychological (i.e., irritation, anger, or anxiety) to the physiological (i.e., circulatory and respiratory effects, nausea, vomiting, and headache).

The ability to detect odors varies considerably among the population and is subjective. Some individuals can smell very minute quantities of specific substances; others have varying sensitivities to odors; and people may have different reactions to the same odor (e.g., bakery, gasoline). It is important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience; e.g., a description of flowery or sweet. Intensity refers to the strength of the odor and depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases, the odor intensity weakens, and it eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant drops below a human's detection threshold.

Neither the state nor the federal governments have adopted rules or regulations for the control of odor sources. Potential odors may be subject to SJVAPCD Rule 4102, Nuisance.

2.1.6 Toxic Air Contaminants

Toxic Air Contaminants (TACs) are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; but due to their high toxicity, they may pose a threat to public health even at very low concentrations. Because there is no threshold level below which adverse health impacts are not expected to occur, TACs differ from criteria pollutants for which acceptable levels of exposure can be determined and for which state and federal governments have set ambient air quality standards. TACs, therefore, are not considered "criteria pollutants" under either the FCAA or the California Clean Air Act (CCAA) and are not subject to NAAQS or CAAQS ambient air quality standards. Instead, USEPA and CARB regulate hazardous air pollutants (HAPs) and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology to limit emissions. In conjunction with SJVAPCD rules, these federal and state statutes and regulations establish the regulatory framework for TACs. At the national level, USEPA has established national emission standards for hazardous air pollutants (NESHAP) in accordance with the requirements of the federal CAA and subsequent amendments. These are technology-based, source-specific regulations that limit allowable emissions of HAPs.



Within California, TACs are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. The following provides a summary of the primary TACs of concern within the state of California and related health effects.

2.1.6.1 Diesel Particulate Matter

Diesel particulate matter (DPM) was identified as a TAC by CARB in August 1998. DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute approximately 42 percent of the statewide total, with an additional 55 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources, contributing about three percent of emissions, include shipyards, warehouses, heavy equipment repair yards, and oil and gas production operations. Emissions from these sources are from diesel-fueled internal combustion engines. Stationary sources that report DPM emissions also include heavy construction, manufacturers of asphalt paving materials and blocks, and diesel-fueled electrical generation facilities (CARB 2025b).

In October 2000, CARB issued a report entitled *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, which is commonly referred to as the Diesel Risk Reduction Plan (DRRP). The DRRP provides a mechanism for combating the DPM problem. The goal of the DRRP is to reduce concentrations of DPM. The key elements of the DRRP are to clean up existing engines through engine retrofit emission control devices, to adopt stringent standards for new diesel engines, and to lower the sulfur content of diesel fuel through advanced technology emission control devices on diesel engines. When fully implemented, the DRRP will significantly reduce emissions from both old and new diesel-fueled motor vehicles and from stationary sources that burn diesel fuel. In addition to these strategies, CARB continues to promote the use of alternative fuels and electrification. As a result of these actions, DPM concentrations and associated health risks in future years are projected to decline (CARB 2025b). In comparison to year 2010 inventory of statewide DPM emissions, CARB estimates that emissions of DPM in 2035 will be reduced by more than 50 percent.

DPM is typically composed of carbon particles (also called “soot” or “black carbon”) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and NOx. NOx emissions from diesel engines are important because they can undergo chemical reactions in the atmosphere leading to formation of $PM_{2.5}$ and O_3.

In California, diesel exhaust particles have been identified as a carcinogen accounting for an estimated 70 percent of the total known cancer risks in California. DPM is estimated to increase statewide cancer risk by 520 cancer occurrences per million residents exposed over an estimated 70-year lifetime. Non-cancer health effects associated with exposure to DPM include premature death, exacerbated chronic heart and lung disease, including asthma, and decreased lung function in children. Short-term exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with



human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks (CARB 2025b).

Individuals most vulnerable to non-cancer health effects of DPM are children whose lungs are still developing and the elderly who often have chronic health problems. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to DPM (CARB 2025b). In addition to its health effects, DPM significantly contributes to haze and reduced visibility.

2.1.6.2 Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals with useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings constructed prior to 1977 when it was banned for use in buildings. Exposure to naturally occurring asbestos (NOA) can occur during soil disturbing activities in areas with deposits present (USEPA 2025i).

2.1.7 Valley Fever

Valley Fever is an infection caused by a fungus that lives in the soil. About 10,000 U.S. cases are reported each year, mostly from Arizona and California. Valley fever can be misdiagnosed because its symptoms are like those of other illnesses.

The fungus that causes Valley fever, *Coccidioides*, grows naturally and is found in the southwestern United States, parts of Mexico and Central America, and parts of South America. The fungus is endemic in many areas within the SJVAB. People can get this infection by breathing in fungal spores from the air, especially when the wind blows or when dirt with the fungal spores is moved by human activity. About 40 percent of the people who come into contact with the fungal spores will develop symptoms that may require medical treatment and the symptoms will not go away on their own. Some people may develop a more severe infection, especially those with compromised immune systems (Centers for Disease Control [CDC] 2020).

2.1.8 Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiovascular diseases. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The nearest sensitive receptors to the Project Site include the residential units to the north of the Project Site, along M Street, and to the east, along Tulare Street. The closest residential unit is an apartment approximately 750 feet from the Project's eastern boundary.

2.2 Regulatory Setting

Air quality within the Project area is regulated by several jurisdictions, including the USEPA, CARB, and SJVAPCD. Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation. Although USEPA regulations may not be superseded, both state and local regulations may be more stringent.

2.2.1 Federal

2.2.1.1 United States Environmental Protection Agency

At the federal level, the USEPA has been charged with implementing national air quality programs. The USEPA's air quality mandates are drawn primarily from the FCAA, which was signed into law in 1970. Congress substantially amended the FCAA in 1977 and again in 1990.

2.2.1.1.1 Federal Clean Air Act

The FCAA required the USEPA to establish NAAQS, and also set deadlines for their attainment. Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects, such as visibility restrictions. NAAQS are summarized in Table 1.

2.2.1.1.2 National Emission Standards for Hazardous Air Pollutants

Pursuant to the FCAA of 1970, the USEPA established the National Emission Standards for Hazardous Air Pollutants (NESHAPs). These are technology-based source-specific regulations that limit allowable emissions of HAPs. Among these sources include asbestos-containing building materials (ACBMs). NESHAPs include requirements pertaining to the inspection, notification, handling, and disposal of ACBMs associated with the demolition and renovation of structures.

2.2.1.1.3 Non-Road Diesel Rule

The USEPA has established a series of increasingly strict emissions standards for new off-road diesel equipment, on-road diesel trucks, and locomotives. New construction equipment used for the Project, including heavy-duty trucks and off-road construction equipment, would be required to comply with the emissions standards.

2.2.2 State

2.2.2.1 California Air Resources Board

The CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the CCAA of 1988. Other CARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control districts and air quality management districts), establishing CAAQS, which in many cases are more stringent than the NAAQS, and setting emissions standards for new motor vehicles. The emission standards established for motor vehicles differ depending on various factors including the model year, and the type of vehicle, fuel and engine used. The CAAQS are summarized in Table 1.

2.2.2.2 California Clean Air Act

The CCAA requires that all air districts in the state endeavor to achieve and maintain CAAQS for O_3, CO, SO_2, and NO_2 by the earliest practical date. The CCAA specifies that districts focus attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. Each district plan is required to either (1) achieve a 5 percent annual reduction, averaged over consecutive three-year periods, in district-wide emissions of each non-attainment pollutant or its precursors, or (2) to provide for implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

2.2.2.3 Assembly Bills 1807 & 2588 - Toxic Air Contaminants

Within California, TACs are regulated primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics Hot Spots Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB designates a substance as a TAC.

Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

2.2.2.4 Regulatory Attainment Designations

Under the CCAA, CARB is required to designate areas of the state as attainment, nonattainment, or unclassified with respect to applicable standards. An “attainment” designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A “nonattainment” designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An “unclassified” designation signifies that the data does not support either an attainment or nonattainment designation. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The USEPA designates areas for O_3, CO, and NO_2 as “does not meet the primary standards,” “cannot be classified,” or “better than national standards.” For SO_2, areas are designated as “does not meet the primary standards,” “does not meet the secondary standards,” “cannot be classified,” or “better than national standards.” However, CARB terminology of attainment, nonattainment, and unclassified is more frequently used. The USEPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, USEPA assigned new nonattainment designations to areas that had previously been classified as Group I, II, or III for PM_{10} based on the likelihood that they would violate national PM_{10} standards. All other areas are designated “unclassified.”

2.2.2.5 Low-Emission Vehicle Program and Zero-Emission Vehicle Program

The CARB first adopted Low-Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the state’s passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan (SIP). In 2012, CARB adopted the LEV III amendments to California’s LEV regulations. These amendments include more stringent emission standards for both criteria pollutants and GHGs for new passenger vehicles.

The Advanced Clean Cars II (ACC II) regulation builds on the Advanced Clean Cars (ACC) rule adopted in 2012. ACC II decreases emissions by increasing electric vehicle (EV) sales via two programs. First, the Zero-Emission Vehicle (ZEV) program requires ZEVs, defined as battery-electric vehicles (BEVs) or fuel-cell-electric vehicles (FCEVs), to comprise an increasing portion of annual vehicle sales. Under the ZEV program, original equipment manufacturers must increase sales of ZEVs from 35 percent in 2026 to 100 percent in 2035. Second, ACC II further strengthened the LEV program discussed above, with more stringent emission standards beginning with model year 2025.



2.2.2.6 On-Road Heavy-Duty Vehicle Program

The CARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations (CCR) contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. CARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.

In addition, the CARB's Truck and Bus regulation was established to meet federal attainment standards. This regulation requires heavy-duty diesel vehicles that operate in California to reduce TAC emissions from their exhaust. Therefore, as of January 1, 2023, nearly all trucks and buses are required to have 2010 or newer model year engines to reduce PM and NOx emissions. To help ensure that the benefits of this regulation are achieved, only vehicles compliant with this regulation are registered by the California Department of Motor Vehicles.

2.2.2.7 In-Use Off-Road Diesel-Fueled Fleets Regulation

CARB has adopted the In-Use Off-Road Diesel-Fueled Fleets Regulation with the intent to reduce PM and NOx emissions from existing off-road heavy-duty diesel vehicles in California. In general, the regulation imposes limits on vehicle idling; requires all vehicle usage to be reported to CARB; restricts the addition of older vehicles into fleets; requires the phase-out of the oldest and least efficient engines; and, starting in 2024, requires the procurement and use of renewable diesel.

2.2.2.8 Advanced Clean Truck Act

To reduce emissions, the Advanced Clean Truck Act (ACT) requires original equipment manufacturers of medium- and heavy-duty vehicles to sell ZEVs or near-zero-emissions vehicles (NZEVs), such as plug-in electric hybrids, at an increasing percentage of their annual sales from 2024 to 2035. A ZEV is a vehicle that produces zero tail-pipe emissions, including BEVs and hydrogen fuel cell vehicles. A NZEV is a vehicle with an internal combustion engine and an electric energy storage system, including plug-in hybrid vehicles and hydrogen internal combustion engine vehicles. The ACT includes a cap-and-trade system, capping the number of fossil fuel vehicles sold by stipulating annual sales percentage requirements. Manufacturers can comply with the ACT by generating compliance credits through the sale of ZEVs or NZEVs or through the trading of compliance credits.

2.2.2.9 California State Implementation Plan

The FCAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the FCAA. The USEPA has the



responsibility to review all SIPs to determine if they conform to the requirements of the CAA. State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register.

2.2.2.10 California Renewables Portfolio Standard Program

Established in 2002 under SB 1078 and accelerated by SB 107 (2006) and SB 2 (2011), California's Renewable Portfolio Standard (RPS) required investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent of their electricity from renewable energy sources by 2020. In 2015, SB 350 further increased the RPS to 50 percent by 2030. The legislation also included interim targets of 40 percent by 2024 and 45 percent by 2027. The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) are jointly responsible for implementing the program. Pacific Gas & Electric (PG&E) is on track to meeting these obligations, and currently delivers 93 percent greenhouse gas emissions free clean energy with the plan to be net zero by 2040 and climate positive (carbon negative) by 2050. SB 100, signed into law in September 2018, requires California utilities to increase the percentages of renewable energy sold to retail customers. The new targets are for 50 percent renewable resources by December 31, 2026, 60 percent by December 31, 2030, and 100 percent from eligible renewable energy resources and zero-carbon resources by 2045.

2.2.2.11 Judicial Council Policy on Asbestos Management for Court Facilities

In 2018, the Judicial Council adopted a policy with requirements to manage asbestos hazards related to renovation or demolition in court facilities. The policy generally requires compliance with applicable federal and state statutes, as well as notification of all Facilities Services staff and employees that may be affected (Judicial Council 2018).

2.2.3 Regional

2.2.3.1 San Joaquin Valley Air Pollution Control District

Although the Judicial Council is not generally subject to regional or local land use plans and regulations, it is subject to plans and regulations implementing delegated federal authority. SJVAPCD is the agency primarily responsible for helping ensure that NAAQS and CAAQS are not exceeded, and that air quality conditions are maintained in the SJVAB, within which the Project is located. Responsibilities of the SJVAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the CAA and the CCAA.

2.2.3.1.1 Current Air Quality Plans

The SJVAPCD is responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the SJVAB. The main purpose of an AQMP is to bring the area into compliance with federal and state air quality standards. The SJVAPCD does not have one single AQMP for criteria pollutants; rather, the SJVAPCD addresses each criteria pollutant with its own Plan. The SJVAPCD has the following AQMPs:

- 2004 Revision to the California State Implementation Plan for Carbon Monoxide
- 2007 PM_{10} Maintenance Plan
- 2013 Plan for the Revoked 1-Hour Ozone Standard
- 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards
- 2022 Plan for the 2015 8-Hour Ozone Standard
- 2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard
- 2024 Plan for the 2012 $PM_{2.5}$ Standard

The SJVAPCD's AQMPs incorporate the latest scientific and technological information and planning assumptions, including updated emission inventory methodologies for various source categories. The SJVAPCD's AQMPs included the integrated strategies and measures needed to meet the NAAQS, implementation of new technology measures, and demonstrations of attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards.

The SJVAPCD's current air quality plans are discussed below.

Carbon Monoxide Plans. CARB approved the 2004 Revision to the California State Implementation Plan (SIP) for Carbon Monoxide on July 22, 2004 to demonstrate how ten areas of the state, including SJVAB, would maintain CO standards.

Ozone Plans. The SJVAPCD adopted the 2022 Plan for the 2015 8-Hour Ozone standard in December 2022 to meet CAA requirements and ensure attainment of the USEPA's 8-hour ozone threshold of 70 ppb. In June 2023, SJVAPCD adopted the 2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard to request redesignation of the SJVAB to attainment for the 1-hour federal O_3 standard and demonstrate a maintenance plan to ensure attainment through 2036.

SJVAPCD's Governing Board approved the 2016 Plan for the 2008 8-Hour Ozone Standard on June 16, 2016. The comprehensive strategy in this plan will reduce NO_X emissions by over 60 percent between 2012 and 2031 and will bring the San Joaquin Valley into attainment of USEPA's 2008 8-hour O_3 standard as expeditiously as practicable, no later than December 31, 2031.

Particulate Matter Plans. The USEPA designated the SJVAB as an attainment/maintenance area for PM_{10} and non-attainment for $PM_{2.5}$. SJVAPCD adopted the 2007 PM_{10} Maintenance Plan in September 2007 to help ensure SJVAB's continued attainment of the USEPA's PM_{10} standard. The 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards was adopted in 2018 and addresses the USEPA federal 1997 annual $PM_{2.5}$ standard of 15 µg/m³ and 24-hour $PM_{2.5}$ standard of 65 µg/m³; the 2006 24-hour $PM_{2.5}$ standard of 35 µg/m³; and the 2012 annual $PM_{2.5}$ standard of 12 µg/m³. This plan demonstrates attainment of the federal $PM_{2.5}$ standards as expeditiously as practicable. The most recent $PM_{2.5}$ plan is



the 2024 Plan for the 2012 $PM_{2.5}$ Standard and was adopted in 2024. This plan addresses the 2012 annual $PM_{2.5}$ standard of 12 µg/m³ and demonstrates expeditious attainment of the 2012 $PM_{2.5}$ standard by 2030.

2.2.3.1.2 Rules and Regulations

SJVAPCD rules and regulations that may apply to projects that will occur during buildout of the Project include, but are not limited to, the following:

Rule 2010 – Permits Required. The purpose of this rule is to require any person constructing, altering, replacing or operating any source operation which emits, may emit, or may reduce emissions to obtain an Authority to Construct or a Permit to Operate. This rule also explains the posting requirements for a Permit to Operate and the illegality of a person willfully altering, defacing, forging, counterfeiting, or falsifying any Permit to Operate.

Rule 2201 – New and Modified Stationary Source Review Rule. The purpose of this rule is to provide for the following:

- The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards; and
- No net increase in emissions above specified thresholds from new and modified Stationary Sources of all non-attainment pollutants and their precursors.

Rule 2280 – Portable Equipment Registration. Portable equipment used at project sites for less than six consecutive months must be registered with the SJVAPCD. The SJVAPCD will issue the registrations 30 days after receipt of the application.

Rule 4002 – National Emission Standards for Hazardous Air Pollutants. This rule incorporates the National Emission Standards for Hazardous Air Pollutants from Part 61, Chapter I, Subchapter C, Title 40, Code of Federal Regulations (CFR) and the National Emission Standards for Hazardous Air Pollutants for Source Categories from Part 63, Chapter I, Subchapter C, Title 40, CFR.

Rule 4102 – Nuisance. The purpose of this rule is to protect the health and safety of the public and applies to any source operation that emits or may emit air contaminants or other materials.

Rule 4601 – Architectural Coatings. The purpose of this rule is to limit ROG emissions (also called Volatile Organic Compounds [VOC] emissions) from architectural coatings. Emissions are reduced by limits on ROG content and providing requirements on coatings storage, cleanup, and labeling.

Rule 4623 – Storage of Organic Liquids. The purpose of this rule is to limit ROG emissions from the storage of organic liquids.

Rule 4624 – Transfer of Organic Liquids. The purpose of this rule is to limit ROG emissions from the transfer of organic liquids.



Rule 4641 – Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit ROG emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations may be subject to Rule 4641.

Rule 8011 – General Requirements. Fugitive Dust Emission Sources. Fugitive dust regulations are applicable to outdoor fugitive dust sources. Operations, including construction operations, must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII. According to Rule 8011, the SJVAPCD requires the implementation of control measures for fugitive dust emission sources. For projects in which construction-related activities would disturb equal to or greater than 1 acre of surface area, the SJVAPCD recommends that demonstration of receipt of an SJVAPCD-approved Dust Control Plan or Construction Notification Form, before issuance of the first grading permit, be made a condition of approval.

Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities. The purpose of this rule is to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities. The following best management practices (BMPs) are included:

- Pre-water site sufficient to limit visible dust emissions (VDE) to 20% opacity.
- Phase work to reduce the amount of disturbed surface area at any one time.
- Apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity
- Construct and maintain wind barriers sufficient to limit VDE to 20% opacity.
- Apply water or chemical/organic stabilizers/suppressants, sufficient to comply with the conditions of a stabilized surface. If an area having 0.5 acres or more of disturbed surface area remains unused for seven or more days, the area must comply with the conditions for a stabilized surface area as defined in section 3.58 of Rule 8011.
- An owner/operator shall limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour.
- Cease outdoor construction, excavation, extraction, and other earthmoving activities that disturb the soil whenever VDE exceeds 20% opacity.

Rule 9510 – New Source Review. Rule 9510 requires certain development projects to mitigate exhaust emissions from construction equipment greater than 50 horsepower to 20 percent below statewide average NOx emissions and 45 percent below statewide average PM_{10} exhaust emissions. This rule also requires applicants to reduce baseline emissions of NOx and PM_{10} emissions associated with operations by 33.3 percent and 50 percent, respectively, over a period of 10 years.

Regulation VIII – Fugitive PM_{10} Prohibitions. Rules 8011-8081 are designed to reduce PM_{10} emissions (e.g., dust or dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, etc. All



development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

2.2.3.1.3 SJVAPCD California Environmental Quality Act (CEQA) Guidance and Thresholds

SJVAPCD also provides guidance and thresholds for CEQA air quality and GHG analyses. In particular, SJVAPCD's 2015 Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) states the following:

> *The District's Air Quality Attainment Plans include measures to promote air quality elements in county and city general plans as one of the primary indirect source programs. The general plan is the primary long-range planning document used by cities and counties to direct development. Since air districts have no authority over land use decisions, it is up to cities and counties to ensure that their general plans help achieve air quality goals. Section 65302.1 of the California Government Code requires cities and counties in the San Joaquin Valley to amend appropriate elements of their general plans to include data, analysis, comprehensive goals, policies, and feasible implementation strategies to improve air quality in their next housing element revisions.*
>
> *The Air Quality Guidelines for General Plans (AQGGP), adopted by the District in 1994 and amended in 2005, is a guidance document containing goals and policy examples that cities and counties may want to incorporate into their general plans to satisfy Section 65302.1. When adopted in a general plan and implemented, the suggestions in the AQGGP can reduce vehicle trips and miles traveled and improve air quality. The specific suggestions in the AQGGP are voluntary. The District strongly encourages cities and counties to use their land use and transportation planning authority to help achieve air quality goals by adopting the suggested policies and programs.*

2.2.4 Local

Because the Judicial Council is the CEQA lead agency for the Project, and is acting for the State of California, local government regulations do not apply to the Project. However, the Judicial Council considers local policies and guidelines, as appropriate.

3 Greenhouse Gas

3.1 Environmental Setting

To fully understand global climate change, it is important to recognize the naturally occurring "greenhouse effect" and to define the GHGs that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect.

3.1.1 Greenhouse Gases

Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and sulfur hexafluoride (SF_6). Primary GHGs attributed to global climate change are discussed in the following subsections.

3.1.1.1 Carbon Dioxide

CO_2 is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere (USEPA 2025j).

3.1.1.2 Methane

CH_4 is a colorless, odorless gas, and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. CH_4 is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (enteric fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about 12 years (USEPA 2025k).

3.1.1.3 Nitrous Oxide

N_2O is a clear, colorless gas with a slightly sweet odor. N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years (USEPA 2025l).

3.1.1.4 Hydrofluorocarbons

HFCs are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HCFC-22 (or Freon 22, used in air conditioning applications). The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 260 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes of less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years) (USEPA 2025m).

3.1.1.5 Perfluorocarbons

PFCs are colorless, highly dense, chemically inert, and nontoxic. There are seven PFC gases: perfluoromethane (CF_4), perfluoroethane (C_2F_6), perfluoropropane (C_3F_8), perfluorobutane (C_4F_{10}), perfluorocyclobutane (C_4F_8), perfluoropentane (C_5F_{12}), and perfluorohexane (C_6F_{14}). Natural geological emissions have been responsible for the PFCs that have accumulated in the atmosphere in the past; however, the largest current source is aluminum production, which releases CF_4 and C_2F_6 as byproducts. The estimated atmospheric lifetimes for CF_4 and C_2F_6 are 50,000 and 10,000 years, respectively (USEPA 2025m).

3.1.1.6 Nitrogen Trifluoride

NF_3 is an inorganic, colorless, odorless, toxic, nonflammable gas used as an etchant in microelectronics. NF_3 is predominantly employed in the cleaning of the plasma-enhanced chemical vapor deposition chambers in the production of liquid crystal displays and silicon-based thin film solar cells. In 2009, NF_3 was listed by California as a potential GHG to be listed and regulated under AB 32 (Section 38505 Health and Safety Code).

3.1.1.7 Sulfur Hexafluoride

SF_6 is an inorganic compound that is colorless, odorless, nontoxic, and generally nonflammable. SF_6 is primarily used as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80 percent of all SF_6 produced worldwide. Leaks of SF_6 occur from aging equipment and during equipment maintenance and servicing. SF_6 has an atmospheric life of 3,200 years (USEPA 2025n).



3.1.1.8 Black Carbon

Black carbon is the most strongly light-absorbing component of PM emitted from burning fuels such as coal, diesel, and biomass. Black carbon contributes to climate change both directly by absorbing sunlight and indirectly by depositing on snow and by interacting with clouds and affecting cloud formation. Black carbon is considered a short-lived species, which can vary spatially and, consequently, it is very difficult to quantify associated global-warming potentials. The main sources of black carbon in California are wildfires, off-road vehicles (locomotives, marine vessels, tractors, excavators, dozers, etc.), on-road vehicles (cars, trucks, and buses), fireplaces, agricultural waste burning, and prescribed burning (planned burns of forest or wildlands). California has been an international leader in reducing emissions of black carbon, including programs that target reducing PM from diesel engines and burning activities (CARB 2025h).

3.1.2 Global Warming Potential

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weigh each gas by its global warming potential (GWP).

Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. Based on a 100-year time horizon, CH_4 traps over 25 times more heat per molecule than CO_2, and N_2O absorbs roughly 298 times more heat per molecule than CO_2. Additional GHGs with high GWP include NF_3, SF_6, PFCs, and black carbon.

3.1.3 Sources of Greenhouse Gas Emissions

On a global scale, GHG emissions are predominantly associated with activities related to energy production; changes in land use, such as deforestation and land clearing; industrial sources; agricultural activities; transportation; waste and wastewater generation; and commercial and residential land uses. World-wide, energy production including the burning of coal, natural gas, and oil for electricity and heat is the largest single source of global GHG emissions.

3.1.3.1 United States of America

In 2022, GHG emissions in the United States. totaled 6,343 million metric tons (MMT) of CO_2e. Within the United States, the largest contributor to GHG emissions is the transportation sector (28 percent). The next largest contributors are from electricity production (25 percent) and industry (23 percent), followed by the commercial and residential sectors (13 percent) and the agricultural sector (10 percent). Transportation emissions primarily come from burning fossil fuels for our cars, trucks, ships, trains, and planes. Over 90 percent of the fuel used for transportation is petroleum-based, which includes primarily gasoline and diesel. The bulk of emissions generated from energy production come from burning fossil fuels, mostly coal and natural gas. Industry emissions are also primarily generated from fossil fuels burned for heat, the use of certain products that contain GHGs, and the handling of waste. Similar to industry sector



emissions, commercial and residential uses arise primarily from fossil fuels for heat, the use of certain products that contain GHGs, and the handling of waste. Agricultural emissions come from livestock such as cows, agricultural soil, and rice production. The land use and forestry sector within the United States serves as a carbon sink. Carbon sinks absorb CO_2 from the atmosphere. Land areas across the United States absorbed approximately 13 percent of the 2022 GHG emissions (USEPA 2025o). In 2023, GHG emissions in the United States totaled 6,197 $MMTCO_2e$, while this data has been released via a Freedom of Information request, the USEPA has not formally adopted the 2023 emissions report (USEPA 2025p).

3.1.3.2 California

In 2022, GHG emissions within California totaled 371.1 MMT of CO_2e. Similar to national emissions, in California, the transportation sector is the largest contributor. Transportation emissions account for approximately 39 percent of the total statewide GHG emissions. The majority of transportation emissions are derived from passenger vehicles and heavy-duty trucks. Emissions associated with industrial uses are the second largest contributor, totaling roughly 23 percent. Industrial emissions are driven by fuel combustion from sources that include refineries, oil and gas extraction, cement plants, and the portion of cogeneration emissions attribution to thermal energy output. Electricity generation (in state and imports) totaled roughly 16 percent. Emissions from the electricity generation sector have declined over the years due to the increase in renewable generation that continues to replace fossil power (CARB 2024b).

3.2 Regulatory Setting

There are considerable regulatory actions regarding GHGs and climate change at the federal, state, regional, and local level. The following includes the key regulations that may be relevant to the Project. As noted previously, although the Judicial Council is not generally subject to regional or local land use plans and regulations, it is subject to plans and regulations implementing delegated federal authority.

3.2.1 Federal

3.2.1.1 Federal Clean Air Act

As noted previously, the principal air quality regulatory mechanism at the federal level is the FCAA and, in particular, the 1990 amendments to the FCAA and the NAAQS that it establishes. The FCAA does not specifically regulate GHG emissions; however, the U.S. Supreme Court has determined that GHGs are pollutants that can be regulated under the CAA. There are currently no federal regulations that set ambient air quality standards for GHGs.

The USEPA is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO_2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions. USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the Green Power Partnership program for encouraging the use of renewable



energy) play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

In 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the federal CAA. USEPA adopted a Final Endangerment Finding for six defined GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6). The Endangerment Finding was required before USEPA could regulate GHG emissions under Section 202(a)(1) of the FCAA. USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not themselves impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

3.2.2 State

3.2.2.1 Executive Order S-3-05

Executive Order S-3-05 was established by Governor Arnold Schwarzenegger in June 2006; the order establishes statewide emission reduction targets through the year 2050, as follows:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The EO does not include any specific requirements that pertain to the Project; however, future actions taken by the state to implement these goals may affect the Project depending on the specific implementation measures that are developed. The 2050 reduction target has not been codified, and the California Supreme Court has ruled that CEQA lead agencies are not required to use it as a significance threshold.

3.2.2.2 Assembly Bill 32 and Senate Bill 32

AB 32, the California Global Warming Solutions Act of 2006, requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. GHGs, as defined under AB 32, include CO_2, CH_4, NO_X, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

> *Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.*

CARB approved the 1990 GHG emissions level of 427 $MMTCO_2e$ on December 6, 2007 (CARB 2007). Therefore, to meet the state's target, emissions generated in California in 2020 are required to be equal to or less than 427 $MMTCO_2e$. In order to set a framework for the state to meet this target, CARB was tasked with creating a Scoping Plan (as described below). California announced in July 2018 that the state emitted 427 $MMTCO_2e$ in 2016 and achieved AB 32 goals (CARB 2018).

SB 32 was signed into law on September 8, 2016. SB 32 states that "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit no later than December 31, 2030."

3.2.2.3 Assembly Bill 1279: The California Climate Crisis

AB 1279 was signed into law in 2022 and establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045 and maintain net negative GHG emissions thereafter. AB 1279 requires that by 2045 the statewide anthropogenic GHG emissions are reduced by at least 85 percent below 1990 levels. The bill also requires CARB to ensure that an updated Scoping Plan identifies and recommends measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO_2 removal and carbon capture, utilization, and storage technologies to complement AB 1279's emissions reduction requirements.

3.2.2.4 Climate Change Scoping Plans

The Scoping Plan is a blueprint for how the state plans to meet the required GHG reductions under AB 32, SB 32, and AB 1279. CARB is required under AB 32 to update the Scoping Plan at least once every five years. The most recent Scoping Plan is the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) that was adopted in December 2022 and serves as the third update to the initial plan adopted in 2008 (2008 Scoping Plan). The 2008 Scoping Plan addressed how the state can achieve the AB 32 reduction targets by 2020. An updated plan was adopted in 2014 (2013 Scoping Plan) to assess progress towards the 2020 reduction goal and address short-lived climate pollutants (SLCPs). The 2017 Scoping Plan also addressed progress towards the 2020 reduction goal and created a pathway for the state to meet the 2030 reduction goal set under SB 32.

Finally, the 2022 Scoping Plan assesses progress toward achieving the SB 32 2030 target and laying out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities (CARB 2022). The 2022 Scoping Plan also includes a discussion about the use of natural and working land use sectors for sequestration, carbon storage, and potential emission sources during wildfires. The estimated GHG emission reductions from the 2022 Scoping Plan are provided in Table 4.

Table 4. Estimated Statewide Greenhouse Gas Emissions Reductions in the 2022 Scoping Plan

Emissions Scenario	GHG Emissions (MMT CO_2e)
2019	
2019 State GHG Emissions	404
2030	
2030 Business-As-Usual (BAU) Forecast	312
2030 GHG Emissions without Carbon Removal and Capture	233
2030 GHG Emissions with Carbon Removal and Capture	226
2030 Emissions Target Set by SB 32 (1990 levels by 2030)	260
Reduction below BAU necessary to Schieve 1990 levels by 2030	52
2045	
2045 BAU Forecast	266
2045 GHG Emissions without Carbon Removal and Capture	72
2045 GHG Emissions with Carbon Removal and Capture	-3

Source: CARB 2022.

The 2022 Scoping Plan accounts for existing and recent direction in EOs and State Statutes, which identify policies, strategies, and regulations in support of and implementation of the 2022 Scoping Plan. These EOs and State Statutes include AB 1279, SB 100, SB 905, and EO N-79-20 (see below). Ultimately, achieving the targets set by SB 32 and AB 1279 will require continued commitment to and successful implementation of existing policies and programs as well as new policy tools and technical solutions to further reduce GHG emissions.

3.2.2.5 Senate Bill 375: The Sustainable Communities and Climate Protection Act of 2008

SB 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits more than 40 percent of the total GHG emissions in California. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.



CARB prepared a Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets in 2018 which set updated GHG reduction targets for metropolitan planning organizations for 2020 and 2035 (CARB 2025i).

3.2.2.6 Senate Bill 1368: Emission Performance Standards

Enacted in 2006, SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant.

Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the state. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 pounds of CO_2 per megawatt-hour.

3.2.2.7 Senate Bill 1078: Renewable Electricity Standards

SB 1078 (September 12, 2002) required California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, the governor signed Executive Order (EO) S-14-08, which established the Renewable Portfolio Standard (RPS) target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. EO S-21-09 directed CARB to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. In 2011, the state legislature adopted this higher standard in SB X1-2. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas.

3.2.2.8 Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

SB 350 (October 7, 2015) reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for electric vehicle charging stations.



3.2.2.9 Senate Bill 100: California Renewables Portfolio Standard Program

SB 100 (September 10, 2018) revised the RPS goals to achieve the 50 percent renewable resources target by December 31, 2026, and to achieve a 60 percent target by December 31, 2030. The bill requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; and 60 percent by December 31, 2030. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

3.2.2.10 Senate Bill 1383: California Short-Lived Climate Pollutant Reduction Strategy

SB 1383 (September 19, 2016) required California to reduce methane and other short-lived climate pollutants from landfills. The bill sets targets of 75 percent less organic waste sent to landfills and 20 percent of unsold, still-edible food sent to food recovery organizations by 2025. The bill also requires cities and counties to annually procure a quantity of recovered organic waste products to meet their annual procurement target. Jurisdictions can fulfill their target by procuring any combination of the following recovered organic waste products: compost, mulch, and renewable energy (transportation fuel, heat, and electricity) from anaerobic digestion and electricity from biomass conversion. Jurisdictions are also required to report on project implementation.

3.2.2.11 Executive Order S-3-05: Global Warming Impacts

EO S-3-05 was signed on June 1, 2005. The EO sets the following GHG emission reduction targets: (1) by 2010, California shall reduce GHG emissions to 2000 levels; (2) by 2020, California shall reduce GHG emissions to 1990 levels; and (3) by 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

3.2.2.12 Executive Order B-30-15

EO B-30-15 was signed on April 29, 2015. The EO established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030. Additionally, the EO ordered all state agencies with jurisdiction over GHG sources to implement measures to achieve these GHG emissions reductions and it directed CARB to update the Scoping Plan to meet the 2030 goal.



3.2.2.13 California Green Building Standards Code

The California Green Building Standards Code (CALGreen), CCR Part 11, Title 24, includes standards for energy efficiency, water efficiency, material conservation, and environmental quality in new residential and nonresidential structures. CALGreen was created in 2008 under SB 1473 in order to support California's GHG reduction goals under AB 32. CALGreen is updated on a triennial basis with minor revisions every 18 months.

3.2.2.14 Judicial Council's Water Conservation Policy

Adopted in 2015, the Judicial Council's Water Conservation Policy identifies best practices to encourage water conservation in all capital projects and courthouse facilities. The best practices that may be applicable to the Project include using non-potable water for dust control during construction, installing efficient indoor plumbing fixtures, and requiring climate-appropriate landscape planning (Judicial Council 2015).

3.2.3 Regional

Because the Judicial Council is the CEQA lead agency for the Project, and is acting for the State of California, local government regulations do not apply to the Project. However, the Judicial Council considers local policies and guidelines, as appropriate.

3.2.3.1 San Joaquin Valley Air Pollution Control District

In August 2008, SJVAPCD's governing board adopted the Climate Change Action Plan (CCAP). The CCAP directed the SJVAPCD Air Pollution Control Officer to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific GHG emissions on global climate change.

On December 17, 2009, the SJVAPCD governing board adopted *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*, and the *District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. SJVAPCD concluded that the existing science is inadequate to support quantification of the impacts that project-specific GHG emissions have on global climate change. SJVAPCD found the effects of project-specific emissions to be cumulative; and without mitigation, their incremental contribution to global climate change could be considered cumulatively considerable. SJVAPCD found that this cumulative impact is best addressed by requiring all projects to reduce their GHG emissions, whether through project design elements or mitigation.

3.2.4 Local

Because the Judicial Council is the CEQA lead agency for the Project, and is acting for the State of California, local government regulations do not apply to the Project. However, the Judicial Council considers local policies and guidelines, as appropriate.



4 Methodology

The following modeling parameters and assumptions will be used to generate criteria air pollutant and GHG emissions for the Project.

4.1 Criteria Air Pollutant and GHG Model Selection

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operation from a variety of land use projects. CalEEMod quantifies direct GHG emissions, such as construction and operational activities and vehicle use, and indirect emissions, such as energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, CalEEMod identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user.

CalEEMod was developed for the California Air Pollution Control Officers Association in collaboration with the California Air Districts. Default data (e.g., emission factors, trip lengths, meteorology, source inventory) have been provided by the various California Air Districts to account for local requirements and conditions.

CalEEMod is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable, such as preparing CEQA or National Environmental Policy Act documents, conducting pre-project planning, and, verifying compliance with local air quality rules and regulations, etc.

CalEEMod version 2022.1.1.41 was used to estimate construction and operational impacts of the Project.

4.2 Construction Modeling Assumptions

4.2.1 Land Use

The Project would involve demolition of the existing Sheriff Administration Building and South Annex Jail buildings (approximately 87,000 SF) and 40,000 SF of existing paving. The Project would construct a new 413,000 SF courthouse and secure parking. The entire Project (courthouse and parking) was modeled as a Government Office Building within CalEEMod.

4.2.2 Construction Schedule

The Project would require construction tasks including demolition, site preparation, grading, building construction, paving, architectural coating. It is assumed that construction would take place 5 days per week for 8 hours per day.



Table 5 shows the anticipated construction schedule. The construction schedule presents a "worst-case" analysis scenario since emission factors for construction equipment decrease as the analysis year increases due to improvements in technology and more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years or is phased over multiple years.

Table 5. Anticipated Project Construction Schedule

Construction Task	Start Date	End Date	Workdays
Demolition	10/1/2029	10/27/2029	20
Site Preparation	10/28/2029	12/1/2029	25
Grading	12/2/2029	2/10/2030	50
Building Construction	2/11/2030	10/15/2033	960
Paving	9/1/2033	10/15/2033	32
Architectural Coating	6/1/2033	10/15/2033	98

Source: CalEEMod Output (Appendix A).

4.2.3 Construction Equipment

The off-road equipment fleet for construction was generated using default values from CalEEMod. CalEEMod generates construction fleets for construction activities based on the size of the construction areas. CalEEMod default horsepower and load factors were used for this analysis. Table 6 provides a breakdown of the anticipated equipment required for the Project.

Table 6. Anticipated Project Construction Equipment

Construction Task	Equipment Modeled[1]	Pieces of Equipment	Average Daily Usage (hours/day)	Horsepower	Load Factor
Demolition	Concrete/Industrial Saw	1	8	33	0.73
	Rubber Tired Dozers	1	8	367	0.40
	Tractors/Loaders/Backhoes	3	8	84	0.37
Site Preparation	Graders	1	8	148	0.41
	Scrapes	1	8	423	0.48
	Tractors/Loaders/Backhoes	1	8	84	0.37
Grading	Graders	1	8	148	0.41
	Rubber Tired Dozers	1	8	367	0.40
	Tractors/Loaders/Backhoes	2	7	84	0.37
Building Construction	Cranes	1	7	367	0.29
	Forklifts	2	8	82	0.20
	Generator Sets	1	8	14	0.74

Construction Task	Equipment Modeled[1]	Pieces of Equipment	Average Daily Usage (hours/day)	Horsepower	Load Factor
	Tractors/Loaders/Backhoes	1	7	84	0.37
	Welders	3	8	46	0.45
Paving	Cement and Mortar Mixers	1	8	10	0.56
	Pavers	1	8	81	0.42
	Rollers	2	8	36	0.38
	Paving Equipment	1	8	89	0.36
	Tractors/Loaders/Backhoes	1	7	84	0.37
Architectural Coating	Air Compressor	1	6	37	0.48

Notes:
[1] Equipment modeled is based on CalEEMod defaults for a 2.09-acre construction site.

4.2.4 Vehicle Trips

Off-site construction emissions are caused by motor vehicle exhaust from delivery vehicles, hauling trucks, worker traffic, and road dust. The number of daily vehicle trips during construction was based on CalEEMod defaults and calculated using EMFAC 2021 with EPA approved adjustment factors. Project construction is expected to generate a maximum of 132 passenger car trips per day from construction workers going to and from the Project site. The fleet mix for worker trips is light duty passenger vehicles to light duty trucks. The vendor trips fleet mix comprises medium duty and heavy-duty diesel trucks. The Project is located in Fresno, California, and it was assumed that workers would travel from nearby to the Project Site. CalEEMod defaults were used for worker and vendor trip lengths.

In addition, the Project would require hauling truck trips to transport demolition materials and grading materials. During construction, approximately 10,000 tons of demolition debris (from the Sheriff Administration, South Annex Jail, and pavement) and 1,000,000 cubic yards of soil would be hauled off-site. CalEEMod assumes haul trucks have a carrying capacity of 20 tons or 16 cubic yards per truckbed. Therefore, construction would generate 1,000 truck trips during demolition and 125,000 truck trips during grading to account for truck travel to and from the Project Site. The default trip length of 20 miles was assumed for all haul truck trips.

4.3 Project Operational Modeling Assumptions

Long-term operational emissions of criteria air pollutants and precursors were also calculated using CalEEMod for both the Project and the existing site to determine the net operational impact. As discussed above, the Project Site is currently developed and operates with the Sheriff Administration Building and South Annex Jail buildings (approximately 87,000 square feet). For both operational CalEEMod models, the default vehicle trips, fleet mix, energy consumption, and all other inputs were assumed. Mobile emissions were calculated using EMFAC 2021 with EPA approved adjustment factors. The Project CalEEMod model assumed a buildout year of 2033, the earliest possible year for operation while the



existing operational CalEEMod model calculates the emissions for the year 2025. Additionally, GHG emissions were calculated for the Project in 2050. CalEEMod defaults were utilized for all inputs.

4.4 Health Risk Assessment Methods

An air dispersion model is a mathematical formulation used to estimate the air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. This assessment relied on the USEPA's AMS/EPA Regulatory Model (AERMOD) Version 22112 air dispersion model applied in the Lakes Software AERMOD View Version 13.0.0 interface. The AERMOD model was used to estimate the concentration of PM_{10} at sensitive receptor locations from potential sources of project-generated TACs. The AERMOD model provides a refined methodology for estimating health impacts by utilizing long-term, measured representative meteorological data for the Project Site.

The modeling analysis considers the spatial distribution and elevation of each emitting source in relation to the sensitive receptors. Direction-dependent calculations were obtained by identifying the Universal Transverse Mercator coordinates for each source location. Terrain elevations were obtained for the Project Site using the AERMAP model, which is the AERMOD terrain data pre-processor. The air dispersion model assessment used meteorological data recorded from the Fresno Station, which is located approximately 4.7 miles northeast of the Project Site. The meteorological data used was preprocessed for use with AERMOD and included data for the years 2018-2023.

After using AERMOD to determine the concentration of PM at sensitive receptor locations, the associated health risks were calculated using the CARB's Hotspot Analysis Reporting Program Version 2 (HARP 2) Risk Assessment Standalone Tool (RAST), which calculates the cancer and non-cancer health impacts using the Office of Environmental Health Hazard Assessment's (OEHHA) Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015).

4.4.1 Modeling Assumptions

The estimated concentration of exhaust PM_{10} was used as a proxy to represent emissions of DPM. The PM_{10} emissions from construction were determined using the results of the CalEEMod modeling conducted for the Project. Construction emissions were assumed to be distributed evenly over the Project Site by applying an area source in AERMOD. The concentration of the PM_{10} was calculated at the maximally exposed residential receptor which was then input into CARB's HARP 2 RAST model to calculate the health risks. The exposure period was set to four years to encompass the entire construction period. Consistent OEHHA guidance, exposure was assumed to occur during the third trimester, infant, and child stages of life. Detailed parameters and complete calculations are contained in Appendix B.



5 Air Quality Impact Analysis

5.1 CEQA Guidelines

According to the CEQA Guidelines' Appendix G Environmental Checklist, the following questions are analyzed and evaluated to determine whether impacts related to air quality are considered to be significant environmental effects.

Where available and determined to be appropriate for the Project, the Judicial Council may reference the significance criteria established by the applicable air quality management or air pollution district to make the following determinations.

Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

c) Expose sensitive receptors to substantial pollutant concentrations?

d) Result in other emissions (such as those leading to odors) affecting a substantial number of people?

5.2 Thresholds of Significance

The final determination of whether a project is significant is within the purview of the lead agency pursuant to Section 15064(b) of the CEQA Guidelines. If the lead agency finds that the project has the potential to exceed its established air pollution thresholds, the project should be considered to have potentially significant air quality impacts. The SJVAPCD has adopted quantitative air pollution thresholds to assist lead agencies in determining the significance of project emissions. The SJVAPCD thresholds are presented in Table 7.

To address the potential for air pollutant hotspots, SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard. SJVAPCD also has adopted thresholds of significance for health risks from exposure to TACs. A project would result in a significant impact if the project would increase the cancer risk for the person with maximum exposure potential by 20 in a million or result in a non-cancer hazard index greater than 1.



Table 7. SJVAPCD Criteria Pollutant Thresholds of Significance

Pollutant	Construction Emissions (tons/year)	Operational Emission (tons/year)
Carbon monoxide (CO)	100	100
Oxides of nitrogen (NOx)	10	10
Reactive organic gas (ROG)	10	10
Sulfur oxides (SO_X)	27	27
Particulate matter 10 microns diameter or less (PM_{10})	15	15
Fine particulate matter 2.5 microns diameter or less ($PM_{2.5}$)	15	15

Source: SJVAPCD 2015.

5.3 Air Impact Analysis

Impact AIR-1 Conflict with or obstruct implementation of the applicable air quality plan?

The CEQA Guidelines indicate that a significant impact would occur if a project would conflict with or obstruct implementation of the applicable air quality plan. The SJVAPCD GAMAQI proposes the following criteria for determining project consistency with the current AQMPs:

- Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMPs?
- Will the project conform to the assumptions in the AQMPs?
- Will the project comply with applicable control measures in the AQMPs?

The use of criteria listed above is a standard approach for CEQA analysis of projects in the SJVAPCD's jurisdictions and other air districts for the following reasons:

- Significant contribution to existing or new exceedances of the air quality standards would be inconsistent with the goal of attaining the air quality standards.
- AQMP emissions inventories and attainment modeling are based on growth assumptions for the area within the SJVAPCD's jurisdiction.
- AQMPs rely on a set or air district-initiated control measures and implementation of federal and state measures to reduce emissions within their jurisdictions, with the goal of attaining the air quality standards.

The Judicial Council finds the SJVAPCD analysis persuasive and adopts the SJVAPCD thresholds of significance for the purposes of determining air quality impacts for this Project.

AQMPs are plans for reaching attainment of the NAAQS and CAAQS. The assumptions, inputs, and control measures are analyzed to determine whether the SJVAB can reach attainment for the ambient air quality standards. To show attainment of the standards, SJVAPCD analyzes the growth projections in the valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both state and SJVAPCD regulations and other local programs and measures. The applicable AQMPs include the 2004 Carbon Monoxide Plan, the 2022 8-Hour Ozone Plan, the 2023 1-Hour Ozone Maintenance Plan, the 2007 PM_{10} Maintenance Plan, the 2018 $PM_{2.5}$ Plan, and 2024 $PM_{2.5}$ Plan.

5.3.1 Contribution to Air Quality Violations

A measure of determining whether a project is inconsistent with the AQMPs is whether the project would result in increased frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. Because of the region's non-attainment status for O_3, $PM_{2.5}$, and PM_{10}, if Project-generated emissions of either of the O_3 precursor pollutants (ROG and NOx), PM_{10}, or $PM_{2.5}$ would exceed the SJVAPCD's significance thresholds, then the Project would be considered to conflict with the attainment plans.

As shown in Impact AIR-2, emissions of ROG, NOx, PM_{10}, and $PM_{2.5}$ from construction and operation of the Project would not exceed the SJVAPCD's significance thresholds. As shown in Impact AIR-3, the Project would not expose sensitive receptors to a substantial pollutant concentration. Therefore, the Project would not contribute to air quality violations.

5.3.2 Consistency with Assumptions in Air Quality Plans

The primary way of determining consistency with the AQMPs' assumptions is determining consistency with the applicable general plan to see that the Project's population density and land use are consistent with the growth assumptions used in the AQMPs for the SJVAB.

As required by California law, general plans contain a land use element that details the types and quantities of land uses that the city or county estimates will be needed for future growth and designates locations for land uses to regulate growth. The Fresno Council of Governments uses the growth projections and land use information in adopted general plans and other sources to estimate future average daily trips and vehicles miles traveled, which are then provided to SJVAPCD to estimate future emissions in the AQMPs. Existing and future pollutant emissions computed in the AQMPs are based on land uses from area general plans. AQMPs detail the control measures and emission reductions required for reaching attainment of the air standards based on these growth and emission estimates.

The applicable general plan for the area around the Project Site is the Fresno General Plan, which was adopted in 2014, prior to the SJVAPCD's adoption of the applicable AQMPs. Per the Fresno General Plan, the land use designation for the area around the Project Site is Downtown General. The Downtown General designation allows for the development of courthouses, therefore the Project is consistent with the Fresno General Plan. Operational staff and associated vehicle trips would be limited and most of the



operational labor force is expected to be from surrounding local communities. The Project would employ up to 390 full-time employees and 14 part-time employees daily, which falls within the Fresno General Plan's employment projections of 108,000 by 2035 (City of Fresno 2014). Accordingly, long-term emissions associated with operational vehicle trips would be negligible and would not conflict with any assumptions of the applicable AQMPs. For example, the AQMPs assumes the regional fleet will trend towards cleaner technology with CARB incentive programs like the Low Emission Vehicle Program and Zero-Emission Vehicle Program. Therefore, the Project would be consistent with the buildout assumptions included in the County's General Plan and, therefore, the Project would also be consistent with the modeling used to prepare the AQMPs. The impact would be less than significant.

5.3.3 Control Measures

The AQMP contains several control measures that are enforceable requirements through the adoption of rules and regulations. A detailed description of rules and regulations that apply to the Project is provided in Section 2.2. The Project would not conflict with or obstruct implementation of the applicable AQMP. For example, construction and decommissioning activities would be consistent with Regulation VIII and the BMPs disclosed within Rule 8021.

5.3.4 Conclusion

As a result, the Project would not conflict with or obstruct implementation of the applicable air quality plan.

Impact AIR-2	**Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?**

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. If emissions fall below thresholds, then a project's impacts are not considered cumulative considerable and would not result in an adverse air quality impact (SJVAPCD 2015).

The SJVAPCD GAMAQI adopted in 2015 contains thresholds for ROG and NOx, SOx, CO, PM_{10}, and $PM_{2.5}$ (Table 7).

5.3.5 Construction Emissions

Project emissions during construction are generated from off-road construction equipment, worker vehicle trips, and hauling trips. As shown in Table 8, the emissions from construction fall below SJVAPCD thresholds, and impacts would be less than significant.



Table 8. Construction Emissions

Emissions Source		Emissions (tons/year)					
		ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Project Construction	Year 2029	0.04	0.33	0.42	<0.01	0.13	0.04
	Year 2030	0.14	1.16	1.54	<0.01	0.08	0.05
	Year 2031	0.13	1.10	1.50	<0.01	0.03	0.03
	Year 2032	0.13	1.07	1.50	<0.01	0.03	0.02
	Year 2033	1.07	0.94	1.36	<0.01	0.02	0.02
	Mobile (2029-2033)[1]	0.67	8.78	5.75	0.05	1.72	0.51
Thresholds		**10**	**10**	**100**	**27**	**15**	**15**
Any Year Exceed Thresholds?		**No**	**No**	**No**	**No**	**No**	**No**

Notes:
[1] Mobile emissions were calculated using emission factors for 2029 with EMFAC 2021 with EPA approved adjustment factors.
Source of Emissions: CalEEMod Output (Appendix A).
Source of Thresholds: SJVAPCD 2015.

5.3.6 Operation and Maintenance Emissions

Emissions during operation of the Project would be generated during routine site maintenance, including landscaping and repainting, and employee, jurors, defendants, and the public's trips to and from the Project Site. As shown in Table 9, the net operational emissions fall below SJVAPCD thresholds; therefore, the Project impacts would be less than significant.

Table 9. Operational Emissions

Source	Emissions (tons/year)					
	ROG	NOx	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile	4.17	5.22	22.97	0.06	5.94	1.54
Area	1.97	0.01	1.62	<0.01	<0.01	<0.01
Energy	0.04	0.81	0.68	<0.01	0.06	**0.06**
Project Total	6.18	6.04	25.27	0.07	6.00	1.60
Existing Total	(1.64)	(1.56)	(7.22)	(0.02)	(1.26)	(0.34)
Net Total	**4.54**	**4.48**	**18.05**	**0.05**	**4.74**	**1.26**
Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Any Year Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod Output (Appendix A).
Source of Thresholds: SJVAPCD 2015.
Notes:
Emissions were quantified using CalEEMod based on Project details and estimated operating year for the Project. Totals may not sum exactly due to rounding.

5.3.7 Conclusion

As shown in Table 9 and Table 10, criteria pollutant emissions would not exceed any threshold of significance during Project construction or long-term operation. The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under applicable federal or state ambient air quality standards. The impact would be less than significant.

Impact AIR-3	**Expose sensitive receptors to substantial pollutant concentrations?**

This discussion addresses whether the Project would expose sensitive receptors to localized concentrations of air pollutants or TACs during construction or operation. According to CARB, some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics.

As depicted in Figure 1, Project Location, the closest sensitive receptors are residences located approximately 750 feet east of the Project site.

5.3.8 Construction

During construction activities associated with the Project, the potential exists for sensitive receptors in the Project area to be exposed to localized impacts from criteria pollutants (i.e., CO, NO_2, PM), asbestos, fugitive dust, Valley Fever, and DPM. The potential impacts are evaluated below.

5.3.8.1 Localized Impacts

Emissions occurring at or near the Project have the potential to create a localized impact, also referred to as an air pollutant hotspot. Localized emissions are considered significant when, combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard.

SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.



It should be noted that localized impacts only account for on-site emissions. Most on-road mobile sources from construction worker trips, vendor trips, and hauling trips would be generated off-site on existing roadways. Therefore, the localized emissions account for all on-site sources (off-road construction equipment, architectural coating) and mobile source emissions generated within 0.25 miles of the Project site to account for any on-site vehicle movement and idling. As shown in Table 10, on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants. Based on SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation. Impacts would be less than significant.

Table 10. Localized Concentrations of Emissions for Construction

Emissions Source	Emissions (pounds per day)			
	NOx[1]	CO	PM_{10}	$PM_{2.5}$
Construction Maximum	84.20	80.60	4.34	2.05
Significance Thresholds	**100**	**100**	**100**	**100**
Any Year Exceed Significance Thresholds?	**No**	**No**	**No**	**No**

Source of Emissions: CalEEMod Output (Attachment A).
Source of Thresholds: SJVAPCD 2015.
Notes:
[1] NOx emissions used as a proxy for NO_2.

5.3.8.2 Asbestos

According to the United States Geological Survey (USGS), no NOA is present within the Project area (USGS 2011). Therefore, development of the Project is not anticipated to expose receptors to NOA. Impacts would be less than significant.

Exposure to asbestos can occur during demolition or remodeling of buildings constructed prior to 1977, when asbestos was banned for use in buildings. The existing on-site buildings were constructed between 1942 and 1970 and, as a result, have the potential to include ACBMs. The Project would be required to comply with the provisions in the Judicial Council's Policy on Asbestos Management for Court Facilities (Judicial Council 2018). Provisions of this policy include:

- Informing all entities of the potential hazard.
- A written program that complies with applicable federal, state, and local laws and regulations, as well as asbestos-related labor and business laws, and regulations regarding asbestos management, storage, and disposal.
- Fugitive dust control measures.
- Work conducted must follow the written program.
- All entities must follow the Asbestos Notification Requirements.



Compliance with Judicial Council's Policy on Asbestos Management for Court Facilities would minimize sensitive receptors' exposure to substantial concentrations of asbestos including worker safety and fugitive dust measures, and the impact would be less than significant.

5.3.8.3 Fugitive Dust

The potential for localized PM_{10} and $PM_{2.5}$ health impacts is a concern for sensitive receptors. The closest sensitive receptor is located approximately 750 feet east of the Project Site. Most of this fugitive dust would remain localized and would be deposited near the Project Site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from the Project Site. The Project would comply with SJVAPCD's Regulation VIII by preparing and complying with a Dust Control Plan that incorporates BMPs for reducing fugitive dust. BMPs required under SJVAPCD Rule 8021 are listed above. With implementation of these BMPs, potential impacts to sensitive receptors resulting from fugitive dust would be less than significant.

5.3.8.4 Valley Fever

Valley fever, or *coccidioidomycosis*, is an infection caused by inhalation of the spores of the fungus *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities. The San Joaquin Valley is considered an endemic area for Valley fever.

Construction activities would generate fugitive dust that could contain *C. immitis* spores. The Project would minimize the generation of fugitive dust during construction activities by complying with SJVAPCD's Regulation VIII and implementing the BMPs contained therein. BMPs include using water or chemical stabilizers to reduce opacity to less than 20 percent to prevent airborne dust that carries valley fever. Additionally, construction contractors would be subject to the Occupational Safety and Health Administration's (OSHA) standards for worker protection, including Construction Standard for Personal Protective Equipment (29 CFR 1926 Subpart E) (OSHA 2026). With implementation of these BMPs and OSHA standards, potential impacts to sensitive receptors resulting from Valley Fever would be less than significant.

5.3.8.5 Diesel Particulate Matter

Construction activities have the potential to generate DPM emissions related to the number and types of diesel-powered equipment typically associated with construction. Off-road, heavy-duty diesel equipment used for site grading and other construction activities result in the generation of DPM, which is a primary pollutant of concern when evaluating the health risk posed to sensitive receptors. According to CARB, the concentration of DPM is a factor of distance from the source of emissions. Because of the proximity of sensitive receptors there is the potential for DPM emissions to result in a health impact. Accordingly, a construction HRA was prepared to determine if a potential health risk would occur as a result of Project construction.



The construction HRA evaluated DPM (represent as exhaust PM_{10}) emissions generated during construction of the Project and the related health risk impacts for sensitive receptors located within 1,000 feet of the Project boundary. A project would result in a significant impact if it would individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 20 in one million or an increased non-cancer risk of greater than 1.0 on the hazard index (SJVAPCD 2015).

The nearest sensitive receptors are residents occupying an apartment complex approximately 750 feet east of the Project Site. To estimate the potential cancer risk associated with construction of the Project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to concentrations at the receptor locations of interest (i.e., receptors at nearby residences).

As discussed above, AERMOD dispersion model was used to predict concentrations of DPM at sensitive receptors within 1,000 feet of the Project Site. To model emissions, a release height of three meters was chosen to represent the release height of construction equipment. Emissions from off-road construction equipment and on-road vehicle travel were distributed throughout the modeled area source. AERMOD modeling was performed to assess the risks posed to nearby receptors from the on-site construction. On-site modeling was assumed to occur as an area source.

The current OEHHA guidance recommends that cancer risks be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, it recommends evaluating the risks for the third trimester of pregnancy to age zero (third trimester exposure), ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposure, an ASF of three for child exposure, and an ASF of one for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilograms of body weight per day (L/kg-day). As recommended, 95th percentile breathing rates are used for the third trimester and infant exposure, and 80th percentile breathing rates are used for child and adult exposure. These age-specific breathing rates are 361 L/kg-day for the third trimester receptor, 1,090 L/kg-day for the infant receptors, 572 L/kg-day for child receptors, and 233 L/kg-day for adult receptors (OEHHA 2015). According to OEHHA, the cancer risk for a residential receptor is assumed to start in the third trimester of life. Project construction would occur over approximately 4.04 years and would include the third trimester, the infant, and the first 1.79 years of the child stages of life to account for the entire construction period.

Results of the construction health risk analysis are summarized in Table 11. The calculations and AERMOD output data used in the assessment are included in Appendix B.



Table 11: Health Risks from Project Construction at the Maximally Exposed Sensitive Receptor

Health Impact Metric	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index (construction)[1]
Closest Sensitive Receptor	8.9	0.004
Threshold	20	1
Exceeds Threshold?	**No**	**No**

Notes:
[1] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM10 exhaust) by the REL of 5 µg/m3.
Source: Appendix B.

As shown in Table 11, construction of the Project would not expose nearby receptors to cancer and noncancer risks that exceed the SJVAPCD's threshold of significance. Therefore, the impact related to DPM exposure during construction would be less than significant.

5.3.9 Operation

The potential for sensitive receptors in the Project area to be exposed to localized impacts from criteria pollutants (i.e., CO, NO_2, PM), fugitive dust, Valley Fever, and DPM are evaluated below.

5.3.9.1 Localized Impacts

Localized impacts could occur in areas with a single large source of emissions, such as a fuel power plant, or with multiple sources concentrated in a small area, such as a distribution center. The Project proposes to develop a courthouse. Table 13 demonstrates the daily operational emissions from the Project and demonstrates that during operation, the Project would not exceed localized concentrations.

Table 12. Localized Concentrations of Emissions for Operations

Emissions Source	Emissions (pounds per day)			
	NOx[1]	**CO**	**PM_{10}**	**$PM_{2.5}$**
Operation Maximum	30.35	97.26	2.06	0.83
Significance Thresholds	**100**	**100**	**100**	**100**
Any Year Exceed Significance Thresholds?	**No**	**No**	**No**	**No**

Source of Emissions: CalEEMod Output (Attachment A).
Source of Thresholds: SJVAPCD 2015.
Notes:
[1] NOx emissions used as a proxy for NO_2.

5.3.9.2 Fugitive Dust and Valley Fever

During operation, dust emissions are anticipated to be negligible because most of the Project area would be occupied by buildings, landscaping, and pathways. Thus, the potential for the Project to generate fugitive dust, including dust that may expose sensitive receptors to Valley Fever, during operations would be similar to existing conditions and less than significant.

5.3.9.3 Diesel Particulate Matter

The greatest potential during long-term operations for exposure to TACs is from the use of heavy-duty diesel trucks and stationary generators that use diesel fuel. Given the nature of the Project, vehicle trips to and from the Project Site during operations would primarily be from courthouse staff and members of the public. As a result, the Project would attract very few diesel-fueled truck trips. Additionally, the Project may include an emergency, back-up stationary generator on-site. However, the generator would only operate during routine testing and maintenance operations and, as a result, would not generate DPM that would impact nearby sensitive receptors. The back-up generator would be permitted by SJVAPCD prior to installation. For these reasons, once operational, the Project would not be expected to expose nearby sensitive receptors to substantial amounts of DPM.

5.3.10 Conclusion

The Project would not expose sensitive receptors to substantial pollutant concentrations during construction or operation, therefore, the impact would be less than significant.

Impact AIR-4	**Result in other emissions (such as those leading to odors) affecting a substantial number of people?**

While offensive odors rarely cause any physical harm, they can still be unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and SJVAPCD. The occurrence and severity of odor impacts depends on numerous factors, including nature, frequency, and intensity of the source, the wind speed and direction, and the sensitivity of the receptor. The nearest sensitive receptors to the Project Site are the residents occupying an apartment complex approximately 750 feet to the east.

5.3.11 Construction

Construction activities associated with the Project could result in short-term odorous emissions from diesel exhaust associated with diesel-fueled equipment. However, these emissions would be intermittent and would dissipate rapidly from the source. In addition, this diesel-powered equipment would only be present on-site temporarily during construction activities. In general, construction activities would not create objectionable odors affecting a substantial number of people, and the impact would be less than significant.



5.3.12 Operation

Land uses typically considered as associated with the production of odors during operations include wastewater treatment facilities, waste disposal facilities, and agricultural operations. The Project does not include any land uses that are typically associated with emitting objectionable odors. In the unlikely event that the Project emits an objectionable odor, the SJVAPCD receives complaints about nuisance odors through its Rule 4102 process, and SJVAPCD may coordinate with the Judicial Council if a complaint is received.

5.3.13 Conclusion

The Project would not result in other emissions (such as those leading to odors) affecting a substantial number of people, therefore, impacts would be less than significant.

6 Greenhouse Gas Impact Analysis

6.1 CEQA Guidelines

According to the CEQA Guidelines' Appendix G Environmental Checklist, the following questions are analyzed and evaluated to determine whether impacts related to GHGs are considered to be significant environmental effects.

Where available and determined to be appropriate for the Project, the Judicial Council may reference the significance criteria established by the applicable air quality management or air pollution district to make the following determinations.

Would the Project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

6.1.1 Thresholds

The SJVAPCD's guidance for valley land use agencies in addressing GHG emission impacts for new projects under CEQA presents a tiered approach to analyzing project significance with respect to GHG emissions. On November 20, 2015, the California Supreme Court issued its decision on the *Center for Biological Diversity v. California Department of Fish and Wildlife* on the Newhall Ranch project case. The Court determined that there is no substantial evidence to link a specific project's achievement of CARB's scoping plan's statewide average reduction below BAU to the conclusion that the project's reduction would meet AB 32's 2020 goals. Furthermore, since the release of SJVAPCD's guidance, SB 32 was enacted, which requires the state to further reduce GHG emissions beyond the goals established in AB 32. As a result, the SJVAPCD's 29 percent reduction in emissions as compared to a BAU standard is outdated and was not used for this analysis.

CEQA Guidelines Section 15064.4 provides guidance for determining the significance of impacts from GHGs as follows:

> (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
>
> (1) Quantify greenhouse gas emissions resulting from a project; and/or

(2) Rely on a qualitative analysis or performance-based standards.

(b) In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., Section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the state's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

(c) A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

6.1.2 Project Threshold of Significance

For development projects, an effective way to evaluate the project's generation of GHG emissions is to evaluate whether a subject project "incorporates efficiency and conservation measures sufficient to contribute its portion of the overall GHG reductions necessary" for the State to achieve its own mandates (*Center for Biological Diversity, et al. v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204).



The intent of the 2022 Scoping Plan, and the State legislation on which it is built, is to decouple the State's population and economic growth from carbon emissions, thereby accommodating continued growth in California but in a way that achieves a lower rate of GHG emissions (CARB 2022). With a reduced rate of emissions per resident and employee, California can accommodate expected population growth and achieve economic development objectives, while also achieving legislative emissions targets. An efficiency target can be developed that mirrors statewide emissions reduction legislation and applicable EOs for the target year. To create an efficiency target, the statewide emissions target for a specified target year can be divided by the forecast population and employment statewide for the same year. This yields an emissions "budget" for each California resident/employee and allows a community to assess whether or not its emissions rate is consistent with the statewide emissions budget.

If a project or plan demonstrates that the rate of GHG emissions is efficient enough to provide its share of State emissions reduction targets, the impact is not cumulatively considerable (*Center for Biological Diversity, et al. v. Department of Fish and Wildlife*, *supra*). Therefore, for evaluation of the Project's generation of GHG emissions, this analysis uses a GHG efficiency metric that is tailored for new development, to the proposed Project, and to the proposed Project location to assess the GHG efficiency of the Project, and whether the Project provides for its share of emissions reductions embodied within SB 32 in the short-term and EO S-3-05 for the consideration of the State's long-term emissions reductions goals.

Table 13 presents the land use-related statewide emissions and employment figures and calculates the proposed 2030 and 2050 GHG efficiency targets to quantitatively evaluate the proposed Project's GHG emissions. Adjusted emissions remove GHG emissions associated with residential land uses as the Project does not include any residential land uses. For the purposes of analysis in this EIR, the 2030 GHG efficiency threshold was calculated to be 11.63 MT CO2e per employee and the 2050 GHG efficiency threshold was calculated to be 3.31 MT CO2e per employee; additional calculations and inputs provided in Table 13.

Table 13. GHG Efficiency Threshold

Metric	**1990 State Inventory**	**2030 Project-specific GHG Efficiency Threshold**	**2050 Project-specific GHG Efficiency Threshold**
Statewide Emissions (MMT CO_2e/yr)	431	258	86
Adjusted Land Use-Related Emissions (MMT CO_2e/yr)[1]	401	241	80
Percent Mass Emissions Reduction	n/a	40 percent below 1990	80 percent below 1990
Statewide Employment[2] (service population)	n/a	20,715,080	24,153,880
Per Employee Emissions Efficiency Threshold ($MTCO_2e$/SP)	**n/a**	**11.63**	**3.31**

Sources: CARB 2007 and Employment Development Department (EDD) 2025.
Notes:
[1] GHG emissions associated with residential uses were removed.
[2] Employment projections for 2030 and 2050 are calculated using a linear forecast from 2023 (19,511,500 employees) and 2033 (21,230,900 employees) data.

Additionally, the Project would be required to comply with CARB's 2022 Scoping Plan. To determine whether the Project would conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing GHG emissions, the Project was evaluated for consistency with the applicable state plan. While SJVAPCD has a CAAP, SB 32 was issued after the CAAP was adopted, which requires the state to further reduce GHG emissions beyond the goals laid out in AB 32 and therefore the CAAP is outdated.

6.2 GHG Impact Analysis

Impact GHG-1	**Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

The following emissions estimate is consistent with CEQA Guidelines Section 15064.4(a). CalEEMod was used to estimate the Project's GHG emissions during construction and operation. Modeling assumptions are described in Section 4.

6.2.1 Constructions Emission Inventory

Construction GHGs would be emitted temporarily by off-road construction equipment, vehicle travel by workers, material hauling from the Project Site, and material deliveries to the Project Site. The estimated construction GHG emissions are shown in Table 14. Because construction GHG emissions are temporary, they are typically amortized over the life of the Project and added to operational emissions. The Project is anticipated to have a lifetime of 30 years.

Table 14. Construction Greenhouse Gas Emissions

Construction Year	Metric Tons of Carbon Dioxide Equivalents (MT CO2e)
Construction—2029	77.52
Construction—2030	264.56
Construction—2031	261.18
Construction—2032	261.90
Construction—2033	230.15
Construction—Mobile (2029-2033)	5,379.39
Total	**6,477.70**
Amortized over 30 years[1]	**215.92**

Source: CalEEMod Output (Appendix A).

Notes:

[1] GHG emissions are amortized over the 30-year life of the Project.

6.2.2 Operational Emission Inventory

Operational or long-term emissions occur over the life of the Project. Operational activities of the Project would generate GHG emissions primarily from employees, jurors, defendants, and the public's trips to and from the Project Site, energy usage, landscaping equipment, handling of solid waste, and emissions associated with water and wastewater. Net operational GHG emissions associated with the Project are shown in Table 15 and demonstrate that implementation of the Project would result in an increase of GHG emissions and would exceed the Project's 2030 GHG efficiency threshold in 2033 (Project buildout) and the Project's 2050 GHG efficiency threshold in 2050. Therefore, the impact is potentially significant.

Table 15. Operational Greenhouse Gas Emissions

Source	Emissions of Metric Tons of Carbon Dioxide Equivalents (MT CO_2e) Per Year (2033)	Emissions of Metric Tons of Carbon Dioxide Equivalents (MT CO_2e) Per Year (2050)
Mobile	6,012.82	5,666.72[1]
Area	6.05	6.05
Energy	947.92	877.64
Water	114.00	111.65
Waste	119.90	119.90
Refrigerants	0.17	0.17
Total Operational Emissions	*7,200.86*	*6,782.13*
Amortized Construction Emissions	215.92	215.92
Project Total	7,416.78	6,998.05
Existing Total	**(1,723.30)**	**(1,723.30)**
Net Project Total	5,693.48	5,274.75
Project Service Population	404	**404**
Project GHG Efficiency (MT CO_2e per service population)	**14.09**	**13.06**
GHG Efficiency Threshold (MT CO_2e per service population)[2]	**11.63**	**3.31**
Exceed Threshold?	**Yes**	**Yes**

Source: CalEEMod Output (Appendix A).Notes:

[1] Increased electricity use from EV charging would not increase GHG emissions in 2050, as RPS requires 100 percent renewables by 2045.

[2] The 2030 GHG efficiency threshold is applied to 2032 (Project buildout).

The Project would implement the following mitigation measures:

Mitigation Measure GHG-1: The Judicial Council shall not include natural gas infrastructure to or within the Project site and Project operations shall not use natural gas.

Mitigation Measure GHG-2: The Judicial Council shall include the following TDM measures:

- Provide cyclists end-of-trip facilities (i.e., showers, lockers, and similar features) in the project design and operational maintenance.
- Provide transit-oriented design.
- Implement commute trip reduction marketing.
- Provide ridesharing program.

As shown in Table 16, with implementation of the Mitigation Measures GHG-1 and GHG-2 GHG emissions would reduce long term operational GHG emissions below the 2030 GHG efficiency threshold, however, GHG emissions would remain above the 2050 GHG efficiency threshold.

Table 16. Mitigated Operational Greenhouse Gas Emissions

Source	Emissions of Metric Tons of Carbon Dioxide Equivalents (MT CO_2e) Per Year (2033)	Emissions of Metric Tons of Carbon Dioxide Equivalents (MT CO_2e) Per Year (2050)
Mobile	4,311.38	4,063.21[1]
Area	6.05	6.05
Energy	70.28	0
Water	114.00	111.65
Waste	119.90	119.90
Refrigerants	0.17	0.17
Total Operational Emissions	*4,621.78*	*4,300.98*
Amortized Construction Emissions	215.92	**215.92**
Project Total	4,837.70	4,516.90
Existing Total	(1,723.30)	(**1,723.30**)
Net Project Total	3,114.40	2,793.60
Project Service Population	404	404
Project GHG Efficiency (MT CO_2e per service population)	**7.71**	**6.91**
GHG Efficiency Threshold (MT CO_2e per service population)[2]	**11.63**	**3.31**
Exceed Threshold?	**No**	**Yes**

Source: CalEEMod Output (Appendix A).

Notes:

[1] Increased electricity use from EV charging would not increase GHG emissions in 2050, as RPS requires 100 percent renewables by 2045.

[2] The 2030 GHG efficiency threshold is applied to 2033 (Project buildout).

It should be noted that, operational emissions may be further reduced by the following Project attributes that cannot be quantified at this time:

- The Project would be designed and constructed to a LEED silver rating, at a minimum, which would include additional energy and resource efficiency measures that could reduce related GHG emissions.
- The Judicial Council shall offer jurors public transportation passes at no cost to the juror, to support increased use of public transit as a mode of travel by visitors to and from the Project site, thereby reducing VMT and related mobile-source GHG emissions.

6.2.3 Conclusion

As shown in Table 16, the Project's GHG emissions, would be reduced below the 2030 GHG efficiency threshold with implementation of Mitigation Measures GHG-1 and GHG-2. However, GHG emissions would remain above the 2050 GHG efficiency threshold. Thus, impacts would be significant and unavoidable.

Impact GHG-2	**Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

A project would have a significant impact with respect to GHG emissions and global climate change if it would substantially conflict with the provisions of CEQA Guidelines Section 15064.4(b). Pursuant to CEQA Guidelines Appendix G, a significant GHG impact is identified if the project could conflict with applicable GHG reduction plans, policies, or regulations.

6.2.4 Consistency with State GHG Reduction Strategies

CARB's 2022 Scoping Plan sets a framework for California to meet the reduction targets of SB 32 and AB 1279. The 2022 Scoping Plan builds upon previous iterations of state scoping plans to achieve carbon neutrality and reduce anthropogenic GHG emissions by 85 percent of year 1990 levels no later than 2045, as directed by AB 1279. Table 17 evaluates Project consistency with the GHG reduction strategies identified in the 2022 Scoping Plan. As shown therein, the Project would be consistent with all applicable measures and, as a result, would support the overall carbon neutrality goal established by the 2022 Scoping Plan.

Table 17. Project Consistency with 2022 Scoping Plan Greenhouse Gas Reduction Strategies

Measure	Consistency Determination
Deploy ZEVs and reduce driving demand	**Consistent.** The Project is in close proximity to Fresno Area Express bus lines. Additionally, the Project Site is easily accessible by pedestrians. Moreover, the Project would consolidate courts from several different courthouses in one centralized location, reducing vehicle trips associated with multiple facilities. The Project would not directly deploy ZEVs, however consistent with the 2025 California Green Building Standards (CALGreen), or applicable code at the time of construction, the proposed secure parking would include electric vehicle (EV)-capable spaces and EV chargers. Additionally, the Project would implement Mitigation Measure GHG-2.
Generate clean electricity	**Consistent.** The Project would not directly generate clean electricity. However, the Project would purchase electricity from PG&E, which is subject to the RPS. The RPS would require utilities to provide 100% GHG free sources of electricity to consumers by 2045. PG&E offers 100% GHG free electricity via two plans, 100% solar choice and Green Saver, according to their 2024 power content label. Additionally, PG&E's base plan provides 98% GHG free electricity (PG&E 2025).
Decarbonize Buildings	**Consistent.** The Project would be constructed in compliance with the applicable CALGreen standards and would meet at least LEED Silver certification. Moreover, the Project would replace older, less efficient buildings and consolidate functions reducing energy consumption associated with multiple facilities. Additionally, with implementation of Mitigation Measure GHG -1, the Project would be all-electric and would not include any natural gas connections.
Reduce non-combustion emissions (Methane)	**Consistent.** The Project would not include any land uses that generate significant levels of methane, such as landfills or dairy farms.
Reduce non-combustion emissions (Hydrofluorocarbons [HFCs])	**Consistent.** The Project would comply with all applicable SJVAPCD and state regulations governing short-lived climate pollutants (SLCPs), including HFCs.
Compensate for remaining emissions	**Not Applicable.** This measure is aimed at the state government to reduce statewide emissions to meet AB 1279 goals.

Source: CARB 2022b.

This analysis finds that the Project would be consistent with the applicable strategies recommended in the 2022 Scoping Plan.

6.2.5 Conclusion

The Project would not conflict with an applicable plan adopted for the purposes of reducing GHG emissions, and impacts would be considered less than significant.



7 References

CARB. 2025a. Sulfur Dioxide & Health. Available online at: https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health. Accessed November 2025.

_____. 2025b. Overview: Diesel Exhaust & Health. Available online at: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed November 2025.

_____. 2025c. Sulfate & Health. Available online at: https://ww2.arb.ca.gov/resources/sulfate-and-health. Accessed November 2025.

_____. 2025d. Hydrogen Sulfide & Health. Available online at: https://ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health. Accessed November 2025.

_____. 2025e. Vinyl Chloride & Health. Available online at: https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed November 2025.

_____. 2025f. Visibility-Reducing Particles & Health. Available online at: https://ww2.arb.ca.gov/resources/visibility-reducing-particles-and-health. Accessed November 2025.

_____. 2025g. iADAM: Air Quality Data Statistics. Available online at: https://www.arb.ca.gov/adam/index.html. Accessed November 2025.

_____. 2025h. GHG Short-Lived Climate Pollutant Inventory. Available online at: https://ww2.arb.ca.gov/ghg-slcp-inventory. Accessed November 2025.

_____. 2025i. SB 375 Regional Plan Climate Targets. Available online at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed November 2025.

———. 2024a. Table of Ambient Air Quality Standards. Available online at: https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Accessed November 2025.

_____. 2024b. California Greenhouse Gas Emissions from 2000 to 2022: Trends of Emissions and Other Indicators. Available online at: https://ww2.arb.ca.gov/sites/default/files/2024-09/nc-2000_2022_ghg_inventory_trends.pdf. Accessed November 2025.

_____. 2022. 2022 Scoping Plan. Available online at: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp_1.pdf. Accessed November 2025.

_____. 2018. Climate Pollutants Fall Below 1990 Levels for the First Time. Available online at: https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time. Accessed November 2025.

_____. 2007. Staff Report California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit. Available online at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed November 2025.

_____. 2005. Air Quality and Land Use Handbook: A Community Health Perspective. Available online at: https://ww2.arb.ca.gov/sites/default/files/2023-05/Land%20Use%20Handbook_0.pdf. Accessed November 2025.

CDC. 2020. Coccidioidomycosis. Available online at: https://www.cdc.gov/fungal/diseases/coccidioidomycosis/index.html. Accessed September 22, 2022.

City of Fresno. 2014. Fresno General Plan. Available online at: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf. Accessed November 2025.

Judicial Council. 2018. Judicial Council Policy on Asbestos Management for Court Facilities. Available online at: https://courts.ca.gov/system/files/jcc_policy_asbestos_mgmt_for_court_facilities.pdf. Accessed November 2025.

_____. 2015. Water Conservation Policy. Available online at: https://www.courts.ca.gov/documents/jc-20150626-itemK.pdf. Accessed November 2025.

NASA. 2025. Wildfires and Climate Change. Available online at: https://science.nasa.gov/wildfires-and-climate-change/. Accessed November 2025.

National Centers for Environmental Information. 2025. County Time Series. Available online at: https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/CA-029/tmin/all/2/1895-2023. Accessed November 2025.

PG&E. 2025. Power Content Label. Available online at: https://www.pge.com/assets/pge/docs/about/corporate-responsibility-and-sustainability/2024-pcl-pacific-gas-and-electric-company.pdf. Accessed November 2025.

OSHA. 2026. Valley Fever (Coccidioidomycosis) Standards. Available online at: Valley Fever (Coccidioidomycosis) - Standards | Occupational Safety and Health Administration. Accessed January 2026.

SJVAPCD. 2025. Ambient Air Quality Standards & Valley Attainment Status. Available online at: https://www.valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainmnet-status/. Accessed November 2025.

_____. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Available online at: https://www.valleyair.org/transportation/GAMAQI.pdf. Accessed November 2025.

USEPA. 2025a. Criteria Air Pollutants. Available online at: https://www.epa.gov/criteria-air-pollutants?msclkid=402121eaa62811ec9f3a5e32e281714a. Accessed November 2025.

_____. 2025b. Ground-Level Ozone Basics. Available online at: https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics#wwh. Accessed November 2025.

_____. 2025c. Health Effects of Ozone Pollution. Available online at: https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed November 2025.

_____. 2025d. Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution. Available online at: https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution#What%20is%20CO. Accessed November 2025.

_____. 2024e. Basic Information about NO2. Available online at: https://www.epa.gov/no2-pollution/basic-information-about-no2#What%20is%20NO2. Accessed November 2025.

_____. 2025f. Sulfur Dioxide Basics. Available online at: https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#what%20is%20so2. Accessed November 2025.

_____. 2025g. Learn About Lead. Available online at: https://www.epa.gov/lead/learn-about-lead. Accessed November 2025.

_____. 2025h. Particulate Matter (PM) Basics. Available online at: https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM. Accessed November 2025.

_____. 2025i. Learn About Asbestos. Available online at: https://www.epa.gov/asbestos/learn-about-asbestos#asbestos. Accessed November 2025.

_____. 2025j. Carbon Dioxide Emissions. Available online at: https://www.epa.gov/ghgemissions/carbon-dioxide-emissions. Accessed November 2025.

_____. 2025k. Methane Emissions. Available online at: https://www.epa.gov/ghgemissions/methane-emissions. Accessed November 2025.

_____. 2025l. Nitrous Oxide Emissions. Available online at: https://www.epa.gov/ghgemissions/nitrous-oxide-emissions. Accessed November 2025.

_____. 2025m. Fluorinated Gas Emissions. Available online at: https://www.epa.gov/ghgemissions/fluorinated-gas-emissions. Accessed November 2025.

_____. 2025n. Sulfur Hexafluoride (SF6) Basics. Available online at: https://www.epa.gov/eps-partnership/sulfur-hexafluoride-sf6-basics. Accessed November 2025.

_____. 2025o. Inventory of U.S. Greenhouse Gas Emissions and Sinks. Available online at: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed November 2025.

_____. 2025p. Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2023. Available online at: https://library.edf.org/AssetLink/145ky510ew61fk1tq5c2klp5kq5yp33j.pdf. Accessed November 2025.

USGS. 2011. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Available online at: https://pubs.usgs.gov/of/2011/1188/. Accessed November 2025.

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New Fresno Courthouse Project Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	New Fresno Courthouse Project
Construction Start Date	10/1/2029
Operational Year	2033
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70000
Precipitation (days)	25.4000
Location	2200 Fresno St, Fresno, CA 93721, USA
County	Fresno
City	Fresno
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2400
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.43

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Government Office Building	413.000	1000sqft	2.09000	413,000	0.00000	0.00000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-3	Provide Transit-Oriented Development
Transportation	T-7	Implement Commute Trip Reduction Marketing
Transportation	T-8	Provide Ridesharing Program
Transportation	T-10	Provide End-of-Trip Bicycle Facilities
Transportation	T-42*	Implement Telecommute and/or Alternative Work Schedule Program
Energy	E-15	Require All-Electric Development

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.4064	21.0977	13.8383	20.6595	0.03665	0.34069	0.00000	0.34069	0.31343	0.00000	0.31343	—	3,577.97	3,577.97	0.14514	0.02903	0.00000	3,590.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.4064	21.0977	13.8383	20.6595	0.03665	0.48306	6.95417	7.37730	0.44441	1.40454	1.84895	—	3,577.97	3,577.97	0.14514	0.02903	0.00000	3,590.25
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.96471	5.84497	6.37569	8.45962	0.01656	0.19182	0.61242	0.68636	0.17647	0.14475	0.28917	—	1,592.51	1,592.51	0.06460	0.01292	0.00000	1,597.97
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.08856	1.06671	1.16356	1.54388	0.00302	0.03501	0.11177	0.12526	0.03221	0.02642	0.05277	—	263.657	263.657	0.01070	0.00214	0.00000	264.562

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.21101	1.00914	8.70495	11.5787	0.02312	0.24315	0.00000	0.24315	0.22369	0.00000	0.22369	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2031	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	0.00000	0.22711	0.20894	0.00000	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2032	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	0.00000	0.20641	0.18990	0.00000	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	0.00000	2,208.60
2033	21.4064	21.0977	13.8383	20.6595	0.03665	0.34069	0.00000	0.34069	0.31343	0.00000	0.31343	—	3,577.97	3,577.97	0.14514	0.02903	0.00000	3,590.25
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.56315	1.31348	11.6034	14.3673	0.02507	0.48306	6.95417	7.37730	0.44441	1.40454	1.84895	—	2,714.83	2,714.83	0.11013	0.02203	0.00000	2,724.14
2030	1.52791	1.28387	10.6725	13.9358	0.02312	0.46928	3.21716	3.68645	0.43174	1.40454	1.83628	—	2,454.44	2,454.44	0.09956	0.01991	0.00000	2,462.86
2031	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	0.00000	0.22711	0.20894	0.00000	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2032	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	0.00000	0.20641	0.18990	0.00000	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	0.00000	2,208.60
2033	21.4064	21.0977	13.8383	20.6595	0.03665	0.34069	0.00000	0.34069	0.31343	0.00000	0.31343	—	3,577.97	3,577.97	0.14514	0.02903	0.00000	3,590.25
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.25864	0.21719	1.81672	2.32547	0.00436	0.07394	0.61242	0.68636	0.06802	0.14475	0.21277	—	466.650	466.650	0.01893	0.00379	0.00000	468.251
2030	0.89043	0.74286	6.37569	8.45962	0.01648	0.19182	0.25813	0.44995	0.17647	0.11269	0.28917	—	1,592.51	1,592.51	0.06460	0.01292	0.00000	1,597.97
2031	0.84319	0.70265	6.03983	8.23448	0.01651	0.16222	0.00000	0.16222	0.14925	0.00000	0.14925	—	1,572.17	1,572.17	0.06377	0.01275	0.00000	1,577.57
2032	0.82236	0.68526	5.88329	8.20632	0.01656	0.14784	0.00000	0.14784	0.13602	0.00000	0.13602	—	1,576.48	1,576.48	0.06395	0.01279	0.00000	1,581.89
2033	5.96471	5.84497	5.16605	7.45763	0.01453	0.11978	0.00000	0.11978	0.11020	0.00000	0.11020	—	1,385.37	1,385.37	0.05620	0.01124	0.00000	1,390.13
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.04720	0.03964	0.33155	0.42440	0.00080	0.01349	0.11177	0.12526	0.01241	0.02642	0.03883	—	77.2592	77.2592	0.00313	0.00063	0.00000	77.5243

2030	0.16250	0.13557	1.16356	1.54388	0.00301	0.03501	0.04711	0.08212	0.03221	0.02057	0.05277	—	263.657	263.657	0.01070	0.00214	0.00000	264.562
2031	0.15388	0.12823	1.10227	1.50279	0.00301	0.02961	0.00000	0.02961	0.02724	0.00000	0.02724	—	260.291	260.291	0.01056	0.00211	0.00000	261.185
2032	0.15008	0.12506	1.07370	1.49765	0.00302	0.02698	0.00000	0.02698	0.02482	0.00000	0.02482	—	261.005	261.005	0.01059	0.00212	0.00000	261.901
2033	1.08856	1.06671	0.94280	1.36102	0.00265	0.02186	0.00000	0.02186	0.02011	0.00000	0.02011	—	229.364	229.364	0.00930	0.00186	0.00000	230.151

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.21101	1.00914	8.70495	11.5787	0.02312	0.24315	0.00000	0.24315	0.22369	0.00000	0.22369	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2031	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	0.00000	0.22711	0.20894	0.00000	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2032	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	0.00000	0.20641	0.18990	0.00000	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	0.00000	2,208.60
2033	21.4064	21.0977	13.8383	20.6595	0.03665	0.34069	0.00000	0.34069	0.31343	0.00000	0.31343	—	3,577.97	3,577.97	0.14514	0.02903	0.00000	3,590.25
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.56315	1.31348	11.6034	14.3673	0.02507	0.48306	6.95417	7.37730	0.44441	1.40454	1.84895	—	2,714.83	2,714.83	0.11013	0.02203	0.00000	2,724.14
2030	1.52791	1.28387	10.6725	13.9358	0.02312	0.46928	3.21716	3.68645	0.43174	1.40454	1.83628	—	2,454.44	2,454.44	0.09956	0.01991	0.00000	2,462.86
2031	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	0.00000	0.22711	0.20894	0.00000	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2032	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	0.00000	0.20641	0.18990	0.00000	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	0.00000	2,208.60
2033	21.4064	21.0977	13.8383	20.6595	0.03665	0.34069	0.00000	0.34069	0.31343	0.00000	0.31343	—	3,577.97	3,577.97	0.14514	0.02903	0.00000	3,590.25
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.25864	0.21719	1.81672	2.32547	0.00436	0.07394	0.61242	0.68636	0.06802	0.14475	0.21277	—	466.650	466.650	0.01893	0.00379	0.00000	468.251
2030	0.89043	0.74286	6.37569	8.45962	0.01648	0.19182	0.25813	0.44995	0.17647	0.11269	0.28917	—	1,592.51	1,592.51	0.06460	0.01292	0.00000	1,597.97
2031	0.84319	0.70265	6.03983	8.23448	0.01651	0.16222	0.00000	0.16222	0.14925	0.00000	0.14925	—	1,572.17	1,572.17	0.06377	0.01275	0.00000	1,577.57
2032	0.82236	0.68526	5.88329	8.20632	0.01656	0.14784	0.00000	0.14784	0.13602	0.00000	0.13602	—	1,576.48	1,576.48	0.06395	0.01279	0.00000	1,581.89
2033	5.96471	5.84497	5.16605	7.45763	0.01453	0.11978	0.00000	0.11978	0.11020	0.00000	0.11020	—	1,385.37	1,385.37	0.05620	0.01124	0.00000	1,390.13

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.04720	0.03964	0.33155	0.42440	0.00080	0.01349	0.11177	0.12526	0.01241	0.02642	0.03883	—	77.2592	77.2592	0.00313	0.00063	0.00000	77.5243
2030	0.16250	0.13557	1.16356	1.54388	0.00301	0.03501	0.04711	0.08212	0.03221	0.02057	0.05277	—	263.657	263.657	0.01070	0.00214	0.00000	264.562
2031	0.15388	0.12823	1.10227	1.50279	0.00301	0.02961	0.00000	0.02961	0.02724	0.00000	0.02724	—	260.291	260.291	0.01056	0.00211	0.00000	261.185
2032	0.15008	0.12506	1.07370	1.49765	0.00302	0.02698	0.00000	0.02698	0.02482	0.00000	0.02482	—	261.005	261.005	0.01059	0.00212	0.00000	261.901
2033	1.08856	1.06671	0.94280	1.36102	0.00265	0.02186	0.00000	0.02186	0.02011	0.00000	0.02011	—	229.364	229.364	0.00930	0.00186	0.00000	230.151

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2032	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2033	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2032	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2033	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

2032	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2033	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2032	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2033	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

2.2.4. Total Construction Emissions by Year, Mitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.21101	1.00914	8.70495	11.5787	0.02312	0.24315	0.00000	0.24315	0.22369	0.00000	0.22369	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2031	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	0.00000	0.22711	0.20894	0.00000	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2032	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	0.00000	0.20641	0.18990	0.00000	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	0.00000	2,208.60
2033	21.4064	21.0977	13.8383	20.6595	0.03665	0.34069	0.00000	0.34069	0.31343	0.00000	0.31343	—	3,577.97	3,577.97	0.14514	0.02903	0.00000	3,590.25
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.56315	1.31348	11.6034	14.3673	0.02507	0.48306	6.95417	7.37730	0.44441	1.40454	1.84895	—	2,714.83	2,714.83	0.11013	0.02203	0.00000	2,724.14
2030	1.52791	1.28387	10.6725	13.9358	0.02312	0.46928	3.21716	3.68645	0.43174	1.40454	1.83628	—	2,454.44	2,454.44	0.09956	0.01991	0.00000	2,462.86
2031	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	0.00000	0.22711	0.20894	0.00000	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2032	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	0.00000	0.20641	0.18990	0.00000	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	0.00000	2,208.60
2033	21.4064	21.0977	13.8383	20.6595	0.03665	0.34069	0.00000	0.34069	0.31343	0.00000	0.31343	—	3,577.97	3,577.97	0.14514	0.02903	0.00000	3,590.25
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2029	0.25864	0.21719	1.81672	2.32547	0.00436	0.07394	0.61242	0.68636	0.06802	0.14475	0.21277	—	466.650	466.650	0.01893	0.00379	0.00000	468.251
2030	0.89043	0.74286	6.37569	8.45962	0.01648	0.19182	0.25813	0.44995	0.17647	0.11269	0.28917	—	1,592.51	1,592.51	0.06460	0.01292	0.00000	1,597.97
2031	0.84319	0.70265	6.03983	8.23448	0.01651	0.16222	0.00000	0.16222	0.14925	0.00000	0.14925	—	1,572.17	1,572.17	0.06377	0.01275	0.00000	1,577.57
2032	0.82236	0.68526	5.88329	8.20632	0.01656	0.14784	0.00000	0.14784	0.13602	0.00000	0.13602	—	1,576.48	1,576.48	0.06395	0.01279	0.00000	1,581.89
2033	5.96471	5.84497	5.16605	7.45763	0.01453	0.11978	0.00000	0.11978	0.11020	0.00000	0.11020	—	1,385.37	1,385.37	0.05620	0.01124	0.00000	1,390.13
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.04720	0.03964	0.33155	0.42440	0.00080	0.01349	0.11177	0.12526	0.01241	0.02642	0.03883	—	77.2592	77.2592	0.00313	0.00063	0.00000	77.5243
2030	0.16250	0.13557	1.16356	1.54388	0.00301	0.03501	0.04711	0.08212	0.03221	0.02057	0.05277	—	263.657	263.657	0.01070	0.00214	0.00000	264.562
2031	0.15388	0.12823	1.10227	1.50279	0.00301	0.02961	0.00000	0.02961	0.02724	0.00000	0.02724	—	260.291	260.291	0.01056	0.00211	0.00000	261.185
2032	0.15008	0.12506	1.07370	1.49765	0.00302	0.02698	0.00000	0.02698	0.02482	0.00000	0.02482	—	261.005	261.005	0.01059	0.00212	0.00000	261.901
2033	1.08856	1.06671	0.94280	1.36102	0.00265	0.02186	0.00000	0.02186	0.02011	0.00000	0.02011	—	229.364	229.364	0.00930	0.00186	0.00000	230.151

2.2.5. Onsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.21101	1.00914	8.70495	11.5787	0.02312	0.24315	0.00000	0.24315	0.22369	0.00000	0.22369	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2031	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	0.00000	0.22711	0.20894	0.00000	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2032	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	0.00000	0.20641	0.18990	0.00000	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	0.00000	2,208.60
2033	21.4064	21.0977	13.8383	20.6595	0.03665	0.34069	0.00000	0.34069	0.31343	0.00000	0.31343	—	3,577.97	3,577.97	0.14514	0.02903	0.00000	3,590.25
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.56315	1.31348	11.6034	14.3673	0.02507	0.48306	6.95417	7.37730	0.44441	1.40454	1.84895	—	2,714.83	2,714.83	0.11013	0.02203	0.00000	2,724.14
2030	1.52791	1.28387	10.6725	13.9358	0.02312	0.46928	3.21716	3.68645	0.43174	1.40454	1.83628	—	2,454.44	2,454.44	0.09956	0.01991	0.00000	2,462.86
2031	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	0.00000	0.22711	0.20894	0.00000	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2032	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	0.00000	0.20641	0.18990	0.00000	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	0.00000	2,208.60
2033	21.4064	21.0977	13.8383	20.6595	0.03665	0.34069	0.00000	0.34069	0.31343	0.00000	0.31343	—	3,577.97	3,577.97	0.14514	0.02903	0.00000	3,590.25

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.25864	0.21719	1.81672	2.32547	0.00436	0.07394	0.61242	0.68636	0.06802	0.14475	0.21277	—	466.650	466.650	0.01893	0.00379	0.00000	468.251
2030	0.89043	0.74286	6.37569	8.45962	0.01648	0.19182	0.25813	0.44995	0.17647	0.11269	0.28917	—	1,592.51	1,592.51	0.06460	0.01292	0.00000	1,597.97
2031	0.84319	0.70265	6.03983	8.23448	0.01651	0.16222	0.00000	0.16222	0.14925	0.00000	0.14925	—	1,572.17	1,572.17	0.06377	0.01275	0.00000	1,577.57
2032	0.82236	0.68526	5.88329	8.20632	0.01656	0.14784	0.00000	0.14784	0.13602	0.00000	0.13602	—	1,576.48	1,576.48	0.06395	0.01279	0.00000	1,581.89
2033	5.96471	5.84497	5.16605	7.45763	0.01453	0.11978	0.00000	0.11978	0.11020	0.00000	0.11020	—	1,385.37	1,385.37	0.05620	0.01124	0.00000	1,390.13
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.04720	0.03964	0.33155	0.42440	0.00080	0.01349	0.11177	0.12526	0.01241	0.02642	0.03883	—	77.2592	77.2592	0.00313	0.00063	0.00000	77.5243
2030	0.16250	0.13557	1.16356	1.54388	0.00301	0.03501	0.04711	0.08212	0.03221	0.02057	0.05277	—	263.657	263.657	0.01070	0.00214	0.00000	264.562
2031	0.15388	0.12823	1.10227	1.50279	0.00301	0.02961	0.00000	0.02961	0.02724	0.00000	0.02724	—	260.291	260.291	0.01056	0.00211	0.00000	261.185
2032	0.15008	0.12506	1.07370	1.49765	0.00302	0.02698	0.00000	0.02698	0.02482	0.00000	0.02482	—	261.005	261.005	0.01059	0.00212	0.00000	261.901
2033	1.08856	1.06671	0.94280	1.36102	0.00265	0.02186	0.00000	0.02186	0.02011	0.00000	0.02011	—	229.364	229.364	0.00930	0.00186	0.00000	230.151

2.2.6. Offsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2032	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2033	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

2032	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2033	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2032	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2033	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2032	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2033	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.0490	12.5588	4.58166	21.6841	0.02765	0.36862	0.00000	0.36862	0.36084	0.00000	0.36084	364.221	5,798.86	6,163.08	37.2811	0.39362	1.00442	7,213.41
Mit.	12.5617	12.3151	0.15114	17.9625	0.00107	0.03190	0.00000	0.03190	0.02412	0.00000	0.02412	364.221	512.507	876.728	36.8133	0.38367	1.00442	1,912.40
% Reduced	4%	2%	97%	17%	96%	91%	—	91%	93%	—	93%	—	91%	86%	1%	3%	—	73%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.85016	9.60648	4.43052	3.72164	0.02658	0.33672	0.00000	0.33672	0.33672	0.00000	0.33672	364.221	5,725.00	6,089.22	37.2780	0.39299	1.00442	7,139.28

Mit.	9.36280	9.36280	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	364.221	438.643	802.864	36.8102	0.38303	1.00442	1,838.27
% Reduced	5%	3%	100%	100%	100%	100%	—	100%	100%	—	100%	—	92%	87%	1%	3%	—	74%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.4277	11.0624	4.50506	12.5799	0.02711	0.35245	0.00000	0.35245	0.34861	0.00000	0.34861	364.221	5,761.42	6,125.65	37.2795	0.39330	1.00442	7,175.84
Mit.	10.9403	10.8187	0.07453	8.85821	0.00053	0.01573	0.00000	0.01573	0.01189	0.00000	0.01189	364.221	475.069	839.290	36.8117	0.38335	1.00442	1,874.82
% Reduced	4%	2%	98%	30%	98%	96%	—	96%	97%	—	97%	—	92%	86%	1%	3%	—	74%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.08555	2.01889	0.82217	2.29582	0.00495	0.06432	0.00000	0.06432	0.06362	0.00000	0.06362	60.3010	953.869	1,014.17	6.17205	0.06512	0.16629	1,188.04
Mit.	1.99661	1.97442	0.01360	1.61662	0.00010	0.00287	0.00000	0.00287	0.00217	0.00000	0.00217	60.3010	78.6531	138.954	6.09459	0.06347	0.16629	310.398
% Reduced	4%	2%	98%	30%	98%	96%	—	96%	97%	—	97%	—	92%	86%	1%	3%	—	74%

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	12.5617	12.3151	0.15114	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Energy	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,710.83	5,710.83	0.46784	0.00995	—	5,725.49
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	13.0490	12.5588	4.58166	21.6841	0.02765	0.36862	0.00000	0.36862	0.36084	0.00000	0.36084	364.221	5,798.86	6,163.08	37.2811	0.39362	1.00442	7,213.41

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	9.36280	9.36280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,710.83	5,710.83	0.46784	0.00995	—	5,725.49
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	9.85016	9.60648	4.43052	3.72164	0.02658	0.33672	0.00000	0.33672	0.33672	0.00000	0.33672	364.221	5,725.00	6,089.22	37.2780	0.39299	1.00442	7,139.28
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	10.9403	10.8187	0.07453	8.85821	0.00053	0.01573	—	0.01573	0.01189	—	0.01189	—	36.4259	36.4259	0.00153	0.00031	—	36.5573
Energy	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,710.83	5,710.83	0.46784	0.00995	—	5,725.49
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	11.4277	11.0624	4.50506	12.5799	0.02711	0.35245	0.00000	0.35245	0.34861	0.00000	0.34861	364.221	5,761.42	6,125.65	37.2795	0.39330	1.00442	7,175.84
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	1.99661	1.97442	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247
Energy	0.08894	0.04447	0.80857	0.67920	0.00485	0.06145	—	0.06145	0.06145	—	0.06145	—	945.493	945.493	0.07746	0.00165	—	947.921
Water	—	—	—	—	—	—	—	—	—	—	—	26.0296	2.34554	28.3752	2.66904	0.06342	—	113.999
Waste	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629
Total	2.08555	2.01889	0.82217	2.29582	0.00495	0.06432	0.00000	0.06432	0.06362	0.00000	0.06362	60.3010	953.869	1,014.17	6.17205	0.06512	0.16629	1,188.04

2.5. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	12.5617	12.3151	0.15114	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	424.476	424.476	0.00000	0.00000	—	424.476
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	12.5617	12.3151	0.15114	17.9625	0.00107	0.03190	0.00000	0.03190	0.02412	0.00000	0.02412	364.221	512.507	876.728	36.8133	0.38367	1.00442	1,912.40
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	9.36280	9.36280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	424.476	424.476	0.00000	0.00000	—	424.476
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	9.36280	9.36280	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	364.221	438.643	802.864	36.8102	0.38303	1.00442	1,838.27
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	10.9403	10.8187	0.07453	8.85821	0.00053	0.01573	—	0.01573	0.01189	—	0.01189	—	36.4259	36.4259	0.00153	0.00031	—	36.5573
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	424.476	424.476	0.00000	0.00000	—	424.476
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442

Total	10.9403	10.8187	0.07453	8.85821	0.00053	0.01573	0.00000	0.01573	0.01189	0.00000	0.01189	364.221	475.069	839.290	36.8117	0.38335	1.00442	1,874.82
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	1.99661	1.97442	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	70.2768	70.2768	0.00000	0.00000	—	70.2768
Water	—	—	—	—	—	—	—	—	—	—	—	26.0296	2.34554	28.3752	2.66904	0.06342	—	113.999
Waste	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629
Total	1.99661	1.97442	0.01360	1.61662	0.00010	0.00287	0.00000	0.00287	0.00217	0.00000	0.00217	60.3010	78.6531	138.954	6.09459	0.06347	0.16629	310.398

3. Construction Emissions Details

3.1. Demolition (2029)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.54582	1.29640	11.6034	14.3673	0.02392	0.42313	—	0.42313	0.38928	—	0.38928	—	2,492.95	2,492.95	0.10112	0.02022	—	2,501.51
Demolition	—	—	—	—	—	—	6.95417	6.95417	—	1.05306	1.05306	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08470	0.07104	0.63580	0.78725	0.00131	0.02319	—	0.02319	0.02133	—	0.02133	—	136.600	136.600	0.00554	0.00111	—	137.069
Demolition	—	—	—	—	—	—	0.38105	0.38105	—	0.05770	0.05770	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01546	0.01296	0.11603	0.14367	0.00024	0.00423	—	0.00423	0.00389	—	0.00389	—	22.6157	22.6157	0.00092	0.00018	—	22.6933
Demolition	—	—	—	—	—	—	0.06954	0.06954	—	0.01053	0.01053	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.54582	1.29640	11.6034	14.3673	0.02392	0.42313	—	0.42313	0.38928	—	0.38928	—	2,492.95	2,492.95	0.10112	0.02022	—	2,501.51
Demolition	—	—	—	—	—	—	6.95417	6.95417	—	1.05306	1.05306	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08470	0.07104	0.63580	0.78725	0.00131	0.02319	—	0.02319	0.02133	—	0.02133	—	136.600	136.600	0.00554	0.00111	—	137.069
Demolition	—	—	—	—	—	—	0.38105	0.38105	—	0.05770	0.05770	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01546	0.01296	0.11603	0.14367	0.00024	0.00423	—	0.00423	0.00389	—	0.00389	—	22.6157	22.6157	0.00092	0.00018	—	22.6933
Demolition	—	—	—	—	—	—	0.06954	0.06954	—	0.01053	0.01053	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. Site Preparation (2029)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19969	1.00807	7.76298	10.6075	0.02507	0.32694	—	0.32694	0.30079	—	0.30079	—	2,714.83	2,714.83	0.11013	0.02203	—	2,724.14
Dust From Material Movement	—	—	—	—	—	—	0.62039	0.62039	—	0.06699	0.06699	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08217	0.06905	0.53171	0.72654	0.00172	0.02239	—	0.02239	0.02060	—	0.02060	—	185.947	185.947	0.00754	0.00151	—	186.585
Dust From Material Movement	—	—	—	—	—	—	0.04249	0.04249	—	0.00459	0.00459	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01500	0.01260	0.09704	0.13259	0.00031	0.00409	—	0.00409	0.00376	—	0.00376	—	30.7857	30.7857	0.00125	0.00025	—	30.8913
Dust From Material Movement	—	—	—	—	—	—	0.00775	0.00775	—	0.00084	0.00084	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19969	1.00807	7.76298	10.6075	0.02507	0.32694	—	0.32694	0.30079	—	0.30079	—	2,714.83	2,714.83	0.11013	0.02203	—	2,724.14
Dust From Material Movement	—	—	—	—	—	—	0.62039	0.62039	—	0.06699	0.06699	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08217	0.06905	0.53171	0.72654	0.00172	0.02239	—	0.02239	0.02060	—	0.02060	—	185.947	185.947	0.00754	0.00151	—	186.585
Dust From Material Movement	—	—	—	—	—	—	0.04249	0.04249	—	0.00459	0.00459	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01500	0.01260	0.09704	0.13259	0.00031	0.00409	—	0.00409	0.00376	—	0.00376	—	30.7857	30.7857	0.00125	0.00025	—	30.8913

Dust From Material Movement	—	—	—	—	—	—	0.00775	0.00775	—	0.00084	0.00084	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Grading (2029)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56315	1.31348	11.0582	13.8256	0.02266	0.48306	—	0.48306	0.44441	—	0.44441	—	2,454.55	2,454.55	0.09957	0.01991	—	2,462.97
Dust From Material Movement	—	—	—	—	—	—	3.21716	3.21716	—	1.40454	1.40454	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09177	0.07711	0.64921	0.81168	0.00133	0.02836	—	0.02836	0.02609	—	0.02609	—	144.103	144.103	0.00585	0.00117	—	144.597
Dust From Material Movement	—	—	—	—	—	—	0.18887	0.18887	—	0.08246	0.08246	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01675	0.01407	0.11848	0.14813	0.00024	0.00518	—	0.00518	0.00476	—	0.00476	—	23.8578	23.8578	0.00097	0.00019	—	23.9397

Dust From Material Movement	—	—	—	—	—	—	0.03447	0.03447	—	0.01505	0.01505	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56315	1.31348	11.0582	13.8256	0.02266	0.48306	—	0.48306	0.44441	—	0.44441	—	2,454.55	2,454.55	0.09957	0.01991	—	2,462.97
Dust From Material Movement	—	—	—	—	—	—	3.21716	3.21716	—	1.40454	1.40454	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09177	0.07711	0.64921	0.81168	0.00133	0.02836	—	0.02836	0.02609	—	0.02609	—	144.103	144.103	0.00585	0.00117	—	144.597
Dust From Material Movement	—	—	—	—	—	—	0.18887	0.18887	—	0.08246	0.08246	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01675	0.01407	0.11848	0.14813	0.00024	0.00518	—	0.00518	0.00476	—	0.00476	—	23.8578	23.8578	0.00097	0.00019	—	23.9397
Dust From Material Movement	—	—	—	—	—	—	0.03447	0.03447	—	0.01505	0.01505	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. Grading (2030)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52791	1.28387	10.6725	13.9358	0.02266	0.46928	—	0.46928	0.43174	—	0.43174	—	2,454.44	2,454.44	0.09956	0.01991	—	2,462.86
Dust From Material Movement	—	—	—	—	—	—	3.21716	3.21716	—	1.40454	1.40454	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12259	0.10301	0.85630	1.11814	0.00182	0.03765	—	0.03765	0.03464	—	0.03464	—	196.931	196.931	0.00799	0.00160	—	197.607
Dust From Material Movement	—	—	—	—	—	—	0.25813	0.25813	—	0.11269	0.11269	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02237	0.01880	0.15628	0.20406	0.00033	0.00687	—	0.00687	0.00632	—	0.00632	—	32.6042	32.6042	0.00132	0.00026	—	32.7161
Dust From Material Movement	—	—	—	—	—	—	0.04711	0.04711	—	0.02057	0.02057	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52791	1.28387	10.6725	13.9358	0.02266	0.46928	—	0.46928	0.43174	—	0.43174	—	2,454.44	2,454.44	0.09956	0.01991	—	2,462.86
Dust From Material Movement	—	—	—	—	—	—	3.21716	3.21716	—	1.40454	1.40454	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12259	0.10301	0.85630	1.11814	0.00182	0.03765	—	0.03765	0.03464	—	0.03464	—	196.931	196.931	0.00799	0.00160	—	197.607
Dust From Material Movement	—	—	—	—	—	—	0.25813	0.25813	—	0.11269	0.11269	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02237	0.01880	0.15628	0.20406	0.00033	0.00687	—	0.00687	0.00632	—	0.00632	—	32.6042	32.6042	0.00132	0.00026	—	32.7161
Dust From Material Movement	—	—	—	—	—	—	0.04711	0.04711	—	0.02057	0.02057	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Building Construction (2030)

3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.21101	1.00914	8.70495	11.5787	0.02312	0.24315	—	0.24315	0.22369	—	0.22369	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.21101	1.00914	8.70495	11.5787	0.02312	0.24315	—	0.24315	0.22369	—	0.22369	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.76784	0.63984	5.51938	7.34149	0.01466	0.15417	—	0.15417	0.14183	—	0.14183	—	1,395.57	1,395.57	0.05661	0.01132	—	1,400.36
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14013	0.11677	1.00729	1.33982	0.00268	0.02814	—	0.02814	0.02588	—	0.02588	—	231.053	231.053	0.00937	0.00187	—	231.846
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21101	1.00914	8.70495	11.5787	0.02312	0.24315	—	0.24315	0.22369	—	0.22369	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21101	1.00914	8.70495	11.5787	0.02312	0.24315	—	0.24315	0.22369	—	0.22369	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76784	0.63984	5.51938	7.34149	0.01466	0.15417	—	0.15417	0.14183	—	0.14183	—	1,395.57	1,395.57	0.05661	0.01132	—	1,400.36
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14013	0.11677	1.00729	1.33982	0.00268	0.02814	—	0.02814	0.02588	—	0.02588	—	231.053	231.053	0.00937	0.00187	—	231.846
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Building Construction (2031)

3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	—	0.22711	0.20894	—	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	—	0.22711	0.20894	—	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84319	0.70265	6.03983	8.23448	0.01651	0.16222	—	0.16222	0.14925	—	0.14925	—	1,572.17	1,572.17	0.06377	0.01275	—	1,577.57
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15388	0.12823	1.10227	1.50279	0.00301	0.02961	—	0.02961	0.02724	—	0.02724	—	260.291	260.291	0.01056	0.00211	—	261.185
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	—	0.22711	0.20894	—	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	1.18047	0.98371	8.45577	11.5283	0.02312	0.22711	—	0.22711	0.20894	—	0.20894	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84319	0.70265	6.03983	8.23448	0.01651	0.16222	—	0.16222	0.14925	—	0.14925	—	1,572.17	1,572.17	0.06377	0.01275	—	1,577.57
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15388	0.12823	1.10227	1.50279	0.00301	0.02961	—	0.02961	0.02724	—	0.02724	—	260.291	260.291	0.01056	0.00211	—	261.185
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Building Construction (2032)

3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	—	0.20641	0.18990	—	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	—	0.20641	0.18990	—	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	—	2,208.60

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82236	0.68526	5.88329	8.20632	0.01656	0.14784	—	0.14784	0.13602	—	0.13602	—	1,576.48	1,576.48	0.06395	0.01279	—	1,581.89
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15008	0.12506	1.07370	1.49765	0.00302	0.02698	—	0.02698	0.02482	—	0.02482	—	261.005	261.005	0.01059	0.00212	—	261.901
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	—	0.20641	0.18990	—	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14816	0.95674	8.21410	11.4575	0.02312	0.20641	—	0.20641	0.18990	—	0.18990	—	2,201.05	2,201.05	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.82236	0.68526	5.88329	8.20632	0.01656	0.14784	—	0.14784	0.13602	—	0.13602	—	1,576.48	1,576.48	0.06395	0.01279	—	1,581.89
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15008	0.12506	1.07370	1.49765	0.00302	0.02698	—	0.02698	0.02482	—	0.02482	—	261.005	261.005	0.01059	0.00212	—	261.901
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8. Building Construction (2033)

3.8.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12394	0.93652	8.01513	11.4462	0.02312	0.18624	—	0.18624	0.17134	—	0.17134	—	2,201.05	2,201.05	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12394	0.93652	8.01513	11.4462	0.02312	0.18624	—	0.18624	0.17134	—	0.17134	—	2,201.05	2,201.05	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63345	0.52782	4.51733	6.45108	0.01303	0.10496	—	0.10496	0.09657	—	0.09657	—	1,240.51	1,240.51	0.05032	0.01006	—	1,244.77

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11561	0.09633	0.82441	1.17732	0.00238	0.01916	—	0.01916	0.01762	—	0.01762	—	205.381	205.381	0.00833	0.00167	—	206.086
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12394	0.93652	8.01513	11.4462	0.02312	0.18624	—	0.18624	0.17134	—	0.17134	—	2,201.05	2,201.05	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12394	0.93652	8.01513	11.4462	0.02312	0.18624	—	0.18624	0.17134	—	0.17134	—	2,201.05	2,201.05	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63345	0.52782	4.51733	6.45108	0.01303	0.10496	—	0.10496	0.09657	—	0.09657	—	1,240.51	1,240.51	0.05032	0.01006	—	1,244.77
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.11561	0.09633	0.82441	1.17732	0.00238	0.01916	—	0.01916	0.01762	—	0.01762	—	205.381	205.381	0.00833	0.00167	—	206.086
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Paving (2033)

3.9.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63287	0.53087	5.05890	8.11385	0.01181	0.14740	—	0.14740	0.13560	—	0.13560	—	1,243.40	1,243.40	0.05044	0.01009	—	1,247.67
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63287	0.53087	5.05890	8.11385	0.01181	0.14740	—	0.14740	0.13560	—	0.13560	—	1,243.40	1,243.40	0.05044	0.01009	—	1,247.67
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05548	0.04654	0.44352	0.71135	0.00104	0.01292	—	0.01292	0.01189	—	0.01189	—	109.010	109.010	0.00442	0.00088	—	109.384
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01013	0.00849	0.08094	0.12982	0.00019	0.00236	—	0.00236	0.00217	—	0.00217	—	18.0479	18.0479	0.00073	0.00015	—	18.1098
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63287	0.53087	5.05890	8.11385	0.01181	0.14740	—	0.14740	0.13560	—	0.13560	—	1,243.40	1,243.40	0.05044	0.01009	—	1,247.67
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63287	0.53087	5.05890	8.11385	0.01181	0.14740	—	0.14740	0.13560	—	0.13560	—	1,243.40	1,243.40	0.05044	0.01009	—	1,247.67
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05548	0.04654	0.44352	0.71135	0.00104	0.01292	—	0.01292	0.01189	—	0.01189	—	109.010	109.010	0.00442	0.00088	—	109.384
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01013	0.00849	0.08094	0.12982	0.00019	0.00236	—	0.00236	0.00217	—	0.00217	—	18.0479	18.0479	0.00073	0.00015	—	18.1098
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10. Architectural Coating (2033)

3.10.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11071	0.09150	0.76425	1.09943	0.00173	0.00705	—	0.00705	0.00649	—	0.00649	—	133.516	133.516	0.00542	0.00108	—	133.975
Architectural Coatings	19.5388	19.5388	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11071	0.09150	0.76425	1.09943	0.00173	0.00705	—	0.00705	0.00649	—	0.00649	—	133.516	133.516	0.00542	0.00108	—	133.975
Architectural Coatings	19.5388	19.5388	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02973	0.02457	0.20520	0.29519	0.00046	0.00189	—	0.00189	0.00174	—	0.00174	—	35.8483	35.8483	0.00145	0.00029	—	35.9713
Architectural Coatings	5.24604	5.24604	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00542	0.00448	0.03745	0.05387	0.00008	0.00035	—	0.00035	0.00032	—	0.00032	—	5.93509	5.93509	0.00024	0.00005	—	5.95546
Architectural Coatings	0.95740	0.95740	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11071	0.09150	0.76425	1.09943	0.00173	0.00705	—	0.00705	0.00649	—	0.00649	—	133.516	133.516	0.00542	0.00108	—	133.975
Architectural Coatings	19.5388	19.5388	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11071	0.09150	0.76425	1.09943	0.00173	0.00705	—	0.00705	0.00649	—	0.00649	—	133.516	133.516	0.00542	0.00108	—	133.975
Architectural Coatings	19.5388	19.5388	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02973	0.02457	0.20520	0.29519	0.00046	0.00189	—	0.00189	0.00174	—	0.00174	—	35.8483	35.8483	0.00145	0.00029	—	35.9713
Architectural Coatings	5.24604	5.24604	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00542	0.00448	0.03745	0.05387	0.00008	0.00035	—	0.00035	0.00032	—	0.00032	—	5.93509	5.93509	0.00024	0.00005	—	5.95546
Architectural Coatings	0.95740	0.95740	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	424.476	424.476	0.00000	0.00000	—	424.476
Total	—	—	—	—	—	—	—	—	—	—	—	—	424.476	424.476	0.00000	0.00000	—	424.476

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	424.476	424.476	0.00000	0.00000	—	424.476
Total	—	—	—	—	—	—	—	—	—	—	—	—	424.476	424.476	0.00000	0.00000	—	424.476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	70.2768	70.2768	0.00000	0.00000	—	70.2768
Total	—	—	—	—	—	—	—	—	—	—	—	—	70.2768	70.2768	0.00000	0.00000	—	70.2768

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	424.476	424.476	0.00000	0.00000	—	424.476
Total	—	—	—	—	—	—	—	—	—	—	—	—	424.476	424.476	0.00000	0.00000	—	424.476
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	424.476	424.476	0.00000	0.00000	—	424.476
Total	—	—	—	—	—	—	—	—	—	—	—	—	424.476	424.476	0.00000	0.00000	—	424.476

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	70.2768	70.2768	0.00000	0.00000	—	70.2768
Total	—	—	—	—	—	—	—	—	—	—	—	—	70.2768	70.2768	0.00000	0.00000	—	70.2768

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02
Total	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02
Total	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.08894	0.04447	0.80857	0.67920	0.00485	0.06145	—	0.06145	0.06145	—	0.06145	—	875.216	875.216	0.07746	0.00165	—	877.644
Total	0.08894	0.04447	0.80857	0.67920	0.00485	0.06145	—	0.06145	0.06145	—	0.06145	—	875.216	875.216	0.07746	0.00165	—	877.644

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.83820	8.83820	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.52460	0.52460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.19886	2.95233	0.15114	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Total	12.5617	12.3151	0.15114	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.83820	8.83820	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.52460	0.52460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9.36280	9.36280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.61297	1.61297	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09574	0.09574	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.28790	0.26571	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247
Total	1.99661	1.97442	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.83820	8.83820	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.52460	0.52460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.19886	2.95233	0.15114	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Total	12.5617	12.3151	0.15114	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.83820	8.83820	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.52460	0.52460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9.36280	9.36280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	1.61297	1.61297	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09574	0.09574	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.28790	0.26571	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247
Total	1.99661	1.97442	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Total	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Total	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	26.0296	2.34554	28.3752	2.66904	0.06342	—	113.999
Total	—	—	—	—	—	—	—	—	—	—	—	26.0296	2.34554	28.3752	2.66904	0.06342	—	113.999

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Total	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Total	—	—	—	—	—	—	—	—	—	—	—	157.220	14.1672	171.387	16.1211	0.38303	—	688.560
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	26.0296	2.34554	28.3752	2.66904	0.06342	—	113.999
Total	—	—	—	—	—	—	—	—	—	—	—	26.0296	2.34554	28.3752	2.66904	0.06342	—	113.999

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Total	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Total	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904
Total	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Govern Office Building	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Total	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Total	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904
Total	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	10/1/2029	10/27/2029	5.00000	20.0000	—

Site Preparation	Site Preparation	10/28/2029	12/1/2029	5.00000	25.0000	—
Grading	Grading	12/2/2029	2/10/2030	5.00000	50.0000	—
Building Construction	Building Construction	2/11/2030	10/15/2033	5.00000	960.000	—
Paving	Paving	9/1/2033	10/15/2033	5.00000	32.0000	—
Architectural Coating	Architectural Coating	6/1/2033	10/15/2033	5.00000	98.0000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Demolition	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000
Site Preparation	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Site Preparation	Scrapers	Diesel	Average	1.000000	8.00000	423.000	0.48000
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	7.00000	84.0000	0.37000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	7.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Average	2.00000	7.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	6.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Average	3.00000	8.00000	46.0000	0.45000

Paving	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Paving	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	1.000000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Demolition	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000
Site Preparation	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Site Preparation	Scrapers	Diesel	Average	1.000000	8.00000	423.000	0.48000
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	7.00000	84.0000	0.37000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	7.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Average	2.00000	7.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	6.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Average	3.00000	8.00000	46.0000	0.45000

Paving	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Paving	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	1.000000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Demolition	Vendor	0.00000	4.00000	HHDT,MHDT
Demolition	Hauling	0.00000	20.0000	HHDT
Demolition	Onsite truck	0.00000	—	HHDT
Site Preparation	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Site Preparation	Vendor	0.00000	4.00000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	0.00000	—	HHDT
Grading	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Grading	Vendor	0.00000	4.00000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Building Construction	Vendor	0.00000	4.00000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	0.00000	—	HHDT

Paving	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Paving	Vendor	0.00000	4.00000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	0.00000	—	HHDT
Architectural Coating	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00000	4.00000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	0.00000	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Demolition	Vendor	0.00000	4.00000	HHDT,MHDT
Demolition	Hauling	0.00000	20.0000	HHDT
Demolition	Onsite truck	0.00000	—	HHDT
Site Preparation	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Site Preparation	Vendor	0.00000	4.00000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	0.00000	—	HHDT
Grading	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Grading	Vendor	0.00000	4.00000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Building Construction	Vendor	0.00000	4.00000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	0.00000	—	HHDT
Paving	Worker	0.00000	7.70000	LDA,LDT1,LDT2

Paving	Vendor	0.00000	4.00000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	0.00000	—	HHDT
Architectural Coating	Worker	0.00000	7.70000	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00000	4.00000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	0.00000	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00000	0.00000	619,500	206,500	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	10,000.00	0.00000
Site Preparation	0.00000	0.00000	37.5000	0.00000	0.00000
Grading	1,000.000	1,000,000	50.0000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	0.00000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Government Office Building	0.00000	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2029	0.00000	203.983	0.03300	0.00400
2030	0.00000	203.983	0.03300	0.00400
2031	0.00000	203.983	0.03300	0.00400
2032	0.00000	203.983	0.03300	0.00400
2033	0.00000	203.983	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Government Office Building	Wood Fireplaces	0	0
Government Office Building	Gas Fireplaces	0	0
Government Office Building	Propane Fireplaces	0	0
Government Office Building	Electric Fireplaces	0	0
Government Office Building	No Fireplaces	0	0
Government Office Building	Conventional Wood Stoves	0	0
Government Office Building	Catalytic Wood Stoves	0	0
Government Office Building	Non-Catalytic Wood Stoves	0	0
Government Office Building	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	619,500	206,500	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00000

Summer Days	day/yr	180.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government Office Building	9,683,355	16.0000	0.0000	0.0000	16,494,843

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government Office Building	9,683,355	16.0000	0.0000	0.0000	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Government Office Building	82,046,450	0.00000

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Government Office Building	82,046,450	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government Office Building	384.090	0.00000

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government Office Building	384.090	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.14.2. Mitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	0.00000	annual days of extreme heat
Extreme Precipitation	0.00000	annual days with precipitation above 20 mm
Sea Level Rise	0.00000	meters of inundation depth
Wildfire	0.00000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	82.4767
AQ-PM	97.6105
AQ-DPM	94.0635
Drinking Water	84.3887
Lead Risk Housing	39.6723
Pesticides	56.3793
Toxic Releases	79.6949
Traffic	13.5500
Effect Indicators	—
CleanUp Sites	58.1747
Groundwater	74.8298
Haz Waste Facilities/Generators	50.1390
Impaired Water Bodies	0.00000
Solid Waste	0.00000
Sensitive Population	—
Asthma	86.8395
Cardio-vascular	94.9900
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	88.2055
Housing	37.4778
Linguistic	61.0908
Poverty	92.6759
Unemployment	89.6668

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—

Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	54.3
Asthma ER Admissions	21.4
High Blood Pressure	19.3
Cancer (excluding skin)	96.9
Asthma	4.5
Coronary Heart Disease	7.5
Chronic Obstructive Pulmonary Disease	1.5
Diagnosed Diabetes	9.0
Life Expectancy at Birth	0.0
Cognitively Disabled	0.1
Physically Disabled	0.0
Heart Attack ER Admissions	3.5
Mental Health Not Good	0.4
Chronic Kidney Disease	27.1
Obesity	0.8
Pedestrian Injuries	0.0
Physical Health Not Good	1.0
Stroke	5.6
Health Risk Behaviors	—
Binge Drinking	38.6
Current Smoker	0.1
No Leisure Time for Physical Activity	0.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	99.4
Elderly	94.7
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	49.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.8
Traffic Density	0.0
Traffic Access	0.0
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	96.0000
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	Central Fresno

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Characteristics: Utility Information	PG&E's 2024 power content label
Land Use	Project site is approximately 2.09 acres
Construction: Construction Phases	Project specific schedule see methodology.
Construction: Trips and VMT	Mobile emissions calculated with EMFAC 2021 with EPA approved adjustment factors.
Operations: Vehicle Data	Mobile emissions calculated with EMFAC 2021 with EPA approved adjustment factors.

8.2. Project Characteristics

8.2.2. Utility Information

Model Parameter	Units	Default Value	New Value
CO2	lb/MWh	203.983	16.0000
CH4	lb/MWh	0.03300	0.00000
N2O	lb/MWh	0.00400	0.00000

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	9.48118	2.09000
Landscape Area	sq. ft	—	0.00000
Special Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	End Date	10/29/2029	10/27/2029
Site Preparation	Site Preparation	Start Date	10/30/2029	10/28/2029
Site Preparation	Site Preparation	End Date	11/3/2029	12/1/2029
Site Preparation	Site Preparation	Work Days per Phase	3.00000	25.0000
Grading	Grading	Start Date	11/4/2029	12/2/2029
Grading	Grading	End Date	11/12/2029	2/10/2030
Grading	Grading	Work Days per Phase	6.00000	50.0000
Building Construction	Building Construction	Start Date	11/13/2029	2/11/2030
Building Construction	Building Construction	End Date	9/17/2030	10/15/2033
Building Construction	Building Construction	Work Days per Phase	220.000	960.000
Paving	Paving	Start Date	9/18/2030	9/1/2033
Paving	Paving	End Date	10/2/2030	10/15/2033
Paving	Paving	Work Days per Phase	10.00000	32.0000
Architectural Coating	Architectural Coating	Start Date	10/3/2030	6/1/2033
Architectural Coating	Architectural Coating	End Date	10/17/2030	10/15/2033
Architectural Coating	Architectural Coating	Work Days per Phase	10.00000	98.0000

8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value
Demolition	Worker	One-Way Trips per Day	12.5000	0.00000
Demolition	Hauling	One-Way Trips per Day	125.000	0.00000
Site Preparation	Worker	One-Way Trips per Day	7.50000	0.00000
Grading	Worker	One-Way Trips per Day	10.00000	0.00000
Grading	Hauling	One-Way Trips per Day	2,502.50	0.00000

Building Construction	Worker	One-Way Trips per Day	132.160	0.00000
Building Construction	Vendor	One-Way Trips per Day	67.6907	0.00000
Paving	Worker	One-Way Trips per Day	15.0000	0.00000
Architectural Coating	Worker	One-Way Trips per Day	26.4320	0.00000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Government Office Building	Weekday Trip Rate	size/day	22.5900	0.00000

New Fresno Courthouse Project
Construction Vehicle Emissions
EMFAC 2021 with EPA Adjustment Factors

Construction Schedule

Construction Phase Name	Start Date	End Date	Number of Days
Demolition	10/1/2029	10/27/2029	20
Site Preparation	10/28/2029	12/1/2029	25
Grading	12/2/2029	2/10/2030	50
Building Construction	2/11/2030	10/15/2033	960
Paving	9/1/2033	10/15/2033	32
Architectural Coating	6/1/2033	10/15/2033	98

Construction Trips and VMT

	Trips per Day				Construction Trip Length in Miles					Trips per Phase				VMT per Phase			
Phase Name	Worker Trip Number	Vendor Trip Number	Onsite Truck Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Onsite Truck Trip Length	Hauling Trip Length	Number of Days per Phase	Worker Trip Number	Vendor Trip Number	Onsite Truck Trip Number	Hauling Trip Number	Worker VMT	Vendor VMT	Onsite Truck VMT	Hauling VMT
Demolition	12.5	0	0	50	7.7	4	0	20	20	250	0	0	1000	1,925	0	0	20,000
Site Preparation	8	0	0	0	7.7	4	0	20	25	188	0	0	0	1,444	0	0	0
Grading	10	0	0	2500	7.7	4	0	20	50	500	0	0	125000	3,850	0	0	2,500,000
Building Construction	132	68	0	0	7.7	4	0	20	960	126874	65280	0	0	976,927	261,120	0	0
Paving	15	0	0	0	7.7	4	0	20	32	480	0	0	0	3,696	0	0	0
Architectural Coating	26	0	0	0	7.7	4	0	20	98	2590.14	0	0	0	19,944	0	0	0
									Totals	130,881	65,280	0	126,000	1,007,786	261,120	0	2,520,000
									Total Vehicles	65,441	32,640	0	15,750				

Construction Emissions

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
0.67	8.78	5.75	0.05	1.72	0.51	5,153.22	0.03	0.76	5,379.39

Worker

CalEEMod Vehicle Class Percentage

LDA	50%
LDT1/LDT2	25%

Vehicle Category	Fuel	Population	Vehicle Mi	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUI	PM2.5_IDL	PM2.5_STI	PM2.5_PM	PM2.5_PMI	PM10_RUN	PM10_IDLE	PM10_STR	PM10_PMT	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLEX	N2O_STRE	ROG_RUNI	ROG_IDLE	ROG_STRE	ROG_HOTS	TOG_RUNI	TOG_IDLE	TOG_STRE	TOG_HOTS	TOG_RUNL	TOG_DIUR	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
LDA	Gasoline		322126.8419	89.30%	12090.16591	0	12142.34	397.6609	0	95.40631	899.9144	930.9406	432.4925	0	103.7631	3599.657	2659.830316	115041653	0	3671952	645.6472	0	3112.914	1649.477	0	1720.997	2215.336	0	13396.87	4353.058	11954.76	39734.73	3232.614	0	14667.88	4353.058	11954.76	39734.73	17434	267112.5	0	140455.9	1137.304	0	36.30098
LDA	Diesel		457.0818389	0.13%	66.35973398	0	0	4.864793	0	0	1.276933	1.349205	5.084757	0	0	5.107733	3.85487265	134767.35	0	0	0.435382	0	0	21.23265	0	0	9.373526	0	0	0	10.67114	0	0	0	0	0	0	1.979246	146.4252	0	0	1.276989	0	0
LDA	Electricity		25932.44865	7.19%	0	0	0	0	0	72.44656	55.53062	0	0	0	289.7862	158.658922	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDA	Plug-in Hybrid		12223.38883	3.39%	46.27172972	0	250.9413	6.734556	0	3.556496	34.14805	22.19251	7.324445	0	3.868014	136.5922	63.4071745	2074859	0	135005.4	6.003147	0	89.94204	8.173055	0	44.24751	19.24416	0	370.7538	94.15709	110.2892	639.0881	28.08104	0	405.9288	94.15709	110.2892	639.0881	314.5275	3386.096	0	2849.194	20.51209	0	1.334666
LDT1	Gasoline		27403.62679	98.99%	45795.60657	0	22536.33	635.9092	0	154.7126	997.6521	1260.403	691.6093	0	168.2641	3990.608	3601.1527	154496563	0	5219787	2111.42	0	5906.867	3681.143	0	2361.839	9136.075	0	30065.64	11310.9	32863.8	101976	13331.34	0	32918.09	11310.9	32863.8	101976	19120.7	576432.7	0	293995.7	1527.356	0	51.60291
LDT1	Diesel		2.905406477	0.01%	62.17791157	0	0	8.657834	0	0	0.105774	0.148152	9.049303	0	0	0.423095	0.42329116	19690.471	0	0	0.650402	0	0	3.086487	0	0	14.00276	0	0	0	0	0	0	0	0	0	0	0.163949	106.0329	0	0	0.18563	0	0
LDT1	Electricity		147.3222549	0.53%	0	0	0	0	0	0	5.36339	4.100638	0	0	0	21.45356	11.7161087	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT1	Plug-in Hybrid		128.129587	0.46%	5.815471525	0	34.27889	0.560415	0	0.31984	4.664665	3.067316	0.609502	0	0.347855	18.65866	8.76375983	261190.58	0	19694.36	0.756236	0	12.32218	1.031851	0	6.078766	2.418624	0	50.64543	7.136088	6.115987	46.85347	3.52925	0	55.45037	7.136088	6.115987	46.85347	40.76361	427.6742	0	389.2034	2.582135	0	0.194699
LDT2	Gasoline		163197.4833	96.98%	21532.05303	0	17077.21	444.0515	0	104.5401	977.3245	1193.843	482.9466	0	113.6969	3909.298	3410.97878	152749089	0	4978469	948.4667	0	4168.545	2248.536	0	2132.914	3452.2	0	18491.29	4867.001	14175.62	47035.89	5037.442	0	20245.64	4867.001	14175.62	47035.89	19119.6	343466.4	0	185977.1	1510.08	0	49.21724
LDT2	Diesel		500.5392686	0.30%	48.52976741	0	0	5.597762	0	0	2.99753	3.596142	5.850868	0	0	11.99012	10.2746915	402262.44	0	0	0.714648	0	0	63.37661	0	0	15.38595	0	0	0	0	0	0	0	0	0	0	4.646169	156.3906	0	0	3.811641	0	0
LDT2	Electricity		2351.640527	1.40%	0	0	0	0	0	0	14.08303	10.77636	0	0	0	56.33214	30.7895885	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT2	Plug-in Hybrid		2234.378018	1.33%	17.34277445	0	98.33051	2.039689	0	1.113869	13.3808	8.75534	2.218347	0	1.211434	53.52319	25.0152583	778190.85	0	61449.84	2.250352	0	35.27225	3.064216	0	17.36575	7.212767	0	145.2786	23.60231	22.17222	155.3906	10.52485	0	159.0618	23.60231	22.17222	155.3906	121.4897	1271.763	0	1116.447	7.693209	0	0.607494
Total					79664.3229	0	52139.43	1506.077	0	359.6492	3023.358	3494.703	1637.186	0	391.1514	12093.43	9984.86531	425958167	0	14086358	3716.345	0	13325.86	7679.12	0	6283.441	14871.25	0	62520.48	20655.85	59132.76	189588	21687.66	0	68452.06	20655.85	59132.76	189588	56157.86	1192506	0	624783.5	4210.802	0	139.258

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
0.38	0.15	2.00	0.00	0.03	0.01	440.04	0.02	0.01	444.6314

Vendor

CalEEMod Vehicle Class Percentage

MMDT	50.00%
HHDT	50.00%

Vehicle Category	Fuel	Population	Vehicle Mi	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUI	PM2.5_IDL	PM2.5_STI	PM2.5_PM	PM2.5_PMI	PM10_RUN	PM10_IDLE	PM10_STR	PM10_PMT	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLEX	N2O_STRE	ROG_RUNI	ROG_IDLE	ROG_STRE	ROG_HOTS	TOG_RUNI	TOG_IDLE	TOG_STRE	TOG_HOTS	TOG_RUNL	TOG_DIUR	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
T6 CAIRP Class 4	Diesel		14.99454677	0.18%	76.23113191	78.785	35.45735	1.573675	0.033193	0	0.757898	3.741449	1.650019	0.034804	0	3.041159	10.7235835	264308.94	17066.39	0	0.077822	0.07175	0	41.64198	2.688817	0	1.675478	1.544747	0	0	0	0	1.781005	1.64204	0	0	0	0	50.38479	7.20865	59.97936	0	2.366577	0.15281	0
T6 CAIRP Class 5	Diesel		19.41807935	0.23%	96.71438264	101.8573	45.94225	1.935017	0.031011	0	0.977001	4.823075	2.02728	0.032489	0	3.917223	13.8127176	342140.31	22170.19	0	0.09009	0.091828	0	53.90435	3.492922	0	1.939621	1.977024	0	0	0	0	2.056516	2.096174	0	0	0	0	65.35007	8.867006	77.53229	0	3.074233	0.199206	0
T6 CAIRP Class 6	Diesel		73.08602305	0.86%	340.5897957	383.852	179.5147	7.240558	0.150439	0	3.762499	18.57399	7.578433	0.157459	0	15.07085	53.1421005	1282039.4	82173.81	0	0.346793	0.355055	0	201.9858	12.94652	0	7.466369	7.644235	0	0	0	0	7.782876	7.968283	0	0	0	0	245.7687	32.59715	292.3859	0	11.3704	0.728799	0
T6 CAIRP Class 7	Diesel		117.6860198	1.38%	599.4596295	571.5673	261.4674	11.64046	0.163322	0	5.748091	28.37609	12.17073	0.170762	0	22.99982	81.1008159	1818636.7	127240.5	0	0.530882	0.541873	0	286.527	20.0468	0	11.42974	11.66637	0	0	0	0	12.3962	12.65284	0	0	0	0	396.2755	55.68679	469.8861	0	16.68186	1.167142	0
T6 Instate Delivery Class 4	Diesel		305.0270513	3.58%	4060.277222	5716.357	1876.053	39.48798	6.357744	0	14.74797	81.83659	41.66804	6.708743	0	59.55586	236.054215	5515556.4	1194271	0	4.859581	5.189618	0	868.9782	188.158	0	104.6254	111.7311	0	0	0	0	116.4966	124.4085	0	0	0	0	1014.126	473.3413	4154.125	0	50.34183	10.90041	0
T6 Instate Delivery Class 5	Diesel		388.3780864	4.55%	4189.505146	7101.044	2435.91	26.97496	4.493442	0	18.86842	104.701	28.34789	4.722143	0	75.88387	300.771545	7025724.4	1511879	0	5.333793	6.253647	0	1106.906	238.1972	0	76.08161	134.6393	0	0	0	0	83.90283	148.4803	0	0	0	0	1301.415	444.2567	5253.368	0	64.22229	13.82025	0
T6 Instate Delivery Class 6	Diesel		888.197501	10.41%	11196.25908	16576.2	5561.548	97.83353	16.40093	0	43.15767	239.4822	102.8408	17.24036	0	173.6161	688.140826	15986655	3459380	0	11.94997	15.02349	0	2518.704	545.0267	0	257.2795	323.4517	0	0	0	0	284.0566	357.1158	0	0	0	0	2961.662	1254.878	12082.26	0	146.0666	31.6076	0
T6 Instate Delivery Class 7	Diesel		376.7226985	4.42%	6276.219375	6845.8	2291.846	18.97867	2.780628	0	17.68014	98.10724	19.86331	2.91024	0	70.81509	280.681022	6724171	1498139	0	3.069401	5.818519	0	1059.396	236.0324	0	66.08336	125.2711	0	0	0	0	74.19908	140.6557	0	0	0	0	1268.406	534.9972	5048.022	0	62.83749	14.00013	0
T6 Instate Other Class 4	Diesel		604.607583	7.09%	7152.6484	12613.37	4191.599	99.8001	24.09758	0	29.3754	153.7539	105.4742	25.46764	0	118.8101	444.188672	10653401	2564650	0	9.143082	12.33836	0	1678.448	404.0616	0	196.848	265.6414	0	0	0	0	218.7128	295.1474	0	0	0	0	2003.493	797.3218	8961.309	0	96.80462	23.30429	0
T6 Instate Other Class 5	Diesel		1555.287751	18.23%	12971.97926	30675.81	11352.19	114.5687	17.05565	0	76.32645	399.5005	120.1425	17.88541	0	306.309	1145.18064	27326626	6534218	0	9.931792	26.99169	0	4305.321	1029.469	0	213.8288	581.1236	0	0	0	0	232.4191	631.6467	0	0	0	0	5222.463	1269.166	22568.71	0	248.8694	59.5085	0
T6 Instate Other Class 6	Diesel		1370.012513	16.06%	14596.89601	28276.34	9707.659	185.9889	43.19086	0	66.84115	349.8534	195.7908	45.46708	0	269.2795	1006.74027	24028061	5771216	0	17.05564	26.83244	0	3785.631	909.2575	0	367.2032	577.6951	0	0	0	0	405.0975	637.3115	0	0	0	0	4558.852	1594.341	20172.78	0	218.7283	52.53559	0
T6 Instate Other Class 7	Diesel		923.7947638	10.83%	13923.43139	18958.22	6705.804	87.18664	17.01799	0	44.6633	233.7723	91.49302	17.85855	0	179.3672	676.59011	15933352	4082385	0	7.777048	16.79766	0	2510.364	643.1814	0	167.3271	361.649	0	0	0	0	185.4447	400.8134	0	0	0	0	3109.148	1043.904	13304.63	0	145.9921	37.40555	0
T6 Instate Tractor Class 6	Diesel		13.04132698	0.15%	161.8943435	267.8023	96.40898	2.228412	0.440831	0	0.640671	3.353336	2.348906	0.464667	0	2.584397	9.66214129	223737.43	55164.65	0	0.186061	0.25971	0	35.24992	8.691213	0	4.005851	5.591494	0	0	0	0	4.418274	6.167167	0	0	0	0	43.40396	16.8589	192.6522	0	2.026153	0.499568	0
T6 Instate Tractor Class 7	Diesel		1085.667708	12.73%	12626.10479	21143.13	7535.676	82.1448	10.73916	0	51.25706	268.2847	86.01495	11.24512	0	205.4006	767.919789	17410973	4581733	0	7.019986	18.26862	0	2743.106	721.8539	0	151.1384	393.3184	0	0	0	0	169.4479	440.9667	0	0	0	0	3655.016	1052.821	15658.32	0	162.4117	42.73896	0
T6 OOS Class 4	Diesel		9.542531663	0.11%	50.01934685	53.62708	21.59611	1.055173	0.031526	0	0.438162	2.163035	1.102883	0.032952	0	1.752648	6.18009943	152236.99	9915.213	0	0.060689	0.044062	0	23.985	1.562146	0	1.306616	0.948642	0	0	0	0	1.487482	1.079957	0	0	0	0	31.94493	5.312762	38.29324	0	1.441593	0.093891	0
T6 OOS Class 5	Diesel		12.24686901	0.14%	55.89493526	67.50592	27.89041	1.149248	0.021329	0	0.562336	2.776035	1.201212	0.022293	0	2.249345	7.93152917	196473.4	12828.76	0	0.057134	0.05432	0	30.95446	2.021176	0	1.230072	1.169498	0	0	0	0	1.400343	1.331384	0	0	0	0	41.17583	5.749476	48.93507	0	1.860486	0.121481	0
T6 OOS Class 6	Diesel		47.11576831	0.55%	208.8685796	262.1271	107.5813	4.712481	0.131665	0	2.163402	10.67987	4.925558	0.137619	0	8.653607	30.5139225	735991.09	47503.39	0	0.250949	0.214974	0	115.9557	7.484179	0	5.40286	4.628328	0	0	0	0	6.150745	5.268999	0	0	0	0	158.0633	23.29075	188.9524	0	6.969295	0.449829	0
T6 OOS Class 7	Diesel		64.77294107	0.76%	308.7175629	354.1944	147.7576	6.072541	0.084506	0	2.974162	14.68228	6.347114	0.088327	0	11.89665	41.9493726	948231.71	66334.87	0	0.276696	0.284094	0	149.3943	10.45109	0	5.957179	6.136464	0	0	0	0	6.781795	6.963129	0	0	0	0	218.1051	30.58432	258.668	0	8.979187	0.628152	0
T6 Public Class 4	Diesel		72.05472665	0.84%	4265.082919	4956.242	277.8249	21.54197	4.962558	0	3.434635	18.50041	22.78042	5.247859	0	13.89989	53.4790903	1353158.4	464020.9	0	2.573236	1.617233	0	213.1907	73.10668	0	55.40106	34.81858	0	0	0	0	62.18182	39.08017	0	0	0	0	171.4467	139.385	993.3212	0	12.41887	4.258641	0
T6 Public Class 5	Diesel		106.0838718	1.24%	3066.894493	5028.877	562.201	14.68746	2.450902	0	5.099177	27.46635	15.47176	2.581779	0	20.55641	79.0897223	1983434.4	686571.2	0	3.114468	2.691911	0	312.4909	108.1696	0	67.05365	57.9561	0	0	0	0	74.85326	64.69749	0	0	0	0	293.8695	198.7044	1779.03	0	18.19553	6.298434	0
T6 Public Class 6	Diesel		127.6483069	1.50%	4957.095473	6274.349	676.8693	29.97737	7.375165	0	6.087263	32.7886	31.70574	7.800385	0	24.63885	94.7967171	2391181.4	798957.1	0	3.606299	3.284304	0	376.7316	125.876	0	77.64263	70.71017	0	0	0	0	87.03159	79.26081	0	0	0	0	353.2616	217.9615	2143.74	0	21.93054	7.327573	0
T6 Public Class 7	Diesel		276.1982299	3.24%	10195.38381	12184.82	1508.615	60.17265	16.0359	0	13.24171	71.3255	63.75943	16.99177	0	53.69618	206.593279	5134016.3	1684758	0	7.142964	7.278439	0	808.8664	265.4342	0	153.7861	156.7028	0	0	0	0	172.3887	175.6685	0	0	0	0	790.9303	418.9452	4834.863	0	46.78965	15.3543	0
T6 Utility Class 5	Diesel		56.21891487	0.66%	346.9037159	818.3783	329.6255	2.400148	0.225215	0	2.884082	15.30855	2.512274	0.235737	0	11.55289	43.8015294	991432.28	176036.6	0	0.256753	0.746479	0	156.2006	27.73464	0	5.527813	16.07149	0	0	0	0	5.722478	16.63745	0	0	0	0	189.3018	34.63056	615.4211	0	8.796331	1.561858	0
T6 Utility Class 6	Diesel		10.62762524	0.12%	65.24685513	155.0342	62.9326	0.445485	0.042665	0	0.546359	2.900044	0.465948	0.044624	0	2.186935	8.29152534	187072.03	33246.14	0	0.04668	0.14144	0	29.47327	5.237943	0	1.005016	3.04517	0	0	0	0	1.037076	3.142311	0	0	0	0	35.78562	6.53523	116.5026	0	1.658638	0.29477	0
T6 Utility Class 7	Diesel		11.79421556	0.14%	68.15310581	173.2677	69.02207	0.485943	0.047964	0	0.614225	3.260276	0.508191	0.05016	0	2.458238	9.32014269	208962.78	37315.06	0	0.049374	0.158327	0	32.92217	5.879003	0	1.063	3.408737	0	0	0	0	1.086469	3.483997	0	0	0	0	39.71379	7.061896	129.4781	0	1.836937	0.328027	0
T7 CAIRP Class 8	Diesel		2839.968029	17.41%	36403.69275	325256.2	13408.79	723.1744	128.2484	0	217.3434	649.1228	759.2253	134.6417	0	873.2289	1862.86138	33427439	65227871	0	13.2468	1465.087	0	5266.507	10276.68	0	285.1999	31542.93	0	0	0	0	305.1985	33754.76	0	0	0	0	5001.353	984.3182	437944.6	0	306.2113	597.5184	0
T7 NNOOS Class 8	Diesel		2641.891717	16.20%	29624.15256	404673.1	12442.2	612.139	139.3906	0	190.3308	575.516	639.8173	145.6932	0	761.3232	1644.33157	28536394	69325454	0	11.40731	1590.06	0	4495.921	10922.25	0	245.5964	34233.56	0	0	0	0	279.5928	38972.3	0	0	0	0	4652.529	891.572	505660.8	0	270.2226	656.4706	0
T7 NOOS Class 8	Diesel		1141.542001	7.00%	13076.50769	174856.3	5370.406	280.0525	60.22965	0	82.24054	246.2737	292.7153	62.95296	0	328.9621	703.639157	12610719	30540105	0	5.063608	687.0532	0	1986.824	4811.606	0	109.0181	14792.07	0	0	0	0	124.1088	16839.64	0	0	0	0	2010.324	399.0826	218492.3	0	119.416	289.1965	0
T7 Other Port Class 8	Diesel		51.96465427	0.32%	629.7811376	2013.326	257.0049	7.627694	0.756121	0	3.911112	13.30151	7.993176	0.79235	0	15.68485	38.10245994	666005.86	408878.3	0	0.208624	8.554834	0	104.9295	64.41895	0	4.494819	202.3575	0	0	0	0	4.934819	202.3575	0	0	0	0	91.51286	30.88077	2626.436	0	6.170074	3.787969	0
T7 POAK Class 8	Diesel		236.2396701	1.45%	2997.026685	9063.882	1169.556	35.47553	3.393662	0	17.55406	59.26681	37.15145	3.553984	0	70.35236	169.66198	3040939.6	1825103	0	0.972599	38.78027	0	479.1013	287.5457	0	20.93979	834.9287	0	0	0	0	23.07209	919.9495	0	0	0	0	416.0322	146.3627	11940.2	0	28.36393	17.02338	0
T7 POLA Class 8	Diesel		303.2599526	1.86%	4358.741176	12014.28	1438.833	53.15531	4.275608	0	22.11602	73.83658	55.63591	4.475139	0	88.58694	211.254645	4059342.9	2493034	0	1.408029	48.84101	0	639.5511	392.7785	0	30.31447	1051.534	0	0	0	0	34.04453	1180.92	0	0	0	0	534.0518	255.7229	15327.39	0	38.2013	23.46122	0
T7 Public Class 8	Diesel		539.8486708	3.31%	24793.62644	14044.63	4971.107	139.2906	24.58944	0	40.34081	172.0507	147.0896	25.96269	0	163.0046	496.57377	7959079.7	1684401	0	16.74978	29.2016	0	1253.956	265.3781	0	360.6182	628.7024	0	0	0	0	403.8647	704.0984	0	0	0	0	717.1271	1250.139	7061.822	0	73.23014	15.49789	0
T7 Single Concrete/Transit Mix	Diesel		222.2871578	1.36%	2071.818851	4792.88	1739.667	27.90812	1.969791	0	18.01951	58.56749	29.23396	2.06337	0	72.23608	167.702619	2989863.8	975021.2	0	0.801285	21.28412	0	471.0543	153.615	0	17.25144	458.2413	0	0	0	0	17.75801	471.6972	0	0	0	0	391.4478	87.02899	6116.383	0	26.5348	8.653235	0
T7 Single Dump Class 8	Diesel		303.9250287	1.86%	3474.839017	6832.915	2085.49	45.27869	3.659954	0	23.383	74.84165	47.51839	3.840559	0	93.91225	214.702583	4115235.1	1406735	0	1.427755	27.63512	0	648.357	221.6316	0	30.73918	594.9765	0	0	0	0	33.4912	648.2438	0	0	0	0	535.0854	179.2592	8292.36	0	37.61376	12.85773	0
T7 Single Other Class 8	Diesel		1363.343272	8.36%	13579.68775	29104	9692.577	175.8946	15.21072	0	104.9991	336.8088	184.3173	15.93908	0	421.0691	964.768343	17869814	5954610	0	5.708753	124.4749	0	2815.396	938.1512	0	122.9079	2679.91	0	0	0	0	133.2198	2904.753	0	0	0	0	2400.288	641.7644	37280.92	0	163.4114	54.45221	0
T7 SWCV Class 8	Diesel		301.2213994	1.85%	13398.31664	9203.075	2310.402	39.27309	12.0614	0	22.06767	180.2193	40.9917	12.58921	0	88.14779	514.195427	9112031.7	1048864	0	3.112263	17.1641	0	1435.604	165.2489	0	67.00617	369.5384	0	0	0	0	74.99217	413.5811	0	0	0	0	358.341	159.3802	4225.757	0	85.74846	9.870294	0
T7 Tractor Class 8	Diesel		6320.558182	38.75%	77545.10675	251190.6	53062.61	1143.754	95.01092	0	469.9166	1460.219	1198.121	99.52716	0	1883.836	4181.30918	75699584	50307402	0	29.3877	1043.398	0	11926.5	7925.952	0	632.7092	22464.08	0	0	0	0	700.6635	24876.77	0	0	0	0	11130.43	3255.59	321641.6	0	706.2131	469.3255	0
T7 Utility Class 8	Diesel		44.13378617	0.27%	478.1490728	333.3427	475.078	2.606076	0.121571	0	3.383139	12.63459	2.724134	0.127079	0	13.53366	36.10179	607375.93	69214.55	0	0.206987	1.36154	0	95.69232	10.90478	0	4.456368	29.31358	0	0	0	0	4.856227	31.94382	0	0	0	0	77.72223	42.52473	414.0138	0	5.576003	0.635423	0
Total					334187.9373	1422817	164492.7	4205.912	663.2795	0	1628.455	6102.67	4410.706	695.7574	0	6534.07	17495.8603	349511397	2.67E+08	0	182.7035	5254.246	0	55065.66	42032.22	0	3933.557	113122.5	0	0	0	0	4358.144	125524.7	0	0	0	0	56535.61	17998.03	1696468	0	3229.584	2484.036	0

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
0.13	2.118	1.89	0.01	0.03	0.01	616.30	0.01	0.10	645.3684

Haul

Vehicle Category	Fuel	Population	Vehicle Mi	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUI	PM2.5_IDL	PM2.5_STI	PM2.5_PM	PM2.5_PMI	PM10_RUN	PM10_IDLE	PM10_STR	PM10_PMT	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLEX	N2O_STRE	ROG_RUNI	ROG_IDLE	ROG_STRE	ROG_HOTS	TOG_RUNI	TOG_IDLE	TOG_STRE	TOG_HOTS	TOG_RUNL	TOG_DIUR	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
T7 CAIRP Class 8	Diesel		2839.968029	17.41%	702644.8049	313896.1	51761.88	13958.33	123.7691	0	4195.047	12529.02	14654.16	129.9391	0	16854.6	35955.9642	645198726

New Fresno Courthouse Project
Construction Vehicle Emissions
EMFAC 2021 with EPA Adjustment Factors

Construction Schedule

Construction Phase Name	Start Date	End Date	Number of Days
Demolition	10/1/2029	10/27/2029	0
Site Preparation	10/28/2029	12/1/2029	0
Grading	12/2/2029	2/10/2030	1
Building Construction	2/11/2030	10/15/2033	0
Paving	9/1/2033	10/15/2033	0
Architectural Coating	6/1/2033	10/15/2033	0

Construction Trips and VMT

	Trips per Day				Construction Trip Length in Miles					Trips per Phase				VMT per Phase			
Phase Name	Worker Trip Number	Vendor Trip Number	Onsite Truck Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Onsite Truck Trip Length	Hauling Trip Length	Number of Days per Phase	Worker Trip Number	Vendor Trip Number	Onsite Truck Trip Number	Hauling Trip Number	Worker VMT	Vendor VMT	Onsite Truck VMT	Hauling VMT
Demolition	13	0	0	50	0.25	0.25	0	0.25	0	0	0	0	0	0	0	0	0
Site Preparation	8	0	0	0	0.25	0.25	0	0.25	0	0	0	0	0	0	0	0	0
Grading	10	0	0	2500	0.25	0.25	0	0.25	1	10	0	0	2500	3	0	0	625
Building Construction	132	68	0	0	0.25	0.25	0	0.25	0	0	0	0	0	0	0	0	0
Paving	15	0	0	0	0.25	0.25	0	0.25	0	0	0	0	0	0	0	0	0
Architectural Coating	26	0	0	0	0.25	0.25	0	0.25	0	0	0	0	0	0	0	0	0
									Totals	10	0	0	2,500	3	0	0	625
									Total Vehicles	5	0	0	313				

Construction Emissions

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
4.71	73.14	66.77	0.11	0.64	0.21	5.39	0.00	0.00	5.65

Worker

CalEEMod Vehicle Class Percentage

LDA	50%
LDT1/LDT2	25%

Vehicle Category	Fuel	Population	Vehicle Mi	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUI	PM2.5_IDL	PM2.5_STR	PM2.5_PM	PM2.5_PM	PM10_RUN	PM10_IDLE	PM10_STR	PM10_PM1	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STREX	N2O_RUNE	N2O_IDLEX	N2O_STREX	ROG_RUNE	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIURI	TOG_RUNE	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIURI	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
LDA	Gasoline		322126.8419	89.30%	0.029991911	0	0.927738	0.000986	0	0.00729	0.002232	0.002309	0.001073	0	0.007928	0.00893	0.0065982	285.38228	0	280.556	0.001602	0	0.237843	0.004092	0	0.131493	0.005496	0	1.02359	0.332596	0.913405	3.035938	0.068019	0	1.120702	0.332596	0.913405	3.035938	0.043248	0.662622	0	10.73155	0.002821	0	0.002774
LDA	Diesel		457.0813889	0.13%	0.000164618	0	0	1.21E-05	0	0	3.17E-06	3.35E-06	1.26E-05	0	0	1.27E-05	9.5627E-06	0.3343155	0	0	1.08E-06	0	0	5.27E-05	0	0	2.33E-05	0	0	0	0	0	0	2.65E-05	0	0	0	0	0	4.91E-06	0.000363	0	3.17E-06	0	0
LDA	Electricity		25932.44865	7.19%	0	0	0	0	0	0	0.00018	0.000138	0	0	0	0.000719	0.00039358	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDA	Plug-in Hybrid		12223.38883	3.39%	0.000114786	0	0.019173	1.67E-05	0	0.000272	8.47E-05	5.51E-05	1.82E-05	0	0.000296	0.000339	0.00015729	5.1470747	0	10.31511	1.49E-05	0	0.006872	2.03E-05	0	0.003381	4.77E-05	0	0.028327	0.007194	0.008427	0.04883	6.97E-05	0	0.031015	0.007194	0.008427	0.04883	0.00078	0.0084	0	0.217693	5.09E-05	0	0.000102
LDT1	Gasoline		27403.62679	98.99%	0.113604543	0	1.721891	0.001577	0	0.011821	0.002475	0.003127	0.001716	0	0.012856	0.009899	0.00893333	383.25754	0	398.8186	0.005238	0	0.451315	0.009132	0	0.180457	0.022664	0	2.29717	0.864211	2.510963	7.791491	0.033071	0	2.515112	0.864211	2.510963	7.791491	0.047432	1.429949	0	22.46278	0.003789	0	0.003943
LDT1	Diesel		2.905406477	0.01%	0.000154244	0	0	2.15E-05	0	0	2.62E-07	3.68E-07	2.24E-05	0	0	1.05E-06	1.0501E-06	0.0485978	0	0	1.61E-06	0	0	7.66E-06	0	0	3.47E-05	0	0	0	0	0	0	3.95E-05	0	0	0	0	0	4.07E-07	0.000263	0	4.6E-07	0	0
LDT1	Electricity		147.3222549	0.53%	0	0	0	0	0	0	1.33E-05	1.02E-05	0	0	0	5.32E-05	2.9064E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT1	Plug-in Hybrid		128.129587	0.46%	1.44264E-05	0	0.002619	1.39E-06	0	2.44E-05	1.16E-05	7.61E-06	1.51E-06	0	2.66E-05	4.63E-05	2.174E-05	0.6479319	0	1.50475	1.88E-06	0	0.000941	2.56E-06	0	0.000464	6E-06	0	0.00387	0.000545	0.000467	0.00358	8.75E-06	0	0.004237	0.000545	0.000467	0.00358	0.000101	0.001061	0	0.029737	6.41E-06	0	1.49E-05
LDT2	Gasoline		163197.4833	96.98%	0.053414273	0	1.304787	0.001102	0	0.007987	0.002424	0.002962	0.001198	0	0.008687	0.009698	0.00846157	378.9226	0	380.3807	0.002353	0	0.318498	0.005578	0	0.162966	0.008564	0	1.41283	0.371864	1.083091	3.593784	0.012496	0	1.546871	0.371864	1.083091	3.593784	0.04743	0.852032	0	14.20961	0.003746	0	0.00376
LDT2	Diesel		500.5392686	0.30%	0.000120387	0	0	1.39E-05	0	0	7.44E-06	8.92E-06	1.45E-05	0	0	2.97E-05	2.5488E-05	0.997887	0	0	1.77E-06	0	0	0.000157	0	0	3.82E-05	0	0	0	0	0	0	4.35E-05	0	0	0	0	0	1.15E-05	0.000388	0	0	9.46E-06	0	0
LDT2	Electricity		2351.640527	1.40%	0	0	0	0	0	0	3.49E-05	2.67E-05	0	0	0	0	0.00014	7.6379E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT2	Plug-in Hybrid		2234.378018	1.33%	4.3022E-05	0	0.007513	5.06E-06	0	8.51E-05	3.32E-05	2.17E-05	5.5E-06	0	9.26E-05	0.000133	6.2055E-05	1.9304475	0	4.695084	5.58E-06	0	0.002695	7.6E-06	0	0.001327	1.79E-05	0	0.0111	0.001803	0.001694	0.011873	2.61E-05	0	0.012153	0.001803	0.001694	0.011873	0.000301	0.003155	0	0.085302	1.91E-05	0	4.64E-05
Total				0.19762221	0	3.983721	0.003736	0	0.027479	0.0075	0.008669	0.004061	0	0.029886	0.03	0.02476932	1056.6687	0	1076.27	0.009219	0	1.018164	0.019049	0	0.480087	0.036891	0	4.776886	1.578214	4.518047	14.48549	0.0538	0	5.230089	1.578214	4.518047	14.48549	0.13931	2.958233	0	47.73667	0.010446	0	0.01064

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
0.06	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.002307

Vendor

CalEEMod Vehicle Class Percentage

MMDT	50.00%
HHDT	50.00%

Vehicle Category	Fuel	Population	Vehicle Mi	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUI	PM2.5_IDL	PM2.5_STR	PM2.5_PM	PM2.5_PM	PM10_RUN	PM10_IDLE	PM10_STR	PM10_PM1	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STREX	N2O_RUNE	N2O_IDLEX	N2O_STREX	ROG_RUNE	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIURI	TOG_RUNE	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIURI	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
T6 CAIRP Class 4	Diesel		14.99454677	0.18%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP Class 5	Diesel		19.41807935	0.23%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP Class 6	Diesel		73.08602305	0.86%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP Class 7	Diesel		117.6860198	1.38%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate Delivery Class 4	Diesel		305.0270513	3.58%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate Delivery Class 5	Diesel		388.3780864	4.55%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate Delivery Class 6	Diesel		888.197501	10.41%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate Delivery Class 7	Diesel		376.7226985	4.42%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate Other Class 4	Diesel		604.607583	7.09%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate Other Class 5	Diesel		1555.287751	18.23%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate Other Class 6	Diesel		1370.012513	16.06%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate Other Class 7	Diesel		923.7947638	10.83%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate Tractor Class 6	Diesel		13.04132698	0.15%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate Tractor Class 7	Diesel		1085.667708	12.73%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 OOS Class 4	Diesel		9.542531663	0.11%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 OOS Class 5	Diesel		12.24686901	0.14%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 OOS Class 6	Diesel		47.11576831	0.55%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 OOS Class 7	Diesel		64.7729107	0.76%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Public Class 4	Diesel		72.05472665	0.84%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Public Class 5	Diesel		106.0838718	1.24%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Public Class 6	Diesel		127.6483069	1.50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Public Class 7	Diesel		276.1982299	3.24%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Utility Class 5	Diesel		56.21891487	0.66%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Utility Class 6	Diesel		10.62762524	0.12%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Utility Class 7	Diesel		11.79421556	0.14%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 CAIRP Class 8	Diesel		2839.968029	17.41%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 NNOOS Class 8	Diesel		2641.891717	16.20%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 NOOS Class 8	Diesel		1141.542001	7.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 Other Port Class 8	Diesel		51.96465427	0.32%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 POAK Class 8	Diesel		236.2396701	1.45%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 POLA Class 8	Diesel		303.2559526	1.86%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 Public Class 8	Diesel		539.8486708	3.31%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 Single Concrete/Transit Mix	Diesel		222.2871578	1.36%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 Single Dump Class 8	Diesel		303.9250287	1.86%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 Single Other Class 8	Diesel		1363.343272	8.36%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 SWCV Class 8	Diesel		301.2213994	1.85%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 Tractor Class 8	Diesel		6320.558182	38.75%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T7 Utility Class 8	Diesel		44.13378617	0.27%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0

Haul

Vehicle Category	Fuel	Population	Vehicle Mi	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUI	PM2.5_IDL	PM2.5_STR	PM2.5_PM	PM2.5_PM	PM10_RUN	PM10_IDLE	PM10_STR	PM10_PM1	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STREX	N2O_RUNE	N2O_IDLEX	N2O_STREX	ROG_RUNE	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIURI	TOG_RUNE	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIURI	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
T7 CAIRP Class 8	Diesel		2839.968029	17.41%	174.2670647	6228.0981	1027.021	3.461887	2.455736	0	1.040438	3.107397	3.634465	2.578157	0	4.180209	8.91764984	160019.53	1249002	0	0.063413	28.05391	0	25.21114	196.7807	0	1.365272	603.993	0	0	0	0	1.461007	646.3457	0	0	0	0	23.94183	4.712001	8385.888	0	1.465855	11.44145	0
T7 NNOOS Class 8	Diesel		2641.891717	16.20%	141.3342169	7748.7956	952.9872	2.930353	2.66909	0	0.911127	2.755036	3.062851	2.789775	0	3.644508	7.8715321	136605.75	1327464	0	0.054608	30.44692	0	21.52229	209.1424	0	1.175687	655.5138	0	0	0	0	1.33843	746.2526	0	0	0	0	22.27199	4.268018	9682.536	0	1.293575	12.57029	0
T7 NOOS Class 8	Diesel		1141.542001	7.00%	62.59817179	3348.1974	411.3362	1.340631	1.153294	0	0.393691	1.17893	1.401249	1.205441	0	1.574765	3.36837066	60368.408	584790.6	0	0.02424	13.15589	0	9.511067	92.134	0	0.521877	283.2427	0	0	0	0	0.594118	322.4503	0	0	0	0	9.623562	1.910437	4183.753	0	0.571653	5.537617	0
T7 Other Port Class 8	Diesel		51.96465427	0.32%	3.01480707	38.551735	19.68481	0.036514	0.014478	0	0.018723	0.063675	0.038264	0.015172	0	0.075084	0.18239918	3188.2174	7829.318	0	0.000999	0.16381	0	0.502305	1.233512	0	0.021502	3.526793	0	0	0	0	0.023623	3.874798	0	0	0	0	0.438079	0.147828	50.29174	0	0.029537	0.072533	0
T7 POAK Class 8	Diesel		236.2396701	1.45%	14.34697977	173.55779	89.57994	0.169824	0.064983	0	0.084033	0.283714	0.177847	0.068053	0	0.336782	0.81218396	14557.194	34947.59	0	0.004656	0.742576	0	2.293492	5.506006	0	0.10024	15.98745	0	0	0	0	0.110448	17.61545	0	0	0	0	1.991576	0.700649	228.6343	0	0.13578	0.325969	0
T7 POLA Class 8	Diesel		303.2559526	1.86%	20.86560382	230.05282	110.2048	0.254458	0.081871	0	0.105671	0.353461	0.266333	0.085691	0	0.424072	1.011291	19432.363	47737.32	0	0.00674	0.935222	0	3.061577	7.521034	0	0.146118	20.13506	0	0	0	0	0.162974	22.61259	0	0	0	0	2.556544	1.224164	293.4931	0	0.182872	0.449242	0
T7 Public Class 8	Diesel		539.8486708	3.31%	118.6888521	268.93054	380.7527	0.666794	0.470846	0	0.193114	0.823619	0.704033	0.497141	0	0.780315	2.37713393	38100.68	32253.39	0	0.080182	0.559161	0	6.002778	5.081535	0	1.726305	12.03857	0	0	0	0	1.933329	13.48228	0	0	0	0	3.432938	5.984505	135.2218	0	0.350558	0.296758	0
T7 Single Concrete/Transit Mix	Diesel		222.2871578	1.36%	9.917944101	91.77543	133.2466	0.133598	0.037718	0	0.086261	0.280367	0.139945	0.03951	0	0.345799	0.80280436	14312.691	18669.98	0	0.003836	0.407554	0	2.25497	2.941463	0	0.082584	8.774534	0	0	0	0	0.085009	9.032192	0	0	0	0	1.873888	0.416614	117.1182	0	0.127024	0.165695	0
T7 Single Dump Class 8	Diesel		303.9250287	1.86%	16.63430136	127.00895	159.7342	0.216752	0.070074	0	0.111936	0.358272	0.227474	0.07354	0	0.449565	1.02779653	19699.923	26936.55	0	0.006835	0.529165	0	3.103731	4.243865	0	0.147151	11.39278	0	0	0	0	0.160325	12.41276	0	0	0	0	2.561492	0.858127	158.7845	0	0.18006	0.246203	0
T7 Single Other Class 8	Diesel		1363.343272	8.36%	65.00693048	557.2917	742.3849	0.84202	0.291259	0	0.502638	1.612328	0.88234	0.305206	0	2.015688	4.61841463	85544.068	114020.6	0	0.027328	2.38348	0	13.4775	17.96399	0	0.588369	51.31567	0	0	0	0	0.637733	55.62103	0	0	0	0	11.49035	3.072172	713.8657	0	0.782262	1.042666	0
T7 SWCV Class 8	Diesel		301.2213994	1.85%	64.13869407	176.22309	176.961	0.188003	0.230955	0	0.10564	0.862723	0.19623	0.241062	0	0.42197	2.46149006	43619.944	20083.94	0	0.014899	0.328663	0	6.87234	3.164233	0	0.320763	7.076026	0	0	0	0	0.358993	7.919369	0	0	0	0	1.715404	0.762964	80.916

New Fresno Courthouse Project
Construction Vehicle Emissions
EMFAC 2021 with EPA Adjustment Factors

Construction Schedule

Construction Phase Name	Start Date	End Date	Number of Days
Demolition	10/1/2029	10/27/2029	20
Site Preparation	10/28/2029	12/1/2029	25
Grading	12/2/2029	2/10/2030	50
Building Construction	2/11/2030	10/15/2033	960
Paving	9/1/2033	10/15/2033	32
Architectural Coating	6/1/2033	10/15/2033	98

Construction Trips and VMT

	Trips per Day				Construction Trip Length in Miles					Trips per Phase				VMT per Phase			
Phase Name	Worker Trip Number	Vendor Trip Number	Onsite Truck Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Onsite Truck Trip Length	Hauling Trip Length	Number of Days per Phase	Worker Trip Number	Vendor Trip Number	Onsite Truck Trip Number	Hauling Trip Number	Worker VMT	Vendor VMT	Onsite Truck VMT	Hauling VMT
Demolition	13	0	0	50	0.25	0.25	0	0.25	20	250	0	0	1000	63	0	0	250
Site Preparation	8	0	0	0	0.25	0.25	0	0.25	25	187.5	0	0	0	47	0	0	0
Grading	10	0	0	2500	0.25	0.25	0	0.25	50	500	0	0	125000	125	0	0	31,250
Building Construction	132	68	0	0	0.25	0.25	0	0.25	960	126874	65280	0	0	31,718	16,320	0	0
Paving	15	0	0	0	0.25	0.25	0	0.25	32	480	0	0	0	120	0	0	0
Architectural Coating	26	0	0	0	0.25	0.25	0	0.25	98	2590.14	0	0	0	648	0	0	0
									Totals	130,881	65,280	0	126,000	32,720	16,320	0	31,500
									Total Vehicles	65,441	32,640	0	15,750				

Construction Emissions

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
0.61	3.68	4.28	0.01	0.01	0.00	588.16	0.02	0.09	617.00

Worker

CalEEMod Vehicle Class Percentage

LDA	50%
LDT1/LDT2	25%

Vehicle Category	Fuel	Population		Vehicle Mix	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSO	ROG_RUNL
LDA	Gasoline		322126.8419	89.30%	392.5378543	0	12142.34	12.91107	0	95.40631	29.218	30.22534	14.04196	0	103.7631	116.872	86.3581221	3735118.6	0	3671952	20.96257	0	3112.914	53.55444	0	1720.997	71.92651	0	13396.87	4353.058	11954.76
LDA	Diesel		457.0818389	0.13%	2.154536817	0	0	0.157948	0	0	0.041459	0.043805	0.16509	0	0	0.165836	0.1251582	4375.5633	0	0	0.014136	0	0	0.689372	0	0	0.304335	0	0	0	0	0
LDA	Electricity		25932.44865	7.19%	0	0	0	0	0	0	2.352161	1.802942	0	0	0	9.408644	5.15126369	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDA	Plug-in Hybrid		12223.38883	3.39%	1.502328887	0	250.9413	0.218654	0	3.556496	1.108703	0.720536	0.237807	0	3.868014	4.434811	2.0586745	67365.552	0	135005.4	0.194907	0	89.94204	0.265359	0	44.24751	0.624811	0	370.7538	94.15709	110.2892
LDT1	Gasoline		27403.62679	98.99%	1486.870343	0	22536.33	20.6464	0	154.7126	32.3913	40.92219	22.45485	0	168.2641	129.5652	116.920542	5016122.2	0	5219787	68.55261	0	5906.867	119.5176	0	2361.839	296.6258	0	30065.64	11310.9	32863.8
LDT1	Diesel		2.905406477	0.01%	2.018763363	0	0	0.281099	0	0	0.003434	0.00481	0.293809	0	0	0.013737	0.01374322	636.05426	0	0	0.021117	0	0	0.100211	0	0	0.454635	0	0	0	0	0
LDT1	Electricity		147.3222549	0.53%	0	0	0	0	0	0	0.174136	0.133138	0	0	0	0.696544	0.38039314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT1	Plug-in Hybrid		128.129587	0.46%	0.188814011	0	34.27889	0.018195	0	0.31984	0.15145	0.099588	0.019789	0	0.347855	0.605801	0.28453766	8480.2137	0	19694.36	0.024553	0	12.32218	0.033502	0	6.078766	0.078527	0	50.64543	7.136088	6.115987
LDT2	Gasoline		163197.4833	96.98%	699.0926309	0	17077.21	14.41726	0	104.5401	31.73132	38.76112	15.68008	0	113.6969	126.9253	110.746064	4959386	0	4978469	30.79437	0	4168.545	73.00442	0	2132.914	112.0844	0	18491.29	4867.001	14175.62
LDT2	Diesel		500.5392686	0.30%	1.575641799	0	0	0.181746	0	0	0.097322	0.116758	0.189963	0	0	0.38929	0.33359388	13060.469	0	0	0.023203	0	0	2.057682	0	0	0.499544	0	0	0	0	0
LDT2	Electricity		2351.640527	1.40%	0	0	0	0	0	0	0.457241	0.349882	0	0	0	1.828966	0.99966197	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT2	Plug-in Hybrid		2234.378018	1.33%	0.563077092	0	98.33051	0.066224	0	1.113869	0.434441	0.284264	0.072024	0	1.211434	1.737766	0.81218371	25265.937	0	61449.84	0.073063	0	35.27225	0.099488	0	17.36575	0.234181	0	145.2786	23.60231	22.17222
Total					2586.50399	0	52139.43	48.89859	0	359.6492	98.16096	113.4644	53.15538	0	391.1514	392.6439	324.183938	13829811	0	14086358	120.6605	0	13325.86	249.3221	0	6283.441	482.8328	0	62520.48	20655.85	59132.76

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
0.37	0.06	0.73	0.00	0.00	0.00	27.92	0.01	0.01	30.1991

Vendor

CalEEMod Vehicle Class Percentage

MMDT	50.00%
HHDT	50.00%

Vehicle Category	Fuel	Population		Vehicle Mix	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSO	ROG_RUNL
T6 CAIRP Class 4	Diesel		14.99454677	0.18%	4.764445744	78.7850032	35.45735	0.098355	0.033193	0	0.047369	0.233841	0.103126	0.034804	0	0.190072	0.67022397	16519.309	17066.39	0	0.004864	0.07175	0	2.602624	2.688817	0	0.104717	1.544747	0	0	0
T6 CAIRP Class 5	Diesel		19.41807935	0.23%	6.044648915	101.857267	45.94225	0.120939	0.031011	0	0.061063	0.301442	0.126705	0.032489	0	0.244826	0.86329485	21383.769	22170.19	0	0.005631	0.091828	0	3.369022	3.492922	0	0.121226	1.977024	0	0	0
T6 CAIRP Class 6	Diesel		73.08602305	0.86%	21.28686223	383.851954	179.5147	0.452535	0.150439	0	0.235156	1.160875	0.473652	0.157459	0	0.941928	3.32138128	80127.464	82173.81	0	0.021675	0.355055	0	12.62411	12.94652	0	0.466648	7.644235	0	0	0
T6 CAIRP Class 7	Diesel		117.6860198	1.38%	37.46622684	571.567266	261.4674	0.727528	0.163322	0	0.359256	1.773506	0.760671	0.170762	0	1.437489	5.06880099	113664.8	127240.5	0	0.03318	0.541873	0	17.90793	20.0468	0	0.714358	11.66637	0	0	0
T6 Instate Delivery Class 4	Diesel		305.0270513	3.58%	253.7673264	5716.35733	1876.053	2.467999	6.357744	0	0.921748	5.114787	2.604253	6.708743	0	3.722241	14.7533884	344722.28	1194271	0	0.303724	5.189618	0	54.31113	188.158	0	6.53909	111.7311	0	0	0
T6 Instate Delivery Class 5	Diesel		388.3780964	4.55%	261.8440716	7101.04418	2435.91	1.685935	4.493442	0	1.179276	6.543811	1.771743	4.722143	0	4.742742	18.7982215	439107.78	1511879	0	0.220862	6.253647	0	69.18161	238.1972	0	4.7551	134.6393	0	0	0
T6 Instate Delivery Class 6	Diesel		888.197501	10.41%	699.7661926	16576.1975	5561.548	6.114595	16.40093	0	2.697354	14.96764	6.427553	17.24036	0	10.85101	43.0088016	999165.92	3459380	0	0.746873	15.02349	0	157.419	545.0267	0	16.07997	323.4517	0	0	0
T6 Instate Delivery Class 7	Diesel		376.7226985	4.42%	392.2637109	6845.79963	2291.846	1.186167	2.780628	0	1.105009	6.131702	1.241457	2.91024	0	4.425943	17.5425639	420260.69	1498139	0	0.191838	5.818519	0	66.21224	236.0324	0	4.13021	125.2711	0	0	0
T6 Instate Other Class 4	Diesel		604.607583	7.09%	447.040525	12613.3652	4191.599	6.237506	24.09758	0	1.835963	9.609617	6.592139	25.46764	0	7.42563	27.761792	665837.54	2564650	0	0.571443	12.33836	0	104.903	404.0616	0	12.303	265.6414	0	0	0
T6 Instate Other Class 5	Diesel		1555.287751	18.23%	810.7487041	30675.8129	11352.19	7.160544	17.05565	0	4.770403	24.96878	7.508905	17.88541	0	19.14431	71.5737897	1707914.1	6534218	0	0.620737	26.99169	0	269.0826	1029.469	0	13.3643	581.1236	0	0	0
T6 Instate Other Class 6	Diesel		1370.012513	16.06%	912.3060008	28276.3424	9707.659	11.62431	43.19086	0	4.177572	21.86584	12.23693	45.46708	0	16.82997	62.9212671	1501753.8	5771216	0	1.065977	26.83244	0	236.6019	909.2575	0	22.9502	577.6951	0	0	0
T6 Instate Other Class 7	Diesel		923.7947638	10.83%	870.215712	18958.2216	6705.804	5.449165	17.01799	0	2.791456	14.61077	5.718314	17.85855	0	11.21045	41.9118819	995834.47	4082385	0	0.485744	16.79766	0	156.8941	643.1814	0	10.45794	361.649	0	0	0
T6 Instate Tractor Class 6	Diesel		13.04132698	0.15%	10.11839647	267.802309	96.40898	0.139276	0.440831	0	0.040042	0.209583	0.146807	0.464667	0	0.161525	0.60388383	13983.589	55164.65	0	0.011629	0.25971	0	2.20312	8.691213	0	0.250366	5.591494	0	0	0
T6 Instate Tractor Class 7	Diesel		1085.667708	12.73%	789.1315494	21143.1293	7535.676	5.13405	10.73916	0	3.203566	16.76779	5.375934	11.24512	0	12.83754	47.9949868	1088185.8	4581733	0	0.438749	18.26862	0	171.4441	721.8539	0	9.446148	393.3184	0	0	0
T6 OOS Class 4	Diesel		9.542531663	0.11%	3.126209178	53.6270822	21.59611	0.065948	0.031526	0	0.027385	0.13519	0.06893	0.032952	0	0.10954	0.38625621	9514.8116	9915.213	0	0.003793	0.044062	0	1.499062	1.562146	0	0.081663	0.948642	0	0	0
T6 OOS Class 5	Diesel		12.24686901	0.14%	3.493433454	67.5059195	27.89041	0.071828	0.021329	0	0.035146	0.173502	0.075076	0.022293	0	0.140584	0.49572057	12279.588	12828.76	0	0.003571	0.05432	0	1.934654	2.021176	0	0.076879	1.169498	0	0	0
T6 OOS Class 6	Diesel		47.11575831	0.55%	13.05428622	262.127072	107.5813	0.29453	0.131665	0	0.135213	0.667492	0.307847	0.137619	0	0.54085	1.90712015	45999.443	47503.39	0	0.015684	0.214974	0	7.247231	7.484179	0	0.337679	4.628328	0	0	0
T6 OOS Class 7	Diesel		64.77294107	0.76%	19.29484768	354.194446	147.7576	0.379534	0.084506	0	0.185885	0.917643	0.396695	0.088327	0	0.74354	2.62183579	59264.482	66334.87	0	0.017293	0.284094	0	9.337143	10.45109	0	0.372324	6.116464	0	0	0
T6 Public Class 4	Diesel		72.05472665	0.84%	266.5676825	4956.24224	277.8249	1.346373	4.962558	0	0.214665	1.156276	1.423777	5.247859	0	0.868743	3.34244314	84572.401	464020.9	0	0.160827	1.617233	0	13.32442	73.10668	0	3.462566	34.81858	0	0	0
T6 Public Class 5	Diesel		106.0838718	1.24%	191.6809058	5028.87691	562.201	0.917966	2.450902	0	0.318699	1.716647	0.966985	2.581779	0	1.284776	4.94310765	123964.65	686571.2	0	0.194654	2.691911	0	19.53068	108.1696	0	4.190853	57.9561	0	0	0
T6 Public Class 6	Diesel		127.6483069	1.50%	309.8184671	6274.34947	676.8693	1.873586	7.375165	0	0.380454	2.049288	1.981609	7.800385	0	1.539928	5.92479482	149448.84	798957.1	0	0.225394	3.284304	0	23.54573	125.876	0	4.852665	70.71017	0	0	0
T6 Public Class 7	Diesel		276.1982299	3.24%	637.2114882	12184.8167	1508.615	3.760791	16.0359	0	0.827607	4.457844	3.984964	16.99177	0	3.356011	12.9120799	320876.02	1684758	0	0.446435	7.278439	0	50.55415	265.4342	0	9.611628	156.7028	0	0	0
T6 Utility Class 5	Diesel		56.21891487	0.66%	21.68148224	818.378256	329.6255	0.150009	0.225215	0	0.180255	0.956785	0.157017	0.235737	0	0.722056	2.73759559	61964.518	176036.6	0	0.016047	0.746479	0	9.762535	27.73464	0	0.345488	16.07149	0	0	0
T6 Utility Class 6	Diesel		10.62762524	0.12%	4.077928446	155.034233	62.9326	0.027843	0.042665	0	0.034147	0.181253	0.029122	0.044624	0	0.136683	0.51822033	11692.002	33246.14	0	0.002918	0.14144	0	1.84208	5.237943	0	0.062814	3.04517	0	0	0
T6 Utility Class 7	Diesel		11.79421556	0.14%	4.259569113	173.267666	69.02207	0.030371	0.047964	0	0.038389	0.203767	0.031762	0.05016	0	0.15364	0.58250892	13060.174	37315.06	0	0.003086	0.158327	0	2.057636	5.879003	0	0.066437	3.408737	0	0	0
T7 CAIRP Class 8	Diesel		2839.968029	17.41%	2275.230797	325256.197	13408.79	45.1984	128.2484	0	13.58396	40.57017	47.45158	134.6417	0	54.57681	116.428836	2089214.9	65227871	0	329.1567	10276.68	0	17.825	31542.93	0	0	0	0	0	0
T7 NNOOS Class 8	Diesel		2641.891717	16.20%	1845.259535	404673.104	12442.2	38.25869	139.3906	0	11.89567	35.96975	39.98858	145.6932	0	47.5827	102.770723	1783524.6	69325454	0	0.712957	1590.06	0	280.995	10922.25	0	15.34977	34233.56	0	0	0
T7 NOOS Class 8	Diesel		1141.542001	7.00%	817.2817308	174856.263	5370.406	17.50328	60.22965	0	5.140033	15.39211	18.2947	62.95296	0	20.56013	43.9774473	788169.93	30540105	0	0.316476	687.0532	0	124.1765	4811.606	0	6.813631	14792.07	0	0	0
T7 Other Port Class 8	Diesel		51.96465427	0.32%	39.3613211	2013.3258	257.0049	0.476731	0.756121	0	0.244444	0.831344	0.499573	0.79235	0	0.980303	2.38140371	41625.366	408878.3	0	0.013039	8.554834	0	6.558093	64.41895	0	0.280726	184.1832	0	0	0
T7 POAK Class 8	Diesel		236.2396701	1.45%	187.3141678	9063.88178	1169.556	2.217221	3.393662	0	1.097129	3.704176	2.321966	3.553984	0	4.397023	10.6038737	190058.73	1825103	0	0.060787	38.78027	0	29.94383	287.5457	0	1.308737	834.9287	0	0	0
T7 POLA Class 8	Diesel		303.2559526	1.86%	272.4213235	12014.2785	1438.833	3.322207	4.275608	0	1.382251	4.614786	3.477244	4.475139	0	5.536684	13.2034153	253708.93	2493034	0	0.088002	48.84101	0	39.97195	392.7785	0	1.894654	1051.534	0	0	0
T7 Public Class 8	Diesel		539.8486708	3.31%	1549.601653	14044.6283	4971.107	8.705661	24.58944	0	2.5213	10.75317	9.19185	25.96269	0	10.18779	31.0358606	497442.48	1684401	0	1.046861	29.2016	0	78.37227	265.3781	0	22.53864	628.7024	0	0	0
T7 Single Concrete/Transit Mix	Diesel		222.2871578	1.36%	129.4886782	4792.88006	1739.667	1.744258	1.969791	0	1.126219	3.660468	1.827123	2.06337	0	4.514755	10.4814137	186866.49	975021.2	0	0.05008	21.28412	0	29.44089	153.615	0	1.078215	458.2413	0	0	0
T7 Single Dump Class 8	Diesel		303.9250287	1.86%	217.1774385	6632.9154	2085.49	2.829918	3.65954	0	1.461438	4.677603	2.9699	3.840559	0	5.869516	13.4189114	257202.19	1406735	0	0.089235	27.63512	0	40.52231	221.6316	0	1.921199	594.9765	0	0	0
T7 Single Other Class 8	Diesel		1363.343272	8.36%	848.7304844	29104.0016	9692.577	10.99341	15.21072	0	6.562445	21.05055	11.51983	15.93908	0	26.31682	60.2980215	1116863.4	5954610	0	0.356797	124.4749	0	175.9623	938.1512	0	7.681743	2679.91	0	0	0
T7 SWCV Class 8	Diesel		301.2213994	1.85%	837.3947898	9203.07469	2310.402	2.454568	12.0614	0	1.379229	11.26371	2.561981	12.58921	0	5.509237	32.1372142	569501.98	1048864	0	0.194516	17.1641	0	89.72527	165.2489	0	4.187886	369.5384	0	0	0
T7 Tractor Class 8	Diesel		6320.558182	38.75%	4846.569172	251190.605	53062.61	71.48461	95.01092	0	29.36979	91.26371	74.88255	99.52716	0	117.7397	261.331824	4731224	50307402	0	1.836731	1043.398	0	745.4063	7925.952	0	39.54433	22464.08	0	0	0
T7 Utility Class 8	Diesel		44.13378617	0.27%	29.88431705	333.342706	475.078	0.16288	0.121571	0	0.211446	0.789662	0.170258	0.127079	0	0.845854	2.25636187	37960.995	69214.55	0	0.012937	1.36154	0	5.98077	10.90478	0	0.278523	29.31358	0	0	0
Total					20886.74608	1422817.05	164492.7	262.8695	663.2795	0	101.7784	381.4169	275.6691	695.7574	0	408.3794	1093.49127	21844462	2.67E+08	0	11.41897	5254.246	0	3441.604	42032.22	0	245.8473	113122.5	0	0	0

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
0.12	1.773	1.87	0.00	0.00	0.00	288.63	0.01	0.05	302.3132

Haul

Vehicle Category	Fuel	Population		Vehicle Mix	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSO	ROG_RUNL
T7 CAIRP Class 8	Diesel		2839.968029	17.41%	8783.060061	313896.146	51761.88	174.4791	123.7691	0	52.43808	156.6128	183.1771	129.9391	0	210.6825	449.449552	8064984.1	62949691	0	3.196034	1413.917	0	1270.642	9917.75	0	68.80973	30441.25	0	0	0
T7 NNOOS Class 8	Diesel		2641.891717	16.20%	7123.244529	390539.3	48030.56	147.6898	134.5222	0	45.9208	138.8538	154.3677	140.6047	0	183.6832	396.725218	6884929.6	66904161	0	2.752224	1534.525	0	1084.723	10540.78	0	59.25464	33037.9	0	0	0
T7 NOOS Class 8	Diesel		1141.542001	7.00%	3154.947858	168749.151	20731.35	67.56782	58.12604	0	19.84204	59.41806	70.62294	60.75424	0	79.36816	169.765881	3042567.8	29473447	0	1.221689	663.0569	0	479.3578	4643.554	0	26.30262	14275.43	0	0	0
T7 Other Port Class 8	Diesel		51.96465427	0.32%	151.9462763	1943.00744	992.1147	1.840321	0.729712	0	0.943628	3.209233	1.928501	0.764676	0	3.784259	9.19291875	160686.16	394597.6	0	0.050334	8.256044	0	25.31617	62.16902	0	1.083684	177.7504	0	0	0
T7 POAK Class 8	Diesel		236.2396701	1.45%	723.0877802	8747.31238	4514.829	8.559124	3.275134	0	4.235241	14.29921	8.963471	3.429856	0	16.9738	40.9340714	733682.58	1761358	0	0.234657	37.42582	0	115.592	277.5027	0	5.052109	805.7675	0	0	0
T7 POLA Class 8	Diesel		303.2559526	1.86%	1051.626433	11594.6621	5554.32	12.82469	4.126277	0	5.335897	17.81443	13.42319	4.318838	0	21.37323	50.9690664	979391.11	2405961	0	0.339713	47.13516	0	154.3035	379.0601	0	7.313923	1014.807	0	0	0
T7 Public Class 8	Diesel		539.8486708	3.31%	5981.918144	13554.099	19189.93	33.60641	23.73062	0	9.732961	41.5104	35.48324	25.05591	0	39.32786	119.80755	1920274.3	1625571	0	4.041193	28.18169	0	302.54	256.1094	0	87.00578	606.7441	0	0	0
T7 Single Concrete/Transit Mix	Diesel		222.2871578	1.36%	499.8643827	4625.48168	6715.627	6.733347	1.900993	0	4.347538	14.13048	7.053231	1.991304	0	17.42828	40.4613397	721359.61	940967.1	0	0.193325	20.54074	0	113.6505	148.2498	0	4.162226	442.2365	0	0	0
T7 Single Dump Class 8	Diesel		303.9250287	1.86%	838.3687885	6401.25107	8050.603	10.92432	3.531726	0	5.641579	18.05692	11.46469	3.706421	0	22.65806	51.8009449	992876.12	1357602	0	0.344472	26.66992	0	156.428	213.8908	0	7.416391	574.1961	0	0	0

T7 Single Other Class 8	Diesel		1363.343272	8.36%	3276.349296	28087.5015	37416.2	42.4378	14.67946	0	25.33297	81.26131	44.46993	15.38239	0	101.5907	232.768098	4311421	5746636	0	1.377342	120.1274	0	679.2661	905.3848	0	29.65379	2586.31	0	0	0
T7 SWCV Class 8	Diesel		301.2213994	1.85%	3232.590181	8881.64377	8918.832	9.475356	11.64014	0	5.324231	43.48122	9.890002	12.14951	0	21.26727	124.059099	2198445.2	1012230	0	0.750891	16.56462	0	346.3659	159.4773	0	16.16647	356.6317	0	0	0
T7 Tractor Class 8	Diesel		6320.558182	38.75%	18709.18247	242417.404	204837.3	275.9516	91.69253	0	113.376	352.3048	289.0687	96.05103	0	454.51	1008.8177	18263916	48550342	0	7.090324	1006.956	0	2877.487	7649.126	0	152.6527	21679.49	0	0	0
T7 Utility Class 8	Diesel		44.13378617	0.27%	115.3622533	321.700222	1833.941	0.628764	0.117325	0	0.816244	3.048328	0.657247	0.12264	0	3.265245	8.71022046	146540.61	66797.13	0	0.049939	1.313986	0	23.08753	10.52391	0	1.075181	28.28976	0	0	0
Total					53641.54845	1199758.66	418547.5	792.7185	471.8412	0	293.2872	944.001	830.5698	494.2706	0	1175.913	2703.46166	48421074	2.23E+08	0	21.64214	4924.67	0	7628.76	35163.57	0	465.9493	106026.8	0	0	0

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
0.12	1.84	1.68	0.00	0.01	0.00	271.61	0.00	0.04	284.4862

New Fresno Courthouse Project
On Road Operational Emissions (2033)
EMFAC 2021 with USEPA Adjustment Factors

VMT	16,765,647
Trips	2,432,378
Vehicles	1,216,189

Air Quality Emissions (tons)						
ROG	NOx	CO	SOx	PM10	PM2.5	
4.17	5.22	22.97	0.06	5.94	1.536	

GHG Emissions (metric ton)				
CO2	CH4	NO2	CO2e	
5897.75	0.26	0.36	6012.821	

Vehicle Cat	Fuel	Vehicle Mix	NOx_RUNE	NOx_IDLEX	NOx_STREX	PM2.5_RUN	PM2.5_IDLEX	PM2.5_STR	PM2.5_PM1	PM2.5_PME	PM10_RUN	PM10_IDLE	PM10_STRI	PM10_PMT	PM10_PMB	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STREX	N2O_RUNE	N2O_IDLEX	N2O_STREX	ROG_RUNE	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIURI	TOG_RUNE	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIURI	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
All Other Bu	Diesel	0.01%	4216.837	532.619	385.0717	82.58327	1.8056587	0	6.825773	36.74098	86.29	1.886705	0	27.29445	104.941	2415708.4	96495.12	0	12.11638	0.580674	0	380.5958	15.20285	0	260.8623	12.50174	0	0	0	0	296.9718	14.23228	0	0	0	0	470.5905	771.0451	356.2155	0	22.87531	0.913751	0
All Other Bu	Natural Ga	0.00%	7.421618	11.24472	0	0.171418	0.0406796	0	0.314877	1.694885	0.186433	0.044243	0	1.259509	4.84253	95148.193	8879.042	0	89.80168	26.56914	0	19.39658	1.810051	0	1.283089	0.379621	0	0	0	0	91.6492	27.11576	0	0	0	0	111.2566	360.1752	80.76801	0	0	0	0
LDA	Gasoline	41.49%	160337.3	0	190031.8	4762.089	0	1327.171	13912.94	14283.5	5179.206	0	1443.419	55661.76	40809.99	1.678E+09	0	59284715	8212.591	0	44583.94	23623.28	0	27960.85	26677.37	0	185630.3	62173.46	193506.3	629916.2	38927.56	0	203241.8	62173.46	193506.3	629916.2	282716.8	3737268	0	2078086	16591.39	0	586.0898
LDA	Diesel	0.04%	368.7774	0	0	23.92226	0	0	13.76285	14.36173	25.00392	0	0	55.05141	41.03352	1349719.5	0	0	2.507724	0	0	212.6489	0	0	53.98983	0	0	0	0	0	61.46383	0	0	0	0	0	21.33241	1142.571	0	0	12.78928	0	0
LDA	Electricity	4.35%	0	0	0	0	0	0	1459.105	1120.1	0	0	0	5836.421	3200.284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDA	Plug-in Hyb	1.79%	773.5523	0	4925.066	87.95772	0	56.41171	599.9351	393.1508	95.66204	0	61.35288	2399.741	1123.288	34704690	0	2554669	98.95354	0	1742.185	133.5307	0	846.3747	320.9673	0	7276.551	1835.923	2825.876	14824.68	468.3547	0	7966.907	1835.923	2825.876	14824.68	5366.126	56555.34	0	55919.32	343.0912	0	25.2555
LDT1	Gasoline	3.26%	29027.04	0	21463.5	505.0029	0	142.0154	1091.719	1363.288	549.2367	0	154.4547	4366.877	3895.11	158593425	0	5838729	1436.155	0	5388.372	2866.242	0	2581.103	5844.388	0	25868.49	10342.34	31546.27	100869.3	8528.118	0	28322.74	10342.34	31546.27	100869.3	21562.81	457993.5	0	258547	1567.857	0	57.72178
LDT1	Diesel	0.00%	2.55442	0	0	0.350268	0	0	0.015304	0.018905	0.366106	0	0	0.061215	0.054013	2624.8541	0	0	0.027413	0	0	0.413547	0	0	0.59019	0	0	0	0	0	0.671892	0	0	0	0	0	0.023721	4.613711	0	0	0.024872	0	0
LDT1	Electricity	0.04%	0	0	0	0	0	0	12.39486	9.492905	0	0	0	49.57943	27.12259	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT1	Plug-in Hyb	0.03%	12.37495	0	82.78156	0.990831	0	0.648461	10.08384	6.648084	1.077619	0	0.705261	40.33535	18.99453	555791.09	0	46953.41	1.592909	0	29.50331	2.16243	0	14.43703	5.134695	0	122.3058	18.04115	16.96802	123.6211	7.492535	0	133.9095	18.04115	16.96802	123.6211	86.99206	907.7534	0	939.9038	5.494561	0	0.464182
LDT2	Gasoline	22.17%	123520.4	0	128026.2	2674.858	0	725.1844	7433.786	9052.781	2909.152	0	788.7042	29735.14	25865.09	1.091E+09	0	39414262	5901.524	0	29825.31	14868.27	0	17269.12	20218.91	0	127639.9	34723.11	110976.3	362388.1	29503.38	0	139749.6	34723.11	110976.3	362388.1	150927	2353472	0	1371150	10788.3	0	389.6501
LDT2	Diesel	0.07%	349.4831	0	0	45.97554	0	0	24.90504	29.98273	48.05435	0	0	99.62018	85.66496	3179533.2	0	0	5.82661	0	0	500.9368	0	0	125.4435	0	0	0	0	0	142.8091	0	0	0	0	0	38.60281	1300.737	0	0	30.12769	0	0
LDT2	Electricity	0.50%	0	0	0	0	0	0	169.2784	129.7854	0	0	0	677.1136	370.8155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT2	Plug-in Hyb	0.41%	173.8827	0	1136.119	16.61308	0	10.65655	138.3936	91.03376	18.06824	0	11.58997	553.5742	260.0964	78040270.2	0	692649.9	22.27783	0	403.0264	30.10706	0	196.3292	72.14852	0	1678.561	289.0503	320.8216	2072.925	105.279	0	1837.813	289.0503	320.8216	2072.925	1222.022	12728.73	0	12899.52	77.15316	0	6.847549
LHD1	Gasoline	1.34%	17735.91	528.8436	17964.61	340.9568	0	6.35891	536.8799	7328.41	371.0035	0	6.919286	2148.573	20948.58	199428880	2056278	911167.6	717.5909	1739.006	883.2572	1105.996	49.28756	1604.219	2859.603	5850.55	3946.485	1144.712	7094.267	40209.08	4020.822	8226.323	4163.605	1103.04	6836.006	38745.3	10098.04	156012.4	61372.82	103451.8	1762.514	18.17298	8.052722
LHD1	Diesel	1.09%	189363.3	23116.02	0	6198.545	387.91611	0	615.297	5599.203	6636.83	415.3448	0	2521.215	16387.9	126840788	1870440	0	1290.265	73.44243	0	19983.82	294.6885	0	27778.65	1581.172	0	0	0	0	29093.75	1656.028	0	0	0	0	35148.76	71112.56	12056.93	0	1081.528	15.94859	0
LHD1	Electricity	0.25%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LHD2	Gasoline	0.19%	2764.909	77.42293	2828.213	41.93601	0	0.713122	75.1313	1196.466	45.60632	0	0.775535	300.506	3418.256	32618268	341206.7	125967.1	85.22849	248.5221	129.7276	189.6859	6.669691	231.3973	323.9861	861.2437	592.6592	186.5341	1170.991	6999.047	458.3639	1218.457	629.1282	180.854	1135.334	6785.921	1433.637	19897.28	8729.369	13947.73	291.1323	3.045419	1.124311
LHD2	Diesel	0.46%	77379.96	9487.942	0	2627.517	165.91188	0	260.063	2761.002	2803.076	176.9974	0	1061.749	8051.599	62362380	1253696	0	559.7453	31.2669	0	9825.218	197.5203	0	12050.99	673.158	0	0	0	0	12428.42	694.2408	0	0	0	0	15008.14	29838.49	5054.512	0	532.6045	10.70716	0
LHD2	Electricity	0.06%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCY	Gasoline	1.95%	169518.1	0	5130.88	554.1277	0	139.1172	327.662	1376.18	593.8527	0	148.8056	1310.648	3931.943	60371804	0	2093704	45569.37	0	7611.702	12180.87	0	310.7939	285447.5	0	55100.54	172228	189624.3	120418	348747.2	0	59938.5	172228	189624.3	120418	2946.453	3583906	0	375540.5	596.8367	0	20.6984
MDV	Gasoline	15.25%	114128.4	0	108922.6	1981.993	0	559.9866	5114.572	6399.658	2155.598	0	609.0365	20458.29	18284.74	927218108	0	34232572	4980.221	0	25089.42	11825.57	0	12890.19	18498.67	0	116434.3	33747.81	111871.3	355995.5	26993.21	0	127480.9	33747.81	111871.3	355995.5	101528.6	1809828	0	1071457	9166.495	0	338.4238
MDV	Diesel	0.21%	1052.225	0	0	99.698	0	0	68.87881	88.13343	104.2059	0	0	275.5152	251.8098	12290844	0	0	11.12541	0	0	1936.427	0	0	239.5236	0	0	0	0	0	272.6817	0	0	0	0	0	106.7621	5499.331	0	0	116.462	0	0
MDV	Electricity	0.49%	0	0	0	0	0	0	165.457	126.9882	0	0	0	661.8278	362.8235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MDV	Plug-in Hyb	0.27%	113.5513	0	736.9089	11.95376	0	7.793622	89.76479	59.02607	13.00081	0	8.476274	359.0592	168.6459	5096479.7	0	552952.5	14.51556	0	260.6338	19.57445	0	126.5992	47.11542	0	1088.748	225.0729	315.3528	1763.515	68.75071	0	1192.042	225.0729	315.3528	1763.515	798.23	8312.429	0	8366.882	50.38389	0	5.466498
MH	Gasoline	0.13%	3867.255	0	1494.348	28.79767	0	0.991581	65.7849	345.7354	31.32009	0	1.078435	263.1396	987.8154	42710525	0	96642.05	126.7017	0	108.2122	342.08	0	167.2167	424.3471	0	413.826	21785.54	548.7119	5172.572	619.2063	0	453.0873	21785.54	548.7119	5172.572	986.7732	6726.492	0	8768.933	422.237	0	0.955405
MH	Diesel	0.08%	53657.61	0	0	1120.923	0	0	56.72086	222.5531	1171.606	0	0	226.8835	635.8659	15377905	0	0	77.64674	0	0	2422.795	0	0	1671.689	0	0	0	0	0	1903.106	0	0	0	0	0	2406.279	5474.075	0	0	145.7135	0	0
Motor Coac	Diesel	0.01%	2152.941	3987.091	397.2408	36.87412	1.6381043	0	4.164829	38.12097	38.26453	1.699872	0	16.53964	108.1346	2213648.7	932682.4	0	0.781267	18.42789	0	348.7613	146.9445	0	16.82047	396.7475	0	0	0	0	19.14882	451.6668	0	0	0	0	301.2107	70.28644	5850.716	0	20.96193	8.831944	0
OBUS	Gasoline	0.03%	1688.986	20.67064	279.9869	5.896072	0	0.209681	16.06211	84.11352	6.410515	0	0.227976	64.22838	240.2493	8347542.1	134593.3	22519.87	45.81472	65.78945	23.97832	91.66564	1.71779	21.36089	206.8024	241.7765	122.5523	27.02175	152.5313	1480.941	290.4738	339.5983	129.1585	26.01062	146.8237	1425.526	193.4812	4281.634	1800.845	2479.761	70.54166	1.137393	0.190306
OBUS	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTO	Diesel	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTO	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBUS	Gasoline	0.04%	1623.49	441.3358	938.4752	6.095145	0	0.593807	13.98781	109.9511	6.621647	0	0.6451	55.88895	313.7963	5454679	1267328	53653.02	23.34678	1287.506	71.34106	128.5992	41.33929	86.7636	101.9726	5268.563	377.3132	153.4703	514.4551	1664.93	141.1576	7293.114	391.8979	145.5898	488.0387	1579.439	291.3581	2340.077	38626.29	7800.95	51.32101	11.92381	0.504801
SBUS	Diesel	0.10%	36567.69	18524.56	1813.14	209.8501	10.333678	0	53.48191	280.2629	224.4583	11.05303	0	218.9211	819.4422	19433433	2772945	0	28.4046	9.587415	0	3061.745	436.8786	0	611.5432	206.4144	0	0	0	0	678.9013	229.1498	0	0	0	0	3090.72	2200.206	6976.089	0	168.9276	24.10418	0
SBUS	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBUS	Natural Ga	0.02%	1444.909	1640.984	0	15.96344	4.9670779	0	14.17568	74.28523	17.35648	5.400525	0	56.68564	212.1797	5264423.5	1385284	0	12686.59	4524.84	0	1073.187	282.3992	0	181.2664	64.65104	0	0	0	0	11704.22	4174.464	0	0	0	0	4383.694	35260.86	8343.624	0	0	0	0
T6 CAIRP C	Diesel	0.00%	102.4799	61.72463	28.46286	2.186275	0.0234135	0	1.129163	5.574239	2.296324	0.024592	0	4.53878	16.00442	375294.49	13939.41	0	0.101369	0.059539	0	59.1278	2.19616	0	2.182445	1.281867	0	0	0	0	1.939653	1.139262	0	0	0	0	60.90417	8.264386	42.01005	0	2.782267	0.103341	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.00%	127.4464	77.58033	35.77424	2.687797	0.0247289	0	1.417497	6.997631	2.820502	0.02595	0	5.692542	20.07276	472181.34	17582.48	0	0.121591	0.075059	0	74.39236	2.770126	0	2.61783	1.61601	0	0	0	0	2.318002	1.430924	0	0	0	0	77.07324	10.21342	53.07653	0	3.527373	0.131348	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.01%	528.6888	334.7308	157.6209	11.22385	0.1172649	0	6.070885	29.9698	11.76299	0.122898	0	24.34905	85.85843	1991242.2	73633.75	0	0.515332	0.321576	0	313.721	11.60103	0	11.09496	6.923437	0	0	0	0	9.581813	5.979209	0	0	0	0	320.7129	41.7462	221.1276	0	14.53306	0.537415	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.01%	801.4468	478.8335	214.0784	17.05708	0.1446087	0	8.770044	43.29429	17.83907	0.151238	0	35.10133	123.7726	2631917.1	106936.3	0	0.785421	0.474194	0	414.6596	16.84786	0	16.90989	10.20928	0	0	0	0	16.88019	10.19135	0	0	0	0	550.2259	76.05974	378.8549	0	22.23067	0.903245	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.04%	4929.628	4617.096	1608.967	32.31148	2.927163	0	22.43463	124.4899	34.29731	3.107063	0	91.13311	361.2131	8058530.5	1002916	0	4.008332	4.066884	0	1269.625	158.0099	0	86.29829	87.55889	0	0	0	0	87.4947	88.77278	0	0	0	0	1349.197	458.9709	3161.752	0	64.89137	8.075992	0
T6 Instate [	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.05%	5606.659	5904.437	2091.929	27.99759	2.5577474	0	28.88736	160.2962	29.51968	2.6968	0	116.5609	461.9982	10289567	1275706	0	3.723818	5.199511	0	1621.125	200.988	0	80.17277	111.9441	0	0	0	0	79.20069	110.5867	0	0	0	0	1728.767	502.7944	4028.246	0	83.08081	10.3004	0
T6 Instate [	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.11%	14052.42	13599.09	4787.351	83.16262	7.4684583	0	66.13212	366.9676	87.72602	7.878276	0	266.9727	1058.167	23471663	2919810	0	10.51361	12.04211	0	3697.97	460.0173	0	226.3551	259.2634	0	0	0	0	224.0709	256.6471	0	0	0	0	3947.82	1272.428	9234.087	0	189.2456	23.54163	0
T6 Instate [	Electricity	0.02%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.05%	8890.522	5952.404	1996.035	27.75457	1.93728	0	27.49571	152.5739	29.14835	2.034567	0	110.5093	438.0119	10252923	1317121	0	4.343158	5.058264	0	1615.352	207.513	0	93.507	108.903	0	0	0	0	100.2759	116.7864	0	0	0	0	1844.393	740.2788	4262.326	0	90.36972	11.60916	0
T6 Instate [	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Natural Ga	0.00%	12.03467	69.29789	0	0.367114	0.2696091	0	0.597796	3.317175	0.398738	0.292834	0	2.387998	9.465013	208020.76	64171.81	0	173.2914	165.0507	0	42.40639	13.08184	0	2.475992	2.358249	0	0	0	0	162.7867	155.0456	0	0	0	0	193.9708	697.7044	493.833	0	0	0	0
T6 Instate [	Diesel	0.07%	8076.267	10149.88	3705.492	90.27205	10.112453	0	45.78276	239.6316	96.0107	10.75531	0	186.347	696.6852	15835319	2196535	0	7.544527	9.270482	0	2494.861	346.065	0	162.4316	199.5909	0	0	0	0	162.8408	200.0937	0	0	0	0	2698.036	743.8136	6839.73	0	125.4177	17.39683	0
T6 Instate [	Electricity	0.02%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.19%	17528.36	26405.01	10060.3	149.8175	10.637033	0	121.291	634.8496	157.4442	11.17853	0	487.8059	1823.733	41173292	5687729	0	12.22186	23.55282	0	6486.869	896.104	0	263.1333	507.0857	0	0	0	0	250.6151	482.9618	0	0	0	0	7063.22	1523.22	17661.19	0	326.7126	45.13247	0
T6 Instate [	Electricity	0.04%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.17%	17327.67	23363.66	8635.929	177.8648	18.055865	0	105.3	551.151	187.8764	19.07219	0	425.6619	1591.399	35992924	4983054	0	15.09528	21.0441	0	5670.7	785.0821	0	324.9972	453.0738	0	0	0	0	318.5284	444.0557	0	0	0	0	6167.268	1573.312	15554.48	0	285.7849	39.56559	0
T6 Instate [	Electricity	0.04%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.12%	18705.44	16340.35	5846.863	124.7645	9.177903	0	71.47801	374.1232	131.6944	9.687679	0	288.7373	1079.486	24871402	3677464	0	10.53207	14.03629	0	3918.499	579.3859	0	226.7527	302.1975	0	0	0	0	234.6606	312.7366	0	0	0	0	4437.659	1369.314	10994.53	0	205.2935	30.35452	0
T6 Instate [	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Natural Ga	0.00%	18.77599	135.363	0	0.540365	0.5510923	0	1.138098	5.956922	0.587092	0.598746	0	4.547708	17.00227	328809.48	126452.3	0	256.8556	329.5333	0	67.02996	25.77812	0	3.66996	4.708381	0	0	0	0	227.8275	292.2917	0	0	0	0	339.8365	856.917	928.7717	0	0	0	0
T6 Instate T	Diesel	0.00%	195.5521	219.71	83.851	2.121346	0.1986499	0	1.013852	5.306607	2.24313	0.210054	0	4.102719	15.33861	339722.65	47868.58	0	0.164764	0.203119	0	53.52344	7.541714	0	3.547316	4.373089	0	0	0	0	3.472445	4.280788	0	0	0	0	58.44377	16.55006	147.8099	0	2.657834	0.374502	0
T6 Instate T	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate T	Diesel	0.15%	17917.36	18497.79	6583.581	121.5208	7.3820315	0	80.39435	420.7923	127.57	7.749501	0	322.9814	1207.513	26456462	4047311	0

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New Fresno Courthouse Project

On Road Operational Emissions - Mitigated (2033)

EMFAC 2021 with USEPA Adjustment Factors

VMT	12,021,482
Trips	1,744,090
Vehicles	872,045

Air Quality Emissions (tons)						
ROG	NOx	CO	SOx	PM10	PM2.5	
2.99	3.74	16.47	0.04	5.82	1.492	

GHG Emissions (metric ton)				
CO2	CH4	NO2	CO2e	
4228.87	0.19	0.26	4311.38	

Vehicle Cat	Fuel	Vehicle Mix	NOx_RUNE	NOx_IDLEX	NOx_STREX	PM2.5_RUN	PM2.5_IDLEX	PM2.5_STR	PM2.5_PM1	PM2.5_PME	PM10_RUN	PM10_IDLE	PM10_STRI	PM10_PMT	PM10_PMB	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STREX	N2O_RUNE	N2O_IDLEX	N2O_STREX	ROG_RUNE	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIURN	TOG_RUNE	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIURN	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
All Other Bu	Diesel	0.01%	3023.601	381.9042	276.1083	59.21473	1.2947129	0	4.894288	26.3444	61.87257	1.352826	0	19.57096	75.2459	1732136.9	69189.97	0	8.687813	0.416361	0	272.8989	10.90091	0	187.0462	8.964135	0	0	0	0	212.9379	10.20499	0	0	0	0	337.4278	552.8629	255.4175	0	16.4023	0.655188	0
All Other Bu	Natural Ga	0.00%	5.321528	8.062809	0	0.122912	0.0291685	0	0.225777	1.215285	0.133678	0.031723	0	0.903107	3.472242	68224.166	6366.547	0	64.39055	19.05089	0	13.90794	1.297862	0	0.920014	0.2722	0	0	0	0	65.71528	19.44283	0	0	0	0	79.77442	258.2566	57.91316	0	0	0	0
LDA	Gasoline	41.49%	114966.7	0	136258.7	3414.563	0	951.6222	9976.004	10241.7	3713.649	0	1034.976	39904.01	29262.01	1.203E+09	0	42508968	5888.679	0	31968.06	16938.61	0	20048.79	19128.49	0	133102.7	44580.28	138750	451669.3	27912.25	0	145730.7	44580.28	138750	451669.3	202716.6	2679736	0	1490052	11896.53	0	420.2444
LDA	Diesel	0.04%	264.4247	0	0	17.153	0	0	9.868387	10.2978	17.92858	0	0	39.47355	29.42229	967790.17	0	0	1.798115	0	0	152.4757	0	0	38.71236	0	0	0	0	0	44.07145	0	0	0	0	0	15.29599	819.2587	0	0	9.170304	0	0
LDA	Electricity	4.35%	0	0	0	0	0	0	1046.223	803.1456	0	0	0	4184.893	2294.702	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDA	Plug-in Hyb	1.79%	554.6607	0	3531.424	63.06838	0	40.44893	430.1719	281.9011	68.59261	0	43.99191	1720.687	805.4318	24884325	0	1831776	70.95272	0	1249.2	95.74559	0	606.8768	230.1434	0	5217.511	1316.413	2026.24	10629.75	335.8247	0	5712.518	1316.413	2026.24	10629.75	3847.676	40551.91	0	40095.88	246.0069	0	18.10897
LDT1	Gasoline	3.26%	20813.27	0	15389.99	362.1025	0	101.8294	782.7961	977.5195	393.8195	0	110.7488	3131.184	2792.913	113716339	0	4186548	1029.767	0	3863.629	2055.183	0	1850.73	4190.605	0	18548.51	7415.778	22619.65	72326.39	6114.922	0	20308.28	7415.778	22619.65	72326.39	15461.2	328395.3	0	185386.2	1124.202	0	41.38829
LDT1	Diesel	0.00%	1.831597	0	0	0.251153	0	0	0.010973	0.013555	0.262509	0	0	0.043893	0.038729	1882.1007	0	0	0.019656	0	0	0.296526	0	0	0.423184	0	0	0	0	0	0.481767	0	0	0	0	0	0.017099	3.308172	0	0	0.017834	0	0
LDT1	Electricity	0.04%	0	0	0	0	0	0	8.887492	6.806703	0	0	0	35.54987	19.44772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT1	Plug-in Hyb	0.03%	8.87322	0	59.35693	0.710456	0	0.464967	7.23042	4.76688	0.772686	0	0.505694	28.92168	13.61966	398519.22	0	33667.04	1.142165	0	21.15478	1.550528	0	10.3518	3.681734	0	87.69703	12.93606	12.1666	88.64016	5.372377	0	96.01721	12.93606	12.1666	88.64016	62.37597	650.887	0	673.94	3.939768	0	0.332833
LDT2	Gasoline	22.17%	88567.88	0	91798.76	1917.955	0	519.9796	5330.252	6491.121	2085.951	0	565.5253	21321.01	18546.06	782472738	0	28261241	4231.573	0	21385.66	10661	0	12382.49	14497.57	0	91521.72	24897.54	79573.43	259843.4	21154.83	0	100204.8	24897.54	79573.43	259843.4	108219.3	1687512	0	983157.2	7735.54	0	279.3911
LDT2	Diesel	0.07%	250.5901	0	0	32.96587	0	0	17.85768	21.49854	34.45644	0	0	71.43072	61.4244	2279822.6	0	0	4.177858	0	0	359.187	0	0	89.94682	0	0	0	0	0	102.3985	0	0	0	0	0	27.67939	932.6684	0	0	21.60248	0	0
LDT2	Electricity	0.50%	0	0	0	0	0	0	121.3778	93.06011	0	0	0	485.5112	265.886	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT2	Plug-in Hyb	0.41%	124.6792	0	814.632	11.91208	0	7.641074	99.23242	65.27399	12.95548	0	8.310366	396.9297	186.4971	5595900.6	0	496651.3	15.97389	0	288.9824	21.58769	0	140.7741	51.7327	0	1203.58	207.258	230.039	1486.351	75.48823	0	1317.769	207.258	230.039	1486.351	876.2269	9126.888	0	9249.352	55.32117	0	4.909904
LHD1	Gasoline	1.34%	12717.19	379.1972	12881.18	244.4765	0	4.559534	384.9593	5254.695	266.0209	0	4.961341	1540.592	15020.78	142996610	1474414	653335.3	514.5347	1246.921	633.3226	793.0326	35.3407	1150.275	2050.423	4195.025	2829.751	820.7941	5086.808	28831.15	2883.052	5898.527	2985.433	790.9138	4901.627	27781.57	7240.601	111865.7	44006.2	74178.15	1263.776	13.03059	5.77405
LHD1	Diesel	1.09%	135779.3	16574.9	0	4444.546	278.14781	0	441.1868	4014.8	4758.81	297.815	0	1807.788	11750.62	90948727	1341163	0	925.1596	52.66048	0	14329.01	211.3008	0	19918.14	1133.749	0	0	0	0	20861.11	1187.423	0	0	0	0	25202.74	50989.88	8645.193	0	775.4883	11.43563	0
LHD1	Electricity	0.25%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LHD2	Gasoline	0.19%	1982.524	55.51463	2027.916	30.0694	0	0.51133	53.87144	857.9027	32.70113	0	0.556083	215.472	2450.994	23388296	244655.7	90322.29	61.11143	178.198	93.01867	136.0106	4.782374	165.919	232.3079	617.5383	424.9549	133.7507	839.6369	5018.532	328.6609	873.671	451.1043	129.6779	814.0694	4865.715	1027.961	14266.96	6259.227	10000.95	208.7507	2.183659	0.806166
LHD2	Diesel	0.46%	55483.8	6803.147	0	1884.01	118.96394	0	186.4731	1979.723	2009.891	126.9126	0	761.3067	5773.243	44715735	898938.7	0	401.3545	22.41933	0	7044.982	141.6282	0	8640.927	482.675	0	0	0	0	8911.554	497.7921	0	0	0	0	10761.29	21395.11	3624.241	0	381.8938	7.677366	0
LHD2	Electricity	0.06%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCY	Gasoline	1.95%	121549.7	0	3678.999	397.3265	0	99.75134	234.9437	986.7633	425.8106	0	106.6982	939.7746	2819.324	43288431	0	1501251	32674.63	0	5457.825	8734.053	0	222.8488	204674.6	0	39508.79	123492.8	135966.5	86343.43	250062.4	0	42977.75	123492.8	135966.5	86343.43	2112.697	2569770	0	269274.1	427.9502	0	14.84139
MDV	Gasoline	15.25%	81833.58	0	78100.85	1421.149	0	401.5277	3667.304	4588.751	1545.63	0	436.698	14669.22	13110.72	664843761	0	24545809	3570.971	0	17989.88	8479.299	0	9242.665	13264.11	0	83486.97	24198.22	80215.15	255259.7	19354.96	0	91407.73	24198.22	80215.15	255259.7	72799.1	1297702	0	768267.9	6572.657	0	242.6603
MDV	Diesel	0.21%	754.4779	0	0	71.48652	0	0	49.38821	63.19437	74.71882	0	0	197.5529	180.5553	8812911.3	0	0	7.977261	0	0	1388.478	0	0	171.7457	0	0	0	0	0	195.5211	0	0	0	0	0	76.5517	3943.189	0	0	83.50681	0	0
MDV	Electricity	0.49%	0	0	0	0	0	0	118.6377	91.05444	0	0	0	474.5508	260.1555	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MDV	Plug-in Hyb	0.27%	81.41973	0	528.3864	8.571213	0	5.588267	64.3641	42.3235	9.321976	0	6.07775	257.4564	120.9243	3654331.9	0	396484	10.4081	0	186.8825	14.03548	0	90.77556	33.7832	0	780.6657	161.3842	226.1177	1264.494	49.29637	0	854.7307	161.3842	226.1177	1264.494	572.3553	5960.266	0	5999.312	36.12679	0	3.919648
MH	Gasoline	0.13%	2772.94	0	1071.493	20.64881	0	0.710994	47.16979	247.9029	22.45747	0	0.773271	188.6791	708.2939	30624754	0	69295.33	90.84903	0	77.5915	245.2818	0	119.8995	304.2698	0	296.726	15620.91	393.4433	3708.893	443.9898	0	324.8776	15620.91	393.4433	3708.893	707.5466	4823.101	0	6287.595	302.7569	0	0.685055
MH	Diesel	0.08%	38474.15	0	0	803.7358	0	0	40.6706	159.5774	840.0772	0	0	162.6824	455.9353	11026428	0	0	55.67509	0	0	1737.218	0	0	1198.652	0	0	0	0	0	1364.586	0	0	0	0	0	1725.376	3925.079	0	0	104.481	0	0
Motor Coac	Diesel	0.01%	1543.724	2858.867	284.8339	26.43987	1.1745713	0	2.98631	27.33391	27.43684	1.218861	0	11.85943	77.53584	1587253.9	668762	0	0.560192	13.21337	0	250.0725	105.3637	0	12.06079	284.4802	0	0	0	0	13.73029	323.859	0	0	0	0	215.9773	50.39753	4195.143	0	15.03035	6.332776	0
OBUS	Gasoline	0.03%	1211.055	14.82148	200.7592	4.227664	0	0.150348	11.51702	60.31197	4.596536	0	0.163466	46.05371	172.2661	5985443.2	96507.58	16147.44	32.85055	47.17306	17.19319	65.72707	1.231708	15.31642	148.2837	173.3612	87.8738	19.37543	109.3696	1061.881	208.2786	243.5024	92.61064	18.65042	105.2771	1022.146	138.7319	3070.063	1291.261	1778.065	50.58053	0.815546	0.136455
OBUS	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTO	Diesel	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTO	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBUS	Gasoline	0.04%	1164.092	316.4514	672.9157	4.370406	0	0.425778	10.02969	78.83832	4.747923	0	0.462557	40.07408	225.0016	3911171.8	908713	38470.87	16.74035	923.1812	51.15374	92.20959	29.64155	62.21217	73.11749	3777.722	270.5452	110.0429	368.8802	1193.806	101.2144	5229.388	281.0029	104.3924	349.9388	1132.506	208.9127	1677.907	27696.24	5593.521	36.79874	8.549737	0.361958
SBUS	Diesel	0.10%	26220.15	13282.68	1300.077	150.4689	7.4095654	0	38.34817	200.9571	160.9435	7.925366	0	156.9731	587.5651	13934366	1988287	0	20.36697	6.874472	0	2195.365	313.2554	0	438.4952	148.0055	0	0	0	0	486.793	164.3075	0	0	0	0	2216.141	1577.615	5002.071	0	121.1262	17.28344	0
SBUS	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBUS	Natural Ga	0.02%	1036.044	1176.636	0	11.44628	3.5615479	0	10.16439	53.26478	12.44512	3.872343	0	40.64534	152.1393	3774752.8	993291.4	0	9096.676	3244.45	0	769.508	202.4889	0	129.9736	46.35678	0	0	0	0	8392.284	2993.219	0	0	0	0	3143.243	25283.12	5982.635	0	0	0	0
T6 CAIRP C	Diesel	0.00%	73.48125	44.25847	20.40875	1.567626	0.0167882	0	0.809645	3.9969	1.646534	0.017633	0	3.254444	11.47566	2690976.64	9994.986	0	0.072685	0.042692	0	42.39644	1.574714	0	1.56488	0.919138	0	0	0	0	1.390791	0.816886	0	0	0	0	43.67016	5.925818	30.1225	0	1.994971	0.074098	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.00%	91.38299	55.62749	25.65123	1.927233	0.0177314	0	1.016389	5.017516	2.022386	0.018607	0	4.081727	14.39278	3385868.47	12607.18	0	0.087185	0.05382	0	53.3416	1.986266	0	1.977064	1.158729	0	0	0	0	1.662078	1.026016	0	0	0	0	55.26387	7.323332	38.05751	0	2.529234	0.09418	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.01%	379.0861	240.0123	113.0191	8.047843	0.0840826	0	4.35301	21.48912	8.434424	0.088122	0	17.45902	61.56312	14277181.6	52797.67	0	0.369509	0.23058	0	224.9476	8.318294	0	7.955425	4.964318	0	0	0	0	6.870453	4.287277	0	0	0	0	229.961	29.9333	158.5553	0	10.42061	0.385343	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.01%	574.6619	343.3384	153.5008	12.23045	0.1036889	0	6.28839	31.04333	12.79116	0.108443	0	25.16873	88.74873	1887165.1	76676.63	0	0.563171	0.340012	0	297.3236	12.08044	0	12.12491	7.320366	0	0	0	0	12.10361	7.307509	0	0	0	0	394.5288	54.53716	271.6506	0	15.94007	0.647655	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.04%	3534.694	3310.6	1153.679	23.16832	2.0988661	0	16.08631	89.26307	24.59222	2.22786	0	65.34523	259.0008	5778213	719122	0	2.874097	2.916081	0	910.3598	113.298	0	61.87851	62.78242	0	0	0	0	62.73638	63.65282	0	0	0	0	967.4153	329.0962	2267.073	0	46.5291	5.790735	0
T6 Instate [	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.05%	4020.146	4233.663	1499.977	20.07513	1.8339837	0	20.71312	114.9373	21.16652	1.933689	0	83.57776	331.2669	7377934.3	914720.6	0	2.670091	3.72821	0	1162.397	144.1146	0	57.48633	80.26734	0	0	0	0	56.78932	79.29411	0	0	0	0	1239.579	360.5189	2888.377	0	59.57148	7.385707	0
T6 Instate [	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.11%	10076.01	9750.968	3432.678	59.63015	5.3551148	0	47.41875	263.127	62.90224	5.648967	0	191.4276	758.7379	16829901	2093594	0	7.53858	8.634566	0	2651.558	329.8466	0	162.3036	185.8998	0	0	0	0	160.6657	184.0238	0	0	0	0	2830.707	912.3699	6621.125	0	135.6949	16.88007	0
T6 Instate [	Electricity	0.02%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.05%	6374.776	4268.057	1431.219	19.90087	1.3890895	0	19.71527	109.4002	20.90026	1.458847	0	79.23852	314.0679	7351659.7	944416.5	0	3.114177	3.626931	0	1158.257	148.7932	0	67.04738	78.08683	0	0	0	0	71.90087	83.73945	0	0	0	0	1322.486	530.8026	3056.219	0	64.79785	8.324129	0
T6 Instate [	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Natural Ga	0.00%	8.629224	49.68872	0	0.263232	0.193318	0	0.428638	2.378516	0.285907	0.209971	0	1.712268	6.786704	149157.25	46013.16	0	124.2552	118.3465	0	30.40668	9.380085	0	1.775362	1.690937	0	0	0	0	116.723	111.1724	0	0	0	0	139.083	500.2754	354.0935	0	0	0	0
T6 Instate [	Diesel	0.07%	5790.931	7277.78	2656.952	64.72782	7.2509405	0	32.82764	171.8232	68.84261	7.711888	0	133.6165	499.5446	11354409	1574983	0	5.409657	6.647221	0	1788.892	248.1393	0	116.4684	143.1129	0	0	0	0	116.7618	143.4734	0	0	0	0	1934.574	533.3371	4904.297	0	89.92834	12.47406	0
T6 Instate [	Electricity	0.02%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.19%	12568.37	18933.21	7213.545	107.4237	7.6270805	0	86.96937	455.2066	112.8923	8.015353	0	349.7718	1307.672	29522510	4078277	0	8.763448	16.8881	0	4651.283	642.5342	0	188.6746	363.5961	0	0	0	0	179.6987	346.2985	0	0	0	0	5064.545	1092.196	12663.62	0	234.2629	32.36137	0
T6 Instate [	Electricity	0.04%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.17%	12424.47	16752.47	6192.227	127.5345	12.946611	0	75.50332	395.1921	134.7131	13.67535	0	305.2126	1141.082	25808028	3573003	0	10.82378	15.08927	0	4066.065	562.9281	0	233.0329	324.8679	0	0	0	0	228.3946	318.4016	0	0	0	0	4422.12	1128.113	11153.04	0	204.9165	28.36975	0
T6 Instate [	Electricity	0.04%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.12%	13412.37	11716.54	4192.381	89.45997	6.5808394	0	51.25192	268.2578	94.42892	6.946365	0	207.0335	774.0246	17833556	2636855	0	7.551819	10.06445	0	2809.684	415.4375	0	162.5886	216.6849	0	0	0	0	168.2588	224.2418	0	0	0	0	3181.937	981.8399	7883.415	0	147.2017	21.76513	0
T6 Instate [	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Natural Ga	0.00%	13.46296	97.05945	0	0.387458	0.3951501	0	0.816051	4.271296	0.420963	0.42932	0	3.260846	12.19115	235766.46	90670.17	0	184.1733	236.2856	0	48.06253	18.48371	0	2.631473	3.376055	0	0	0	0	163.3593	209.5822	0	0	0	0	243.6732	614.4357	665.9579	0	0	0	0
T6 Instate T	Diesel	0.00%	140.2168	157.5389	60.12375	1.52107	0.1424381	0	0.726963	3.805	1.608393	0.150615	0	2.941775	10.99825	243591.54	34323.24	0	0.118141	0.145642	0	38.37795	5.407641	0	2.543534	3.13564	0	0	0	0	2.489849	3.069457	0	0	0	0	41.90597	11.8669	105.9842	0	1.905748	0.268529	0
T6 Instate T	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate T	Diesel	0.15%	12847.29	13263.49	4720.631	87.13416	5.2931441	0	57.64521	301.7209	91.47161	5.556631	0	231.

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New Fresno Courthouse Project (2050) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	New Fresno Courthouse Project (2050)
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70000
Precipitation (days)	25.4000
Location	2200 Fresno St, Fresno, CA 93721, USA
County	Fresno
City	Fresno
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2400
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.43

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Government Office Building	413.000	1000sqft	2.09000	413,000	0.00000	0.00000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-10	Provide End-of-Trip Bicycle Facilities
Transportation	T-42*	Implement Telecommute and/or Alternative Work Schedule Program
Energy	E-15	Require All-Electric Development

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.0492	12.5590	4.58167	21.6841	0.02765	0.36862	0.00000	0.36862	0.36084	0.00000	0.36084	364.221	5,360.22	5,724.44	37.2811	0.39362	1.00442	6,774.77
Mit.	12.5619	12.3153	0.15115	17.9625	0.00107	0.03190	0.00000	0.03190	0.02412	0.00000	0.02412	364.221	73.8637	438.085	36.8133	0.38367	1.00442	1,473.75
% Reduced	4%	2%	97%	17%	96%	91%	—	91%	93%	—	93%	—	99%	92%	1%	3%	—	78%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.85016	9.60648	4.43052	3.72164	0.02658	0.33672	0.00000	0.33672	0.33672	0.00000	0.33672	364.221	5,286.35	5,650.58	37.2780	0.39299	1.00442	6,700.64
Mit.	9.36280	9.36280	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	364.221	0.00000	364.221	36.8102	0.38303	1.00442	1,399.62
% Reduced	5%	3%	100%	100%	100%	100%	—	100%	100%	—	100%	—	100%	94%	1%	3%	—	79%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.4278	11.0625	4.50506	12.5799	0.02711	0.35245	0.00000	0.35245	0.34861	0.00000	0.34861	364.221	5,322.78	5,687.00	37.2795	0.39330	1.00442	6,737.20

Mit.	10.9404	10.8188	0.07454	8.85822	0.00053	0.01573	0.00000	0.01573	0.01189	0.00000	0.01189	364.221	36.4259	400.647	36.8117	0.38335	1.00442	1,436.18
% Reduced	4%	2%	98%	30%	98%	96%	—	96%	97%	—	97%	—	99%	93%	1%	3%	—	79%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.08557	2.01891	0.82217	2.29582	0.00495	0.06432	0.00000	0.06432	0.06362	0.00000	0.06362	60.3010	881.247	941.548	6.17205	0.06512	0.16629	1,115.42
Mit.	1.99663	1.97444	0.01360	1.61662	0.00010	0.00287	0.00000	0.00287	0.00217	0.00000	0.00217	60.3010	6.03073	66.3317	6.09459	0.06347	0.16629	237.776
% Reduced	4%	2%	98%	30%	98%	96%	—	96%	97%	—	97%	—	99%	93%	1%	3%	—	79%

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	12.5619	12.3153	0.15115	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Energy	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	13.0492	12.5590	4.58167	21.6841	0.02765	0.36862	0.00000	0.36862	0.36084	0.00000	0.36084	364.221	5,360.22	5,724.44	37.2811	0.39362	1.00442	6,774.77
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	9.36280	9.36280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	9.85016	9.60648	4.43052	3.72164	0.02658	0.33672	0.00000	0.33672	0.33672	0.00000	0.33672	364.221	5,286.35	5,650.58	37.2780	0.39299	1.00442	6,700.64
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	10.9404	10.8188	0.07454	8.85822	0.00053	0.01573	—	0.01573	0.01189	—	0.01189	—	36.4259	36.4259	0.00153	0.00031	—	36.5573
Energy	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	11.4278	11.0625	4.50506	12.5799	0.02711	0.35245	0.00000	0.35245	0.34861	0.00000	0.34861	364.221	5,322.78	5,687.00	37.2795	0.39330	1.00442	6,737.20
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	1.99663	1.97444	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247
Energy	0.08894	0.04447	0.80857	0.67920	0.00485	0.06145	—	0.06145	0.06145	—	0.06145	—	875.216	875.216	0.07746	0.00165	—	877.644
Water	—	—	—	—	—	—	—	—	—	—	—	26.0296	0.00000	26.0296	2.66904	0.06342	—	111.653
Waste	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629
Total	2.08557	2.01891	0.82217	2.29582	0.00495	0.06432	0.00000	0.06432	0.06362	0.00000	0.06362	60.3010	881.247	941.548	6.17205	0.06512	0.16629	1,115.42

2.5. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	12.5619	12.3153	0.15115	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Water	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	12.5619	12.3153	0.15115	17.9625	0.00107	0.03190	0.00000	0.03190	0.02412	0.00000	0.02412	364.221	73.8637	438.085	36.8133	0.38367	1.00442	1,473.75
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	9.36280	9.36280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	9.36280	9.36280	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	364.221	0.00000	364.221	36.8102	0.38303	1.00442	1,399.62
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	10.9404	10.8188	0.07454	8.85822	0.00053	0.01573	—	0.01573	0.01189	—	0.01189	—	36.4259	36.4259	0.00153	0.00031	—	36.5573
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Water	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Waste	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	10.9404	10.8188	0.07454	8.85822	0.00053	0.01573	0.00000	0.01573	0.01189	0.00000	0.01189	364.221	36.4259	400.647	36.8117	0.38335	1.00442	1,436.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	1.99663	1.97444	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Water	—	—	—	—	—	—	—	—	—	—	—	26.0296	0.00000	26.0296	2.66904	0.06342	—	111.653
Waste	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629
Total	1.99663	1.97444	0.01360	1.61662	0.00010	0.00287	0.00000	0.00287	0.00217	0.00000	0.00217	60.3010	6.03073	66.3317	6.09459	0.06347	0.16629	237.776

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02
Total	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02
Total	0.48736	0.24368	4.43052	3.72164	0.02658	0.33672	—	0.33672	0.33672	—	0.33672	—	5,286.35	5,286.35	0.46784	0.00995	—	5,301.02

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.08894	0.04447	0.80857	0.67920	0.00485	0.06145	—	0.06145	0.06145	—	0.06145	—	875.216	875.216	0.07746	0.00165	—	877.644
Total	0.08894	0.04447	0.80857	0.67920	0.00485	0.06145	—	0.06145	0.06145	—	0.06145	—	875.216	875.216	0.07746	0.00165	—	877.644

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.83820	8.83820	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.52460	0.52460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.19906	2.95252	0.15115	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Total	12.5619	12.3153	0.15115	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.83820	8.83820	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.52460	0.52460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9.36280	9.36280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	1.61297	1.61297	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09574	0.09574	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.28792	0.26573	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247
Total	1.99663	1.97444	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.83820	8.83820	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.52460	0.52460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.19906	2.95252	0.15115	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Total	12.5619	12.3153	0.15115	17.9625	0.00107	0.03190	—	0.03190	0.02412	—	0.02412	—	73.8637	73.8637	0.00310	0.00063	—	74.1300
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer	8.83820	8.83820	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.52460	0.52460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9.36280	9.36280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.61297	1.61297	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09574	0.09574	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.28792	0.26573	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247
Total	1.99663	1.97444	0.01360	1.61662	0.00010	0.00287	—	0.00287	0.00217	—	0.00217	—	6.03073	6.03073	0.00025	0.00005	—	6.05247

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393

Total	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Total	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	26.0296	0.00000	26.0296	2.66904	0.06342	—	111.653
Total	—	—	—	—	—	—	—	—	—	—	—	26.0296	0.00000	26.0296	2.66904	0.06342	—	111.653

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Total	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393

Total	—	—	—	—	—	—	—	—	—	—	—	157.220	0.00000	157.220	16.1211	0.38303	—	674.393
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	26.0296	0.00000	26.0296	2.66904	0.06342	—	111.653
Total	—	—	—	—	—	—	—	—	—	—	—	26.0296	0.00000	26.0296	2.66904	0.06342	—	111.653

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Total	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Total	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904

Total	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Total	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Total	—	—	—	—	—	—	—	—	—	—	—	207.001	0.00000	207.001	20.6890	0.00000	—	724.226
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904
Total	—	—	—	—	—	—	—	—	—	—	—	34.2714	0.00000	34.2714	3.42530	0.00000	—	119.904

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.00442	1.00442
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16629	0.16629

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Government Office Building	Wood Fireplaces	0	0
Government Office Building	Gas Fireplaces	0	0
Government Office Building	Propane Fireplaces	0	0
Government Office Building	Electric Fireplaces	0	0
Government Office Building	No Fireplaces	0	0
Government Office Building	Conventional Wood Stoves	0	0
Government Office Building	Catalytic Wood Stoves	0	0
Government Office Building	Non-Catalytic Wood Stoves	0	0
Government Office Building	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	619,500	206,500	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government Office Building	9,683,355	0.00000	0.0000	0.0000	16,494,843

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government Office Building	9,683,355	0.00000	0.0000	0.0000	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Government Office Building	82,046,450	0.00000

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Government Office Building	82,046,450	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government Office Building	384.090	0.00000

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government Office Building	384.090	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000

Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.14.2. Mitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	0.00000	annual days of extreme heat
Extreme Precipitation	0.00000	annual days with precipitation above 20 mm

Sea Level Rise	0.00000	meters of inundation depth
Wildfire	0.00000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	82.4767
AQ-PM	97.6105
AQ-DPM	94.0635
Drinking Water	84.3887
Lead Risk Housing	39.6723
Pesticides	56.3793
Toxic Releases	79.6949
Traffic	13.5500
Effect Indicators	—

CleanUp Sites	58.1747
Groundwater	74.8298
Haz Waste Facilities/Generators	50.1390
Impaired Water Bodies	0.00000
Solid Waste	0.00000
Sensitive Population	—
Asthma	86.8395
Cardio-vascular	94.9900
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	88.2055
Housing	37.4778
Linguistic	61.0908
Poverty	92.6759
Unemployment	89.6668

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—

Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	54.3
Asthma ER Admissions	21.4
High Blood Pressure	19.3
Cancer (excluding skin)	96.9
Asthma	4.5
Coronary Heart Disease	7.5
Chronic Obstructive Pulmonary Disease	1.5
Diagnosed Diabetes	9.0
Life Expectancy at Birth	0.0

Cognitively Disabled	0.1
Physically Disabled	0.0
Heart Attack ER Admissions	3.5
Mental Health Not Good	0.4
Chronic Kidney Disease	27.1
Obesity	0.8
Pedestrian Injuries	0.0
Physical Health Not Good	1.0
Stroke	5.6
Health Risk Behaviors	—
Binge Drinking	38.6
Current Smoker	0.1
No Leisure Time for Physical Activity	0.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	99.4
Elderly	94.7
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	49.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.8
Traffic Density	0.0
Traffic Access	0.0
Other Indices	—
Hardship	0.0
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	96.0000
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	Central Fresno

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Characteristics: Utility Information	Electricity provided must be net zero by 2045.
Land Use	Project site is approximately 2.09 acres
Construction: Construction Phases	Project specific schedule see methodology.
Operations: Vehicle Data	Mobile emission are calculate using a EMFAC 2021 with EPA approved adjustment factors

8.2. Project Characteristics

8.2.2. Utility Information

Model Parameter	Units	Default Value	New Value
CO2	lb/MWh	203.983	0.00000
CH4	lb/MWh	0.03300	0.00000
N2O	lb/MWh	0.00400	0.00000

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	9.48118	2.09000
Landscape Area	sq. ft	—	0.00000
Special Landscape Area	sq. ft	—	0.00000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Government Office Building	Weekday Trip Rate	size/day	22.5900	0.00000

New Fresno Courthouse Project
On Road Operational Emissions (2050)
EMFAC 2021 with USEPA Adjustment Factors

VMT	16,765,647
Trips	2,432,378
Vehicles	1,216,189

Air Quality Emissions (tons)						GHG Emissions (metric ton)			
ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
3.08	5.47	19.16	0.05	5.94	1.530	5550.90	0.19	0.37	5666.723

Vehicle Cat	Fuel	Vehicle Mix	NOx_RUNE	NOx_IDLEX	NOx_STREX	PM2.5_RUN	PM2.5_IDLEX	PM2.5_STR	PM2.5_PM1	PM2.5_PME	PM10_RUN	PM10_IDLE	PM10_STRI	PM10_PMT	PM10_PMB	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STREX	N2O_RUNE	N2O_IDLEX	N2O_STREX	ROG_RUNE	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIURI	TOG_RUNE	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIURI	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
All Other Bu	Diesel	0.01%	1811.8	320.0045	334.4837	7.930145	0.1374127	0	6.418032	34.54624	8.254562	0.143034	0	25.56636	98.29688	2129488.2	81371.91	0	1.376916	0.357742	0	335.5017	12.82018	0	29.64463	7.702079	0	0	0	0	33.74816	8.768231	0	0	0	0	465.2378	192.5036	320.1822	0	20.16498	0.770543	0
All Other Bu	Natural Ga	0.00%	10.56885	17.7695	0	0.27773	0.066294	0	0.499635	2.689376	0.302057	0.072101	0	1.998539	7.68393	147467.02	13764.55	0	143.1517	41.25547	0	30.06212	2.805993	0	2.045356	0.589459	0	0	0	0	146.0969	42.10424	0	0	0	0	176.5375	573.2844	132.0944	0	0	0	0
LDA	Gasoline	40.29%	128069.1	0	156731.4	2705.671	0	703.5647	13511.11	13922.93	2942.664	0	765.1908	54044.43	39779.8	1.525E+09	0	52095170	6088.405	0	29935.52	20970.61	0	24793.88	17554.06	0	111947.7	35158.83	146063.7	457709.2	25614.84	0	122568.7	35158.83	146063.7	457709.2	283441.1	3267126	0	1541659	15071.63	0	515.0138
LDA	Diesel	0.02%	31.68791	0	0	2.73311	0	0	8.034244	8.284658	2.85669	0	0	32.13698	23.67045	694044.61	0	0	0.590167	0	0	109.347	0	0	12.70596	0	0	0	0	0	14.46489	0	0	0	0	0	12.45307	416.8382	0	0	6.576425	0	0
LDA	Electricity	5.62%	0	0	0	0	0	0	1885.224	1450.155	0	0	0	7540.896	4143.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDA	Plug-in Hyb	1.91%	777.7241	0	5247.291	52.21499	0	34.72314	639.1862	424.0635	56.78857	0	37.76459	2556.745	1211.61	34891128	0	2562639	98.07986	0	1815.539	130.5317	0	863.2537	322.7174	0	7752.622	1845.264	3829.06	21366.8	470.9085	0	8488.145	1845.264	3829.06	21366.8	5463.631	56867.23	0	59577.87	344.9343	0	25.3343
LDT1	Gasoline	2.71%	9231.312	0	11503.95	192.4568	0	51.12466	907.8439	1124.782	209.3143	0	55.60273	3631.376	3213.664	117656116	0	4069139	437.4311	0	2127.924	1464.921	0	1770.785	1279.746	0	8090.035	3290.987	15342.89	47260.41	1867.403	0	8857.57	3290.987	15342.89	47260.41	18972.39	234268.1	0	108458.1	1163.15	0	40.22758
LDT1	Diesel	0.00%	0.13089	0	0	0.019961	0	0	0.010569	0.013049	0.020863	0	0	0.042275	0.037282	1710.6956	0	0	0.002478	0	0	0.269521	0	0	0.053349	0	0	0	0	0	0.060734	0	0	0	0	0	0.016381	0.578914	0	0	0.01621	0	0
LDT1	Electricity	0.08%	0	0	0	0	0	0	28.33021	21.817	0	0	0	113.3208	62.33427	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT1	Plug-in Hyb	0.06%	26.28158	0	177.4609	1.757122	0	1.150614	21.61697	14.36538	1.91103	0	1.251398	86.46788	41.04394	11788863.7	0	99532.58	3.302458	0	61.37474	4.378993	0	29.16374	10.90557	0	262.19	66.00529	145.4899	816.9395	15.91338	0	287.065	66.00529	145.4899	816.9395	184.6931	1920.66	0	2014.895	11.65427	0	0.983981
LDT2	Gasoline	22.87%	82990.05	0	113161	1577.612	0	412.5159	7667.542	9426.204	1715.797	0	448.6487	30670.17	26932.01	1.032E+09	0	36273986	4657.464	0	22167.33	12770.29	0	17027	14035.78	0	86450.74	23120.58	103575	321351.2	20480.98	0	94652.68	23120.58	103575	321351.2	160673.9	2198964	0	1133237	10205.04	0	358.6053
LDT2	Diesel	0.09%	363.1025	0	0	54.46499	0	0	29.13081	35.78631	56.92765	0	0	116.5232	102.2466	3487181.1	0	0	6.806085	0	0	549.4068	0	0	146.531	0	0	0	0	0	166.8158	0	0	0	0	0	45.15273	1573.649	0	0	33.04281	0	0
LDT2	Electricity	0.93%	0	0	0	0	0	0	311.3167	239.687	0	0	0	1245.267	684.8199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT2	Plug-in Hyb	0.63%	257.7487	0	1738.696	17.38253	0	11.44965	211.7951	140.6943	18.90508	0	12.45254	847.1805	401.9838	11561554	0	1024349	32.36319	0	600.9421	42.8803	0	285.3703	106.9531	0	2568.841	635.1683	1381.342	7702.565	156.0657	0	2812.557	635.1683	1381.342	7702.565	1811.304	18837.3	0	19741.2	114.2977	0	10.12674
LHD1	Gasoline	0.78%	3371.007	394.6097	12743.06	302.7322	0	3.362717	522.3926	7130.66	329.2145	0	3.656879	2089.352	20371.18	174405201	1819356	798472.2	268.9983	1397.929	636.0003	342.3868	41.98398	1322.914	705.896	3751.698	2204.073	536.9631	5524.376	30560.02	710.3875	3775.57	1664.297	370.3266	3809.989	21076.29	5894.307	78452.64	35929.68	62720.6	959.1363	10.00549	4.391175
LHD1	Diesel	0.51%	33803.44	10308.59	0	2758.428	307.55855	0	481.969	4385.918	2928.024	326.4681	0	1957.881	12726.22	89477196	1253263	0	627.7917	58.77053	0	14097.17	197.4521	0	13515.98	1265.295	0	0	0	0	8236.992	771.1035	0	0	0	0	18589.82	18131.9	5614.122	0	482.4679	6.757689	0
LHD1	Electricity	1.04%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LHD2	Gasoline	0.09%	488.3018	37.81757	1214.211	32.90482	0	0.364856	56.87736	905.7719	35.78496	0	0.396792	227.4965	2587.773	21539349	229665.3	86338.28	27.18279	132.8049	61.06803	53.19276	4.032644	127.2602	69.91817	351.768	208.9905	63.28414	652.2053	3629.079	72.84566	366.4966	163.3768	45.18501	465.676	2591.17	655.1378	8809.61	3993.495	7031.754	120.4751	1.284577	0.482912
LHD2	Diesel	0.26%	23017.2	5267.94	0	1754.598	148.86635	0	233.9813	2484.101	1876.633	159.2202	0	957.7165	7262.684	51527767	1011830	0	378.7956	28.02659	0	8118.221	159.4142	0	8155.245	603.396	0	0	0	0	5251.472	388.5496	0	0	0	0	9182.787	11741.47	2828.887	0	284.8306	5.593104	0
LHD2	Electricity	0.25%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCY	Gasoline	1.75%	130712.2	0	2355.594	535.7862	0	142.1932	292.7133	1229.396	574.7547	0	152.541	1170.853	3512.559	53113140	0	1471607	34831.35	0	5209.281	10035.88	0	165.6686	203210.5	0	35342.11	152510.7	166623.6	82099.36	254768.7	0	38500.38	152510.7	166623.6	82099.36	2690.639	2626559	0	318841.2	525.0775	0	14.54833
MDV	Gasoline	13.44%	50156.51	0	69907.87	931.2679	0	245.8573	4505.37	5607.745	1012.839	0	267.3922	18021.48	16022.13	732643448	0	25983932	2791.338	0	13310.53	7588.25	0	10246.81	8475.852	0	52596.13	15147.65	67931.8	211996.3	12367.94	0	57586.14	15147.65	67931.8	211996.3	94262.29	1324234	0	679649.9	7242.926	0	256.8776
MDV	Diesel	0.15%	222.7237	0	0	19.80784	0	0	49.97473	62.32389	20.70346	0	0	199.8989	178.0683	7820619.2	0	0	4.115667	0	0	1232.142	0	0	88.60788	0	0	0	0	0	100.8742	0	0	0	0	0	77.4608	2882.745	0	0	74.10434	0	0
MDV	Electricity	0.86%	0	0	0	0	0	0	287.5542	221.673	0	0	0	1150.217	633.3514	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MDV	Plug-in Hyb	0.40%	165.0743	0	1113.423	11.18384	0	7.428906	135.629	90.17951	12.16344	0	8.079613	542.5158	257.6557	7404907.7	0	798399.3	20.65589	0	382.3817	27.27776	0	180.4427	68.49774	0	1645.029	422.4045	950.786	5242.531	99.95175	0	1801.1	422.4045	950.786	5242.531	1160.056	12066.04	0	12641.83	73.20505	0	7.89299
MH	Gasoline	0.10%	3602.088	0	786.5167	22.7547	0	0.835423	49.66956	261.0405	24.74782	0	0.908599	198.6783	745.8301	32242639	0	70058.53	46.81184	0	77.42862	295.656	0	90.56636	132.0112	0	263.5633	6239.599	252.9131	2239.767	192.6304	0	288.5686	6239.599	252.9131	2239.767	745.0432	2388.264	0	4890.843	318.7513	0	0.6926
MH	Diesel	0.06%	26176.5	0	0	182.6488	0	0	42.56309	167.0029	190.9073	0	0	170.2524	477.1511	11601272	0	0	40.63118	0	0	1827.785	0	0	874.7654	0	0	0	0	0	995.8623	0	0	0	0	0	2315.967	2491.889	0	0	109.9279	0	0
Motor Coac	Diesel	0.01%	1906.206	2654.654	289.552	29.29203	1.5362903	0	3.90597	37.27524	29.89361	1.567842	0	15.25499	103.9861	1896454.4	747514	0	0.609522	16.75972	0	298.7872	117.7711	0	13.12284	360.8321	0	0	0	0	14.93935	410.7799	0	0	0	0	273.9302	44.42831	5331.565	0	17.95829	7.07851	0
OBUS	Gasoline	0.01%	1719.356	23.52233	321.6816	5.115465	0	0.159645	13.03741	68.27387	5.560217	0	0.173525	52.11853	194.9519	6083902.6	99439.54	15187.31	5.841049	48.16502	13.54494	86.24805	1.988021	20.09783	15.83952	137.1559	51.05284	10.41858	76.51123	688.907	17.02122	147.3883	41.16409	7.672609	56.34555	507.3352	83.48751	298.5456	780.6079	601.7008	27.92099	0.45636	0.069699
OBUS	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTO	Diesel	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTO	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBUS	Gasoline	0.01%	286.723	124.3889	204.6025	2.194762	0	0.217524	3.728109	29.30478	2.387034	0	0.23658	14.91263	83.72903	1199310.7	281519.8	11936.88	3.423054	342.1204	18.67116	22.97399	13.23642	18.67684	12.86525	1283.345	90.08968	24.19158	160.0466	440.834	10.82686	1080.011	56.88656	13.95194	92.30323	254.241	43.14615	173.2987	5720.027	1046.069	6.643489	1.559457	0.066123
SBUS	Diesel	0.04%	6184.646	8627.972	1742.452	43.70298	2.5773644	0	46.26054	242.4205	45.79632	2.700819	0	185.5173	694.4086	14379589	1849353	0	3.893968	8.000811	0	2265.51	291.3662	0	83.83606	172.2553	0	0	0	0	47.87681	98.37095	0	0	0	0	1572.15	354.3373	3658.833	0	69.03085	8.878027	0
SBUS	Electricity	0.06%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBUS	Natural Ga	0.01%	584.4894	1651.462	0	16.45306	6.4905686	0	14.61046	76.56367	17.91819	7.068545	0	58.52017	219.0465	4560846.8	1357071	0	10651.84	4039.616	0	929.7585	276.6478	0	152.1938	57.71814	0	0	0	0	5091.587	1930.938	0	0	0	0	2378.121	13328.7	5950.495	0	0	0	0
T6 CAIRP C	Diesel	0.00%	118.3702	80.65437	35.07663	2.430591	0.0237456	0	1.440095	7.109188	2.528029	0.024698	0	5.732123	20.21233	451460.31	16540.64	0	0.11414	0.077751	0	71.12776	2.605985	0	2.457404	1.673955	0	0	0	0	1.121098	0.763679	0	0	0	0	41.23987	5.048421	28.40532	0	1.794394	0.065743	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.00%	144.0891	98.06729	42.64576	2.982201	0.029118	0	1.76591	8.717612	3.101892	0.030287	0	7.029305	24.78639	553689.33	20288.56	0	0.140012	0.095322	0	87.23398	3.196471	0	3.014426	2.052259	0	0	0	0	1.376296	0.936999	0	0	0	0	50.59922	6.196994	34.85163	0	2.201883	0.080682	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.01%	690.8688	463.4511	201.6065	13.69417	0.1328006	0	8.053926	39.7591	14.25673	0.138256	0	32.08825	113.148	2528261.6	92616.09	0	0.639224	0.435676	0	398.3286	14.5917	0	13.76282	9.379988	0	0	0	0	6.272514	4.275003	0	0	0	0	230.858	28.24851	159.0122	0	10.0417	0.367851	0
T6 CAIRP C	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.02%	957.1921	621.1157	268.2678	21.06919	0.1919061	0	11.63848	57.45465	21.91892	0.199646	0	46.33634	163.3889	3289647.2	133643.2	0	1.007033	0.631791	0	518.2853	21.05554	0	21.68114	13.60229	0	0	0	0	18.82964	11.81332	0	0	0	0	637.9408	84.79906	439.4057	0	24.5412	0.996996	0
T6 CAIRP C	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.03%	5097.877	6182.177	2201.093	18.07077	1.7067562	0	30.68679	170.2812	18.84604	1.779979	0	122.4755	485.4408	9870098.6	1198882	0	2.724267	5.567377	0	1555.038	188.8843	0	58.65272	119.8641	0	0	0	0	29.64403	60.58125	0	0	0	0	969.8701	227.6604	2253.28	0	43.18735	5.245796	0
T6 Instate [	Electricity	0.03%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.03%	6460.97	7873.237	2799.939	22.91921	2.166435	0	38.95168	216.1431	23.89901	2.25905	0	155.4392	616.0952	12527138	1521445	0	3.456562	7.065818	0	1973.656	239.7042	0	74.41883	152.1251	0	0	0	0	37.58496	76.83024	0	0	0	0	1229.999	288.3791	2857.605	0	54.78292	6.65349	0
T6 Instate [	Electricity	0.04%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.08%	15048.76	18055.16	6424.893	52.98503	4.9760925	0	89.46822	496.4598	55.27685	5.191328	0	357.2013	1415.795	28791428	3497182	0	7.94431	16.24463	0	4536.101	550.9824	0	171.0388	349.7423	0	0	0	0	86.29168	176.4503	0	0	0	0	2824.887	663.0333	6563.08	0	125.7837	15.27845	0
T6 Instate [	Electricity	0.10%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.04%	7145.034	7268.634	2517.958	26.44078	2.0179533	0	36.28193	201.3287	27.71744	2.115388	0	145.5537	576.9134	12033161	1483332	0	3.995249	6.477243	0	1895.829	233.6996	0	86.01661	139.4533	0	0	0	0	58.29267	94.5062	0	0	0	0	1511.8	444.3279	3508.056	0	68.15786	8.401846	0
T6 Instate [	Electricity	0.03%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Natural Ga	0.00%	16.54424	98.331	0	0.545878	0.4004156	0	0.883881	4.904662	0.592649	0.434723	0	3.529311	13.9887	271487.91	83804.41	0	255.453	242.0536	0	55.34459	17.08408	0	3.649919	3.458469	0	0	0	0	151.8409	143.8764	0	0	0	0	180.6784	650.6962	462.3147	0	0	0	0
T6 Instate [	Diesel	0.05%	7897.055	13373.45	5070.425	60.83471	3.7705766	0	63.01267	329.8148	63.39255	3.929113	0	251.2863	939.4701	19634303	2643026	0	5.02301	12.18087	0	3093.392	416.4099	0	108.144	262.2509	0	0	0	0	53.98381	130.9115	0	0	0	0	1949.668	365.2446	4869.14	0	84.2186	11.33689	0
T6 Instate [	Electricity	0.07%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.14%	20464.9	34885.74	13188.02	158.051	9.7932771	0	163.744	857.0531	164.695	10.20496	0	652.9843	2441.276	51024936	6867732	0	13.05931	31.64709	0	8038.999	1082.014	0	281.1634	681.3532	0	0	0	0	140.2131	339.7834	0	0	0	0	5060.377	947.594	12637.48	0	218.6015	29.4228	0
T6 Instate [	Electricity	0.17%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.12%	18176.26	30527.56	11551.48	139.7534	8.600758	0	143.7797	752.5578	145.7159	8.9677	0	573.7149	2144.916	44847040	6036603	0	11.48138	27.82193	0	7065.669	951.0693	0	247.191	598.9986	0	0	0	0	123.3379	298.875	0	0	0	0	4451.145	833.956	11116.17	0	192.2687	25.88019	0
T6 Instate [	Electricity	0.15%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.09%	12555.48	17716.59	6581.581	100.6258	5.1170518	0	85.31488	446.5469	105.6107	5.370547	0	342.6712	1281.126	27157824	3761880	0	8.097022	15.83046	0	4278.726	592.6858	0	174.3267	340.8255	0	0	0	0	114.9041	224.6486	0	0	0	0	3339.882	751.1684	8319.533	0	144.6762	20.04043	0
T6 Instate [	Electricity	0.07%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Natural Ga	0.00%	30.48223	225.104	0	0.928443	0.9474248	0	1.945639	10.18368	1.009606	1.030247	0	7.781322	29.0916	510290.12	194906.3	0	436.4924	556.5115	0	104.026	39.73292	0	6.236615	7.951451	0	0	0	0	247.9505	316.1276	0	0	0	0	369.2993	930.7918	1015.717	0	0	0	0
T6 Instate T	Diesel	0.00%	170.1873	287.8419	109.2455	1.326655	0.082261	0	1.374558	7.194575	1.38363	0.085794	0	5.486295	20.51131	428712.74	57701.07	0	0.107782	0.264917	0	67.54387	9.090827	0	2.32051	5.703584	0	0	0	0	1.149386	2.825076	0	0	0	0	42.07417	7.792803	105.0786	0	1.817156	0.244574	0
T6 Instate T	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate T	Diesel	0.16%	14056.23	21763.58	8024.455	111.6435	6.0235667	0	100.3574	525.2811	116.5985	6.290907	0	401.1097	1499.607	29032054	4343316	0	9.344817	19.56

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New Fresno Courthouse Project
On Road Mitigated Operational Emissions (2050)
EMFAC 2021 with USEPA Adjustment Factors

VMT	12,021,482
Trips	1,744,090
Vehicles	872,045

Air Quality Emissions (tons)						GHG Emissions (metric ton)			
ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
2.21	3.92	13.74	0.04	5.82	1.487	3980.16	0.14	0.27	4063.214

Vehicle Cat	Fuel	Vehicle Mix	NOx_RUNE	NOx_IDLEX	NOx_STREX	PM2.5_RUN	PM2.5_IDLEX	PM2.5_STR	PM2.5_PM1	PM2.5_PME	PM10_RUN	PM10_IDLE	PM10_STRI	PM10_PMT	PM10_PMB	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STREX	N2O_RUNE	N2O_IDLEX	N2O_STREX	ROG_RUNE	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIURI	TOG_RUNE	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIURI	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
All Other Bu	Diesel	0.01%	1299.116	229.4531	239.8351	5.686157	0.0985291	0	4.601925	24.77071	5.918774	0.10256	0	18.33186	70.48187	1526908.2	58346.17	0	0.987291	0.256512	0	240.565	9.192462	0	21.25611	5.522628	0	0	0	0	24.19846	6.287092	0	0	0	0	333.5898	138.031	229.5805	0	14.45891	0.552503	0
All Other Bu	Natural Ga	0.00%	7.578191	12.74128	0	0.199141	0.0475348	0	0.358253	1.928365	0.216584	0.051698	0	1.433013	5.509613	105738.37	9869.605	0	102.6442	29.58144	0	21.55546	2.011984	0	1.466583	0.42266	0	0	0	0	104.7559	30.19003	0	0	0	0	126.5828	411.0625	94.71572	0	0	0	0
LDA	Gasoline	40.29%	91829.44	0	112381.3	1940.049	0	504.4776	9687.877	9983.166	2109.98	0	548.6654	38751.51	28523.33	1.093E+09	0	37353843	4365.573	0	21464.69	15036.57	0	17777.98	12586.8	0	80269.98	25209.97	104732.2	328191.6	80269.98	25209.97	104732.2	328191.6	203236	2342629	0	1105417	10806.82	0	369.2808
LDA	Diesel	0.02%	22.7212	0	0	1.959724	0	0	5.760799	5.940353	2.048334	0	0	23.0432	16.97244	497651.23	0	0	0.423168	0	0	78.40515	0	0	9.11056	0	0	0	0	0	10.37177	0	0	0	0	0	8.929235	298.8858	0	0	4.715498	0	0
LDA	Electricity	5.62%	0	0	0	0	0	0	1351.763	1039.806	0	0	0	5407.054	2970.873	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDA	Plug-in Hyb	1.91%	557.652	0	3762.469	37.43975	0	24.89756	458.316	304.0665	40.71914	0	27.07837	1833.264	868.7614	25018007	0	1837491	70.32626	0	1301.797	93.59522	0	618.9795	231.3982	0	5558.869	1323.111	2745.554	15320.65	337.6558	0	6086.262	1323.111	2745.554	15320.65	3917.591	40775.54	0	42719.17	247.3285	0	18.16547
LDT1	Gasoline	2.71%	6619.133	0	8248.687	137.9974	0	36.65796	650.9519	806.5034	150.0848	0	39.86887	2603.808	2304.295	84363036	0	2917698	313.6515	0	1525.787	1050.393	0	1269.708	917.6172	0	5800.804	2359.739	11001.32	33887.17	1338.985	0	6351.15	2359.739	11001.32	33887.17	13603.79	167977.4	0	77767.81	834.0145	0	28.84442
LDT1	Diesel	0.00%	0.093852	0	0	0.014313	0	0	0.007578	0.009356	0.01496	0	0	0.030312	0.026732	1226.6211	0	0	0.001777	0	0	0.193255	0	0	0.038253	0	0	0.043548	0	0	0	0	0	0	0	0	0.011746	0.415099	0	0	0.011623	0	0
LDT1	Electricity	0.08%	0	0	0	0	0	0	20.31363	15.84345	0	0	0	81.2545	44.69558	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT1	Plug-in Hyb	0.06%	18.8447	0	127.2449	1.25991	0	0.825026	15.50003	10.30042	1.370267	0	0.897291	62.00012	29.42976	8452781.35	0	71367.93	2.367964	0	44.00758	3.139872	0	20.9113	7.819625	0	187.9983	47.32783	104.3208	585.7708	11.41038	0	205.8345	47.32783	104.3208	585.7708	132.4306	1377.172	0	1444.742	8.356467	0	0.705545
LDT2	Gasoline	22.87%	59506.4	0	81139.94	1131.196	0	295.7866	5497.862	6758.877	1230.279	0	321.6949	21991.45	19311.08	740169151	0	26009566	3339.544	0	15894.66	9156.686	0	12208.89	10064.08	0	61987.85	16578.17	74266.44	230418.7	14685.49	0	67868.89	16578.17	74266.44	230418.7	115208.1	1576725	0	812565.8	7317.326	0	257.131
LDT2	Diesel	0.09%	260.3556	0	0	39.05306	0	0	20.88768	25.65988	40.81887	0	0	83.55072	73.31395	2500415.6	0	0	4.880171	0	0	393.9415	0	0	105.0672	0	0	0	0	0	119.612	0	0	0	0	0	32.37589	1128.355	0	0	23.69271	0	0
LDT2	Electricity	0.93%	0	0	0	0	0	0	223.2236	171.8629	0	0	0	892.8945	491.0368	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT2	Plug-in Hyb	0.63%	184.8137	0	1246.699	12.4638	0	8.209751	151.8636	100.8821	13.55552	0	8.928853	607.4543	288.2347	8289988.1	0	734490	23.2054	0	430.894	30.74649	0	204.6193	76.68864	0	1841.938	455.4352	990.4651	5522.976	111.9039	0	2016.69	455.4352	990.4651	5522.976	1298.76	13506.92	0	14155.05	81.95497	0	7.261182
LHD1	Gasoline	0.78%	2417.115	282.9473	9137.168	217.0683	0	2.411172	374.5715	5112.901	236.0569	0	2.622095	1498.129	14606.76	125053867	1304534	572529.2	192.88	1002.358	456.0318	245.5018	30.10381	948.5704	506.149	2690.083	1580.388	385.0191	3961.148	21912.47	509.3696	2707.2	1193.352	265.5356	2731.88	15112.35	4226.399	56252.94	25762.69	44972.6	687.7301	7.174247	3.148608
LHD1	Diesel	0.51%	24238.1	7391.577	0	1977.877	220.52896	0	345.5866	3144.838	2099.483	234.0877	0	1403.86	9125.093	64157888	898628	0	450.1458	42.14028	0	10108.1	141.5792	0	9691.375	907.2555	0	0	0	0	5906.175	552.905	0	0	0	0	13329.47	13001.13	4025.498	0	345.9443	4.845471	0
LHD1	Electricity	1.04%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LHD2	Gasoline	0.09%	350.1273	27.11636	870.6266	23.59376	0	0.261613	40.7828	649.4662	25.65891	0	0.284512	163.122	1855.512	15444372	164677.1	61907.21	19.49089	95.2252	43.78766	38.14084	2.89153	91.24947	50.13347	252.2285	149.8527	45.37668	467.6513	2602.162	52.23257	262.7893	117.1462	32.39904	333.904	1857.949	469.7538	6316.76	2863.459	5041.984	86.38435	0.921081	0.346263
LHD2	Diesel	0.26%	16504.04	3777.276	0	1258.101	106.74176	0	167.7718	1781.177	1345.603	114.1658	0	686.7121	5207.567	36946986	725513.3	0	271.608	20.09593	0	5821.013	114.3049	0	5847.561	432.6536	0	0	0	0	3765.466	278.6021	0	0	0	0	6584.339	8418.997	2028.399	0	204.2323	4.010428	0
LHD2	Electricity	0.25%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCY	Gasoline	1.75%	93724.68	0	1689.033	384.1751	0	101.9569	209.8844	881.5144	412.1167	0	109.3766	839.5376	2518.613	38083747	0	1055188	24975.14	0	3735.215	7196.034	0	118.7895	145708.2	0	25341.38	109354.9	119474.3	58867.77	182676.9	0	27605.96	109354.9	119474.3	58867.77	1929.271	1883323	0	228619	376.4966	0	10.4316
MDV	Gasoline	13.44%	35963.75	0	50126.1	667.7476	0	176.2872	3230.488	4020.925	726.2364	0	191.7285	12921.95	11488.36	525327774	0	18631280	2001.474	0	9544.063	5441.007	0	7347.277	6077.445	0	37713.05	10861.33	48709.2	152007.9	8868.194	0	41291.04	10861.33	48709.2	152007.9	67588.95	949516.3	0	487329.9	5193.4	0	184.1892
MDV	Diesel	0.15%	159.6997	0	0	14.20283	0	0	35.83341	44.68814	14.84502	0	0	143.3336	127.6804	5607623.3	0	0	2.951059	0	0	883.4833	0	0	63.53456	0	0	0	0	0	72.32987	0	0	0	0	0	55.54177	2067.016	0	0	53.13508	0	0
MDV	Electricity	0.86%	0	0	0	0	0	0	206.1852	158.9463	0	0	0	824.7406	454.1324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MDV	Plug-in Hyb	0.40%	118.3633	0	798.3586	8.019152	0	5.326755	97.25011	64.86147	8.72156	0	5.793332	389.0004	184.7471	5309545.5	0	572476.9	14.8109	0	274.1794	19.55899	0	129.383	49.11498	0	1179.537	302.8771	681.7429	3759.056	76.66846	0	1291.444	302.8771	681.7429	3759.056	831.7954	8651.718	0	9064.583	52.49026	0	5.659517
MH	Gasoline	0.10%	2582.808	0	563.9567	16.31582	0	0.599024	35.6146	187.1741	17.74494	0	0.651494	142.4584	534.783	23118959	0	50234.13	33.56552	0	55.5187	211.9944	0	64.93887	94.65604	0	188.983	4473.985	181.3465	1605.982	138.1219	0	206.9126	4473.985	181.3465	1605.982	534.2188	1712.458	0	3506.885	228.5544	0	0.496616
MH	Diesel	0.06%	18769.35	0	130.9648	0	0	30.51904	119.7462	136.8864	0	0	0	122.0762	342.1319	8318467.1	0	0	29.1338	0	0	1310.578	0	0	627.2336	0	0	0	0	0	714.0637	0	0	0	0	0	160.619	1786.761	0	0	78.8217	0	0
Motor Coac	Diesel	0.01%	1366.808	1903.469	207.6177	21.00328	1.1015675	0	2.8007	26.72749	21.43464	1.124191	0	10.93829	74.56125	1359815.9	535990.6	0	0.437046	12.01723	0	214.2395	84.44553	0	9.409478	258.7277	0	0	0	0	10.71197	294.5418	0	0	0	0	196.4163	31.85646	3822.897	0	12.87664	5.07551	0
OBUS	Gasoline	0.01%	1232.831	16.86624	230.6557	3.667945	0	0.11447	9.34822	48.95446	3.986846	0	0.124423	37.37058	139.7865	4362344.3	71301.22	10889.77	4.188211	34.53581	9.712143	61.84249	1.425472	14.41076	11.35742	98.34498	36.60646	7.470444	54.86091	493.9675	12.20474	105.6819	29.51592	5.501497	40.4015	363.775	59.8631	214.0663	559.7199	431.438	20.0202	0.327224	0.049977
OBUS	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTO	Diesel	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTO	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBUS	Gasoline	0.01%	205.5892	89.19069	146.7063	1.573711	0	0.155971	2.673168	21.01243	1.711577	0	0.169635	10.69281	60.03628	859942.5	201858.4	8559.113	2.454435	245.3109	13.3878	16.47305	9.490922	13.39187	9.224775	920.1981	64.59708	17.34611	114.7584	316.0916	7.763192	774.4009	40.78942	10.00397	66.18426	182.2986	30.93711	124.2605	4101.435	750.0634	4.763585	1.118179	0.047413
SBUS	Diesel	0.04%	4434.581	6186.522	1249.392	31.33637	1.8480497	0	33.17022	173.8229	32.83737	1.93657	0	133.0216	497.9122	10310605	1326043	0	2.792094	5.736828	0	1624.44	208.9186	0	60.11302	123.5123	0	0	0	0	34.32914	70.535	0	0	0	0	1127.28	254.0707	2623.496	0	49.49723	6.365819	0
SBUS	Electricity	0.06%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBUS	Natural Ga	0.01%	419.0968	1184.149	0	11.79735	4.6539378	0	10.47615	54.8985	12.84789	5.068365	0	41.96075	157.063	3270266.7	973061.8	0	7637.698	2896.529	0	666.6653	198.365	0	109.1276	41.38568	0	0	0	0	3650.824	1384.542	0	0	0	0	1705.185	9557.089	4266.688	0	0	0	0
T6 CAIRP C	Diesel	0.00%	84.87503	57.83167	25.15102	1.742808	0.0170263	0	1.032592	5.097505	1.812674	0.017709	0	4.110107	14.49286	323710.86	11860.15	0	0.081842	0.05575	0	51.00078	1.868572	0	1.762034	1.200277	0	0	0	0	0.803862	0.547581	0	0	0	0	29.57025	3.619872	20.36749	0	1.286636	0.04714	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.00%	103.3163	70.31727	30.57833	2.13833	0.0208785	0	1.266212	6.250794	2.224151	0.021716	0	5.040227	17.7726	397012.19	14547.52	0	0.100393	0.068349	0	62.54943	2.291968	0	2.161436	1.471533	0	0	0	0	0.986846	0.671857	0	0	0	0	36.28119	4.443434	24.98969	0	1.578817	0.057852	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.01%	495.3741	332.3087	144.5581	9.819139	0.0952222	0	5.774911	28.50849	10.22251	0.099134	0	23.00825	81.13057	1812840.9	66408.59	0	0.45836	0.312393	0	285.6138	10.4627	0	9.868366	6.72574	0	0	0	0	4.497585	3.065309	0	0	0	0	165.5320	20.25505	114.0166	0	7.200209	0.26376	0
T6 CAIRP C	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.02%	686.336	445.3591	192.3563	15.10725	0.1376026	0	8.345147	41.19674	15.71653	0.143152	0	33.22458	117.1549	2358777.7	95826.3	0	0.722073	0.453014	0	371.6264	15.09747	0	15.54604	9.753259	0	0	0	0	13.50143	8.470513	0	0	0	0	457.4231	60.80352	315.0674	0	17.59679	0.714877	0
T6 CAIRP C	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.03%	3655.334	4432.811	1578.252	12.9573	1.2237968	0	22.00337	122.0969	13.51319	1.2763	0	87.81865	348.0759	7077162.7	859635.2	0	1.953383	3.991981	0	1115.01	135.4359	0	42.0558	85.94626	0	0	0	0	21.25568	43.43862	0	0	0	0	695.4265	163.2395	1615.671	0	30.96665	3.761398	0
T6 Instate [	Electricity	0.03%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.03%	4632.713	5645.354	2007.643	16.43378	1.5534006	0	27.92954	154.9813	17.13632	1.619809	0	111.4547	441.7591	8982341.5	1090923	0	2.478461	5.066409	0	1415.172	171.8753	0	53.36058	109.0784	0	0	0	0	26.94957	55.08965	0	0	0	0	881.9471	206.7766	2048.991	0	39.28103	4.770757	0
T6 Instate [	Electricity	0.04%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.08%	10790.42	12946.11	4606.846	37.99189	3.5680117	0	64.15145	355.9769	39.63519	3.722342	0	256.1242	1015.168	20644335	2507587	0	5.696313	11.6479	0	3252.523	395.0714	0	122.6401	250.776	0	0	0	0	61.87378	126.5203	0	0	0	0	2025.53	475.4152	4705.931	0	90.19077	10.95512	0
T6 Instate [	Electricity	0.10%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.04%	5123.208	5211.834	1805.453	18.95885	1.4469347	0	26.01525	144.3588	19.87425	1.516798	0	104.3665	413.6646	8628144.4	1063595	0	2.864716	4.644383	0	1359.368	167.5698	0	61.67654	99.99229	0	0	0	0	41.79763	67.76386	0	0	0	0	1084.007	318.5967	2515.384	0	48.87127	6.024383	0
T6 Instate [	Electricity	0.03%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Natural Ga	0.00%	11.86272	70.50636	0	0.391411	0.2871103	0	0.63377	3.516792	0.424948	0.31171	0	2.530624	10.03032	194665.14	60090.35	0	183.1676	173.5599	0	39.68376	12.24981	0	2.617104	2.479829	0	0	0	0	108.8746	103.1638	0	0	0	0	129.5519	466.5691	331.4939	0	0	0	0
T6 Instate [	Diesel	0.05%	5662.43	9589.177	3635.651	43.62035	2.7036197	0	45.18201	236.4873	45.4544	2.817295	0	180.18	673.6288	14078396	1895131	0	3.601652	8.734062	0	2218.057	298.5787	0	77.54259	188.042	0	0	0	0	38.70804	93.8676	0	0	0	0	1397.972	261.8915	3491.323	0	60.38731	8.128902	0
T6 Instate [	Electricity	0.07%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.14%	14673.96	25014.15	9456.216	113.3274	7.0220816	0	117.4095	614.5333	118.0913	7.317268	0	468.2097	1750.47	36586441	4924375	0	9.363927	22.69194	0	5764.209	775.8374	0	201.6028	488.5513	0	0	0	0	100.5371	243.6352	0	0	0	0	3628.445	679.4539	9061.466	0	156.744	21.09706	0
T6 Instate [	Electricity	0.17%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.12%	13032.94	21889.2	8282.765	100.2075	6.1670086	0	103.0945	539.607	104.4827	6.430118	0	411.3712	1537.971	32156700	4328431	0	8.232503	19.94918	0	5066.301	681.946	0	177.2435	429.5004	0	0	0	0	88.43705	214.3026	0	0	0	0	3191.607	597.972	7970.637	0	137.8625	18.55689	0
T6 Instate [	Electricity	0.15%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.09%	9002.664	12703.34	4719.196	72.15176	3.6690838	0	61.17338	320.1878	75.72611	3.850848	0	245.7058	918.6065	19472991	2697384	0	5.805813	11.35093	0	3067.978	424.974	0	124.9976	244.3824	0	0	0	0	82.38972	161.0799	0	0	0	0	2394.797	538.6107	5965.361	0	103.7372	14.36961	0
T6 Instate [	Electricity	0.07%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Natural Ga	0.00%	21.85669	161.4065	0	0.665722	0.6793328	0	1.395083	7.302008	0.723918	0.738719	0	5.579446	20.85957	365893.63	139753.8	0	312.9784	399.0359	0	74.58981	28.48973	0	4.471844	5.701436	0	0	0	0	177.7881	226.6732	0	0	0	0	264.7989	667.4062	728.3002	0	0	0	0
T6 Instate [	Diesel	0.00%	122.0295	206.3915	78.33242	0.951252	0.0589837	0	0.9856	5.158731	0.992105	0.061517	0	3.933841	14.70723	307400.16	41373.45	0	0.077283	0.189953	0	48.43102	6.518403	0	1.663877	4.089645	0	0	0	0	0.824145	2.025667	0	0	0	0	30.16847	5.587678	75.34463	0	1.302956	0.175367	0
T6 Instate [	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate [	Diesel	0.16%	10078.75	15605.16	5753.782	80.05183	4.319083	0	71.95935	376.6426	83.60472	4.510774	0	287.6079	1075.264	20816872	3114291

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New Fresno Courthouse Project - Existing Conditions Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	New Fresno Courthouse Project - Existing Conditions
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70000
Precipitation (days)	25.4000
Location	2200 Fresno St, Fresno, CA 93721, USA
County	Fresno
City	Fresno
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2400
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.43

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Government Office Building	87.0000	1000sqft	2.09000	87,000.0	0.00000	0.00000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.74769	2.64443	0.96517	4.56724	0.00583	0.07766	0.00000	0.07766	0.07601	0.00000	0.07601	76.7246	1,221.55	1,298.28	7.85340	0.08292	0.21158	1,519.53
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.07497	2.02364	0.93331	0.78398	0.00560	0.07093	0.00000	0.07093	0.07093	0.00000	0.07093	76.7246	1,205.99	1,282.72	7.85275	0.08278	0.21158	1,503.92
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.40673	2.32979	0.94902	2.64970	0.00571	0.07425	0.00000	0.07425	0.07344	0.00000	0.07344	76.7246	1,213.67	1,290.39	7.85307	0.08285	0.21158	1,511.62
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43923	0.42519	0.17320	0.48357	0.00104	0.01355	0.00000	0.01355	0.01340	0.00000	0.01340	12.7026	200.936	213.639	1.30017	0.01372	0.03503	250.266

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Area	2.64503	2.59310	0.03186	3.78326	0.00023	0.00672	—	0.00672	0.00508	—	0.00508	—	15.5597	15.5597	0.00065	0.00013	—	15.6158
Energy	0.10266	0.05133	0.93331	0.78398	0.00560	0.07093	—	0.07093	0.07093	—	0.07093	—	1,203.01	1,203.01	0.09855	0.00210	—	1,206.10
Water	—	—	—	—	—	—	—	—	—	—	—	33.1191	2.98437	36.1034	3.39598	0.08069	—	145.048
Waste	—	—	—	—	—	—	—	—	—	—	—	43.6055	0.00000	43.6055	4.35822	0.00000	—	152.561
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21158	0.21158
Total	2.74769	2.64443	0.96517	4.56724	0.00583	0.07766	0.00000	0.07766	0.07601	0.00000	0.07601	76.7246	1,221.55	1,298.28	7.85340	0.08292	0.21158	1,519.53
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	1.97231	1.97231	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.10266	0.05133	0.93331	0.78398	0.00560	0.07093	—	0.07093	0.07093	—	0.07093	—	1,203.01	1,203.01	0.09855	0.00210	—	1,206.10
Water	—	—	—	—	—	—	—	—	—	—	—	33.1191	2.98437	36.1034	3.39598	0.08069	—	145.048
Waste	—	—	—	—	—	—	—	—	—	—	—	43.6055	0.00000	43.6055	4.35822	0.00000	—	152.561
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21158	0.21158
Total	2.07497	2.02364	0.93331	0.78398	0.00560	0.07093	0.00000	0.07093	0.07093	0.00000	0.07093	76.7246	1,205.99	1,282.72	7.85275	0.08278	0.21158	1,503.92
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	2.30406	2.27845	0.01571	1.86572	0.00011	0.00332	—	0.00332	0.00251	—	0.00251	—	7.67326	7.67326	0.00032	0.00007	—	7.70092
Energy	0.10266	0.05133	0.93331	0.78398	0.00560	0.07093	—	0.07093	0.07093	—	0.07093	—	1,203.01	1,203.01	0.09855	0.00210	—	1,206.10
Water	—	—	—	—	—	—	—	—	—	—	—	33.1191	2.98437	36.1034	3.39598	0.08069	—	145.048
Waste	—	—	—	—	—	—	—	—	—	—	—	43.6055	0.00000	43.6055	4.35822	0.00000	—	152.561
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21158	0.21158
Total	2.40673	2.32979	0.94902	2.64970	0.00571	0.07425	0.00000	0.07425	0.07344	0.00000	0.07344	76.7246	1,213.67	1,290.39	7.85307	0.08285	0.21158	1,511.62
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.42049	0.41582	0.00287	0.34049	0.00002	0.00061	—	0.00061	0.00046	—	0.00046	—	1.27040	1.27040	0.00005	0.00001	—	1.27498
Energy	0.01874	0.00937	0.17033	0.14308	0.00102	0.01294	—	0.01294	0.01294	—	0.01294	—	199.172	199.172	0.01632	0.00035	—	199.683

Water	—	—	—	—	—	—	—	—	—	—	—	5.48324	0.49410	5.97733	0.56224	0.01336	—	24.0143
Waste	—	—	—	—	—	—	—	—	—	—	—	7.21939	0.00000	7.21939	0.72155	0.00000	—	25.2582
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03503	0.03503
Total	0.43923	0.42519	0.17320	0.48357	0.00104	0.01355	0.00000	0.01355	0.01340	0.00000	0.01340	12.7026	200.936	213.639	1.30017	0.01372	0.03503	250.266

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	89.4174	89.4174	0.00000	0.00000	—	89.4174
Total	—	—	—	—	—	—	—	—	—	—	—	—	89.4174	89.4174	0.00000	0.00000	—	89.4174
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	89.4174	89.4174	0.00000	0.00000	—	89.4174
Total	—	—	—	—	—	—	—	—	—	—	—	—	89.4174	89.4174	0.00000	0.00000	—	89.4174
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	14.8041	14.8041	0.00000	0.00000	—	14.8041
Total	—	—	—	—	—	—	—	—	—	—	—	—	14.8041	14.8041	0.00000	0.00000	—	14.8041

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.10266	0.05133	0.93331	0.78398	0.00560	0.07093	—	0.07093	0.07093	—	0.07093	—	1,113.59	1,113.59	0.09855	0.00210	—	1,116.68
Total	0.10266	0.05133	0.93331	0.78398	0.00560	0.07093	—	0.07093	0.07093	—	0.07093	—	1,113.59	1,113.59	0.09855	0.00210	—	1,116.68
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.10266	0.05133	0.93331	0.78398	0.00560	0.07093	—	0.07093	0.07093	—	0.07093	—	1,113.59	1,113.59	0.09855	0.00210	—	1,116.68
Total	0.10266	0.05133	0.93331	0.78398	0.00560	0.07093	—	0.07093	0.07093	—	0.07093	—	1,113.59	1,113.59	0.09855	0.00210	—	1,116.68
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.01874	0.00937	0.17033	0.14308	0.00102	0.01294	—	0.01294	0.01294	—	0.01294	—	184.368	184.368	0.01632	0.00035	—	184.879
Total	0.01874	0.00937	0.17033	0.14308	0.00102	0.01294	—	0.01294	0.01294	—	0.01294	—	184.368	184.368	0.01632	0.00035	—	184.879

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	1.86180	1.86180	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.11051	0.11051	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.67272	0.62079	0.03186	3.78326	0.00023	0.00672	—	0.00672	0.00508	—	0.00508	—	15.5597	15.5597	0.00065	0.00013	—	15.6158
Total	2.64503	2.59310	0.03186	3.78326	0.00023	0.00672	—	0.00672	0.00508	—	0.00508	—	15.5597	15.5597	0.00065	0.00013	—	15.6158
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.86180	1.86180	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.11051	0.11051	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.97231	1.97231	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.33978	0.33978	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02017	0.02017	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06054	0.05587	0.00287	0.34049	0.00002	0.00061	—	0.00061	0.00046	—	0.00046	—	1.27040	1.27040	0.00005	0.00001	—	1.27498
Total	0.42049	0.41582	0.00287	0.34049	0.00002	0.00061	—	0.00061	0.00046	—	0.00046	—	1.27040	1.27040	0.00005	0.00001	—	1.27498

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	33.1191	2.98437	36.1034	3.39598	0.08069	—	145.048
Total	—	—	—	—	—	—	—	—	—	—	—	33.1191	2.98437	36.1034	3.39598	0.08069	—	145.048
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	33.1191	2.98437	36.1034	3.39598	0.08069	—	145.048
Total	—	—	—	—	—	—	—	—	—	—	—	33.1191	2.98437	36.1034	3.39598	0.08069	—	145.048
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	5.48324	0.49410	5.97733	0.56224	0.01336	—	24.0143
Total	—	—	—	—	—	—	—	—	—	—	—	5.48324	0.49410	5.97733	0.56224	0.01336	—	24.0143

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.6055	0.00000	43.6055	4.35822	0.00000	—	152.561
Total	—	—	—	—	—	—	—	—	—	—	—	43.6055	0.00000	43.6055	4.35822	0.00000	—	152.561
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.6055	0.00000	43.6055	4.35822	0.00000	—	152.561
Total	—	—	—	—	—	—	—	—	—	—	—	43.6055	0.00000	43.6055	4.35822	0.00000	—	152.561
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.21939	0.00000	7.21939	0.72155	0.00000	—	25.2582
Total	—	—	—	—	—	—	—	—	—	—	—	7.21939	0.00000	7.21939	0.72155	0.00000	—	25.2582

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21158	0.21158
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21158	0.21158
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21158	0.21158
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21158	0.21158
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03503	0.03503
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03503	0.03503

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Government Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Government Office Building	Wood Fireplaces	0	0
Government Office Building	Gas Fireplaces	0	0
Government Office Building	Propane Fireplaces	0	0

Government Office Building	Electric Fireplaces	0	0
Government Office Building	No Fireplaces	0	0
Government Office Building	Conventional Wood Stoves	0	0
Government Office Building	Catalytic Wood Stoves	0	0
Government Office Building	Non-Catalytic Wood Stoves	0	0
Government Office Building	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	130,500	43,500.0	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government Office Building	2,039,835	16.0000	0.0000	0.0000	3,474,701

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

Government Office Building	17,283,393	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government Office Building	80.9100	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	0.00000	annual days of extreme heat
Extreme Precipitation	0.00000	annual days with precipitation above 20 mm
Sea Level Rise	0.00000	meters of inundation depth
Wildfire	0.00000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	82.4767
AQ-PM	97.6105
AQ-DPM	94.0635
Drinking Water	84.3887
Lead Risk Housing	39.6723
Pesticides	56.3793
Toxic Releases	79.6949
Traffic	13.5500
Effect Indicators	—
CleanUp Sites	58.1747
Groundwater	74.8298
Haz Waste Facilities/Generators	50.1390
Impaired Water Bodies	0.00000
Solid Waste	0.00000

Sensitive Population	—
Asthma	86.8395
Cardio-vascular	94.9900
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	88.2055
Housing	37.4778
Linguistic	61.0908
Poverty	92.6759
Unemployment	89.6668

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—

Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	54.3
Asthma ER Admissions	21.4
High Blood Pressure	19.3
Cancer (excluding skin)	96.9
Asthma	4.5
Coronary Heart Disease	7.5
Chronic Obstructive Pulmonary Disease	1.5
Diagnosed Diabetes	9.0
Life Expectancy at Birth	0.0
Cognitively Disabled	0.1
Physically Disabled	0.0
Heart Attack ER Admissions	3.5
Mental Health Not Good	0.4
Chronic Kidney Disease	27.1

Obesity	0.8
Pedestrian Injuries	0.0
Physical Health Not Good	1.0
Stroke	5.6
Health Risk Behaviors	—
Binge Drinking	38.6
Current Smoker	0.1
No Leisure Time for Physical Activity	0.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	99.4
Elderly	94.7
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	49.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.8
Traffic Density	0.0
Traffic Access	0.0
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	96.0000

Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	Central Fresno

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Characteristics: Utility Information	PG&E's 2024 power content label
Land Use	Project specific site acreage
Operations: Vehicle Data	Calculated in Excel using EMFAC 2021 with EPA approved adjustment factors

8.2. Project Characteristics

8.2.2. Utility Information

Model Parameter	Units	Default Value	New Value
CO2	lb/MWh	203.983	16.0000
CH4	lb/MWh	0.03300	0.00000

N2O	lb/MWh	0.00400	0.00000

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	1.99725	2.09000
Landscape Area	sq. ft	—	0.00000
Special Landscape Area	sq. ft	—	0.00000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Government Office Building	Weekday Trip Rate	size/day	22.5900	0.00000

New Fresno Courthouse Project
On Road Existing Operational Emissions (2025)
EMFAC 2021 with USEPA Adjustment Factors

VMT	3,531,746
Trips	512,390
Vehicles	256,195

Air Quality Emissions (tons)						GHG Emissions (metric ton)			
ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	NO2	CO2e
1.21	1.39	6.74	0.02	1.25	0.33	1444.80	0.08	0.09	1473.028

Vehicle Cat	Fuel	Vehicle Mix	NOx_RUNE	NOx_IDLEX	NOx_STREX	PM2.5_RUN	PM2.5_IDLEX	PM2.5_STR	PM2.5_PM1	PM2.5_PME	PM10_RUN	PM10_IDLE	PM10_STRI	PM10_PMT	PM10_PMB	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STREX	N2O_RUNE	N2O_IDLEX	N2O_STREX	ROG_RUNE	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIURN	TOG_RUNE	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIURN	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
All Other Bu	Diesel	0.01%	1162.265	139.8259	89.48505	30.89448	0.8148943	0	1.458034	7.848138	32.29131	0.851738	0	5.832122	22.42319	553943	22138.6	0	4.059967	0.184427	0	87.27395	3.487945	0	87.40997	3.97067	0	0	0	0	99.5096	4.520306	0	0	0	0	97.54499	242.1355	80.24257	0	5.245509	0.209639	0
All Other Bu	Natural Ga	0.00%	1.084344	1.021377	0	0.013348	0.0032838	0	0.028182	0.151693	0.014517	0.003571	0	0.112727	0.433408	9344.1247	842.4286	0	7.808326	2.562772	0	1.904861	0.171735	0	0.111566	0.036617	0	0	0	0	7.968969	2.615497	0	0	0	0	9.957512	31.61897	6.423726	0	0	0	0
LDA	Gasoline	43.27%	54203.07	0	53467.77	1637.219	0	419.4857	3056.094	3160.436	1780.625	0	456.229	12224.38	9029.818	422861062	0	15171604	2955.958	0	14653.65	6479.319	0	7140.452	10845.75	0	65460.37	19792.85	50214.78	170842.8	15826.09	0	71670.86	19792.85	50214.78	170842.8	54411.18	1074436	0	650690.7	4180.412	0	149.9867
LDA	Diesel	0.09%	679.1735	0	51.02599	0	0	6.421969	6.766455	53.33316	0	0	0	25.68788	19.33273	725371.39	0	0	3.76665	0	0	114.2826	0	0	81.09375	0	0	0	0	0	92.31984	0	0	0	0	0	9.954048	974.1388	0	0	6.873263	0	0
LDA	Electricity	2.26%	0	0	0	0	0	159.8869	122.2847	0	0	0	639.5477	349.385	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDA	Plug-in Hyb	1.28%	131.9935	0	744.5717	23.96124	0	12.86093	90.69812	57.98973	26.06004	0	13.98744	362.7925	165.6849	5920021.2	0	421253.7	17.43354	0	271.4944	24.09011	0	135.7226	54.94725	0	1100.069	281.9724	255.9122	1719.053	80.1789	0	1204.437	281.9724	255.9122	1719.053	869.0477	9674.157	0	8453.885	58.52544	0	4.164521
LDT1	Gasoline	4.08%	21653.79	0	9409.808	244.7166	0	64.23159	288.1837	365.9043	266.1516	0	69.85771	1152.735	1045.441	48082603	0	1855950	990.7785	0	2551.746	1545.428	0	871.4373	4432.393	0	13560	4656.589	13564.91	40986.37	6467.737	0	14846.49	4656.589	13564.91	40986.37	5388.656	238755.6	0	130019.5	475.3455	0	18.34796
LDT1	Diesel	0.00%	130.0908	0	0	17.92807	0	0	0.163674	0.235767	18.7387	0	0	0.654697	0.673621	32765.618	0	0	1.009983	0	0	5.162237	0	0	21.74435	0	0	0	0	0	24.75449	0	0	0	0	0	0.253695	147.68	0	0	0.310471	0	0
LDT1	Electricity	0.01%	0	0	0	0	0	0.483594	0.36938	0	0	0	0	1.934375	1.055371	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT1	Plug-in Hyb	0.01%	0.593669	0	3.732262	0.074997	0	0.045027	0.454636	0.29579	0.081567	0	0.048971	1.818544	0.845114	26680.678	0	2236.12	0.078236	0	1.358649	0.107887	0	0.678171	0.247137	0	5.514239	0.809165	0.687407	5.134336	0.360622	0	6.037398	0.809165	0.687407	5.134336	4.157841	43.78282	0	42.3762	0.263766	0	0.022106
LDT2	Gasoline	20.38%	47835.88	0	34895.41	792.0236	0	201.0951	1439.497	1753.168	861.3979	0	218.7093	5757.99	5009.052	245685733	0	9011186	1916.007	0	8522.227	4193.575	0	3887.583	7444.914	0	39390.31	9683.731	26885.46	89968.67	10863.6	0	43127.43	9683.731	26885.46	89968.67	26373.35	617129.1	0	376098.6	2428.854	0	89.08475
LDT2	Diesel	0.06%	109.3926	0	0	10.83748	0	0	3.900641	4.621764	11.32751	0	0	15.60256	13.20504	565368.38	0	0	1.14535	0	0	89.07402	0	0	24.65871	0	0	0	0	0	28.0723	0	0	0	0	0	6.045992	233.308	0	0	5.357153	0	0
LDT2	Electricity	0.14%	0	0	0	0	0	9.900154	7.556353	0	0	0	39.60062	21.58958	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT2	Plug-in Hyb	0.17%	16.74779	0	100.1682	2.488597	0	1.415523	12.20173	7.876673	2.706576	0	1.539511	48.80693	22.50478	752076.64	0	65618.85	2.20912	0	36.49519	3.048947	0	18.23092	6.971897	0	147.9937	23.64793	21.13517	154.2403	10.17338	0	162.0345	23.64793	21.13517	154.2403	117.1318	1232.121	0	1137.312	7.435043	0	0.648709
LHD1	Gasoline	1.66%	11276.13	156.7257	5630.646	90.23958	0	2.560159	118.6685	1619.824	98.15126	0	2.784619	474.71	4628.423	51727061	510988	219429.4	534.8417	486.4936	280.832	626.8452	12.65772	439.8132	2684.696	1793.499	1397.868	439.3509	2435.262	13910.67	3913.232	2614.217	1528.822	438.8721	2432.608	13895.52	2639.504	71509.91	16008.49	25988.36	509.8413	5.03649	2.162778
LHD1	Diesel	1.48%	96567.53	8069.027	0	2231.288	101.32888	0	157.7113	1435.173	2336.444	106.1043	0	631.9993	4107.995	33462147	509875.4	0	477.6815	19.4042	0	5271.975	80.33108	0	10284.2	417.761	0	0	0	0	11677.64	474.3646	0	0	0	0	8504.991	29264.97	3453.674	0	316.1259	4.816931	0
LHD1	Electricity	0.01%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LHD2	Gasoline	0.27%	1695.554	26.19184	964.751	12.31494	0	0.303045	19.43146	309.446	13.39387	0	0.329595	77.72732	884.1483	9719612.4	97556.27	35847.56	56.00654	81.29345	46.16375	102.315	2.065361	73.0629	252.6551	300.1461	227.2881	68.09552	366.2261	2195.68	368.3107	437.5412	248.6068	68.02846	365.8654	2193.518	433.5244	7930.433	2632.981	4035.576	95.83763	0.961927	0.353465
LHD2	Diesel	0.56%	30730.01	2957.635	0	772.934	38.063352	0	59.24321	628.9654	809.2524	39.85186	0	237.3746	1800.091	15036045	305784	0	168.0719	7.289538	0	2368.935	48.17639	0	3618.49	156.9395	0	0	0	0	4103.884	177.9917	0	0	0	0	3399.14	9821.794	1295.893	0	142.035	2.888527	0
LHD2	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCY	Gasoline	2.16%	47850.36	0	1707.2	122.7816	0	33.67985	76.42484	320.9843	131.1484	0	35.80581	305.6994	917.098	14423044	0	578942.3	13098.02	0	2162.178	3196.315	0	98.6459	87810.05	0	16142.1	40309.24	43856.06	31054	104415.5	0	17544.99	40309.24	43856.06	31054	664.0384	1068269	0	91212.47	142.5865	0	5.723434
MDV	Gasoline	17.65%	62523.86	0	41678.01	708.3847	0	184.8441	1246.906	1577.62	770.4316	0	201.0342	4987.624	4507.485	264038903	0	9815829	2296.812	0	9684.885	4788.952	0	3867.135	9562.456	0	48887.47	11010.37	32564.01	103929.6	13952.76	0	53525.61	11010.37	32564.01	103929.6	21902.91	643545.8	0	373043.9	2610.293	0	97.03946
MDV	Diesel	0.25%	768.5596	0	0	58.43621	0	0	17.95449	22.66475	61.07843	0	0	71.81796	64.75644	3601061.8	0	0	5.145426	0	0	567.3487	0	0	110.778	0	0	0	0	0	126.1134	0	0	0	0	0	27.82945	1832.665	0	0	34.12189	0	0
MDV	Electricity	0.15%	0	0	0	0	0	10.87644	8.302003	0	0	0	43.50576	23.72001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MDV	Plug-in Hyb	0.12%	12.43555	0	71.88901	2.323999	0	1.28417	8.756979	5.625124	2.527561	0	1.396652	35.02791	16.07178	557982.2	0	59362.79	1.639486	0	26.17956	2.261712	0	13.07212	5.176762	0	106.2126	20.91827	17.84778	129.6347	7.553919	0	116.2894	20.91827	17.84778	129.6347	87.09401	912.6243	0	816.2296	5.516222	0	0.586862
MH	Gasoline	0.19%	2658.561	0	415.5711	10.68508	0	0.36765	20.46425	107.5507	11.621	0	0.399853	81.85699	307.2878	13299150	0	31019.82	94.38032	0	36.22515	167.6784	0	43.93171	405.9521	0	151.1944	11966.85	279.8998	2528.208	592.3644	0	165.5389	11966.85	279.8998	2528.208	306.2203	9437.703	0	3283.142	131.4756	0	0.306663
MH	Diesel	0.10%	16624.64	0	0	409.8159	0	0	13.77913	54.06456	428.346	0	0	55.11654	154.4702	3272613	0	0	22.28803	0	0	586.4992	0	0	479.8482	0	0	0	0	0	546.2753	0	0	0	0	0	463.8281	1635.019	0	0	35.27365	0	0
Motor Coac	Diesel	0.01%	454.4239	888.4304	81.30047	7.57993	0.3148041	0	0.800379	6.924092	7.914512	0.3287	0	3.198222	19.76277	466615.7	198066.6	0	0.177741	3.583348	0	73.51549	31.20548	0	3.82672	77.14851	0	0	0	0	4.356429	87.8277	0	0	0	0	58.57563	18.70826	1134.159	0	4.418572	1.875573	0
OBUS	Gasoline	0.04%	842.7941	6.4904	83.08026	1.329963	0	0.056912	4.200462	21.99684	1.446368	0	0.061893	16.80083	62.8443	2471588.5	38448.28	6469.61	23.82054	19.64132	7.462052	38.92278	0.521193	6.190742	118.1702	74.97703	39.93426	8.1794	38.31386	379.7669	172.1326	109.2153	43.64665	8.165119	38.24696	379.1039	62.31957	2602.735	579.5664	845.1307	24.38685	0.379364	0.063835
OBUS	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTO	Diesel	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTO	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBUS	Gasoline	0.04%	529.6136	101.4557	163.4607	1.454247	0	0.131786	3.048768	23.96483	1.581542	0	0.143322	12.19443	68.46733	1232924.7	285936.3	12350.89	11.06108	280.2014	14.91064	32.88394	9.79173	15.64954	52.2811	1171.665	81.66131	25.0113	58.95644	204.2211	76.05805	1704.527	89.13883	24.93576	58.77838	203.6043	68.29123	1253.269	9033.197	2004.11	12.17706	2.824069	0.121984
SBUS	Diesel	0.12%	16364.43	6295.502	358.9763	81.66671	5.8551258	0	12.40002	64.98021	85.46879	6.127718	0	49.66369	185.8959	4616108.3	667450.7	0	10.85173	2.397329	0	727.2697	105.1571	0	233.6348	51.61383	0	0	0	0	265.8048	58.72072	0	0	0	0	638.9045	751.9969	1441.744	0	43.66017	6.312896	0
SBUS	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SBUS	Natural Ga	0.02%	321.2915	303.6096	0	2.741627	0.7957253	0	2.434589	12.75805	2.981639	0.865386	0	9.737928	36.44998	978129.46	247903	0	2399.431	830.4929	0	199.3981	50.53665	0	34.28314	11.8661	0	0	0	0	2435.985	843.1448	0	0	0	0	853.8295	7588.636	1496.795	0	0	0	0
T6 CAIRP C	Diesel	0.00%	30.00089	15.41641	6.358609	0.576582	0.0112917	0	0.223624	1.103945	0.60328	0.011815	0	0.895428	3.157412	82656.708	3136.368	0	0.032008	0.013316	0	13.0226	0.494136	0	0.689117	0.286683	0	0	0	0	0.778899	0.324033	0	0	0	0	16.09565	2.779546	11.19643	0	0.779995	0.029597	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.00%	37.44056	20.11321	8.494364	0.643634	0.0061694	0	0.295927	1.460877	0.673136	0.006452	0	1.184412	4.176416	109521.05	4179.245	0	0.031214	0.016506	0	17.25509	0.658442	0	0.672029	0.35536	0	0	0	0	0.758592	0.401133	0	0	0	0	21.40679	3.13139	14.72689	0	1.0339	0.039453	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.01%	112.5591	68.25858	28.9522	2.235819	0.0355517	0	1.005404	4.963288	2.338128	0.037179	0	4.023707	14.1882	363601.55	13683.08	0	0.116528	0.057579	0	57.28557	2.155774	0	2.508805	1.239671	0	0	0	0	2.82212	1.394488	0	0	0	0	72.05321	10.7765	49.94445	0	3.426783	0.128957	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 CAIRP C	Diesel	0.02%	212.1235	109.6855	46.59057	3.554045	0.0271275	0	1.645196	8.121691	3.714431	0.028352	0	6.58023	23.20288	560738.14	22735.72	0	0.15917	0.090979	0	88.34452	3.582023	0	3.426884	1.958744	0	0	0	0	3.874987	2.214871	0	0	0	0	119.4607	17.42627	82.12698	0	5.301421	0.214952	0
T6 CAIRP C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate D	Diesel	0.04%	1662.747	1120.524	318.3508	24.14418	2.350551	0	4.307513	23.90242	25.28715	2.461825	0	17.26507	68.43142	1672632	212198.8	0	2.951617	1.055734	0	263.5238	33.432	0	63.5475	22.72967	0	0	0	0	72.22861	25.83473	0	0	0	0	304.4648	233.2934	749.9707	0	15.80381	2.004953	0
T6 Instate D	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate D	Diesel	0.05%	1488.002	1309.004	410.8662	13.9319	1.4633994	0	5.426046	30.10917	14.58021	1.531498	0	21.73158	86.13477	2105797.3	264761	0	1.772815	1.153207	0	331.7692	41.7132	0	38.16822	24.82822	0	0	0	0	43.33866	28.19157	0	0	0	0	390.5878	179.2897	928.5395	0	19.90066	2.502102	0
T6 Instate D	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate D	Diesel	0.12%	4372.602	3158.598	937.188	58.71197	6.1634605	0	12.47067	69.19985	61.44575	6.450446	0	49.94696	197.9686	4810286.6	609971.9	0	6.996568	3.005746	0	757.8626	96.10132	0	150.6342	64.7129	0	0	0	0	171.0729	73.49343	0	0	0	0	886.8564	588.6674	2164.81	0	45.45788	5.764319	0
T6 Instate D	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate D	Diesel	0.05%	1819.243	1147.887	376.1806	5.441966	0.8728858	0	4.869335	27.01998	5.689021	0.912513	0	19.48075	77.21343	1879317.8	244155.3	0	0.888294	1.000368	0	296.0873	38.46677	0	19.12472	21.53765	0	0	0	0	21.73263	24.47458	0	0	0	0	355.9676	153.7041	825.6724	0	17.78152	2.310121	0
T6 Instate D	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate C	Natural Ga	0.00%	2.03143	11.55567	0	0.059148	0.043482	0	0.096528	0.535635	0.064325	0.047288	0	0.386088	1.530291	35122.121	10796.68	0	28.03418	26.74284	0	7.159874	2.200974	0	0.400553	0.382102	0	0	0	0	28.52675	27.21272	0	0	0	0	34.00984	122.2727	86.46754	0	0	0	0
T6 Instate C	Diesel	0.08%	3263.413	2586.235	693.8883	57.99317	9.4776844	0	8.487237	44.42307	60.74089	9.926739	0	34.01925	127.1859	3199680.7	453104.2	0	5.633545	2.796418	0	504.111	71.38675	0	121.2887	60.20612	0	0	0	0	137.8662	68.43501	0	0	0	0	595.1255	415.7411	1638.557	0	30.22869	4.28066	0
T6 Instate C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate C	Diesel	0.20%	4578.295	5504.411	1868.427	44.85991	5.2320685	0	21.26181	111.2865	46.91868	5.472185	0	85.10238	318.1675	7976915.8	1118121	0	4.181308	4.74496	0	1256.766	176.1604	0	90.02241	102.1577	0	0	0	0	102.0714	115.8309	0	0	0	0	1537.984	467.7247	3891.849	0	75.38901	10.56724	0
T6 Instate C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate C	Diesel	0.18%	6350.857	5569.932	1593.502	106.7406	18.47217	0	19.06806	99.8042	111.7322	19.336	0	76.38523	285.5772	7149338.6	1009456	0	10.32344	6.012498	0	1126.381	159.0403	0	222.2607	129.4474	0	0	0	0	252.4985	147.0583	0	0	0	0	1348.666	799.3414	3643.014	0	67.55911	9.539061	0
T6 Instate C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate C	Diesel	0.11%	4227.07	3105.811	1052.129	25.94407	5.3490879	0	11.73255	61.40939	27.13678	5.594999	0	46.9642	175.5824	4303990.4	642841.6	0	2.41245	3.005749	0	678.0954	101.28	0	51.93938	64.71296	0	0	0	0	58.92122	73.41187	0	0	0	0	853.1726	315.3947	2142.843	0	40.66382	6.073526	0
T6 Instate C	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate C	Natural Ga	0.00%	2.658468	18.73982	0	0.068977	0.0704788	0	0.145971	0.764028	0.075011	0.076644	0	0.58382	2.182695	46125.912	17520.35	0	33.80496	43.5369	0	9.403069	3.571638	0	0.483006	0.622056	0	0	0	0	34.25481	44.11626	0	0	0	0	51.16809	129.0777	139.3865	0	0	0	0
T6 Instate T	Diesel	0.00%	68.78542	51.34857	15.86297	1.229663	0.1661668	0	0.1794	0.938997	1.287156	0.173936	0	0.718656	2.6868	64962.814	9516.719	0	0.10704	0.055715	0	10.23492	1.499363	0	2.304532	1.199528	0	0	0	0	2.619482	1.363462	0	0	0	0	12.74011	8.282011	34.341	0	0.614008	0.089949	0
T6 Instate T	Electricity	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T6 Instate T	Diesel	0.13%	3593.071	3462.56	1197.327	22.54842	2.5040483	0	13.56348	70.99266	23.57322	2.617854	0	54.26604	202.8814	4777165.9	724126.2

| | | |

Appendix B AERMOD and HARP Output Files

*HARP - HRACalc v22118 4/7/2026 5:42:26 PM - Cancer Risk - Input File: C:\Users\MaMcPherson\OneDrive - Stantec\Desktop\JCC Fresno\HRA\HARP\ResidentialHRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RIS	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISK	PIG_RISK	CHICKEN_	EGG_RISK	1ST_DRIVE	2ND_DRIVE	PASTURE_(	FISH_CONC	WATER_CONC
1			9901	DieselExhP	0.02287	8.71E-06	3YrCancerI	*	8.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v22118 4/7/2026 5:42:26 PM - Acute Risk - Input File: C:\Users\MaMcPherson\OneDrive - Stantec\Desktop\JCC Fresno\HRA\HARP\ResidentialHRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DE	RESP	SKIN	EYE	BONE/TEE	ENDO	BLOOD	ODOR	GENERAL
1			9901	DieselExhP	0	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v22118 4/7/2026 5:42:26 PM - Chronic Risk - Input File: C:\Users\MaMcPherson\OneDrive - Stantec\Desktop\JCC Fresno\HRA\HARP\ResidentialHRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DE	RESP	SKIN	EYE	BONE/TEE	ENDO	BLOOD	ODOR	GENERAL	DETAILS	INH_CONC
1			9901	DieselExhP	0.02287	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	*	2.29E-02

HARP2 - HRACalc (dated 22118) 4/7/2026 5:42:26 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 3

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk saved to: C:\Users\MaMcPherson\OneDrive - Stantec\Desktop\JCC Fresno\HRA\HARP\ResidentialCancerRisk.csv
Calculating chronic risk
Chronic risk saved to: C:\Users\MaMcPherson\OneDrive - Stantec\Desktop\JCC Fresno\HRA\HARP\ResidentialNCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\MaMcPherson\OneDrive - Stantec\Desktop\JCC Fresno\HRA\HARP\ResidentialNCAcuteRisk.csv
HRA ran successfully

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 4/7/2026
** File: C:\Lakes\AERMOD View\New Fresno Courthouse Porject\New Fresno Courthouse
Porject.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\New Fresno Courthouse Porject\New Fresno Courth
   MODELOPT DFAULT CONC
   AVERTIME 1 ANNUAL
   POLLUTID DPM
   RUNORNOT RUN
   ERRORFIL "New Fresno Courthouse Porject.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1       AREAPOLY   250839.142  4069325.343       88.220
** Source Parameters **
   SRCPARAM PAREA1       9.6135E-08     3.000         4
   AREAVERT PAREA1       250839.142 4069325.343 250889.614 4069269.345
   AREAVERT PAREA1       251001.241 4069361.816 250946.717 4069417.077
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "New Fresno Courthouse Porject.rou"
```

```
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE "Met data\Fresno_18-22.SFC"
   PROFFILE "Met data\Fresno_18-22.PFL"
   SURFDATA 93193 2018 FRESNO/AIR_TERMINAL
   UAIRDATA 23230 2018 OAKLAND/WSO_AP
   PROFBASE 100.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "New Fresno Courthouse Porject.AD\01H1GALL.PLT" 31
   PLOTFILE ANNUAL ALL "New Fresno Courthouse Porject.AD\AN00GALL.PLT" 32
   SUMMFILE "New Fresno Courthouse Porject.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```

```
** Lakes Environmental AERMOD MPI
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 4/7/2026
** File: C:\Lakes\AERMOD View\New Fresno Courthouse Porject\New Fresno Courthouse
Porject.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\New Fresno Courthouse Porject\New Fresno Courth
   MODELOPT DFAULT CONC
   AVERTIME 1 ANNUAL
   POLLUTID DPM
   RUNORNOT RUN
   ERRORFIL "New Fresno Courthouse Porject.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1       AREAPOLY   250839.142  4069325.343       88.220
** Source Parameters **
   SRCPARAM PAREA1       9.6135E-08     3.000         4
   AREAVERT PAREA1       250839.142 4069325.343 250889.614 4069269.345
   AREAVERT PAREA1       251001.241 4069361.816 250946.717 4069417.077
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
```

```
   INCLUDED "New Fresno Courthouse Porject.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE "Met data\Fresno_18-22.SFC"
   PROFFILE "Met data\Fresno_18-22.PFL"
   SURFDATA 93193 2018 FRESNO/AIR_TERMINAL
   UAIRDATA 23230 2018 OAKLAND/WSO_AP
   PROFBASE 100.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "New Fresno Courthouse Porject.AD\01H1GALL.PLT" 31
   PLOTFILE ANNUAL ALL "New Fresno Courthouse Porject.AD\AN00GALL.PLT" 32
   SUMMFILE "New Fresno Courthouse Porject.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      63       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187      63       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
```

```
 **********************************
 *** SETUP Finishes Successfully ***
 **********************************

  *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\New Fresno Courthouse
Porject\New Fresno Courth ***        04/07/26
 *** AERMET - VERSION  21112 ***   ***
                       ***        17:24:50

                                  PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                                          ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses RURAL Dispersion Only.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Assumes No FLAGPOLE Receptor Heights.
      * The User Specified a Pollutant Type of: DPM

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates ANNUAL Averages

 **This Run Includes:      1 Source(s);       1 Source Group(s); and     203
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:      0 VOLUME source(s)
                 and:      1 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
```

```
 INIT.   URBAN  EMISSION RATE    AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
  SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

 PAREA1           0   0.96135E-07  250839.1 4069325.3    88.2     3.00       4
  0.00     NO                      NO
  *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\New Fresno Courthouse
Porject\New Fresno Courth ***        04/07/26
 *** AERMET - VERSION  21112 ***   ***
                       ***        17:24:50

                                  PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*


                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        PAREA1      ,
  *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\New Fresno Courthouse
Porject\New Fresno Courth ***        04/07/26
 *** AERMET - VERSION  21112 ***   ***
                       ***        17:24:50

                                  PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                       (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     ( 250363.3, 4069583.2,      87.5,      87.5,       0.0);         ( 250373.3,
4069583.2,      87.5,      87.5,       0.0);
     ( 250383.3, 4069583.2,      87.5,      87.5,       0.0);         ( 250393.3,
4069583.2,      87.5,      87.5,       0.0);
     ( 250363.3, 4069593.2,      87.5,      87.5,       0.0);         ( 250373.3,
4069593.2,      87.5,      87.5,       0.0);
     ( 250383.3, 4069593.2,      87.6,      87.6,       0.0);         ( 250393.3,
4069593.2,      87.6,      87.6,       0.0);
     ( 250403.3, 4069593.2,      87.6,      87.6,       0.0);         ( 250353.3,
4069603.2,      87.5,      87.5,       0.0);
     ( 250363.3, 4069603.2,      87.5,      87.5,       0.0);         ( 250373.3,
4069603.2,      87.6,      87.6,       0.0);
```

```
     ( 250383.3, 4069603.2,      87.6,      87.6,       0.0);         ( 250393.3,
4069603.2,      87.6,      87.6,       0.0);
     ( 250403.3, 4069603.2,      87.6,      87.6,       0.0);         ( 250413.3,
4069603.2,      87.6,      87.6,       0.0);
     ( 250423.3, 4069603.2,      87.6,      87.6,       0.0);         ( 250343.3,
4069613.2,      87.5,      87.5,       0.0);
     ( 250353.3, 4069613.2,      87.5,      87.5,       0.0);         ( 250363.3,
4069613.2,      87.5,      87.5,       0.0);
     ( 250373.3, 4069613.2,      87.6,      87.6,       0.0);         ( 250383.3,
4069613.2,      87.6,      87.6,       0.0);
     ( 250393.3, 4069613.2,      87.6,      87.6,       0.0);         ( 250403.3,
4069613.2,      87.6,      87.6,       0.0);
     ( 250413.3, 4069613.2,      87.6,      87.6,       0.0);         ( 250423.3,
4069613.2,      87.7,      87.7,       0.0);
     ( 250433.3, 4069613.2,      87.6,      87.6,       0.0);         ( 250343.3,
4069623.2,      87.5,      87.5,       0.0);
     ( 250353.3, 4069623.2,      87.5,      87.5,       0.0);         ( 250363.3,
4069623.2,      87.5,      87.5,       0.0);
     ( 250373.3, 4069623.2,      87.6,      87.6,       0.0);         ( 250383.3,
4069623.2,      87.6,      87.6,       0.0);
     ( 250393.3, 4069623.2,      87.6,      87.6,       0.0);         ( 250403.3,
4069623.2,      87.6,      87.6,       0.0);
     ( 250413.3, 4069623.2,      87.7,      87.7,       0.0);         ( 250423.3,
4069623.2,      87.7,      87.7,       0.0);
     ( 250433.3, 4069623.2,      87.7,      87.7,       0.0);         ( 250443.3,
4069623.2,      87.7,      87.7,       0.0);
     ( 250343.3, 4069633.2,      87.5,      87.5,       0.0);         ( 250353.3,
4069633.2,      87.6,      87.6,       0.0);
     ( 250363.3, 4069633.2,      87.6,      87.6,       0.0);         ( 250373.3,
4069633.2,      87.6,      87.6,       0.0);
     ( 250383.3, 4069633.2,      87.6,      87.6,       0.0);         ( 250393.3,
4069633.2,      87.6,      87.6,       0.0);
     ( 250403.3, 4069633.2,      87.7,      87.7,       0.0);         ( 250413.3,
4069633.2,      87.7,      87.7,       0.0);
     ( 250423.3, 4069633.2,      87.7,      87.7,       0.0);         ( 250433.3,
4069633.2,      87.7,      87.7,       0.0);
     ( 250443.3, 4069633.2,      87.7,      87.7,       0.0);         ( 250453.3,
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     ( 250353.3, 4069643.2,      87.6,      87.6,       0.0);         ( 250363.3,
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     ( 250373.3, 4069643.2,      87.6,      87.6,       0.0);         ( 250383.3,
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     ( 250393.3, 4069643.2,      87.6,      87.6,       0.0);         ( 250403.3,
4069643.2,      87.7,      87.7,       0.0);
     ( 250413.3, 4069643.2,      87.7,      87.7,       0.0);         ( 250423.3,
4069643.2,      87.8,      87.8,       0.0);
     ( 250433.3, 4069643.2,      87.7,      87.7,       0.0);         ( 250443.3,
4069643.2,      87.7,      87.7,       0.0);
     ( 250353.3, 4069653.2,      87.6,      87.6,       0.0);         ( 250363.3,
4069653.2,      87.6,      87.6,       0.0);
```

```
     ( 250373.3, 4069653.2,      87.6,      87.6,       0.0);         ( 250383.3,
4069653.2,      87.6,      87.6,       0.0);
     ( 250393.3, 4069653.2,      87.7,      87.7,       0.0);         ( 250403.3,
4069653.2,      87.7,      87.7,       0.0);
     ( 250413.3, 4069653.2,      87.7,      87.7,       0.0);         ( 250423.3,
4069653.2,      87.8,      87.8,       0.0);
     ( 250433.3, 4069653.2,      87.8,      87.8,       0.0);         ( 250353.3,
4069663.2,      87.6,      87.6,       0.0);
     ( 250363.3, 4069663.2,      87.6,      87.6,       0.0);         ( 250373.3,
4069663.2,      87.7,      87.7,       0.0);
     ( 250383.3, 4069663.2,      87.7,      87.7,       0.0);         ( 250393.3,
4069663.2,      87.7,      87.7,       0.0);
     ( 250403.3, 4069663.2,      87.8,      87.8,       0.0);         ( 250413.3,
4069663.2,      87.8,      87.8,       0.0);
     ( 250423.3, 4069663.2,      87.8,      87.8,       0.0);         ( 250433.3,
4069663.2,      87.8,      87.8,       0.0);
     ( 250373.3, 4069673.2,      87.7,      87.7,       0.0);         ( 250383.3,
4069673.2,      87.7,      87.7,       0.0);
     ( 250393.3, 4069673.2,      87.8,      87.8,       0.0);         ( 250403.3,
4069673.2,      87.8,      87.8,       0.0);
     ( 250413.3, 4069673.2,      87.8,      87.8,       0.0);         ( 250423.3,
4069673.2,      87.8,      87.8,       0.0);
     ( 250383.3, 4069683.2,      87.8,      87.8,       0.0);         ( 250393.3,
4069683.2,      87.8,      87.8,       0.0);
     ( 250403.3, 4069683.2,      87.8,      87.8,       0.0);         ( 250413.3,
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     ( 250393.3, 4069693.2,      87.9,      87.9,       0.0);         ( 250403.3,
4069693.2,      87.9,      87.9,       0.0);
  *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\New Fresno Courthouse
Porject\New Fresno Courth ***        04/07/26
 *** AERMET - VERSION  21112 ***   ***
                       ***        17:24:50

                                  PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                  (METERS)

     ( 250765.7, 4069577.3,      88.5,      88.5,       0.0);         ( 250775.7,
4069577.3,      88.4,      88.4,       0.0);
     ( 250755.7, 4069587.3,      88.5,      88.5,       0.0);         ( 250765.7,
4069587.3,      88.5,      88.5,       0.0);
     ( 250775.7, 4069587.3,      88.5,      88.5,       0.0);         ( 250785.7,
4069587.3,      88.5,      88.5,       0.0);
     ( 250745.7, 4069597.3,      88.6,      88.6,       0.0);         ( 250755.7,
4069597.3,      88.5,      88.5,       0.0);
     ( 250765.7, 4069597.3,      88.5,      88.5,       0.0);         ( 250775.7,
4069597.3,      88.5,      88.5,       0.0);
```

```
     ( 250785.7, 4069597.3,      88.5,      88.5,       0.0);         ( 250795.7,
4069597.3,      88.4,      88.4,       0.0);
     ( 250745.7, 4069607.3,      88.6,      88.6,       0.0);         ( 250755.7,
4069607.3,      88.6,      88.6,       0.0);
     ( 250765.7, 4069607.3,      88.5,      88.5,       0.0);         ( 250775.7,
4069607.3,      88.5,      88.5,       0.0);
     ( 250785.7, 4069607.3,      88.5,      88.5,       0.0);         ( 250745.7,
4069617.3,      88.6,      88.6,       0.0);
     ( 250755.7, 4069617.3,      88.6,      88.6,       0.0);         ( 250765.7,
4069617.3,      88.6,      88.6,       0.0);
     ( 250775.7, 4069617.3,      88.5,      88.5,       0.0);         ( 250745.7,
4069627.3,      88.6,      88.6,       0.0);
     ( 250755.7, 4069627.3,      88.6,      88.6,       0.0);         ( 250765.7,
4069627.3,      88.5,      88.5,       0.0);
     ( 250334.7, 4069437.6,      87.5,      87.5,       0.0);         ( 250344.7,
4069437.6,      87.6,      87.6,       0.0);
     ( 250324.7, 4069447.6,      87.4,      87.4,       0.0);         ( 250334.7,
4069447.6,      87.5,      87.5,       0.0);
     ( 250344.7, 4069447.6,      87.5,      87.5,       0.0);         ( 250354.7,
4069447.6,      87.7,      87.7,       0.0);
     ( 250314.7, 4069457.6,      87.3,      87.3,       0.0);         ( 250324.7,
4069457.6,      87.4,      87.4,       0.0);
     ( 250334.7, 4069457.6,      87.4,      87.4,       0.0);         ( 250344.7,
4069457.6,      87.5,      87.5,       0.0);
     ( 250354.7, 4069457.6,      87.6,      87.6,       0.0);         ( 250364.7,
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     ( 250314.7, 4069467.6,      87.3,      87.3,       0.0);         ( 250324.7,
4069467.6,      87.3,      87.3,       0.0);
     ( 250334.7, 4069467.6,      87.3,      87.3,       0.0);         ( 250344.7,
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     ( 250354.7, 4069467.6,      87.5,      87.5,       0.0);         ( 250364.7,
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4069477.6,      87.3,      87.3,       0.0);
     ( 250334.7, 4069477.6,      87.3,      87.3,       0.0);         ( 250344.7,
4069477.6,      87.3,      87.3,       0.0);
     ( 250354.7, 4069477.6,      87.4,      87.4,       0.0);         ( 250324.7,
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     ( 250334.7, 4069487.6,      87.3,      87.3,       0.0);         ( 250344.7,
4069487.6,      87.3,      87.3,       0.0);
     ( 250334.7, 4069497.6,      87.3,      87.3,       0.0);         ( 250562.0,
4069164.7,      88.2,      88.2,       0.0);
     ( 250572.0, 4069164.7,      88.2,      88.2,       0.0);         ( 250582.0,
4069164.7,      88.3,      88.3,       0.0);
     ( 250552.0, 4069174.7,      88.2,      88.2,       0.0);         ( 250562.0,
4069174.7,      88.2,      88.2,       0.0);
     ( 250572.0, 4069174.7,      88.2,      88.2,       0.0);         ( 250582.0,
4069174.7,      88.2,      88.2,       0.0);
     ( 250592.0, 4069174.7,      88.2,      88.2,       0.0);         ( 250602.0,
4069174.7,      88.2,      88.2,       0.0);
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(250542.0, 4069184.7, 88.1, 88.1, 0.0); (250552.0, 4069184.7, 88.2, 88.2, 0.0);
(250562.0, 4069184.7, 88.2, 88.2, 0.0); (250572.0, 4069184.7, 88.2, 88.2, 0.0);
(250582.0, 4069184.7, 88.2, 88.2, 0.0); (250592.0, 4069184.7, 88.2, 88.2, 0.0);
(250532.0, 4069194.7, 88.0, 88.0, 0.0); (250542.0, 4069194.7, 88.1, 88.1, 0.0);
(250552.0, 4069194.7, 88.2, 88.2, 0.0); (250562.0, 4069194.7, 88.2, 88.2, 0.0);
(250572.0, 4069194.7, 88.2, 88.2, 0.0); (250582.0, 4069194.7, 88.2, 88.2, 0.0);
(250592.0, 4069194.7, 88.2, 88.2, 0.0); (250532.0, 4069204.7, 88.0, 88.0, 0.0);
(250542.0, 4069204.7, 88.1, 88.1, 0.0); (250552.0, 4069204.7, 88.1, 88.1, 0.0);
(250562.0, 4069204.7, 88.2, 88.2, 0.0); (250572.0, 4069204.7, 88.2, 88.2, 0.0);
(250582.0, 4069204.7, 88.2, 88.2, 0.0); (250542.0, 4069214.7, 88.0, 88.0, 0.0);
(250552.0, 4069214.7, 88.1, 88.1, 0.0); (250562.0, 4069214.7, 88.1, 88.1, 0.0);
(250572.0, 4069214.7, 88.1, 88.1, 0.0); (251132.8, 4068860.5, 88.2, 88.2, 0.0);
(251142.8, 4068860.5, 88.2, 88.2, 0.0); (251152.8, 4068860.5, 88.2, 88.2, 0.0);
(251122.8, 4068870.5, 88.3, 88.3, 0.0); (251132.8, 4068870.5, 88.3, 88.3, 0.0);
(251142.8, 4068870.5, 88.2, 88.2, 0.0); (251152.8, 4068870.5, 88.2, 88.2, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(251162.8, 4068870.5, 88.2, 88.2, 0.0); (251122.8, 4068880.5, 88.4, 88.4, 0.0);
(251132.8, 4068880.5, 88.3, 88.3, 0.0); (251142.8, 4068880.5, 88.3, 88.3, 0.0);
(251152.8, 4068880.5, 88.3, 88.3, 0.0); (251162.8, 4068880.5, 88.3, 88.3, 0.0);
(251142.8, 4068890.5, 88.4, 88.4, 0.0); (251152.8, 4068890.5, 88.3, 88.3, 0.0);

```
     ( 251152.8, 4068900.5,      88.4,      88.4,       0.0);         ( 251238.6,
4069235.2,      89.2,      89.2,       0.0);
     ( 251228.6, 4069245.2,      89.2,      89.2,       0.0);         ( 251238.6,
4069245.2,      89.2,      89.2,       0.0);
     ( 251248.6, 4069245.2,      89.1,      89.1,       0.0);         ( 251218.6,
4069255.2,      89.2,      89.2,       0.0);
     ( 251228.6, 4069255.2,      89.2,      89.2,       0.0);         ( 251238.6,
4069255.2,      89.2,      89.2,       0.0);
     ( 251248.6, 4069255.2,      89.1,      89.1,       0.0);         ( 251208.6,
4069265.2,      89.2,      89.2,       0.0);
     ( 251218.6, 4069265.2,      89.2,      89.2,       0.0);         ( 251228.6,
4069265.2,      89.2,      89.2,       0.0);
     ( 251238.6, 4069265.2,      89.1,      89.1,       0.0);         ( 251218.6,
4069275.2,      89.2,      89.2,       0.0);
     ( 251228.6, 4069275.2,      89.2,      89.2,       0.0);

  *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\New Fresno Courthouse
Porject\New Fresno Courth ***        04/07/26
 *** AERMET - VERSION  21112 ***   ***
                       ***        17:24:50

                                   PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                                          *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                                (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1

               NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON
WHAT IS INCLUDED IN THE DATA FILE.


                                   *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
```

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL
DATA ***

Surface file: Met data\Fresno_18-22.SFC
Met Version: 21112
Profile file: Met data\Fresno_18-22.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 93193 Upper air station no.: 23230
Name: FRESNO/AIR_TERMINAL Name:
OAKLAND/WSO_AP
Year: 2018 Year: 2018

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
18	01	01	1	01	-6.0	0.108	-9.000	-9.000	-999.	85.	18.7	0.17	1.06	1.00	1.20	347.	10.0	280.9	2.0
18	01	01	1	02	-2.0	0.062	-9.000	-9.000	-999.	38.	10.9	0.02	1.06	1.00	0.91	174.	10.0	279.2	2.0
18	01	01	1	03	-3.4	0.076	-9.000	-9.000	-999.	50.	11.8	0.03	1.06	1.00	1.20	265.	10.0	279.2	2.0
18	01	01	1	04	-5.1	0.095	-9.000	-9.000	-999.	71.	15.2	0.06	1.06	1.00	1.35	316.	10.0	278.1	2.0
18	01	01	1	05	-8.8	0.123	-9.000	-9.000	-999.	104.	19.1	0.04	1.06	1.00	1.87	96.	10.0	277.0	2.0
18	01	01	1	06	-2.6	0.067	-9.000	-9.000	-999.	43.	10.7	0.02	1.06	1.00	1.08	177.	10.0	277.5	2.0
18	01	01	1	07	-3.7	0.078	-9.000	-9.000	-999.	52.	11.5	0.02	1.06	1.00	1.33	181.	10.0	277.5	2.0
18	01	01	1	08	-15.2	0.167	-9.000	-9.000	-999.	164.	30.7	0.06	1.06	0.65	2.32	76.	10.0	276.4	2.0

```
 18 01 01   1 09   -3.5  0.149 -9.000 -9.000 -999.  139.     86.8  0.04   1.06
0.36    2.15  109.   10.0  278.1    2.0
 18 01 01   1 10   56.2  0.204  0.651  0.006  177.  221.    -13.6  0.04   1.06
0.26    2.37  134.   10.0  281.4    2.0
 18 01 01   1 11   92.0  0.233  1.067  0.016  477.  270.    -12.4  0.04   1.06
0.22    2.62  105.   10.0  283.1    2.0
 18 01 01   1 12  116.8  0.202  1.234  0.018  581.  219.     -6.4  0.04   1.06
0.21    2.11  102.   10.0  285.9    2.0
 18 01 01   1 13  112.5  0.144  1.280  0.019  673.  132.     -2.4  0.02   1.06
0.21    1.55  183.   10.0  287.5    2.0
 18 01 01   1 14   84.0  0.122  1.190  0.019  723.  103.     -2.0  0.02   1.06
0.22    1.28  200.   10.0  289.2    2.0
 18 01 01   1 15   57.9  0.161  1.059  0.019  738.  155.     -6.5  0.03   1.06
0.26    1.81  262.   10.0  290.4    2.0
 18 01 01   1 16   16.8  0.124  0.702  0.019  742.  105.    -10.3  0.03   1.06
0.35    1.47  259.   10.0  289.9    2.0
 18 01 01   1 17   -2.5  0.068 -9.000 -9.000 -999.   44.     11.3  0.02   1.06
0.62    1.14  297.   10.0  287.5    2.0
 18 01 01   1 18   -7.4  0.111 -9.000 -9.000 -999.   89.     16.9  0.03   1.06
1.00    1.84  239.   10.0  286.4    2.0
 18 01 01   1 19   -4.0  0.085 -9.000 -9.000 -999.   60.     13.8  0.06   1.06
1.00    1.21   83.   10.0  284.9    2.0
 18 01 01   1 20  -10.4  0.137 -9.000 -9.000 -999.  122.     22.3  0.06   1.06
1.00    1.93   76.   10.0  283.8    2.0
 18 01 01   1 21   -4.7  0.090 -9.000 -9.000 -999.   65.     14.0  0.04   1.06
1.00    1.38  109.   10.0  283.1    2.0
 18 01 01   1 22   -4.1  0.084 -9.000 -9.000 -999.   58.     13.0  0.04   1.06
1.00    1.30  127.   10.0  281.4    2.0
 18 01 01   1 23  -11.7  0.145 -9.000 -9.000 -999.  133.     23.6  0.06   1.06
1.00    2.04   70.   10.0  280.9    2.0
 18 01 01   1 24   -3.4  0.079 -9.000 -9.000 -999.   54.     13.0  0.06   1.06
1.00    1.09   80.   10.0  281.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 18 01 01 01   10.0 1  347.    1.20   281.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
  *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\New Fresno Courthouse
Porject\New Fresno Courth ***        04/07/26
 *** AERMET - VERSION  21112 ***   ***
                       ***        17:24:50

                                  PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     PAREA1      ,
```

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
250363.28	4069583.21	0.00723	250373.28	4069583.21	0.00739
250383.28	4069583.21	0.00756	250393.28	4069583.21	0.00773
250363.28	4069593.21	0.00709	250373.28	4069593.21	0.00725
250383.28	4069593.21	0.00741	250393.28	4069593.21	0.00757
250403.28	4069593.21	0.00774	250353.28	4069603.21	0.00681
250363.28	4069603.21	0.00695	250373.28	4069603.21	0.00710
250383.28	4069603.21	0.00726	250393.28	4069603.21	0.00741
250403.28	4069603.21	0.00757	250413.28	4069603.21	0.00773
250423.28	4069603.21	0.00790	250343.28	4069613.21	0.00654
250353.28	4069613.21	0.00668	250363.28	4069613.21	0.00682
250373.28	4069613.21	0.00696	250383.28	4069613.21	0.00710
250393.28	4069613.21	0.00725	250403.28	4069613.21	0.00740
250413.28	4069613.21	0.00756	250423.28	4069613.21	0.00771
250433.28	4069613.21	0.00786	250343.28	4069623.21	0.00642
250353.28	4069623.21	0.00655	250363.28	4069623.21	0.00668
250373.28	4069623.21	0.00681	250383.28	4069623.21	0.00695
250393.28	4069623.21	0.00709	250403.28	4069623.21	0.00723
250413.28	4069623.21	0.00738	250423.28	4069623.21	0.00752
250433.28	4069623.21	0.00766	250443.28	4069623.21	0.00780
250343.28	4069633.21	0.00629	250353.28		

```
4069633.21        0.00642
         250363.28    4069633.21        0.00654                      250373.28
4069633.21        0.00667
         250383.28    4069633.21        0.00680                      250393.28
4069633.21        0.00693
         250403.28    4069633.21        0.00706                      250413.28
4069633.21        0.00719
         250423.28    4069633.21        0.00732                      250433.28
4069633.21        0.00745
         250443.28    4069633.21        0.00758                      250453.28
4069633.21        0.00770
         250353.28    4069643.21        0.00629                      250363.28
4069643.21        0.00641
         250373.28    4069643.21        0.00653                      250383.28
4069643.21        0.00665
         250393.28    4069643.21        0.00677                      250403.28
4069643.21        0.00689
         250413.28    4069643.21        0.00701                      250423.28
4069643.21        0.00713
         250433.28    4069643.21        0.00724                      250443.28
4069643.21        0.00735
         250353.28    4069653.21        0.00616                      250363.28
4069653.21        0.00627
         250373.28    4069653.21        0.00638                      250383.28
4069653.21        0.00649
         250393.28    4069653.21        0.00660                      250403.28
4069653.21        0.00671
         250413.28    4069653.21        0.00682                      250423.28
4069653.21        0.00693
         250433.28    4069653.21        0.00703                      250353.28
4069663.21        0.00603
         250363.28    4069663.21        0.00613                      250373.28
4069663.21        0.00623
         250383.28    4069663.21        0.00634                      250393.28
4069663.21        0.00644
         250403.28    4069663.21        0.00654                      250413.28
4069663.21        0.00663
         250423.28    4069663.21        0.00672                      250433.28
4069663.21        0.00681
         250373.28    4069673.21        0.00608                      250383.28
4069673.21        0.00618
  *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\New Fresno Courthouse
Porject\New Fresno Courth ***        04/07/26
 *** AERMET - VERSION  21112 ***   ***
                      ***        17:24:50

                                  PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                  *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
```

YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
250393.28	4069673.21	0.00627	250403.28	4069673.21	0.00636
250413.28	4069673.21	0.00644	250423.28	4069673.21	0.00652
250383.28	4069683.21	0.00602	250393.28	4069683.21	0.00610
250403.28	4069683.21	0.00617	250413.28	4069683.21	0.00624
250393.28	4069693.21	0.00592	250403.28	4069693.21	0.00599
250765.73	4069577.32	0.01232	250775.73	4069577.32	0.01220
250755.73	4069587.32	0.01142	250765.73	4069587.32	0.01132
250775.73	4069587.32	0.01122	250785.73	4069587.32	0.01110
250745.73	4069597.32	0.01062	250755.73	4069597.32	0.01054
250765.73	4069597.32	0.01045	250775.73	4069597.32	0.01035
250785.73	4069597.32	0.01024	250795.73	4069597.32	0.01013
250745.73	4069607.32	0.00983	250755.73	4069607.32	0.00976
250765.73	4069607.32	0.00967	250775.73	4069607.32	0.00958
250785.73	4069607.32	0.00949	250745.73	4069617.32	0.00913
250755.73	4069617.32	0.00906	250765.73	4069617.32	0.00899
250775.73	4069617.32	0.00890	250745.73	4069627.32	0.00851
250755.73	4069627.32	0.00844	250765.73	4069627.32	0.00838
250334.74	4069437.63	0.00886	250344.74	4069437.63	0.00910
250324.74	4069447.63	0.00849	250334.74		

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4069447.63        0.00871
         250344.74    4069447.63        0.00894                    250354.74
4069447.63        0.00919
         250314.74    4069457.63        0.00815                    250324.74
4069457.63        0.00835
         250334.74    4069457.63        0.00857                    250344.74
4069457.63        0.00879
         250354.74    4069457.63        0.00903                    250364.74
4069457.63        0.00927
         250314.74    4069467.63        0.00801                    250324.74
4069467.63        0.00821
         250334.74    4069467.63        0.00842                    250344.74
4069467.63        0.00863
         250354.74    4069467.63        0.00886                    250364.74
4069467.63        0.00910
         250314.74    4069477.63        0.00788                    250324.74
4069477.63        0.00807
         250334.74    4069477.63        0.00827                    250344.74
4069477.63        0.00848
         250354.74    4069477.63        0.00870                    250324.74
4069487.63        0.00793
         250334.74    4069487.63        0.00812                    250344.74
4069487.63        0.00832
         250334.74    4069497.63        0.00798                    250562.02
4069164.66        0.01478
         250572.02    4069164.66        0.01513                    250582.02
4069164.66        0.01548
         250552.02    4069174.66        0.01513                    250562.02
4069174.66        0.01552
         250572.02    4069174.66        0.01592                    250582.02
4069174.66        0.01632
         250592.02    4069174.66        0.01673                    250602.02
4069174.66        0.01715
         250542.02    4069184.66        0.01539                    250552.02
4069184.66        0.01583
         250562.02    4069184.66        0.01627                    250572.02
4069184.66        0.01672
         250582.02    4069184.66        0.01719                    250592.02
4069184.66        0.01766
         250532.02    4069194.66        0.01558                    250542.02
4069194.66        0.01604
         250552.02    4069194.66        0.01653                    250562.02
4069194.66        0.01703
  *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\New Fresno Courthouse
Porject\New Fresno Courth ***        04/07/26
 *** AERMET - VERSION  21112 ***   ***
                       ***        17:24:50

                                  PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*
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*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
250572.02	4069194.66	0.01754	250582.02	4069194.66	0.01806
250592.02	4069194.66	0.01860	250532.02	4069204.66	0.01617
250542.02	4069204.66	0.01668	250552.02	4069204.66	0.01722
250562.02	4069204.66	0.01777	250572.02	4069204.66	0.01834
250582.02	4069204.66	0.01894	250542.02	4069214.66	0.01731
250552.02	4069214.66	0.01790	250562.02	4069214.66	0.01851
250572.02	4069214.66	0.01914	251132.75	4068860.54	0.00722
251142.75	4068860.54	0.00745	251152.75	4068860.54	0.00770
251122.75	4068870.54	0.00736	251132.75	4068870.54	0.00761
251142.75	4068870.54	0.00787	251152.75	4068870.54	0.00813
251162.75	4068870.54	0.00839	251122.75	4068880.54	0.00777
251132.75	4068880.54	0.00804	251142.75	4068880.54	0.00831
251152.75	4068880.54	0.00858	251162.75	4068880.54	0.00886
251142.75	4068890.54	0.00879	251152.75	4068890.54	0.00908
251152.75	4068900.54	0.00961	251238.62	4069235.23	0.02081
251228.62	4069245.23	0.02151	251238.62	4069245.23	0.02007
251248.62	4069245.23	0.01875	251218.62	4069255.23	0.02220
251228.62	4069255.23	0.02064	251238.62		

4069255.23   0.01922
         251248.62   4069255.23   0.01793   251208.62
4069265.23   0.02287
         251218.62   4069265.23   0.02118   251228.62
4069265.23   0.01966
         251238.62   4069265.23   0.01828   251218.62
4069275.23   0.02005
         251228.62   4069275.23   0.01858

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

                                *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   PAREA1   ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                        ** CONC OF DPM   IN MICROGRAMS/M**3   **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 - - -

4069613.21 0.63486 (19122709)
250373.28 4069613.21 0.64919 (19122709) 250383.28
4069613.21 0.66188 (19122709)
250393.28 4069613.21 0.67267 (19122709) 250403.28
4069613.21 0.68137 (19122709)
250413.28 4069613.21 0.68768 (19122709) 250423.28
4069613.21 0.69161 (19122709)
250433.28 4069613.21 0.69275 (19122709) 250343.28
4069623.21 0.60923 (19122709)
250353.28 4069623.21 0.62271 (19122709) 250363.28
4069623.21 0.63455 (19122709)
250373.28 4069623.21 0.64458 (19122709) 250383.28
4069623.21 0.65281 (19122709)
250393.28 4069623.21 0.65897 (19122709) 250403.28
4069623.21 0.66291 (19122709)
250413.28 4069623.21 0.66459 (19122709) 250423.28
4069623.21 0.66370 (19122709)
250433.28 4069623.21 0.66001 (19122709) 250443.28
4069623.21 0.65362 (19122709)
250343.28 4069633.21 0.60917 (19122709) 250353.28
4069633.21 0.61878 (19122709)
250363.28 4069633.21 0.62642 (19122709) 250373.28
4069633.21 0.63222 (19122709)
250383.28 4069633.21 0.63600 (19122709) 250393.28
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                                  PAGE  13
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                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA1      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                     ** CONC OF DPM      IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
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                       ***        17:24:50

                                  PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                                   *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS
AVERAGED OVER   5 YEARS ***


                                    ** CONC OF DPM      IN MICROGRAMS/M**3
             **


                      NETWORK
GROUP ID                     AVERAGE CONC                RECEPTOR  (XR, YR, ZELEV,
ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
```

```
ALL       1ST HIGHEST VALUE IS       0.02287 AT (  251208.62,  4069265.23,    89.24,
   89.24,    0.00)  DC
          2ND HIGHEST VALUE IS       0.02220 AT (  251218.62,  4069255.23,    89.21,
   89.21,    0.00)  DC
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   89.21,    0.00)  DC
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          7TH HIGHEST VALUE IS       0.02007 AT (  251238.62,  4069245.23,    89.18,
   89.18,    0.00)  DC
          8TH HIGHEST VALUE IS       0.02005 AT (  251218.62,  4069275.23,    89.24,
   89.24,    0.00)  DC
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   89.17,    0.00)  DC
         10TH HIGHEST VALUE IS       0.01922 AT (  251238.62,  4069255.23,    89.16,
   89.16,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
  *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\New Fresno Courthouse
Porject\New Fresno Courth ***        04/07/26
 *** AERMET - VERSION  21112 ***   ***
                       ***        17:24:50

                                  PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***


                                    ** CONC OF DPM      IN MICROGRAMS/M**3
             **

                                                          DATE
                                         NETWORK
GROUP ID                              AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       1.45602  ON 18100107: AT (  250785.73,
```

4069587.32,   88.46,   88.46,   0.00) DC

 *** RECEPTOR TYPES: GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
  *** AERMOD - VERSION 24142 ***   *** C:\Lakes\AERMOD View\New Fresno Courthouse
Porject\New Fresno Courth ***   04/07/26
 *** AERMET - VERSION 21112 ***   ***
                       ***   17:24:50

                                  PAGE 17
 *** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of   0 Fatal Error Message(s)
 A Total of   4 Warning Message(s)
 A Total of   1361 Informational Message(s)

 A Total of   43824 Hours Were Processed

 A Total of   750 Calm Hours Identified

 A Total of   611 Missing Hours Identified (1.39 Percent)

    ******** FATAL ERROR MESSAGES ********
               *** NONE ***

    ********   WARNING MESSAGES   ********
 ME W186   63   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187   63   MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 MX W420   7582   METQA: Wind Speed Out-of-Range.   KURDAT =
 18111222
 MX W420   7588   METQA: Wind Speed Out-of-Range.   KURDAT =
 18111304

    ****
    *** AERMOD Finishes Successfully ***
    ****

Stantec

Stantec is a global leader in sustainable architecture, engineering, and environmental consulting. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.



Appendix C Biological Resources Technical Report

Biological Resources Technical Report

New Fresno Courthouse Project

Date:
April 23, 2026

Prepared for:
Judicial Council of California

Prepared by:
Stantec Consulting Services Inc.
621 W Line Street, Suite 205
Bishop, California 93514

Project/File:
185806843

Stantec

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Prepared by:

Signature

Dannique Aalbu, Biologist

Reviewed by:

Signature

Emily C. Eppinger, Biologist

Approved by:

Signature

StephAnnie Roberts, Principal, Environmental Planner

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Appendix C Representative Photographs

Acronyms / Abbreviations

Acronym / Abbreviation	Full Name
APN	Assessor's Parcel Number
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
COOP	Continuity of Operations Plan
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DPS	Distinct Population Segment
EAP	Emergency Action Plan
EIR	Environmental Impact Report
ESA / FESA	Federal Endangered Species Act
FC	Federal Candidate
FE	Federally Endangered
FGC	California Fish and Game Code
FT	Federally Threatened
GIS	Geographic Information System
HSEEP	Homeland Security Exercise and Evaluation Program
IPaC	Information for Planning and Consultation (USFWS)
LEED	Leadership in Energy and Environmental Design
MBTA	Migratory Bird Treaty Act
NWI	National Wetlands Inventory
NPPA	Native Plant Protection Act
P	Proposed for Listing (Federal)
RWQCB	Regional Water Quality Control Board
SF	Square Feet
SR	State Route
SR (Status)	State Rare
SSC	Species of Special Concern (CDFW)
State T / ST	State Threatened
State E / SE	State Endangered
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WDR	Waste Discharge Requirement
WOTS	Waters of the State
WOTUS	Waters of the United States
WRCC	Western Regional Climate Center

1 Introduction

This Biological Resources Technical Report (Report) addresses biological resources in and around the Judicial Council of California's (Judicial Council's) proposed New Fresno Courthouse Project (Project). The Report describes the environmental conditions within the vicinity of the Project and evaluates the potential for biological resources to occur, with an emphasis on special-status plant and animal species (i.e. those listed as endangered or threatened or given another designation by the state or federal regulatory agencies owing to heightened conservation concern) as well as jurisdictional features and regulated habitats. Together, this summary of desktop resources and field surveys will help inform analysis for California Environmental Quality Act (CEQA) review and requirements for State of California regulatory agency permitting and compliance.

The Project is located in the City of Fresno (City), in Fresno County, California **(Appendix A -Figure 1)**. The Project consists of the demolition of two existing buildings and the construction of a new courthouse for the Superior Court of California, County of Fresno (County), to support criminal, juvenile, drug, behavioral health, and general trial cases. The proposed courthouse facility is located on a 2.09-acre portion of the 7.60-acre L-shaped lot (Site 1), which occupies the western portion of the 13.94-acre Courtyard Park parcel, County-owned Courthouse Park property at 2200 Fresno Street **(Appendix A -Figure 2)**. Site 1 is located on the western side of the parcel and is bound by Fresno Street to the northwest, M Street to the northeast, Tulare Street southeast, and Van Ness Avenue to the southwest. It encompasses the existing County Sheriff's Office and South Annex Jail, which are connected via an underground tunnel to the Main Jail located across Fresno Street to the west. In addition to Site 1, an adjacent staging area is proposed at the intersection of Fresno Street and M Street. Together, Site 1 and the adjacent staging area (staging area 3) make up the Project Area **(Appendix A - Figure 2).**

This Report is based on existing information, including information gathered from a review of desktop resources (i.e. existing literature, data, and maps), a 2023 field reconnaissance survey and accompanying Due Diligence Report (PlaceWorks 2024), and a 2025 field reconnaissance survey (Stantec 2025). The Study Area for this Report encompasses the Project Area and a 500-foot buffer **(Appendix A - Figure 3).**

The overall purpose of this Report is to:

- Characterize the habitat and vegetation communities present;
- Evaluate the potential for special-status plant and animal species to occur; and
- Discuss potential impacts to special-status species, sensitive natural communities, and jurisdictional aquatic features.

2 Project Description

The Judicial Council is proposing to construct and operate a new consolidated courthouse for the Fresno County Superior Court of California (Project) to support criminal, civil, juvenile, drug, behavioral health, and general trial cases. The Project will be delivered through a Design-Build process. Although final plans have not yet been prepared, the Project is anticipated to include demolition, site preparation, grading, building construction, paving, and architectural finishing activities.

The Project is located on a County-owned Courthouse Park property at 2200 Fresno Street (Fresno County Assessor's Parcel Number 466-160-01T). The Project Area, along with the larger Courthouse Park parcel, features paved walkways, manicured lawns, and a variety of ornamental trees and plantings. Trees planted along street frontages are largely non-native ornamental species. Within Courthouse Park, tree plantings are diverse and include mature deodar cedar (*Cedrus deodara*), Italian stone pine (*Pinus pinea*), Chinese elm (*Ulmus parvifolia*), ginkgo (*Ginkgo biloba*), and other ornamental species.

Demolition of the Sheriff Administration and South Annex Jail buildings will be completed as part of the Project. Following demolition, the Judicial Council would construct a new, approximately 413,000 square-foot (SF) courthouse designed to accommodate current judicial functions and future growth in judgeships. The proposed building would consist of a basement level, podium levels of approximately 43,700 SF each, and tower levels of approximately 27,560 SF each, totaling no more than 11 stories above ground and one level below ground.

The proposed new courthouse would include additional courtrooms, support spaces, and secure parking for judges and officers. The support spaces would include, but are not limited to, judicial chambers, clerks' offices, jury assembly and deliberation rooms, temporary in-custody holding, administrative office space, parking loading dock, and secure prisoner sallyport. The courthouse would include a connection to the existing tunnel to the County Jail across Fresno Street for transport of prisoners. Secured parking would be provided for judges and officers only; no staff or public parking is included as part of the Project scope. The new courthouse would be staffed by approximately 390 full-time employees and 14 part-time employees daily.

The Project would implement sustainable elements throughout its design, construction, and operation and maintenance. The Project would be designed for sustainability and, at a minimum, to the standards of a Leadership in Energy and Environmental Design (LEED) Silver-certified rating. The Project is anticipated to result in an increase of approximately 65,000 SF of paved/impervious surfaces within the Project Area as compared to the existing facilities.

Project construction is planned to occur over 48 months and is anticipated to start in October 2029 and be completed by October 2033. Construction would be phased to align with the Office of the State Fire Marshal's permitting guidelines and the Judicial Council Building Official's requirements. Construction is anticipated to occur in the following phases: Site Preparation, Grading, Building Construction, Paving, and Architectural Coating.

3 Methods

The analysis presented in this Report includes a review and update of existing information about sensitive biological resources known to occur within the Project's Study Area **(Appendix A - Figure 3).**

3.1 Definitions

3.1.1 Special-Status Species and Sensitive Communities

For the purpose of this evaluation, special-status plant and/or animal species are defined as the following:

- species listed as rare, threatened, or endangered and protected under the California Endangered Species Act (CESA)
- species that are proposed for listing by California as threatened or endangered under CESA (14 California Code of Regulations 670.5)
- species that are listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (FESA);
- species that are recognized as fully protected or as species of special concern (SSC) by the CDFW
- species fully protected by California Fish and Game Code Sections 3511, 4700, 5050, or 5515
- species ranked as "rare, threatened, or endangered in California" by the California Native Plant Society (CNPS) as California Rare Plant Rank (CRPR) 1A, 1B, 2A or 2B plant species
- species included on the CDFW Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2025a)
- species covered under the CDNPA listed in Chapter 3, Division 23, of the California Food and Agriculture Code
- species protected by the Migratory Bird Treaty Act or California Fish and Game Code

Sensitive natural communities are those communities that have a highly limited distribution, and may or may not contain rare, threatened, or endangered species. The California Natural Diversity Database (CNDDB) ranks natural communities according to their rarity and endangerment in California. Habitats are considered "sensitive" if they are identified on the CDFW List of Vegetation Alliances and Associations as being highly imperiled or classified by CDFW in the CNDDB as natural communities of special concern – Ranks S1 to S3.

3.1.1.1 Potential to Occur

The potential for special-status species to occur within the Study Area was classified under one of five categories as described below. Only those special-status species with an occurrence potential of "Moderate" or greater are evaluated in detail as those species are most likely to occur.

- **Present:** The species is known to be present or has been recently observed in the Study Area.
- **High:** The species has been observed and documented within five miles of the Study Area within the last five years and suitable habitat for the species is present.
- **Moderate:** The Project is located within the range of the species, there are documented occurrences within five miles of the Study Area, and/or suitable habitat for the species exists in the Study Area.
- **Low:** The Project is located within the range of the species, and low-quality (e.g., disturbed, agricultural) habitat is present in the Study Area.
- **Absent:** The Project is located outside of the range of the species and/or potential habitat to support the species is not present in the Study Area.

3.2 Literature and Database Review

The Project is located within the *Fresno South, California* USGS 7.5-minute quadrangle. CNDDB and CNPS database searches for special-status species included the *Fresno South* USGS 7.5-minute quadrangle and eight surrounding quadrangles: *Herndon, Fresno North, Clovis, Kearney Park, Malaga, Raisin, Caruthers, and Conejo.* A 5-mile radius search of CDFW's CNDDB was conducted based on habitat types and migration distances for potential special-status plant and animal species that have potential to occur within the Study Area (CDFW 2025a; **Appendix A - Figure 4**). Calflora and CNPS's online inventory databases were used to obtain detailed habitat information for rare plant species. The USFWS's IPaC database was also queried for federally endangered, threatened, candidate, and proposed animal and plant species that have potential to occur in the Study Area. Detailed location-specific Information about habitat types and special-status species that could occur within the Study Area was obtained from the following sources:

- CDFW CNDDB plant and animal records (CDFW 2025a; **Appendix B – CNDDB Species List**)
- CNPS online *Inventory of Rare and Endangered Plants* (CNPS 2025a; **Appendix B – CNPS Species List**)
- Manual of California Vegetation, Online Edition (CNPS 2025b)
- Calflora (Calflora 2025)
- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) resource list of endangered and threatened species that may occur in the Project Area (USFWS 2025a; **Appendix B – USFWS Species List**)
- USFWS Designated Critical Habitat within the Project Area (USFWS 2025b)
- USFWS National Wetlands Inventory (USFWS 2025c)
- U.S. Geological Survey (USGS) National Hydrography Dataset Plus V2 (USGS 2025)

Other information sources consulted to determine which special-status species could potentially occur in the Study Area included:

- *New Fresno Courthouse Due Diligence Review: Site 1* report, prepared by PlaceWorks which included a desktop review and 2023 field reconnaissance survey of Site 1 (PlaceWorks 2024)
- Google Earth Imagery (Google Earth 2024)
- Results from a field reconnaissance survey conducted by Stantec staff in November 2025. The site visit included photo documentation of the green spaces within the Project Area (**Appendix C – Representative Photographs**) and a reconnaissance-level habitat assessment of staging area 3 (Stantec 2025)
- Biological Resources Technical Memorandum for the City of Fresno Water and Sewer Improvements Project, Fresno County, California (Rincon 2025)

4 Regulatory Context

4.1 Federal Regulatory Requirements

4.1.1 Federal Endangered Species Act

The FESA of 1973 was established to protect and recover endangered and threatened species and the ecosystems upon which they depend. According to the FESA "endangered" indicates a species is in danger of extinction throughout all or a significant portion of its range. In addition, the FESA defines a species as "threatened" if that species is likely to become endangered within the foreseeable future. The USFWS maintains a list of endangered and threatened species. The USFWS and the National Marine Fisheries Service administer FESA and are responsible for consulting with other federal agencies pursuant to FESA. Consultation with the USFWS would be necessary if a Project action has the potential to affect federally listed species, their habitat, as well as areas of Designated Critical Habitat. This consultation would proceed under Section 7 of the FESA if a federal action is required for the Project or it would proceed through Section 10 of the FESA if no such federal nexus were available.

4.1.2 Clean Water Act

The objective of the Clean Water Act (CWA) of 1977, as amended, is to maintain and restore the chemical, physical, and biological integrity of the nation’s waters. The discharge of dredged or fill material into waters of the U.S. (WOTUS), including jurisdictional wetlands, is regulated under Section 404 of the CWA by the USACE via a permitting process. Surface water quality is further regulated by the U.S. Environmental Protection Agency (USEPA); in California this authority is delegated to the State Water Resources Control Board (SWRCB) or the Regional Water Quality Control Board (RWQCB). Applicants for Section 404 permits are also required to comply with Section 401 of the CWA by obtaining Water Quality Certification (WQC) through the State.

4.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 enacts the provisions of treaties between the U.S., Great Britain, Mexico, Japan, and Russia and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. This treaty prohibits “take,” which has been defined to include harming any migratory bird listed under the MBTA, including nests, eggs, and/or young.

4.2 State Regulatory Requirements

4.2.1 California Endangered Species Act

The CESA prohibits “take” of plants or animals threatened with extinction or experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, which includes protecting native plant and animal species and their habitats. “Take” is defined in Section 86 of the California Fish and Game Code (FGC) as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” CESA authorizes CDFW to issue incidental take permits for state-listed species when specific criteria are met.

4.2.2 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne), Sections 1601 to 1602 of the California FGC, authorizes the SWRCB to oversee water rights and water quality policy, and the SWRCB has established nine RWQCBs to protect and enhance water quality at the regional and local levels. In addition to preparing WQCs to designate beneficial uses of water bodies in each region, each RWQCB may issue a permit, referred to as a Waste Discharge Requirement (WDR), for activities that result in pollutant or nuisance discharges that may affect surface or groundwater, including isolated wetlands not subject to the jurisdiction of the USACE.

4.2.3 California Fish and Game Code

The California FGC has several provisions for the protection of waters of the State (WOTS), and special-status plant, fish, and wildlife resources, including their habitat. The applicable sections of the California FGC are as follows:

- **Sections 1600–1616 (Streambed Alteration):** The CDFW is responsible for the protection and conservation of fish and wildlife resources in California. Under Section 1602, CDFW has the authority to issue Lake or Streambed Alteration Agreements for construction activities that substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the CDFW as providing resources for fish or wildlife.
- **Sections 1900–1913 (Native Plant Protection Act):** The Native Plant Protection Act (NPPA) of 1977 prohibits the taking, possessing, or sale within the State of any plants that the CDFW has determined are rare, threatened, or endangered. The CDFW has the authority to enforce the provisions of this act and authorize measures to salvage native plants that may otherwise be affected by project activities, if deemed appropriate.
- **Sections 3500–3516 (Game Birds and Birds of Prey):** The CDFW protects game birds, birds of prey, migratory birds, and fully protected birds and their nests, eggs, and young from take or possession, except as otherwise provided by the code (e.g., incidental take under CESA).
- **Sections 3511, 4700, 5050, and 5515 (Fully Protected Species):** California statutes accord a “fully protected” status to specific birds, mammals, reptiles, amphibians, and fish. These species cannot be “taken,” and no process exists for the issuance of incidental take permits for fully protected species.

4.3 Local Regulations

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as lead agency, considers local policies in evaluating whether the proposed Project’s impacts would be significant.

4.3.1 City of Fresno General Plan

The City of Fresno General Plan (General Plan) establishes a comprehensive and long-term strategy for development within Fresno. With respect to biological resources, Objective POSS-5 of the Parks, Open Space and Schools Element of the General Plan calls for providing long-term preservation, restoration, enhancement, and enjoyment of plant, wildlife, and aquatic habitat (City of Fresno 2014). Policies that govern the implementation of this objective that are relevant to this Project include:

- POSS-5-c: Buffers for Natural Areas. Require development projects, where appropriate and warranted, to incorporate natural features (such as ponds, hedgerows, and wooded strips) to serve as buffers for adjacent natural areas with high ecological value.
- In 2021, the City of Fresno released a Mitigation Monitoring and Reporting Program to support their General Plan Environmental Impact Report (LSA 2021). This Mitigation Monitoring and Reporting Program includes mitigation measures to protect biological resources that are consistent with the Federal and State regulatory requirements outlined in the preceding sections of this report.

4.3.2 Fresno Municipal Code

Article 3, *Street Trees and Parkways*, of Chapter 13 of the Fresno Municipal Code contains the public tree policy, tree beautification and preservation regulations, and Special Tree List authorization. Section 13-304, *Tree Beautification*, establishes and defines the Master Tree Plan requirements, Parkway Tree requirements, and other requirements related to new and existing development and the provision of parkway trees. Section 13-305, *Tree Preservation*, outlines tree removal and maintenance requirements, tree permit conditions, and payment of fees in-lieu of replacing a removed tree. Lastly, Section 13-306, *Special Tree List*, outlines the Special Tree List requirements and tree removal requests for Special Trees.

The Public Works Director is authorized to develop and maintain a Special Tree List. Such list is intended to include those trees of special interest to the City, including, but not limited to, landmark trees or trees of outstanding size or beauty. The City Council may also designate trees on the Special Tree List by resolution.

5 Environmental Setting

5.1 Site Conditions and Land Use

5.1.1 Local Setting and Existing Land Use

The Project Area is situated in the western portion of the 13.94-acre Courtyard Park parcel (the parcel) in the City of Fresno, Fresno County, California. It is located in the highly developed and urban City center, situated in a 1,500-acre area between State Route (SR) 99, SR 180, and SR 41 (**Appendix A - Figure 1**).

The parcel has been developed as Courthouse Park (formerly known as Court House Square) since the late 1800s. Initial development included a three-story courthouse constructed in 1874, with a copper dome added by 1885. A jail has occupied the northeastern portion of the parcel since at least 1888. The current jail building, located in the northern section of the Project Area, was constructed in 1942, with an annex added in 1960. The Fresno County Sheriff's Office building, located in the southern section of the Project Area, was constructed in 1970, as part of a broader effort to redevelop downtown Fresno. This redevelopment also included the demolition of the original 1874 County Courthouse, construction of the Fresno Courthouse and its associated underground parking in 1966, located east of Site 1, placement of 22 commemorative statues, and planned landscaping throughout the overall Courthouse Park parcel (**Appendix A - Figure 2)**.

Courthouse Park is the largest green space in downtown Fresno and houses the County Courthouse along with various other County facilities. Existing buildings within the park include the Fresno Superior Court and Hall of Records, located southeast of the Project Area, and the Fresno County Sheriff's Office and South Jail Annex, both situated within the Project Area boundaries. An underground parking facility is located east of the Project Area, with access from M Street to the north. The overall Courthouse Park parcel features paved walkways, lawns, ornamental trees, and landscaping (**Appendix C – Representative Photographs**).

5.1.2 Physical Conditions

The overall topography is extremely low gradient with elevations ranging from approximately 285 to 300 feet above mean sea level. The regional climate is typical of the Central Valley and is characterized by a Mediterranean climate with cool, wet winters and hot, dry summers. Precipitation in the region primarily occurs as rain. The average annual rainfall is approximately 10.89 inches and typically occurs between October and April. The Project Area climate typically exhibits a nine-month growing season from February through November. Most herbaceous growth occurs during spring and ceases as soil moisture depletes in early summer. Air temperatures range from an average January high of 54.6 degrees Fahrenheit (ºF) to an average July high of 98.3 ºF. The annual average high temperature is 76.5 ºF (WRCC 2025).

5.2 Biotic Habitats

5.2.1 Vegetation Communities

Vegetation types in the Project Area were classified based on descriptions provided in *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988), as well as the *California Natural Community List* (CDFW 2025b), which is adapted from the technical approach and vegetation alliance classification system described in *A Manual of California Vegetation,* Online Edition (CNPS 2025b). The vegetation communities present in the Project Area are urban. No aquatic features were observed within the Project Area. Descriptions of the vegetation communities within the Project Area are provided below.

5.2.1.1 Urban Vegetation

Urban vegetation can be classified into five general areas: tree grove, street strip, shade tree/lawn, lawn, and shrub cover. Urban areas typically have a small diversity of trees, shrubs, and grasses, but greater productivity than natural grasslands due to abundant water and fertilizer (McBride and Reid 2008). Examples include residential landscapes, golf courses, parks, and school grounds. Non-native landscape species and invasive weeds are common.

Ornamental non-native vegetation species known to occur within the Project Area include mature deodar cedars, Italian stone pine, Chinese elm, and ginkgo (PlaceWorks 2024). Invasive species, including non-native grasses, were also observed in the Project Area and are further discussed below (**Appendix C – Representative Photographs**).

5.2.1.2 Invasive Plant Species

Invasive plants (i.e., noxious weeds) are undesirable, non-native plants that commonly invade disturbed sites. Most species were introduced from Europe and Asia, and many are known to negatively affect native wildlife habitat and plant communities. When disturbance results in the creation of habitat openings or in the loss of intact native vegetation, invasive plants may colonize the site and spread, often out-competing native species. Once established, they are very difficult to eradicate.

All pertinent non-native plant species were reviewed to determine their status as invasive plants according to the ratings in the California Invasive Plant Inventory produced by California Invasive Plant Council (Cal-IPC) (Cal-IPC 2025). Cal-IPC categorizes non-native invasive plants into three categories of overall negative ecological impact in California as “high”, “moderate”, and “limited”.

Invasive species with a Cal-IPC rating of “high”, “moderate”, or “limited” were not observed within Site 1 during PlaceWork’s field reconnaissance survey but were observed within staging area 3 during Stantec’s field reconnaissance survey (**Appendix C – Representative Photographs**). Invasive species observed within the Project Area include *Bromus* spp., redstem filaree (*Erodium cicutarium*), and puncture vine (*Tribulus terrestris*) (Stantec 2025). Invasive species ratings are depicted in **Table 1.**

Table 1. Invasive Species Know to Occur within the Project Area

Common Name ***Scientific Name***	**Cal-IPC Rating**[1]	**Occurrence**
Bromus Spp.	n/a	Observed in northmost staging area.
Redstem filaree *Erodium cicutarium*	Limited	Observed in northmost staging area.
Puncture vine *Tribulus terrestris*	Limited	Observed in northmost staging area.

[1]**Cal-IPC Ratings:**
High – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.
Moderate – These species have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.
Limited – These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

5.2.1.3 Sensitive Natural Communities

Habitats are considered “sensitive” by CDFW if they are identified on the List of Vegetation Alliances and Associations as being highly imperiled or classified by CDFW in the CNDDB as natural communities of special concern – Ranks S1 to S3. No sensitive natural communities are present within the Project Area as the Project is located within a heavily urbanized and developed area (CDFW 2025a).

5.2.2 Habitat Connectivity

Habitat corridors are segments of land that provide linkages for wildlife movement between different habitats while also providing cover. Corridors also function as avenues along which plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and populations can be replenished from other areas. Habitat corridors often consist of riparian areas along streams, rivers, or other natural features. The Project Area is surrounded by urban development and does not provide habitat corridors for any plant or animal species.

5.2.3 Special-Status Plant Species

Regionally occurring special-status plant species were identified based on a review of pertinent literature, the IPaC resource list, and CNDDB and CNPS database records (USFWS 2025a, CDFW 2025a, CNPS 2025a). Ten special status plant species were identified by the above databases to potentially occur within the Study Area (**Appendix A - Figure 4**). For each species identified as having potential to occur, habitat requirements were assessed and compared to the habitats in the Study Area to determine if suitable habitat is present. Of the ten species, none were found to have a potential to occur in the Project Area, due to the lack of suitable habitat and the heavily developed and urbanized nature of the Project Area. Additionally, all documented observations were historic (greater than 50 years old) and no special-status plants were observed during the field survey’s conducted by PlaceWorks in Site 1 (PlaceWorks 2024) and by Stantec in staging area 3 (Stantec 2025).

All special-status plant species that were identified through desktop research as potentially occurring in the Study Area are described below in **Table 2**.

Table 2. Special Status Plant Species with Potential to Occur within the Study Area

Common Name *Scientific Name*	Listing Status[1] (Fed/State/CRPR)	Known Habitat & Elevation Range	Blooming Period	Potential for Occurrence
Lesser saltscale *Atriplex minuscula*	-/-/1B.1	Chenopod scrub, playas, valley and foothill grassland. In alkali sink and grassland in sandy, alkaline soils. Occurs from 0–73 feet.	May–Oct	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not contain chenopod scrub, playas, or valley and foothill grassland habitats preferred by this species.
Succulent owl's-clover *Castilleja campestris var. succulenta*	FT/SE/1B.2	Vernal pools. Moist places, often in acidic soils. Occurs from 66–2,313 feet.	(March) April–May	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not contain vernal pool habitats preferred by this species.
California jewelflower *Caulanthus californicus*	FE/SE/1B.2	Chenopod scrub, valley and foothill grassland, pinyon and juniper woodland. Sandy soils. Occurs from 213–6,102 feet.	Feb–May	**Absent.** One documented historical (no date given) CNDDB occurrence approximately 3 miles north of the Project Area. Occurrence details suggest habitat in the vicinity has been eliminated by urbanization and agriculture. The Project Area does not contain the chenopod scrub, valley and foothill grassland, pinyon and juniper woodland habitats preferred by this species.
California satintail *Imperata brevifolia*	-/-/2B.1	Coastal scrub, chaparral, riparian scrub, Mojave Desert scrub, meadows and seeps (alkali). Mesic sites, alkali seeps, riparian areas. Occurs from 10–4,905 feet.	Sept–May	**Absent.** One documented historical (1893) CNDDB occurrence recorded as in the vicinity of Fresno. The Project Area does not contain the coastal scrub, chaparral, riparian scrub, Mojave Desert scrub, and meadows and seeps (alkali) habitats preferred by this species.
Alkali-sink goldfields *Lasthenia chrysantha*	-/-/1B.1	Vernal Pools. Alkaline. Occurs from 0–656 feet.	Feb–April	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not contain vernal pool habitats preferred by this species.
Madera leptosiphon *Leptosiphon serrulatus*	-/-/1B.2	Cismontane woodland, lower montane coniferous forest. Dry slopes; often on decomposed granite in woodland. Occurs from 262–5,397 feet.	April–May	**Absent.** One documented historical (1922) CNDDB occurrence recorded as near Fresno. The Project Area does not contain the Cismontane woodland and lower montane coniferous forest habitats preferred by this species.
San Joaquin Valley Orcutt grass	FT/SE/1B.1	Vernal pools. Occurs from 33–2,477 feet.	April–Sept	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not contain vernal pool habitats preferred by this species.

Common Name *Scientific Name*	Listing Status[1] (Fed/State/CRPR)	Known Habitat & Elevation Range	Blooming Period	Potential for Occurrence
Orcuttia inaequalis				
Hairy Orcutt grass *Orcuttia pilosa*	FE/SE/1B.1	Vernal pools. Occurs from 82–410 feet.	May–Sept	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not contain vernal pool habitats preferred by this species.
Sandford's arrowhead *Sagittaria sanfordii*	-/-/1B.2	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. Occurs from 0–1,985 feet.	May–Oct (Nov)	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not contain the marsh and swamp habitats preferred by this species.
Greene's tuctoria *Tuctoria greenei*	FE/SR/1B.1	Vernal pools. Vernal pools in open grasslands. Occurs from 82–4,347 feet.	May- July (Sept)	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not contain vernal pool habitats preferred by this species.

[1]Federal and State Status Codes
- = No status, or not applicable
FE = Listed as endangered under the FESA;
FT = Listed as threatened under the FESA;
SE = Listed as endangered under the CESA;
SR = Listed as rare under the Native Plant Protection Act.

CNPS Ranking
1A = Presumed extinct in California and either rare or extinct elsewhere.
1B = Rare, threatened, or endangered in California and elsewhere.
2A = Presumed extinct in California but common elsewhere.
2B = Rare, threatened, or endangered in California but more common elsewhere.

Threat Ranks
0.1 = Seriously threatened in California (more than 80% of occurrences threatened/high degree and immediacy of threat).
0.2 = Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat).
0.3 = Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

5.2.4 Special-Status Animal Species

Regionally occurring special-status animal species were identified based on a review of pertinent literature, the USFWS species list, CNDDB database records, and the reconnaissance-level biological field survey results (USFWS 2025a, CDFW 2025a, PlaceWorks 2024). Twenty-two (22) special-status animal species were identified by the above databases to potentially occur within the Study Area (**Appendix A - Figure 4)**. For each species, habitat requirements were assessed and compared to existing information about habitats present in the Project Area to determine the species' potential to occur. Based on habitat assessments conducted during the field reconnaissance surveys, only one of the 22 animal species identified was determined to have a moderate potential to occur – western mastiff bat (*Eumops perotis californicus)*; for the remaining 21 special status animal species, habitat was determined to be absent within the Project Area.

All special-status animal species that were identified through desktop research as potentially occurring in the Study Area are described below in **Table 3**.

Table 3. Special Status Animal Species with Potential to Occur within the Study Area

Common Name *Scientific Name*	Listing Status[1] (Fed/State)	Known Habitat Requirements[2]	Potential for Occurrence
Invertebrates			
Crotch's bumble bee *Bombus crotchii*	-/CE	Found near grasslands and shrublands and generally prefers hotter and drier habitats than other bumblebee species. Nests found underground in abandoned rodent burrows, old bird nests, rock piles or in cavities of dead trees.	**Absent.** One documented CNDDB occurrence recorded a foraging individual on a sage species at a private residence in 2019. Limited suitable nesting habitat is present in the Project Area due to lack of food plants (milkweeds, dusty maidens, lupines, medics, phacelias, sages, snapdragons, clarkia, poppies, and wild buckwheats) and nesting habitat[3,4]. This species was once common in the Central Valley of California but is now scarce in that area[3].
Monarch butterfly - California overwintering population *Danaus plexippus plexippus pop. 1*	FC/-	Occurs in a variety of habitats spring through fall and uses milkweed (*Asclepias spp.*) as the larval host plant. Migrates to overwintering sites within 1.5 miles off the California coast from September to November. They overwinter on eucalyptus trees (*Eucalyptus globulus*), Monterey pines *(Pinus radiata)*, and/or Monterey cypress (*Cupressus macrocarpa)*.	**Absent.** The Project Area does not provide suitable larval host plant habitat and there is no suitable foraging habitat within the Project Area.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FE/-	Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not contain any elderberry species and therefore does not provide suitable habitat for this species.
Crustaceans			
Vernal pool fairy shrimp *Branchinecta lynchi*	FT/-	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not provide suitable aquatic habitat for this species.
Amphibians			
California tiger salamander – central California DPS *Ambystoma californiense pop. 1*	FT/ST	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Requires underground refuges, such as California ground squirrel (*Otospermophilus beecheyi*) burrows, and vernal pools or other seasonal water sources for breeding.	**Absent.** One documented historical (1936) CNDDB occurrence recorded as Fresno. The Project Area does not provide suitable burrowing habitat and does not contain a seasonal water source.
Western spadefoot	P/-	Occurs primarily in grassland habitats but can be found in valley-foothill	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project

Common Name *Scientific Name*	Listing Status[1] (Fed/State)	Known Habitat Requirements[2]	Potential for Occurrence
Spea hammondii		hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Area does not provide suitable aquatic or terrestrial habitat for this species.
Reptiles			
Northwestern pond turtle *Actinemys marmorata*	P/SSC	Slow water aquatic habitat with available basking sites. Hatchlings require shallow water with dense submergent or short emergent vegetation. Require an upland oviposition site near the aquatic site.	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not provide suitable aquatic habitat for this species.
Northern California legless lizard *Anniella pulchra*	-/SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**Absent.** One documented historical (given as 188X) CNDDB occurrence recorded as Fresno. The Project Area does not contain the appropriate sandy or loose loamy soils with sparse vegetation.
California glossy snake *Arizona elegans occidentalis*	-/SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	**Absent.** One documented historical (1893) CNDDB occurrence recorded as Fresno. The Project Area does not provide suitable scrub or grassland habitat.
Blunt-nosed leopard lizard *Gambelia silus*	FE/-	Primarily inhabits the San Joaquin Valley and surrounding foothills in California, favoring open, sparsely vegetated areas with scattered shrubs and mammal burrows for shelter.[3]	**Absent.** The Project Area does not provide suitable open shrub habitat and mammal burrows required for this species.
Coast horned lizard *Phrynosoma blainvillii*	-/SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**Absent.** One documented historical (1893) CNDDB occurrence recorded as Fresno. The Project Area does not provide suitable sandy loose soil and open habitat required for this species.
Giant gartersnake *Thamnophis gigas*	FT/ST	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches. This is the most aquatic of all the gartersnake species in California.	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not provide suitable aquatic habitat for this species.
Birds			
Tricolored blackbird *Agelaius tricolor*	-/ST	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate (e.g. cattail [*Typha* sp.] tule marshes), and foraging area with insect prey within a few kilometers of the colony.	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. No suitable colony nesting habitat is present in the Project Area.
Burrowing owl *Athene cunicularia*	-/CE	Grasslands and ruderal habitats. Uses mammal burrows or other suitable underground cavities.	**Absent.** One documented CNDDB occurrence recorded at the Fresno Airport in 1990. No suitable nesting or

Common Name *Scientific Name*	Listing Status[1] (Fed/State)	Known Habitat Requirements[2]	Potential for Occurrence
			foraging habitat is present in the Project Area due to lack of rodent burrows.
Swainson's hawk *Buteo swainsoni*	-/ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranchlands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Absent.** One documented historical (1956) CNDDB occurrence recorded as Fresno and one nesting CNDDB occurrence recorded in trees within pasture approximately 4.5 miles south of Frenso in 2016. The Project Area does not provide suitable nesting or foraging habitat for this species.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT/SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow (*Salix* sp.), often mixed with cottonwood (*Populus* sp.), with lower story of blackberry (*Rubus* sp.), nettle (*Urtica* sp.), or Cailfornia wild grape (*Vitis californica*).	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not provide suitable nesting or foraging habitat for this species.
Least Bell's vireo *Vireo bellii pusillus*	FE/SE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, *Baccharis* sp., mesquite.	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not provide suitable nesting or foraging habitat for this species.
Mammals			
Pallid bat *Antrozous pallidus*	-/SSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Absent.** One documented historical (1909) CNDDB occurrence recorded as Fresno. The Project Area does not contain suitable roosting habitat or foraging habitat for this species.
Fresno kangaroo rat *Dipodomys nitratoides exilis*	FE/SE	Alkali sink-open grassland habitats in western Fresno County. Bare alkaline clay-based soils subject to seasonal inundation, with more friable soil mounds around shrubs and grasses.	**Absent.** One documented historical (1898) CNDDB occurrence recorded as northwest Fresno. The Project Area does not contain any suitable alkali sink-open grassland habitats.
Western mastiff bat *Eumops perotis californicus*	-/SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	**Moderate.** Three documented CNDDB occurrences recorded in Fresno: two in 1991 and one in 1958. A recent biological assessment conducted for a water and sewer improvements project within the vicinity of Project Area suggested that suitable foraging habitat may be present (Rincon 2025). The Project Area may provide foraging and roosting for this species, as high buildings are present and insects (moths) are likely present.
American badger *Taxidea taxus*	-/SSC	Most abundant in drier, open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs open,	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not provide suitable

Common Name *Scientific Name*	Listing Status[1] (Fed/State)	Known Habitat Requirements[2]	Potential for Occurrence
		uncultivated ground in which to dig burrows. Preys on burrowing rodents.	burrowing or foraging habitat for this species.
San Joaquin kit fox *Vulpes macrotis mutica*	FE/ST	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	**Absent.** No CNDDB occurrences within 5 miles of the Project Area. The Project Area does not provide suitable burrowing or foraging habitat for this species.

[1]Federal and State Status Codes
- = No status, or not applicable
FE = Listed as endangered under the Federal Endangered Species Act (FESA)
FT = Listed as threatened under FESA
SE = Listed as endangered under the California Endangered Species Act (CESA)
ST = Listed as threatened under CESA
SSC = Designated as a Species of Special Concern by CDFW under the California Environmental Quality Act (CEQA)
FP = Fully Protected under the California Fish and Game Code (F.G.C.)
C = Candidate for listing as either endangered or threatened under FESA
CE = Candidate for listing as endangered under CESA
CT = Candidate for listing as threatened under CESA
P = Proposed for listing as either endangered or threatened under FESA
[2]Sources: CNDDB Species Descriptions, CDFW 1990, CDFW 2023, CDFW 1990, Hatfield et al. 2015, Koch et al. 2012, Pierson and Rainey 1998, Texas Tech 2025, USFWS 2025d, Vaughan 1959
[3]USFWS Species Description. https://www.fws.gov/species/blunt-nosed-leopard-lizard-gambelia-silus

6 Results

6.1 Habitats and Natural Communities of Concern

6.1.1 Sensitive Natural Communities

There are no sensitive natural communities within the Study Area.

6.1.2 Wetlands and Other Waters

There are no wetlands or other waters that could be considered potential WOTUS or WOTS within the Study Area. According to a USFWS National Wetlands Inventory query, the closest recorded water resource, classified as a freshwater pond, is located 0.36 miles south of the Project Area on the south side of Chukchansi Park (USFWS 2025b, Google Earth 2024).

6.1.3 Critical Habitat

There is no designated critical habitat within the Study Area.

6.1.4 Habitat Connectivity

There are no habitat corridors within the Study Area.

6.2 Special-Status Plant Species

There is no potential for special-status plant species to occur within the Study Area due to lack of native vegetation communities and the developed and urban nature of the habitat within the Project Area. Landscaped vegetation growing throughout the Project Area is actively maintained and does not provide suitable habitat for any special-status plant species. In addition, no special-status plants were observed during the July 2023 field reconnaissance survey or the November 2025 site visit (PlaceWorks 2024, Stantec 2025). Furthermore, all the vegetation within the Project Area consists of non-native landscape species, with no native species observed.

6.3 Special-Status Animal Species

The Project Area is located in an urban city center, fully developed with buildings, parking lots, landscaping, and roadways, creating little to no habitat for most special-status animal species. Similarly, the five-mile radius area surrounding the Project Area is generally urban, with significant human development present in all directions. Thus, it is not surprising that, of the sensitive status animal species that do have recorded occurrences within five miles of the Project Area, approximately a third of them are historic (CDFW 2025a). To the southwest of the Project Area, the parcels are considerably less developed and contain some agriculture areas which may provide suitable habitat for some animal species, but there is no obvious connectivity corridor between the agricultural lands and the Project Area; furthermore, the SR 99 exists as a significant barrier to animal movement/corridors, with only species that can fly able to travel between the two areas.

One special-status animal species was found to have moderate potential to occur within the Project Area: western mastiff bat (*Eumops perotis californicus)*. This species is considered to have moderate potential to occur because the Project Area is located within the range of the species, there are documented occurrences within five miles of the Study Area, and/or suitable foraging and roosting habitat for the species may exist in the Study Area. The remaining 21 species were determined to likely be absent from the Project Area, as no potentially suitable habitat for these special-status animal species is present.

Nesting raptors and other migratory bird species were also found to have low potential to occur within the Project Area. These species are considered to have low potential to nest in the Project Area because the area is located within the range of many bird species and low-quality (e.g., disturbed) habitat is present in the Study Area.

6.3.1 Western Mastiff Bat

6.3.1.1 Distribution, Biology, and Habitat Requirements

The western mastiff bat is considered a California Species of Special Concern (SSC) by CDFW. They are an uncommon resident in southeastern San Joaquin Valley and Coastal Ranges from Monterey County southward through southern California, from the coast eastward to the Colorado Desert. The species occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. Suitable habitat consists of extensive open areas with abundant roost locations provided by crevices in rock outcrops and buildings that are at least 10 feet above the ground (CDFW 1990, Pierson and Rainey 1998).

Unlike most North American bats, the western mastiff bat does not undergo either migration or prolonged hibernation but are periodically active all winter and move among alternate daytime roosts (CDFW 1990, Texas Tech 2025). The size of colonies varies, but they usually consist of less than 100 bats. Males and females live together year-round, even during maternity periods (Texas Tech 2025).

The western mastiff bat is nocturnal, leaving roosts at night to find food (UW 2025). They catch and feed on insects in flight. Moths are their biggest food source, but they have been observed to eat beetles, ants, dragonflies, crickets, and grasshoppers (Cockrum 1960, Chebes n.d.). They are known to spend up to seven hours foraging at night and may travel up to 15 miles in the process (Vaughan 1959). Their long, narrow wings allow the bat to maintain flight for long periods of time, flying from near ground level to up to 196 feet (Chebes n.d.). Compared with other California bat species, the western mastiff bat is considered relatively easy to detect, due to their high-pitched echolocation call that is audible to the human ear.

6.3.1.2 Occurrence Records

Three CNDDB occurrences for western mastiff bat exist within five miles of the Project Area: two recorded in 1991 and one in 1958 (CDFW 2025a). One of the 1991 observations was of a single individual, collected at an address approximately four miles northwest of the Project Area; the other 1991 observation was of an individual, collected at Washington Grammar School (now Yokomi Elementary School) approximately one mile northeast of the Project Area. The 1958 observation was of a single individual collected at the base of a power pole, approximately 4.5 miles north of the Project Area.

6.3.1.3 Suitable Habitat within the Project Area

There is a moderate potential for western mastiff bat to forage or roost in the Project Area as the Project is within the range of the species, there are several documented occurrences within five miles of the Study Area, and suitable habitat for the species exists in the Study Area. Though no western mastiff bats were observed during the 2023 reconnaissance survey (PlaceWorks 2024), the existing tall buildings may provide roosting habitat and the maintained greenspace, night lighting, and large water foundation in the Courthouse Park suggest there is potential suitable habitat for the species main food source – moths (**Appendix C – Representative Photographs**).

6.3.2 Nesting Raptors and Other Migratory Birds

In addition to special-status avian species, nesting raptors and other migratory bird species are protected under the MBTA and/or California FGC. The Project Area contains suitable foraging, roosting, and possibly nesting habitat for a variety of bird species in the form of ornamental trees and shrubs.

There were no nesting birds or nesting behavior observed in Site 1 during the field reconnaissance survey conducted on July 12, 2023 (during nesting bird season); however, several avian species were noted to be either observed or assumed present, including house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), mourning dove *(Zenaida macroura)*, northern mockingbird (*Mimus polyglottos*), American robin (*Turdus migratorius*), dark-eyed junco (*Junco hyemalis)*, bushtit (*Psaltriparus minimus*), Wilson's warbler (*Cardellina pusilla*), Anna's hummingbird (*Calypte anna*), American goldfinch (*Spinus tristis*), California scrub jay (*Aphelocoma californica*), and American crow (*Corvus brachyrhynchos*). A pair of red-tailed hawks (*Buteo jamaicensis*) were also observed flying over Site 1. No special status bird species were observed (PlaceWorks 2024).

7 Conclusions and Recommendations

The information provided in this Report provides a summary of the biological resources present and/or likely to occur in the Project Area and can be used to support compliance with applicable federal and state regulations.

The results of the desktop review and accompanying field data indicate that no sensitive natural communities, wetlands and/or waters, critical habitat, and sensitive status plant species occur and/or have suitable habitat within the Study Area; therefore, no adverse effects to these sensitive biological resources are anticipated. Conversely, results suggest that sensitive status animal species, including western mastiff bat and nesting raptors and other migratory birds may occur within the Study Area. Details and proposed recommendations for limiting potential impacts are further discussed below.

7.1 Special Status Animal Species

7.1.1 Western Mastiff Bat

The western mastiff bat, a CDFW protected species, was found to have a moderate potential to occur within the Project Area because the Project is located within the range of the species, suitable foraging and roosting habitat exists within the Project Area, and there are documented occurrences within five miles of the Study Area (CDFW 2025a). Though no western mastiff bats were observed during the 2023 reconnaissance survey (PlaceWorks 2024), the survey was conducted during the day. However, with the presence of suitable roosting habitat (i.e., tall buildings for roosting) and foraging opportunities (i.e., the presence of greenspace, night lighting, and a large water foundation) in the Courthouse Park, this suggests there is also potential suitable habitat for the species main food source – moths.

Western mastiff bats may be found roosting in trees or on existing structures within the Project Area and the larger Courthouse Park parcel. Inadvertent destruction or disturbance of active roosts, including maternal roosts, would be a potentially significant impact under CEQA. Therefore, measures for avoidance or mitigation of impacts to active roosts are recommended as follows:

BIO-1. Western Mastiff Bat Survey. Within 6 months prior to the start of construction, a qualified biologist with at least 5 years' experience conducting surveys or assessments of bat habitat shall conduct a survey and conduct a visual inspection of suitable habitat features in buildings and trees, as access allows, at the Project site and a minimum of 500-feet adjacent to areas that may be impacted by Project activities. If no suitable bat roosting habitat is identified, no further action is required. If evidence of bat roosting is observed, an evening survey using bat acoustic detectors will be conducted to determine whether bats are actively roosting on or near the Project Site, the species, and the location of the roost. If an active roost is detected, demolition and/or construction activities will be modified or revised to avoid disturbing the roost. If disturbance of the roost cannot be avoided, removal or disturbance of the roost shall occur outside of the maternity roost season in accordance with a bat mitigation plan developed by the qualified biologist. The bat mitigation plan shall include methods for humane bat exclusion and no-disturbance buffers, as needed to accomplish the removal or disturbance of the roost. If a lapse in Project construction activities of more than six months occurs, the qualified biologist shall complete another habitat assessment before Project construction activities can be reinitiated.

7.1.2 Raptors and Other Migratory Bird Species

Raptors and other bird species protected under the MBTA and/or California FGC may be found nesting in trees, other vegetation, or on existing structures within the Project Area and the larger Courthouse Park parcel during nesting season (typically between February 1 and August 31). Inadvertent destruction or disturbance of active bird nests, including nest failure, would be a potentially significant impact and a violation of the MBTA and California FGC.

Therefore, if demolition and/or construction work is anticipated to occur within the typical nesting season (February 1 to August 31), a pre-construction nesting bird survey is recommended:

BIO-2: Nesting Bird Survey. If demolition and/or construction (including any tree removal) occurs during the typical nesting season (February 1 through August 31) a pre-construction nesting bird survey shall be conducted by a qualified biologist with at least 5 years' experience conducting nesting bird surveys to document any nests within the vicinity of the Project Area (within 250 feet of the Project Area for nesting songbirds and within 500 feet of the Project Area for nesting raptors). Nesting bird surveys will be performed not more than 7 days prior to the start of Project demolition and/or construction activities. If an active nest is observed, a protective buffer will be established around the nest to avoid any disturbances. During any vegetation removal, if an active nest is identified within the Project Area, a biological monitor shall monitor the nest during Project activities to ensure there are no disturbances to the nesting bird and prevent nest failure.

8 References

Calflora. 2025. A non-profit database providing information on wild California plants. Berkeley, CA https://www.calflora.org/search.html. Accessed November 2025.

California Department of Fish and Wildlife (CDFW). 2025a. Rarefind 5. California Natural Diversity Database (CNDDB). Biogeographic Data Branch, California Department of Fish and Wildlife. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed November 2025.

CDFW. 2025b. California Natural Community List. Biogeographic Data Branch, California Department of Fish and Wildlife. https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities.Updated February 27, 2025. Accessed November 2025.

CDFW. 2023. Crotch's Bumble Bee (*Bombus crotchii)* Current and historic range map. CDFW Wildlife Branch, GIS-LS, May 24, 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213184&inline. Accessed November 2025.

CDFW. 1990. California Wildlife Habitat Relationships (CWHR) System. California Department of Fish and Wildlife California Interagency Wildlife Task Group. Life History for Western Mastiff Bat. Originally published in: Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.

California Invasive Species Council (Cal-IPC). 2025a. California Invasive Plant Inventory. Cal-IPC Publication 2006-02. Cal-IPC: Berkeley, California. www.cal-ipc.org. Accessed November 2025.

California Native Plant Society (CNPS). 2025a. Inventory of Rare And Endangered Plants (Online Edition, V8-02). Sacramento, California. http://www.rareplants.cnps.org. Accessed November 2025.

CNPS. 2025b. A Manual of California Vegetation, Online Edition. Available: http://www.cnps.org/cnps/vegetation/;. Accessed November 2025. California Native Plant Society, Sacramento, CA.Chebes, Lukasz. n.d. *Eumops perotis* (western bonneted bat). *Animal Diversity Web*. https://animaldiversity.org/accounts/Eumops_perotis/. Accessed November 2025.

City of Fresno. 2014. Fresno General Plan. Development and Resource Management Department. City of Fresno. Adopted December 18, 2014.

City of Fresno. 2025. Code of Ordinances: Supplement 53 Update 1. Chapter 13 – Sidewalks, Streets, Parkways, and Underground Utility Districts. Updated October 22, 2025. https://library.municode.com/ca/fresno/codes/code_of_ordinances?nodeId=MUCOFR_CH13SISTPAUNUTDI. Accessed November 2025.

Cockrum, E. Lendell. 1960. Distribution, Habitat and Habits of the Mastiff Bat, *Eumops perotis*, in North America. *Journal of the Arizona Academy of Science*. 1 (3): 79–84.

Google Earth. 2025. earth.google.com/web/. Imagery from February 11, 2024. Accessed November 2025.

Hatfield, R.; Jepsen, S.; Thorp, R.; Richardson, L. & Colla, S. 2015. "Crotch's bumblebee". *IUCN Red List of Threatened Species*: e.T44937582A46440211. https://www.iucnredlist.org/species/44937582/46440211. Accessed November 2025.

Koch, J; Strange, J; William, P. 2012. *Bumble Bees of the Western United States*. https://www.ars.usda.gov/ARSUserFiles/20800500/BumbleBeeGuideWestern2012.pdf Accessed November 2025.

LSA Associates, Inc (LSA). 2021. *General Plan EIR - Mitigation Monitoring and Reporting Program*. Fresno, California. September 2021. Retrieved from: https://www.fresno.gov/wp-content/uploads/2023/10/J35.5-GP-PEIR-MMRP-September-2021.pdf. Accessed January 2026.

Mayer, K. E. and Laudenslayer, W. F. 1998. A Guide to Wildlife Habitats of California.

McBride, J. R. and C. Reid. 2008. Urban. California Wildlife Habitat Relationships Systems. https://wildlife.ca.gov/Data/CWHR/Wildlife-Habitats. Accessed November 2025.

Pierson, Elizabeth D. and William E. Rainey, 1998. Western mastiff bat, *Eumops perotis*. *Terrestrial Mammal Species of Special Concern in California, Bolster, B.C., Ed. 66. Pg. 66-71.*

PlaceWorks. 2024. *New Fresno Courthouse Due Diligence Review: Site 1*. January 2024.

Stantec. 2025. Field Reconnaisance Survey – Personal Comms. and Photographic Documentation. November 18, 2025.

Texas Tech University (Texas Tech). 2025. Western Bonneted Bat. *Eumops perotis* (Schinz 1821). *Natural Science Research Laboratory: Mammals of Texas*. https://www.depts.ttu.edu/nsrl/mammals-of-texas-online-edition/Accounts_Chiroptera/Eumops_perotis.php. Accessed November 2025.

U.S. Fish and Wildlife Service (USFWS). 2025a. Information for Planning and Consultation (IPaC) resource list. https://ecos.fws.gov/ipac/. Accessed November 2025.

USFWS. 2025b. Critical Habitat for Threatened & Endangered Species Mapper. https://fws.maps.arcgis.com/home/webmap/viewer.html. Accessed November 2025.

USFWS. 2025c. USFWS National Wetlands Inventory (NWI). https://www.fws.gov/wetlands/. Accessed November 2025.

USFWS. 2025d. Blunt-nosed Leopard Lizard – Species Profile. https://www.fws.gov/species/blunt-nosed-leopard-lizard-gambelia-silus. Accessed November 2025.

U.S. Geological Survey (USGS). 2025. National Hydrography Dataset Plus V2. https://www.epa.gov/waterdata/nhdplus-national-hydrography-dataset-plus. Accessed November 2025.

University of Wisconsin Stevens Point (UW). 2025. *Eumops perotis* – Western Bonneted Bat. *University of Wisconsin Department of Biology: Vertebrate Collection.* https://www3.uwsp.edu/biology/VertebrateCollection/Pages/Vertebrates/Mammals%20of%20Paraguay/Eumops%20perotis/Eumops%20perotis.aspx. Accessed November 2025.

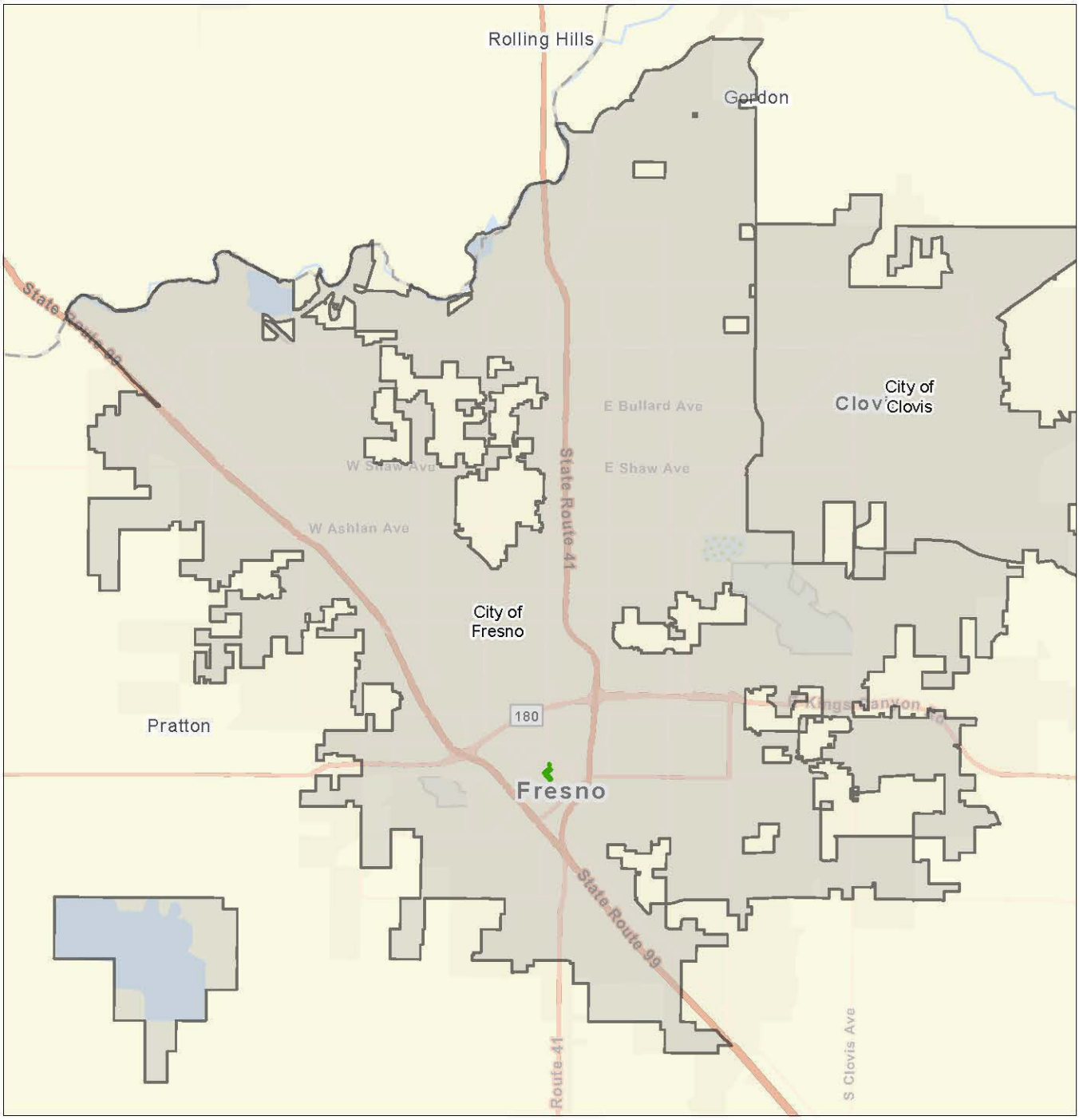
Rincon Consultants, Inc. (Rincon). 2025. Biological Resources Technical Memorandum for the City of Fresno Water and Sewer Improvements Project, Fresno County, California. April 29, 2025. Retrieved from: https://ceqanet.lci.ca.gov/2025100590. Accessed January 2026.

Vaughan, T. A. 1959. Functional morphology of three bats: Eumops, Myotis, Macrotus. Univ. Kans., Mus. Nat. Hist. Publ. 12:1-153. Information retrieved from: http://nrm.dfg.ca.gov file handler 'Life history account for Western Mastiff Bat'. Accessed November 2025.

Western Regional Climate Center (WRCC) 2025. Cooperative Climatological Data Summaries. NOAA Cooperative Stations – temperature and Precipitation. Regional Climate Center. FRESNO YOSEMITE INTL AP, CALIFORNIA (043257). https://wrcc.dri.edu/Climate/west_coop_summaries.php. Accessed November 2025.

Figures

A.1 Project Location



Project Area
City Limits

0 1.25 2.5 Miles

(At original document size of 8.5x11)
1:158,400

N

Stantec

Project Location
City of Fresno
Fresno County, California

Prepared by DL on 2025-12-04
TR by SET on 2025-12-04
IR by SR on 2025-12-04

Client/Project
185806843

Judicial Council of California
New Fresno Courthouse Project

Figure No.
1

Title
Project Location

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Data Sources: Stantec 2025.
3. Background: World Street Map: City of Fresno, Fresno County Dept. PWP, California State Parks, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

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A.2 Project Area



Project Area
Potential Staging Areas
Courthouse Park

0 125 250 Feet
(At original document size of 8.5x11)
1:3,000

N

Stantec

Project Location	Prepared by DL on 2025-12-04
City of Fresno	TR by SET on 2025-12-04
Fresno County, California	IR by SR on 2025-12-04
Client/Project	185806843

Judicial Council of California
New Fresno Courthouse Project

Figure No.
2

Title
Project Area

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Data Sources: Stantec 2025.
3. Background: NAIP Imagery. Source: Esri, USDA FSA
World Imagery (Firefly): Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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A.3 Study Area



Study Area (500 ft. Buffer)

Project Area

0 175 350 Feet

(At original document size of 8.5x11)
1:4,200

N

Stantec

Project Location	Prepared by DL on 2025-12-04
City of Fresno	TR by SET on 2025-12-04
Fresno County, California	IR by SR on 2025-12-04
Client/Project	185806843

Judicial Council of California
New Fresno Courthouse Project

Figure No.
3

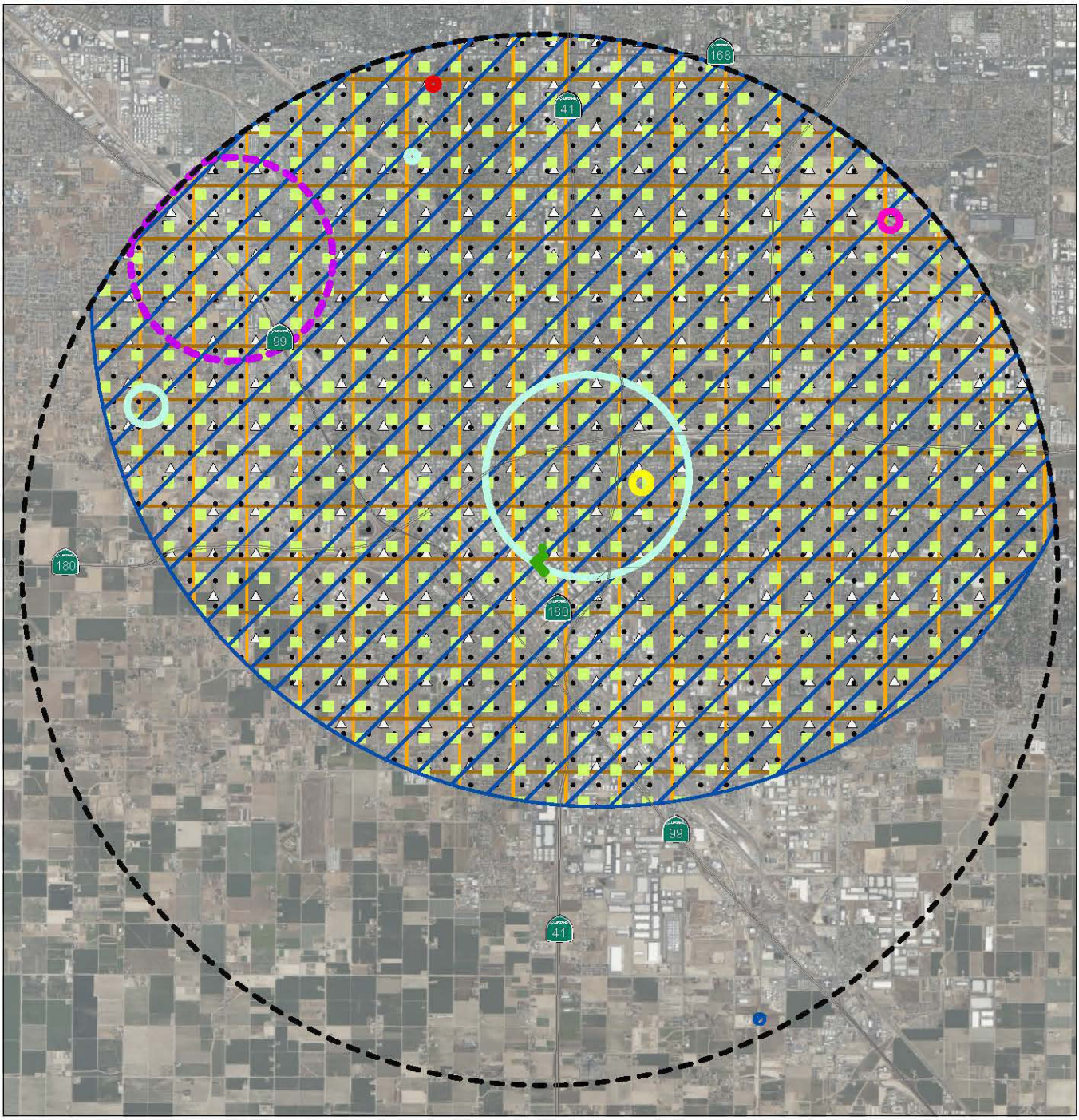
Title
Study Area

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Data Sources: Stantec 2025.
3. Background: NAIP Imagery: Source: Esri, USDA FSA
World Imagery (Firefly): Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

V:\185806\Active\185806843 JCC Fresno Courthouse\03 data\gis cad\gis\pro\Fresno Courthouse 20251112\Fresno Courthouse 20251112.aprx Revised: 2025-12-04 By: dalaw

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

A.4 CNDDB Special-Status Plant & Animal Species Occurrence within Five Miles of the Project Area



Project Area

5-Mile Search Radius

CNDDB

Wildlife

- Crotch's bumble bee
- California tiger salamander
- California glossy snake
- coast horned lizard
- Northern California legless lizard
- burrowing owl
- Swainson's hawk
- Fresno kangaroo rat
- pallid bat
- western mastiff bat

Plants

- California jewelflower

0 0.75 1.5 Miles

(At original document size of 8.5x11)
1:95,040

N

Stantec

Project Location
City of Fresno
Fresno County, California

Prepared by DL on 2025-12-04
TR by SET on 2025-12-04
IR by SR on 2025-12-04

Client/Project
185806843

Judicial Council of California
New Fresno Courthouse Project

Figure No.
4

Title
CNDDB Special-Status Plant and Animal Species Occurrences Within Five Miles of the Project Area

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Data Sources: Stantec 2025. CNDDB Data From CDFW 2025.
3. Background: Bing Maps Aerial: © 2025 Microsoft Corporation Earthstar Geographics SIO

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Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

Appendix B Database Results

B.1 USFWS

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Project information

NAME

New Fresno Courthouse Project

LOCATION

Fresno County, California



DESCRIPTION

Some(The Superior Court of California, County of Fresno – New Fresno Courthouse project (proposed project) would provide 36 courtrooms and support spaces of approximately 413,000 square feet. Development of the proposed project would allow the County court to consolidate operations that are currently located in three existing facilities: Fresno County Courthouse, north Annex Jail, and M Street Courthouse. The proposed project would also provide space for growth in future new judgeships.)

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Fresno Kangaroo Rat Dipodomys nitratoides exilis Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5150	Endangered
San Joaquin Kit Fox Vulpes macrotis mutica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard Gambelia silus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/625	Endangered
Northwestern Pond Turtle Actinemys marmorata Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

NOT FOR CONSULTATION

Amphibians

NAME	STATUS
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot Spea hammondii No critical habitat has been designated for this species.	Proposed Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

NOT FOR CONSULTATION

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

NOT FOR CONSULTATION

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

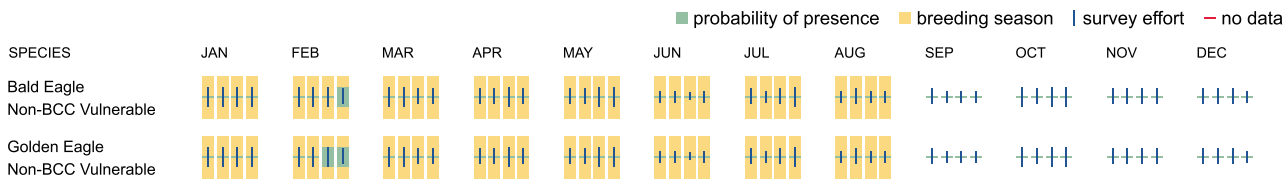
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The Migratory Birds Treaty Act of 1918.

NOT FOR CONSULTATION

2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

NOT FOR CONSULTATION

Lawrence's Goldfinch Spinus lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Northern Harrier Circus hudsonius This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350	Breeds Apr 1 to Sep 15
Nuttall's Woodpecker Dryobates nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher Contopus cooperi This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Santa Barbara Song Sparrow Melospiza melodia graminea This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/5513	Breeds Mar 1 to Sep 5
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Western Screech-owl Megascops kennicottii cardonensis This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jun 30

NOT FOR CONSULTATION

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

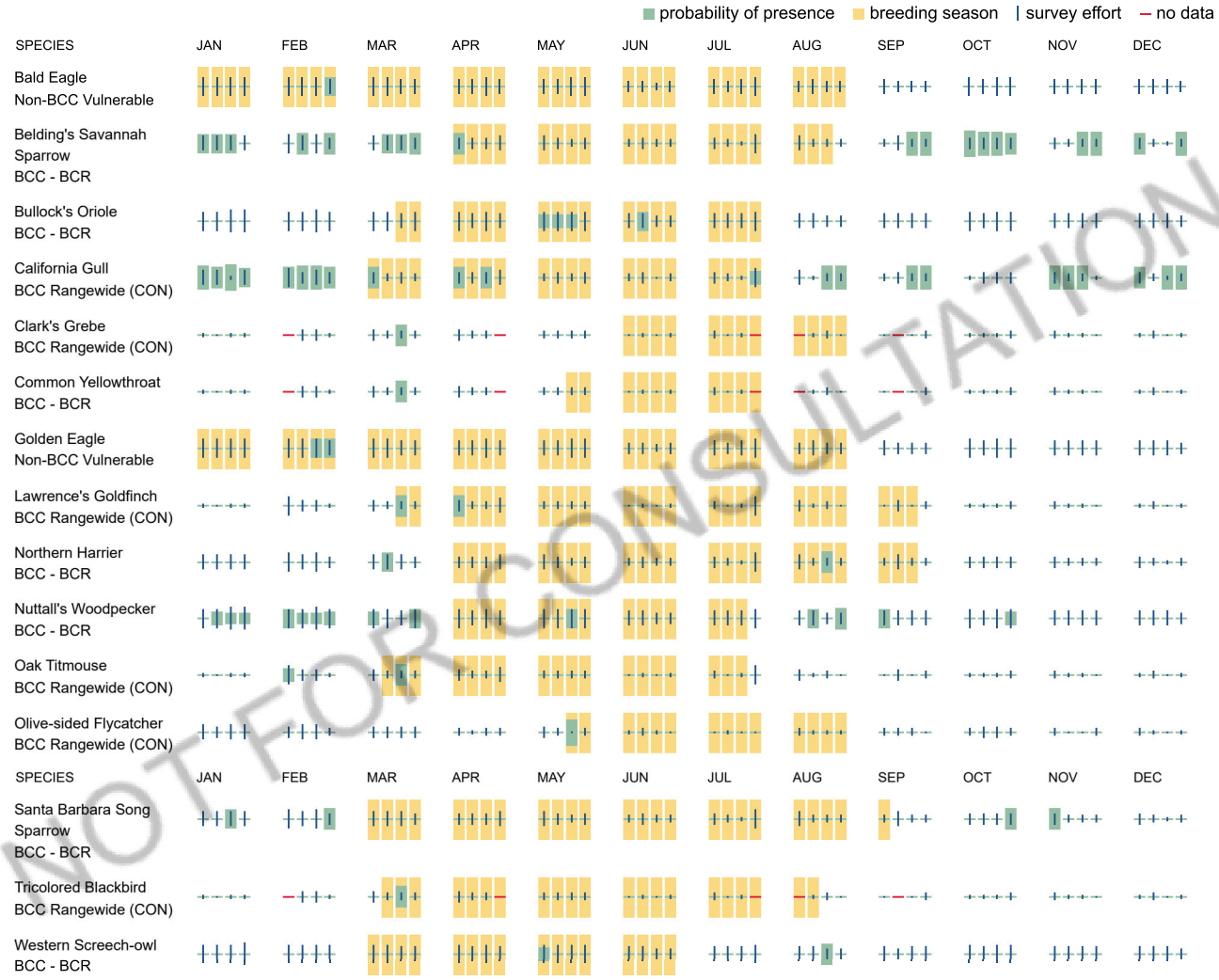
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



NOT FOR CONSULTATION

Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

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Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving

NOT FOR CONSULTATION

modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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B.2 CNDDB

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Fresno South (3611967) OR Herndon (3611978) OR Fresno North (3611977) OR Clovis (3611976) OR Kearney Park (3611968) OR Malaga (3611966) OR Raisin (3611958) OR Caruthers (3611957) OR Conejo (3611956))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Actinemys marmorata northwestern pond turtle	G2 SNR	Proposed Threatened None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	388 388	1160 S:1	0	0	0	0	0	1	0	1	1	0	0
Agelaius tricolor tricolored blackbird	G1G2 S2	None Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered USFWS_BCC-Birds of Conservation Concern	330 365	960 S:3	0	0	0	0	2	1	3	0	1	1	1
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	G3T3 S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	297 400	1329 S:4	0	1	1	0	2	0	2	2	2	0	2
Anniella pulchra Northern California legless lizard	G3 S2S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	300 300	386 S:1	0	0	0	0	0	1	1	0	1	0	0
Antrozous pallidus pallid bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	310 310	425 S:1	0	0	0	0	0	1	1	0	1	0	0
Ardea alba great egret	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	296 296	43 S:1	0	0	0	0	0	1	0	1	1	0	0
Arizona elegans occidentalis California glossy snake	G5T2 S2	None None	CDFW_SSC-Species of Special Concern	250 300	260 S:2	0	0	0	0	0	2	2	0	2	0	0
Athene cunicularia burrowing owl	G4 S2	None Candidate Endangered	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	213 351	2291 S:6	1	1	1	1	0	2	5	1	6	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Atriplex minuscula lesser saltscale	G2 S2	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		52 S:1	0	0	0	0	0	1	1	0	1	0	0
Bombus crotchii Crotch's bumble bee	G2 S2	None Candidate Endangered	IUCN_EN-Endangered	253 319	880 S:3	0	1	0	0	0	2	1	2	3	0	0
Bombus pensylvanicus American bumble bee	G3G4 S2	None None	IUCN_VU-Vulnerable	300 300	810 S:1	0	0	0	0	0	1	1	0	1	0	0
Branchinecta lynchi vernal pool fairy shrimp	G3 S3	Threatened None	IUCN_VU-Vulnerable	385 395	804 S:2	0	0	0	1	0	1	1	1	2	0	0
Buteo swainsoni Swainson's hawk	G5 S4	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	250 300	2585 S:6	0	2	1	1	0	2	3	3	6	0	0
Castilleja campestris var. succulenta succulent owl's-clover	G4?T2T3 S2S3	Threatened Endangered	Rare Plant Rank - 1B.2	350 350	99 S:1	0	0	0	0	1	0	1	0	0	1	0
Caulanthus californicus California jewelflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley		67 S:1	0	0	0	0	1	0	1	0	0	0	1
Coccyzus americanus occidentalis western yellow-billed cuckoo	G5T2T3 S1	Threatened Endangered	BLM_S-Sensitive USFS_S-Sensitive	300 345	165 S:2	0	0	0	0	2	0	2	0	0	1	1
Desmocerus californicus dimorphus valley elderberry longhorn beetle	G3T3 S3	Threatened None		225 225	271 S:1	0	0	0	0	0	1	1	0	1	0	0
Dipodomys nitratoides exilis Fresno kangaroo rat	G2TH SH	Endangered Endangered	IUCN_VU-Vulnerable	220 225	12 S:3	0	0	0	0	3	0	3	0	0	0	3
Efferia antiochi Antioch efferian robberfly	G1G2 S1S2	None None		260 300	4 S:2	0	0	0	0	0	2	2	0	2	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Egretta thula snowy egret	G5 S4	None None	IUCN_LC-Least Concern	296 296	20 S:1	0	0	0	0	0	1	0	1	1	0	0
Eriastrum hooveri Hoover's eriastrum	G3 S3	Delisted None	Rare Plant Rank - 4.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	235 235	47 S:1	0	0	0	0	1	0	1	0	0	0	1
Eumops perotis californicus western mastiff bat	G4G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern	310 320	296 S:4	0	0	0	0	0	4	4	0	4	0	0
Imperata brevifolia California satintail	G3 S3	None None	Rare Plant Rank - 2B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden USFS_S-Sensitive	300 300	32 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasiurus cinereus hoary bat	G3G4 S4	None None	IUCN_LC-Least Concern	270 270	238 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasthenia chrysantha alkali-sink goldfields	G2 S2	None None	Rare Plant Rank - 1B.1		55 S:1	0	0	0	0	1	0	1	0	0	1	0
Leptosiphon serrulatus Madera leptosiphon	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden USFS_S-Sensitive		26 S:1	0	0	0	0	0	1	1	0	1	0	0
Linderiella occidentalis California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	400 400	509 S:1	0	0	0	0	0	1	1	0	1	0	0
Lytta molesta molestan blister beetle	G2 S2	None None		275 360	17 S:2	0	0	0	0	0	2	2	0	1	1	0
Metapogon hurdi Hurd's metapogon robberfly	G1G2 S1S2	None None		325 325	3 S:1	0	0	0	0	0	1	1	0	0	1	0
Nannopterum auritum double-crested cormorant	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	332 332	39 S:1	0	0	0	0	0	1	0	1	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Northern Claypan Vernal Pool	G1	None		350	21	0	0	0	0	0	1	1	0	1	0	0
Northern Claypan Vernal Pool	S1.1	None		350	S:1											
Nycticorax nycticorax	G5	None	IUCN_LC-Least Concern	296	37	0	0	0	0	0	1	0	1	1	0	0
black-crowned night heron	S4	None		296	S:1											
Orcuttia inaequalis	G1	Threatened	Rare Plant Rank - 1B.1	300	47	0	0	0	0	1	0	1	0	0	0	1
San Joaquin Valley Orcutt grass	S1	Endangered		300	S:1											
Orcuttia pilosa	G1	Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	310	35	0	0	0	0	1	0	1	0	0	1	0
hairy Orcutt grass	S1	Endangered		310	S:1											
Perognathus inornatus	G3	None	BLM_S-Sensitive IUCN_LC-Least Concern	265	140	0	0	0	0	1	2	3	0	2	0	1
San Joaquin pocket mouse	S2S3	None		265	S:3											
Phrynosoma blainvillii	G4	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	300	841	0	0	0	0	1	0	1	0	0	1	0
coast horned lizard	S4	None		300	S:1											
Sagittaria sanfordii	G3	None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	295	143	0	2	1	0	0	6	6	3	9	0	0
Sanford's arrowhead	S3	None		360	S:9											
Spea hammondii	G2G3	Proposed Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	259	1445	0	0	1	0	0	1	2	0	2	0	0
western spadefoot	S3S4	None		355	S:2											
Taxidea taxus	G5	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	250	648	0	0	0	0	0	2	2	0	2	0	0
American badger	S3	None		315	S:2											
Thamnophis gigas	G2	Threatened	IUCN_VU-Vulnerable	195	381	0	0	0	0	1	0	1	0	0	1	0
giant gartersnake	S2	Threatened		195	S:1											
Tuctoria greenei	G1	Endangered	Rare Plant Rank - 1B.1	405	50	0	0	0	0	1	0	1	0	0	0	1
Greene's tuctoria	S1	Rare		405	S:1											
Vireo bellii pusillus	G5T2	Endangered		345	505	0	0	0	0	2	0	2	0	0	2	0
least Bell's vireo	S3	Endangered		360	S:2											

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Vulpes macrotis mutica	G4T2	Endangered		200	1026	0	0	0	0	0	2	2	0	2	0	0
San Joaquin kit fox	S3	Threatened		302	S:2											

B.3 CNPS

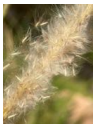
CALIFORNIA NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

Search Results

10 matches found. Click on scientific name for details

Search Criteria: , CRPR is one of [1A:1B:2A:2B] , 9-Quad include [3611966:3611976:3611968:3611967:3611978:3611977:3611958:3611956:3611957]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	None	None	G2	S2	1B.1	Yes	1994-01-01	 © 2000 Robert E. Preston, Ph.D.
Castilleja campestris var. *succulenta*	succulent owl's-clover	Orobanchaceae	annual herb (hemiparasitic)	(Mar)Apr-May	FT	CE	G4? T2T3	S2S3	1B.2	Yes	1984-01-01	No Photo Available
Caulanthus californicus	California jewelflower	Brassicaceae	annual herb	Feb-May	FE	CE	G1	S1	1B.1	Yes	1984-01-01	No Photo Available
Imperata brevifolia	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	None	None	G3	S3	2B.1		2006-12-26	 © 2020 Matt C. Berger
Lasthenia chrysantha	alkali-sink goldfields	Asteraceae	annual herb	Feb-Apr	None	None	G2	S2	1B.1	Yes	2019-09-30	 © 2009 California State University, Stanislaus

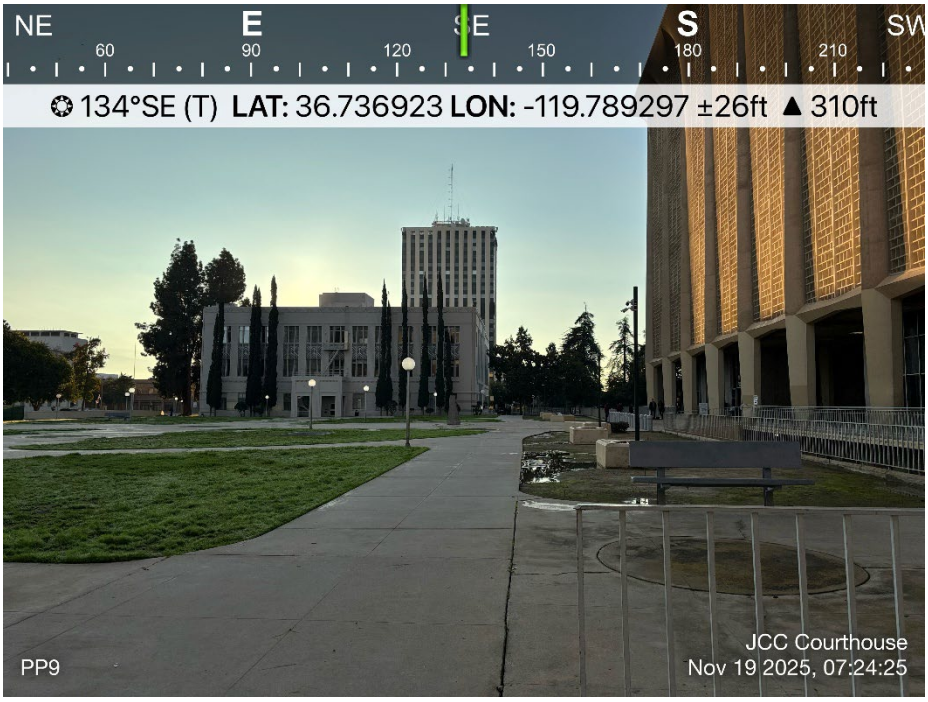
Leptosiphon serrulatus	Madera leptosiphon	Polemoniaceae	annual herb	Apr-May	None	None	G3	S3	1B.2	Yes	1980-01-01	 © 2008 Chris Winchell
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Orcuttia pilosa	hairy Orcutt grass	Poaceae	annual herb	May-Sep	FE	CE	G1	S1	1B.1	Yes	1980-01-01	 © 2003 George W. Hartwell
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook
Tuctoria greenei	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	FE	CR	G1	S1	1B.1	Yes	1974-01-01	 ©2008 F. Gauna

Showing 1 to 10 of 10 entries

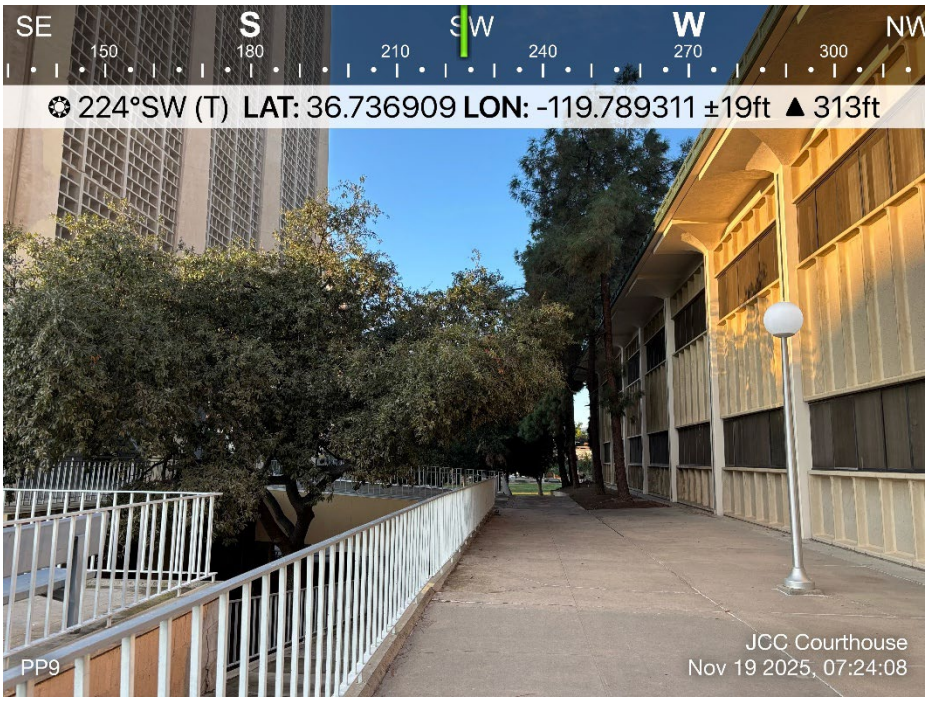
Go to top

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2025. Rare Plant Inventory (online edition, v9.5.1). Website https://www.rareplants.cnps.org [accessed 13 November 2025].
}

Appendix C Representative Photographs



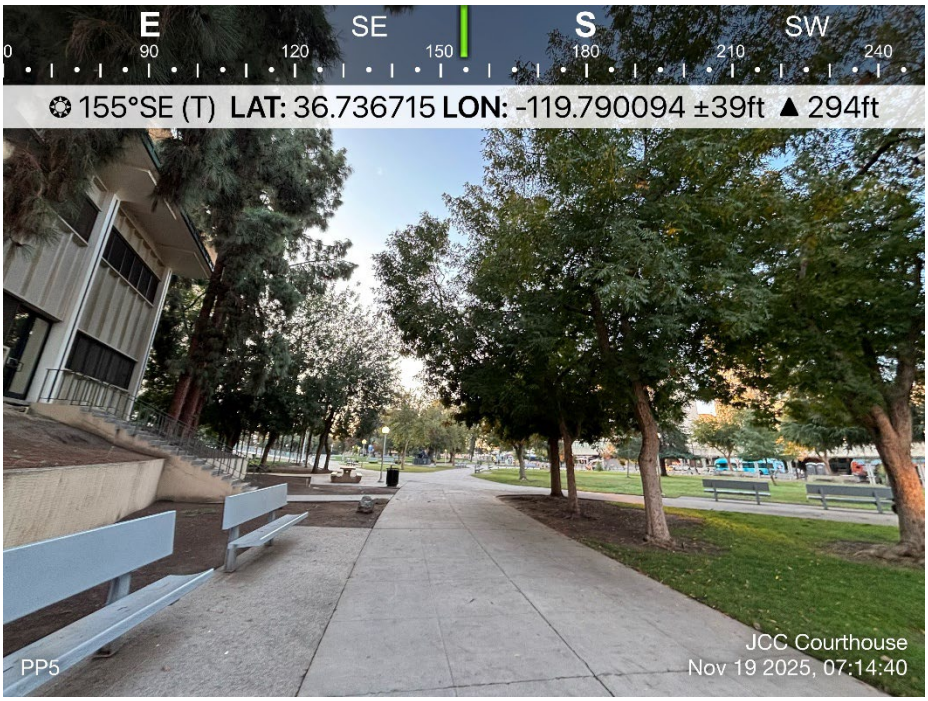
Portion of Project Area within Courthouse Park – tall buildings, grass, ornamental trees, and standing water present.



Portion of Project Area within Courthouse Park –ornamental trees present.



Portion of Project Area within Courthouse Park – ornamental trees and grass present.



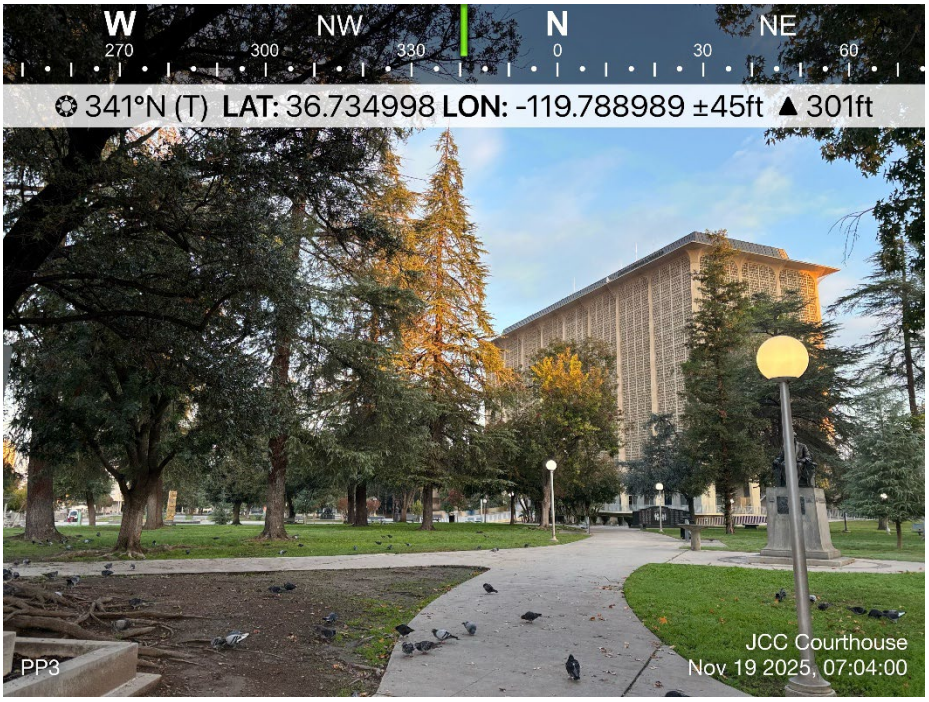
Portion of Project Area within Courthouse Park – ornamental trees and grass present.



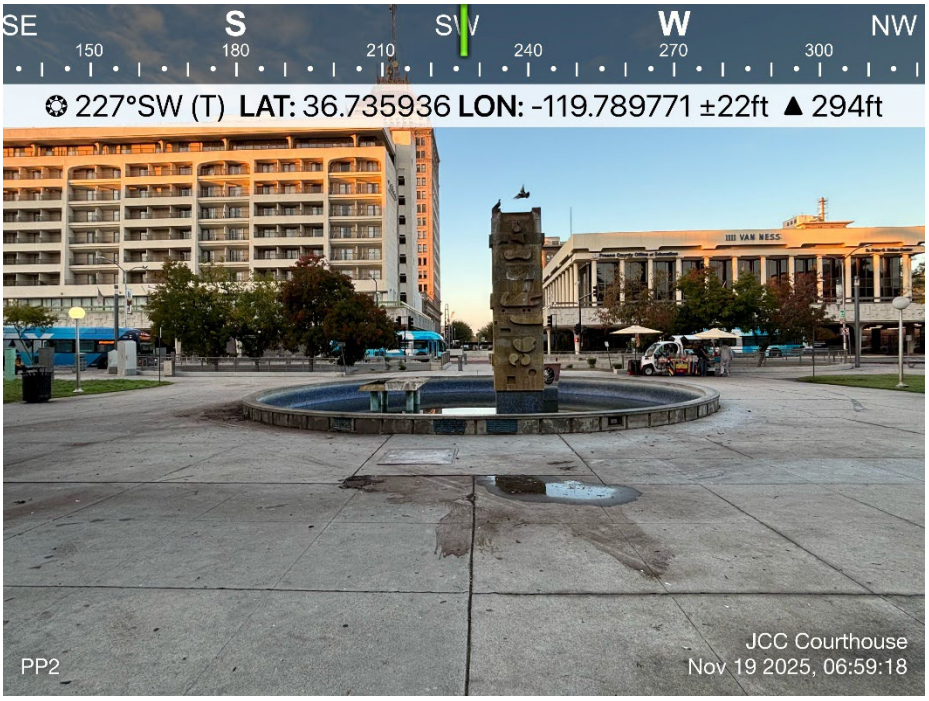
Portion of Project Area within Courthouse Park – ornamental trees and grass present.



Portion of Project Area within Courthouse Park – ornamental trees and grass present.



Portion of Project Area within Courthouse Park – tall building, ornamental trees, and grass present. Pigeons foraging at ground level.



Portion of Project Area within Courthouse Park – water fountain at center with urban surroundings.



Portion of proposed staging Area – grass with some bare patches present.



Portion of proposed staging Area – broken concrete and trash present.

Appendix D Historic Resources Evaluation Report – Confidential not included within this report

Appendix E Archaeological Resources Study Report - Confidential not included within this report

Appendix F Paleontological Resources Assessment

Draft Paleontological Resources Assessment for the New Fresno Courthouse Project, Fresno, California

Results of an analysis of existing data to assess potential impacts to paleontological resources

Stantec

Prepared for:
Judicial Council of California

Date:
April 10, 2026

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Revision Record

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date

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Executive Summary

Stantec Consulting Services Inc. (Stantec) conducted a paleontological resources assessment on behalf of the Judicial Council of California (Judicial Council) for the New Fresno Courthouse Project (the Project) on 2.09 acres within the Courthouse Park parcel at 2200 Fresno Street in Fresno, Fresno County, California. This study was conducted in support of the proposed demolition of the existing Fresno County Sheriff's Office Administration Building and South Annex Jail and construction of a modern courtroom, approximately 413,000 square-foot courthouse.

The proposed Project is subject to compliance with the California Environmental Quality Act (CEQA) regarding the Project's potential impacts on paleontological resources. The lead agency for this Project is the Judicial Council. This study consisted of an analysis of existing data including a review of geologic mapping, relevant scientific literature, and online databases of the University of California Museum of Paleontology, National Museum of Natural History of the Smithsonian, and the American Museum of Natural History. This research was used to assign paleontological potential rankings of the Society of Vertebrate Paleontology (SVP) (2025) to the geologic units present in the Project Site, either at the surface or in the subsurface. Following this, Project plans were reviewed to identify potential impacts to paleontological resources and develop mitigation recommendations to reduce potential impacts to less than significant.

The results of the study indicate that two geologic units are present in the Project Site: the Modesto Formation at the surface and the Riverbank Formation in the subsurface. Stantec assesses these units as having high (Fossil Prediction Map System [FPMS] 4) paleontological potential. Project activities include demolition, grading, and construction of the new courthouse facility, which involve ground disturbance that may encounter the Modesto and Riverbank Formations. Should unique paleontological resources be damaged or destroyed by Project activities, it would constitute an adverse impact for the purposes of CEQA.

In order to reduce potential impacts to paleontological resources to less than significant, in compliance with CEQA, Stantec recommends a paleontologist meeting SVP (2025) standards as a Paleontological Principal Investigator be retained to oversee a paleontological mitigation program. The following mitigation activities are recommended for the Project, as part of the mitigation program:

- The Paleontological Principal Investigator should develop and oversee the implementation of a Paleontological Mitigation Plan tailored to the Project plans that provides for paleontological monitoring of earthwork and ground disturbing activities into undisturbed geologic units with high (FPMS 4) paleontological potential to be conducted by a Paleontological Technician meeting industry standards (SVP 2025). This plan should include provisions for worker training, depths and locations for monitoring, monitoring procedures, a fossil discovery plan in the event a fossil is found during construction, including a plan for assessment and treatment, and requirements for final reporting of the results of the mitigation program.
- The Project Paleontologist should develop a Worker's Environmental Awareness Program training that communicates requirements and procedures for the discovery of fossils during

construction, to be delivered by the paleontological monitor to the construction crew prior to the onset of ground disturbance.

- Fulltime paleontological monitoring should be implemented once excavations exceed the depth of previously disturbed sediments or artificial fill across the Project Site. Spot check monitoring may be conducted initially, until the depth of previous disturbance is known. The Paleontological Principal Investigator may alter the frequency or depth of monitoring based on subsurface conditions.
- In the event that fossils are encountered during construction activities, work should stop in a safe radius of the finds, usually 100 feet, while the Paleontological Technician documents the fossils. The Paleontological Principal Investigator shall assess the fossils. Should fossils meet criteria of scientific importance to be considered a unique paleontological resource, they should be collected and curated in an accredited repository along with associated data and curation fees.

Based on the findings in this study and the implementation of the above mitigation recommendations, the proposed Project should not cause an adverse impact to paleontological resources. Changes to the Project plans or Project Site from those assessed in this study may require additional assessment for impacts to paleontological resources.

Acronyms / Abbreviations

Acronym / Abbreviation	Full Name
AMNH	American Museum of Natural History
bgs	below ground surface
BVMNH	Buena Vista Museum of Natural History and Science
CEQA	California Environmental Quality Act
Cogstone	Cogstone Resource Management, Inc.
CY	Cubic yards
Chico State	California State University-Chico
FPMS	Fossil Prediction Map System
Fresno State	California State University-Fresno
GIS	Geographic Information System
Judicial Council	Judicial Council of California
NHMLA	Natural History Museum of Los Angeles County
Ma	Million years ago
NMNH	National Museum of Natural History at the Smithsonian
PRC	Public Resources Code
Project	New Fresno Courthouse Project
RAM	Raymond M. Alf Museum of Paleontology
SCNHM	Sierra College Natural History Museum
SF	Square feet
SJSU	San Jose State University
SR	State Route
Stantec	Stantec Consulting Services Inc.
Stanford	Stanford University
SVP	Society of Vertebrate Paleontology
UCMP	University of California Museum of Paleontology

Glossary

Term	Definition
Fossil	Evidence of ancient life, typically regarded by the Society of Vertebrate Paleontology (2025) as 11,700 years (Pleistocene) or older.
Paleontological Technician	An individual with academic training (college or university degree) with an emphasis in paleontology or demonstrated equivalent experience. Academic training as defined herein must include completed basic coursework in paleontology, geology, and biology. Equivalent experience is defined as a minimum of two years of cumulative professional or non-professional work in laboratory preparation, curation, and/or fieldwork related to paleontology, as well as documented knowledge of the discipline of paleontology. Also referred to as a Field Paleontologist [Society of Vertebrate Paleontology 2025].
Paleontological Monitoring	Observation of construction activities by a Paleontological Technician, under supervision of the Paleontological Principal Investigator. Monitoring may be fulltime (observation of the entire duration of a particular activity) or consist of a spot check (observation of a portion of the activity or of an area following the activity).
Paleontological Principal Investigator	Someone with an advanced degree (Master's or Ph.D.) with an emphasis in paleontology plus a minimum of two years (or 50 completed mitigation projects) of demonstrated professional experience and competency with paleontological resource mitigation projects at the level of field supervisor, under the direct supervision of a principal investigator. [Society of Vertebrate Paleontology 2025].
Project Site	The 2.09-acre footprint in which Project activities will occur.
Unique Paleontological Resource	The Society of Vertebrate Paleontology's 2025 Guidelines proposes five significance criteria, suggesting that fossils are scientifically significant if they: (1) provide data on evolutionary relationships; (2) provide data in determining the age of geologic stratum; (3) provide data regarding the development or interaction of biological communities; (4) demonstrate "unusual or spectacular circumstances in the history of life;" or (5) are in short supply and/or in danger of being depleted or destroyed. Since CEQA does not provide a threshold of significance for environmental impacts to paleontological resources, the Judicial Council adopts these professional criteria for determining whether the Project may impact a unique paleontological resource as referenced in the CEQA Guidelines (14 Cal. Code of Regs. Appendix G).

1 Introduction

Stantec Consulting Services Inc. (Stantec) conducted a paleontological resources assessment on behalf of the Judicial Council of California (Judicial Council) for the New Fresno Courthouse Project (the Project) on 2.09 acres within the Courthouse Park parcel at 2200 Fresno Street in Fresno, Fresno County, California. This study was conducted in support of the proposed demolition of the existing Fresno County Sheriff's Administration Building and South Annex Jail and construction of a modern courtroom, approximately 413,000 square-foot courthouse

The proposed Project is subject to compliance with the California Environmental Quality Act (CEQA; Pub. Res. Code sections 21000 *et seq*.) requirements regarding the Project's potential impacts on paleontological resources. The lead agency for the Project is the Judicial Council. As part of CEQA compliance, a paleontological resources assessment was conducted to assess potential impacts of the proposed Project on paleontological resources.

1.1 Project Description

The Judicial Council is proposing to construct and operate a new consolidated courthouse for the Superior Court of California, County of Fresno, to support criminal, civil, juvenile, drug, behavioral health, and general trial cases. The Project will be delivered through a Design-Build process. Although final plans have not yet been prepared, the Project is anticipated to include site preparation, grading, building construction, paving, and architectural finishing activities. The proposed courthouse facility would be located on a 2.09-acre portion of the 7.6-acre L-shaped Site 1, which occupies the western portion of the 13.94-acre parcel, County-owned Courthouse Park property at 2200 Fresno Street in the City of Fresno. The Project Site is situated in the northern section of Courthouse Park. The Project Site also contains an underground tunnel connection that travels north to the Main Jail, located on the southeast corner of the intersection of 'M' Street and Fresno Street.

Demolition of the Sheriff Administration and South Annex Jail buildings would be completed as part of the project. Following demolition, the Judicial Council would construct a new, approximately 413,000 square feet (SF), courthouse designed to accommodate current judicial functions and future growth in judgeships. The proposed building would consist of a basement level, podium levels of approximately 43,700 SF each, and tower levels of approximately 27,560 SF each, totaling up to 11 stories above ground and one level below ground.

The proposed new courthouse would provide additional courtrooms, support spaces, and secure parking for judges and officers. The support spaces would include, but are not limited to, judicial chambers, clerks' offices, jury assembly and deliberation rooms, temporary in-custody holding, administrative office space, parking loading dock, and secure prisoner sallyport. The courthouse would include a connection to the existing tunnel to the Fresno County Jail across Fresno Street for transport of prisoners. Secured parking would be provided for judges and officers only; no staff or public parking is included as part of the project scope. The new courthouse would be staffed by approximately 390 full-time employees and 14 part-time employees daily.

The Project would implement sustainable elements throughout its design, construction, and operation and maintenance. The Project would be designed for sustainability and, at a minimum, to the standards of a Leadership in Energy and Environmental Design Silver certified rating. The Project is anticipated to result in an increase of approximately 65,000 SF of paved/impervious surfaces within the Project Site as compared to the existing facilities.

1.1.1 Supporting Infrastructure

The Project Site is served by existing utilities that would be realigned to support operation of the Project. Utility needs of the Project would not substantially differ from those currently available at the site. The Project's potential impacts to these utility systems are analyzed elsewhere, and the conclusions are included here for reference when evaluating the scope of potential subsurface disturbance that could impact paleontological resources.

Stormwater Drainage

The Fresno Metropolitan Flood Control District provides flood control and urban stormwater management services for the Fresno and Clovis metropolitan areas. The Project Site is located within Drainage Area 'FF,' which conveys runoff to a stormwater retention basin at the northeast corner of South West Avenue and West Eden Avenue. Currently, onsite drainage inlets collect and convey stormwater to a 12-inch stormwater pipe along Fresno Street. This existing 12-inch connection is anticipated to accommodate runoff from the Project. The Project generated runoff is not expected to exceed the capacity of the existing drainage system.

Potable and Recycled Water

The existing site is served by an 8-inch water main on Mariposa Street and a 12-inch water main on Tulare Street. These connections are expected to be used for the Project. Water pressure is not anticipated to be affected, as the Project's demand is similar to that of the existing courthouse. Additionally, the Project will include a new fire suppression sprinkler system. The current water system is expected to have sufficient capacity to meet the required flow for fire protection.

Wastewater

An existing 12-inch sewer main currently serves the existing Courthouse via a connection along Tulare Street. The sewer main runs through the alley located northeast of the Fresno County District Attorney building. This same sewer main is anticipated to service the Project. Future wastewater flows are expected to be consistent with existing conditions; therefore, no impacts to the existing sewer collection system are anticipated.

Electricity

The existing electrical distribution system in the area should be adequate and capable of servicing the proposed Project.

Natural Gas

The existing gas distribution system in the area should be adequate and capable of servicing the proposed Project.

1.2 Demolition Activities

Existing Site Development

The Project Site has been developed as Courthouse Park (historically referred to as Court House Square) since the late 1800s. Initial development included construction of a three-story courthouse in 1874, which was subsequently modified with the addition of a copper dome by 1885. A jail facility has occupied the northeastern portion of the parcel since at least 1888.

The existing jail building, located in the northern section of the Project Site, was constructed in 1942, and an annex was added in 1960. The Fresno County Sheriff's Office building, located in the southern portion of the Project Site, was constructed in 1970 as part of a broader downtown redevelopment effort.

Demolition Scope

As part of the proposed New Fresno Courthouse Project, demolition activities would include removal of the existing Sheriff Administration Building and South Annex Jail. These activities would prepare the site for future construction and site development associated with the Project.

Demolition would include the systematic removal and off-haul of aboveground structures, foundations, utilities, and associated improvements. In addition, the Project would include removal of approximately 40,000 SF of existing paving, full repaving of 2,000 SF of existing drive access road.

Demolition work would occur within the existing developed footprint of the Project Site, and no new ground disturbance would extend beyond the Project Site boundaries.

Duration and Equipment

Demolition and abatement activities are anticipated to occur over approximately four months. Equipment likely to be used during demolition includes excavators, loaders, haul trucks, cranes, compressors, and other standard construction equipment. Activities would generally occur during daytime construction hours consistent with City of Fresno noise regulations.

1.3 Project Construction and Staging

Construction is planned to occur over 36 months and is anticipated to start in October 2028 and be completed by October 2031. Construction will be phased to align with the Office of the State Fire Marshal's permitting guidelines and the Judicial Council Building Official's requirements. Construction is anticipated to occur in the following phases: Site Preparation, Grading, Building Construction, Paving, and Architectural Coating. Site Preparation is expected to begin and conclude in September 2028, followed by Site Grading from October to November 2028. Building construction would commence in November 2028 and is

anticipated to be completed by September 2031. Paving is expected to take place between May and June 2031, while Architectural Coating is anticipated to occur between January and May 2030.

It is anticipated construction would require the export of approximately 1,000,000 cubic yards (CY) of material and import of approximately 1,000 CY of fill material. The estimated maximum depth of excavation is expected to be 15 feet.

1.4 Project Location

The proposed new courthouse would be constructed within the 2.09-acre Site 1a (the Project Site), which is part of the larger 7.60-acre Site 1, which is located within the 13.94-acre Courthouse Park parcel at 2200 Fresno Street and identified by Assessor's Parcel Number 466-160-01T, within the City of Fresno, Fresno County, California (**Figure 1**). Site 1 consists of a 7.60-acre L-shaped portion of the western side of the Courthouse Park parcel and is bound by Fresno Street to the northwest, 'M' Street to the northeast, Tulare Street southeast, and Van Ness Avenue to the southwest. The Project Site is located within the northern corner of Site 1, southeast of the intersection of 'M' Street and Fresno Street (**Figure 2, Figure 3**). It encompasses the existing Fresno County Sheriff's Office and South Annex Jail, which is connected via an underground tunnel to the Main Jail located across Fresno Street to the west. The Project Site is located in portions of Sections 3, 4, and 10 of Township 14 South, Range 20 East, as depicted on the Fresno South, California United States Geological Survey 7.5-minute series topographic quadrangle.

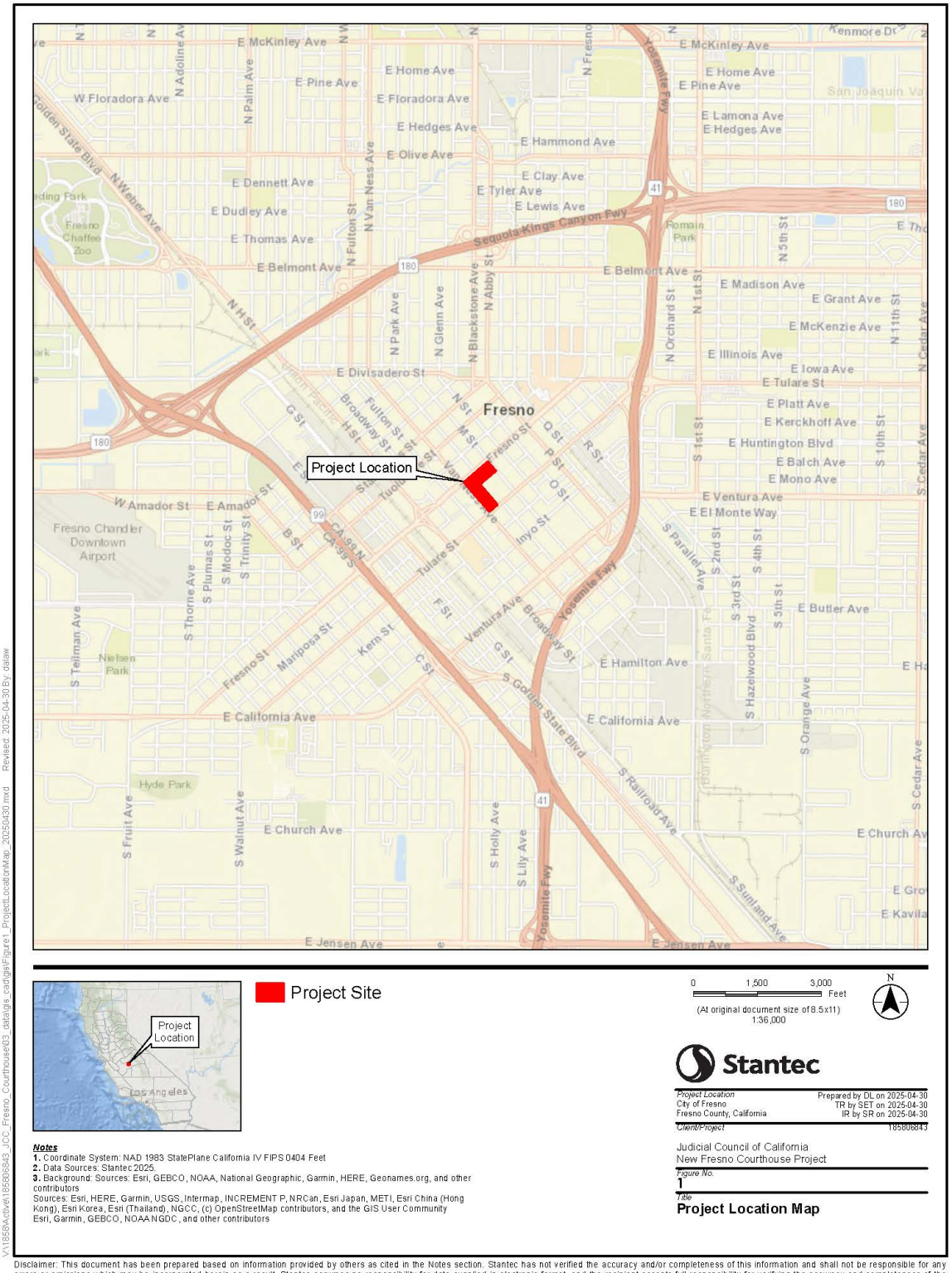
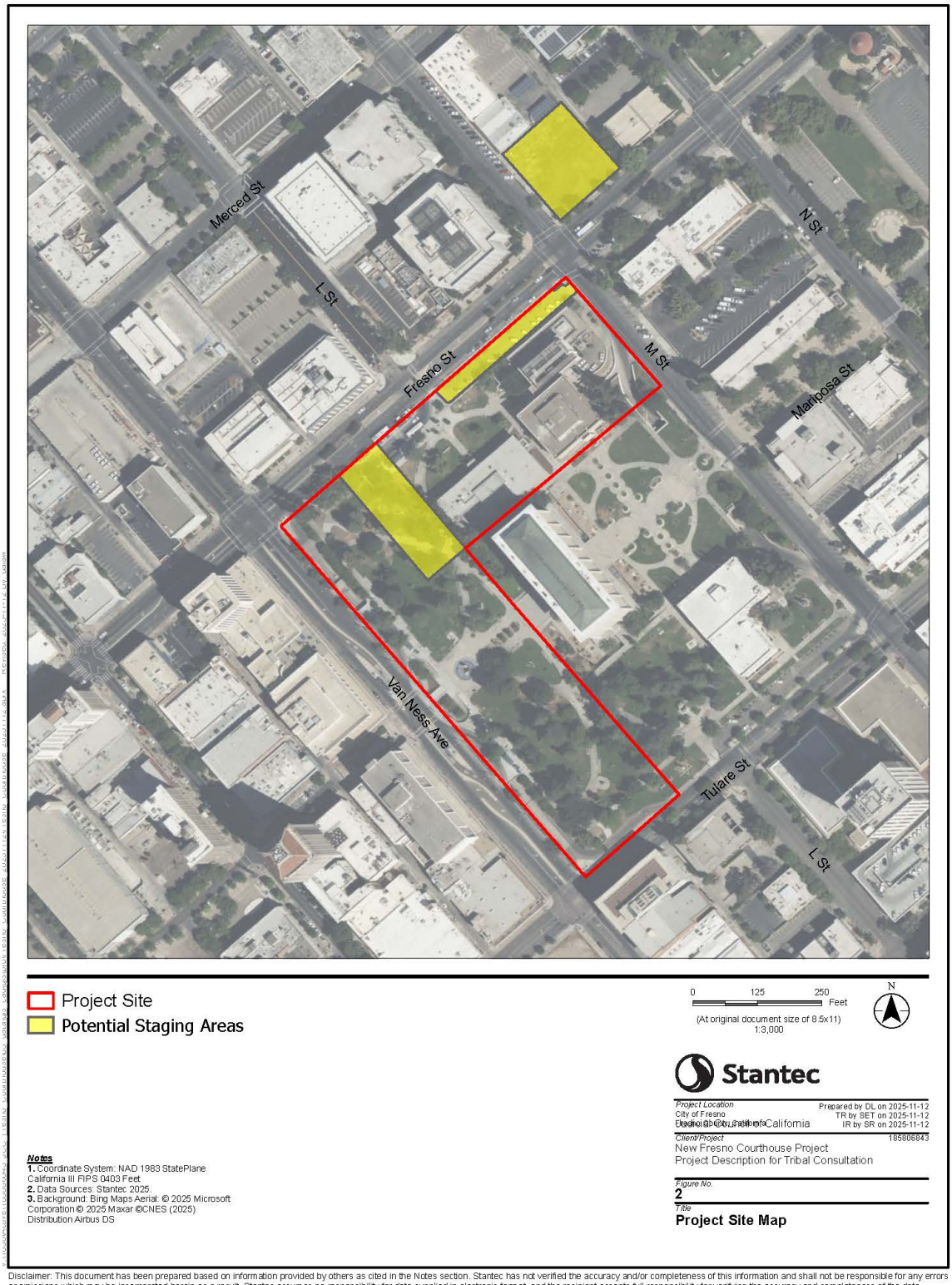


Figure 1. Project Location Map.



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Figure 2. Project Site Map.

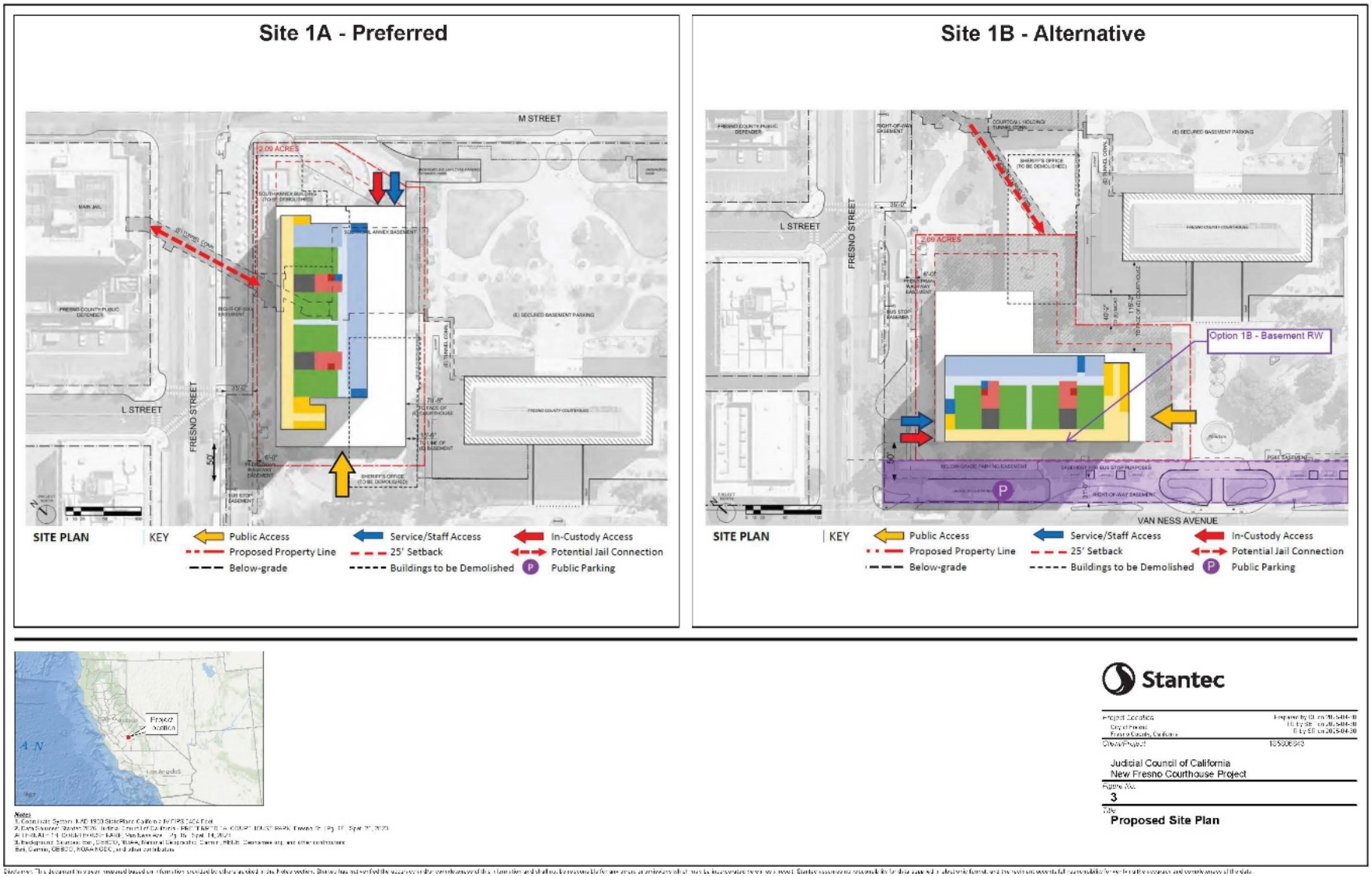


Figure 3. Proposed Site Plan.

1.5 Paleontological Resources

Fossils are evidence of ancient life, defined by the Society of Vertebrate Paleontology (SVP) (2025) as being over approximately 11,700 years in age, or Pleistocene and older. This includes the remains of the body of an organism, such as bones, skin impressions, shell, or leaves, as well as traces of an organism's activity, such as footprints or burrows, called trace fossils. Fossils can have scientific and educational value; however, if damaged, destroyed, or improperly collected, fossils can lose this value (Murphey et al. 2019).

CEQA does not define what constitutes a unique paleontological resource.In the absence of a legal definition, the Society of Vertebrate Paleontology (SVP) developed Best Practice Guidelines for Mitigation of Adverse Impacts on Paleontological Resources (SVP Guidelines 2025), which recommends five criteria for determining whether a paleontological resource is significant. "Fossils are considered scientifically significant if one or more of these five criteria are met (from Scott and Springer, 2003).

1. The Fossils provide data on the evolutionary relationships and developmental trends among organisms, both living and extinct.
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein.
3. he fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas.
4. The fossils demonstrate unusual or spectacular circumstances in the history of life.
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

(SVP Guidelines 2025, p. 8, Table 5.) Through these criteria, the paleontology profession has articulated science-based standards for determining whether a paleontological resource is scientifically significant. Because CEQA requires analysis of significant environmental effects, the Project's effects on insignificant paleontological resources do not need to be considered. The Judicial Council finds the SVP Guidelines 2025 articulates reasonable and science-based criteria for determining whether the Project may have a significant effect on paleontological resources. If the Project would destroy, directly or indirectly, a paleontological resource that meets the significance criteria stated above, it would have a significant effect on the environment. (*See* CEQA Guidelines, 14 Cal. Code of Regs. 15000, *et seq*., Appendix G, Section VII(f).)

1.5.1 Professional Standards

A variety of professional guidelines have been developed that outline protocols and practices for conducting mitigation paleontology. In particular, some studies have focused on establishing best practices for conducting mitigation paleontology, including resource assessments and surveys, monitoring and other forms of mitigation, and data and fossil recovery in a mitigation context, which differs from academic paleontology in the constraints of working on construction sites and schedules as well as the purpose of mitigation paleontology as a tool for regulatory compliance (Eisentraut and Cooper 2002; Murphey et al. 2019; Scott and Springer 2003; SVP 2025). A robust body of scientific literature also exists outlining best practices for paleontological data collection and management of fossils and fossil localities, some of which

is authored by agency representatives (Santucci and McClelland 2001 references therein; Santucci et al. 2009). This study conforms to these industry best practices.

2 Regulatory Framework

The Judicial Council, acting as the Judicial Branch of State government, is not subject to local land use regulations; however, the Judicial Council, as appropriate, considers local policies in evaluating whether the Project's impacts would be significant.

2.1 State of California

2.1.1 California Environmental Quality Act

CEQA requires that before approving most discretionary projects, the Lead Agency must identify and examine significant adverse environmental effects that may result from activities associated with such projects. CEQA separates the consideration of paleontological resources from cultural resources (PRC Section 21083.09). The CEQA Guidelines Appendix G initial study checklist includes the question, "Will the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?"

3 Methodology

The paleontological resources assessment reported herein consisted of an analysis of existing data including museum collections data, geologic mapping, and the scientific literature. To assess whether paleontological resources are likely to be encountered in a given area, the paleontological potential of the geologic units present in the area is assessed. Paleontological potential is derived from the known fossil data collected from the geologic unit as a whole, not just from a specific survey or study. Paleontological potential of a geologic unit consists of both (a) the potential for yielding abundant vertebrate fossils or for yielding scientifically important fossils, whether large or small, vertebrate, invertebrate, plant, or trace fossils and (b) the importance of recovered evidence for new and scientifically important taxonomic, phylogenetic, paleoecologic, taphonomic, biochronologic, or stratigraphic data (SVP Guidelines 2025).

The paleontological assessment presented here was conducted by Senior Principal Paleontologist Alyssa Bell, Ph.D. with support from Paleontologist Joshua Broussard, M.S. Geographic Information System (GIS) maps were drafted by GIS Technician Danny Law, B.S. This report was authored by Mr. Broussard and reviewed by Paleontologist Joe Kobler, B.A., and Dr. Bell. Stantec's work in support of the Project was managed by Principal Environmental Planner StephAnnie Roberts, who coordinated Stantec's work and provided quality assurance and control.

3.1 Analysis of Existing Data

In order to assess the paleontological potential of the Project Site, geologic mapping was consulted to identify the geologic units present at the surface or likely present in the subsurface. Museum records enquiries were sent to the following museums in early December of 2025: the Natural History Museum of

Los Angeles County (NHMLA), University of California Museum of Paleontology (UCMP), San Jose State University (SJSU), Sierra College Natural History Museum (SCNHM), California State University-Chico (Chico State), California State University-Fresno (Fresno State), Stanford University (Stanford), Raymond M. Alf Museum of Paleontology (RAM), and the Buena Vista Museum of Natural History and Science (BVMNH).

As the majority of these museums did not provide relevant information (see Section 4.0, *Results*), the online databases of the UCMP, National Museum of Natural History of the Smithsonian (NMNH), and the American Museum of Natural History (AMNH) were searched for relevant records. Searches were conducted using both the names of formal geologic units in the Project Site as well as for localities listed without formal units attributed but from the appropriate geologic age. Online searches were restricted to Fresno County. The online databases searched do not provide specific geographic locations beyond the county the fossils were recovered from but do include locality names that can sometimes be used to infer the general area of the locality.

3.2 Paleontological Potential

The results of the analysis of existing data were used to assign the paleontological potential rankings of the SVP (2025) Fossil Prediction Map System (FPMS) to the geologic units likely present in the Project Site. The FPMS is a resource management tool based on the premise that the history of a geologic unit for preserving fossils can be used to predict the presence of fossils using geologic mapping. The FPMS scale is a six-tier system that ranges from very low (FPMS 1) to very high (FPMS 5) paleontological potential, also including a rank for unknown (U) paleontological potential, closely following the design of the Bureau of Land Management's (2022) Potential Fossil Yield Classification System (**Table 3**).

Table 1. Summary of the Society of Vertebrate Paleontology's (2025) Fossil Prediction Map System

FPMS Rank	Assignment Criteria	Management Summary
Very High (5)	Highly fossiliferous geologic units that consistently and predictably preserve scientifically significant fossils.	Management concern is very high. Typical actions include pre-construction field surveys, full-time monitoring, and collection or avoidance of scientifically significant resources.
High (4)	Highly fossiliferous geologic units that preserve scientifically significant fossils, but their concentrations vary and are less predictable than 5.	Management concern is high. Typical actions include pre-construction field surveys, full-time or part-time monitoring, and collection or avoidance of scientifically significant resources.
Moderate (3)	Fossiliferous geologic units that are often marine in origin and in which fossils may be common, but scientifically significant fossils are isolated or sparse.	Management concern is moderate. Typical actions may include pre-construction field surveys, full-time or part-time monitoring, based on the results of paleontological resources impact evaluations, and collection or avoidance of scientifically significant resources
Low (2)	Geologic units that are not likely to preserve fossils, including sedimentary deposits that are generally younger than 11,700 years before present, older sedimentary units that only rarely	Management concern is generally low. Actions such as surveys or monitoring are not typically recommended except in rare situations in which

FPMS Rank	Assignment Criteria	Management Summary
	preserve fossils, or units that exhibit diagenetic changes that make fossil preservation unlikely.	isolated scientifically significant fossils are known to be present in the study area.
Very Low (1)	Geologic units that are not likely to contain recognizable fossils including Precambrian units and units that are igneous or metamorphic, excluding air-fall and reworked volcanic ash.	Management concerns are very low. Impact mitigation is unlikely to be recommended except in rare circumstances.
Unknown (U)	Geologic units that cannot be assigned an informed rank. This includes units that have not been subject to prior field surveys but that contain lithologies or preserve depositional settings that are known to be conducive to fossil preservation, units that have not been published in the scientific literature, and units in which reports of fossils have not been verified.	Management concern is medium to high until a provisional designation is made. Actions usually include pre-construction field survey to collect data to assign a rank of 1 to 5, with additional action based on the assigned rank.

3.3 Paleontological Impacts Assessment

Following the assessment of paleontological potential, an impacts assessment was conducted comparing planned Project activities with mapped geologic units. Where potential adverse impacts from Project activities were identified, mitigation recommendations were developed to avoid or mitigate those impacts.

Impacts to paleontological resources can be classified as direct, indirect, or cumulative. Impacts can also be considered as adverse impacts or as beneficial impacts. Direct adverse impacts on paleontological resources result from destruction of these nonrenewable resources by surface disturbing actions including construction excavations. Therefore, in areas that contain paleontologically sensitive geologic units, ground disturbance has the potential to adversely impact significant paleontological resources by destroying them and rendering them permanently unavailable to science and society. Beneficial direct impacts, however, may result when paleontological resources are identified during construction and are appropriately documented and salvaged, thus ensuring the specimens are protected for future study and education.

Indirect impacts typically include those effects which result from the continuing implementation of management decisions and resulting activities, including normal ongoing operations of facilities constructed within a given Project Site. Human activities that increase erosion can also cause indirect impacts to surface and subsurface fossils as the result of exposure, transport, weathering, and reburial.

Cumulative adverse impacts can result from incrementally minor but collectively significant actions taking place over time. The incremental loss of significant paleontological resources over time from construction-related surface disturbance or vandalism and unlawful collection would represent a significant cumulative adverse impact, because it would result in the destruction of non-renewable paleontological resources and the associated irretrievable loss of scientific information.

The impact assessment conducted here takes into consideration planned Project activities in terms of aerial and subsurface extents, including the possibility of subsurface geologic units having a different paleontological potential than surficial units. For example, artificial fill is unlikely to preserve paleontological resources; yet may overly older units that have paleontological potential. In areas with this underlying

geologic setting surficial work may be of low risk for impacting paleontological resources while activities that require deeper excavations would be at greater risk of impacting paleontological resources. For this reason, the impact assessment takes into consideration both the surface and subsurface geology and is tailored to Project activities.

4 Results

4.1 Geologic Setting

The Project Site is located within the City of Fresno in the central portion of Fresno County within the San Joaquin Valley of California. The San Joaquin Valley lies within the Great Valley geomorphic province, an alluvial plain extending from the Tehachapi Mountains in the south to the Klamath Mountains in the north, a distance of about 450 miles. The San Joaquin Valley comprises two-thirds of the Great Valley, bound by the Sierra Nevada in the east, the Diablo and Temblor Ranges in the west, and the Tehachapi Mountains to the south (Galloway and Riley 1999). The San Joaquin Valley is primarily comprised of Cenozoic and Mesozoic sediments up to 5 miles thick, capped with younger Pleistocene- to Holocene-aged alluvial deposits. The San Joaquin Valley can be subdivided into five regions, of which the Project Site is in the southern Sierra block, which occupies the eastern side of the broad syncline that forms the Great Valley (Bartow 1991). The Sierra block captures sediments shed off the Sierra Nevada to the east, and as such consists of a series of alluvial fans that prograde into the valley (Weissmann et al. 2002). These sediments preserve continuous deposition from the last ice ages (Weissmann et al. 2002). These sediments are generally similar, being alluvial in nature and sourced from the Sierra Nevada, but can be distinguished on the basis of soil profile development, cross-cutting and fill relationships, topographic expression, and local lithological differences (Marchand and Allwardt 1981).

4.2 Museum Records Searches

Of the museums from which records were requested, the NHMLA, SJSU, Chico State, Fresno State, BVMNH, and Stanford indicated their collections do not focus on the Fresno area. The NHMLA and Fresno State indicated the UCMP collections did include relevant data. At the time of writing, the SCNHM, UCMP, and RAM have not replied to the original or follow up requests. If the Judicial Council receives additional data from these museums before approving the Project's CEQA reviewthe Judicial Council will evaluate that data. While there is a potential gap in data based on the lack of response from these museums, the available data and online resource supplements enable a reasonably complete analysis of the Project's potential significant impacts on paleontological resources.

The online databases of the UCMP (2025) and the NMNH (2025) returned records of specimens in Fresno County from relevant geologic units, while the AMNH (2025) returned no results in Fresno County. These results are summarized in **Table 4** below, with data shown limited by available data in the various databases. Results are discussed further for relevant geologic units in Section 4.3.

Table 2. Museum Database Search Results

Geologic Unit	NMNH	UCMP
Pleistocene-aged specimens from unattributed deposits	One locality preserving a bivalve specimen	Two localities preserving 167 specimens
Modesto Formation	None	Four localities preserving mammal, plant, and invertebrate specimens
Riverbank Formation	None	Two localities preserving mammal and plant specimens

4.3 Project Site Geology and Paleontology

Geologic mapping by Matthews and Burnett (1965) indicates the surface of the Project Site consists of the Modesto Formation, with exposures of the underlying Riverbank Formation at the surface within 0.5 miles of the Project Site (**Figure 4; Table 5**). These geologic units range in age from the late to the middle Pleistocene (approximately 13,000 to 450,000 years ago) and are described below.

Modesto Formation (Qf in Figure 4). The Modesto Formation is mapped across the footprint of the Project Site (Matthews and Burnett 1965). The Modesto Formation is the uppermost of the older alluvial units that comprise the top of the Great Valley sequence, dating from the late Pleistocene, approximately 12,000 to at least 42,000 years ago; however, the latter date is poorly constrained, and the unit may be older (Helley and Harwood 1985). The Modesto Formation was first named by Davis and Hall (1959) for young fluvial deposits in eastern Stanislaus and northern Merced Counties.

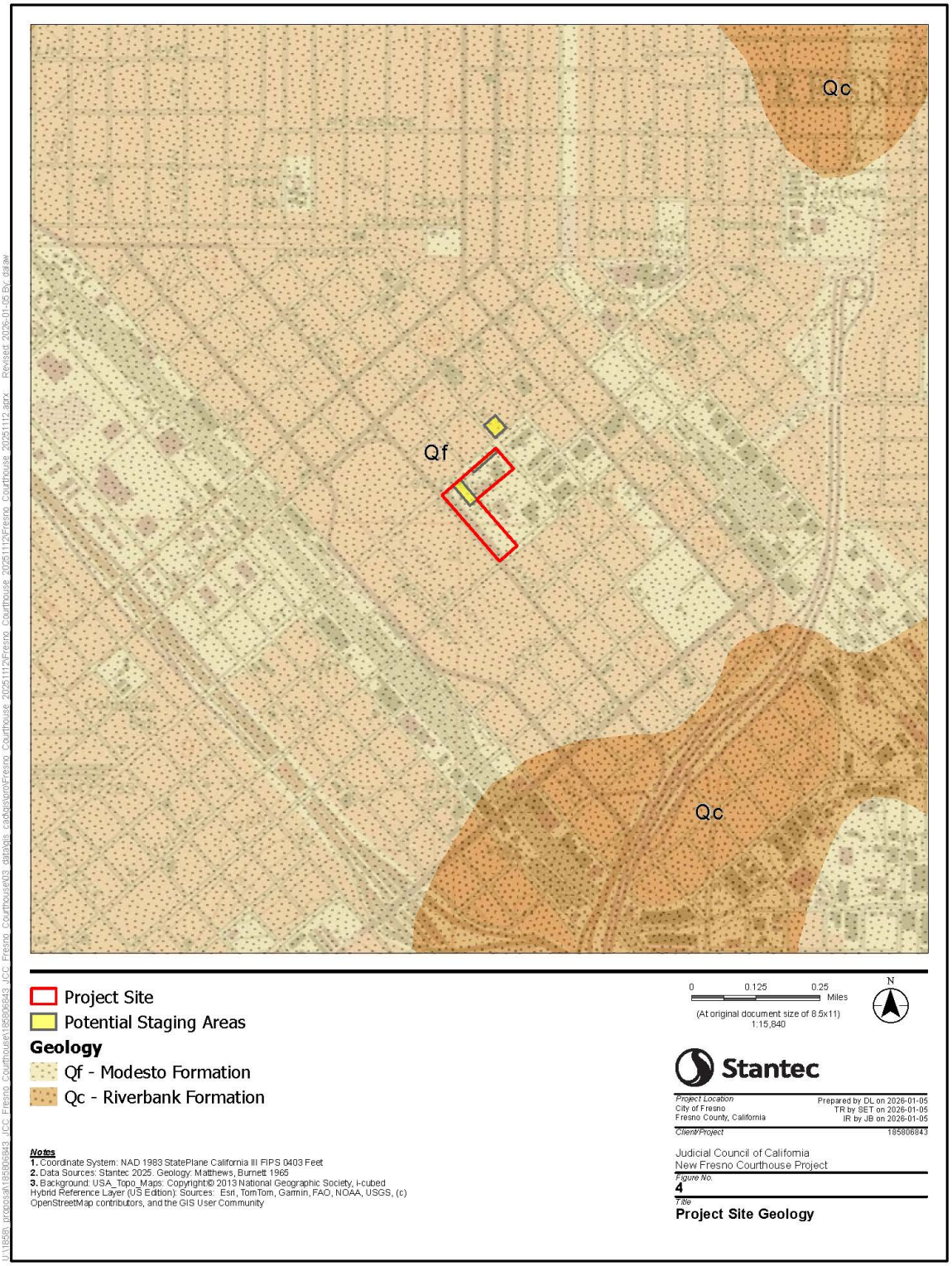


Figure 4. Project Site Geology.

Table 3. Paleontological Potential of Geologic Units in the Project Site.

Geologic Unit	Age (years)	Occurrence within Project Site	Paleontological Potential
Modesto Formation (Qf)	12,000 – 42,000	Surface across Project Site	High (FPMS 4)
Riverbank Formation (Qc)	130,000 – 450,000	Subsurface across Project Site	High (FPMS 4)

In the eastern San Joaquin Valley, the Modesto Formation is a series of coalescing alluvial fans of arkosic silt, sand, and gravels. Thickness of the formation varies greatly across its extent (Marchand and Allward 1981). Marchand and Allwardt (1981) separate the Modesto Formation into an upper and lower member. The lower member is primarily composed of buff to grey, fine- to medium-grained sand and locally derived detritus of andesitic and metamorphic material, with much of the lower portion comprised of well-stratified silt and fine sands. The upper member is primarily composed of cross-bedded, arkosic, light-brown, fine- to medium fine to medium sands and gravels, with more silt and fine sands present near the San Joaquin River (Marchand and Allwardt 1981). The lower member is thicker than the upper member by at least 25 meters in places, whereas the upper member rarely exceeds 10 meters thick (Marchand and Allward 1981). The Modesto Formation comprises several facies of river terraces, thin eolian dunes, and fan deposits across its extent (Marchand and Allward 1981). Previous mitigation work in the Modesto Formation in the vicinity of Fresno has documented sediments of the Modesto Formation consisting of interbedded, largely unconsolidated, and moderately to well sorted, buff colored, subangular to subrounded, moderately compacted fine- to coarse-grained sand (Paleo Solutions [2018], Cogstone Resource Management, Inc. [Cogstone] [2015, 2016] as cited in Caltrans 2020).

The Modesto Formation was deposited during the latest series of aggradational events in the eastern San Joaquin Valley (Marchand and Allwardt 1981). During interglacial erosion, sediments were carried from the foothills and deposited in the valley as series of alluvial fans and distinct terrace deposits along existing rivers such as the San Joaquin, Stanislaus, Chowchilla, and Fresno River (Helley and Harwood 1985; Marchand and Allwardt 1981). Fluvial streams later bisected these earlier fan and terrace deposits and deposited coarser stream channel sediments and terraces on top of the existing alluvial fans and terraces (Helley and Harwood 1985; Marchand and Allwardt 1981). The Modesto and underlying Riverbank Formations are noted by Marchand and Allwardt (1981) as lithologically similar, however the less erosionally modified alluvial fans and low terraces of the Modesto Formation differentiate it from the Riverbank Formation.

The online database of the UCMP (2025) contains four localities attributed to the Modesto Formation in Fresno County, two vertebrate localities, one plant locality, and one invertebrate locality. The specimens from these localities have not been catalogued in the available online data (UCMP 2025). One of these localities is listed as the Ashlan onramp, which may refer to the Ashlan Avenue onramp to either State Route 41, 99, or 168, in the City of Fresno. Location information is not provided for the other three localities. Additionally, the UCMP (2025) has records of two localities and 167 specimens from Pleistocene-aged localities not assigned to a formal geologic unit; these may be representative of the Modesto or Riverbank Formations. The majority of these localities preserved vertebrates, with four preserving invertebrate specimens (UCMP 2025). One of these localities, the Tranquillity locality is located southwest of Fresno in sediments recognized by Bishop and Chapman (1980) as the upper part of the Great Valley Sequence, which is contemporaneous with the Modesto Formation. The Tranquillity locality preserves a diverse

vertebrate fauna, including macrofauna such as mammoth, camel, deer, horse, and wolf, as well as microfauna such as several types of rodents, snakes, birds, and turtles (UCMP 2025; Angel 1966). The NMNH (2025) database did not contain records of localities attributed to the Modesto Formation but does contain records of one bivalve specimen from the Pleistocene-aged sediments in Fresno County. The online database of the AMNH (2025) did not have records of localities attributed to the Modesto Formation in Fresno County.

A review of the scientific literature and paleontological mitigation reports reveal additional scientifically significant Pleistocene-aged fossils have been documented from localities attributed to the Modesto Formation within the region. Nearby projects along SR 99 in areas mapped as the Modesto Formation, including the SR 99 Plainsburg Road/Arboleda Drive Freeway Project in Merced County (PaleoResource Consultants 2017; Cogstone 2012; Haasl et al. 2015) and the South Stockton Six-Lane Project in San Joaquin County (Haasl and Fisk 2017) encountered hundreds of fossils from Pleistocene megafauna. Specimens recovered included Columbian mammoth, giant ground sloth, American llama, ancient bison, dire wolf, and cougar, along with smaller mammals, birds, and reptiles (Caltrans 2020). Monitoring of construction for the SR 99 Plainsburg Road/Arboleda Drive Freeway Project along SR 99 in Merced County by Cogstone (2012) documented 128 localities preserving 1,667 specimens in the lower and upper Modesto Formation. The localities produced a variety of Pleistocene taxa, including mammoths, camels, bison, deer, horses, cougars, dire wolves, coyotes, giant ground sloths, birds, rabbit, rats, voles, mice, rattlesnakes, frogs, turtles, and lizards (Cogstone 2012). Later monitoring along SR 99 in Merced County by PaleoResources Consultants (2017) documented ten localities in the Modesto Formation preserving horse, camel, giant ground sloth, bison, rabbit, lizard, and rodent remains.

Given the documentation of scientifically significant and diverse Pleistocene taxa from the Modesto Formation in the Great Valley, this unit is assessed as having high (FPMS 4) paleontological potential.

Riverbank Formation (Qc in Figure 4). The Riverbank Formation is mapped approximately 0.5 miles southeast of the Project Site (Matthews and Burnett 1965). The Riverbank Formation underlies the Modesto Formation and is likely present beneath the Project Site at unknown depths. These deposits are much older than the Modesto Formation, dating from 130,000 to 450,000 years ago (Helley and Harwood 1985). The Riverbank Formation was first named by Davis and Hall (1959) for fluvial deposits in eastern Stanislaus and northern Merced Counties. In the eastern San Joaquin Valley, the Riverbank Formation is a series of coalescing alluvial fans of arkosic sand and scattered pebbles with gravel lenses, and some interbedded silt and fine sands (Marchand and Allward 1981). Sediments are derived from the nearby Sierran granitic plutons through glacial and interglacial weathering processes (Haasl and Fisk 2017). Thickness of the formation varies greatly across its extent, with the thickness increasing towards river channels and basinward (Marchand and Allward 1981). Marchand and Allwardt (1981) separate the Riverbank Formation into an upper, middle, and lower unit from observations at the type locality on the Stanislaus River near Riverbank, exposures near Fresno, and in the Sacramento Valley. The lower member is described as an older, eroded alluvial surface and is primarily composed of buff to grey, well-stratified, silt, fine- to medium-grained sands with gravel lenses. The middle member is described as a thin, broad alluvial surface representing a single aggradational unit (Marchand and Allward 1981). It is composed of yellowish-brown to dark-brown sandy loam and sandy clay loam coarsening upwards into buff to light-brown coarse-grained sands with pebbles (Marchand and Allward 1981). The upper member represents a single aggradational unit that dissects older fans towards the east and spreads out over lower and middle Riverbank Formation

fans further westward into the valley (Marchand and Allward 1981). It is composed of grayish-brown, well-stratified gray silt and very fine-grained sands to reddish-brown coarse-grained sand with pebbles (Marchand and Allward 1981). Previous mitigation work in the Riverbank Formation in the vicinity of Fresno have documented sediments of gray to reddish-brown, moderately to well sorted, subangular to rounded, poorly to moderately compacted clay, silt, and very fine- to medium grained sand, with sedimentary structures including planar laminations, ripples, channels, and bioturbation (Paleo Solutions [2018], Cogstone [2015, 2016] as cited in Caltrans 2020). The Riverbank Formation represents an older aggradational fan sequence of material eroded from the surrounding Sierra Nevada mountains. These fans were later dissected by streams which created terrace deposits that are topographically higher than the younger terraces of the Modesto Formation (Marchand and Allward 1981).

The online database of the UCMP (2025) contains two localities attributed to the Riverbank Formation in Fresno County, which preserve mammal and plant fossils, the specimens from which are not catalogued. The NMNH (2025) database did not contain records of localities attributed to the Riverbank Formation but the bivalve locality discussed above may be from either the Riverbank or Modesto Formations.

A review of the scientific literature and paleontological mitigation reports shows a diverse and scientifically important fossil fauna has been recovered from the Riverbank Formation. Some of the same projects along SR 99 which encountered the Modesto Formation, also recovered fossils from the Riverbank Formation. Specimens recovered include Columbian mammoth, camel, horse, pronghorn, and rabbit (Haasl et al. 2015; PaleoResource Consultants 2017). During monitoring of construction along SR 180 West in Fresno, California, Fresno State staff recovered partial mammoth tusks, molars, pelvic fragments, and rib remains in the Riverbank Formation approximately four miles west of the Project Site (Dundas et al. 2009). Further out, work at the Fairmead Landfill in Madera County has documented a diverse vertebrate fauna dominated by large mammals, including two types of sloth, saber-toothed cat, two types of wolf, camel, several types of pronghorn, and deer, as well as some microfauna like rodents (Dundas et al. 1996; Dundas and Blades 1999). Additionally, fossils including Harlan's ground sloth, bison, horse, camel, squirrel, and mammoth, and plants were discovered in the Riverbank Formation during the construction of the ARCO Arena in Sacramento, California (Hilton et al. 2000; Caltrans 2020).

Given the documentation of significant and diverse Pleistocene taxa from the Riverbank Formation in the Great Valley, this unit is assessed as having high (FPMS 4) paleontological potential.

4.4 Potential Impacts to Paleontological Resources from Project Activities

The Project plans to demolish existing facilities and construct a new courthouse. This will entail ground disturbance consisting of the following:

- Demolition of existing structures, parking areas, hardscape, and landscaping.
- Earthwork cut and fill to prepare a new building pad; cut and fill depths are unknown at this time.
- Construction of a 413,000-square-foot, eleven-story courthouse building with basement parking level.
- Underground utilities and other infrastructure improvements.
- Bioretention and landscape areas.

Of these activities, those that involve ground disturbance into the Modesto and Riverbank Formations may encounter fossils. As the Project is in a developed, urban setting, there may be previously disturbed sediments or artificial fill underlying the Project Site; however, at this time geotechnical data is not available to address this aspect of the subsurface of the Project Site. The depth of the proposed Project activities is not established at this time, and so identifying which activities will exceed the depth of artificial fill or previous disturbance at the Project Site and extend into the Modesto Formation (and perhaps subsequently the Riverbank Formation) cannot be specified at this time. In general, activities limited to the shallow subsurface, like landscaping, are unlikely to encounter undisturbed sensitive units. More substantial excavations, such as for the underground parking, are more likely to encounter sensitive units, depending on the presence and depth of previous disturbance.

Should fossils with scientific significance that can be considered unique paleontological resources be encountered during construction, their destruction would constitute a direct adverse impact. It is not anticipated that the Project will pose indirect adverse impacts to paleontological resources, as the final Project will not entail increased exposure or erosion of native sediments beyond the duration of the ground disturbance described above. Should direct impacts occur, they would contribute to cumulative impacts in the region, such as the collective loss of nonrenewable paleontological resources across the region over time.

5 Recommendations and Management Considerations

A successful mitigation program is one which provides for the identification and appropriate treatment of unique paleontological resources. Important components include worker training, so the construction personnel can assist with identifying potential unique paleontological resources and take action in the event they discover a fossil; and monitoring of ground disturbing activities in areas of potential impact by trained paleontologists. Paleontological monitoring is the most common mitigation tool, during which a trained Paleontological Technician, under the supervision of the Paleontological Principal Investigator, observes construction activities and halts construction temporarily to inspect the exposed sediments. Monitoring by experienced paleontologists greatly increases the probability that fossils will be identified during ground-disturbing activities and that, if they are scientifically significant, successful mitigation and salvage efforts will prevent adverse impacts to these resources.

The ability to apply mitigation is tied to the nature of the ground disturbing activity. Construction monitoring requires a Paleontological Technician to be able to observe either cuts into the ground, such as the sidewalls of trenches or a graded ground surface, or to observe spoils piles, such as from drilling or trenching. As the methods of ground disturbance planned for this Project produce cuts, spoils, or, in some cases, both, they are ideal targets of paleontological monitoring as a successful means of reducing potential impacts on paleontological resources to a less-than-significant level.

The depth at which monitoring should be implemented depends on the presence of artificial fill or previously disturbed sediments. Spot checks by a Paleontological Technician are appropriate in the absence of geotechnical data to establish the depth of previous disturbance or the thickness of artificial fill. Once this has been established, through either spot checks or geotechnical data, fulltime paleontological monitoring

should be implemented when ground disturbing activities exceed the depth of fill or previous disturbance and work is occurring in the Modesto or Riverbank Formations.

Therefore, Stantec recommends a qualified paleontologist meeting SVP (2025) standards as a Paleontological Principal Investigator be retained to oversee a paleontological mitigation program. Stantec recommends the following mitigation activities for the Project, as part of the mitigation program:

- The Paleontological Principal Investigator should develop and oversee the implementation of a Paleontological Mitigation Plan tailored to the Project plans that provides for paleontological monitoring of earthwork and ground disturbing activities into undisturbed geologic units with high (FPMS 4) paleontological potential to be conducted by a Paleontological Technician meeting industry standards (SVP 2025). This plan should include provisions for worker training, depths and locations for monitoring, monitoring procedures, a fossil discovery plan in the event a fossil is found during construction, including a plan for assessment and treatment, and requirements for final reporting of the results of the mitigation program.
- The Paleontological Principal Investigator should develop a Worker's Environmental Awareness Program training that communicates requirements and procedures for the discovery of fossils during construction, to be delivered by the Paleontological Technician to the construction crew prior to the onset of ground disturbance.
- Fulltime paleontological monitoring should be implemented once excavations exceed the depth of previously disturbed sediments or artificial fill across the Project Site. Spot check monitoring may be conducted initially, until the depth of previous disturbance is known. The Paleontological Principal Investigator may alter the frequency or depth of monitoring based on subsurface conditions.
- In the event that fossils are encountered during construction activities, work should stop in a safe radius of the finds, usually 100 feet, while the Paleontological Technician documents the fossils. The Paleontological Principal Investigator shall assess the fossils. Should the fossils meet criteria of scientific significance to be considered a unique paleontological resource, they should be collected and curated in an accredited repository along with associated data and curation fees.

Based on the findings in this study and the implementation of the above mitigation recommendations, the proposed Project should not cause an adverse impact to paleontological resources. Changes to the Project plans or Project Site from those assessed in this study may require additional assessment for impacts to paleontological resources.

6 Summary

Stantec conducted an analysis of existing data to assess the paleontological potential of the geologic units in the Project Site, both in the surface and in the subsurface, followed by a review of Project plans and an impacts assessment to identify potential impacts to paleontological resources from Project activities. This study identified two geologic units with high (FPMS 4) paleontological potential in the Project Site, the Modesto Formation and the underlying Riverbank Formation. Project activities that involve ground disturbance that exceeds the depth of artificial fill or previous disturbance may encounter unique

paleontological resources in these units. If this occurs, the destruction of those resources would constitute a direct adverse impact. Therefore, Stantec has developed recommendations for the development and implementation of a paleontological mitigation program by a qualified Paleontological Principal Investigator (as defined by the SVP [2025]).

7 References

American Museum of Natural History (AMNH). 2025. Search of online collections database. Available at https://emu-prod.amnh.org/imulive/paleo/paleontology.html. Accessed on December 15, 2025.

Angel, J. 1966. "Early skeletons from Tranquillity, California." *Smithsonian Contributions to Anthropology* Volume 2, 32 pp.

Bartow, J. Alan. 1991. *The Cenozoic Evolution of the San Joaquin Valley, California.* U.S. Geological Survey Professional Paper 1501.

Bishop, C.C., and R. Chapman. 1980. *Geologic Map of California, Santa Cruz Sheet*. California Geological Survey, Bouguer Gravity Map of California BGA-20. Scale 1:250,000.

Bureau of Land Management (BLM). 2022. *Potential Fossil Yield Classification (PFYC) System for Paleontological Resources on Public Lands*. Permanent Instruction Memorandum No. 2022-009.

California Department of Transportation (Caltrans). 2020. *Paleontological Evaluation Report and Preliminary Mitigation Measures El Dorado to Clinton Avenue Rehabilitation Project Post Miles 21.2 to 24.4, Fresno County, California.* Fresno, CA. Prepared for California Department of Transportation, Southern San Joaquin Valley Engineering, Hazardous Waste, and Paleontological Branch, District 6. 68 Pp.

California State University, Chico (Chico State). 2025. Paleontological locality records search inquiry. Email response received December 12, 2025.

City of Fresno. 2014. *General Plan*. Available online at https://www.fresno.gov/planning/general-plan-development-code/#general-plan. Accessed on January 12, 2026.

Cogstone Resource Management, Inc. (Cogstone). 2012. *Paleontological Monitoring Report for the Arboleda Drive Freeway Project, State Route 99, Merced County, California*. 10-MER-99 (PM 4.6/10.5; KP 7.4/16.9) EA 10-415701. Report prepared for California Department of Transportation, District 6. 149 Pp.

----------. 2015. *Paleontological Monitoring Report for the Olive Avenue at State Route 99 Traffic Signal and Ramp Metering Project, Fresno County, California*. 06-FRE-99 (PM 23.4); EA 06-012700. Report prepared for California Department of Transportation, District 6. 76 Pp.

----------. 2016. *Paleontological Monitoring Report for Construction Phase I of the State Route 99 Realignment for the High Speed Train in Fresno, Fresno County, California*. 06-FRE-99 (PM 23.5/26.6); EA 06-2HT101; Contract 06Al 786. Report prepared for California Department of Transportation, District 6.

County of Fresno. 2024. *General Plan.* Accessed online at https://www.fresnocountyca.gov/files/sharedassets/county/v/1/public-works-and-planning/development-services/planning-and-land-use/general-plan/fcgpr_general-plan_county_final_2024_02.pdf . Accessed on December 18, 2025.

Davis, G.H., and F.R. Hall. 1959. “Water quality of eastern Stanislaus and northern Merced counties, California.” *Stanford University Publications, Geological Sciences* 6(1): 1-56.

Dundas R., R. Smith, K. Verosub. 1996. “The Fairmead Landfill Locality (Pleistocene, Irvingtonian), Madera County, California: preliminary report and significance.” *PaleoBios* 17 (2–4): 50-58.

Dundas, R. and D. Blades. 1999. “The Fairmead Landfill Locality (Pleistocene, Irvingtonian), Madera County, California.” *Geological Society of America, Abstracts with Programs* 31 (7): 465.

Eisentraut, P.J., and J.D. Cooper. 2002. *Development of a Model Curation Program for Orange County’s Archaeological and Paleontological Collections–Final Report*. Submitted to the County of Orange.

Galloway, D., and F. Riley. 1999. “San Joaquin Valley, California.” In: *Land Subsidence in the United States.* United States Geological Survey Circular 1182: 23-34.

Haasl, D. M. and L.H. Fisk. 2017. *Paleontological Mitigation Report for the South Stockton Six-Lane Project in San Joaquin County, California*.

Haasl, D. M., H.M. Wagner, and L.H. Fisk. 2015. *Paleontological Mitigation Report for the State Route 99 Arboleda Drive Freeway Project, Merced County, California*. Fresno: Central Region Hazardous Waste and Paleontology Branch, California Department of Transportation, District 6.

Hilton, R.P., D.C. Dailey, and H.G. McDonald. 2000. “A late Pleistocene biota from the ARCO Arena site, Sacramento, California.” *PaleoBios* 20 (1): 7-12.

Helley, E. and D. Harwood. 1985. *Geologic Map of Late Cenozoic Deposits of the Sacramento Valley and Northern Sierran Foothills, California*. US Geological Survey Miscellaneous Field Studies Map MF-1790. Scale 1:62,500.

Marchand, D. and A. Allwardt. 1981. *Late Cenozoic Stratigraphic Units, Northeastern San Joaquin Valley, California*. United States Geological Survey Bulletin 1470. Washington D.C. 77 Pp.

Matthews, R.A., and Burnett, J.L. 1965. *Geologic Map of California, Fresno Sheet.* California Division of Mines and Geology. Scale 1:250,000.

Murphey, P., G. Knauss, L. Fisk, T. Demere, and R. Reynolds. 2019. “Best practices in mitigation paleontology.” *Proceedings of the San Diego Society of Natural History* 47: 43.

National Museum of Natural History (NMNH). 2025. Search of online collections database. Available at https://collections.nmnh.si.edu/search/paleo/. Accessed on December 15, 2025.

Natural History Museum of Los Angeles County (NHMLA). 2025. Paleontological locality records search letter. Email response received December 21, 2025.

Nilsen, T. 1990. “Santonian, Campanian, and Maastrichtian depositional systems, Sacramento Basin, California.” *In* Ingersoll, R. and T. Nilsen, eds. *Sacramento Valley Symposium and Guidebook*. Pacific Section SEPM 65: 95-132.

Orme, D.A., S.A. Graham, R.V. Ingersoll, and T.F. Lawton. 2018. “Four-dimensional model of Cretaceous depositional geometry and sediment flux in the northern Great Valley forearc, California.” In *Tectonics, Sedimentary Basins, and Provenance: A Celebration of the Career of William R. Dickinson*. Geological Society of America, pp. 409-424.

PaleoResource Consultants. 2017. *Paleontological Mitigation Report for the Plainsburg at State Route 99 Project, Merced County, California. 10-MER-99 (PM 0.0-5.1)*. Prepared for California Department of Transportation, Southern San Joaquin Valley Engineering, Hazardous Waste, and Paleontological Branch, District 6.

Paleo Solutions, Inc. 2018. *Paleontological Mitigation Report for the Southbound State Route 99 Ramp Metering Project, Fresno County, California*. 06-FRE-99 (PM 22.7/28.1); EA 06-0K2904; Contract 06A2126, TO-64, Report prepared for California Department of Transportation, District 6.

San Jose State University Geology Department (SJSU). 2025. Paleontological locality records search inquiry. Email response received December 18, 2025.

Santucci, V., J. Kenworthy, and A. Mims. 2009. “Monitoring *in situ* paleontological resources.” In Young, R., and Norby, L., eds. *Geological Monitoring.* Geological Society of America, p. 189–204.

Santucci, V. and L. McClelland. 2001. *Proceedings of the 6th Fossil Resource Conference*. Geological Resources Division Technical Report NPS/NRGRD/GRDTR-01/01. National Park Service. 224 pp.

Scott, E., and K. Springer. 2003. “CEQA and fossil preservation in southern California.” *The Environmental Monitor* 4-10.

Society of Vertebrate Paleontology (SVP). 2025. *Best Practice Guidelines for Mitigation of Adverse Impacts on Paleontological Resources (First edition: Released in October 2025)*. Available at: SVP_Mitigation_Paleontology_Best_Practices_First_edition_October_2025.pdf Accessed on October 30, 2025.

University of California Museum of Paleontology (UCMP). 2025. Review of the online collections database. Accessed at https://ucmpdb.berkeley.edu/. Search conducted on December 15, 2025.

Weissmann, Gary S., Jeffrey F. Mount, and Graham E. Fogg. 2002, "Glacially driven cycles in accumulation space and sequence stratigraphy of a stream-dominated alluvial fan, San Joaquin Valley, California, USA." *Journal of Sedimentary Research* 72:2, 240-251.

Appendix G Phase I Environmental Site Assessment

January 2024 | Due Diligence Report

New Fresno Courthouse Due Diligence Review: Site 1

Judicial Council of California

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PLACEWORKS

1. Introduction

1.1 PROPOSED PROJECT

The Superior Court of California, County of Fresno – New Fresno Courthouse project (proposed project) would provide 36 courtrooms and support spaces of approximately 413,000 square feet. Development of the proposed project would allow the County court to consolidate operations that are currently located in three existing facilities: Fresno County Courthouse, north Annex Jail, and M Street Courthouse. The proposed project would also provide space for growth in future new judgeships. The proposed project will require acquisition of a site of approximately 2.09 acres.

1.2 PROJECT LOCATION

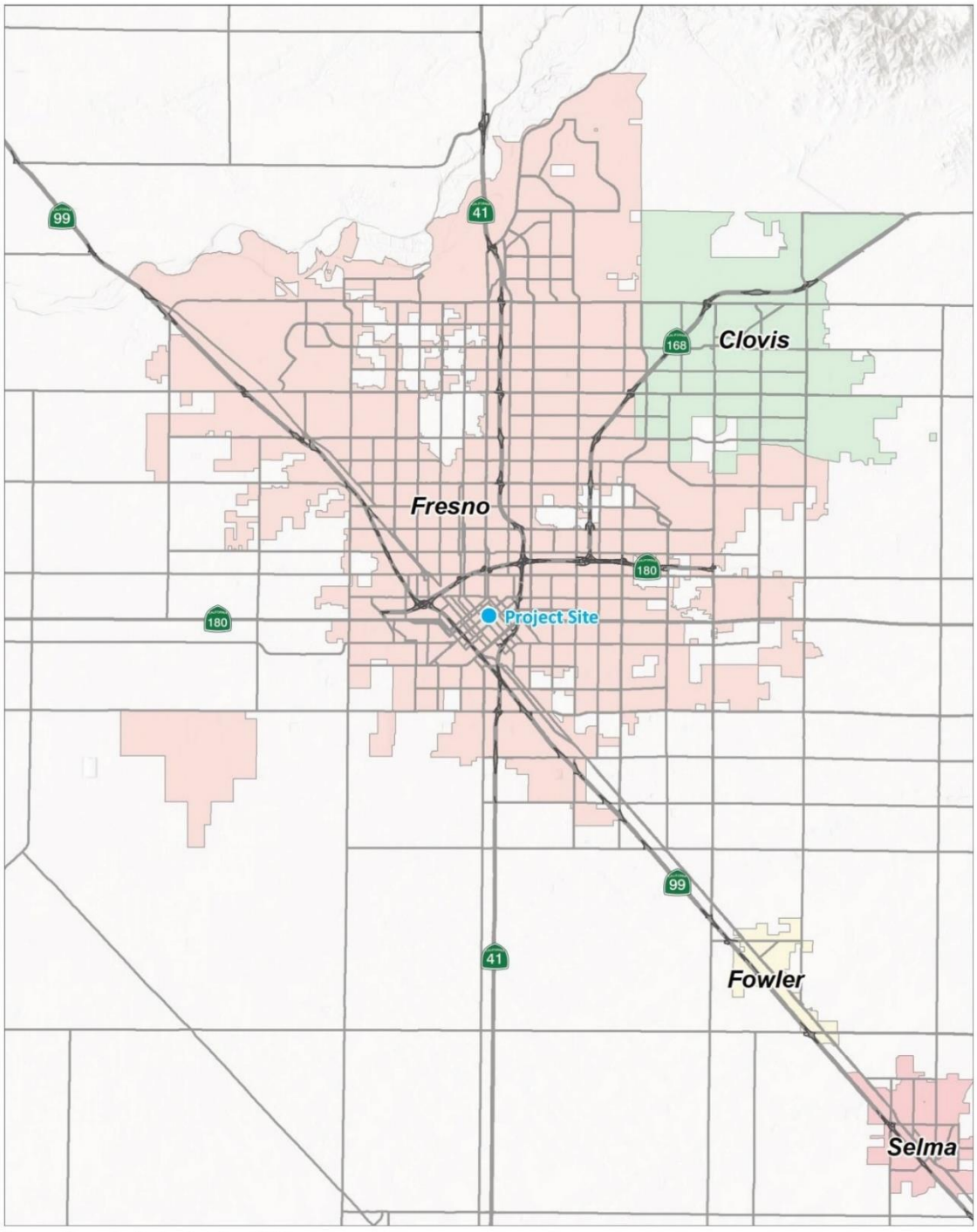
The City of Fresno is in Fresno County and is bordered by unincorporated land of Madera County to the northeast, the City of Clovis to the east, and unincorporated land of Fresno County in all other directions. The project site consists of three distinct areas, encompassing approximately 11.9 acres, located along Fresno Street between Van Ness Avenue and O Street in downtown Fresno, California.

The United States Geological Survey (USGS) topographic map for the site is the Fresno South, California Quadrangle. The project site is in Fresno County at approximately 36.73734 north latitude and 119.78933 west longitude. The project site is in Sections 3 and 4 of Township 14 South, Range 20 East of the Mt. Diablo Base Line and Meridian. Figure 1.1, *Regional Vicinity*, and Figure 1.2, *Local Vicinity*, show the location of the project site.

Regional access to the project site is provided via State Route (SR-) 41, SR-99, and SR-180. The project site is served by local and regional transit including the Fresno Public Transportation the Fresno County Rural Transit Agency. The public use airport located nearest to the project site is Fresno Yosemite International Airport, located 5175 East Clinton Way, Fresno, California, approximately 4.4 miles northeast of the project site.

INTRODUCTION

Figure 1.1 Regional Vicinity

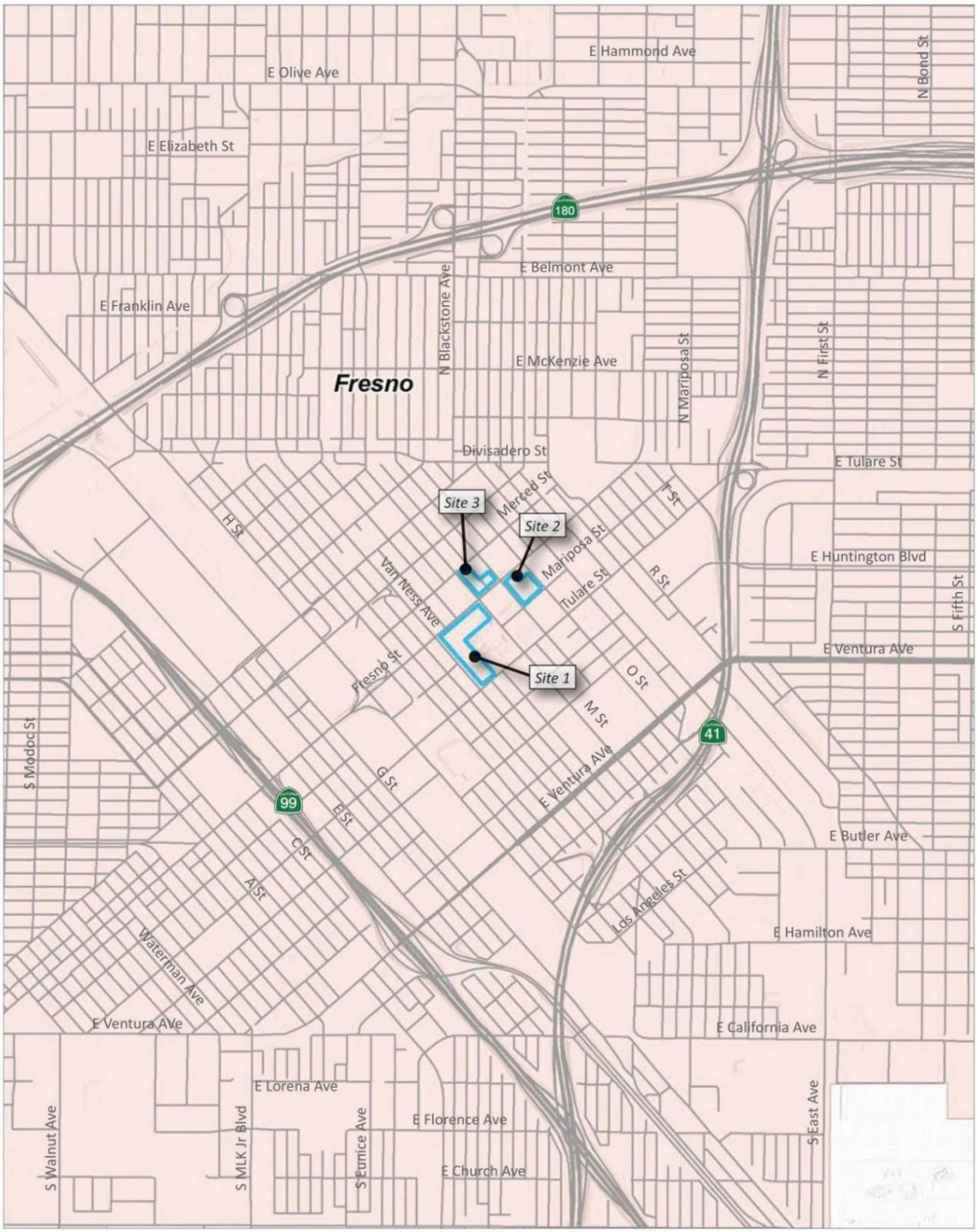


Source: Generated using ArcMap 2023.

0 3
Scale (Miles)

Note: Unincorporated county areas are shown in white.

Figure 1.2 Local Vicinity



1.3 SITE 1

For the purposes of this due diligence review, information contained in this report is focused on Site 1. Site 1 is an L-shaped 7.6-acre portion of the 13.94-acre Courthouse Park parcel located at 2200 Fresno Street and identified with Assessor Parcel Number (APN) 466-16-001T. The site is owned by Fresno County and includes underground parking, the South Annex Jail and a Fresno County Sheriff's Department office building. The site is bounded by Fresno Street to the northwest, M Street to the northeast, Tulare Street to the southeast, and Van Ness Avenue to the southwest. The site has a zoning designation of Downtown General and a General Plan land use designation of Downtown General. Land uses surrounding the site include public and institutional uses and commercial uses. The project site is in a developed area in the City of Fresno.

4. Phase I Environmental Site Assessment

4.1 INTRODUCTION

The Phase I Environmental Site Assessment (ESA) was performed in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-21 Standard for the Judicial Council of California (Client) for the Fresno Street properties in Fresno, Fresno County, California. The Phase I ESA was performed in general conformance with the scope and limitations of the ASTM E 1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and with the EPA "All Appropriate Inquiries" standard. Exceptions to, or deletions from, this practice are described below.

The primary purpose for performing a Phase I ESA is to "…permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations (commonly known as landowner liability protections) on Comprehensive Emergency Response Compensation and Liability Act (CERCLA) liability." An environmental site assessment meeting or exceeding this practice and completed less than 180 days prior to the date of acquisition is presumed to be valid under this standard. In order to maintain landowner liability protections, the user also has a "continuing obligation to not interfere with activity and use limitations associated with the property," must take "reasonable steps to prevent releases" and must "comply with legal release reporting obligations."[6] Further, it is the goal of this study to identify business risks related to the property associated with environmental conditions.

Our conclusions are intended to help the user evaluate the "environmental risk" associated with the site, as defined in the ASTM E 1527-21 Standard and the U.S. Environmental Protection Agency (EPA) All Appropriate Inquiry standard.

OBJECTIVE

The objective of this assessment was to evaluate site history, existing observable conditions, current site use, and current and historic uses of surrounding properties to identify the potential presence of Recognized Environmental Conditions (RECs) in connection with the subject site. In addition, the Standard requires the identification of historical RECs (HRECs) and known or suspect environmental conditions in the Phase I ESA report. The Standard also requires the identification of controlled RECs (CRECs). Our conclusions are intended to help the user evaluate the "environmental risk" associated with the site.

[6] American Society for Testing and Materials, November 2021, Practice for ESAs: Phase I Assessments Process (ASTM Standard E 1527-21).

PHASE I ENVIRONMENTAL SITE ASSESSMENT

SCOPE OF SERVICES

PlaceWorks performed the following detailed scope of services to complete our Phase I ESA assessment:

1. Visual observations of site conditions, and of adjoining property use, to evaluate the nature and type of activities that have been or are being conducted at and adjacent to the site, in terms of the potential for release or threat of release of hazardous substances or petroleum products.
2. Review of federal and state environmental database information within the ASTM- specified radii from the subject site using a database service to access records. Use of 7.5-minute topographic maps to evaluate the site's physical setting.
3. Review of federal and state environmental files, as necessary, pertaining to the subject site and nearby sites with the potential to impact the subject site.
4. Review of previous reports (if any) prepared for the subject site.
5. Review of historical aerial photographs and topographic maps.
6. Contacts with state and local agencies, as necessary, regarding the site and surrounding properties and structures.
7. Interviews with the Key Site Manager and property tenant representatives (if any). Interpretation of information and data assembled as a result of the above work tasks, and formulation of conclusions regarding the potential presence and impact of RECs as defined by the ASTM E 1527-21 Standard.

NON-SCOPE CONSIDERATIONS

The ASTM E 1527-21 Standard includes the following list of "additional issues" that are non-scope considerations outside of the scope of the ASTM Phase I ESA practice: Asbestos-Containing Materials, Biological Agents, Radon, Lead-Based Paint, Lead in Drinking Water, Wetlands, Regulatory Compliance, Cultural and Historic Risks, Industrial Hygiene, Health and Safety, Ecological Resources, Endangered Species, Indoor Air Quality unrelated to releases of hazardous substances or petroleum products in the environment and mold.

A limited assessment of the presence of polychlorinated biphenyls (PCBs) is included in the ASTM work scope. Accordingly, the assessment of the presence of PCBs is limited to those potential sources specified in the ASTM E 1527-21 Standard as "electrical or hydraulic equipment known or likely to contain PCBs" to the extent visually and or physically observed or identified from the interview or records review.

EXCEPTIONS AND DEVIATIONS

PlaceWorks has completed this assessment in substantial conformance with ASTM E 1527-21. In our opinion, there were no exceptions, addition, deviations, or deletions made to the ASTM work scope.

LIMITATIONS

Our work for the proposed project was performed generally consistent with the ASTM E 1527-21 Standard for Phase I Environmental Site Assessments. Several organizations other than ASTM, such as professional associations (e.g. Associated Soil and Foundation Engineers and Association of Ground Water Scientists and Engineers) have also developed "guidelines" or "standards" for environmental site assessments. The Phase I ESA presented herein is consistent with the ASTM E 1527-21 Standard, which may vary from the specific "guidelines" or "standards" required by other organizations.

This report was prepared pursuant to an Agreement between the Client and PlaceWorks. All uses of this report are subject to, and deemed acceptance of, the conditions and restrictions contained in the Agreement. The observations and conclusions described in this report are based solely on the Scope of Services provided pursuant to the Agreement. PlaceWorks has not performed any additional observations, investigations, studies, or other testing not specified in the Agreement. PlaceWorks shall not be liable for the existence of any condition the discovery of which would have required the performance of services not authorized under the Agreement.

This report is prepared for the exclusive use of the Client in connection with Site 1. There are no intended beneficiaries other than the Client. PlaceWorks shall owe no duty whatsoever to any other person or entity on account of the Agreement or the report. Use of this report by any person or entity other than the Client for any purpose whatsoever is expressly forbidden unless such other person or entity obtains written authorization from the Client and from PlaceWorks. Use of this report by such other person or entity without the written authorization of the Client and PlaceWorks shall be at such other person's or entity's sole risk and shall be without legal exposure or liability to PlaceWorks.

Use of this report by any person or entity, including by the Client, for a purpose other than the site, is expressly prohibited unless such person or entity obtains written authorization from PlaceWorks indicating that the report is adequate for such other use. Use of this report by any person or entity for such other purpose without written authorization by PlaceWorks shall be at such person's or entity's sole risk and shall be without legal exposure or liability to PlaceWorks.

This report reflects site conditions observed and described by records available to PlaceWorks as of the date of report preparation. The passage of time may result in significant changes in site conditions, technology, or economic conditions, which could alter the findings and/or recommendations of the report. Accordingly, the Client and any other party to whom the report is provided recognize and agree that PlaceWorks shall bear no liability for deviations from observed conditions or available records after the time of report preparation. No investigation is thorough enough to absolutely rule out the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

The findings, conclusions, and recommendations contained in this report are based on site conditions as they existed at the time of our investigation. Our review of documents, lists, databases, and public agency files have been conducted with due diligence. However, our conclusions are based on available information and are subject to constraints imposed by public agencies on review procedures and information retrieval. As a result, PlaceWorks may have been unable to identify potential concerns. PlaceWorks assumes no responsibility for conditions that did not come to our attention despite reasonable care, or for conditions that were not generally recognizable as environmentally unacceptable at the time of this report. Opinions and judgments expressed are based on our understanding and interpretations of currently available regulatory standards and should not be construed as legal opinions or advice.

Use of this report by any person or entity in violation of the restrictions expressed in this report shall be deemed and accepted by the user as conclusive evidence that such use and the reliance placed on this Report, or any portions thereof, is unreasonable, and that the user accepts full and exclusive responsibility and liability for any losses, damages or other liability which may result.

4.2 PHYSICAL SETTING

Subsurface explorations were not performed for this evaluation; therefore, site geology and hydrology were evaluated on the basis of readily available public information or references, and/or based upon our experience and understanding of subsurface conditions in the subject property area.

TOPOGRAPHY

Topographically, Site 1 slopes slightly to the west and to the southwest. Based on a review of the USGS 7.5-minute Topographic Series, Fresno South, California Quadrangle Map, surface elevation the site ranges between approximately 290 and 295 feet above mean sea level.[7]

GEOLOGIC INFORMATION

Site 1 is located in the San Joaquin Valley within the Great Valley Geomorphic Province. The Great Valley Province is a long, narrow northwest-trending alluvial valley that lies between the Sierra Nevada Range to the east and the Coast Ranges to the west.[8] The San Joaquin Valley is located in the southern portion of the Great Valley and is bounded by the Stockton Arch to the north and the San Emigdio and Tehachapi Mountains to the south. This region formed as a forearc basin during the subduction of the Pacific plate underneath the North American plate.

[7] United States Geological Survey, 2022, 7.5' Topographic Series, Fresno South, California Quadrangle Map, scale 1:24,000.
[8] California Geological Survey, 2002, California Geomorphic Provinces, California Geological Survey Note 36. https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf.

Site 1 is underlain by Holocene alluvial fan deposits.[9] The dominant soil components listed in the U.S. Department of Agriculture Natural Resources Conservation Services (USDA) Web Soil Survey for the site is Delhi loamy sand.

NATURALLY OCCURRING ASBESTOS CONTAINING MINERALS AND RADON GAS

Based on a review of A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos[10] and Van Gosen and Clinkenbeard,[11] Site 1 is not located within a ten-mile radius from an area thought to contain naturally occurring asbestos.

The Indoor Radon Abatement Act of 1988 directs the U.S. EPA to identify and lists areas of the United States with the potential for elevated indoor radon levels. The U.S. EPA's Map of Radon Zones assigns one of three zones based on radon potential:

- Zone 1 counties have a predicted average indoor radon screening level greater than 4 pico curies per liter (pCi/L)
- Zone 2 counties with a predicted average indoor radon screening level between 2 and 4 pCi/L
- Zone 3 counties with a predicted average indoor radon screening level less than 2 pCi/L

Based on the EPA map, Site 1 is within Zone 2, below the level of concern.[12] The California Department of Health Services recommends action to be taken to reduce radon levels inside buildings if they are 4 pCi/L or greater.

GROUNDWATER AND SURFACE WATER INFORMATION

Based on the California Department of Water Resources, Site 1 is situated in the Kings subbasin of the San Joaquin Valley Groundwater Basin.[13] While local groundwater flow is influenced by production well pumping, regional flow in the basin is predominately toward the southwest. Based on a groundwater contour map, groundwater is expected to be located about 180 feet below ground surface at the site.[14] The closest surface water body is Dry Creek Canal about one mile northwest of the site.[15] Hydrogeologic

[9] Matthews, R. A., and J. L. Burnett, 1965, Geologic Map of California: Fresno Sheet, California Division of Mines and Geology Geologic Atlas GAM-05, scale 1:250,000.
[10] California Division of Mines and Geology, August 2000, "A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos."
[11] Van Gosen, B. S., and J. P. Clinkenbeard, 2011, Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California, USGS Open-File Report 2011-1188, scale 1:990,000.
[12] United States Environmental Protection Agency, 2023, California – EPA Map of Radon Zones. https://www.epa.gov/sites/production/files/2014-08/documents/california.pdf.
[13] California Department of Water Resources, 2004, Bulletin 118-California's Groundwater. https://www.water.ca.gov/Programs/Groundwater-Management/Bulletin-118.
[14] Fresno Irrigation District, 2022, Groundwater Level Information website, https://www.fresnoirrigation.com/groundwater-level-info.
[15] United States Geological Survey, 2022, 7.5' Topographic Series, Fresno South, California Quadrangle Map, scale 1:24,000.

investigations were not performed on the site for this investigation; therefore, it is unknown to what extent localized variations in groundwater presence and flow occur on the site.

4.3 SITE HISTORY

4.3.1 Previous Reports

No previous reports for the subject property were reviewed by PlaceWorks for the preparation of the Phase I ESA report.

4.3.2 Past Usage

Past usage of Site 1 was assessed through review of historical aerial photographs, topographic maps, Sanborn fire insurance maps and databases. Copies of historical information reviewed are included in Appendix C, *Phase I Environmental Site Assessment*, of this Due Diligence Report. Based on a review of historical information, the site has been developed with Courthouse Square/Courthouse Park since at least 1888. A jail has been located on the northeast portion of the site since at least 1888, with the current jail building being constructed in 1942, and the annex to that building dating from 1960. The Fresno County Sheriff's Department administration building was constructed southwest of the South Annex Jail in 1969.

Copies of the aerial photographs, topographic maps, Sanborn fire insurance maps and city directories are included in Appendix C, *Phase I Environmental Site Assessment*, of this Due Diligence Report.

4.3.2.1 AERIAL PHOTOGRAPHS

The copies of the aerial records indicate the following for Site 1:

- 1937 – Site 1 appears to be used as the plaza for the courthouse, which is located adjacent, to the east of the site. Site 1 is primarily covered in trees and no discernable structures can be made out. The surrounding area is largely built-up with many large and small buildings.
- 1942 – The project site and surrounding area appear relatively unchanged in comparison to the 1937 aerial photograph.
- 1946 – The project site and surrounding area appears to be relatively unchanged in comparison to the 1942 aerial photograph. The larger County Jail can now be seen and uncovered by trees.
- 1950 – The project site and surrounding area appear to be unchanged in comparison to the 1946 aerial photograph.
- 1957 – The site and surrounding area appear unchanged in comparison to the 1950 Aerial photograph.
- 1962 – The site and surrounding area appear unchanged in comparison to the 1957 Aerial photograph.

- 1967 – A large portion of the site has been cleared away of most trees and it appears construction for the underground garage and Law Enforcement Office are under way.
- 1973 – The site now has a new law enforcement building constructed next to the county jail, and the rest of the site appears to have been landscaped once again.
- 1979 – The project site and surrounding area appear relatively unchanged in comparison to the 1973 aerial photograph.
- 1984 – The project site and surrounding area appear relatively unchanged in comparison to the 1979 aerial photograph.
- 1987 – The project site and surrounding area appear relatively unchanged in comparison to the 1984 aerial photograph.
- 1998 – The project site and surrounding area appear relatively unchanged in comparison to the 1987 aerial photograph.
- 2006 – The project site and surrounding area appear relatively unchanged in comparison to the 1998 aerial photograph. There is now a large baseball stadium present a couple blocks southwest of the site.
- 2009 – The project site and surrounding area appear relatively unchanged in comparison to the 2006 aerial photograph.
- 2012 – The project site and surrounding area appear relatively unchanged in comparison to the 2009 aerial photograph.
- 2016 – The project site and surrounding area appear relatively unchanged in comparison to the 2012 aerial photograph.
- 2020 – The project site and surrounding area appears relatively unchanged in comparison to the 2016 aerial photograph.

4.3.2.2 TOPOGRAPHIC MAPS

The copies of the topographic maps indicate the following for Site 1:

- 1923 – The project site and surrounding area are largely developed appears to be largely undeveloped. There is a railroad track/station southeast of the project site and main roadways are labeled to the west of the Site.
- 1942 – The Northern section of the map is labeled as unmapped. The project site appears relatively unchanged in comparison to the 1923 topographic map. Additional structures are depicted in the surrounding area.
- 1946 – The project site and surrounding area appear relatively unchanged in comparison to the 1942 topographic map. Only school, county buildings, and church buildings are depicted on the topographic map. The County Jail now appears to be on the site.

- 1947 – The project site and surrounding area appear relatively unchanged in comparison to the 1946 topographic map.
- 1963/1965 – The project site and surrounding area appear relatively unchanged in comparison to the 1947 topographic map. The map is largely highlighted red, indicating the area is built-up. The site now shows the addition to the jail on the southern side of the site.
- 1972 – The project site appears relatively unchanged in comparison to the 1963/1965 topographic map.
- 1981 – The project site and surrounding area appear relatively unchanged in comparison to the 1972 topographic map. There is now an indication that the Law Enforcement Office has been built on Site 1.
- 2012 – Only roads and contours are depicted in newer topographic maps.
- 2015 – Only roads and contours are depicted in newer topographic maps.
- 2018 – Only roads and contours are depicted in newer topographic maps.

4.3.2.3 SANBORN RECORDS REPORT

The copies of the Sanborn records indicate the following for Site 1:

- 1888 – Site 1 is located on the southeast corner of Fresno Street and K Street (currently named Van Ness Avenue). The site appears to be primarily vacant and being used as the city's courthouse plaza. On the map, the area is labeled as "Court House Square." Near the southwest corner of Fresno and M Steet, appears to be a Jail, labeled "County Jail". East, adjacent to Site 1, but sharing the same city block, is the Fresno County Court House. The surrounding area appears to be developed with many structures surrounding the site.
- 1898 – The site appears relatively unchanged in comparison to the 1888 Sanborn Map. The labeled Courthouse has become larger, adjacent to the site.
- 1906 – The County Jail, on the southern end of the site now appears larger in size.
- 1918 – Site 1 no longer has path indication on the site. There is a small structure on the site labeled "Band Stand."
- 1948 – The site now has a few more structures present within it. There is a large structure on the southwest corner of Fresno Street and M Street labeled "Fresno County Jail." The map indicates it was built in 1942. The former County Jail labeled in previous maps is now the Courthouse Annex. There are also two smaller structures on the site labeled "Women's Comfort Station and "Men's Comfort Station."
- 1950 – The site appears relatively unchanged in comparison to the 1948 Sanborn map.
- 1970 – Site 1 now has a few more large additions. The former restroom structures and band stand are no longer depicted. There is a large building labeled "Law Enforcement Office" where the "Men's Comfort Area" structure was previously located in the 1950 Sanborn map. There is now an indication of an underground garage on an adjacent area to Site 1. Security tunnels extend from the underground garage to beneath the jail building The Fresno County Jail, which is also located on the site and now has

a large attachment to its northern side. A section adjacent west of the off-site courthouse is being used as an outdoor patio space. There are also ramps depicted adjacent to Site 1 facing Van Ness Avenue to an underground garage located underneath Van Ness Avenue.

PRIOR AGRICULTURAL USE

Based on the review of historical aerial photographs, topographic maps, and Sanborn maps, Site 1 has not been historically used for agricultural purposes.

MINES

Based on the review of historical aerial photographs and topographic maps, Site 1 does not appear to have been used as a site for mining operations.

ILLEGAL DRUG MANUFACTURING

Site 1 was not identified by the California Hazardous Material Incident Report System which is maintained by the California Office of Emergency Services and contains information regarding hazardous material incidents such as accidental releases or spills. Clandestine Drug Laboratory Locations database maintained by the U.S. Department of Justice was also reviewed for the presence of drug laboratories or dumpsites. Drug-related waste was not observed on the site during the site inspection.

PRIOR U.S. GOVERNMENT OWNERSHIP

Based on the review of the EDR database, historical aerial photographs, and topographic maps reviewed, there are no indications that Site 1 was owned by the U.S. Government or devoted to military use or operations.

4.3.3 Surrounding Property Land Uses

Based on the review of the EDR, historical aerial photographs, topographic maps, and Sanborn maps the properties surrounding Site 1 are predominately commercial and institutional. The regulatory agency database search prepared by EDR indicates the presence of agency database listings for facilities located within an approximate one-mile radius of the site. No listed sites were near Site 1 that were identified that could potentially impact the site. These facilities do not appear to represent a potential threat to soil, soil vapor and or groundwater quality of Site 1. Historically the surrounding land was used as residential, institutional, and commercial.

4.4 STANDARD ENVIRONMENTAL RECORDS REVIEW

A review of selected regulatory agency databases for documented environmental concerns on Site 1, or in close proximity to the site, was conducted by EDR. Site 1 is listed on the HAZNET, LUST, CERS, CERS HAZ WASTE, CERS TANKS, and UST databases. A 10,000-gallon unleaded gasoline underground storage tank (UST) is located east of the South Annex Jail building facing M Street, and a 20,000-gallon diesel UST is located north of the Fresno County Sheriff's Department in a grassy area facing Fresno Street. The UST locations are depicted on Figure 4.1, *Site 1 Underground Storage Tanks*. The gasoline UST is listed on the LUST (leaking UST) database and has a status of completed – case closed as of August 1, 2011. The leak had been reported on October 19, 1990 during a tank closure. The final conclusion was that the leak was considered *de minimis* and site closure was granted in 2011 by the RWQCB.

According to the EDR, the site was not within the radius of any NPL Sites, delisted NPL Sites, RCRA CORRACTS Facilities, RCRA Non-CORRACTS TSD Facilities, or State- and Tribal- equivalent NPL sites. Additionally, the site is not listed as having institutional or engineering controls, or on the ERNS list.

The following information pertains to the facilities that were located within radius parameters of the site:

- Approximately Site and Adjoining
  - 15 RCRA Generators
  - 13 State and Tribal Registered Storage Tanks
  - 9 Orphan Sites
- Within 0.5-mile radius of the site
  - 2 CERCLIS Sites
  - 2 CERCLIS-NFRAP Sites
  - 1 State and Tribal Landfill and Solid Waste Disposal Sites
  - 50 State and Tribal Leaking Storage Tanks
  - 2 State and Tribal Voluntary Cleanup Sites
- Within 1 mile
  - 11 State and Tribal Equivalent CERCLIS sites

4.5 INTERVIEWS

Aaron Smith, Fresno County Facilities Services Manager, Internal Services Department, participated in an interview on July 7, 2023 for Site 1 which is owned by Fresno County. Mr. Smith was not aware of any leaks, spills, or discharges of hazardous materials on the site or the site vicinity. A questionnaire was completed by Christopher Jones, Principal Staff Analyst for the Fresno County Internal Services Department, Facility Services & Real Property. Mr. Jones was not aware of any leaks, spills, or discharges of hazardous materials to the site or adjacent to the site. Mr. Jones indicated that there are land use restrictions on the South Annex portion of the property due to its jail use, but once the jail is vacated, those land use restrictions would end. Mr. Jones was not aware of any environmental cleanup liens against the properties nor was he aware of any land use limitations due to environmental issues. Mr. Jones was also not aware of any environmental cleanups, spills, or chemical releases that may have occurred on the site.

4.6 FINDINGS AND CONCLUSIONS

The objective of a Phase I ESA is to assess whether "recognized environmental conditions" (REC), historical RECs (HREC), and controlled RECs (CREC) are associated with the subject site. Our conclusions are intended to help the user evaluate the "business environmental risk" associated with the subject site. Our opinion regarding an REC's potential impact on the subject site is based on the scope of our work, the information obtained during the course of our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, and our experience evaluating similar sites.

4.6.1 Recognized Environmental Conditions

The ASTM E 1527-21 Standard defines an REC in part as:

> *"the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."*

The following two RECs were identified in the assessment of Site 1 following the ASTM standard:

- A 10,000-gallon gasoline underground storage tank was installed east of the South Annex Jail at 1155 M Street (Site 1) in 1990.
- A diesel underground storage tank was identified in the grassy area north of the Fresno County Sheriff's Department administration building at 2200 Fresno Street (Site 1).

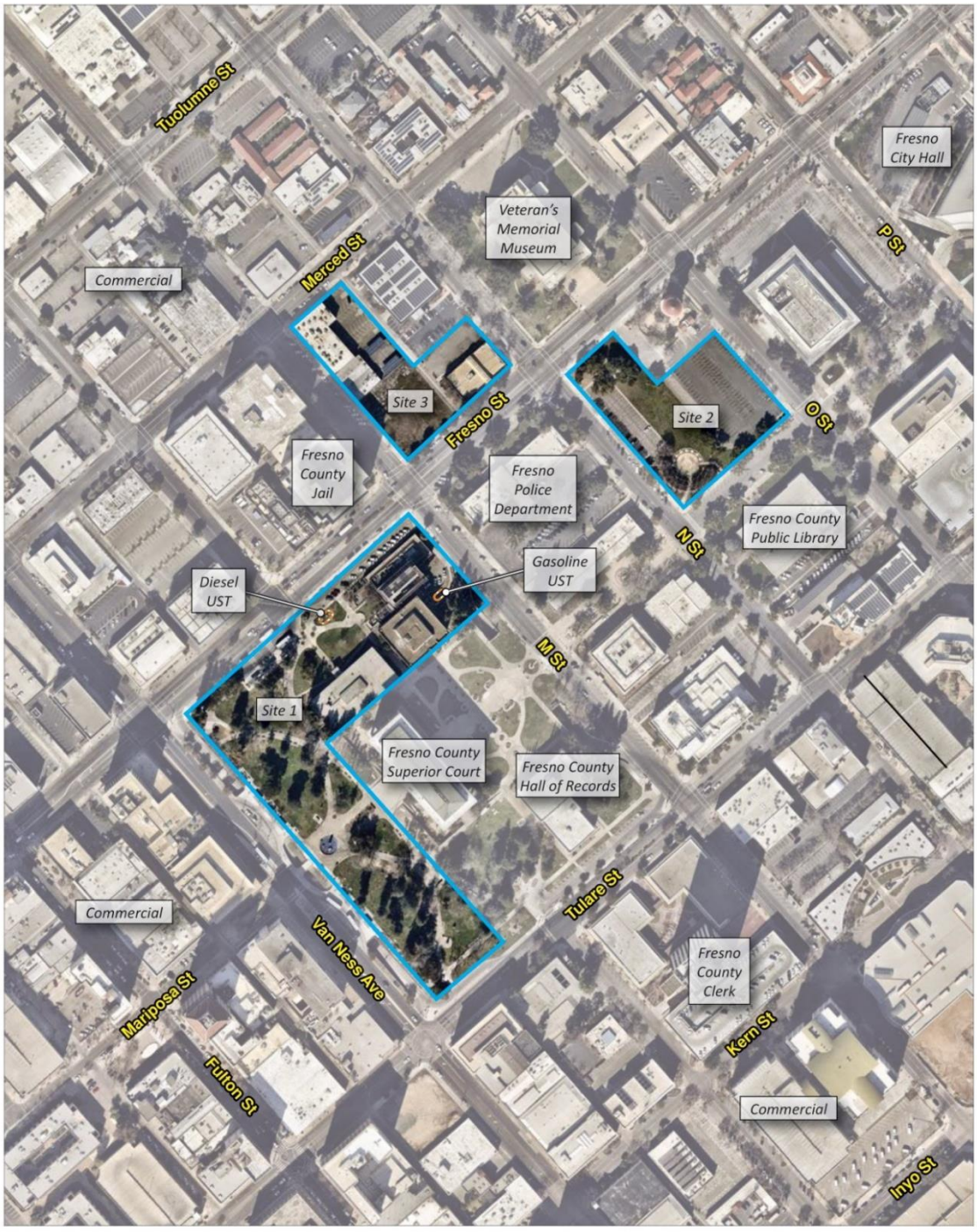
4.6.2 Historical Recognized Environmental Conditions

The ASTM E 1527-21 Standard defines an HREC as:

> *"a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."*

One HREC was identified for Site 1 following the ASTM standard. A gasoline underground storage tank was removed from east of the South Annex Jail (Site 1) in 1990 and gasoline was discovered in soil. A case was opened with the RWQCB and the site status was updated to Completed – Case Closed in 2011.

Figure 4.1 Site 1 Underground Storage Tanks



4.6.3 Controlled Recognized Environmental Conditions

The Standard also requires the identification of CRECs. The ASTM Standard defines CRECs as:

> *"a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."*

This assessment has revealed no evidence of CRECs in connection with Site 1 following the ASTM standard.

4.6.4 Business Environmental Risk

A business environmental risk is defined by ASTM E 1527-21 as:

> *"a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations."*

Our review identified the following potential business environmental risk:

- Based on the age of the existing buildings on Site 1, and the former buildings that existed on the site, it is possible that residual lead from lead-based paint (LBP) and residual pesticides from termiticides are potentially present in the soils in the vicinity of the existing and former structures.

4.6.5 Summary

Based on the results of this Phase I ESA, PlaceWorks recommends that a Phase II ESA be conducted at Site 1 to assess the two RECs identified in this report. In addition, if Site 1 is proposed for sensitive land uses such as residential or childcare, additional soil investigation for lead and pesticides related to the existing and former buildings on the site is recommended.

Appendix B

New Fresno Federal Courthouse
Phase I Environmental Site Assessment

July 2023 | Phase I Environmental Site Assessment

Fresno Street Properties

for Judicial Council of California

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PLACEWORKS

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Executive Summary

PlaceWorks has performed a Phase I Environmental Site Assessment (ESA) on behalf of the Judicial Council of California (Client) for the select properties located along Fresno Street between Van Ness Avenue and O Street in the City of Fresno, Fresno County, California (Figures 1 and 2). The project site consists of three distinct areas encompassing approximately 11.9 acres. The Phase I ESA was performed in general conformance with the scope and limitations of the ASTM E 1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Exceptions to, or deletions from, this practice are described in Section 1 of this report. Our conclusions are intended to help the user evaluate the "environmental risk" associated with the site, as defined in the ASTM E 1527-21 Standard, and discussed in the Introduction section of this report.

The approximately 11.9-acre project site is located along Fresno Street between Van Ness Avenue and O Street in downtown Fresno, California. Site 1 is an L-shaped 7.6-acre portion of the 13.94-acre Courthouse Park parcel located at 2200 Fresno Street and identified with Assessor Parcel Number 466-16-001T which includes underground parking, the South Annex Jail and a Fresno County Sheriff's Department office building. Site 2 is an approximately 2.3-acre portion of the 2.51-acre Eaton Plaza property located at 2400 Fresno Street which includes Assessor Parcel Number 466-09-305T, and Site 3 is an approximately 2.0-acre portion of the 2.96-acre Greater Fresno Area Chamber of Commerce/Office Buildings block which includes Assessor Parcel Numbers 466-113-03, 466-113-06, 466-113-07, and 466-113-08. The project site is about 0.5 miles northwest of the State Route 41 Freeway and about 0.6 miles northeast of State Route 99 Freeway (Figure 2).

Figure 1 depicts the regional location of the project site, Figure 2 shows the local vicinity of the project site, and Figure 3 is an aerial photograph showing the current conditions of the project site. Regional access to the site is provided by the SR-41 Freeway and the SR-99 Freeway. Local access is from Fresno Street which passes alongside the project site (Figure 3).

The objective of a Phase I ESA is to assess whether "recognized environmental conditions" (REC), historical RECs (HREC), and controlled RECs (CREC) are associated with the subject site. Our conclusions are intended to help the user evaluate the "business environmental risk" associated with the subject site. Our opinion regarding an REC's potential impact on the subject site is based on the scope of our work, the information obtained during the course of our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, and our experience evaluating similar sites.

RECOGNIZED ENVIRONMENTAL CONDITIONS (RECs)

The ASTM E 1527-21 Standard defines an REC in part as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under

conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

The following six RECs were identified in the assessment following the ASTM standard.

- A 10,000-gallon gasoline underground storage tank was installed east of the South Annex Jail at 1155 M Street (Site 1) in 1990.
- A diesel underground storage tank was identified in the grassy area north of the Fresno County Sheriff's Department administration building at 2200 Fresno Street (Site 1).
- An automobile repair shop was located on the northwest portion of Site 2 from at least 1932 to 1958. An auto body repair and painting operation was depicted on the southern end of this same facility in the 1948 and 1950 Sanborn fire insurance maps. Auto repair operations may have used solvents, paints, degreasers, lubricants and oils that contain volatile organic compounds, petroleum hydrocarbons, polychlorinated biphenyls, and/or metals.
- A transformer yard was located on the northeastern portion of Site 2 from at least 1946 to about 1962 based on aerial photographs and the 1948 and 1950 Sanborn fire insurance maps. Polychlorinated biphenyls were most likely used in transformers during this time period.
- Automobile repair shops were depicted on a portion of the former apartment building facing Fresno Street on Site 3 and on the northern portion of Site 3 facing the alley in the 1918 Sanborn fire insurance map. Auto repair operations may have used solvents, paints, degreasers, lubricants and oils that contain volatile organic compounds, petroleum hydrocarbons, polychlorinated biphenyls, and/or metals.
- A cleaners operation was identified in the former apartment building facing Fresno Street on Site 3 from at least 1937 to about 1942. Cleaners may have used tetrachloroethylene for dry cleaning garments and fabrics.

HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS (HRECs)

The ASTM E 1527-21 Standard defines an HREC as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

One HREC was identified for the project site following the ASTM standard. A gasoline underground storage tank was removed from east of the South Annex Jail (Site 1) in 1990 and gasoline was discovered in soil. A case was opened with the Regional Water Quality Control Board and the site status was updated to Completed – Case Closed in 2011.

CONTROLLED RECS ENVIRONMENTAL CONDITIONS

The Standard also requires the identification of controlled RECs (CRECs). The ASTM Standard defines CRECs as

"a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

This assessment has revealed no evidence of CRECs in connection with the project site following the ASTM standard.

BUSINESS ENVIRONMENTAL RISK

A business environmental risk is defined by ASTM E 1527-21 as a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations. Our review identified the following potential business environmental risk:

- Based on the age of the existing buildings on Site 1, the existing buildings facing M Street on Site 3, and the former buildings that existed on Sites 1, 2, and 3, it is possible that residual lead from lead-based paint (LBP) and residual pesticides from termiticides are potentially present in the soils in the vicinity of the former structures.

SUMMARY

Based on the results of this Phase I ESA, PlaceWorks recommends that a Phase II ESA be conducted at the project site to assess the five RECs identified in this report. In addition, if the project site is proposed for sensitive land uses such as residential or childcare, additional soil investigation for lead and pesticides related to the existing buildings on Site 1, the existing buildings facing M Street on Site 3, and the former structures across the project site is recommended.

Executive Summary

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1. Introduction

This Phase I Environmental Site Assessment (ESA) was performed in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-21 Standard for the Judicial Council of California (Client) for the Fresno Street properties in Fresno, Fresno County, California (Figures 1 and 2). The Phase I ESA was performed in general conformance with the scope and limitations of the ASTM E 1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and with the EPA "All Appropriate Inquiries" standard. Exceptions to, or deletions from, this practice are described in Section 1 of this report.

The primary purpose for performing a Phase I ESA is to "…permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations (commonly known as landowner liability protections) on Comprehensive Emergency Response Compensation and Liability Act (CERCLA) liability." An environmental site assessment meeting or exceeding this practice and completed less than 180 days prior to the date of acquisition is presumed to be valid under this standard. In order to maintain landowner liability protections, the user also has a "continuing obligation to not interfere with activity and use limitations associated with the property," must take "reasonable steps to prevent releases" and must "comply with legal release reporting obligations." (ASTM, 2021) Further, it is the goal of this study to identify business risks related to the property associated with environmental conditions.

Our conclusions are intended to help the user evaluate the "environmental risk" associated with the site, as defined in the ASTM E 1527-21 Standard and the United States Environmental Protection Agency (EPA) All Appropriate Inquiry (AAI) standard.

1.1 OBJECTIVE

The objective of this assessment was to evaluate site history, existing observable conditions, current site use, and current and historic uses of surrounding properties to identify the potential presence of Recognized Environmental Conditions (RECs) in connection with the subject site. RECs are defined by ASTM as

> "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. This definition does not include *de minimis* conditions defined as "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies" (ASTM, 2021).

In addition, the Standard requires the identification of historical RECs (HRECs) and known or suspect environmental conditions in the Phase I ESA report. The standard defines historical RECs as

> "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

The Standard also requires the identification of controlled RECs (CRECs). The ASTM Standard defines CRECs as

> "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

Our conclusions are intended to help the user evaluate the "environmental risk" associated with the site, defined by ASTM as "a risk which can have a material environmental or environmentally-driven financial impact on the business associated with the current or planned use of a parcel of commercial real estate. Consideration of environmental risk issues may involve addressing one or more non-scope considerations."

1.2 SITE IDENTIFICATION

The approximately 11.9-acre project site is located along Fresno Street between Van Ness Avenue and O Street in downtown Fresno, California. Site 1 is an L-shaped 7.6-acre portion of the 13.94-acre Courthouse Park parcel located at 2200 Fresno Street and identified with Assessor Parcel Number 466-16-001T which includes underground parking, the South Annex Jail and a Fresno County Sheriff's Department office building. Site 2 is an approximately 2.3-acre portion of the 2.51-acre Eaton Plaza property located at 2400 Fresno Street which includes Assessor Parcel Number 466-09-305T, and Site 3 is an approximately 2.0-acre portion of the 2.96-acre Greater Fresno Area Chamber of Commerce/Office Buildings block which includes Assessor Parcel Numbers 466-113-03, 466-113-06, 466-113-07, and 466-113-08. Figure 2, *Local Vicinity,* provides a map depicting the general location of the project site. Figure 3 is an aerial photograph showing the current site conditions.

1.3 DETAILED SCOPE OF SERVICES

PlaceWorks performed the following detailed scope of services to complete our Phase I ESA assessment:

1. Visual observations of site conditions, and of adjoining property use, to evaluate the nature and type of activities that have been or are being conducted at and adjacent to the site, in terms of the potential for release or threat of release of hazardous substances or petroleum products.
2. Review of federal and state environmental database information within the ASTM- specified radii from the subject site using a database service to access records. Use of 7.5-minute topographic maps to evaluate the site's physical setting.
3. Review of federal and state environmental files, as necessary, pertaining to the subject site and nearby

sites with the potential to impact the subject site.

4. Review of previous reports (if any) prepared for the subject site.
5. Review of historical aerial photographs and topographic maps.
6. Contacts with state and local agencies, as necessary, regarding the site and surrounding properties and structures.
7. Interviews with the Key Site Manager and property tenant representatives (if any). Interpretation of information and data assembled as a result of the above work tasks, and formulation of conclusions regarding the potential presence and impact of RECs as defined by the ASTM E 1527-21 Standard.

1.4 NON-SCOPE CONDSIDERATIONS

The ASTM E 1527-21 Standard includes the following list of "additional issues" that are non-scope considerations outside of the scope of the ASTM Phase I ESA practice: Asbestos-Containing Materials, Biological Agents, Radon, Lead-Based Paint, Lead in Drinking Water, Wetlands, Regulatory Compliance, Cultural and Historic Risks, Industrial Hygiene, Health and Safety, Ecological Resources, Endangered Species, Indoor Air Quality unrelated to releases of hazardous substances or petroleum products in the environment and mold.

A limited assessment of the presence of polychlorinated biphenyls (PCBs) is included in the ASTM work scope. Accordingly, the assessment of the presence of PCBs is limited to those potential sources specified in the ASTM E 1527-21 Standard as "electrical or hydraulic equipment known or likely to contain PCBs" to the extent visually and or physically observed or identified from the interview or records review.

1.5 EXCEPTIONS AND DEVIATIONS

PlaceWorks has completed this assessment in substantial conformance with ASTM E 1527-21. In our opinion, there were no exceptions, addition, deviations, or deletions made to the ASTM work scope.

1.6 LIMITATIONS

Our work for this project was performed generally consistent with the ASTM E 1527-21 Standard for Phase I Environmental Site Assessments. Several organizations other than ASTM, such as professional associations (e.g. ASFE and AGWSE) have also developed "guidelines" or "standards" for environmental site assessments. The Phase I ESA presented herein is consistent with the ASTM E 1527-21 Standard, which may vary from the specific "guidelines" or "standards" required by other organizations.

This Report was prepared pursuant to an Agreement between the Client and PlaceWorks. All uses of this Report are subject to, and deemed acceptance of, the conditions and restrictions contained in the Agreement. The observations and conclusions described in this Report are based solely on the Scope of Services provided pursuant to the Agreement. PlaceWorks has not performed any additional observations, investigations, studies, or other testing not specified in the Agreement. PlaceWorks shall not be liable for the existence of any condition the discovery of which would have required the performance of services not authorized under the Agreement.

1. Introduction

This Report is prepared for the exclusive use of the Client in connection with the project site. There are no intended beneficiaries other than the Client. PlaceWorks shall owe no duty whatsoever to any other person or entity on account of the Agreement or the Report. Use of this Report by any person or entity other than the Client for any purpose whatsoever is expressly forbidden unless such other person or entity obtains written authorization from the Client and from PlaceWorks. Use of this Report by such other person or entity without the written authorization of the Client and PlaceWorks shall be at such other person's or entity's sole risk and shall be without legal exposure or liability to PlaceWorks.

Use of this Report by any person or entity, including by the Client, for a purpose other than the site, is expressly prohibited unless such person or entity obtains written authorization from PlaceWorks indicating that the Report is adequate for such other use. Use of this Report by any person or entity for such other purpose without written authorization by PlaceWorks shall be at such person's or entity's sole risk and shall be without legal exposure or liability to PlaceWorks.

This Report reflects site conditions observed and described by records available to PlaceWorks as of the date of report preparation. The passage of time may result in significant changes in site conditions, technology, or economic conditions, which could alter the findings and/or recommendations of the report. Accordingly, the Client and any other party to whom the report is provided recognize and agree that PlaceWorks shall bear no liability for deviations from observed conditions or available records after the time of report preparation. No investigation is thorough enough to absolutely rule out the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not be construed as a guarantee of the absence of such materials on the Site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

The findings, conclusions, and recommendations contained in this report are based on site conditions as they existed at the time of our investigation. Our review of documents, lists, databases, and public agency files have been conducted with due diligence. However, our conclusions are based on available information and are subject to constraints imposed by public agencies on review procedures and information retrieval. As a result, PlaceWorks may have been unable to identify potential concerns. PlaceWorks assumes no responsibility for conditions that did not come to our attention despite reasonable care, or for conditions that were not generally recognizable as environmentally unacceptable at the time of this report. Opinions and judgments expressed are based on our understanding and interpretations of currently available regulatory standards and should not be construed as legal opinions or advice.

Use of this Report by any person or entity in violation of the restrictions expressed in this Report shall be deemed and accepted by the user as conclusive evidence that such use and the reliance placed on this Report, or any portions thereof, is unreasonable, and that the user accepts full and exclusive responsibility and liability for any losses, damages or other liability which may result.

2. Site Description

This section describes the site location and ownership of the site as well as other pertinent details.

2.1.1 Name of Site Owner

Site 1 (APN 466-16-001T) is owned by Fresno County. Site 2 (APN 466-09-305T) is owned by the City of Fresno. APNs 466-113-06 & -07 of Site 3 are owned by Ramirez Commercial Properties, LLC. The owner(s) of the vacant lot on Site 3 (APN 466-113-08) and the Fresno Area Chamber of Commerce parcel (APN 466-113-03) are yet to be identified.

2.1.2 Site Location Map

The United States Geological Survey (USGS) topographic map for the site is the Fresno South, California Quadrangle. The USGS topographic map was used as the source for site setting information. The project site is in Fresno County at approximately 36.73734 north latitude and 119.78933 west longitude. The project site is in Sections 3 and 4 of Township 14 South, Range 20 East of the Mt. Diablo Base Line and Meridian. Figures 1 through 2 show the location of the project site.

2.2 SITE AND VICINITY DESCRIPTION

The approximately 11.9-acre project site is located along Fresno Street between Van Ness Avenue and O Street in downtown Fresno, California. Site 1 is an L-shaped 7.6-acre portion of the 13.94-acre Courthouse Park parcel located at 2200 Fresno Street and identified with Assessor Parcel Number 466-16-001T which includes underground parking, the South Annex Jail and a Fresno County Sheriff's Department office building. Site 2 is an approximately 2.3-acre portion of the 2.51-acre Eaton Plaza property located at 2400 Fresno Street which includes Assessor Parcel Number 466-09-305T, and Site 3 is an approximately 2.0-acre portion of the 2.96-acre Greater Fresno Area Chamber of Commerce/Office Buildings block which includes Assessor Parcel Numbers 466-113-03, 466-113-06, 466-113-07, and 466-113-08.

The project site is in a developed area in the City of Fresno. The Fresno Water Tower, Veterans Memorial Museum, Fresno County Jail, a Bureau of Reclamation office building, a methadone clinic, the Crocker Building, a Wells Fargo, and the Fresno County Jail are located north of the site. Office buildings are located west and east of the site. The Fresno County Public Library, office buildings, Fresno County Superior Court building, and Fresno County Hall of Records building are located south of the site.

2.3 PHYSICAL SETTING

Subsurface explorations were not performed for this evaluation; therefore, site geology and hydrology were evaluated on the basis of readily available public information or references, and/or based upon our experience and understanding of subsurface conditions in the subject property area.

2.3.1 Topography

Topographically, the property slopes slightly to the west and to the southwest. Based on a review of the USGS 7.5-minute Topographic Series, Fresno South, California Quadrangle Map (USGS 2022), surface elevation of the project site ranges between approximately 290 and 295 feet above mean sea level.

2.3.2 Geologic Information

The project site is located in the San :Joaquin Valley within the Great Valley Geomorphic Province. The Great Valley Province is a long, narrow northwest-trending alluvial valley that lies between the Sierra Nevada Range to the east and the Coast Ranges to the west (CGS 2002). The San Joaquin Valley is located in the southern portion of the Great Valley and is bounded by the Stockton Arch to the north and the San Emigdio and Tehachapi Mountains to the south. This region formed as a forearc basin during the subduction of the Pacific plate underneath the North American plate.

The site is underlain by Holocene alluvial fan deposits (Matthews and Burnett 1965). The dominant soil components listed in the United States Department of Agriculture Natural Resources Conservation Services (USDA) Web Soil Survey for the project site is Hanford sandy loam northwest of Fresno Street, and Delhi loamy sand southeast of Fresno Street.

2.3.3 Naturally Occurring Asbestos Containing Minerals and Radon Gas

Based on a review of A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos (Department of Conservation, Division of Mines and Geology 2000) and Van Gosen and Clinkenbeard (2011), the site is not located within a ten-mile radius from an area thought to contain naturally occurring asbestos (NOA).

The Indoor Radon Abatement Act of 1988 directs the United States Environmental Protection Agency to identify and lists areas of the United States with the potential for elevated indoor radon levels. The U.S. EPA's Map of Radon Zones assigns one of three zones based on radon potential:

- Zone 1 counties have a predicted average indoor radon screening level greater than 4 pico curies per liter (pCi/L)
- Zone 2 counties with a predicted average indoor radon screening level between 2 and 4 pCi/L
- Zone 3 counties with a predicted average indoor radon screening level less than 2 pCi/L

Based on the EPA (2021) map, the site is within Zone 2, below the level of concern. The California Department of Health Services recommends action to be taken to reduce radon levels inside buildings if they are 4 pCi/L or greater.

2.3.4 Groundwater and Surface Water Information

Based on the California Department of Water Resources (2004) the project site is situated in the Kings subbasin of the San Joaquin Valley Groundwater Basin. While local groundwater flow is influenced by production well pumping, regional flow in the basin is predominately toward the southwest. Based on a groundwater contour map, groundwater is expected to be located about 180 feet below ground surface at the site (Fresno Irrigation District 2022). The closest surface water body is Dry Creek Canal about one mile northwest of the project site (USGS 2022). Hydrogeologic investigations were not performed on the site for this investigation; therefore, it is unknown to what extent localized variations in groundwater presence and flow occur on the site.

2. Site Description

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3. Site History and Background Information

3.1 PREVIOUS REPORTS

No previous reports for the subject property were reviewed by PlaceWorks for the preparation of this Phase I ESA report.

3.2 PAST USAGE OF THE SITE

Past usage of the site was assessed through review of historical aerial photographs, topographic maps, Sanborn fire insurance maps and databases. Copies of historical information reviewed are included in Appendix A. Based on a review of historical information Site 1 has been developed with Courthouse Square/Courthouse Park since at least 1888. A jail has been located on the northeast portion of Site 1 since at least 1888, with the current jail building being constructed in 1942, and the annex to that building dating from 1960. The Fresno County Sheriff's Department administration building was constructed southwest of the South Annex Jail in 1969. A warehouse that existed on the northwest portion of Site 2 contained grain and flour storage from about 1888 to about 1918, followed by automobile sales and repair from at least 1932 to about 1958. Residential dwellings were located on the southeastern portion of Site 2 from at least 1888 to about 1950. The southeastern portion of Site 2 has been developed with a parking lot since about 1957, with the current configuration of Site 2 becoming apparent in 1962. Site 3 was developed with a church on the southeast portion of Site 3 and residential dwellings from 1888 to about 1950. An apartment building was on the northeast corner of Fresno Street and M Street from at least 1918 to about 1987. Based on information in Section 4.2.4, a cleaners operated in a space within the apartment building from 1937 to about 1942, and an auto repair shop was located in the easternmost portion of the apartment building in 1918. A separate auto repair shop was located on the north portion of Site 3 facing the alley.

Aerial photographs for the proposed sites obtained from EDR for the years 1937, 1942, 1946, 1950, 1957, 1962, 1967, 1973, 1979, 1984, 1987, 1998, 2006, 2009, 2012, 2016, and 2020 were reviewed for the project site. Copies of the aerial photographs are included in Appendix A.

- 1937 – Site 1 appears to be used as the plaza for the courthouse, which is located adjacent, to the east of the site. Site 1 is primarily covered in trees and no discernable structures can be made out. Site 2 is made up of many smaller buildings, some residential and some commercial. There is also a small parking lot located on this site. Site 3 has two larger buildings on the site's edge bordering Fresno Street. The remainder of the site appears to have a few smaller structures and predominantly covered by trees. The surrounding area is largely built-up with many large and small buildings.

- 1942 – The project site and surrounding area appear relatively unchanged in comparison to the 1937 aerial photograph.

3. Site History and Background Information

- 1946 – The project site and surrounding area appears to be relatively unchanged in comparison to the 1942 aerial photograph. The larger County Jail can now be seen and uncovered by trees on Site 1.

- 1950 – The project site and surrounding area appear to be unchanged in comparison to the 1946 aerial photograph.

- 1957 – Site 1 and surrounding area appear unchanged in comparison to the 1950 Aerial photograph. Site 2 no longer has the 3 residential dwellings on its southeast end and now it is occupied by a parking lot. Site 3 is now cleared of trees and is primarily being used as parking space. There are three large buildings on Site 3 as well.

- 1962 – Site 1 and 3 along with the surrounding area appear relatively unchanged in comparison to the 1957 Aerial photograph. Site 2 appears to be cleared of most buildings and is being utilized now as a small park with a parking lot. There also appears to still be two buildings on the northern edge of site 2.

- 1967 – A large portion of Site 1 has been cleared away of most trees and it appears construction for the underground garage and Law Enforcement Office are under way. Site 2 and 3 are primarily being used as parking lots, with Site 3 still having a few large buildings on the site.

- 1973 – Sites 2 and 3, along with surrounding areas appear relatively unchanged in comparison to the 1967 aerial photograph. Site 1 now has a new law enforcement building constructed next to the county jail, and the rest of the site appears to have been landscaped one again.

- 1979 – The project site and surrounding area appear relatively unchanged in comparison to the 1973 aerial photograph.

- 1984 – The project site and surrounding area appear relatively unchanged in comparison to the 1979 aerial photograph.

- 1987 – The project site and surrounding area appear relatively unchanged in comparison to the 1984 aerial photograph.

- 1998 – The project site and surrounding area appear relatively unchanged in comparison to the 1987 aerial photograph. The apartment building is no longer present on Site 3.

- 2006 — The project site and surrounding area appear relatively unchanged in comparison to the 1998 aerial photograph. There is now a large baseball stadium present a couple blocks southwest of the site.

- 2009 – The project site and surrounding area appear relatively unchanged in comparison to the 2006 aerial photograph. Site 3 looks partially undeveloped.

- 2012 – The project site and surrounding area appear relatively unchanged in comparison to the 2009 aerial photograph.

- 2016 — The project site and surrounding area appear relatively unchanged in comparison to the 2012 aerial photograph.

- 2020 – The project site and surrounding area appears relatively unchanged in comparison to the 2016 aerial photograph.

3.2.1 Historical Topographic Maps

Historical Topographic Maps obtained from EDR for the years 1923, 1942, 1946, 1947, 1963/1965, 1972, 1981, 2012, 2015 and 2018 were reviewed for the project site. Copies of the topographic maps are included in Appendix A.

- 1923 – The project site and surrounding area are largely developed and only site 1 appears to be largely undeveloped. There is a railroad track/station southeast of the project site and main roadways are labeled to the west of the Site.

- 1942 – The Northern section of the map is labeled as unmapped. The project site appears relatively unchanged in comparison to the 1923 topographic map. Additional structures are depicted in the surrounding area.

- 1946 – The project site and surrounding area appear relatively unchanged in comparison to the 1942 topographic map. Only school, county buildings, and church buildings are depicted on the topographic map. The County Jail now appears to be on Site 1.

- 1947 – The project site and surrounding area appear relatively unchanged in comparison to the 1946 topographic map.

- 1963/1965 – The project site and surrounding area appear relatively unchanged in comparison to the 1947 topographic map. The map is largely highlighted red, indicating the area is built-up. Site 1 now shows the addition to the jail and sites 2 and 3 are among the portion of the map highlighted in red.

- 1972 – The project site appears relatively unchanged in comparison to the 1963/1965 topographic map.

- 1981 – The project site and surrounding area appear relatively unchanged in comparison to the 1972 topographic map. There is now indication that the Law Enforcement Office is on Site 1.

- 2012 – Only roads and contours are depicted in newer topographic maps.

- 2015 – Only roads and contours are depicted in newer topographic maps.

- 2018 – Only roads and contours are depicted in newer topographic maps.

3. Site History and Background Information

3.2.2 Sanborn Fire Insurance Maps

Sanborn maps obtained from EDR for the years 1888, 1898, 1906, 1918, 1948, 1950, and 1970 were reviewed for the subject site. Copies of the Sanborn maps are included in Appendix A.

- 1888 – Site 1 is located on the southeast corner of Fresno Street and K Street (currently named Van Ness Avenue). The site appears to be primarily vacant and being used as the city's courthouse plaza. On the map, the area is labeled as "Court House Square." Near the southwest corner of Fresno and M Steet, appears to be a Jail, labeled "County Jail". East, adjacent to Site 1, but sharing the same city block, is the Fresno County Court House. Site 2 includes a grain and flour storage warehouse on the northwest portion and a few dwellings with detached stables/garages. Inside the warehouse there is a 3,000-horsepower engine and two 11,000 gallon water tanks. Site 3 is located across Fresno Street, northwest of Sites 1 and 2, between M and N Street. Site 3 contains many smaller parcels which contain residential dwelling within each. Four wells are marked on Site 3 as well as a church on its southeast corner. The surrounding area appears to be developed with many structures surrounding the site.

- 1898 – Sites 1, 2, and 3 appear relatively unchanged in comparison to the 1888 Sanborn Map. The labeled Courthouse has become larger, adjacent to Site 1. The warehouse on Site 2 is labeled as Sperry Flour Co., the 3,000-horsepower engine is not depicted, and a 250-horsepower engine is depicted but is labeled as not used.

- 1906 – The County Jail, on a portion of Site 1 now appears larger in size. Site 2 is depicted with a church on the northeast corner of Mariposa and N Street. Site 3 appears relatively unchanged. There are a few structures replaced or removed within the site and the church located on the southeast corner now appears larger in size.

- 1918 – Site 1 no longer has path indication on the site. There is a small structure on the site labeled "Band Stand" on Site 1. Site 2 is depicted with a vacant church building at the northeast corner of Mariposa and N Streets. Three multifamily dwellings are depicted along Mariposa Street. A private garage is depicted adjacent to the Sperry Flour warehouse and a storage shed is located on the opposite side of Site 2 along O Street. Site 3 has a section shaded in gray on the southwest corner indicating there are a set of apartments and two separate auto repairing shops are depicted on the north portion of Site 3 and the apartment building facing the alley.

- 1948 – Site 1 now has a few more structures present within it. There is a large structure on the southwest corner of Fresno Street and M Street labeled "Fresno County Jail." The map indicates it was built in 1942. The former County Jail labeled in previous maps is now the Courthouse Annex. There are also two smaller structures on the site labeled "Women's Comfort Station and "Men's Comfort Station." Site 2 no longer has the storage shed depicted, and a transformer yard is in its place. The former Sperry Flour warehouse is depicted as an automobile sales and service facility and the former private garage is depicted as an auto body repair and painting shop. Site 3 no longer has the auto repair shops depicted and the remainder of Site 3 appears relatively unchanged in comparison to the 1918 Sanborn Map.

- 1950 – Sites 1, 2, and 3 appear relatively unchanged in comparison to the 1948 Sanborn map.

- 1970 – Site 1 now has a few more large additions. The former restroom structures and band stand are no longer depicted on Site 1. There is a large building labeled "Law Enforcement Office" where the "Men's Comfort Area" structure was previously located in the 1950 Sanborn map. There is now indication of an underground garage on an adjacent area to Site 1. Security tunnels extend from the underground garage to beneath the jail building The Fresno County Jail, which is also located on the site and now has a large attachment to its northern side. A section adjacent west of the off-site courthouse is being used as an outdoor patio space. There are also ramps depicted adjacent to Site 1 facing Van Ness Avenue to an underground garage located underneath Van Ness Avenue. Site 2 is no longer occupied by any commercial or residential buildings and is now being occupied as a park, as indicated on the Sanborn Map. Site 3 no longer has small dwellings. The former church is no longer depicted on Site 3 and a new structure is depicted to be occupied by the Chamber of Commerce. A beauty college is depicted on the eastern portion of the apartment building. A large portion of Site 3 is being used as parking for the building on the site.

3.2.3 Historical City Directories

PlaceWorks reviewed the EDR-City Directory of the project site. A copy of the EDR-City Directory is in Appendix A. City Directory data was searched for the years spanning from 1922 through 2020. The project site is identified in the EDR-City Directory starting in 1927 and in 1942, 1947, 1952, 1958, 1965, 1970, 1975, 1980, 1986, 1990, 1992, 1995, 1996, 2000, 2002, 2005, 2010, 2014, 2017, and 2020.

3.2.4 Prior Agricultural Use

Based on the review of historical aerial photographs, topographic maps, and Sanborn maps, the site has not been historically used for agricultural purposes. Grain and flour storage was located on the northern portion of Site 2 from at least 1888 to about 1918.

3.2.5 Mines

Based on the review of historical aerial photographs and topographic maps, the project site does not appear to have been used as a site for mining operations.

3.2.6 Illegal Drug Manufacturing

The proposed site was not identified by the California Hazardous Material Incident Report System (CHMIRS) which is maintained by the California Office of Emergency Services and contains information regarding hazardous material incidents such as accidental releases or spills. Clandestine Drug Laboratory Locations (CDL) database maintained by the U.S. Department of Justice was also reviewed for the presence of drug laboratories or dumpsites. Drug-related waste was not observed on the site during the site inspection.

3.2.7 Prior U.S. Government Ownership

Based on the review of the EDR database, historical aerial photographs, and topographic maps reviewed, there are no indications that the project site was owned by the U.S. Government or devoted to military use or operations.

3.3 SURROUNDING PROPERTY LAND USES

Based on the review of the EDR, historical aerial photographs, topographic maps, and Sanborn maps the properties surrounding the project site are predominately commercial and institutional. The regulatory agency database search prepared by EDR indicates the presence of agency database listings for facilities located within an approximate one-mile radius of the project site. No listed sites were near the project site that were identified that could potentially impact the project site. These facilities do not appear to represent a potential threat to soil, soil vapor and or groundwater quality of the project site. Historically the surrounding land was used as residential, institutional, and commercial.

4. Environmental Records Review

4.1 STANDARD ENVIRONMENTAL RECORDS REVIEW

PlaceWorks utilized the electronic database service EDR to complete the environmental records review. To determine if the Site has any documented environmental concerns, or if other sites with documented environmental concerns exist within the search radii of the Site prescribed by ASTM 1527-21 and All Appropriate Inquiry, PlaceWorks reviewed a summary of regulatory agency database listings prepared by EDR. In addition, where appropriate, we reviewed local regulatory agency files for additional specific information regarding sites identified in the EDR report judged to be of possible concern to the subject Site. The EDR report presenting a summary of the agency databases reviewed and a map showing the location of the identified sites is provided as Appendix B (EDR, 2023). The results of the database search and follow-up agency file review are summarized below.

The database search was used to identify properties that may be listed in the referenced Agency records, located within the American Society for Testing and Materials (ASTM)-specified search radii indicated below:

Database	Approximate Search Distance	Subject Site Listed?	Number of Sites within Search Area
Federal NPL Sites	1 mile	No	0
Federal Delisted NPL Sites	0.5 mile	No	0
CERCLIS Sites	0.5 mile	No	2
CERCLIS-NFRAP Sites	0.5 mile	No	2
Federal ERNS	Site only	No	0
RCRA non-CORRACTS TSD Facilities	0.5 mile	No	0
RCRA CORRACTS Facilities	1 mile	No	0
RCRA Generators	Site and Adjoining	No	15
Federal Institutional/Engineering Control Registry	0.5 mile	No	0
State and Tribal Equivalent NPL Sites	1 mile	No	0
State and Tribal Equivalent CERCLIS Sites	1 mile	No	11
State and Tribal Registered Storage Tanks	Site and Adjoining	Yes	13
State and Tribal Landfills and Solid Waste Disposal Sites	0.5 mile	No	1
State and Tribal Leaking Storage Tanks	0.5 mile	Yes	50
State and Tribal Institutional Controls/Engineering Control	Site only	No	0
State and Tribal Voluntary Cleanup Sites	0.5 mile	No	2
State and Tribal Brownfield Sites	0.5 mile	No	0
Orphan Site List	Site and Adjoining	No	9
HAZNET	Site only	Yes	0

A review of selected regulatory agency databases for documented environmental concerns on the site, or in close proximity to the site, was conducted by EDR. A copy of the radius report, dated June 26, 2023 is included

4. Environmental Records Review

in Appendix B. The project site is listed on the EDR Hist Auto, EDR Hist Cleaners, HAZNET, LUST, CERS, CERS HAZ WASTE, CERS TANKS, and UST databases.

4.1.1 NPL Sites

The National Priorities List (NPL) is a list of contaminated sites that are considered the highest priority for clean-up by the EPA.

- The project site is not listed on the NPL list.
- The database search did not identify NPL sites within a mile radius of the project site.

4.1.2 Federal Delisted NPL Sites

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425 (e), sites may be deleted from the NPL where no further response is appropriate.

- The project site is not listed on the delisted NPL list.
- The database did not identify any delisted NPL sites within a mile radius of the project site.

4.1.3 CERCLIS Sites

The Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) list identifies sites which are suspected to have contamination and require additional investigation to assess if they should be considered for inclusion on the NPL.

- The project site is not listed on the CERCLIS list.
- The database search identified two CERCLIS listings within a half mile radius of the project site.
    - PG&E Fresno 2 located on Fresno & Tulare Street, approximately 0.423-miles from the project site is listed as being on the SEMS database. The site ID is 0904605 and the EPA ID is CAD983650102.
    - PG&E Gas Plant Fresno on the northwest corner of Thorne and Button Avenues, is listed as being on the SEMS database, and the Non NPL status is listed as "Other Cleanup Activity: State-Lead Cleanup.

4.1.4 CERCLIS-NFRAP Sites

CERCLIS-NFRAP status indicates that a site was once on the CERCLIS List but has No Further Response Actions Planned (NFRAP). Sites on the CERCLIS-NFRAP List were removed from the CERCLIS List in

February 1995 because, after an initial investigation was performed, no contamination was found, contamination was removed quickly, or the contamination was not significant enough to warrant NPL status.

- The project site is not listed on the CERCLIS-NFRAP list.
- The database search identified two CERCLIS-NFRAP Site within a half mile radius of the project site.
    - Fresno County Credit Union at 2211 Merced Steet, approximately 0.047-mile from the project site was previously a gas station with five underground storage tanks that have since been removed from the site. In 1987, A preliminary assessment was completed at the site indicating potential COC hazard. As of 2002, the status of the site is Completed- Case Closed. The Facility Id is 1055002 and EPA ID is 100059.
    - Wilshire Paint Co at 701 & 712 Fulton Street, approximately 0.212-mile from the project site is indicated in the EDR Report as NFRAP-Site does not qualify for the NPL based on existing information. Discovery of potential contaminant was in 1986 and finish date in 1986 as well. The site ID is 0901265 and EPA ID is CAD028211076.

4.1.5 RCRA CORRACTS Facilities

The RCRA CORRACTS Facilities list catalogues facilities that treat, store, or dispose of hazardous waste and have been associated with corrective action activity.

- The project site is not listed as a RCRA CORRACTS TSD Facility.
- The database search did not identify any RCRA CORRACTS TSD Facilities within a one-mile radius of the project site.

4.1.6 RCRA Non-CORRACTS TSD Facilities

The Resource Conservation and Recovery Act (RCRA) non-CORRACTS TSD Facilities List tracks facilities which treat, store, or dispose of hazardous waste and are not associated with corrective action activity.

- The project site is not listed as a RCRA non-CORRACTS TSD facility.
- The database search did not identify any RCRA non-CORRACTS TSD facility within a one-half mile radius of the project site.

4.1.7 RCRA Generators

The RCRA Generator list is maintained by the EPA to track facilities that generate hazardous waste.

- The project site is not listed as a RCRA Generator facility.

4. Environmental Records Review

- The database search identified 15 RCRA Generators within a quarter mile radius of the project site.
    - Twining Laboratories at 2527 Fresno Street, approximately 0.082-mile northeast of the project site, is listed as a large quantity generator. The EPA was the agency that determined the generator was under violation in 2003. The actual return to compliance date is 2004. The EPA ID for this site is CAD007964240.
    - Pacific Bell at 2502 Merced Street, approximately 0.106-mile north-northeast of the project site, is listed as having a Small Quantity Generators, and a Large Quantity Generator.No violations were found for this site. EPA ID for this site is CAT080023419.
    - Michael Chevrolet at 1450 O Street, approximately 0.139-mile north of the project site, is listed as having a Small Quantity Generator. No violations were found for this site. EPA ID for this site is CAD004868717.
    - DTH Fresno at 2715 Fresno Street, approximately 0.188-mile northeast of the project site, is listed as having a small quantity generator. No Violations were found for this site. Epa ID for this site is CAR000273292.
    - Pacific Bell at 1245 Vann Ness Avenue approximately 0.062-mile west of the project site, is listed as having a small quantity generator. No violations were found at this site. EPA ID is CAT080023492.
    - Harbor Freight Tools at 1349 N Blackstone Avenue, approximately 0.080-mile north-northwest of the project site, is listed as having a small quantity generator containing ignitable waste, cadmium, chromium, lead, and mercury. No violations were found for this site. The EPA ID is CAD982477168.
    - Fresno County Health at 1221 Fulton Mall, approximately 0.111-mile west-southwest of the project site, is listed as having a small quantity Generator. No violations were found for this site. The EPA ID is CAD982037467.
    - Slavich Bros Inc. at Stanislaus & M Street, approximately 0.199-mile north-northwest of the project site, is listed as having four small quantity generators containing gasoline, diesel, and waste oil. No violations were found for this site. The EPA ID is CAD982029795.
    - Premier Imports at 2306 Stanislaus Street, approximately 0.199-mile north-northwest of the project site, is listed as having a small quantity generator. No violations were found for this site. The EPA ID is CAD982462467.
    - Pacific Bell, located on 1407 Van Ness Avenue, approximately 0.208-mile west-northwest is listed as having a small quantity generator. No violations were found for this site. The EPA ID is CAT080023427.

- Gestetner Corp at 1363 Broadway, approximately 0.241-mile west of the project site, is listed as having a small quantity generator. No violations were found for this site. The EPA ID is CAD 981679251.
- Pacific Bell at 1401 Fulton Avenue, approximately 0.241-mile west of the project site, is listed as having a small quantity generator. No violations were found for this site. The EPA ID is CAT080023393.
- California High Speed Rial Project at 14 N Motel Drive, approximately 0.241-mile west of the project site, is listed as having a small quantity generator containing arsenic, cadmium, chromium, lead, carbon tetrachloride, benzene, creosote, and naphthalene. No violations were found for this site. The EPA ID is CAR000247247.
- PG&E San Joaquin Regional office at 1401 Fulton Street, approximately 0.241-mile west of the project site, is listed as having a small quantity generator. No violations were found for this site. The EPA ID for this site is CAD981460298.
- Pacific Bell at 1429, 1445. 1455 Van Ness Avenue, approximately 0.220-mile west-northwest of the site, is listed as having a very small quantity generator. No violations were found for this site. The EPA ID is CAT080020639.

4.1.8 Federal Institutional Control / Engineering Controls

A listing of sites with institutional and or engineering controls in place is maintained by the EPA. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

- The project site is not listed as having an institutional or engineering control.

4.1.9 Federal ERNS List

The Federal ERNS list is the Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The list is maintained by the National Response Center United States Coast Guard.

- The project site is not listed on the ERNS List.

4.1.10 State-and Tribal- equivalent NPL

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

- The project site is not listed on state- and tribal-equivalent NPL.
- The database search did not identify any state-and tribal equivalent NPL sites within a one-mile radius of the project site.

4.1.11 State and Tribal- equivalent CERCLIS

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

- The project site is not listed on the state-and tribal-equivalent CERCLIS.
- The database search identified eleven state-and tribal-equivalent CERCLIS within a mile radius of the project site.
    - Fresno County Employee Credit Union Site at 2211 Merced Avenue, approximately 0.047-miles northwest of the project site is listed on EnviroStor as referred to RWQCB on November 29, 1989.
    - Morris P. Kirk & Son (National Lead) at 736-742 Fulton Street, approximately 0.240-miles south-southeast of the project site is listed on EnviroStor with the status of No Action Required as of June 13, 2017.
    - Univar USA Inc. at 1152 G Street, approximately 0.356-miles southwest from the project site is listed on EnviroStor with the status No Action Required as of October 4, 2018.
    - PG&E G Street Substation at 1131 G Street, approximately 0.378-miles southwest of the project site is listed on EnviroStor with the status of certified as of January 19, 2010. The facility underwent a voluntary cleanup of TPH-gas, copper and vanadium in soil.
    - Dill Eldon Plating & Polishing at 1516 H Street, approximately 0.387-miles west of the project site is listed on EnviroStor with the status of Refer: Other Agency as of November 16, 1994.
    - PG&E Manufactured Gas Plan SQ-FK-FRS-2 at Block of F, G, Fresno and Tulare Streets, approximately 0.403-miles southwest of the project site, is listed on EnviroStor as Inactive – Needs Evaluation as of March 18, 1992.

- Former Fresno 2 Manufactured Gas Plant Site at Mariposa Street between F and G Streets, approximately 0.421 miles southwest of the project site, is listed on EnviroStor with the status Active as of February 9, 2010. The chemicals of concern at the facility include polynuclear aromatic hydrocarbons in soil and soil gas.
- Industrial Plating at 733 G Street, approximately 0.477-miles south of the project site is listed on EnviroStor with the status of Refer: Other Agency as of November 16, 1994.
- Commercial Electro Plating, Inc. at 1937 S Cherry Avenue, approximately 0.922-miles south-southeast of the project site, is listed on EnviroStor with the status of No Action Required as of June 15, 2004.
- City of Fresno at 1802 E California Avenue, approximately 0.935-miles south of the project site, is listed on EnviroStor with the status of Active as of January 1, 2022. A discovery report was due on May 8, 2023.
- Lamoure's Cleaners at 308 N 1st Street, approximately 0.976-miles northeast of the project site is listed on EnviroStor with the status Active as of March 1, 2022. Potential chemicals of concern include tetrachloroethylene, trichloroethylene, vinyl chloride, 1,1-dichloroethylene, 1,2-dichloroethylene and cis-1,2-dichloroethylene in soil gas.

Based on the distance from the project site, regulatory status, topography or media affected, these facilities are no expected to have impacted the project site.

4.1.12 State and Tribal- equivalent Landfill and/or Solid Waste Disposal Sites

The database search identified one State Landfills or Solid Waste Disposal Site within a one-half mile radius of the subject site.

- The project site is not listed on state- and tribal- equivalent landfill and/or solid waste disposal site lists.
- The database search identified one state-and tribal equivalent Landfill and/or Solid Waste Disposal site within a half mile radius of the project site.
  - Dan Green's Wood Recycling at 733 South Huges, approximately 0.394-miles east of the project site is listed as a closed facility. The former facility processed chipping and grinding wood waste for recycling purposes only. Based on the closed status and the type of waste involved, this facility is not expected to impact the project site.

4.1.13 State and Tribal Leaking Underground Storage Tanks

The State Water Resources Control Board Leaking Underground Storage Tank Information System contains an inventory of Leaking Underground Storage Tank (LUST) Incident Reports.

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- The project site is listed on state- and tribal leaking underground storage tanks.

    - Fresno County Jail at 1155 M Street on Site 1 is listed on the LUST database twice for a gasoline underground storage tank release. The first case listed indicates that the leak is being confirmed. The second case for the facility has a status of completed – case closed as of August 1, 2011. The leak had been reported on October 19, 1990 during a tank closure. The final conclusion was that the leak was considered de minimus and site closure was granted in 2011.

- The database search also identified 48 LUST facilities within a half-mile radius of the project site.

    - Fresno Clinton B.P. at 2409 Fresno, approximately 0.011-miles north-northeast of the project site, is listed as with the status Completed – Case Closed as of October 26, 2009. The facility experienced a release of gasoline that impacted an aquifer used for drinking water supply in 1994, which was discovered during a tank closure. Based on the regulatory status, this facility is not expected to have impacted the project site.

    - Fresno City Police Dept. at 2323 Mariposa, approximately 0.038-miles east of the project site, is listed twice on the LUST database. The first listing is because of a leak of diesel reported in soil with the status of preliminary site assessment underway. The second listing is also for a diesel release into soil which was reported in 1995. The current status of the facility is Completed – Case Closed as of October 1, 2009. Based on the media impacted, this facility is not expected to have impacted the project site.

    - Fresno County Employees Credit Union Property at 2211 Merced Street, approximately 0.047-miles northwest of the project site, is listed twice on the LUST database. The first entry is listed because of a release of gasoline into soil with the status of Case Closed. The second listing is from a release of gasoline into soil reported in 1986 from subsurface monitoring. The facility is listed with a status of Completed-Case Closed as of May 28, 2002. Based on the regulatory status, this facility is not expected to have impacted the project site.

    - Dept of General Services at 2550 Mariposa Mall, approximately 0.055-miles east-northeast of the project site, is listed twice on the LUST database. The first entry is listed because of a leak of diesel into soil and is listed with a status of Case Closed. The second entry is listed for a leak of diesel into soil that was reported in 1987 from a tank tightness test. The current status for the facility is listed as Completed – Case Closed as of December 12, 2000. Based on the regulatory status, this facility is not expected to impact the project site.

    - Twining Laboratories Inc at 2527 Fresno Street, approximately 0.082-miles northeast of the project site, is listed because of a leak of gasoline into soil that was reported in 1987. The current regulatory status of the case is listed as Completed – Case Closed as of March 11,

2005. Based on the regulatory status, this facility is not expected to have impacted the project site.

- Office Bldg at 850 L Street, approximately 0.138-miles southeast of the project site, is listed because of a leak of waste oil into soil reported in 1993 from a tank closure. The current regulatory status of the case is listed as Completed – Case Closed as of September 23, 2002. Based on the regulatory status, this facility is not expected to have impacted the project site.

- Tutelian & Company at 812 Van Ness Avenue, approximately 0.162-miles south-southeast of the project site, is listed because of a leak of heating oil/fuel oil into soil and an aquifer used for drinking water supply in 2008 from a tank closure. The current regulatory status is listed as Completed – Case Closed as of April 14, 2010. Based on the regulatory status, this facility is not expected to have impacted the project site.

- Atchison Topeka & Santa Fe Rail/BNSF/Amtrak Depot at 2650 Tulare Street, approximately 0.174-miles east-northeast of the project site, is listed twice on the LUST database. One of the entries are listed as leak being confirmed, and the other listing has much more information. The facility experienced a leak of gasoline into soil in 1995 from subsurface monitoring. The current status of the facility is Completed – Case Closed as of November 24, 1997. Based on the regulatory status, this facility is not expected to have impacted the project site.

- Michael Chevrolet at 1450 O Street, approximately 0.185-miles north of the project site, is listed because of a leak of gasoline into soil reported in 1986. The current regulatory status of the case is listed as Completed – Case Closed as of August 16, 1995. Based on the regulatory status, this facility is not expected to impact the project site.

- A Place For You Foundation at 2201 Stanislaus, approximately 0.209-miles northwest of the project site, is listed twice on the LUST database. The first listing is because of a leak of waste oil with the status listed as Case Closed. The second listing for this facility is from a leak of waste oil reported in 1994 from a tank closure. The current regulatory status is listed as Completed – Case Closed as of August 9, 1996. Based on the regulatory status, this facility is not expected to impact the project site.

- Van Ness & Inyo Parking Lot at 750 Van Ness Street, approximately 0.211-miles south-southeast of the project site, is listed twice on the LUST database. The first listing is from a release of gasoline into a drinking water aquifer and the status is listed as Case Closed. The second listing is from a leak of gasoline into an aquifer used for drinking water supply reported in 1987. The current regulatory status of the facility is listed as Completed – Case Closed as of October 12, 1999. Based on the regulatory status, this facility is not expected to impact the project site.

- 29 additional LUST facilities were listed at a quarter-mile or farther from the project site. Based on the distance from the project site, regulatory status and/or gradient flow direction, these

facilities are not expected to impact the project site. The complete list of facilities is included in Appendix B.

4.1.14 State and Tribal Registered Underground Storage Tanks

The State Water Resources Control Board's Hazardous Substance Storage Container Database maintains a list of USTs regulated by the Resource Conservation and Recovery Act.

- The project site is listed twice on the registered UST list. Both entries are located in Site 1.
    - Courthouse Motor Pool at 1155 M Street is listed on the UST database. One 10,000-gallon gasoline UST was installed on the site on July 16, 1990. The tank is a steel double walled UST equipped with a shutoff and a spill bucket. The tank is also listed on the CA FID UST database.
    - Fresno County Sheriffs Admin at 2200 Fresno Street is listed on the UST database. Although the database does not identify the volume or contents of the UST, based on an interview with Fresno County personnel, it is used as a diesel UST to power the emergency generators for the South Annex Jail.
- The database also identified 11 registered storage tank facilities within a quarter mile radius of the project site.
    - Main Jail at 1225 M Street, approximately 0.009-miles north-northwest of the project site, is listed as having a registered 10,000-gallon fuel oil UST.
    - B.F. Sisk Federal Courthouse, Judicial Council of California, at 1130 O Street, approximately 0.014-miles east-northeast of the project site, is listed as having a registered AST identified with CERSID 10175773 and Facility ID FA0281032.
    - Fresno City Police Dept at 2323 Mariposa Mall, approximately 0.038-miles east of the project site, is listed as having a registered UST permitted through Fresno County with the facility ID FA0267545.
    - Dept of General Services at 1025 P Street, approximately 0.086-miles east-northeast of the project site, is listed as having a 1,320-gallon AST.
    - Federal Courthouse at 2500 Tulare Street, approximately 0.105 miles east of the project site, is listed twice as having a registered 2,000-gallon diesel UST. The tank is equipped with a shutoff, tank alarms, a tank ball float, and a tank spill bucket.
    - Van de Pol Petrleum Universal Facility #105 at 25570 W McKamery Avenue in Tranquillity, approximately 0.105-miles south of the project site, is listed as having a registered AST with EPAID CAL000324258.

- Department of Public Health at 1221 Fulton Mall, approximately 0.111-miles west-southwest of the project site, is listed as having a registered UST with facility ID FA0269762.
- AT&T – SB025 at 1445 Van Ness Avenue #236, approximately 0.220-miles west-northwest of the project site is listed on the UST database twice for a 25,000-gallon diesel UST equipped with a tank alarm and a tank spill bucket. The facility ID is identified as FA0266900.
- Performance 500 at 1506 Van Ness Avenue, approximately 0.250-miles west-northwest of the project site is listed on the UST database with facility ID FA0277404.

4.1.15 State and Tribal Voluntary Cleanup Site

The DTSC maintains a list of low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

- The project site is not listed on the state and tribal voluntary cleanup program.
- The database identified two state and tribal voluntary cleanup program sites within a half mile radius of the project site.
  - PG&E G Street Substation at 1131 G Street, approximately 0.378 miles southwest of the project site, is listed on the VCP database. The current status is listed as Certified as of January 19, 2010.
  - Former Fresno 2 Manufactured Gas Plant Site at Mariposa Street between F and G Streets, approximately 0.421 miles southwest of the project site, is listed on the VCP database. The current status is listed as Active as of February 9, 2010. Based on the distance from the project site and topography, this facility is not expected to impact the project site.

4.1.16 HAZNET

The California Environmental Protection Agency, Department of Toxic Substances Control maintains a list of facility and manifest data. The Hazardous Waste Information System (HAZNET) database includes information hazardous waste shipments for generators, transporters, and TSDFs.

- The project site is listed on the HAZNET Hazardous Waste Tracking System database. Both Site 1 and Site 3 are identified on the HAZNET database.
  - Giumarra Prop Corp at 2311 Fresno Street (Site 3), has a 1997 manifest for 8.428 tons of asbestos-containing waste disposed to a landfill. This was likely generated from the demolition of the former apartment building structure on the now-vacant lot on Site 3.
  - Fresno County Sheriffs Dept at 2200 Fresno Street (Site 1) is listed three times, Fresno County Sheriffs Dept at 2204 Fresno Street (Site 1) is listed twice, and Fresno County at 2280 Fresno

Street (Site 1) is listed on the HAZNET database. The manifests were listed for asbestos-containing waste, unspecified oil-containing waste, and other inorganic solid waste.

4.1.17 CERS HAZ Waste and CA CERS

CERS Haz Waste is a list of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator and RCRA LQ HW Generator Program. CERS is the CalEPA database that combines data about environmentally regulated sites and facilities from a variety of regulated activities across the spectrum of environmental programs including hazardous materials and waste.

- The project site is listed on the CERS TANKS database twice, and the CERS and CERS HAZ WASTE databases.
    - Fresno County Jail at 1155 M Street (Site 1) is listed on the CERS HAZ WASTE and CERS TANKS databases.
    - Fresno County Sheriffs Admin at 2200 Fresno Street (Site 1) is listed on the CERS and CERS TANKS databases.
- The database search identified four facilities within a quarter mile of the project site.
    - B. F. Sisk Federal Courthouse, Judicial Council of California at 1130 O Street, approximately 0.014 miles east-northeast of the project site is listed with CERS ID 10175773 and identified as a chemical storage facility with aboveground petroleum storage.
    - Robert E. Coyle Courthouse at 2500 Tulare Street, approximately 0.105 miles east of the project site is listed with CERS ID 10482526 and identified as a chemical storage facility with aboveground petroleum storage and an underground storage tank.
    - Van De Pol Petrleum Universal Facility #105 at 25570 W McKamery Avenue in Tranquillity, approximately 0.105 miles south of the project site is listed with CERS ID 10399651 and identified as a hazardous waste generator and a chemical storage facility with aboveground petroleum storage.
    - AT&T California – SB025 at 1445/1455 Van Ness Avenue, approximately 0.220 miles west-northwest of the project site is listed with CERS ID 10479529 and identified as a hazardous waste generator and chemical storage facility with an underground storage tank.

4.1.18 Orphan Sites

The EDR database identified 9 sites that were indicated as being potentially in the area and were not mapped due to incomplete address information.

Based on a review of the dates, locations, and current regulatory status the proposed project site is not expected to be impacted by these orphan sites.

4.2 ADDITIONAL ENVIRONMENTAL RECORDS REVIEW

In conformance with ASTM inquiry was made with the additional agencies described below.

4.2.1 Local Brownfield Lists

The DTSC's Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. Eight Brownfield sites were identified on the EnviroStor database in the radius searched for the project site.

- Parcel 468-282-23T at 829 Fulton Street, approximately 0.177-miles south of the project site was identified on the US Brownfields database. An assessment of the facility concluded that no recognized environmental conditions were identified in connection with the facility, and no further investigation was warranted.

- Parcel 466-214-17T at 1258 Broadway, approximately 0.210-miles west-southwest of the project site was identified on the US Brownfields database. An assessment of the facility concluded that no recognized environmental conditions were identified in connection with the facility, and no further investigation was warranted.

- Parcel 466-206-50T at 1900 Tuolumne Street, approximately 0.248-miles west of the project site was identified on the US Brownfields database. An assessment of the facility stated that it was formerly developed with single-family residential and a boarding house from 1888 to the late 1890s when it transitioned to commercial and retail development and the Fresno County Free Library was constructed in 1906. By 1965 all structures were demolished from the facility and it was then developed into a commercial parking lot.

- Commercial Building at 721 Broadway, approximately 0.295-miles south of the project site was identified on the US Brownfields database. The facility was developed with a single-family residence from at least 1885 to about 1918 when it was converted to commercial use. Zibbell's Auto Exchange Garage was on the site in 1918, and Richter Bottling Company operated a wholesale beer distribution center on the facility in 1948. In 1950, the facility contained an auto brake shop, and the facility was used for different auto parts stores after 1950 until about 2008, and has been used for Pool Tables R Us since then.

- Parcels 467-04-20ST, -22ST, -23ST at 801 H Street, approximately 0.307-miles south of the project site was identified on the US Brownfields database. The facility was developed with a warehouse that dates to at least 1885, and a parking lot that dates to the late 1990s. Lead was found in the building materials of the warehouse.

- 735 H Street, approximately 0.348-miles south of the project site was identified on the US Brownfields database. The facility was formerly utilized as a lumber yard in 1960, followed in 1912 by a building. One recognized environmental condition was identified on the facility in that the California Spray Chemical Company occupied a portion of the building from 1931 to 1946.

- American & Foreign Property at 603 Broadway, approximately 0.395-miles south-southeast of the project site was identified on the US Brownfields database. Subsurface soil contamination from benzene, xylene, and 2-methylnaphthalene was identified on the property at concentrations exceeding the site screening levels. However, the contamination was not a threat to groundwater and was not detected in deeper samples.

- Abandoned Gas Station at 655 G Street, approximately 0.493-miles south of the project site was identified on the US Brownfields database. The City of Fresno was directed to submit a workplan to the Fresno County Environmental Health System on November 2, 2004 to assess hydrocarbon impacts to soil beneath the facility.

4.2.2 Local Lists of Hazardous Waste Contaminated Sites

A record search was done on the following databases: CERS HAZ Waste, Clandestine Drug Labs, HIST Cal-Sites Historical CalSites Database, and Toxic Pits Cleanup Act Sites. School Property Evaluation Program records were also searched.

- The project site was identified on the CERS Hazardous Waste database, the CERS TANKS database twice, and the CERS database. Further information is included in Section 4.1.17 and Appendix B.

- The database search identified four local hazardous waste contaminated sites within a quarter mile radius of the project site. See Section 4.1.17 for a discussion on these facilities.

Based on the regulatory status, downgradient location and/or distance from the site, these facilities are not expected to have impacted the project site.

4.2.3 Local Lists of Registered Storage Tanks

A record search was done of the local lists of registered storage tanks. The project site was identified 7 times for Site 1, and an additional 101 registered UST sites were identified with 0.25 miles of the project site. These facilities are duplicates of previous entries listed above in Section 4.1.

4.2.4 High Risk Historical Records

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station,

filling station, auto, automobile repair, auto service station, and dry cleaners. The project site was identified three times, including Site 2 once and Site 3 twice.

- Kalam L M at 2309 Fresno Street (Site 3) is listed in 1942 as a Clothes Presser and Cleaner.
- Kalam Leon at 2317 Fresno Street (Site 3) is listed in 1937 as a Clothes Presser and Cleaner.
- McAlister James W Inc at 2412 Fresno Street (Site 2) is listed in 1932 as Hansen Thompson Ltd for automobile garages and automobile repairing. McAlister James W Inc is listed in 1942 and 1947 for automobile repairing. Leach Motors is listed in 1958 for automobile repairing.

Fifty-eight additional historical facilities were identified within the searched radius. Based on the regulatory status, downgradient location and/or distance from the site, these facilities are not expected to have impacted the project site.

4.2.5 State of California Geologic Energy Management Division

A review of California Division of Geologic Energy Management (CalGEM) Well Finder indicates that there are no oil wells or oil fields in the vicinity of the project site. The closest oil well is located approximately three miles south of the project site. The well is identified as a plugged and abandoned dry hole that was advanced by Mid-Cal Oil and Gas Company in 1951 and later abandoned in 1959 (CalGEM 2023). The dry hole is not expected to have impacted the project site.

4.2.6 San Joaquin Valley Air Pollution Control District

The San Joaquin Valley Air Pollution Control District Permitted Facility database was searched for the project site (APCD 2023). The project site (Site 1) was identified on the database for a diesel-fired emergency standby engine powering an electrical generator at 2200 Fresno Street (Sheriff's Admin) and is identified with Facility ID C-1622. In addition, Site 1 was identified for a diesel-fired emergency standby engine powering an emergency generator and a natural gas-fired emergency standby engine powering an emergency generator at 2204 Fresno Street (S Annex Jail) and is identified with Facility ID C-1624. Two other facilities were identified for the property but were determined to lie outside the project site boundaries, including gasoline dispensers in the underground parking garage and another emergency standby engine powering an emergency generator in the Hall of Records. The onsite permits are included in Appendix A.

4.2.7 Vapor Migration

The ASTM 1527-21 standard states that "for the purposes of this practice, "migrate" and "migration" refers to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface". Thus, this section specifies whether or not we perceive a risk of vapor migration to the subject site.

To assess a vapor migration, risk a review and analysis of the site-specific environmental database report and other reasonably ascertainable records was implemented to assess whether:

1. Off-site properties have documented chlorinated volatile organic compound (VOC) contamination located within 100 feet of the subject property, or

2. Off-site properties have documented volatile petroleum hydrocarbon contamination within 30 feet of the subject property.

Based on the records review, it is unlikely that a potential source of vapor migration currently exists beneath the site from off-site properties. No chlorinated VOC contamination was identified, and underground storage tanks were not identified adjacent or within 30 feet of the project site.

4.2.8 User-Provided Information

The ASTM Standard requires disclosure in the Phase I ESA report whether the user of the report has specialized knowledge about previous ownership or uses of the property that may be material to identifying RECs or HRECs, or whether the user has determined that the property's Title contains environmental liens or other information related to environmental condition of the property, including engineering and institutional controls and Activity and Use Limitations, as defined by ASTM. In addition, we are required by the ASTM Standard to inquire whether the user of the report has prior knowledge that the price of the property has been reduced for environmentally related reasons.

PlaceWorks was informed by the user that to their knowledge there are no liens or other information about the environmental condition of the property in the Title. In addition, the user was not aware of specialized knowledge about previous ownership or uses of the property that may be material to identifying RECs with the exception of the information provided above, and has not indicated that the price of the property has been reduced for environmentally-related reasons.

5. Site Reconnaissance and Key Personnel Interview(s)

Current site conditions were observed during a reconnaissance conducted by PlaceWorks on July 7, 2023. No weather-related conditions or other conditions that would limit our ability to observe the site occurred during our site reconnaissance. PlaceWorks personnel observed the exterior portions of the property, including the property boundaries. PlaceWorks was unaccompanied during the site visit. Site photographs from the reconnaissance are included in Appendix C.

ASTM requires that the current site owner or Key Site Manager and user, if different from the current owner or Key Site Manager, be asked if there are any helpful documents or information that can be made available for review. These consist of environmental site assessment reports, audits, permits, tank registrations, Material Safety Data Sheets, Community Right-to-Know plans, safety plans, hydrogeologic or geotechnical reports, or hazardous waste generator reports.

5.1 CURRENT USE OF THE PROPERTY

The approximately 11.9-acre project site is located along Fresno Street between Van Ness Avenue and O Street in downtown Fresno, California. Site 1 is an L-shaped 7.6-acre portion of the 13.94-acre Courthouse Park parcel located at 2200 Fresno Street and identified with Assessor Parcel Number 466-16-001T which includes underground parking, the South Annex Jail and a Fresno County Sheriff's Department office building. Site 2 is an approximately 2.3-acre portion of the 2.51-acre Eaton Plaza property located at 2400 Fresno Street which includes Assessor Parcel Number 466-09-305T, and Site 3 is an approximately 2.0-acre portion of the 2.96-acre Greater Fresno Area Chamber of Commerce/Office Buildings block which includes Assessor Parcel Numbers 466-113-03, 466-113-06, 466-113-07, and 466-113-08.

5.2 SITE VISIT OBSERVATIONS

5.2.1 General Description of Structures

Site 1 is developed with an office building for the Fresno County Sheriff's Department and the South Annex County Jail. Site 2 is not developed with any structures. Site 3 is developed with three office buildings.

5.2.2 Heating and Cooling System

Central heating and cooling systems were observed on the project site.

5. Site Reconnaissance and Key Personnel Interview(s)

5.2.3 Potable Water Supply and Sewage Disposal System or Septic Systems

Potable water is provided by the City of Fresno Department of Public Utilities Water Division. Sewage disposal systems are provided by the City of Fresno Department of Public Utilities Wastewater Management Division.

5.2.4 Use and Storage of Petroleum Products and Hazardous Materials

A gasoline underground storage tank was observed on the east side of Site 1, east of the South Annex Jail building (see Figure 3). A diesel underground storage tank was observed on the north side of Site 1, north of the Fresno County Sheriff's Department administration building. In addition, two diesel-powered engines for backup emergency generators were observed on Site 1. No staining or odors were observed in the vicinity of these features. No use or storage of petroleum products or hazardous materials was observed on Site 2 or Site 3.

5.2.5 Vehicle Maintenance Lifts

No vehicle maintenance lifts were observed at the project site.

5.2.6 Emergency Generators and Sprinkler System Pumps

No sprinkler system pumps were observed on the project site. Two emergency generators were observed on Site 1. No staining or odors were observed in the vicinity of the emergency generators, and the flooring surrounding the features did not show any evidence of cracking.

5.2.7 Polychlorinated Biphenyls (PCBs) Associated with Electrical or Hydraulic Equipment

A pad mounted transformer was observed along M Street on Site 1, and a pad-mounted transformer was observed behind one of the office buildings on Site 3. No signs of leakage were observed near either transformer. No electrical transmission lines or hydraulic equipment were observed on the project site. Based on the information above, PCBs are not expected to have impacted the project site.

5.2.8 Floor Drain and Sumps

No floor drains and sumps were observed at the project site.

5.2.9 Catch Basins

No catch basins were observed at the project site.

5.2.10 Dry Wells

No dry wells were observed at the project site.

5.2.11 Pits, Ponds, Lagoons, and Pools of Liquid

No pits, ponds, lagoons, or pools of liquid were observed at the project site.

5.2.12 Odors

No odors were observed at the project site.

5.2.13 Stains or Corrosion on Floors, Walls, or Ceilings

No stains or corrosion was observed on floors, walls or ceilings located at the project site.

5.2.14 Stained Soil or Pavement

No stained soil or pavement was observed at the project site.

5.2.15 Stressed Vegetation

No stressed vegetation was observed at the project site.

5.2.16 Solid Waste and Evidence of Waste Filling

Solid waste was observed to be confined in trash enclosures, and no evidence of waste filling was observed on the project site.

5.2.17 Wastewater and Stormwater Discharge

No wastewater discharge was observed on the project site. Stormwater is expected to exit the project site via overland flow to local roadways and creeks.

5.2.18 Monitoring, Water Supply, or Irrigation Wells

No monitoring, water supply or irrigation wells were observed at the project site.

5.3 INTERVIEWS

Aaron Smith, Fresno County Facilities Services Manager, Internal Services Department, participated in an interview on July 7, 2023 for Site 1 which is owned by Fresno County. Mr. Smith was not aware of any leaks, spills, or discharges of hazardous materials on Site 1 or the site vicinity. A questionnaire was completed by Christopher Jones, Principal Staff Analyst for the Fresno County Internal Services Department, Facility Services & Real Property. Mr. Jones was not aware of any leaks, spills, or discharges of hazardous materials to the Site 1 or adjacent to Site 1. Mr. Jones indicated that there are land use restrictions on the South Annex portion of the property due to its jail use, but once the jail is vacated, those land use restrictions would end. Mr. Jones was not aware of any environmental cleanup liens against the properties nor was he aware of any land use limitations

5. Site Reconnaissance and Key Personnel Interview(s)

due to environmental issues. Mr. Jones was also not aware of any environmental cleanups, spills, or chemical releases that may have occurred on the project site.

Albert W. Ramirez who represents Ramirez Commercial Properties, LLC, who owns two parcels on Site 3, participated in filling out a questionnaire for his property. Mr. Ramirez was not aware of any leaks, spills, or discharges of hazardous materials to the Site 3 or adjacent to Site 3. Mr. Ramirez was not aware of any environmental cleanup liens against the properties nor was he aware of any land use limitations due to environmental issues. Mr. Ramirez was also not aware of any environmental cleanups, spills, or chemical releases that may have occurred on Site 3. The questionnaires are included in Appendix D.

6. Data Gap Identification

The landowner for Site 2, and the landowners for 2 of the 4 parcels of Site 3 (APNs 466-113-03 and 466-113-08) were not interviewed for this Phase I Environmental Site Assessment. Other landowners include institutional and commercial properties. Because there are no existing structures older than 1994 on these portions of the project site, this is not considered a significant data gap. Adjacent landowners were not interviewed for this Phase I Environmental Site Assessment. A questionnaire was submitted to the user but to date has not been returned. These are not considered to be a significant data gaps based on the large amount of information already gathered for the project site and adjoining areas.

The Fresno County CUPA was contacted for records of the two underground storage tanks on Site 1, but to date have not responded to our request. However, one gasoline release was documented on Site 1 in 1990 and subsequently received closure in 2011. The database search contained in Appendix B indicates that the project site is not on the Recorded Environmental Cleanup Liens database which is maintained by the DTSC and contains a listing of liens placed upon real properties. The project site is also not listed on the DTSC's Deed Restriction database which lists sites with DTSC with restricted land use. The project site is not listed on NPL Liens, a database the EPA maintains on real property, in order to recover remedial action expenditures when the property owner has received notification of potential liability.

6. Data Gap Identification

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7. Findings and Conclusions

PlaceWorks has performed a Phase I Environmental Site Assessment (ESA) on behalf of the Judicial Council of California (Client) for the select properties located along Fresno Street between Van Ness Avenue and O Street in the City of Fresno, Fresno County, California (Figures 1 and 2). The project site consists of three distinct areas encompassing approximately 11.9 acres. This Phase I ESA was performed in general conformance with the scope and limitations of the ASTM E 1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Exceptions to, or deletions from, this practice are described in Section 1 of this report. Our conclusions are intended to help the user evaluate the "environmental risk" associated with the site, as defined in the ASTM E 1527-21 Standard, and discussed in the Introduction section of this report.

The approximately 11.9-acre project site is located along Fresno Street between Van Ness Avenue and O Street in downtown Fresno, California. Site 1 is an L-shaped 7.6-acre portion of the 13.94-acre Courthouse Park parcel located at 2200 Fresno Street and identified with Assessor Parcel Number 466-16-001T which includes underground parking, the South Annex Jail and a Fresno County Sheriff's Department office building. Site 2 is an approximately 2.3-acre portion of the 2.51-acre Eaton Plaza property located at 2400 Fresno Street which includes Assessor Parcel Number 466-09-305T, and Site 3 is an approximately 2.0-acre portion of the 2.96-acre Greater Fresno Area Chamber of Commerce/Office Buildings block which includes Assessor Parcel Numbers 466-113-03, 466-113-06, 466-113-07, and 466-113-08. The project site is about 0.5 miles northwest of the State Route 41 Freeway and about 0.6 miles northeast of State Route 99 Freeway (Figure 2).

Figure 1 depicts the regional location of the project site, Figure 2 shows the local vicinity of the project site, and Figure 3 is an aerial photograph showing the current conditions of the project site. Regional access to the site is provided by the SR-41 Freeway and the SR-99 Freeway. Local access is from Fresno Street which passes alongside the project site (Figure 3).

The objective of a Phase I ESA is to assess whether "recognized environmental conditions" (REC), historical RECs (HREC), and controlled RECs (CREC) are associated with the subject site. Our conclusions are intended to help the user evaluate the "business environmental risk" associated with the subject site. Our opinion regarding an REC's potential impact on the subject site is based on the scope of our work, the information obtained during the course of our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, and our experience evaluating similar sites.

RECOGNIZED ENVIRONMENTAL CONDITIONS (RECs)

The ASTM E 1527-21 Standard defines an REC in part as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under

7. Findings and Conclusions

conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

The following six RECs were identified in the assessment following the ASTM standard.

- A 10,000-gallon gasoline underground storage tank was installed east of the South Annex Jail at 1155 M Street (Site 1) in 1990.
- A diesel underground storage tank was identified in the grassy area north of the Fresno County Sheriff's Department administration building at 2200 Fresno Street (Site 1).
- An automobile repair shop was located on the northwest portion of Site 2 from at least 1932 to 1958. An auto body repair and painting operation was depicted on the southern end of this same facility in the 1948 and 1950 Sanborn fire insurance maps. Auto repair operations may have used solvents, paints, degreasers, lubricants and oils that contain volatile organic compounds, petroleum hydrocarbons, polychlorinated biphenyls, and/or metals.
- A transformer yard was located on the northeastern portion of Site 2 from at least 1946 to about 1962 based on aerial photographs and the 1948 and 1950 Sanborn fire insurance maps. Polychlorinated biphenyls were most likely used in transformers during this time period.
- Automobile repair shops were depicted on a portion of the former apartment building facing Fresno Street on Site 3 and on the northern portion of Site 3 facing the alley in the 1918 Sanborn fire insurance map. Auto repair operations may have used solvents, paints, degreasers, lubricants and oils that contain volatile organic compounds, petroleum hydrocarbons, polychlorinated biphenyls, and/or metals.
- A cleaners operation was identified in the former apartment building facing Fresno Street on Site 3 from at least 1937 to about 1942. Cleaners may have used tetrachloroethylene for dry cleaning garments and fabrics.

HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS (HRECs)

The ASTM E 1527-21 Standard defines an HREC as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

One HREC was identified for the project site following the ASTM standard. A gasoline underground storage tank was removed from east of the South Annex Jail (Site 1) in 1990 and gasoline was discovered in soil. A case was opened with the Regional Water Quality Control Board and the site status was updated to Completed – Case Closed in 2011.

7. Findings and Conclusions

CONTROLLED RECS ENVIRONMENTAL CONDITIONS

The Standard also requires the identification of controlled RECs (CRECs). The ASTM Standard defines CRECs as

"a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

This assessment has revealed no evidence of CRECs in connection with the project site following the ASTM standard.

BUSINESS ENVIRONMENTAL RISK

A business environmental risk is defined by ASTM E 1527-21 as a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations. Our review identified the following potential business environmental risk:

- Based on the age of the existing buildings on Site 1, the existing buildings facing M Street on Site 3, and the former buildings that existed on Sites 1, 2, and 3, it is possible that residual lead from lead-based paint (LBP) and residual pesticides from termiticides are potentially present in the soils in the vicinity of the former structures.

SUMMARY

Based on the results of this Phase I ESA, PlaceWorks recommends that a Phase II ESA be conducted at the project site to assess the five RECs identified in this report. In addition, if the project site is proposed for sensitive land uses such as residential or childcare, additional soil investigation for lead and pesticides related to the existing buildings on Site 1, the existing buildings facing M Street on Site 3, and the former structures across the project site is recommended.

7. Findings and Conclusions

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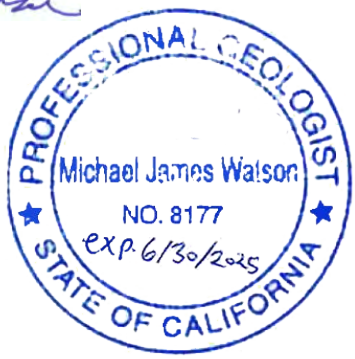
8. Credentials

I declare to the best of my professional knowledge and belief, that I meet the definition of Environmental Professional as defined in the ASTM Standard. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the project site property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Qualifications information for the project personnel is provided in Appendix E.

Michael Watson, PG
Senior Geologist

July 17, 2023



8. Credentials

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9. References

1. American Society for Testing and Materials (ASTM) Practice for ESAs: Phase I Assessments Process (ASTM Standard E 1527-21), November 2021.
2. California Department of Conservation, California Geologic Energy Management Division, 2023. Well Finder website located at https://maps.conservation.ca.gov/doggr/wellfinder/#close.
3. California Division of Mines and Geology (CDMG), 2000. "A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos." August 2000.
4. California Department of Water Resources. 2004. Bulletin 118-California's Groundwater. https://www.water.ca.gov/Programs/Groundwater-Management/Bulletin-118
5. California Geological Survey (CGS), 2002. California Geomorphic Provinces, California Geological Survey Note 36. https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf
6. Fresno Irrigation District, 2022. Groundwater Level Information website. https://www.fresnoirrigation.com/groundwater-level-info
7. Matthews, R. A., and J. L. Burnett, 1965. Geologic Map of California: Fresno Sheet, California Division of Mines and Geology Geologic Atlas GAM-05, scale 1:250,000.
8. PlaceWorks, 2023. Site visit performed by Michael Watson of PlaceWorks on July 7, 2023.
9. United States Department of Agriculture (USDA), 2023. Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
10. United States Environmental Protection Agency (EPA), 2023. California – EPA Map of Radon Zones. https://www.epa.gov/sites/production/files/2014-08/documents/california.pdf
11. United States Geological Survey (USGS), 2022. 7.5' Topographic Series, Fresno South, California Quadrangle Map, scale 1:24,000.
12. Van Gosen, B. S., and J. P. Clinkenbeard, 2011. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California, USGS Open-File Report 2011-1188, scale 1:990,000.

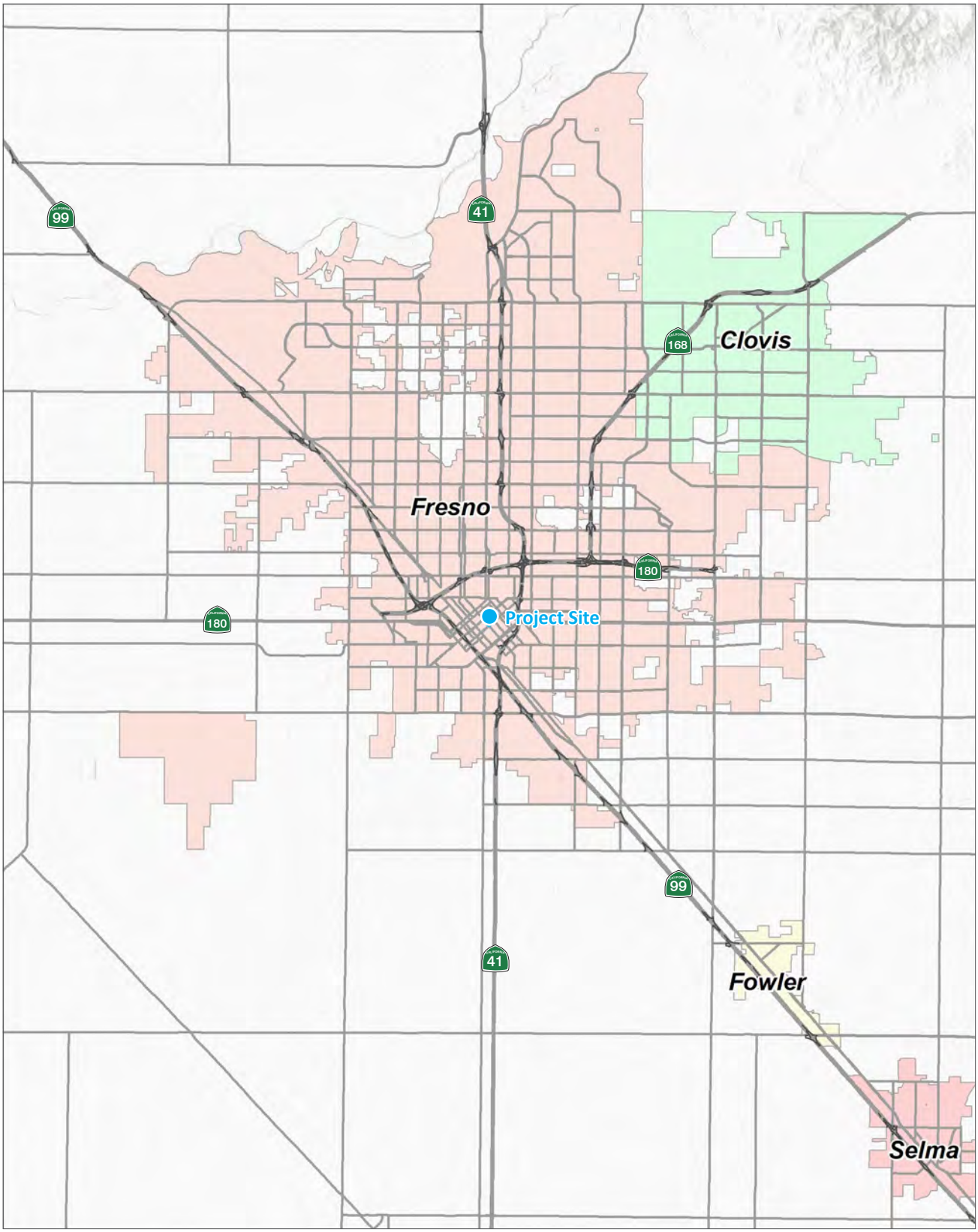
9. References

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Figures

Figures

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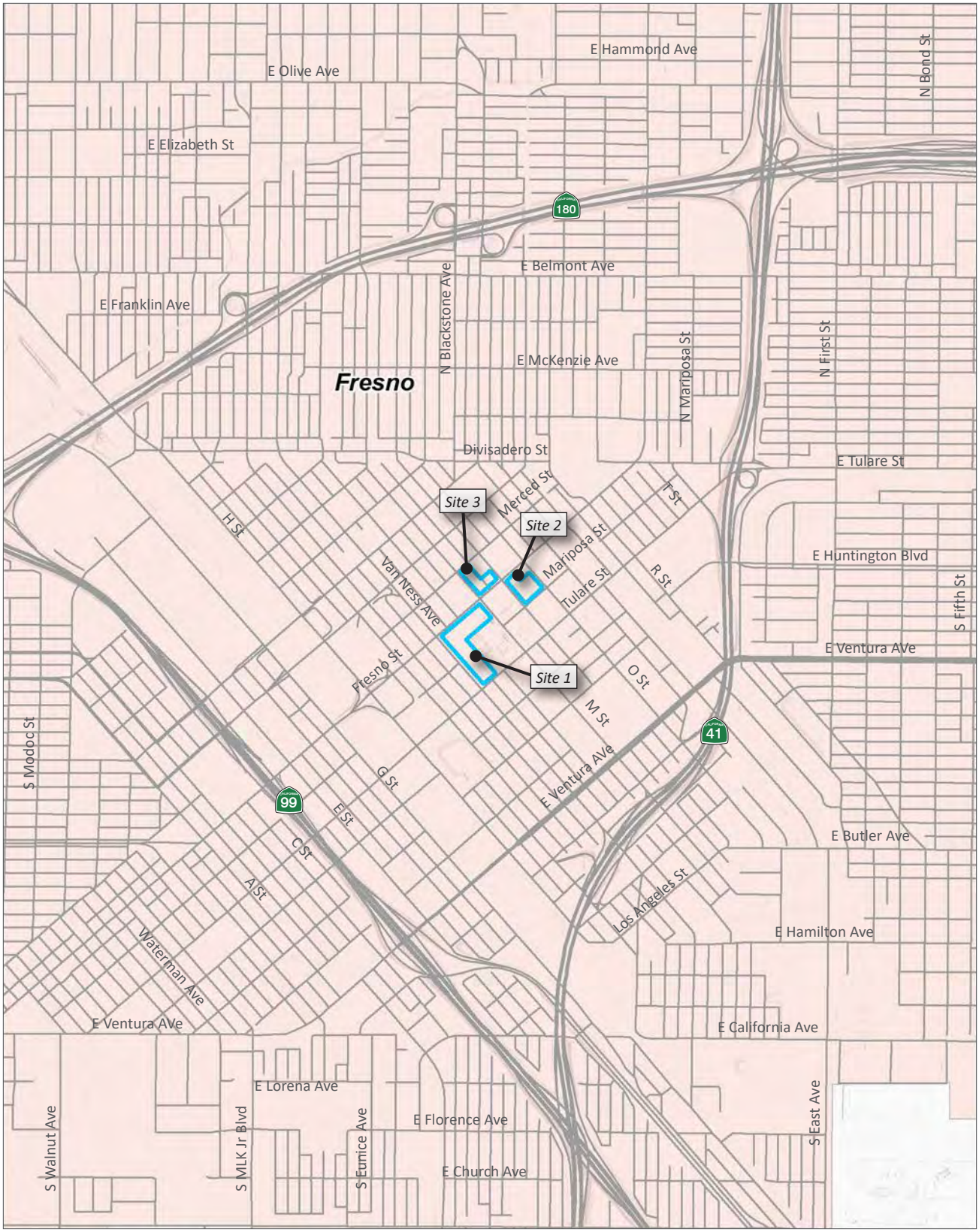


Source: Generated using ArcMap 2023.

0 3
Scale (Miles)

Note: Unincorporated county areas are shown in white.

Figure 1
Regional Location



Source: Generated using ArcMap 2023.

0 2,000
Scale (Feet)

Project Sites

Note: Unincorporated county areas are shown in white.

Figure 2
Local Vicinity



Source: Nearmap 2023.

0 300
Scale (Feet)

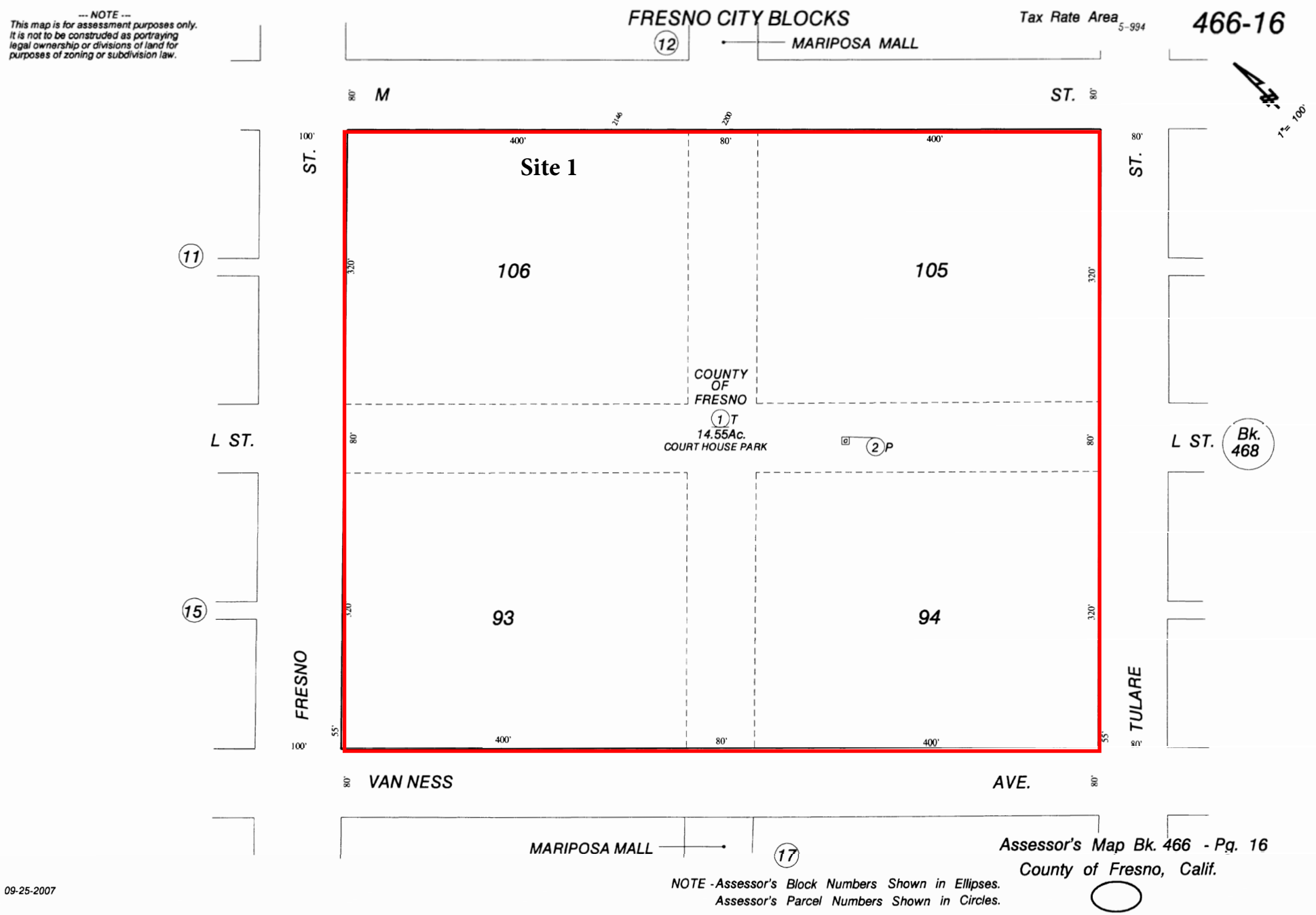
Project Sites

Figure 3
Aerial Photograph

Appendix A. Research Documentation

Appendix

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--- NOTE ---
This map is for assessment purposes only.
It is not to be construded as portraying
legal ownership or divisions of land for
purposes of zoning or subdivision law.
FRESNO CITY BLOCKS
Tax Rate Area 5-994
466-16
12
MARIPOSA MALL
M
ST.
80'
100'
2146
220
400'
80'
Site 1
106
105
320'
COUNTY
OF
FRESNO
1 T
14.55Ac.
COURT HOUSE PARK
2 P
11
L ST.
Bk.
468
15
93
94
55'
FRESNO
TULARE
VAN NESS
AVE.
MARIPOSA MALL
17
1"= 100'
09-25-2007
NOTE - Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.
Assessor's Map Bk. 466 - Pg. 16
County of Fresno, Calif.


LIMITS OF SITE 1 INVESTIGATION
EXISTING BUILDINGS TO BE REMOVED WITHIN LIMIT LINE, TYP.
EXISTIN
TO REM
LIMIT LI

Appendix D. Questionnaires

PLACEWORKS

Environmental Site Assessment Questionnaire for Owner

The following information is requested to evaluate the potential for environmentally-related impacts and property contamination. This questionnaire is to be completed by the owner of the property, or its authorized representative.

PART I

1.	Project description: The Client requested the preparation of a Phase I Environmental Site Assessment (ESA) as part of its due diligence responsibilities for the proposed project. The project site includes portions of three city blocks, referred to as Site 1, Site 2, and Site 3, in downtown Fresno, California.
2.	Property address(es) and Assessor Parcel Number(s) (APN): The project site is located along Fresno Street between Van Ness Avenue and O Street. Site 1 is an L-shaped 7.6-acre portion of the 13.94-acre Courthouse Park parcel located at 2200 Fresno Street and identified with Assessor Parcel Number 466-16-001T which includes underground parking, the South Annex Jail and a Fresno County Sheriff's Department office building. Site 2 is an approximately 2.3-acre portion of the 2.51-acre Eaton Plaza property located at 2400 Fresno Street which includes Assessor Parcel Number 466-09-305T, and Site 3 is an approximately 2.0-acre portion of the 2.96-acre Greater Fresno Area Chamber of Commerce/Office Buildings parcel which includes Assessor Parcel Numbers 466-113-03, 466-113-06, 466-113-07, and 466-113-08.
3.	Current property owner (name, address, telephone number): Fresno County is the owner for Site 1. The owners for Site 3 are not yet identified.
4.	Current property development/improvements: Site 1 is developed with Courthouse Park, underground parking, the South Annex Jail and a Fresno County Sheriff's Department office building. Site 2 is developed with a parking lot, and Site 3 is developed with office buildings.
5.	Date(s) of current property development/improvements: Site 1 appeared to have the current development in place by 1970 based on a review of Sanborn maps and aerial photographs. The Sheriff's building was built in 1969, the Jail in 1942 with the annex built in 1960, and the underground parking was in place by 1967. Site 2 appeared to have the current development in place by 1970. Site 3 appeared to have the current configuration by 2006, with the office buildings along M Street noted in the 1970 Sanborn map, and the Chamber of Commerce building apparent in the 2006 aerial photograph.
6.	Past property use, development/improvements: Site 1 was labeled as Courthouse Square as early as 1888, with a park on most of the site since then. Site 2 formerly had a used car dealership, a flour mill and warehouse, a First Christian Church, and residential development going back to at least 1888. Site 3 formerly had a St. James Episcopal Church, auto repair shops, and residential development including three domestic water wells going back to at least 1888.
7.	Neighboring property uses: The Fresno Water Tower, Veterans Memorial Museum, Fresno County Jail, a Bureau of Reclamation office building, a methadone clinic, the Crocker Building, a Wells Fargo, and the Fresno County Jail are located north of the site. Office buildings are located west and east of the site. The Fresno County Public Library, office buildings, Fresno County Superior Court building, and Fresno County Hall of Records building are located south of the site.

PLACEWORKS

PART II

1. Are you aware of any environmental cleanup liens against the property that are filed under federal, tribal, local or state law?	Yes	**No**
2. Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded in a registry under federal, tribal, state or local law?	**Yes**	No
3. Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the *property* or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?	**Yes**	No
4. Are you aware of any commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, (a) do you know of specific chemicals that are present at the *property?* (b) do you know of spills or other chemical releases that have taken place at the *property?* (c) do you know of any environmental cleanups that have taken place at the *property?*	**Yes**	No
5. Based on your knowledge and experience related to the *property*, are there any obvious indicators that point to the presence or likely presence of contamination at the *property?*	Yes	**No**
6. If a property transaction is occurring in conjunction with this environmental assessment, does the purchase price of this *property* reasonably reflect the fair market value of the *property?* If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property?*	**Yes**	No
7. Are you aware of any past or present above ground or underground storage tanks on the *property*? To your knowledge, has there ever been any hazardous substances or wastes stored on the *property?*	**Yes**	No

If a "Yes" response was provided to Questions 1 – 5 or a "No" response was provided to Question 6, please provide details below:

2. There are some land-use restrictions regarding the jail portions of the property, though as the West Annex Jail comes online, the County plans to wind down all jail operations on the South Annex jail. That will allow the County to end any jail-related limitations on the site.

3. The County operates the jail to the north of the property and several of the office the office buildings nearby, including the Hall of Records and the Crocker building. There are no operations that utilize chemicals or processes that that would be of concern at those sites.

4 & 6. There is an underground gasoline tank fueling County vehicles in the B1 parking area. There is also a diesel tank servicing the generator for the Sheriff's Administration building. Both are currently in use and are actively maintained. There are also generators for two other buildings in the parking structure, but outside of the delineated area, one for the courthouse and another for the Hall of Records. These both have integrated belly fuel tanks. The County is responsible for maintaining the Hall of Records tank while the courts are responsible for the other. Additionally, due to the age of the buildings, we would expect that some of the construction materials of the South Jail and the Sheriff's Administration Building would contain some lead and

asbestos, but nothing that would qualify as a spill or that would have required a cleanup operation on the property.

I certify that the information provided herein is true and correct to the best of my knowledge as of the date signed below.

Name (Printed/Typed): Christopher L Jones

Signature: _____ Date: 7.14.2023

PLACEWORKS

PART II

1.	Are you aware of any environmental cleanup liens against the property that are filed under federal, tribal, local or state law?	Yes **No**
2.	Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded in a registry under federal, tribal, state or local law?	Yes **No**
3.	Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the *property* or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?	Yes **No**
4.	Are you aware of any commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, (a) do you know of specific chemicals that are present at the *property?* (b) do you know of spills or other chemical releases that have taken place at the *property?* (c) do you know of any environmental cleanups that have taken place at the *property?*	Yes **No**
5.	Based on your knowledge and experience related to the *property*, are there any obvious indicators that point to the presence or likely presence of contamination at the *property?*	Yes **No**
6.	If a property transaction is occurring in conjunction with this environmental assessment, does the purchase price of this *property* reasonably reflect the fair market value of the *property?* If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property?*	~~Yes~~ ~~No~~ N/A
7.	Are you aware of any past or present above ground or underground storage tanks on the *property*? To your knowledge, has there ever been any hazardous substances or wastes stored on the *property?*	Yes **No**

If a "Yes" response was provided to Questions 1 – 5 or a "No" response was provided to Question 6, please provide details below:

I certify that the information provided herein is true and correct to the best of my knowledge as of the date signed below.

Name (Printed/Typed): Albert W. Ramirez, Member

Signature: _____ Date: 7-13-23

Environmental Site Assessment Questionnaire for Client

The following information is requested to evaluate the potential for environmentally-related impacts and property contamination. This questionnaire is to be completed by the User of the Phase I Environmental Site Assessment, as defined by ASTM E-1527-21, or its authorized representative.

PART I

1. Project description: The Client requested the preparation of a Phase I Environmental Site Assessment (ESA) as part of its due diligence responsibilities for the proposed project. The project site includes portions of three city blocks, referred to as Site 1, Site 2, and Site 3, in downtown Fresno, California.
2. Property address(es) and Assessor Parcel Number(s) (APN): The project site is located along Fresno Street between Van Ness Avenue and O Street. Site 1 is an L-shaped 7.6-acre portion of the 13.94-acre Courthouse Park parcel located at 2200 Fresno Street and identified with Assessor Parcel Number 466-16-001T which includes underground parking, the South Annex Jail and a Fresno County Sheriff's Department office building. Site 2 is an approximately 2.3-acre portion of the 2.51-acre Eaton Plaza property located at 2400 Fresno Street which includes Assessor Parcel Number 466-09-305T, and Site 3 is an approximately 2.0-acre portion of the 2.96-acre Greater Fresno Area Chamber of Commerce/Office Buildings parcel which includes Assessor Parcel Numbers 466-113-03, 466-113-06, 466-113-07, and 466-113-08.
3. Current property owner (name, address, telephone number): Fresno County is the owner for Sites 1 and 2. The owners for Site 3 are not yet identified.
4. Current property development/improvements: Site 1 is developed with Courthouse Park, underground parking, the South Annex Jail and a Fresno County Sheriff's Department office building. Site 2 is developed with a parking lot, and Site 3 is developed with office buildings.
5. Date(s) of current property development/improvements: Site 1 appeared to have the current development in place by 1970 based on a review of Sanborn maps and aerial photographs. The Sheriff's building was built in 1969, the Jail in 1942 with the annex built in 1960, and the underground parking was in place by 1967. Site 2 appeared to have the current development in place by 1970. Site 3 appeared to have the current configuration by 2006, with the office buildings along M Street noted in the 1970 Sanborn map, and the Chamber of Commerce building apparent in the 2006 aerial photograph.
6. Past property use, development/improvements: Site 1 was labeled as Courthouse Square as early as 1888, with a park on most of the site since then. Site 2 formerly had a used car dealership, a flour mill and warehouse, a First Christian Church, and residential development going back to at least 1888. Site 3 formerly had a St. James Episcopal Church, auto repair shops, and residential development including three domestic water wells going back to at least 1888.
7. Neighboring property uses: The Fresno Water Tower, Veterans Memorial Museum, Fresno County Jail, a Bureau of Reclamation office building, a methadone clinic, the Crocker Building, a Wells Fargo, and the Fresno County Jail are located north of the site. Office buildings are located west and east of the site. The Fresno County Public Library, office buildings, Fresno County Superior Court building, and Fresno County Hall of Records building are located south of the site.

PART II

1.	Are you aware of any environmental cleanup liens against the property that are filed under federal, tribal, local or state law?	**Yes**	**No**
2.	Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded in a registry under federal, tribal, state or local law?	**Yes**	**No**
3.	Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the *property* or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?	**Yes**	**No**
4.	Are you aware of any commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, (a) do you know of specific chemicals that are present at the *property?* (b) do you know of spills or other chemical releases that have taken place at the *property?* (c) do you know of any environmental cleanups that have taken place at the *property?*	**Yes**	**No**
5.	Based on your knowledge and experience related to the *property*, are there any obvious indicators that point to the presence or likely presence of contamination at the *property?*	**Yes**	**No**
6.	If a property transaction is occurring in conjunction with this environmental assessment, does the purchase price of this *property* reasonably reflect the fair market value of the *property?* If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property?*	**Yes**	**No**
7.	Are you aware of any past or present above ground or underground storage tanks on the *property*? To your knowledge, has there ever been any hazardous substances or wastes stored on the *property?*	**Yes**	**No**

If a "Yes" response was provided to Questions 1 – 5 or a "No" response was provided to Question 6, please provide details below:

I certify that the information provided herein is true and correct to the best of my knowledge as of the date signed below.

Name (Printed/Typed): _____

Signature: _____ Date: _____

Appendix H Phase II Environmental Site Assessment

MOORE TWINING ASSOCIATES, INC.

PHASE II ENVIRONMENTAL SITE ASSESSMENT
JUDICIAL COUNCIL OF CALIFORNIA COURTHOUSE PARK REDEVELOPMENT
2200 FRESNO STREET (SOUTHWEST CORNER OF THE INTERSECTION OF FRESNO AND M STREETS)
FRESNO, CALIFORNIA

Prepared for:

Mr. Craig Roberts
Precision Civil Engineering Inc.
1234 O Street
Fresno, California 93721

Prepared by:

Moore Twining Associates, Inc.
2527 Fresno Street
Fresno, California 93721

March 10, 2026
Revised April 27, 2026

C88004.01

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Drawing 2	Single Completed Soil Gas Probe Construction Diagram – SG-1 and SG-3
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Table 3	Soil Analytical Results – STLC Lead
Table 4	Soil Gas Purge and Sample Times
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APPENDICES

Appendix A	Standard Operation Procedures
Appendix B	Soil Boring Logs
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PHASE II ENVIRONMENTAL SITE ASSESSMENT
JUDICIAL COUNCIL OF CALIFORNIA COURTHOUSE PARK REDEVELOPMENT
2200 FRESNO STREET (SOUTHWEST CORNER OF THE INTERSECTION OF FRESNO AND M STREETS)
FRESNO, CALIFORNIA

1.0 INTRODUCTION

This report presents the results and findings of a Phase II Environmental Site Assessment (Phase II ESA) conducted to assess soil and soil gas conditions at the proposed Judicial Council of California Courthouse Park Redevelopment project located at 2200 Fresno Street in Fresno, California (Subject Property). This investigation was conducted to assess for the presence of petroleum hydrocarbons in subsurface soil and soil gas in the vicinity of the existing gasoline and diesel underground storage tank (UST) locations and assess near surface soil along the footprint of the onsite buildings for the presence of lead.

2.0 BACKGROUND INFORMATION

The Phase II ESA was conducted on an approximately 7.6-acre portion of a larger parcel that totals approximately 13.94-acres, located at 2200 Fresno Street (southwest corner of Fresno Street and M Street), in the city of Fresno, California. The Subject Property was previously identified as Site 1 in the former Phase I Environmental Site Assessment (Phase I) report. Drawing 1 depicts the Subject Property boundary. The parcel is associated with the Fresno County assessor's number 466-16-001T, which includes underground parking, the South Annex Jail and a Fresno County Sheriff Department building. Based on the information provided, Judicial Counsel of California (JCC) is looking to redevelop the Subject Property with a new Courthouse Park (judicial buildings, jail, and Fresno County Sherriff's offices).

Per the Regional Water Quality Control Board's Geotracker database, the Subject Property is part of a closed case. *In July 1990, at the Subject Property, an underground storage tank (UST), previously installed in a below ground concrete vault, was removed and replaced. Soil samples collected from three locations beneath the removed fill and venting piping contained total petroleum hydrocarbons as gasoline (TPHg) concentrations up to 3,700 milligrams per kilogram (mg/kg), and ethylbenzene, and xylenes, but no benzene or toluene. A soil assessment conducted in August 2006 determined that the TPHg did not migrate to 10 feet below ground surface (bgs). In September 2007, additional work discovered TPHg concentrations of 9,700 mg/kg, toluene at 29 mg/kg, ethylbenzene at 88 mg/kg. Groundwater is estimated to be more than 100 feet beneath the Subject Property and is not threatened by the small quantity of petroleum hydrocarbons remaining in the soils. The Central Valley Region Regional Water Control Board (CVRRWQCB) concluded the release is unlikely to pose a risk to human health, the environment, or groundwater. Dermal contact with hydrocarbons is unlikely, since the Subject Property is paved. The gasoline hydrocarbons remaining in the soil are expected to be degraded by natural attenuation. The CERRWQCB recommended a Standard UST Closure Letter be mailed to the responsible party*.

A subsequent Phase I ESA was completed by PlaceWorks, dated July 2023. The Phase I ESA is summarized below:

PlaceWorks completed a Phase I ESA on select properties, including the Subject Property, for Judicial Council of California. PlaceWorks identified two Recognized Environmental Conditions (RECs) associated with the Subject Property (Site 1) associated with two USTs on the property; one (1) 10,000-gallon gasoline UST and one (1) diesel UST of an undetermined size. Additionally, one Historical Recognized Environmental Conditions (HREC) was identified on the Subject Property in association with the upgrade of the existing 10,000-gallon UST (previously discussed). The Phase I ESA also identified a Business Risk associated with the age of the buildings; due to the age of the buildings, the potential exists for residual lead from lead-based paint to be present in near surface soils around the edge of the buildings.

3.0 PURPOSE OF INVESTIGATION

The purpose of this Phase II investigation was to assess for the presence of petroleum hydrocarbons in subsurface soil and soil gas in the vicinity of the existing gasoline and diesel underground storage tank (UST) locations and assess near surface soil along the footprint of the onsite buildings for the presence of lead. Information obtained from this investigation was intended to provide an initial screening to determine if contaminants of concern are present in the sampled media at concentrations that could affect human health that may require mitigation and/or special handling or disposal as part of the proposed project.

4.0 SCOPE

The scope of this Phase II ESA included the following:

- Advanced six (6) soil borings to varying depths of up to 25 feet and collected soil samples for analysis of total petroleum hydrocarbons as gasoline (TPHg), diesel (TPHd), and motor oil (TPHmo) by EPA Method 8015M, VOCs by EPA Method 8260B, and LUFT 5 Metals (cadmium, lead, nickel, chromium, and zinc) by EPA Method 6010B;
- Collected twenty-five (25) surface soil samples along the footprint of the onsite buildings for analysis of lead;
- Installed and sampled five (5) temporary soil gas wells for analysis of TPH and VOCs;
- The field and analytical data were evaluated to assess if a release of petroleum hydrocarbons or select metals have occurred at the Subject Property; and
- Prepared this report to present our procedures, findings, conclusions, and recommendations.

5.0 INVESTIGATIVE PROCEDURES

This investigation consisted of a field exploration, a laboratory testing program, analysis of our findings, and preparation of this report.

5.1 Soil Sampling

The work and field activities were intended to be consistent with standard of practice for soil investigation activities conducted in California and as outlined in American Standard Test Method (ASTM) E1903-19. The investigative procedures related to this assessment are summarized below and generally are consistent with Moore Twining's Standard Operating Procedures (SOPs). The SOPs applicable to the work performed are included in Appendix A.

To evaluate current subsurface soil conditions, six (6) soil borings (E-1 through E-6) and five (5) soil gas wells (SG-1 through SG-5) were drilled at the Subject Property to depths of up to 25 feet below site grade (bsg) in the area of the existing USTs and associated product lines as depicted on Drawing 1 of this report.

The drilling activities were performed under the direction of a California registered Professional Geologist. The 25-foot depth soil borings (E-1, E-3, E-4, E-5, and E-6) and the dual-completed soil gas wells (SG-4 and SG-5) were drilled using Moore Twining's CME 75 mobile drill rig equipped with hollow stem auger. During drilling of these soil borings, soil samples were collected at a minimum of 5-foot intervals starting at 5 feet using an 18-inch long, 2-inch diameter standard, split spoon sampler lined with three stainless-steel sleeves. Upon retrieval of the soil sampler, the bottom sleeve was preserved in the field for laboratory testing. Prior to field preservation, sub-cores of soil were collected from the soil sleeves utilizing Encore sampling devices per EPA Method 5035 and preserved in the field for laboratory testing. The content of the middle sleeve was field screened for the presence of contamination and used to describe the soil.

A standard hand auger device was used to drill and sample soil boring E-2 (total depth of 20 feet bsg) and soil gas probes SG-1, SG-2, and SG-3 (total depths of up to 15 feet bsg). Soil samples were collected from these borings by driving stainless-steel sample sleeves into undisturbed soil at the target depth of the augered hole utilizing a slide hammer.

During drilling activities, soil samples were field screened for evidence of petroleum hydrocarbons. Field screening procedures included observation of the soil for lithologic data, odor, and unusual staining. Soil descriptions and the results of the field screening were logged on a field boring log consistent with the Unified Soil Classification System (USCS). The soil boring logs for borings E-1 through E-6 and soil gas probes SG-1 through SG-5 are included in Appendix B of this report. Generally, as described on the boring logs, no hydrocarbon odors or staining were noted from the borings drilled during this investigation. Following completion of the soil sampling, the borings not used for placement of soil gas probes were backfilled with neat cement and patched to match existing surface.

The soil samples were temporarily stored in a properly chilled ice chest with artificial ice and transported to Moore Twining's laboratory under chain-of-custody documentation. Moore Twining is a California Department of Health Services certified hazardous waste laboratory (Certificate No. 1371) for the analysis outlined herein. Selected soil samples collected from soil borings E-1 through E-6 and soil gas probes SG-1 through SG-5 were analyzed in the laboratory for TPHg, TPHd, and TPHmo by EPA Method 8015M, VOCs by EPA Method 8260B, and LUFT 5 Metals (cadmium, lead, nickel, chromium, and zinc) by EPA Method 6010B.

5.2 Soil Gas Probe Installation and Sampling

Five temporary soil gas probes (SG-1, SG-2, SG-3, SG-4, and SG-5) were installed on the property as shown on Drawing 1. Soil gas probes SG-1, SG-2, and SG-3 were single completed to a depth of approximately 10 to 15 feet bsg utilizing a 3-inch diameter hand auger to create each boring. Please note that soil gas probe SG-2 was located near the bottom of the ramp entering the basement garage, thus this well was completed to a depth of 15 feet below the basement grade which represents approximately 25 feet below site grade at the diesel UST location. Upon reaching total depth, the single completed soil gas probes were constructed by installing a 1-inch long porous stainless-steel implant (filtration rating of 50 microns) centered within a 1-foot long filter pack composed of No. 2/12 clean sand. Prior to installation, the probes were attached to ¼-diameter Teflon tubing and set at a depth of 9.5 feet bsg for SG-1 and SG-3 and a depth of approximately 14.5 feet below basement grade at SG-2 location. Following installation of the probes and filter pack, a 1-foot long transition seal composed of dry granular bentonite were installed and a surface seal of neat cement were installed to near surface grade. Single completed soil gas probe construction diagrams are included as Drawings 2 and 3.

Soil gas probes SG-4 and SG-5 were dual completed to target depths of 10 and 25 feet below site grade. The nested soil gas probes were installed by drilling to a depth of 25 feet bsg utilizing our CME 75 mobile drill rig equipped with 4-inch diameter solid flight auger. After the borings were drilled, the deeper soil gas probes were constructed of 1/4-inch diameter Teflon tubing with stainless steel tips attached to the bottom end of the tubing and then placed at depths of approximately 24.5 feet bsg. A filter pack, consisting of No. 2/12 clean sand was placed between the depths of 24 and 25 feet bsg opposite the stainless-steel tip. One- foot thick dry granular bentonite seals were installed above the filter pack from a depth interval of 23 feet to 24 feet bgs which was subsequently sealed with neat cement to a depth of 10 feet bgs. The shallow soil gas probes were then placed at depths of approximately 9.5 feet bsg. A filter pack, consisting of No. 2/12 clean sand, will be placed between the depths of 9 and 10 feet bsg opposite the stainless-steel tip. One-foot thick dry granular bentonite seals were installed above the filter pack from 8 to 9 feet bgs which was subsequently sealed with neat cement to the surface. A dual completed soil gas probe construction diagram is included as Drawing 4.

Following installation, the soil gas probe tubing was capped and allowed to equilibrate a minimum of 48 hours prior to sample collection. The samples were collected in accordance with methodologies outlined in the California Department of Toxic Substances Control's (DTSC) June 2015 *Advisory - Active Soil Gas Investigations.*

Prior to purging each probe, a vapor-tight valve was connected to the vapor probe tubing, a laboratory-supplied flow regulator rated at between 100 and 150 milliliters per minute was attached to the valve with ¼-inch diameter tubing and a 1-liter sample Summa canister was attached to the flow regulator for sample collection. A vapor-tight valve was then connected to the down-hole side of the regulator and the sample collection apparatus was tested for tightness by opening and closing the purge valve to perform a "shut-in test". As part of the shut-in test, the vacuum gauges on the sample tee was monitored for 5 minutes to assess if any leaks exist in the sample train. If the gauge vacuum could not be maintained for a minimum of 5 minutes, the sample train was evaluated, and leaks were repaired and/or a new sample train was used.

Each vapor probe was purged by attaching a laboratory-supplied purge Summa canister to the flow regulator and a minimum of three (3) tubing/filter pack pore space/casing volumes were purged prior to sampling. Following purging, the purge valve was closed on the flow regulator and the sample container valve was opened and a rigid shroud placed over the sample apparatus. A tracer compound, 90% isopropyl alcohol (IPA tracer gas), was placed in a container set inside the shroud to create a tracer gas atmosphere. The shroud atmosphere was monitored using a PID to confirm the presence of the IPA tracer gas. The technician attempted to maintain detectable IPA concentrations within the shroud of approximately 10 parts per million (ppm) or greater as measured with a PID. The vapor samples were analyzed for IPA by EPA Method TO-15 to determine if the samples had been compromised by surface air during the sampling event. Soil vapor sampling data (purge time, sample time, etc.) are summarized in Table 4. A typical soil vapor sampling apparatus diagram is presented on Drawing 5. One outdoor air sample identified as OA-1 was collected during the sampling of soil gas well SG-1 to assess background outdoor air quality.

Following sample collection, the sample valve was closed once the pressure gauge indicated a pressure of minus 3 to 5 inches of mercury remained within the sample container. Vapor sample collection times were recorded during sample collection. The flow regulator was then removed from the sample container, the sample inlet capped with the laboratory supplied threaded cap and the samples were labeled. The collected vapor samples were shipped under chain-of-custody documentation to Environmental Analytical Services, Inc. (EAS), a California-state certified analytical laboratory located in San Luis Obispo, California. The soil vapor samples were analyzed for VOCs, TPHg or TPHd, and the tracer gas IPA using EPA Method TO-15. After completion of the sampling, the Teflon tubing was pulled from each sample location and the surface was finished to match surrounding surface areas.

6.0 RESULTS AND FINDINGS

Soil and soil gas sample analytical results are included in Tables 1, 2, 3 and 5 of this report. Included in these table are published screening levels modified for California to assess human health risk. The soil sample laboratory analytical report and chain-of-custody documentation are included in Appendix C of this report.

As summarized in Table 1, soil sample analytical results revealed no detectible concentrations of TPH and VOCs in the subsurface soil samples analyzed from the Subject Property except for negligible concentrations of TPHmo, toluene, and methylene chloride. These detected concentrations did not exceed their respective residential or commercial/industrial human health screening levels and are therefore considered a low threat to human health and the environment.

As depicted in Table 2, no heavy metal analyzed exceeded their respective residential or commercial/industrial human health screening levels and are therefore considered a low threat to human health and the environment. Additionally, no heavy metal analyzed exceeded their respective total threshold limit concentration (TTLC) nor 10 times their respective soluble threshold limit concentration (STLC trigger concentration) for hazardous waste soil classification (for disposal purposes) except for lead at two (2) surface soil sample locations along the buildings (sample L7 and L21). As indicated in Table 2, the lead concentration at sample location L7 (70 mg/kg) and L21 (53 mg/kg) exceeded 10 times the soluble threshold limit concentration (STLC trigger concentration of 50 mg/kg) for waste soil disposal characterization. As such, these samples were analyzed for STLC lead utilizing the California Waste

Extraction Test. Results of the STLC lead for these samples are included in Table 3. Reported STLC lead concentrations for sample location L7 and L21 were 4.2 milligrams per liter (mg/L) and 3.7 mg/L, respectively, which are below the hazardous waste STLC screening criteria for lead of 5 mg/L.

As depicted in Table 3, soil gas sample analytical results reported detectable concentrations of seventeen (17) VOCs, two (2) of which had detectable concentrations exceeding residential screening levels (benzene had detectable concentrations ranging from 2.46 micrograms per cubic meter [µg/m^3] to 13.8 µg/m^3 and chloroform has detectable concentrations ranging from 1.60 µg/m^3 to 6.18 µg/m^3). No VOCs were detected at concentrations above a commercial screening level. Concentrations of TPHg and/or TPHd were detected below both residential and commercial screening levels. The concentrations of benzene detected in outdoor air (3.77 µg/m^3) were generally similar to the benzene concentrations detected from the soil gas samples collected at the site except for soil gas well SG4 at a depth of 25 feet (located near the diesel UST location).

As depicted in Table 3, the tracer gas 2-propanol (IPA) was not detected in the soil gas samples collected except at well location SG-4 at a depth of 25 feet which reported a concentration of 5.9 µg/m^3. This detected concentration of tracer gas was below 0.01 percent of the concentration measured inside the shroud during sampling (Table 4). As such, the tracer gas analytical results indicate that the sample trains were not significantly compromised during sampling.

7.0 CONCLUSIONS

A total of eleven (11) soil borings were drilled to maximum depths of 25 feet bsg in the vicinity of the fuel USTs and reported product line locations at the Subject Property. As noted on the boring logs, no field evidence of petroleum hydrocarbons were observed during drilling activities. Soil sample analytical results revealed no detectible concentrations of TPH or VOCs, except for negligible concentrations of TPHmo, toluene, and methylene chloride below their respective residential and commercial/industrial human health screening levels and are therefore considered a low threat to human health and the environment. No heavy metal analyzed from the soil samples collected exceeded their respective residential or commercial/industrial human health screening levels nor hazardous waste screening criteria and are therefore considered a low threat to human health and the environment.

As depicted in Table 3, concentrations of TPHg and/or TPHd in soil gas were detected below both residential and commercial screening levels and are therefore considered a low threat to human health and environment. Soil gas sample analytical results reported detectable concentrations of seventeen (17) VOCs, two (2) of which had concentrations exceeding residential screening levels (benzene and chloroform) but were below commercial screening levels. Chloroform is often associated with volatilization from chlorinated drinking water and is likely not associated with a fuel release at the site. The concentrations of benzene detected in outdoor air were generally similar to the benzene concentrations detected from the soil gas samples collected at the site except for soil gas well SG4 at a depth of 25 feet bsg (located near the diesel UST location). No VOCs were detected in soil gas at concentrations above a commercial screening level and are therefore considered a low threat to human health and environment for the proposed commercial property use. Commercial property can be defined as property used for business, profit, or public use such as government office buildings, courthouses, and police stations.

Based on the findings of this investigation, no significant releases of fuel were found in the areas sampled during this investigation that would present an elevated risk to human health and environment for the proposed property use (commercial). Additional environmental assessments for the areas investigated are not warranted at this time.

8.0 LIMITATIONS

The scope of the investigation was intended to be an interactive process. The purpose of an environmental assessment is to reasonably characterize existing Subject Property conditions based on the available data. In performing such a study, it is understood that a balance must be struck between a reasonable inquiry into the Subject Property conditions and an exhaustive analysis of each conceivable environmental characteristic.

Conditions of interest may exist at the Subject Property that could not be identified by visual observations and the scope of the work performed as part of this investigation. Where subsurface exploratory work was performed, our professional opinions were based in part on interpretation of data from discrete sampling locations that may not represent actual conditions or un-sampled locations. If conditions of interest were not identified during performance of the work, such a finding should not be construed as a guarantee that such conditions do not exist at the Subject Property.

This work was conducted in accordance with generally accepted engineering principles and practices at the time the work was performed. This warranty is in lieu of all other warranties, either expressed or implied. This report was prepared for the sole use of the client and appropriate regulatory agencies. Any reliance on this report by a third party is at such party's sole risk.

9.0 CLOSING

Moore Twining appreciates the opportunity to be of service to you on this project. If you should have any questions, please do not hesitate to contact our office at (800) 268-7021.

Sincerely,

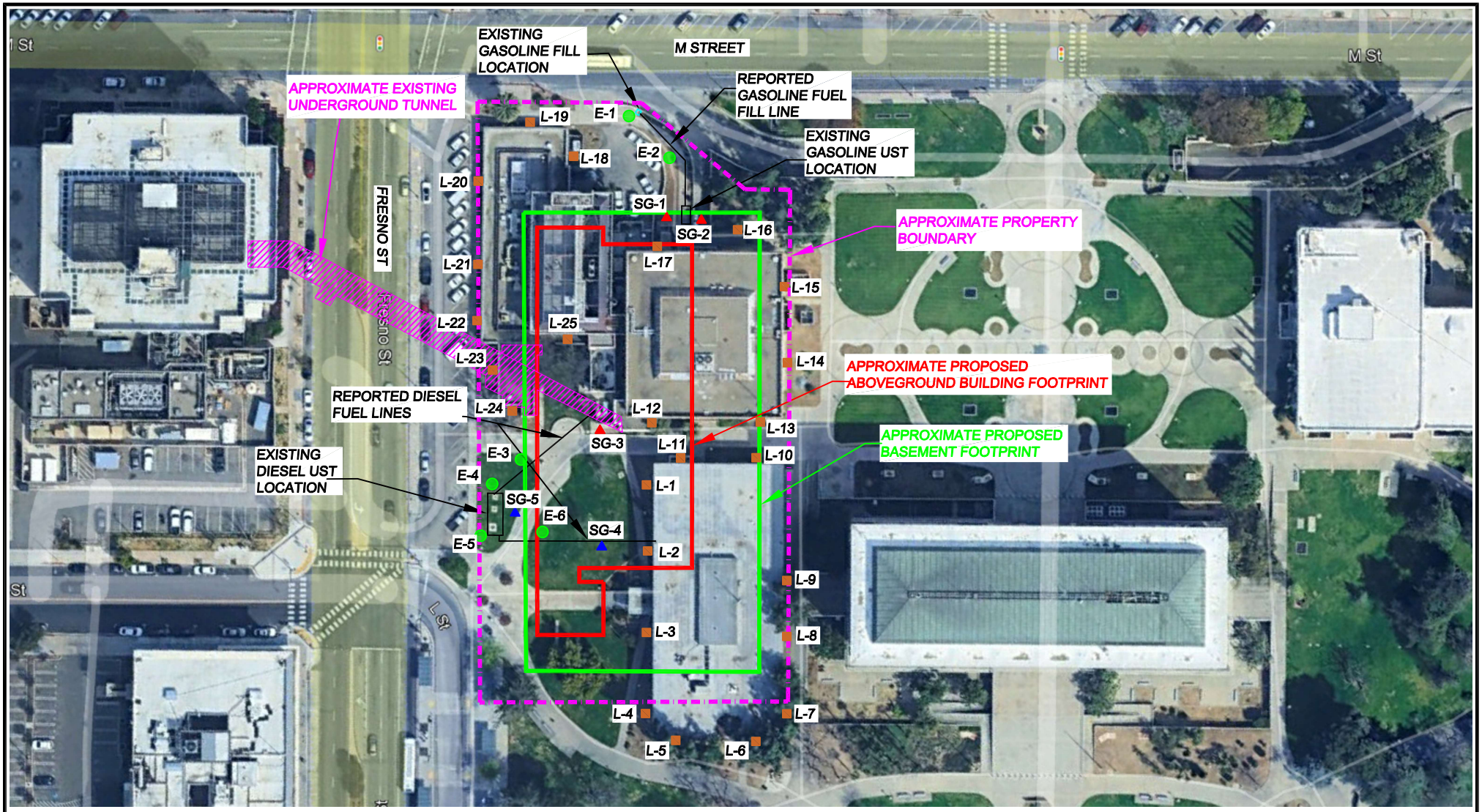
MOORE TWINING ASSOCIATES, INC
Environmental Services Division





Keith Mayes, PG 7555
Environmental Division Manager

DRAWINGS



SOIL BORING LOCATION

DUAL COMPLETED SOIL GAS WELL LOCATION

SINGLE COMPLETED SOIL GAS WELL LOCATION

SURFACE SOIL SAMPLE LOCATION FOR LEAD

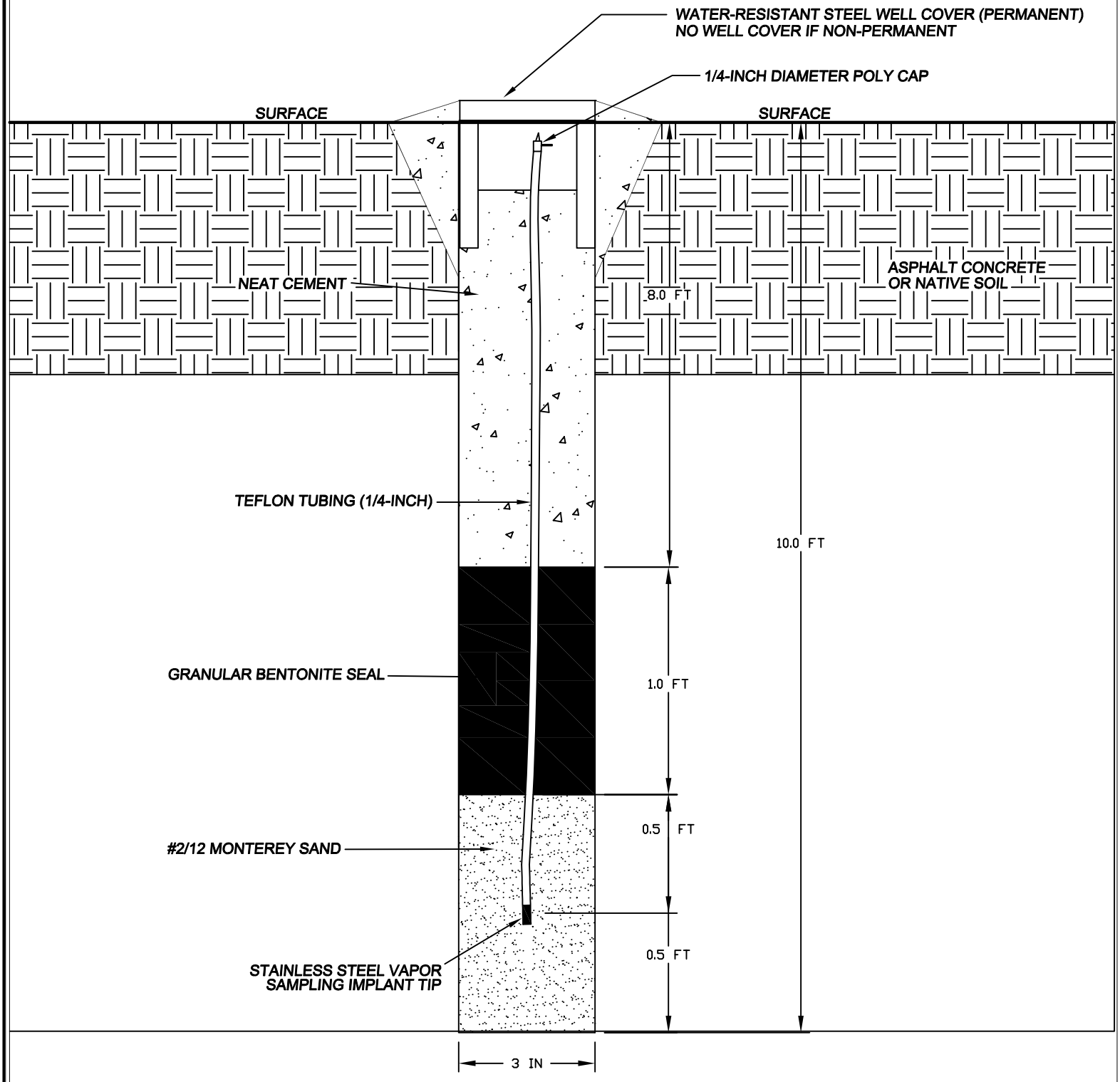
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APPROXIMATE SCALE IN FEET

PHASE II INVESTIGATION SAMPLE LOCATIONS
COURTHOUSE SITE PLAN OPTION 1A - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

FILE NO. 88004-01-02	DATE DRAWN: 12/3/25
DRAWN BY: KLM	REVISED DATE: 4/27/26
PROJECT NO. C88004.01-01	DRAWING NO. 1

MOORE TWINING ASSOCIATES, INC.
Since 1898

SOIL GAS MONITORING WELL CONSTRUCTION DIAGRAM
SG-1 AND SG-3



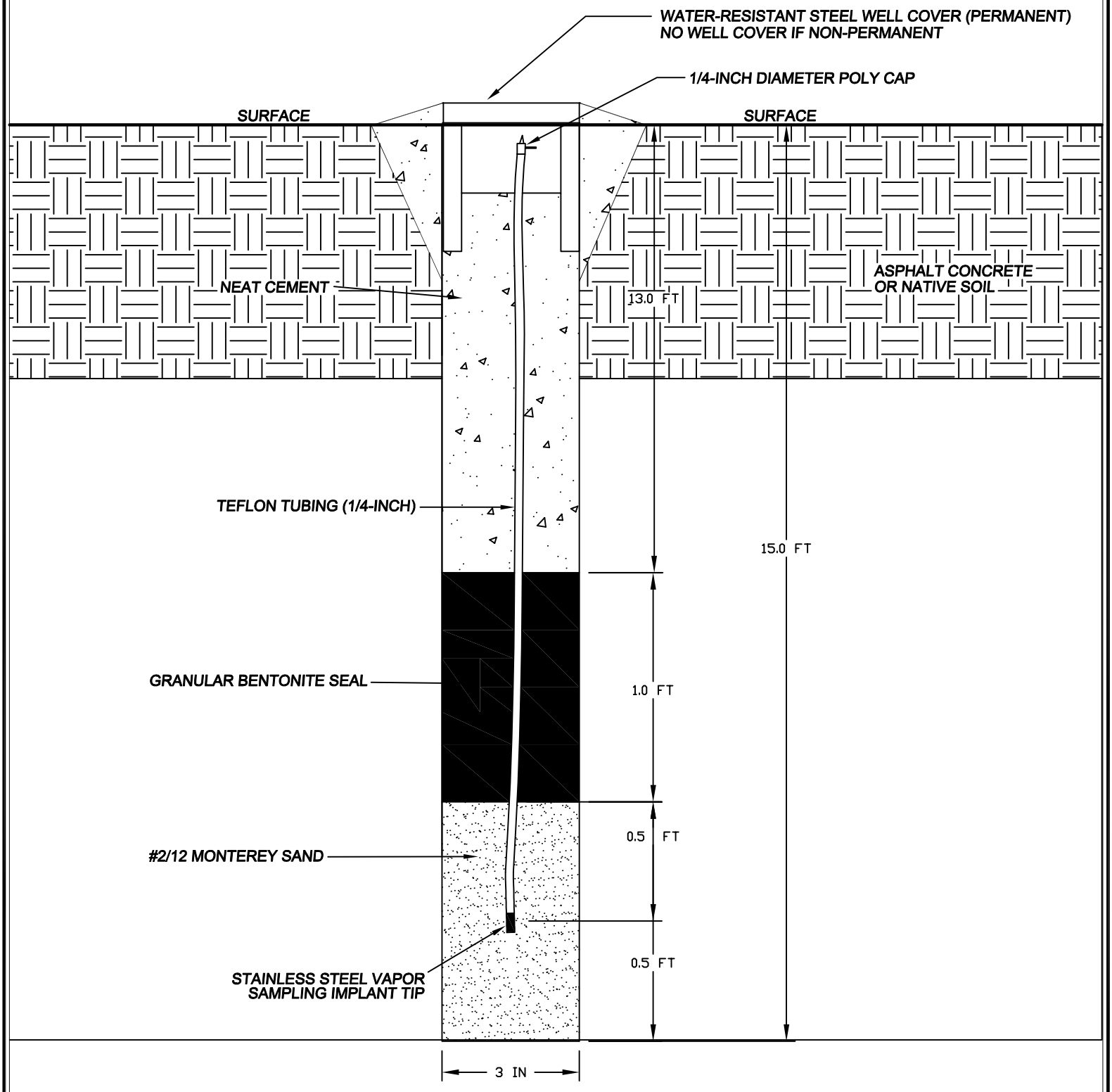
NOT TO SCALE

SOIL GAS MONITORING WELL CONSTRUCTION DIAGRAM
SG-1 AND SG-3
COURTHOUSE SITE PLAN OPTION 1A - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

FILE NO. C88004.01	DATE DRAWN: 1/6/26
DRAWN BY: KLM	APPROVED BY:
PROJECT NO. C88004.01	DRAWING NO. 2

MOORE TWINING ASSOCIATES, INC.

SOIL GAS MONITORING WELL CONSTRUCTION DIAGRAM
SG-2



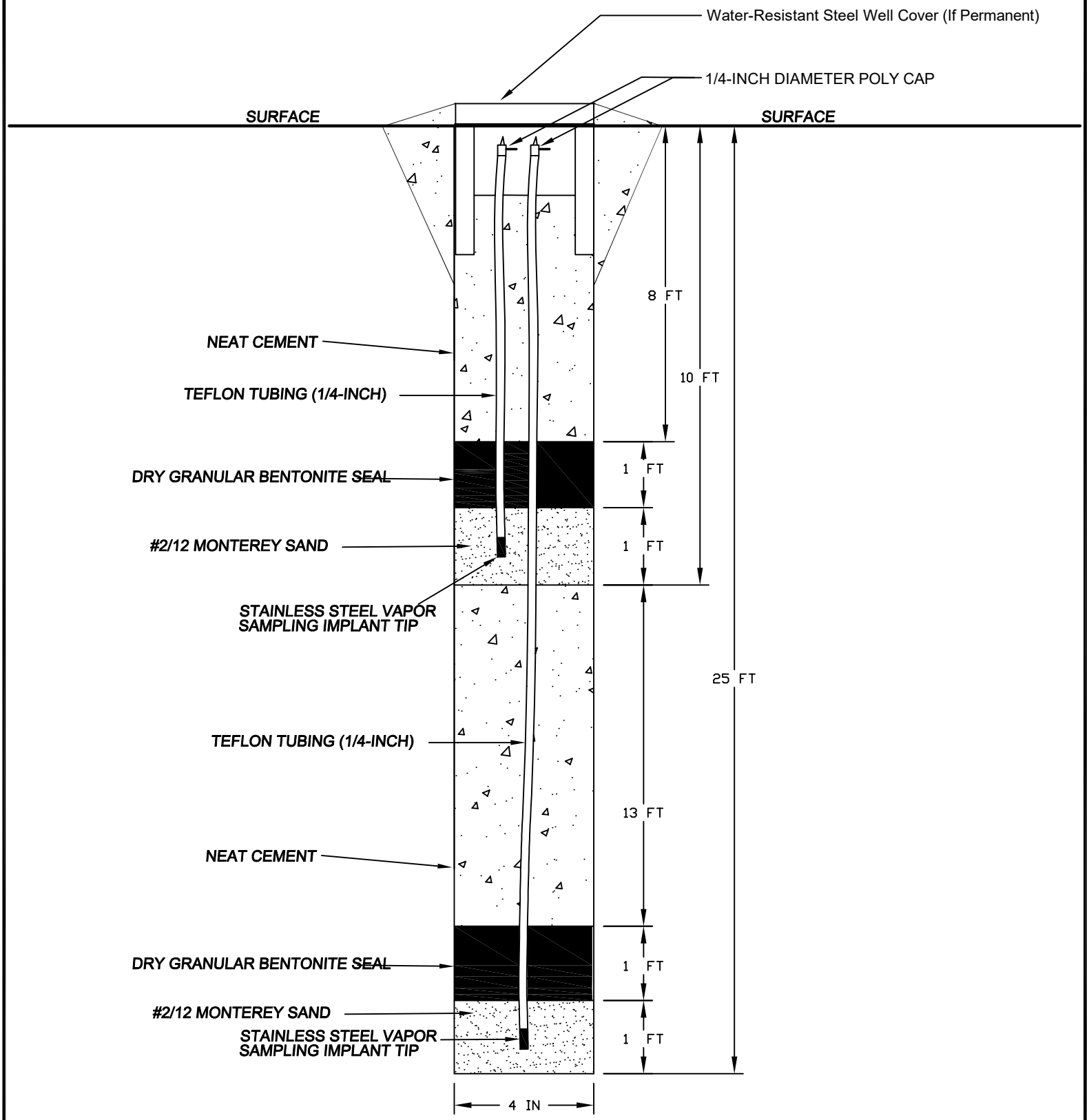
NOT TO SCALE

SOIL GAS MONITORING WELL CONSTRUCTION DIAGRAM SG-2 COURTHOUSE SITE PLAN OPTION 1A - COURTHOUSE PARK SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE FRESNO, CALIFORNIA	FILE NO. C88004.01	DATE DRAWN: 1/6/26
	DRAWN BY: KLM	APPROVED BY:
	PROJECT NO. C88004.01	DRAWING NO. 3

MOORE TWINING ASSOCIATES, INC.

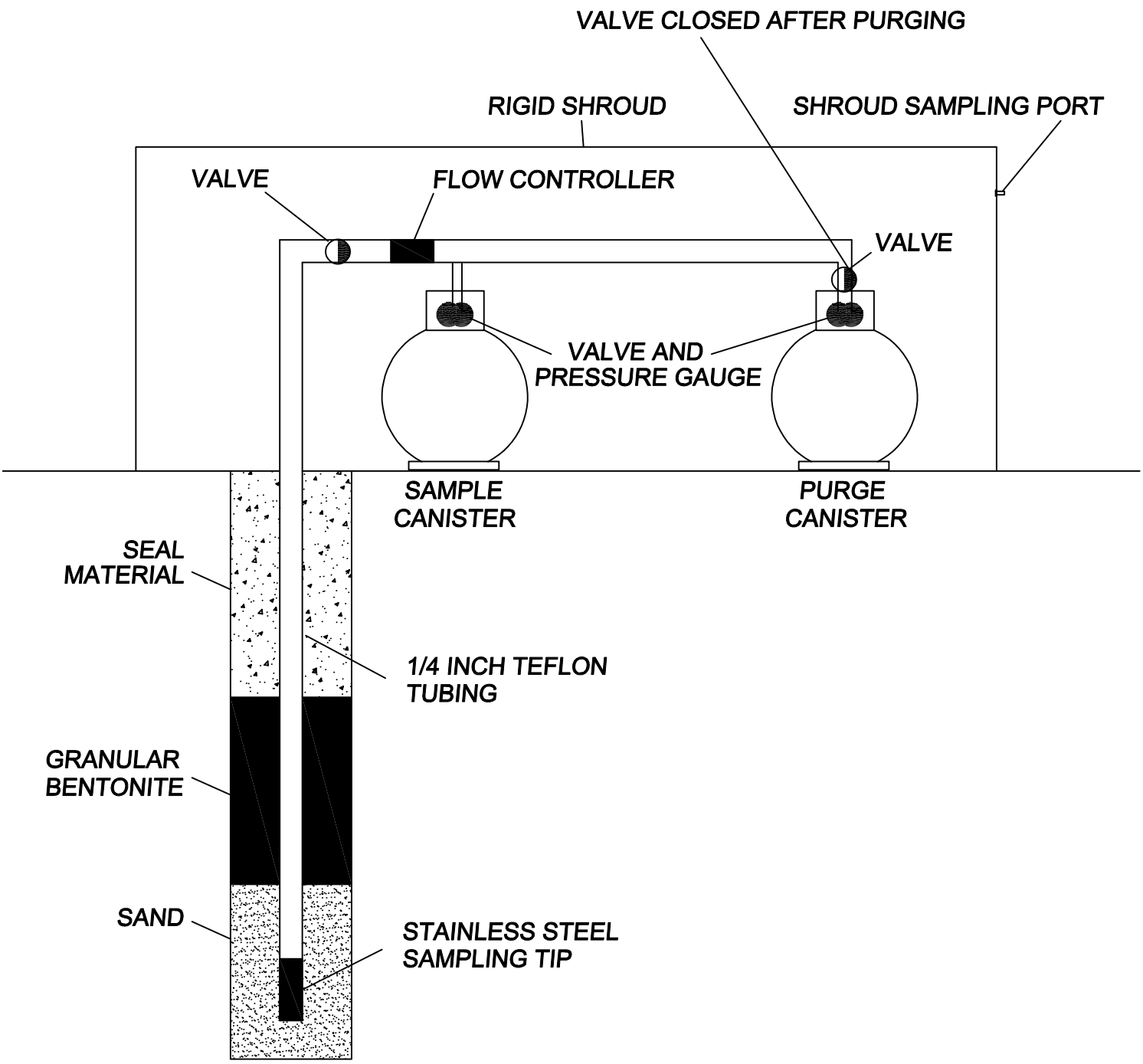
DUAL COMPLETED SOIL GAS MONITORING PROBE CONSTRUCTION DIAGRAM

SG-4 AND SG-5



DUAL COMPLETED SOIL GAS PROBE CONSTRUCTION DIAGRAM - SG-4 AND SG-5 COURTHOUSE SITE PLAN OPTION 1A - COURTHOUSE PARK SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE FRESNO, CALIFORNIA	FILE NO. C88004.01	DATE DRAWN: 1/6/25
	DRAWN BY: KLM	APPROVED BY:
	PROJECT NO. C88004.01	DRAWING NO. 4

MOORE TWINING ASSOCIATES, INC.



TYPICAL SOIL GAS PROBE SAMPLING APPARATUS
COURTHOUSE SITE PLAN OPTION 1A - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET
AND VAN NESS AVENUE
FRESNO, CALIFORNIA

FILE NO. Site Map	DATE DRAWN: 1/6/25
DRAWN BY: KLM	APPROVED BY:
PROJECT NO. C88004.01	DRAWING NO. 5

MOORE TWINING ASSOCIATES, INC.

TABLES

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
Total Petroleum Hydrocarbons and Volatile Organic Hydrocarbons - Methods 8015B/8260B
Proposed Courthouse Park Redevelopment - 2200 Fresno Street, Fresno, California

Sample Identification	Sample Location	Sample Date	Sample Depth (ft)	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	TBA	TAME	ETBE	DIPE	1,2-DCA	EDB	Methylene Chloride	Other VOCs
				Results in Milligram per Kilogram (mg/kg)																
E1-5'	Gasoline UST Fill Port	11/19/25	5	<10	<10	<1.0	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.016	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	**0.0042**	ND
E1-10'	Gasoline UST Fill Port	11/19/25	10	<10	<10	<1.0	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.019	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	**0.0045**	ND
E1-25'		11/19/25	25	<10	<10	<1.0	<0.00087	<0.00087	<0.00087	<0.00087	<0.00087	<0.00087	<0.017	<0.00087	<0.00087	<0.00087	<0.00087	<0.00087	**0.0052**	ND
E2-5'	Gasoline UST Fill Line	11/19/25	5	<10	<10	<1.0	<0.00085	<0.00085	<0.00085	<0.00085	<0.00085	<0.00085	<0.017	<0.00085	<0.00085	<0.00085	<0.00085	<0.00085	**0.0040**	ND
E2-10'	Gasoline UST Fill Line	11/19/25	10	<10	<10	<1.0	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	<0.018	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	**0.0042**	ND
E2-20'		11/19/25	20	<10	<10	<1.0	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	**0.0045**	ND
E3-5'	Diesel UST Product Line	11/19/25	5	<10	**20**	<1.0	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.015	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	**0.0045**	ND
E3-15'		12/2/25	15	<10	<10	<1.0	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	ND
E3-25'		12/2/25	25	<10	<10	<1.0	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.019	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	ND
E4-20'	Diesel UST	12/2/25	20	<10	<10	<1.0	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.019	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	ND
E4-25'		12/2/25	25	<10	<10	<1.0	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.015	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	ND
E5-15'	Diesel UST	12/2/25	15	<10	<10	<1.0	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.018	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	ND
E5-25'		12/2/25	25	<10	<10	<1.0	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.016	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	ND
E6-6'	Diesel UST Product Line	11/24/25	6	<10	<10	<1.0	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.017	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	ND
E6-15'		12/2/25	15	<10	<10	<1.0	<0.00094	<0.00094	<0.00094	<0.00094	<0.00094	<0.00094	<0.019	<0.00094	<0.00094	<0.00094	<0.00094	<0.00094	<0.00094	ND
E6-25'		12/2/25	25	<10	<10	<1.0	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	ND
SG1-10'	Gasoline UST	11/19/25	10	<10	<10	<1.0	<0.00081	<0.00081	<0.00081	<0.00081	<0.00081	<0.00081	<0.016	<0.00081	<0.00081	<0.00081	<0.00081	<0.00081	**0.0040**	ND
SG2-15'		11/19/25	15 #	<10	<10	<1.0	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	**0.0041**	ND
SG2-25'		11/19/25	25 #	<10	<10	<1.0	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	**0.0064**	ND
SG3-5'	Diesel UST Product Line	11/19/25	5	<10	<10	<1.0	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	**0.0042**	ND
SG4-5'	Diesel UST Product Line	11/24/25	5	<10	<10	<1.0	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.017	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	ND
SG4-25'		12/1/25	25	<10	<10	<1.0	<0.00092	**0.0012**	<0.00092	<0.00092	<0.00092	<0.00092	<0.018	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	ND
SG5-25'	Diesel UST	12/1/25	25	<10	<10	<1.0	<0.00092	**0.0011**	<0.00092	<0.00092	<0.00092	<0.00092	<0.018	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	ND
Residential RSL (mg/kg)				*200	*12,000	*460	0.33	1,400	5.8	580	47	2.0	*1,400	-------	130	-------	0.46	0.036	2.2	-------
Commercial RSL (mg/kg)				*920	*180,000	*2,100	1.4	7,300	25	2,500	210	7.6	*6,500	-------	560	-------	2.0	0.16	26	-------

Notes:
TPH-g = Total petroleum hydrocarbons as gasoline
TPH-d = Total petroleum hydrocarbons as diesel
TPH-mo = Total petroleum hydrocarbons as motor oil
EDB = 1,2-Dichloroethane
<0.010 = Less than followed by the indicated laboratory reporting limit (not detected)

TAME = tert-Amyl Methyl Ether
MTBE = Methyl tert-Butyl Ether
TBA = tert-Butyl alcohol
ETBE = Ethyl tert-Butyl Ether

DIPE = Di-Isopropyl Ether
NA = not analyzed
ND = not detected

RSL = Regional Screening Levels, U.S. EPA April 2025 (TR=1E-06 and THQ=1.0) - Available California DTSC HERRO Note 3 (June 2020 - Revised November 2024) values utilized. RSL values are in dry weight.
* = Environmental Screening Levels, compiled by the California Regional Water Quality Control Board, San Francisco Bay Region (revised July 2025) - Direct Exposure Human Health Risk Soil Screening Levels.
# = Sample depth represents feet below ground surface at gasoline UST location. Soil gas probe is located near bottom of basement garage ramp which is approximately 10 feet below the ground surface at the UST location.

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
LUST 5 Metals - Method 6010B
Proposed Courthouse Park Redevelopment - 2200 Fresno Street, Fresno, California

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	Cadmium	Chromium	Lead	Nickel	Zinc
Results in Milligrams per Kilogram (mg/kg)								
E1-5'	Gasoline UST Fill Port	11/19/25	5	<0.40	**12**	**3.0**	**11**	**14**
E1-10'	Gasoline UST Fill Port	11/19/25	10	**0.87**	**23**	**7.9**	**25**	**69**
E1-25'		11/19/25	25	**0.82**	**12**	**9.3**	**20**	**81**
E2-5'	Gasoline UST Fill Line	11/19/25	5	<0.40	**15**	**9.4**	**16**	**22**
E2-10'	Gasoline UST Fill Line	11/19/25	10	<0.40	**11**	**2.9**	**14**	**15**
E2-20'		11/19/25	20	<0.40	**4.9**	<2.0	**7.5**	**17**
E3-5'	Diesel UST Product Line	11/19/25	5	<0.40	**15**	**6.4**	**17**	**19**
E3-15'		12/2/25	15	<0.40	**4.5**	<2.0	**8.8**	**5.5**
E3-25'		12/2/25	25	<0.40	**8.2**	**3.5**	**13**	**25**
E4-20'	Diesel UST	12/2/25	20	<0.40	**12**	**3.7**	**21**	**31**
E4-25'		12/2/25	25	<0.40	**11**	**4.4**	**17**	**16**
E5-15'	Diesel UST	12/2/25	15	<0.40	**19**	<2.0	**20**	**10**
E5-25'		12/2/25	25	<0.40	**12**	**5.3**	**17**	**38**
E6-6'	Diesel UST Product Line	11/24/25	6	<0.40	**20**	**4.3**	**25**	**19**
E6-15'		12/2/25	15	<0.40	**10**	<2.0	**16**	**9.4**
E6-25'		12/2/25	25	**0.52**	**11**	**6.5**	**20**	**50**
SG1-10'	Gasoline UST	11/19/25	10	<0.40	**14**	**9.3**	**15**	**24**
SG2-15'		11/19/25	15 #	<0.40	**9.7**	**2.3**	**11**	**16**
SG2-25'		11/19/25	25 #	<0.40	**4.5**	<2.0	**6.1**	**15**
SG3-5'	Diesel UST Product Line	11/19/25	5	<0.40	**16**	**18**	**21**	**25**
SG4-5'	Diesel UST Product Line	11/24/25	5	<0.40	**14**	**6.5**	**16**	**17**
SG4-25'		12/1/25	25	<0.40	**13**	**4.0**	**13**	**29**
SG5-25'	Diesel UST	12/1/25	25	<0.40	**12**	**4.5**	**18**	**32**
L1-0'	Building Drip Line	12/4/25	Surface	NA	NA	**33**	NA	NA
L2-0'	Building Drip Line	12/4/25	Surface	NA	NA	**26**	NA	NA
L3-0'	Building Drip Line	12/4/25	Surface	NA	NA	**33**	NA	NA
L4-0'	Building Drip Line	12/4/25	Surface	NA	NA	**31**	NA	NA
L5-0'	Building Drip Line	12/4/25	Surface	NA	NA	**30**	NA	NA
L6-0'	Building Drip Line	12/4/25	Surface	NA	NA	**47**	NA	NA
L7-0'	Building Drip Line	12/4/25	Surface	NA	NA	**70**	NA	NA
L8-0'	Building Drip Line	12/4/25	Surface	NA	NA	**39**	NA	NA
L9-0'	Building Drip Line	12/4/25	Surface	NA	NA	**38**	NA	NA
L10-0'	Building Drip Line	12/4/25	Surface	NA	NA	**33**	NA	NA
L11-0'	Building Drip Line	12/4/25	Surface	NA	NA	**29**	NA	NA
L12-0'	Building Drip Line	12/4/25	Surface	NA	NA	**22**	NA	NA
L13-0'	Building Drip Line	12/4/25	Surface	NA	NA	**21**	NA	NA
L14-0'	Building Drip Line	12/4/25	Surface	NA	NA	**20**	NA	NA
L15-0'	Building Drip Line	12/4/25	Surface	NA	NA	**16**	NA	NA
L16-0'	Building Drip Line	12/4/25	Surface	NA	NA	**11**	NA	NA
L17-0'	Building Drip Line	12/4/25	Surface	NA	NA	**19**	NA	NA
L18-0'	Building Drip Line	12/4/25	Surface	NA	NA	**38**	NA	NA
L19-0'	Building Drip Line	12/4/25	Surface	NA	NA	**31**	NA	NA
L20-0'	Building Drip Line	12/4/25	Surface	NA	NA	**21**	NA	NA
L21-0'	Building Drip Line	12/4/25	Surface	NA	NA	**53**	NA	NA
L22-0'	Building Drip Line	12/4/25	Surface	NA	NA	**27**	NA	NA
L23-0'	Building Drip Line	12/4/25	Surface	NA	NA	**14**	NA	NA
L24-0'	Building Drip Line	12/4/25	Surface	NA	NA	**16**	NA	NA
L25-0'	Building Drip Line	12/4/25	Surface	NA	NA	**11**	NA	NA
Human Health Screening Levels								
Residential RSL (mg/kg)				7.1	120,000	80	820	23,000
Commercial RSL (mg/kg)				100	360,000	500	11,000	350,000
Hazardoous Waste Criteria For Direct Landfill Disposal								
TTLC (mg/kg) [1]				100	2,500	1,000	2,000	5,000
STLC Trigger Concentration (mg/kg) [2]				10	50	50	200	2,500

Notes:

RSL = Regional Screening Levels, U.S. EPA November 2024 (TR=1E-06 and THQ=1.0) - Available California DTSC HERRO Note 3 (June 2020 - Revised April 2025) values utilized. RSL values are in dry weight.

<0.40 = less than the indicated laboratory reporting limit (not detected)

NA = not analyzed

= Sample depth represents feet below ground surface at gasoline UST location. Soil gas probe is located near bottom of basement garage ramp which is approximately 10 feet below the ground surface at the UST location.

1 = Total threshold limit concentration (TTLC) in mg/kg wet weight used for California regulated hazardous waste. Source is California Code of Regulations, Title 22, Chapter 11, Article 3.

2 = Trigger concentration (milligrams per kilogram - wet weight) equals ten times the Soluble Threshold Limit Concentration (STLC) based on Waste Extraction Test. Used for California regulated hazardous waste. Source is California Code of Regulations, Title 22, Chapter 11, Article 3. If the detected metal concentration equals or exceeds the STLC Trigger concentration value, the waste extraction test (WET) should be used. If any substance in the waste so analyzed exceeds the STLC value, it is considered a hazardous toxic waste.

Exceeds STLC Trigger Concentration. A California Waste Extraction Test is required to determine hazardous waste concentration for direct landfill disposal.

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
STLC Lead Analysis
Proposed Courthouse Park Redevelopment - 2200 Fresno Street, Fresno, California

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	STLC Lead
Results in Milligrams per Liter (mg/L)				
L7-0'	Building Drip Line	12/4/25	Surface	**4.2**
L21-0'	Building Drip Line	12/4/25	Surface	**3.7**
Hazardoous Waste Criteria For Direct Landfill Disposal				
STLC (mg/L) [1]				5.0

Notes:

1 = Soluble threshold limit concentration (STLC) in mg/L used for California regulated hazardous waste. If any substance in the waste so analyzed exceeds the STLC value, it is considered a hazardous toxic waste for direct landfill disposal.

TABLE 4

SUMMARY OF SOIL VAPOR PURGE AND SAMPLE TIMES

Proposed Courthouse Park Redevelopment - 2200 Fresno Street, Fresno, California

Sample ID	Probe Depth (ft)	Sample Canister ID	Sample Regulator ID	Purge/Sample Flow Rate (ml/minutes)	Calculated 3 Well Purge Volume (ml)	Calculated Purge Time (minutes)	Start Purge	End Purge	Start Sample	End Sample	Start Canister Vacuum ("Hg)	End Canister Vacuum (Inches Hg)	Shroud PID (ppm)	Calculated Shroud PID[1] ($\mu g/m^3$)	Reported Sample Lab IPA Concentration ($\mu g/m^3$)	Percent of Shroud IPA Concentration Detected in Sample
December 8, 2025 - Soil Gas Sampling																
SG-1	10	332	2585	167	3,946	24	0912	0936	0936	0955	27	4	32	473,107	<2.05	<0.01 %
SG-2	25	301	2578	124	4,027	32	0900	0933	0933	0958	28	5	28	413,969	<2.05	<0.01 %
SG-3	9	383	2639	115	3,930	34	1044	1118	1118	1149	28	4	46	680,092	<2.05	<0.01 %
SG4-10'	10	370	2512	125	6,864	55	1213	1308	1308	1335	26	4	26	384,400	<2.05	<0.01 %
SG4-25'	25	389	2643	139	7,108	51	1204	1255	1255	1327	27	5	26	384,400	5.90	<0.01%
SG5-10'	10	306	2586	132	6,864	52	1100	1152	1152	1219	28	5	45	665,307	<2.05	<0.01 %
SG5-25'	25	348	2575	150	7,108	47	1110	1157	1157	1220	27	5	45	665,307	<2.05	<0.01 %
OA-1	NA	358	2569	101	NA	NA	NA	NA	0936	1003	27	4	NA	NA	NA	NA

Notes:

ft = feet

"Hg = inches of mercury

ml = milliliters

"H_2O = inches of water

^{o}F = degrees Fahrenheit

Time	**9:20 AM**
Outside Temperature (^{O}F)	43
Outside Barometric Pressure ("Hg)	30.34
Outside Humidity	86
Wind Speed/Direction (from)	1/SSW

PID = photoionization detector

<2.1 = less than the indicated method detection limit (not detected)

ppm = parts per million

$\mu g/m^3$ = micrograms per cubic meter

1 = Calculated shroud PID in $\mu g/m^3$ equals {PID ppm X mole weight of IPA (60.1 g/mole) X 0.041 X PID correction factor for IPA (6.0) X 1,000}

= Sample depth represents feet below ground surface at gasoline UST location. Soil gas probe is located near bottom of basement garage ramp which is approximately 10 feet below the ground surface at the UST location.

TABLE 5
SUMMARY OF SOIL GAS SAMPLE ANALYTICAL RESULTS
Proposed Courthouse Park Redevelopment - 2200 Fresno Street, Fresno, California

Analyte			Benzene	Toluene	Ethyl-benzene	m,p-Xylenes	o-Xylenes	TPHg	TPHd	PCE	TCE	Chloroform	Acetone	Cyclohexane	Styrene	Tetrahydro-furan	4-Methyl-2-pentanone	2-Hexanone	Freon 114	1,3-Butadiene	Carbon Disulfide	Ethanol	2-Butanone	2-propanol (Tracer Gas)	All Others
Analytical Method			METHOD T0-15																						
Sample ID	Depth (ft)	Sample Date	Results in micrograms per cubic meter (µg/m^3)																						
SG-1	10	12/8/2025	**3.09 J**	**2.04 J**	<1.53	<1.54	<1.49	**265**	NA	<0.68	<0.54	**1.60 J**	**15.1**	<0.58	<1.47	**3.35**	<2.74	<3.42	<1.17	<0.74	<2.60	**5.57**	**3.74 J**	<2.05	ND
SG-2	25 #	12/8/2025	<2.13	<1.26	<1.53	<1.54	<1.49	**117 J**	NA	<0.68	<0.54	<0.82	**6.63**	<0.58	<1.47	<0.98	<2.74	<3.42	<1.17	<0.74	<2.60	<1.57	<1.97	<2.05	ND
SG-3	9	12/8/2025	**3.88**	<1.26	<1.53	<1.54	<1.49	**119 J**	NA	<0.68	<0.54	<0.82	**24.7**	<0.58	<1.47	<0.98	<2.74	<3.42	<1.17	<0.74	**2.84 J**	**135**	**14.3 J**	<2.05	ND
SG4-10'	10	12/8/2025	**4.37**	<1.26	<1.53	<1.54	<1.49	NA	< 79	**0.77 J**	<0.54	**6.18**	**16.3**	<0.58	<1.47	**1.96 J**	<2.74	<3.42	<1.17	<0.74	<2.60	**20.3**	**7.52**	<2.05	ND
SG4-25'	25	12/8/2025	**13.8**	**6.66**	<1.53	**1.72 J**	<1.49	NA	**1,275**	**1.01 J**	<0.54	<0.82	**87.2**	<0.58	**2.06 J**	**6.22**	**5.73 J**	**5.86 J**	<1.17	<0.74	**46.4**	**77.90**	**55.6**	**5.90 J**	ND
SG5-10'	10	12/8/2025	**2.46 J**	<1.26	<1.53	<1.54	<1.49	NA	**524**	**1.31 J**	<0.54	**4.47**	**9.75**	<0.58	<1.47	**4.11**	<2.74	<3.42	<1.17	<0.74	**3.56 J**	**4.32 J**	**3.54 J**	<2.05	ND
SG5-25'	25	12/8/2025	**4.41**	<1.26	<1.53	<1.54	<1.49	NA	**113 J**	**1.64 J**	<0.54	**2.58 J**	**15.0**	**5.22**	<1.47	<0.98	<2.74	<3.42	**2.92**	**1.41 J**	<2.60	<1.57	**14.32**	<2.05	ND
OA-1	Outdoor Air	12/8/2025	**3.77**	**1.60 J**	<1.53	<1.54	<1.49	<68	<79	<0.68	<0.54	<0.82	**8.55**	<0.58	<1.47	<0.98	<2.74	<3.42	<1.17	<0.74	<2.60	<1.57	**3.69 J**	<2.05	ND
Residential Soil Vapor Screening Level (RWQCB ESL)			3.2	15,000 [+]	37	3,500 [*+]		22,000 [+]	6,800 [+]	15	16	4.1	1,100,000 [+]	24,333 [1+]	31,000	70,000 [1+]	103,333 [1+]	1,033 [1+]	---	3 [1]	24,333 [1+]	---	173,333 [1+]	---	---
Commercial Soil Vapor Screening Level (RWQCB ESL)			14	61,000 [+]	160	15,000 [*+]		90,000 [+]	28,000 [+]	67	100	18	4,500,000 [+]	103,333 [1+]	130,000	293,000 [1+]	433,333 [1+]	4,333 [1+]	---	14 [1]	103,333 [1+]	---	733,333 [1+]	---	---

Notes:

PCE = tetrachloroethylene
TCE = trichloroethylene
* = value for total xylenes
+ = non-carcinogenic screening level value
bold = values in bold represent detected concentrations above method detection limit
ND = this analysis includes a variety of individual compounds. The "ND" designation indicates that individual compounds included in the analyses were not detected above laboratory reporting limits.
--- = not available
# = Sample depth represents feet below ground surface at gasoline UST location. Soil gas probe is located near bottom of basement garage ramp which is approximately 10 feet below the ground surface at the UST location.
J = result below the reporting limit but above the method detection limit
<1.26 = less than the indicated method detection limit

Equal to or exceeds residential screening level but below commercial screening level

Equal to or exceeds commercial screening level

NA = not analyzed

ESL = Environmental Screening Levels, San Francisco Bay Regional Water Quality Control Board, revised July 2025
1 = No ESL Available. Derived residential/commercial soil gas screening level calculated by dividing the regulatory residential/commercial ambient air screening level (April 2025 HERO Note 3 or November 2024 RSL when a chemical is not listed in the HHRA) by the default indoor air attenuation factor of 0.03 as specified in the final draft of the Supplemental Guidance for Screening and Evaluation of Vapor Intrusion dated February 2023 published by the DTSC (Supplemental Guidance).

APPENDIX A
MOORE TWINING ASSOCIATES, INC
STANDARD OPERATING PROCEDURES (SOPs)

This appendix contains the standard operating procedures which will be used by Moore Twining Personnel in performing this characterization. Observing these procedures will produce consistent, reliable data.

Standard Operating Procedures for Drilling and Soil Sampling: Subsurface assessment and/or well construction permits are filed with the appropriate government agency before conducting field operations. Underground Service Alert is notified at least 48 hours prior to initiation of field activities. Field activities are performed under the direction of a California registered geologist or certified professional engineer.

Soil boring are drilled using an appropriate method. The method selected will depend upon project objectives and subsurface conditions. Typically soil boring are drilled using a Central Mine Equipment Company model 75 (CME-75) truck-mounted drill rig equipped with 6-5/8-inch outside diameter, continuous-flight, hollow-stem augers. The drilling contractor must have a license for a C-57 classification. The soil boring will be drilled under the supervision of an experienced field geologist. Drilling and sampling equipment are thoroughly cleaned before, during and after each use. Cleaning procedures are described in a subsequent paragraph.

Soil samples are collected using a continuous-coring device, by driving a split-spoon sampler, or by grabbing samples from the drilling cutting returns. The sampler or coring device is lined with brass, stainless steel, or acrylic tubes, in which samples may be retained for subsequent chemical analyses. To collect samples using the split-spoon sampler, the sampler is initially lowered to the bottom of the soil boring and driven 6 inches into undisturbed soil. It is then driven 12 inches deeper by repeatedly dropping a 140-pound weight from a height of 30 inches. The number of blows required to advance the sampler 12 inches is recorded on the boring logs as "blows per foot". This information is used in estimating soil density.

Soil samples are examined for the purpose of preparing lithologic logs. Soils are logged consistent with the Unified Soil Classification System (USCS). The soil boring logs note soil types encountered at depth including consistency, soil moisture, particle size, color, and other distinguishing features.

The soil samples are field screened for evidence of volatile organic chemicals (VOCs) and/or other contaminates. The field screening consist of; visual observation for straining or free fluids, unusual odor, and head space analysis using a photoionization detector (PID). The procedure for performing head space analysis are describe in a subsequent paragraph (if pertinent to this investigation).

Generally, soil samples selected for analyses typically represent those which the field screening indicated will be most likely to contain the contaminate of concern. In most instances, the deepest two samples and/or and sample collected from just above groundwater are selected for analyses. Samples intended for chemical analyses are sealed with Teflon® tape and plastic end caps, labeled, placed on ice, and delivered to a laboratory, along with chain-of-custody documentation.

The soil boring may be completed as groundwater monitoring wells, or abandoned by grouting with a sand-cement slurry. Abandonment procedures depend upon the boring depth, depth to groundwater, project objectives, and regulatory requirements. For boring greater than 15 feet deep, grout is emplaced through the hollow augers which will extend to within 15 feet of the bottom of the boring. If required by the local regulatory agency, grout is emplaced by pumping through a tremie pipe which extends to within 15 feet of the bottom of the boring. The tremie pipe or augers are withdrawn from the boring in 5-foot increments as the boring fills with grout. SOPs for groundwater monitoring well installation are described in a subsequent paragraph (if pertinent to this investigation).

Soil cuttings generated during drilling are containerized in United States Department of Transportation (DOT)-approved drums, or placed on and covered with plastic sheeting, and stored on site in an area inaccessible to the general public. Typically, the stockpiled soil is characterized by collecting and analyzing composite samples from the stockpile. An appropriate method for disposition of the cuttings based on the analytical results will be recommended in the report of this action.

Standard Operating Procedures for Soil Gas Probe Installation: Soil gas monitoring probes are installed by drilling to the target depth utilizing a hand auger or a CME 75 mobile drill rig equipped with 4-inch solid flight auger under the direction of a California registered geologist.

Soil borings for vapor monitoring probes will be drilled and sampled according to "Standard Operating Procedures for Drilling and Soil Sampling". Equipment used for drilling, sampling, and constructing wells, and well construction materials will be thoroughly cleaned according to "Standard Operating Procedures for Equipment Decontamination".

The probes will be constructed of 1/4-inch diameter teflon tubing. The bottom 3-inches of tubing will be a porous stainless-steel tip that will be placed 6-inches from the target depth. A 1-foot thick filter pack consisting of No. 2/12 clean sand is emplaced opposite the filter tip. A one-foot thick dry granular bentonite seal is installed above the filter pack which is subsequently sealed with neat cement to within 0.5 feet of the ground surface. For permanent wells, a flush-mounted well protection box is installed at the surface to protect the soil gas probe tubing. A gas-tight valve or fitting for capping the tubing is installed at the top of the tubing to prevent ambient air from entering the sampling probe. The probes are allowed to set for at least 48 hours to equilibrate before being sampled.

Soil Gas Sampling Procedures: Soil gas sampling is conducted in accordance with the methodologies outlined in ASTM E 2600-08 *Standard Practice of Vapor Intrusion into Structures on Property Involved in Real Estate Transactions* and the Department of Toxic Substances Control (DTSC) *Advisory - Active Soil Gas Investigations*. Field activities are performed under the supervision of a professional engineer or geologist. Sampling equipment is thoroughly cleaned before and after each use according to Moore Twining's "Standard Operating Procedures for Equipment Decontamination." Procedures for obtaining high-quality soil gas samples for use in environmental assessments are:

1. Seal the surface around the soil gas sampler to prevent ambient air intrusion;
2. Conduct a “shut-in” test on the sampling equipment to assess tightness and leaks
3. Conduct leak tests using a shroud and tracer gas to evaluate ambient air intrusion;
4. Purge and sample at low flow rates (less than 200 milliliters per minute);

5. Collect samples in Summa Canisters (USEPA TO methods), glass bulbs, or glass syringes; and
6. Avoid soil gas sample collection following significant rainfall events.

Consistent with industry standards for Summa canister sampling, a minimum of three (3) tubing/casing volumes are purged before sampling the monitoring point. Prior to purging and sampling, a 1/4-inch diameter stainless steel tee fitting will be connected to the top of a 6-liter purge canister or vacuum pump and a 3.2 or 1.0-liter sample Summa canister with pressure gauges installed on the top of the tee fitting. Stainless steel threaded piping (1/4-inch diameter) that is 1 to 2 feet in length will then be connected to the threaded tee fittings on each of the purge and sample canisters. A third tee fitting will be connected to the free end of the pipe. The down-hole side of the third tee fitting will be connected to a 150 milliliter per minute stainless steel threaded flow regulator for sampling. A vapor-tight valve will then be connected to the down-hole side of the regulator and the sample collection apparatus will be tested for tightness by opening and closing the purge valve to perform a "shut-in test". As part of the shut-in test, the vacuum gauges on the sample tees will be monitored for 5 minutes to assess if any leaks exist in the sample train. If the gauge vacuum cannot be maintained for a minimum of 5 minutes, the sample train will be evaluated and leaks will be repaired and/or a new sample train will be used.

Following tightness testing and during purging, the vapor tight valves and purge pump valves will be opened until three (3) volumes of soil gas from the sample tubing and borehole are purged. After purging, the purge sample canister valve will be closed and the sample canister valve will be opened. The sampling apparatus will then be covered with a shroud and a tracer compound 1,1-difluoroethane ("dust off" spray) or isopropyl alcohol (IPA) will be applied within the shroud. When IPA is used as a tracer, the technician attempts to maintain detectable IPA concentrations within the shroud of approximately 10 ppm as measured with a PID. The soil vapor samples collected for analysis by EPA Method TO-15 are collected from the soil vapor probes in 1.0 or 3.2 liter Summa canisters at a flow rate of approximately 150 milliliters per minute (ml/min). The tracer compound will be analyzed in the laboratory to determine if the surface seal and sample trains are compromised during the sampling event. Based on results of the soil gas samples collected from the site, a determination can be made on the integrity of the soil gas sampling apparatus and well seal with respect to outside air influence.

When the sample canister gauges reach a vacuum of approximately 5 inches of mercury, the vapor tight valves will be closed and the samples will be labeled and the elapsed sample collection times will be recorded. A summary of soil gas purge and sample times will be recorded and logged. The tee fittings will be replaced on the samples with a laboratory supplied brass plug.

When the sample canister gauges reach approximately 5 inches of mercury vacuum, the vapor tight valves will be closed and the samples will be labeled and the elapsed sample collection times will be recorded. The tee fittings will be replaced on the samples with a laboratory supplied brass plug. The collected vapor samples will be shipped under chain-of-custody documentation to Environmental Analytical Services, Inc. located in San Luis Obispo, California. The vapor samples are usually analyzed for VOCs and tracer gas (IPA) by EPA Method TO-15.

Standard Operating Procedures for Equipment Decontamination: Proper decontamination procedures reduce the potential for: cross-contamination among sample locations; and introduction of contamination from outside sources.

Before, during, and following drilling operations, drilling equipment is thoroughly cleaned using a high pressure hot water (steam) washer. Well casing, screen, end caps, and centralizers will also be cleaned using the steam washer. Steam cleaning condensate will be containerized for later disposal. Generally, disposal will be the Client's responsibility.

Sampling equipment and any tools, measuring devices, or other equipment which will contact soil, groundwater, or any media being assessed will be washed in a low-phosphate soap and water solution, and rinsed in clean water before each use. The type of soap used will depend upon project requirements.

Standard Operating Procedures for Sample Handling and Chain-of-Custody: Records are developed for samples which include: sampling date, sample type, location, job number, name of sampling personnel, and method of preservation. Each sample container is labeled immediately following collection. Chain-of-custody protocol, as described in United States Environmental Protection Agency, 1986, Test Methods for Evaluating Solid Waste, SW-846, Third Edition, is followed. Samples will be maintained at approximately 4°C. Upon arrival at the laboratory, the samples will be preserved for analysis as appropriate. Samples will be delivered to a California Licensed chemistry laboratory. The laboratory will continued maintenance of the Chain-of-Custody throughout the analytical procedures.

Standard Operating Procedures for Laboratory Quality Assurance/Quality Control: These laboratory QA/QC procedures were developed to reduce outside interferences during analyses of samples. The laboratory director is responsible for creating and maintaining the program. General QA/QC procedures follow:

- Analytical instruments are serviced on a regular basis to assure accurate calibration;
- Organic-free water is monitored daily for quality;
- Gas chromatographs are calibrated daily;
- Method blanks are run to check whether the glassware and reagents are free of interference from chemicals that would invalidate the analyses;
- Standards are prepared using the applicable reference materials;
- Matrix spikes are analyzed in duplicate to validate the accuracy and precision of the method; and
- During groundwater sampling, a travel blank sample consisting of organic-free water is prepared and containerized in the laboratory, transported to the site, and handled and transported in the same manner as the groundwater samples.

Standard Operating Procedures for Using Photoionization Detector (PID): The PID is calibrated in accordance with the manufacture's recommendations prior to use in the field. Upon arrival at the project site, the PID is used to monitor background concentrations of organic vapors in the atmosphere at the site. The background concentrations are measured in a location upwind and removed as possible from sources of organic vapors on the site. When background concentrations of organic vapors register as

"0.0" on the PID, subsequent readings of "0.0" registered from samples tested in the field are recorded as "ND" (not detected). When background concentrations of organic vapors register at some quantity above "0.0", subsequent readings registered from samples tested in the field at or below this value are recorded as "B/G" (background).

Standard Operating Procedures for Decontamination Rinsate, Monitoring Well Purge Water, and Soil Cuttings Disposal: The soil cuttings generated by drilling operations are retained on site, and either covered by plastic sheeting or containerized in United States Department of Transportation (DOT)-approved drums. The drilling equipment decontamination rinseate is also stored in drums. Water purged from monitoring wells is containerized in drums if contamination is known or suspected. Drums containing soil, rinseate, and purged water are sealed and temporarily stored on site at a location remote to the public. Each drum is labeled to identify its contents. Disposal of these wastes will be the responsibility of the Client. The Client will be informed that the wastes must be disposed in accordance with applicable Federal, State, and local regulations.

Standard Operating Procedures for Performing Head Space Analysis: Head space analysis is performed using a photoionization detector (PID). A soil sample is placed in a sealed glass container or plastic bag, agitated, and placed in a warm atmosphere. After approximately 15 minutes, which is generally sufficient for some of the volatile to escape from the soil, the PID probe is inserted into the container and the gas is sampled. The highest concentration of organic vapors measured by the PID will be recorded.

APPENDIX B

SOIL BORING LOGS

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING E-1

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/19/25

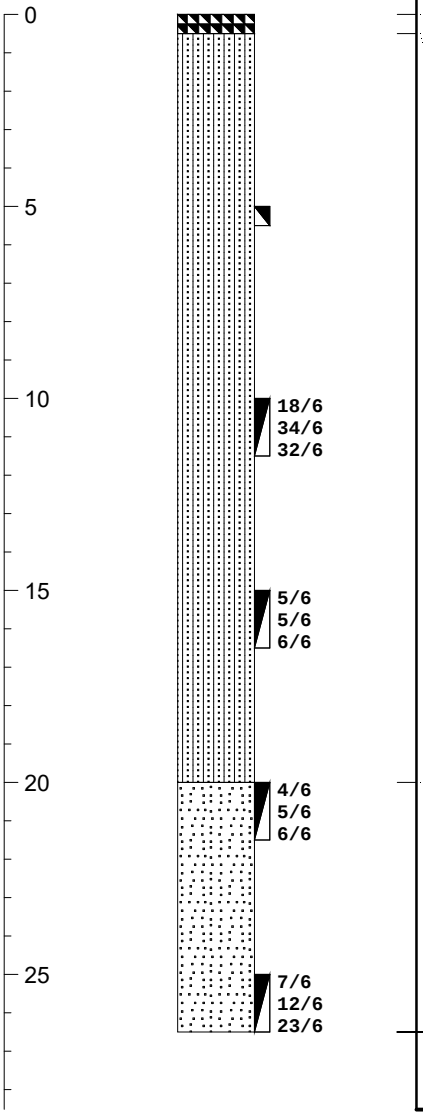
Drilled By: JS

Auger Type: HSA

Drill Type: CME 75

Depth to Groundwater: NE

Elevation:



DEPTH (feet)	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0	RC	4" Reinforced Concrete		
	SM	2" Aggregate Base		
		Silty Sand; moist, fine grained, brown, no odors		
5				PID = 0.0 ppm
		Highly cemented (Hard Pan), very dense, reddish-brown		
10		Moderately cemented	>50	PID = 0.0 ppm
		Non-cemented, medium dense, brown		
15			12	PID = 0.0 ppm
20	SP	Poorly Graded Sand; moist, medium dense, fine to medium grained, brown, no odors	11	PID = 0.0 ppm
25			35	PID = 0.0 ppm
		Bottom of Boring		

Notes: *Backfilled boring with neat cement upon completion.*

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING E-2

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/19/25

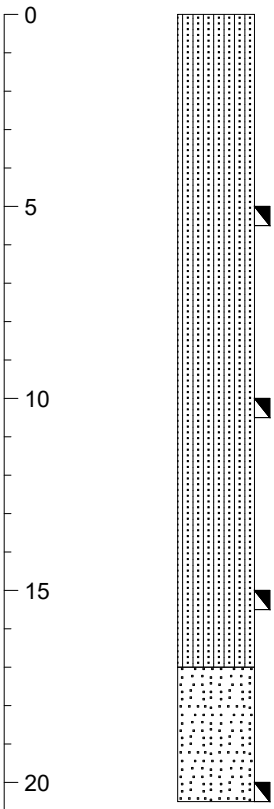
Drilled By: KM

Auger Type: 3-inch Diameter Bucket

Drill Type: Hand Auger

Depth to Groundwater: NE

Elevation:



DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0		SM	Silty Sand; moist, fine to medium grained, brown, no odors		
5			Slightly cemented (Hard Pan), reddish-brown		PID = 0.0 ppm
10			Non-cemented, brown		PID = 0.0 ppm
15					PID = 0.0 ppm
		SP	Poorly Graded Sand; moist, medium dense, fine to medium grained, brown, no odors		
20					PID = 0.0 ppm
			Bottom of Boring		

Notes: *Backfilled boring with neat cement upon completion.*

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING E-3

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/24/25 and 12/2/25

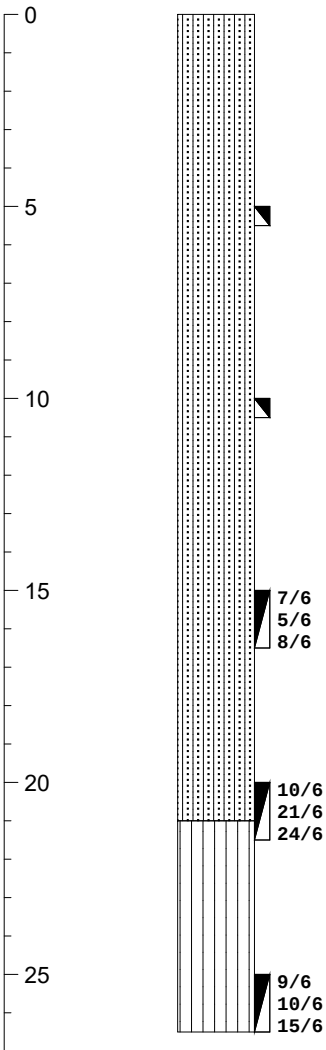
Drilled By: JS

Auger Type: HSA

Drill Type: CME 75

Depth to Groundwater: NE

Elevation:



DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0		SM	Silty Sand; moist, fine grained, brown, no odors		
5					PID = 0.0 ppm
10					PID = 0.0 ppm
15	7/6 5/6 8/6		Less silt, fine to medium grained, medium dense	13	PID = 0.0 ppm
20	10/6 21/6 24/6	ML	Silt, moist, hard, slightly plastic, brown, no odor	45	PID = 0.0 ppm
25	9/6 10/6 15/6		Very stiff	25	PID = 0.0 ppm
			Bottom of Boring		

Notes: *Hand cleared boring to 10 feet on 11/24/25. Completed boring with mobile drill rig on 12/2/25. Backfilled boring with neat cement upon completion.*

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING E-4

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/24/25 and 12/2/25

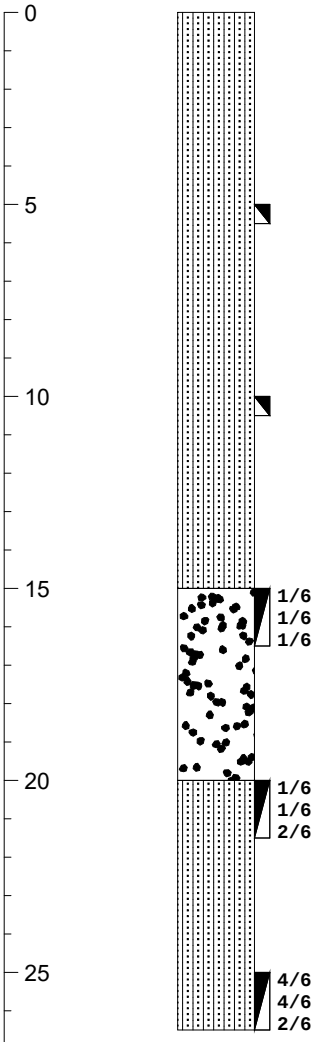
Drilled By: JS

Auger Type: HSA

Drill Type: CME 75

Depth to Groundwater: NE

Elevation:



DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0		SM	Silty Sand; moist, fine grained, brown, no odors		
5					PID = 0.0 ppm
10					PID = 0.0 ppm
15	1/6 1/6 1/6	GP	Pea Gravel (Fill) from adjacent UST excavation, very loose	2	PID = 0.0 ppm
20	1/6 1/6 2/6	SM	Silty Sand, moist, very loose, fine grained, brown, no odor	3	PID = 0.0 ppm
25	4/6 4/6 2/6			6	PID = 0.0 ppm
			Bottom of Boring		

Notes: *Hand cleared boring to 10 feet on 11/24/25. Completed boring with mobile drill rig on 12/2/25. Backfilled boring with neat cement upon completion.*

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING E-5

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/24/25 and 12/2/25

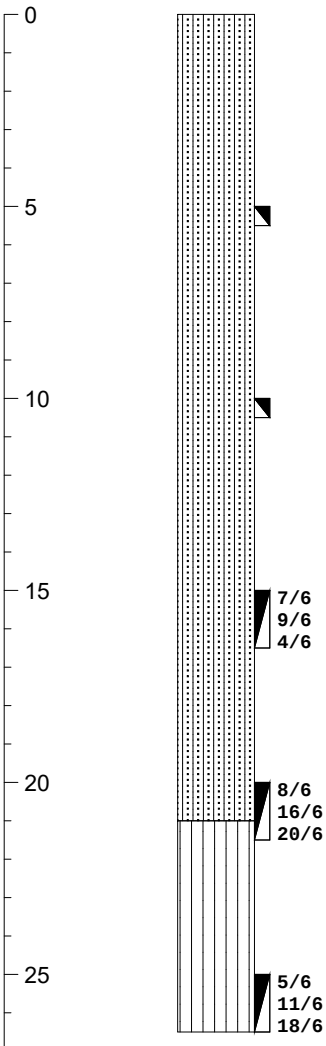
Drilled By: JS

Auger Type: HSA

Drill Type: CME 75

Depth to Groundwater: NE

Elevation:



DEPTH (feet)	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0	SM	Silty Sand; moist, fine grained, brown, no odors		
5				PID = 0.0 ppm
10				PID = 0.0 ppm
		Less silt, fine to medium grained, medium dense		
15			13	PID = 0.0 ppm
20			36	PID = 0.0 ppm
	ML	Silt, moist, hard, slightly plastic, brown, no odor		
25		Very stiff	29	PID = 0.0 ppm
		Bottom of Boring		

Notes: *Hand cleared boring to 10 feet on 11/24/25. Completed boring with mobile drill rig on 12/2/25. Backfilled boring with neat cement upon completion.*

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING E-6

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/24/25 and 12/2/25

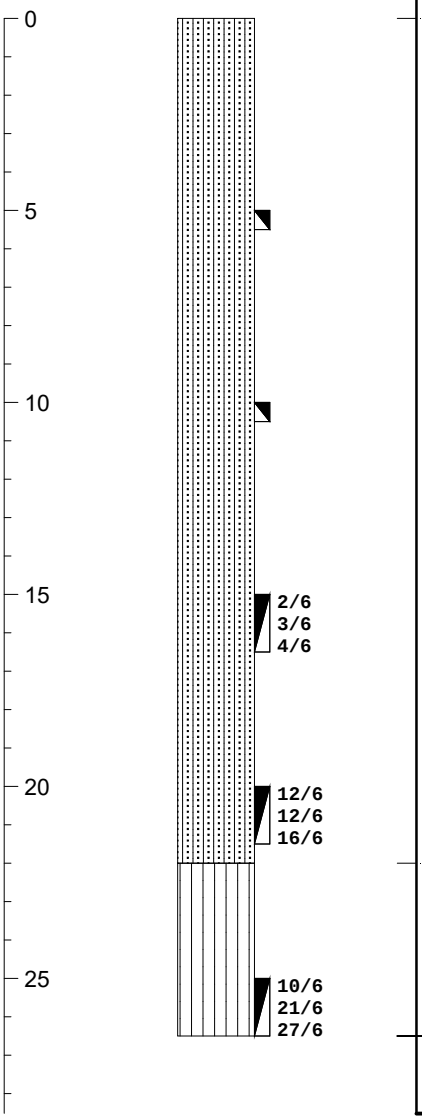
Drilled By: JS

Auger Type: HSA

Drill Type: CME 75

Depth to Groundwater: NE

Elevation:



DEPTH (feet)	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0	SM	Silty Sand; moist, fine grained, brown, no odors		
5				PID = 0.0 ppm
10				PID = 0.0 ppm
15		Less silt, fine to medium grained, loose	7	PID = 0.0 ppm
20		Fine grained, more silt (30%)	28	PID = 0.0 ppm
	ML	Silt, moist, very stiff, slightly plastic, brown, no odor		
25		Hard	48	PID = 0.0 ppm
		Bottom of Boring		

Notes: *Hand cleared boring to 10 feet on 11/24/25. Completed boring with mobile drill rig on 12/2/25. Backfilled boring with neat cement upon completion.*

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING SG-1

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/19/25

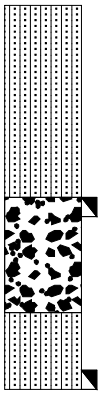
Drilled By: KM

Auger Type: 3-inch Diameter Bucket

Drill Type: Hand Auger

Depth to Groundwater: NE

Elevation:

DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0		SM	Silty Sand; moist, fine to medium grained, brown, no odors		
5		GW	Well Graded Gravel (Fill), subrounded, gray, no odors		PID = 0.0 ppm
		SM	Silty Sand, moist, fine to medium grained, brown, no odor		PID = 0.0 ppm
10			Bottom of Boring		
15					
20					
25					

Notes: *Constructed soil gas well SG-1 upon boring completion.*

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING SG-2

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/19/25

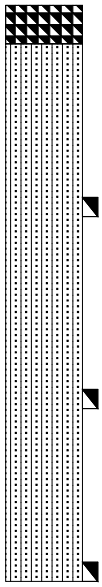
Drilled By: KM

Auger Type: 3-inch Diameter Bucket

Drill Type: Hand Auger

Depth to Groundwater: NE

Elevation:

DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0		RC	9.5" Reinforced Concrete		
			4" Aggregate Base		
		SM	Silty Sand; moist, fine to medium grained, brown, no odors		
			Slightly cemented, light brown		
5					PID = 0.0 ppm
			Non-cemented, brown		
10					PID = 0.0 ppm
15					PID = 0.0 ppm
			Bottom of Boring		
20					
25					

Notes: *Boring located at basement level which represents approximately 10 feet below site grade at the gasoline UST location. Constructed soil gas well SG-2 upon boring completion.*

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING SG-3

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/19/25

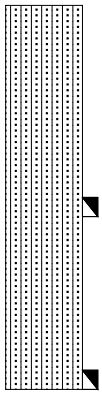
Drilled By: KM

Auger Type: 3-inch Diameter Bucket

Drill Type: Hand Auger

Depth to Groundwater: NE

Elevation:

DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0		SM	Silty Sand; moist, fine to medium grained, brown, no odors		
5					PID = 0.0 ppm
10			Bottom of Boring		PID = 0.0 ppm
15					
20					
25					

Notes: *Constructed soil gas well SG-3 upon boring completion.*

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING SG-4

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/24/25 and 12/1/25

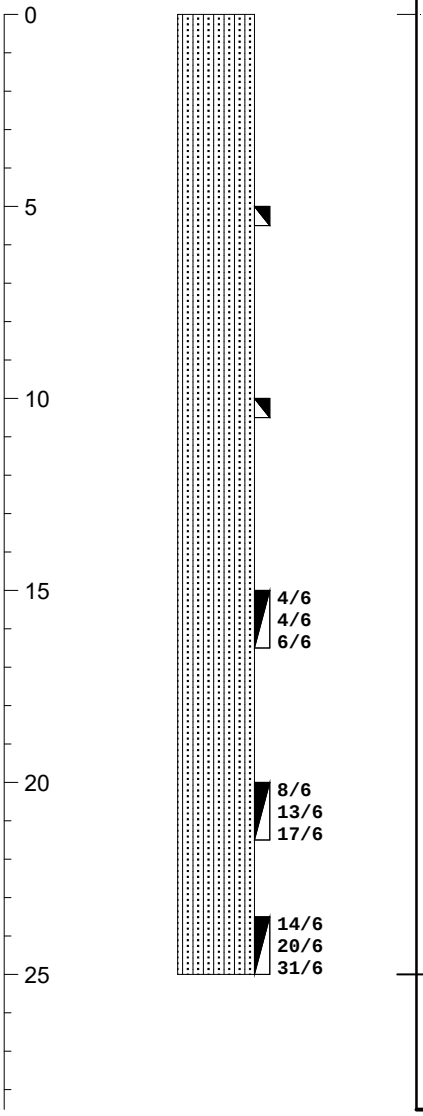
Drilled By: JS

Auger Type: 4-inch Diameter Soild Flight

Drill Type: CME 75

Depth to Groundwater: NE

Elevation:



DEPTH (feet)	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0	SM	Silty Sand; moist, fine grained, brown, no odors		
5				PID = 0.0 ppm
10				PID = 0.0 ppm
15		Fine to medium grained, loose	10	PID = 0.0 ppm
20		Medium dense	30	PID = 0.0 ppm
25		Very hard	>50	PID = 0.0 ppm
		Bottom of Boring		

Notes: *Hand cleared boring to 10 feet on 11/24/25. Completed boring with mobile drill rig on 12/1/25. Constructed nested soil gas well SG-4 upon completion.*

MOORE TWINING ASSOCIATES, INC.

LOG OF SOIL BORING

BORING SG-5

Project: Proposed Fresno Courthouse Park

Location: 2200 Fresno Street, Fresno, California

Project Number: C88004.01

Logged By: KM

Date Started: 11/24/25 and 12/1/25

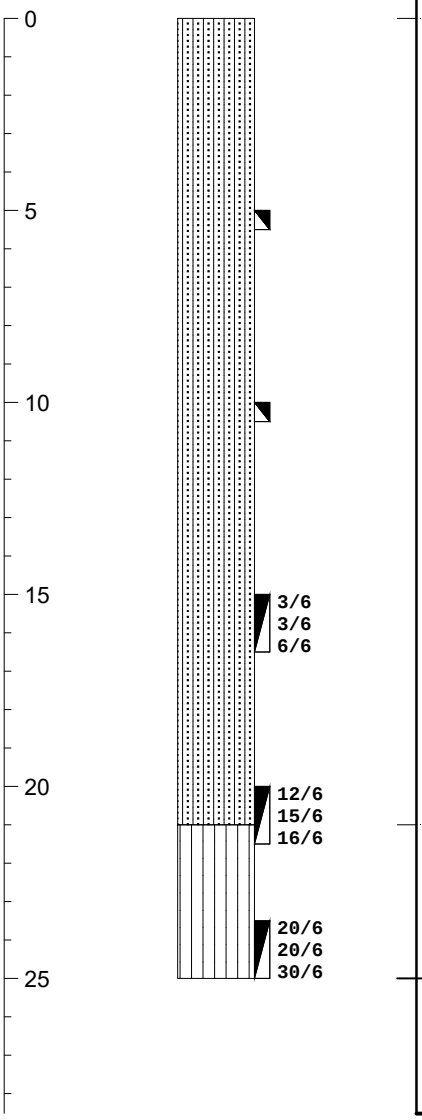
Drilled By: JS

Auger Type: 4-inch Diameter Soild Flight

Drill Type: CME 75

Depth to Groundwater: NE

Elevation:



DEPTH (feet)	USCS	Soil Description	Blows per foot	PID READINGS (ppm)
0	SM	Silty Sand; moist, fine grained, brown, no odors		
5				PID = 0.0 ppm
10				PID = 0.0 ppm
15		Fine to medium grained, loose	9	PID = 0.0 ppm
20			31	PID = 0.0 ppm
	ML	Silt, moist, hard, slightly plastic, brown, no odor		
			50	PID = 0.0 ppm
25		Bottom of Boring		

Notes: *Hand cleared boring to 10 feet on 11/24/25. Completed boring with mobile drill rig on 12/1/25. Constructed nested soil gas well SG-5 upon completion.*

KEY TO SYMBOLS

Symbol Description

Strata symbols

 **Reinforced Concrete**

 **Silty sand**

 **Poorly graded sand**

 **Well graded gravel**

 **Silt**

 **Poorly graded gravel**

Soil Samplers

 **Bulk/Grab sample**

 **Standard penetration test**

Notes:

1. **BSG = below surface grade.**
2. **PID = photoionization detector**
3. **ppm = parts per million**
4. **Boring locations are referenced to existing site features.**
5. **These logs are subject to the limitations, conclusions, and recommendations in this report.**

APPENDIX C

LABORATORY ANALYTICAL REPORTS

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

January 05, 2026

Work Order #: **LK19070**

Keith Mayes
MTA Environmental Division
2527 Fresno Street
Fresno, CA 93721

RE: J.C.C.Courthouse Park Redevelopement,2200 FresnoSt

Enclosed are the analytical results for samples received by our laboratory on **11/19/25** . For your reference, these analyses have been assigned laboratory work order number **LK19070**.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.



Susan Federico
Client Services Representative

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

Analytical Report for the Following Samples

Sample ID	Notes	Laboratory ID	Matrix	Date Sampled	Date Received
E1-5'		LK19070-01	Soil	11/19/25 10:00	11/19/25 16:38
E1-10'		LK19070-02	Soil	11/19/25 14:35	11/19/25 16:38
E1-25'		LK19070-03	Soil	11/19/25 15:00	11/19/25 16:38
E2-5'		LK19070-04	Soil	11/19/25 08:24	11/19/25 16:38
E2-10'		LK19070-05	Soil	11/19/25 08:43	11/19/25 16:38
E2-20'		LK19070-06	Soil	11/19/25 09:35	11/19/25 16:38
E3-5'		LK19070-07	Soil	11/19/25 13:40	11/19/25 16:38
SG1-10'		LK19070-08	Soil	11/19/25 12:15	11/19/25 16:38
SG2-15'		LK19070-09	Soil	11/19/25 10:45	11/19/25 16:38
SG2-25'		LK19070-10	Soil	11/19/25 11:40	11/19/25 16:38
SG3-5'		LK19070-11	Soil	11/19/25 14:35	11/19/25 16:38

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E1-5'

LK19070-01 (Soil) Sampled: 11/19/25 10:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**12**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		**3.0**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**11**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**14**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*48.4%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0040	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloropropane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.016	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.016	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.040	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.0080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromobenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E1-5'

LK19070-01 (Soil) Sampled: 11/19/25 10:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Bromochloromethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.040	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methylene chloride		**0.0042**	0.0016	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.016	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

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MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E1-5'

LK19070-01 (Soil) Sampled: 11/19/25 10:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Trichlorofluoromethane (CFC-11)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.00080	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*94.9%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*104%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*101%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

E1-10'

LK19070-02 (Soil) Sampled: 11/19/25 14:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		**0.87**	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**23**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		**7.9**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**25**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**69**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*55.0%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0047	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

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California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E1-10'

LK19070-02 (Soil) Sampled: 11/19/25 14:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,2-Dichloropropane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.019	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.019	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.047	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.0095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromobenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromochloromethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.047	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

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California ELAP Certificate #1371

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MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E1-10'

LK19070-02 (Soil) Sampled: 11/19/25 14:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Methylene chloride		**0.0045**	0.0019	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.019	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.00095	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*96.0%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*99.4%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*98.4%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

E1-25'

LK19070-03 (Soil) Sampled: 11/19/25 15:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		**0.82**	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**12**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		**9.3**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**20**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**81**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*56.3%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B

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2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
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MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E1-25'

LK19070-03 (Soil) Sampled: 11/19/25 15:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0044	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloropropane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.017	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.017	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.044	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.0087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromobenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromochloromethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E1-25'

LK19070-03 (Soil) Sampled: 11/19/25 15:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
cis-1,3-Dichloropropene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.044	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methylene chloride		**0.0052**	0.0017	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.017	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.00087	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*96.1%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*97.7%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*97.0%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E2-5'

LK19070-04 (Soil) Sampled: 11/19/25 08:24

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**15**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		**9.4**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**16**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**22**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*65.2%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0042	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloropropane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.017	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.017	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.042	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.0085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromobenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E2-5'

LK19070-04 (Soil) Sampled: 11/19/25 08:24

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Bromochloromethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.042	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methylene chloride		**0.0040**	0.0017	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.017	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
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(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E2-5'

LK19070-04 (Soil) Sampled: 11/19/25 08:24

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Trichlorofluoromethane (CFC-11)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.00085	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*95.5%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*103%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*99.3%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

E2-10'

LK19070-05 (Soil) Sampled: 11/19/25 08:43

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**11**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		**2.9**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**14**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**15**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*71.5%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0045	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

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MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E2-10'

LK19070-05 (Soil) Sampled: 11/19/25 08:43

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,2-Dichloropropane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.018	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.018	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.045	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.0090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromobenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromochloromethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.045	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

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MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E2-10'

LK19070-05 (Soil) Sampled: 11/19/25 08:43

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Methylene chloride		**0.0042**	0.0018	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.018	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.00090	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*96.3%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*103%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*98.9%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

E2-20'

LK19070-06 (Soil) Sampled: 11/19/25 09:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**4.9**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		ND	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**7.5**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**17**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*65.6%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B

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MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E2-20'

LK19070-06 (Soil) Sampled: 11/19/25 09:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromochloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E2-20'

LK19070-06 (Soil) Sampled: 11/19/25 09:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
cis-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methylene chloride		**0.0045**	0.0020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichloroethene (TCE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*97.2%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*105%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*100%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E3-5'

LK19070-07 (Soil) Sampled: 11/19/25 13:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**15**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		**6.4**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**17**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**19**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*50.4%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		**20**	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0038	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloropropane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.015	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.015	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.038	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.0077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E3-5'

LK19070-07 (Soil) Sampled: 11/19/25 13:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Bromobenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromochloromethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.038	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methylene chloride		**0.0045**	0.0015	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.015	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E3-5'

LK19070-07 (Soil) Sampled: 11/19/25 13:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Trichloroethene (TCE)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.00077	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*95.6%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*103%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*102%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

SG1-10'

LK19070-08 (Soil) Sampled: 11/19/25 12:15

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**14**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		**9.3**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**15**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**24**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*94.3%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0041	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

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MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

SG1-10'

LK19070-08 (Soil) Sampled: 11/19/25 12:15

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,2-Dichloroethane (1,2-DCA)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloropropane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.016	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.016	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.041	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.0081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromobenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromochloromethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.041	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

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MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

SG1-10'

LK19070-08 (Soil) Sampled: 11/19/25 12:15

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Methyl tert-Butyl Ether (MTBE)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methylene chloride		**0.0040**	0.0016	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.016	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.00081	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*91.9%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*103%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*100%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

SG2-15'

LK19070-09 (Soil) Sampled: 11/19/25 10:45

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**9.7**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		**2.3**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**11**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**16**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*63.7%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B

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MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

SG2-15'

LK19070-09 (Soil) Sampled: 11/19/25 10:45

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromochloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

SG2-15'

LK19070-09 (Soil) Sampled: 11/19/25 10:45

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
cis-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methylene chloride		**0.0041**	0.0020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichloroethene (TCE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*96.5%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*99.4%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*99.0%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

SG2-25'

LK19070-10 (Soil) Sampled: 11/19/25 11:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**4.5**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		ND	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**6.1**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**15**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*47.9%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

SG2-25'

LK19070-10 (Soil) Sampled: 11/19/25 11:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Bromochloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methylene chloride		**0.0064**	0.0020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichloroethene (TCE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

SG2-25'

LK19070-10 (Soil) Sampled: 11/19/25 11:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Trichlorofluoromethane (CFC-11)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*93.4%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*103%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*98.4%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

SG3-5'

LK19070-11 (Soil) Sampled: 11/19/25 14:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Chromium		**16**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Lead		**18**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Nickel		**21**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Zinc		**25**	2.0	mg/kg	1	B5K2001	11/21/25	11/21/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*50.4%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,1-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** Judicial Council of California Courthouse Park **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

SG3-5'

LK19070-11 (Soil) Sampled: 11/19/25 14:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,3-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Butanone (MEK)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
2-Hexanone		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acetone		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrolein		ND	0.050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Acrylonitrile		ND	0.010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Benzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromochloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromodichloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromoform		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Bromomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon disulfide		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Carbon tetrachloride		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chlorobenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroform		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Chloroprene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromochloromethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dibromomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethanol		ND	0.050	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl methacrylate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Ethylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Hexachlorobutadiene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Iodomethane		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Isopropylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
m,p-Xylene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl Methacrylate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** Judicial Council of California Courthouse Park	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

SG3-5'

LK19070-11 (Soil) Sampled: 11/19/25 14:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Methylene chloride		**0.0042**	0.0020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Naphthalene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
n-Propylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
o-Xylene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
p-Isopropyltoluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
sec-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Styrene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.020	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
tert-Butylbenzene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Toluene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichloroethene (TCE)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl acetate		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Vinyl chloride		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Xylenes		ND	0.0010	mg/kg	1	B5L0126	11/25/25	11/25/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*95.0%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Dibromofluoromethane		*96.9%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*
Surr: Toluene-d8		*99.4%*	*Recovery Limits: 70% - 130%*			*B5L0126*	11/25/25	11/25/25	*EPA 8260B*

Notes and Definitions

RPD	The RPD result exceeded the QC control limits. However, both percent recoveries were acceptable.
µg/L	micrograms per liter (parts per billion concentration units)
mg/L	milligrams per liter (parts per million concentration units)
mg/kg	milligrams per kilogram (parts per million concentration units)
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Analysis of pH, filtration, and residual chlorine is to take place immediately after sampling in the field.
If the test was performed in the laboratory, the hold time was exceeded. **(for aqueous matrices only)**

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

BSK Associates Laboratory Fresno
687 N. Laverne Avenue
Fresno, CA 93727
559-497-2888 (Main)

AIK2641
12/03/2025
Invoice: AI31108

Susan Federico
Moore Twining Associates
2527 Fresno Street
Fresno, CA 93721

RE: Report for AIK2641 General

Dear Susan Federico,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 11/20/2025. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2016 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

This certificate of analysis shall not be reproduced except in full, without written approval of the laboratory.

If additional clarification of any information is required, please contact your Client Services Representative, Heather S. Johnson , at 559-497-2888.

Thank you again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Heather Johnson

Heather S. Johnson, Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

Case Narrative

Project and Report Details		Invoice Details	
Client:	Moore Twining Associates	**Invoice To:**	Moore Twining Associates
Report To:	Susan Federico	**Invoice Attn:**	Denise Willis
Project #:	LK19070	**Project PO#:**	43448
Received:	11/20/2025 - 14:39		
Report Due:	12/08/2025		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 4.5

Containers Intact
COC/Labels Agree
Received On Blue Ice
Packing Material - Other
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Danielle Abrames	FINAL.RPT	susanf@mooretwining.com;laurenc@mooretwining.com;gregb@mooretwining.com

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-01
Sampled By: Client
Sample Description: LK19070-01 // E1-5'

Sample Date - Time: 11/19/2025 - 10:00
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1565	11/25/25	11/25/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	105 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-02
Sampled By: Client
Sample Description: LK19070-02 // E1-10'

Sample Date - Time: 11/19/2025 - 14:35
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1100	ug/kg	1.1	AIK1565	11/25/25	11/25/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	102 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-03
Sampled By: Client
Sample Description: LK19070-03 // E1-25'

Sample Date - Time: 11/19/2025 - 15:00
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1565	11/25/25	11/25/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	97 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-04
Sampled By: Client
Sample Description: LK19070-04 // E2-5'

Sample Date - Time: 11/19/2025 - 08:24
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1565	11/25/25	11/25/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	105 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-05
Sampled By: Client
Sample Description: LK19070-05 // E2-10'

Sample Date - Time: 11/19/2025 - 08:43
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1565	11/25/25	11/25/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	104 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-06
Sampled By: Client
Sample Description: LK19070-06 // E2-20'

Sample Date - Time: 11/19/2025 - 09:35
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1565	11/25/25	11/25/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	108 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-07
Sampled By: Client
Sample Description: LK19070-07 // E3-5'

Sample Date - Time: 11/19/2025 - 13:40
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1621	11/25/25	11/26/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	98 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-08
Sampled By: Client
Sample Description: LK19070-08 // SG1-10'

Sample Date - Time: 11/19/2025 - 12:15
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1621	11/25/25	11/26/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	101 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-09
Sampled By: Client
Sample Description: LK19070-09 // SG2-15'

Sample Date - Time: 11/19/2025 - 10:45
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1621	11/25/25	11/26/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	100 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-10
Sampled By: Client
Sample Description: LK19070-10 // SG2-25'

Sample Date - Time: 11/19/2025 - 11:40
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1621	11/25/25	11/26/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	105 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK2641-11
Sampled By: Client
Sample Description: LK19070-11 // SG3-5'

Sample Date - Time: 11/19/2025 - 14:35
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1621	11/25/25	11/26/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	104 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

BSK Associates Laboratory Fresno

Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 8260D - Quality Control											
Batch: AIK1565										Prepared: 11/25/2025	
Prep Method: no prep-volatiles										Analyst: ETH	
Blank (AIK1565-BLK1)											
Gasoline Range Organics (C6-10)	ND	1000	ug/kg							11/25/25	
Surrogate: 1,2-Dichloroethane-d4	*50*			*50*		*100*	*50-150*			11/25/25	
Blank Spike (AIK1565-BS2)											
Gasoline Range Organics (C6-10)	4900	1000	ug/kg	5000	ND	97	50-150			11/25/25	
Surrogate: 1,2-Dichloroethane-d4	*50*			*50*		*100*	*50-150*			11/25/25	
EPA 8260D - Quality Control											
Batch: AIK1621										Prepared: 11/25/2025	
Prep Method: no prep-volatiles										Analyst: ETH	
Blank (AIK1621-BLK1)											
Gasoline Range Organics (C6-10)	ND	1000	ug/kg							11/26/25	
Surrogate: 1,2-Dichloroethane-d4	*52*			*50*		*103*	*50-150*			11/26/25	
Blank Spike (AIK1621-BS1)											
Gasoline Range Organics (C6-10)	4700	1000	ug/kg	5000	ND	94	50-150			11/26/25	
Surrogate: 1,2-Dichloroethane-d4	*50*			*50*		*100*	*50-150*			11/26/25	
Blank Spike Dup (AIK1621-BSD1)											
Gasoline Range Organics (C6-10)	4300	1000	ug/kg	5000	ND	86	50-150	8	30	11/26/25	
Surrogate: 1,2-Dichloroethane-d4	*51*			*50*		*102*	*50-150*			11/26/25	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Field tests are outside the scope of laboratory accreditation and there is no certification available for field testing.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.
- (2) - Formerly known as Bis(2-Chloroisopropyl) ether.
  Unless otherwise noted, TOC results by SM 5310C method do not include purgeable organic carbon, which is removed along with the inorganic carbon interference. The POC contribution to TOC is considered to be negligible.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected below MRL/MDL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	PicoCuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit	U:	The analyte was not detected at or above the reported sample quantitation limit.

Please see the individual Subcontract Lab's report for applicable certifications.

The following parameters are not available for certification through CA ELAP:

Odor Diisopropyl ether (DIPE) by EPA 524.2

The following parameters are calculated values and are outside the scope of our NELAP accreditation:

Total Nitrogen Aggressive Index Trivalent Chromium

BSK is not accredited under the NELAP program for the following additional parameters: **NA**

Certificate of Analysis

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Bakersfield

State of California - ELAP	1180-S3

Fresno

State of California - ELAP	1180	State of Hawaii	4021
Los Angeles CSD	9254479	NELAP certified	4021-025
State of Nevada	NV-C25-00264	State of Oregon - NELAP	4021-025
EPA UCMR5	CA00079	State of Washington	C997-25

Sacramento

State of California - ELAP	1180-S1

San Bernardino

State of California - ELAP	1180-S2	Los Angeles CSD	9254478
NELAP certified	4119-010	State of Oregon - NELAP	4119-010

Vancouver

NELAP certified	WA100008-021	State of Oregon - NELAP	WA100008-021
State of Washington	C824-25		

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 8°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No
If samples were taken today, is there evidence that chilling has begun?	(Yes) No NA	Bubbles Present VOAs (524.2/TTHM/TCP)? TB Received? (Check Method Below)	Yes No (NA) Yes No (NA)
Did all bottles arrive unbroken and intact?	(Yes) No	Was a sufficient amount of sample received?	(Yes) No
Did all bottle labels agree with COC?	(Yes) No	**Do samples have a hold time <72 hours?**	Yes (No)
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes (NA)	Was PM notified of discrepancies? PM: Pat: email scan copy	Yes No (NA)

Bottles Received

"—" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40mlVOA(V) 125ml(D)	Checks*	Passed?	1-5T2
Bacti $Na_2S_2O_3$	—	—	
None (P) White Label	—	—	
Cr6 (P) Lt. Green Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ DW	**Cl, pH > 8**	P F	
Cr6 (P) Pink Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **WW**	pH 9.3-9.7	P F	
Cr6 (P) Black Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ 7199 ****24 HOUR HOLD TIME****	**pH 9.0-9.5**	P F	
HNO_3 (P) Red Label or HCl (P) Purple Cap/Lt. Blue Label	—	—	
H_2SO_4 (P) or (AG) Yellow Label	**pH < 2**	P F	
NaOH (P) Green Cap/Label	Cl, pH >10	P F	
NaOH + ZnAc (P)	**pH > 9**	P F	
Dissolved Oxygen 300ml (g)	—	—	
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—	
HCl (AG) Lt. Blue Label O&G, Diesel	—	—	
Ascorbic, EDTA, KH_2Ct (AG) Pink Label 525	—	—	
Na_2SO_3 (AG) Neon Green Label 515	—	—	
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—	
$Na_2S_2O_3$ (AG) Blue Label 548, THM, 524	—	—	
$Na_2S_2O_3$ (CG) Blue Label 504, 505, 547	—	—	
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	P F	
NH_4Cl (AG) Purple Label 552	—	—	
EDA (P) or (AG) Brown Label DBPs	—	—	
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—	
Ascorbic Acid (AG) **TCP DWRL**	—	—	
Buffer pH 4 (CG)	—	—	
H_3PO_4 (CG) Salmon Label	---	---	
Trizma – EPA 537.1 Light Blue Label FB	—	---	
Ammonia Acetate - EPA 533 Purple Label **FB**	—	—	
Bottle Water	—	—	
Clear Glass: Jar / VOA	—	—	
OTHER: ENCORE 5g	—	—	5

BM 11-20-25

Split

	Container	Preservative	Lot #	Initials	Date/Time
S P					
S P					

Preservation Check
pH Lot #
Cl Lot #

Comments

***Preservation check completed by lab performing analysis.**

✓ **Indicates Blanks Received**

504 ___ 524.2 ___ TTHM ___ 537/533 ___ TCP___

✓ **MS/MSD Received Method:** _____

Labeled by: **Checked by:**

Scanned: _____ Rush/Short HT Page: _____ Time: _____

TL

MOORE TWINING ASSOCIATES, INC.

Analytical Chemistry Division
California ELAP Certification # 1371

AIK2641 Moore7021 11/20/2025

10

Purchase Order # 43448
MTA Project # LK19070

Please reference these numbers on all reports and invoices.
We also request QC data be provided with final report.

SENDING LABORATORY:	PROJECT MANAGER / REPORT TO:	RECEIVING LABORATORY:
Moore Twining Associates, Inc 2527 Fresno Street Fresno, CA 93721 Phone: (559) 268-7021 Fax: (559) 268-0740	Susan Federico SusanF@mooretwining.com **INVOICE TO:** Denise Willis AccountsPayable@MooreTwining.com	BSK Analytical Laboratories 687 N. Laverne Avenue Fresno, CA 93727 Phone: (559) 497-2880 Fax: (559) 485-6935

SAMPLE INFORMATION — **COMMENTS / SOURCE ID**

1 **Client Sample ID: E1-5'**
MTA Sample ID: LK19070-01 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 10:00
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 10:00
Containers Supplied:
5g Encore (D) *5g Encore (E)*

2 **Client Sample ID: E1-10'**
MTA Sample ID: LK19070-02 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 14:35
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 14:35
Containers Supplied:
5g Encore (D) *5g Encore (E)*

3 **Client Sample ID: E1-25'**
MTA Sample ID: LK19070-03 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 15:00
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 15:00
Containers Supplied:
5g Encore (D) *5g Encore (E)*

4 **Client Sample ID: E2-5'**
MTA Sample ID: LK19070-04 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 08:24
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 08:24
Containers Supplied:
5g Encore (D) *5g Encore (E)*

5 **Client Sample ID: E2-10'**
MTA Sample ID: LK19070-05 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 08:43
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 08:43
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Temp °C 4.5

BI, Ø, Walk In

Thermometer # 42

Released By	Date / Time	Received By	Date / Time
[signature]	11-20-25	BM	11-20-25
Released By	Date / Time	Received By	Date / Time
		[signature]	11-20-25 14:59

Please email copy of receipt with your assigned Sample ID Number to SusanF@MooreTwining.com

MOORE TWINING ASSOCIATES, INC.
Analytical Chemistry Division
California ELAP Certification # 1371

AIK2641 Moore7021 11/20/2025

Purchase Order # 43448
MTA Project # LK19070

Please reference these numbers on all reports and invoices.
We also request QC data be provided with final report.

SAMPLE INFORMATION	COMMENTS / SOURCE ID

Client Sample ID: E2-20'
MTA Sample ID: LK19070-06 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 09:35
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 09:35
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Client Sample ID: E3-5'
MTA Sample ID: LK19070-07 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 13:40
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 13:40
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Client Sample ID: SG1-10'
MTA Sample ID: LK19070-08 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 12:15
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 12:15
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Client Sample ID: SG2-15'
MTA Sample ID: LK19070-09 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 10:45
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 10:45
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Client Sample ID: SG2-25'
MTA Sample ID: LK19070-10 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 11:40
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 11:40
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Client Sample ID: SG3-5'
MTA Sample ID: LK19070-11 **Matrix:** Soil **Sampled Date/Time:** 11/19/25 14:35
Requested Analysis: TPH-G **Holding Time Expires:** 12/03/25 14:35
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Temp °C 4.5

BT, B, Walk In

Thermometer # 42

Greg Botta 11-20-25 — Released By / Date / Time

TM 11-20-25 — Received By / Date / Time

Released By / Date / Time

Received By 11-20-25 14:39 / Date / Time

Please email copy of receipt with your assigned Sample ID Number to SusanF@MooreTwining.com

MOORE TWINING ASSOCIATES, INC. EST. 1898

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #: LK190 70
PAGE 1 **OF** 2

REPORT TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ INVOICE TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ REPORT COPY TO:

REPORTING:
X STANDARD FORMAT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS :
☐ Environmental Health Agency :
☐ OTHER:
Standard Excel/J-flag report

SAMPLE INFORMATION
SAMPLED BY (PRINT): Keith Mayes
SIGNATURE:

☐ PUBLIC SYSTEM ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ REPLACEMENT

TURN AROUND TIME: ☐ RUSH, DUE ON:
X STANDARD

SAMPLE TYPES:
SOLID:
BS – BIOSOLID
CR – CERAMIC
SL – SOIL/SOLID
LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW – WASTE WATER

PROJECT INFORMATION
CONTRACT/P.O. NO.:
PROJECT: Judicial Council of California Courthouse Park Redevelopment, 2200 Fresno Street
PROJECT NUMBER: ~~B5420.01~~
PROJECT MANAGER: Keith Mayes

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
X ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
5.9

ANALYSIS REQUESTED

LAB USE	CLIENT SAMPLE ID	DATE	TIME	TYPE	TPHg (8015)	TPHd/mo (8015)	VOCs (8260B)	LUFT 5 Metals		HOLD				
1	E1-5'	11/19/25	10:00	SL	X	X	X	X						
2	E1-10'	11/19/25	14:35	SL	X	X	X	X						
3	E1-25'	11/19/25	15:00	SL	X	X	X	X						
4	E2-5'	11/19/25	08:24	SL	X	X	X	X						
5	E2-10'	11/19/25	08:43	SL	X	X	X	X						
6	E2-20'	11/19/25	09:35	SL	X	X	X	X						
7	E3-5'	11/19/25	13:40	SL	X	X	X	X						
8	SG1-10'	11/19/25	12:15	SL	X	X	X	X						
9	SG2-15'	11/19/25	10:45	SL	X	X	X	X						
10	SG2-25'	11/19/25	11:40	SL	X	X	X	X						
11	SG3-5'	11/19/25	14:35	SL	X	X	X	X						
12	E2-25'	11/19/25	09:07	SL						X				

COMMENTS/ADDITIONAL INSTRUCTIONS: Samples to be analyzed for TPHg and VOCs were collected in Encore devices per EPA Method 5035

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
	MTA	11/19/25	1638		

Sample Integrity — Page 2 of 2 — Moore Twining Associates WO# LK19070 — MTA Bottles: (Yes) or No

COC Info

Was temperature within range? Chemistry ≤6°C Micro <10°C Temp 5.9 °C	(Yes) No N/A	Did all bottle labels agree with COC?	(Yes) No N/A	Were there bubbles in VOA vials? (Volatiles Only)	Yes No (N/A)
If samples were taken today, is there evidence that chilling has begun? Recvd 5.9 C°	(Yes) No N/A	Was a sufficient amount of sample received?	(Yes) No N/A	Was PM notified of discrepancies? PM: By/Time:	Yes No (N/A)
Did all bottles arrive unbroken and intact?	(Yes) No N/A	Were correct containers and preservatives received for the tests requested?	(Yes) No N/A		
Do samples have a hold time <72 hours?	Yes (No) N/A				

Bottles Received

125ml (A) 250ml (B) 1Liter (C) 40ml VOA (V)	1-2																				
Bacti $Na_2S_2O_3$ Thio 120mL																					
None (P)																					
None (AG)																					
None (CG) 500ml																					
Cr6 Buffer (P) Borate Carbonate Buffer-EPA 7196A																					
Dissolved Oxygen 300ml (P)																					
HNO_3 (P)																					
HCl (AG)																					
H_2SO_4 (P)																					
H_3PO_4 (AG) - TOC																					
NaOH (P), cyanide																					
NaOH + ZnAc (P) sodium hydroxid+zinc acetate																					
$Na_2S_2O_3$ (AG) Thio EPA 547, 538, TTHM																					
$Na_2S_2O_3$ (CG) Thio EPA , 504.1																					
$Na_2S_2O_3$ 250ml (Brown P) EPA 549																					
Thio/K Citrate(AG) EPA 531.2																					
NH_4Cl (AG) 552- ammonium chloride EPA HAA5																					
Other:																					
Client Own																					
Low Level Hg/Metals Double Bag																					
Plastic Bag																					
Glass Jar: 125 / 250 / 500																					
Soil Tube: Brass / (Steel) / Plastic	1																				
5g Encore	4																				
Cubitaner 1G / 2.5 G																					

Comments

Filter or Split

	Container	Preservative	Date/Time/Initials
S P F			
S P F			
S P F			
S P F			
S P F			

Page 50 of 50

Labeled by:_____@_____ Labels checked by: MB @_____

FL-SC-0003-07

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

December 10, 2025

Work Order #: **LK24064**

Keith Mayes
MTA Environmental Division
2527 Fresno Street
Fresno, CA 93721

RE: J.C.C.Courthouse Park Redevelopement,2200 FresnoSt

Enclosed are the analytical results for samples received by our laboratory on **11/24/25** . For your reference, these analyses have been assigned laboratory work order number **LK24064**.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.



Lauren Cox
Client Services Representative

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	12/10/2025
Fresno CA, 93721	**Project Manager:** Keith Mayes	

Analytical Report for the Following Samples

Sample ID	Notes	Laboratory ID	Matrix	Date Sampled	Date Received
E6-6'		LK24064-01	Soil	11/24/25 08:50	11/24/25 15:12
SG4-5'		LK24064-02	Soil	11/24/25 10:00	11/24/25 15:12

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	12/10/2025
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E6-6'

LK24064-01 (Soil) Sampled: 11/24/25 08:50

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2117	12/01/25	12/01/25	EPA 6010B
Chromium		**20**	2.0	mg/kg	1	B5K2117	12/01/25	12/01/25	EPA 6010B
Lead		**4.3**	2.0	mg/kg	1	B5K2117	12/01/25	12/01/25	EPA 6010B
Nickel		**25**	2.0	mg/kg	1	B5K2117	12/01/25	12/01/25	EPA 6010B
Zinc		**19**	2.0	mg/kg	1	B5K2117	12/01/25	12/01/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*33.5%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1-Dichloroethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1-Dichloroethene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1-Dichloropropene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0041	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2-Dichloropropane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,3-Dichloropropane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
2,2-Dichloropropane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
2-Butanone (MEK)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.017	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
2-Chlorotoluene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
2-Hexanone		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
4-Chlorotoluene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Acetone		ND	0.017	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Acrolein		ND	0.041	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Acrylonitrile		ND	0.0083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Benzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Bromobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	12/10/2025
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E6-6'

LK24064-01 (Soil) Sampled: 11/24/25 08:50

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Bromochloromethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Bromodichloromethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Bromoform		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Bromomethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Carbon disulfide		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Carbon tetrachloride		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Chlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Chloroethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Chloroform		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Chloromethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Chloroprene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Dibromochloromethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Dibromomethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Ethanol		ND	0.041	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Ethyl methacrylate		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Ethylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Hexachlorobutadiene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Iodomethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Isopropylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
m,p-Xylene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Methyl Methacrylate		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Methylene chloride		ND	0.0017	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Naphthalene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
n-Butylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
n-Propylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
o-Xylene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
p-Isopropyltoluene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
sec-Butylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Styrene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.017	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
tert-Butylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Toluene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	12/10/2025
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E6-6'

LK24064-01 (Soil) Sampled: 11/24/25 08:50

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Trichlorofluoromethane (CFC-11)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Vinyl acetate		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Vinyl chloride		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Xylenes		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*93.4%*	*Recovery Limits: 70% - 130%*			*B5L0125*	12/01/25	12/01/25	*EPA 8260B*
Surr: Dibromofluoromethane		*104%*	*Recovery Limits: 70% - 130%*			*B5L0125*	12/01/25	12/01/25	*EPA 8260B*
Surr: Toluene-d8		*99.5%*	*Recovery Limits: 70% - 130%*			*B5L0125*	12/01/25	12/01/25	*EPA 8260B*

SG4-5'

LK24064-02 (Soil) Sampled: 11/24/25 10:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5K2117	12/01/25	12/01/25	EPA 6010B
Chromium		**14**	2.0	mg/kg	1	B5K2117	12/01/25	12/01/25	EPA 6010B
Lead		**6.5**	2.0	mg/kg	1	B5K2117	12/01/25	12/01/25	EPA 6010B
Nickel		**16**	2.0	mg/kg	1	B5K2117	12/01/25	12/01/25	EPA 6010B
Zinc		**17**	2.0	mg/kg	1	B5K2117	12/01/25	12/01/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Surr: o-Terphenyl		*26.1%*	*Recovery Limits: 11.8% - 130%*			*B5K2401*	11/25/25	11/26/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5K2401	11/25/25	11/26/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1-Dichloroethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1-Dichloroethene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,1-Dichloropropene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0041	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B

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MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	12/10/2025
Fresno CA, 93721	**Project Manager:** Keith Mayes	

SG4-5'

LK24064-02 (Soil) Sampled: 11/24/25 10:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,2-Dichloropropane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,3-Dichloropropane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
2,2-Dichloropropane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
2-Butanone (MEK)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.017	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
2-Chlorotoluene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
2-Hexanone		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
4-Chlorotoluene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Acetone		ND	0.017	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Acrolein		ND	0.041	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Acrylonitrile		ND	0.0083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Benzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Bromobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Bromochloromethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Bromodichloromethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Bromoform		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Bromomethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Carbon disulfide		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Carbon tetrachloride		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Chlorobenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Chloroethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Chloroform		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Chloromethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Chloroprene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Dibromochloromethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Dibromomethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Ethanol		ND	0.041	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Ethyl methacrylate		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Ethylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Hexachlorobutadiene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Iodomethane		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Isopropylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
m,p-Xylene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Methyl Methacrylate		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B

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MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	12/10/2025
Fresno CA, 93721	**Project Manager:** Keith Mayes	

SG4-5'

LK24064-02 (Soil) Sampled: 11/24/25 10:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Methylene chloride		ND	0.0017	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Naphthalene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
n-Butylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
n-Propylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
o-Xylene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
p-Isopropyltoluene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
sec-Butylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Styrene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.017	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
tert-Butylbenzene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Toluene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Vinyl acetate		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Vinyl chloride		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Xylenes		ND	0.00083	mg/kg	1	B5L0125	12/01/25	12/01/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*91.8%*	*Recovery Limits: 70% - 130%*			*B5L0125*	12/01/25	12/01/25	*EPA 8260B*
Surr: Dibromofluoromethane		*104%*	*Recovery Limits: 70% - 130%*			*B5L0125*	12/01/25	12/01/25	*EPA 8260B*
Surr: Toluene-d8		*98.4%*	*Recovery Limits: 70% - 130%*			*B5L0125*	12/01/25	12/01/25	*EPA 8260B*

Notes and Definitions

MS3	Matrix Spike Recovery for this analyte was biased low; associated blank spike recovery is within range.
µg/L	micrograms per liter (parts per billion concentration units)
mg/L	milligrams per liter (parts per million concentration units)
mg/kg	milligrams per kilogram (parts per million concentration units)
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Analysis of pH, filtration, and residual chlorine is to take place immediately after sampling in the field.
If the test was performed in the laboratory, the hold time was exceeded. **(for aqueous matrices only)**

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

BSK Associates Laboratory Fresno
687 N. Laverne Avenue
Fresno, CA 93727
559-497-2888 (Main)

AIK3091
12/08/2025
Invoice: AI31564

Susan Federico
Moore Twining Associates
2527 Fresno Street
Fresno, CA 93721

RE: Report for AIK3091 General

Dear Susan Federico,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 11/25/2025. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2016 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

This certificate of analysis shall not be reproduced except in full, without written approval of the laboratory.

If additional clarification of any information is required, please contact your Client Services Representative, Heather S. Johnson , at 559-497-2888.

Thank you again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Heather Johnson

Heather S. Johnson, Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

Case Narrative

Project and Report Details		Invoice Details	
Client:	Moore Twining Associates	**Invoice To:**	Moore Twining Associates
Report To:	Susan Federico	**Invoice Attn:**	Denise Willis
Project #:	LK24064	**Project PO#:**	43459
Received:	11/25/2025 - 15:00		
Report Due:	12/11/2025		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 5.3

Containers Intact
COC/Labels Agree
Received On Blue Ice
Packing Material - Other
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Danielle Abrames	FINAL.RPT	susanf@mooretwining.com;laurenc@mooretwining.com;gregb@mooretwining.com

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK3091-01
Sampled By: Client
Sample Description: LK24064-01 // E6-6'

Sample Date - Time: 11/24/2025 - 08:50
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1621	11/25/25	11/26/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	101 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIK3091-02
Sampled By: Client
Sample Description: LK24064-02 // SG4-5'

Sample Date - Time: 11/24/2025 - 10:00
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIK1621	11/25/25	11/26/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	102 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

BSK Associates Laboratory Fresno

Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 8260D - Quality Control											
Batch: AIK1621										Prepared: 11/25/2025	
Prep Method: no prep-volatiles										Analyst: ETH	
Blank (AIK1621-BLK1)											
Gasoline Range Organics (C6-10)	ND	1000	ug/kg							11/26/25	
Surrogate: 1,2-Dichloroethane-d4	*52*			*50*		*103*	*50-150*			11/26/25	
Blank Spike (AIK1621-BS1)											
Gasoline Range Organics (C6-10)	4700	1000	ug/kg	5000	ND	94	50-150			11/26/25	
Surrogate: 1,2-Dichloroethane-d4	*50*			*50*		*100*	*50-150*			11/26/25	
Blank Spike Dup (AIK1621-BSD1)											
Gasoline Range Organics (C6-10)	4300	1000	ug/kg	5000	ND	86	50-150	8	30	11/26/25	
Surrogate: 1,2-Dichloroethane-d4	*51*			*50*		*102*	*50-150*			11/26/25	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Field tests are outside the scope of laboratory accreditation and there is no certification available for field testing.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.
- (2) - Formerly known as Bis(2-Chloroisopropyl) ether.
  Unless otherwise noted, TOC results by SM 5310C method do not include purgeable organic carbon, which is removed along with the inorganic carbon interference. The POC contribution to TOC is considered to be negligible.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected below MRL/MDL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	PicoCuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit	U:	The analyte was not detected at or above the reported sample quantitation limit.

Please see the individual Subcontract Lab's report for applicable certifications.

The following parameters are not available for certification through CA ELAP:

Odor Diisopropyl ether (DIPE) by EPA 524.2

The following parameters are calculated values and are outside the scope of our NELAP accreditation:

Total Nitrogen Aggressive Index Trivalent Chromium

BSK is not accredited under the NELAP program for the following additional parameters: **NA**

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Bakersfield

State of California - ELAP	1180-S3

Fresno

State of California - ELAP	1180	State of Hawaii	4021
Los Angeles CSD	9254479	NELAP certified	4021-025
State of Nevada	NV-C25-00264	State of Oregon - NELAP	4021-025
EPA UCMR5	CA00079	State of Washington	C997-25

Sacramento

State of California - ELAP	1180-S1

San Bernardino

State of California - ELAP	1180-S2	Los Angeles CSD	9254478
NELAP certified	4119-010	State of Oregon - NELAP	4119-010

Vancouver

NELAP certified	WA100008-021	State of Oregon - NELAP	WA100008-021
State of Washington	C824-25		

AIK3091 Moore7021 11/25/2025

10

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 8°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No
If samples were taken today, is there evidence that chilling has begun?	(Yes) No NA	Bubbles Present VOAs (524.2/TTHM/TCP)?	Yes No (NA)
		TB Received? (Check Method Below)	Yes No (NA)
Did all bottles arrive unbroken and intact?	(Yes) No	Was a sufficient amount of sample received?	(Yes) No
Did all bottle labels agree with COC?	(Yes) No	**Do samples have a hold time <72 hours?**	(Yes) No
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes (NA)	Was PM notified of discrepancies? PM: dt: email scan copy	Yes No NA

Bottles Received

"|" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40mlVOA(V) 125ml(D)	Checks*	Passed?	1-2				
Bacti $Na_2S_2O_3$	—	—					
None (P) White Label	—	—					
Cr6 (P) Lt. Green Label/Blue Cap NH4OH(NH4)2SO4 **DW**	Cl, pH > 8	P F					
Cr6 (P) Pink Label/Blue Cap NH4OH(NH4)2SO4 **WW**	pH 9.3-9.7	P F					
Cr6 (P) Black Label/Blue Cap NH4OH(NH4)2SO4 **7199** ***24 HOUR HOLD TIME***	pH 9.0-9.5	P F					
HNO_3 (P) Red Label or HCl (P) Purple Cap/Lt. Blue Label	—	—					
H_2SO_4 (P) or (AG) Yellow Label	pH < 2	P F					
NaOH (P) Green Cap/Label	Cl, pH >10	P F					
NaOH + ZnAc (P)	pH > 9	P F					
Dissolved Oxygen 300ml (g)	—	—					
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—					
HCl (AG) Lt. Blue Label O&G, Diesel	—	—					
Ascorbic, EDTA, KH_2Ct (AG) Pink Label 525	—	—					
Na_2SO_3 (AG) Neon Green Label 515	—	—					
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—					
$Na_2S_2O_3$ (AG) Blue Label 548, THM, 524	—	—					
$Na_2S_2O_3$ (CG) Blue Label 504, 505, 547	—	—					
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	P F					
NH_4Cl (AG) Purple Label 552	—	—					
EDA (P) or (AG) Brown Label DBPs	—	—					
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—					
Ascorbic Acid (AG) **TCP DWRL**	—	—					
Buffer pH 4 (CG)	—	—					
H_3PO_4 (CG) Salmon Label	---	---					
Trizma – EPA 537.1 Light Blue Label **FB**	—	---					
Ammonia Acetate - EPA 533 Purple Label **FB**	—	—					
Bottle Water	—	—					
Clear Glass: Jar / VOA	—	—					
OTHER: ENCORE 5g	—	—	2				

JDM 11-25-25

Split

	Container	Preservative	Lot #	Initials	Date/Time
S P					
S P					

Preservation Check
pH Lot #
Cl Lot #

Comments

*Preservation check completed by lab performing analysis.

✓ **Indicates Blanks Received**

504 ___ 524.2 ___ TTHM ___ 537/533 ___ TCP___

✓ **MS/MSD Received Method:** _____

Labeled by: **Checked by:** KM

Scanned: _____ Rush/Short HT Page: _____ Time:_____

MOORE TWINING ASSOCIATES

Analytical Chemistry D
California ELAP Certificati

AIK3091 Moore7021 11/25/2025 10

T ORDER

Purchase Order # 43459
MTA Project # LK24064

Please reference ... numbers on all reports and invoices.
We also request QC data be provided with final report.

SENDING LABORATORY:	PROJECT MANAGER / REPORT TO:	RECEIVING LABORATORY:
Moore Twining Associates, Inc 2527 Fresno Street Fresno, CA 93721 Phone: (559) 268-7021 Fax: (559) 268-0740	Susan Federico SusanF@mooretwining.com **INVOICE TO:** Denise Willis AccountsPayable@MooreTwining.com	BSK Analytical Laboratories 687 N. Laverne Avenue Fresno, CA 93727 Phone: (559) 497-2880 Fax: (559) 485-6935

SAMPLE INFORMATION — **COMMENTS / SOURCE ID**

Client Sample ID: E6-6'
MTA Sample ID: LK24064-01 **Matrix:** Soil **Sampled Date/Time:** 11/24/25 08:50
Requested Analysis: TPH-G **Holding Time Expires:** 12/08/25 08:50
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Client Sample ID: SG4-5'
MTA Sample ID: LK24064-02 **Matrix:** Soil **Sampled Date/Time:** 11/24/25 10:00
Requested Analysis: TPH-G **Holding Time Expires:** 12/08/25 10:00
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Temp °C 5.3

Thermometer # 42

BI, Ø, Walk In

BM 11-25-25

Released By	Date / Time	Received By	Date / Time
Greg Botts	11-25-25	BM 11-25-25	
Released By	Date / Time	Received By	Date / Time
		[illegible]	11-25-25 1120

Please email copy of receipt with your assigned Sample ID Number to SusanF@MooreTwining.com

MOORE TWINING ASSOCIATES, INC.
ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #: LK24064
PAGE 1 **OF** 2

REPORT TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ INVOICE TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ REPORT COPY TO:

REPORTING:
X STANDARD FORMAT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS :
☐ Environmental Health Agency :
☐ OTHER:
Standard Excel/J-flag report

SAMPLE INFORMATION

SAMPLED BY (PRINT): Keith Mayes
SIGNATURE: Keith Mayes

☐ PUBLIC SYSTEM ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ REPLACEMENT

TURN AROUND TIME: ☐ RUSH, DUE ON:
X STANDARD

SAMPLE TYPES:
SOLID:
BS – BIOSOLID
CR – CERAMIC
SL – SOIL/SOLID
LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW – WASTE WATER

PROJECT INFORMATION

CONTRACT/P.O. NO.:
PROJECT: Judicial Council of California Courthouse Park Redevelopment, 2200 Fresno Street, Fresno, CA
PROJECT NUMBER: C88004.01
PROJECT MANAGER: Keith Mayes

ANALYSIS REQUESTED

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
X ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
5°C

	CLIENT SAMPLE ID	DATE	TIME	TYPE	TPHg (8015)	TPHd/mo (8015)	VOCs (8260B)	LUFT 5 Metals						
1	E6-6'	11/24/25	08:50	SL	X	X	X	X						
2	SG4-5'	11/24/25	10:00	SL	X	X	X	X						

COMMENTS/ADDITIONAL INSTRUCTIONS: Samples to be analyzed for TPHg and VOCs were collected in Encore devices per EPA Method 5035

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
Keith Mayes	MTA	11/24/25	15:12		

Sample Integrity — Page 2 of 2 — Moore Twining Associates — WO# 24064

MTA Bottles: Yes or (No)

COC Info

Was temperature within range? Chemistry ≤6°C Micro <10°C Temp 5.0°C	(Yes)	No	N/A	Did all bottle labels agree with COC?	(Yes)	No	N/A
If samples were taken today, is there evidence that chilling has begun? Recvd ____ C°	(Yes)	No	N/A	Was a sufficient amount of sample received?	(Yes)	No	N/A
Did all bottles arrive unbroken and intact?	(Yes)	No	N/A	Were correct containers and preservatives received for the tests requested?	(Yes)	No	N/A
Do samples have a hold time <72 hours?	Yes	(No)	N/A				

Were there bubbles in VOA vials? (Volatiles Only) — Yes No (N/A)

Was PM notified of discrepancies? PM: By/Time: — Yes No (N/A)

Bottles Received

| | | | | | | |

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

January 05, 2026

Work Order #: **LL01040**

Keith Mayes
MTA Environmental Division
2527 Fresno Street
Fresno, CA 93721

RE: J.C.C.Courthouse Park Redevelopement,2200 FresnoSt

Enclosed are the analytical results for samples received by our laboratory on **12/01/25** . For your reference, these analyses have been assigned laboratory work order number **LL01040**.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.



Susan Federico
Client Services Representative

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

Analytical Report for the Following Samples

Sample ID	Notes	Laboratory ID	Matrix	Date Sampled	Date Received
SG4-25'		LL01040-01	Soil	12/01/25 09:40	12/01/25 12:18
SG5-25'		LL01040-02	Soil	12/01/25 08:00	12/01/25 12:18

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

SG4-25'

LL01040-01 (Soil) Sampled: 12/01/25 09:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Chromium		**13**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Lead		**4.0**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Nickel		**13**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Zinc		**29**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*49.2%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloropropene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0046	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloropropane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichloropropane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2,2-Dichloropropane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Butanone (MEK)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chlorotoluene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Hexanone		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Chlorotoluene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acetone		ND	0.018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrolein		ND	0.046	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrylonitrile		ND	0.0092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Benzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** C88004.01 **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

SG4-25'

LL01040-01 (Soil) Sampled: 12/01/25 09:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Bromochloromethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromodichloromethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromoform		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromomethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon disulfide		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon tetrachloride		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroform		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloromethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroprene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromochloromethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromomethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethanol		ND	0.046	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl methacrylate		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Hexachlorobutadiene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Iodomethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Isopropylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
m,p-Xylene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl Methacrylate		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methylene chloride		ND	0.0018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Naphthalene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Butylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Propylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
o-Xylene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
p-Isopropyltoluene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
sec-Butylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Styrene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Toluene		**0.0012**	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** C88004.01 **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

SG4-25'

LL01040-01 (Soil) Sampled: 12/01/25 09:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Trichlorofluoromethane (CFC-11)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl acetate		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl chloride		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Xylenes		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*91.6%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Dibromofluoromethane		*102%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Toluene-d8		*97.8%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*

SG5-25'

LL01040-02 (Soil) Sampled: 12/01/25 08:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Chromium		**12**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Lead		**4.5**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Nickel		**18**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Zinc		**32**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*59.4%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloropropene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0046	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

SG5-25'

LL01040-02 (Soil) Sampled: 12/01/25 08:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,2-Dichloropropane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichloropropane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2,2-Dichloropropane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Butanone (MEK)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chlorotoluene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Hexanone		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Chlorotoluene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acetone		ND	0.018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrolein		ND	0.046	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrylonitrile		ND	0.0092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Benzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromochloromethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromodichloromethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromoform		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromomethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon disulfide		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon tetrachloride		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chlorobenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroform		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloromethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroprene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromochloromethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromomethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethanol		ND	0.046	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl methacrylate		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Hexachlorobutadiene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Iodomethane		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Isopropylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
m,p-Xylene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl Methacrylate		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

SG5-25'

LL01040-02 (Soil) Sampled: 12/01/25 08:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Methylene chloride		ND	0.0018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Naphthalene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Butylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Propylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
o-Xylene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
p-Isopropyltoluene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
sec-Butylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Styrene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butylbenzene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Toluene		**0.0011**	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl acetate		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl chloride		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Xylenes		ND	0.00092	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*91.0%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Dibromofluoromethane		*102%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Toluene-d8		*98.8%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*

Notes and Definitions

MS3	Matrix Spike Recovery for this analyte was biased low; associated blank spike recovery is within range.
RPD	The RPD result exceeded the QC control limits. However, both percent recoveries were acceptable.
µg/L	micrograms per liter (parts per billion concentration units)
mg/L	milligrams per liter (parts per million concentration units)
mg/kg	milligrams per kilogram (parts per million concentration units)
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
	Analysis of pH, filtration, and residual chlorine is to take place immediately after sampling in the field. If the test was performed in the laboratory, the hold time was exceeded. **(for aqueous matrices only)**

BSK Associates Laboratory Fresno
687 N. Laverne Avenue
Fresno, CA 93727
559-497-2888 (Main)

AIL0262
12/10/2025
Invoice: AI31795

Susan Federico
Moore Twining Associates
2527 Fresno Street
Fresno, CA 93721

RE: Report for AIL0262 General

Dear Susan Federico,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 12/2/2025. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2016 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

This certificate of analysis shall not be reproduced except in full, without written approval of the laboratory.

If additional clarification of any information is required, please contact your Client Services Representative, Heather S. Johnson , at 559-497-2888.

Thank you again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Heather Johnson

Heather S. Johnson, Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

Case Narrative

Project and Report Details		Invoice Details	
Client:	Moore Twining Associates	**Invoice To:**	Moore Twining Associates
Report To:	Susan Federico	**Invoice Attn:**	Denise Willis
Project #:	LL01040	**Project PO#:**	43463
Received:	12/02/2025 - 13:09		
Report Due:	12/16/2025		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 5.3

Containers Intact
COC/Labels Agree
Received On Ice
Packing Material - Bubble Wrap
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Danielle Abrames	FINAL.RPT	susanf@mooretwining.com;laurenc@mooretwining.com;gregb@mooretwining.com

Certificate of Analysis

Sample ID: AIL0262-01
Sampled By: Keith Mayes
Sample Description: LL01040-01 // SG4-25'

Sample Date - Time: 12/01/2025 - 09:40
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIL0212	12/08/25	12/09/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	107 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIL0262-02
Sampled By: Keith Mayes
Sample Description: LL01040-02 // SG5-25'

Sample Date - Time: 12/01/2025 - 08:00
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIL0212	12/08/25	12/09/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	99 %	*Acceptable range: 50-150 %*						

BSK Associates Laboratory Fresno

Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 8260D - Quality Control											
Batch: AIL0212										Prepared: 12/8/2025	
Prep Method: no prep-volatiles										Analyst: ETH	
Blank (AIL0212-BLK1)											
Gasoline Range Organics (C6-10)	ND	1000	ug/kg							12/09/25	
Surrogate: 1,2-Dichloroethane-d4	*52*			*50*		*103*	*50-150*			12/09/25	
Blank Spike (AIL0212-BS3)											
Gasoline Range Organics (C6-10)	4900	1000	ug/kg	5000	ND	99	50-150			12/08/25	
Surrogate: 1,2-Dichloroethane-d4	*49*			*50*		*98*	*50-150*			12/08/25	
Duplicate (AIL0212-DUP1), Source: AIL0027-01RE1											
Gasoline Range Organics (C6-10)	2400	1000	ug/kg		ND					12/09/25	
Surrogate: 1,2-Dichloroethane-d4	*50*			*50*		*99*	*50-150*			12/09/25	

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Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Field tests are outside the scope of laboratory accreditation and there is no certification available for field testing.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.
- (2) - Formerly known as Bis(2-Chloroisopropyl) ether.
  Unless otherwise noted, TOC results by SM 5310C method do not include purgeable organic carbon, which is removed along with the inorganic carbon interference. The POC contribution to TOC is considered to be negligible.

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Certificate of Analysis

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected below MRL/MDL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	PicoCuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit	U:	The analyte was not detected at or above the reported sample quantitation limit.

Please see the individual Subcontract Lab's report for applicable certifications.

The following parameters are not available for certification through CA ELAP:

Odor Diisopropyl ether (DIPE) by EPA 524.2

The following parameters are calculated values and are outside the scope of our NELAP accreditation:

Total Nitrogen Aggressive Index Trivalent Chromium

BSK is not accredited under the NELAP program for the following additional parameters: **NA**

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Certificate of Analysis

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Bakersfield

State of California - ELAP	1180-S3

Fresno

State of California - ELAP	1180	State of Hawaii	4021
Los Angeles CSD	9254479	NELAP certified	4021-025
State of Nevada	NV-C25-00264	State of Oregon - NELAP	4021-025
EPA UCMR5	CA00079	State of Washington	C997-25

Sacramento

State of California - ELAP	1180-S1

San Bernardino

State of California - ELAP	1180-S2	Los Angeles CSD	9254478
NELAP certified	4119-010	State of Oregon - NELAP	4119-010

Vancouver

NELAP certified	WA100008-021	State of Oregon - NELAP	WA100008-021
State of Washington	C824-25		

MOORE TWINING ASSOCIATES, INC.

Analytical Chemistry Division
California ELAP Certification # 1371

AIL0262 Moore7021 12/02/2025

10

Purchase Order # 43463
MTA Project # LL01040

Please refer[illegible] reports and invoices.
We also request QC data be provided with final report.

SENDING LABORATORY:	PROJECT MANAGER / REPORT TO:	RECEIVING LABORATORY:
Moore Twining Associates, Inc 2527 Fresno Street Fresno, CA 93721 Phone: (559) 268-7021 Fax: (559) 268-0740	Susan Federico SusanF@mooretwining.com **INVOICE TO:** Denise Willis AccountsPayable@MooreTwining.com	BSK Analytical Laboratories 687 N. Laverne Avenue Fresno, CA 93727 Phone: (559) 497-2880 Fax: (559) 485-6935

SAMPLE INFORMATION — **COMMENTS / SOURCE ID**

Client Sample ID: SG4-25' (1)
MTA Sample ID: LL01040-01 **Matrix:** Soil **Sampled Date/Time:** 12/01/25 09:40
Requested Analysis: TPH-G **Holding Time Expires:** 12/15/25 09:40
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Sample by: Keith Mayes

Client Sample ID: SG5-25' (2)
MTA Sample ID: LL01040-02 **Matrix:** Soil **Sampled Date/Time:** 12/01/25 08:00
Requested Analysis: TPH-G **Holding Time Expires:** 12/15/25 08:00
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Temp °C 5.3 WI, BW, Walk In

Thermometer # 42

BM 12-02-25

Released By	Date / Time	Received By	Date / Time
Greg Botta	1-2-25	BM 12-02-25	
Released By	Date / Time	Received By	Date / Time
			12-02-25 1309

Please email copy of receipt with your assigned Sample ID Number to SusanF@MooreTwining.com

BSK-SR-0002-01 Effective Date: 7/16/2025

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 8°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No
If samples were taken today, is there evidence that chilling has begun?	Yes (No) NA	Bubbles Present VOAs (524.2/TTHM/TCP)? TB Received? (Check Method Below)	Yes No (NA) Yes No (NA)
Did all bottles arrive unbroken and intact?	(Yes) No	Was a sufficient amount of sample received?	(Yes) No
Did all bottle labels agree with COC?	(Yes) No	**Do samples have a hold time <72 hours?**	Yes (No)
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes (NA)	Was PM notified of discrepancies? PM: dt: email scan copy	Yes No (NA)

Bottles Received — "—" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40mlVOA(V) 125ml(D)	Checks*	Passed?
Bacti $Na_2S_2O_3$	—	—
None (P) White Label	—	—
Cr6 (P) Lt. Green Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **DW**	Cl, pH > 8	P F
Cr6 (P) Pink Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **WW**	pH 9.3-9.7	P F
Cr6 (P) Black Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **7199** ***24 HOUR HOLD TIME***	pH 9.0-9.5	P F
HNO_3 (P) Red Label or HCl (P) Purple Cap/Lt. Blue Label	—	—
H_2SO_4 (P) or (AG) Yellow Label	pH < 2	P F
NaOH (P) Green Cap/Label	Cl, pH >10	P F
NaOH + ZnAc (P)	pH > 9	P F
Dissolved Oxygen 300ml (g)	—	—
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—
HCl (AG) Lt. Blue Label O&G, Diesel	—	—
Ascorbic, EDTA, KH_2Ct (AG) Pink Label 525	—	—
Na_2SO_3 (AG) Neon Green Label 515	—	—
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—
$Na_2S_2O_3$ (AG) Blue Label 548, THM, 524	—	—
$Na_2S_2O_3$ (CG) Blue Label 504, 505, 547	—	—
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	P F
NH_4Cl (AG) Purple Label 552	—	—
EDA (P) or (AG) Brown Label DBPs	—	—
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—
Ascorbic Acid (AG) **TCP DWRL**	—	—
Buffer pH 4 (CG)	—	—
H_3PO_4 (CG) Salmon Label	---	---
Trizma – EPA 537.1 Light Blue Label **FB**	—	—
Ammonia Acetate - EPA 533 Purple Label **FB**	—	—
Bottle Water	—	—
Clear Glass: Jar / VOA	—	—
OTHER: Plastic Bag	—	—

Split

	Container	Preservative	Lot #	Initials	Date/Time
S P					
S P					

Preservation Check
pH Lot #
Cl Lot #

Comments

*Preservation check completed by lab performing analysis.

✓ **Indicates Blanks Received**

504 ___ 524.2 ___ TTHM ___ 537/533 ___ TCP___

✓ **MS/MSD Received Method:** _____

Labeled by: **Checked by:**

Scanned: _____ Rush/Short HT Page: _____ Time: _____

MOORE TWINING ASSOCIATES, INC.
EST. 1898
ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #: LL01040
PAGE_____ OF_____

REPORT TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ INVOICE TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ REPORT COPY TO:

REPORTING:
X STANDARD FORMAT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS :
☐ Environmental Health Agency :
☐ OTHER:
Standard Excel/J-flag report

SAMPLE INFORMATION
SAMPLED BY (PRINT): Keith Mayes
SIGNATURE:
☐ PUBLIC SYSTEM ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ REPLACEMENT
TURN AROUND TIME: ☐ RUSH, DUE ON:
X STANDARD

SAMPLE TYPES:
SOLID:
BS – BIOSOLID
CR – CERAMIC
SL – SOIL/SOLID
LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW – WASTE WATER

PROJECT INFORMATION
CONTRACT/P.O. NO.:
PROJECT: Judicial Council of California Courthouse Park Redevelopment, 2200 Fresno Street, Fresno, CA
PROJECT NUMBER: C88004.01
PROJECT MANAGER: Keith Mayes

LAB USE
NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
X ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
5°C

ANALYSIS REQUESTED

CLIENT SAMPLE ID	DATE	TIME	TYPE	TPHg (8015)	TPHd/mo (8015)	VOCs (8260B)	LUFT 5 Metals						
SG4-25'	12/1/25	09:40	SL	X	X	X	X						
SG5-25'	12/1/25	08:00	SL	X	X	X	X						

COMMENTS/ADDITIONAL INSTRUCTIONS: Samples to be analyzed for TPHg and VOCs were collected in Encore devices per EPA Method 5035

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
	MTA	12/1/25	1218		

Sample Integrity — Page 2 of 2 — Moore Twining Associates WO# 201040 — MTA Bottles: Yes or (No)

COC Info

Was temperature within range? Chemistry ≤6°C Micro <10°C Temp 5.0°C	(Yes)	No	N/A	Did all bottle labels agree with COC?	(Yes)	No	N/A
If samples were taken today, is there evidence that chilling has begun? Recvd ____ C°	(Yes)	No	N/A	Was a sufficient amount of sample received?	(Yes)	No	N/A
Did all bottles arrive unbroken and intact?	(Yes)	No	N/A	Were correct containers and preservatives received for the tests requested?	(Yes)	No	N/A
Do samples have a hold time <72 hours?	Yes	(No)	N/A				

| | | | | | | |

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

January 05, 2026

Work Order #: **LL02006**

Keith Mayes
MTA Environmental Division
2527 Fresno Street
Fresno, CA 93721

RE: J.C.C.Courthouse Park Redevelopement,2200 FresnoSt

Enclosed are the analytical results for samples received by our laboratory on **12/02/25** . For your reference, these analyses have been assigned laboratory work order number **LL02006**.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.



Susan Federico
Client Services Representative

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

Analytical Report for the Following Samples

Sample ID	Notes	Laboratory ID	Matrix	Date Sampled	Date Received
E3-15'		LL02006-01	Soil	12/02/25 08:35	12/02/25 11:50
E3-25'		LL02006-02	Soil	12/02/25 08:50	12/02/25 11:50
E4-20'		LL02006-03	Soil	12/02/25 09:25	12/02/25 11:50
E4-25'		LL02006-04	Soil	12/02/25 09:32	12/02/25 11:50
E5-15'		LL02006-05	Soil	12/02/25 10:04	12/02/25 11:50
E5-25'		LL02006-06	Soil	12/02/25 10:20	12/02/25 11:50
E6-15'		LL02006-07	Soil	12/02/25 07:40	12/02/25 11:50
E6-25'		LL02006-08	Soil	12/02/25 07:58	12/02/25 11:50

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E3-15'

LL02006-01 (Soil) Sampled: 12/02/25 08:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Chromium		**4.5**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Lead		ND	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Nickel		**8.8**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Zinc		**5.5**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*59.3%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloropropene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0050	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichloropropane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Butanone (MEK)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.020	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Hexanone		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acetone		ND	0.020	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrolein		ND	0.050	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrylonitrile		ND	0.010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Benzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E3-15'

LL02006-01 (Soil) Sampled: 12/02/25 08:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Bromochloromethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromodichloromethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromoform		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromomethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon disulfide		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon tetrachloride		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroform		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloromethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroprene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromochloromethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromomethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethanol		ND	0.050	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl methacrylate		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Hexachlorobutadiene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Iodomethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Isopropylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
m,p-Xylene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl Methacrylate		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methylene chloride		ND	0.0020	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Naphthalene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Butylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Propylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
o-Xylene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
p-Isopropyltoluene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
sec-Butylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Styrene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.020	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Toluene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichloroethene (TCE)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** C88004.01 **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E3-15'

LL02006-01 (Soil) Sampled: 12/02/25 08:35

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Trichlorofluoromethane (CFC-11)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl acetate		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl chloride		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Xylenes		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*91.2%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Dibromofluoromethane		*99.1%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Toluene-d8		*96.6%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*

E3-25'

LL02006-02 (Soil) Sampled: 12/02/25 08:50

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Chromium		**8.2**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Lead		**3.5**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Nickel		**13**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Zinc		**25**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*56.9%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloropropene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0047	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E3-25'

LL02006-02 (Soil) Sampled: 12/02/25 08:50

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,2-Dichloropropane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichloropropane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2,2-Dichloropropane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Butanone (MEK)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chlorotoluene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Hexanone		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Chlorotoluene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acetone		ND	0.019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrolein		ND	0.047	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrylonitrile		ND	0.0093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Benzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromochloromethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromodichloromethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromoform		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromomethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon disulfide		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon tetrachloride		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroform		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloromethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroprene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromochloromethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromomethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethanol		ND	0.047	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl methacrylate		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Hexachlorobutadiene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Iodomethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Isopropylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
m,p-Xylene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl Methacrylate		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

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MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E3-25'

LL02006-02 (Soil) Sampled: 12/02/25 08:50

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Methylene chloride		ND	0.0019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Naphthalene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Butylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Propylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
o-Xylene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
p-Isopropyltoluene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
sec-Butylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Styrene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Toluene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl acetate		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl chloride		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Xylenes		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*87.6%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Dibromofluoromethane		*97.8%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Toluene-d8		*96.9%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*

E4-20'

LL02006-03 (Soil) Sampled: 12/02/25 09:25

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Chromium		**12**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Lead		**3.7**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Nickel		**21**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Zinc		**31**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*56.2%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B

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California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E4-20'

LL02006-03 (Soil) Sampled: 12/02/25 09:25

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloropropene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0046	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloropropane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichloropropane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2,2-Dichloropropane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Butanone (MEK)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chlorotoluene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Hexanone		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Chlorotoluene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acetone		ND	0.019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrolein		ND	0.046	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrylonitrile		ND	0.0093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Benzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromochloromethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromodichloromethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromoform		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromomethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon disulfide		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon tetrachloride		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chlorobenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroform		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloromethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroprene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E4-20'

LL02006-03 (Soil) Sampled: 12/02/25 09:25

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
cis-1,3-Dichloropropene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromochloromethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromomethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethanol		ND	0.046	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl methacrylate		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Hexachlorobutadiene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Iodomethane		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Isopropylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
m,p-Xylene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl Methacrylate		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methylene chloride		ND	0.0019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Naphthalene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Butylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Propylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
o-Xylene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
p-Isopropyltoluene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
sec-Butylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Styrene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butylbenzene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Toluene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl acetate		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl chloride		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Xylenes		ND	0.00093	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*90.8%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Dibromofluoromethane		*105%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Toluene-d8		*100%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

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MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E4-25'

LL02006-04 (Soil) Sampled: 12/02/25 09:32

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Chromium		**11**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Lead		**4.4**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Nickel		**17**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Zinc		**16**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*50.9%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloropropene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0038	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloropropane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichloropropane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2,2-Dichloropropane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Butanone (MEK)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.015	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chlorotoluene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Hexanone		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Chlorotoluene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acetone		ND	0.015	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrolein		ND	0.038	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrylonitrile		ND	0.0076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Benzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromobenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
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MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E4-25'

LL02006-04 (Soil) Sampled: 12/02/25 09:32

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Bromochloromethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromodichloromethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromoform		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromomethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon disulfide		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon tetrachloride		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chlorobenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroform		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloromethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroprene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromochloromethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromomethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethanol		ND	0.038	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl methacrylate		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethylbenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Hexachlorobutadiene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Iodomethane		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Isopropylbenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
m,p-Xylene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl Methacrylate		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methylene chloride		ND	0.0015	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Naphthalene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Butylbenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Propylbenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
o-Xylene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
p-Isopropyltoluene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
sec-Butylbenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Styrene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.015	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butylbenzene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Toluene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** C88004.01 **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E4-25'

LL02006-04 (Soil) Sampled: 12/02/25 09:32

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Trichlorofluoromethane (CFC-11)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl acetate		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl chloride		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Xylenes		ND	0.00076	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*88.4%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Dibromofluoromethane		*106%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Toluene-d8		*100%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*

E5-15'

LL02006-05 (Soil) Sampled: 12/02/25 10:04

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Chromium		**19**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Lead		ND	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Nickel		**20**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Zinc		**10**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*55.6%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloropropene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0044	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E5-15'

LL02006-05 (Soil) Sampled: 12/02/25 10:04

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,2-Dichloropropane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichloropropane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2,2-Dichloropropane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Butanone (MEK)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chlorotoluene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Hexanone		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Chlorotoluene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acetone		ND	0.018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrolein		ND	0.044	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrylonitrile		ND	0.0088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Benzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromobenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromochloromethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromodichloromethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromoform		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromomethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon disulfide		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon tetrachloride		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chlorobenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroform		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloromethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroprene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromochloromethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromomethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethanol		ND	0.044	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl methacrylate		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethylbenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Hexachlorobutadiene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Iodomethane		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Isopropylbenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
m,p-Xylene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl Methacrylate		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** C88004.01 **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E5-15'

LL02006-05 (Soil) Sampled: 12/02/25 10:04

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Methylene chloride		ND	0.0018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Naphthalene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Butylbenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Propylbenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
o-Xylene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
p-Isopropyltoluene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
sec-Butylbenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Styrene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.018	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butylbenzene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Toluene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl acetate		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl chloride		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Xylenes		ND	0.00088	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*90.0%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Dibromofluoromethane		*101%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Toluene-d8		*99.2%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*

E5-25'

LL02006-06 (Soil) Sampled: 12/02/25 10:20

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Chromium		**12**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Lead		**5.3**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Nickel		**17**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Zinc		**38**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*62.1%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E5-25'

LL02006-06 (Soil) Sampled: 12/02/25 10:20

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloropropene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0041	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloropropane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichloropropane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2,2-Dichloropropane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Butanone (MEK)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.016	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chlorotoluene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Hexanone		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Chlorotoluene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acetone		ND	0.016	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrolein		ND	0.041	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrylonitrile		ND	0.0082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Benzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromobenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromochloromethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromodichloromethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromoform		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromomethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon disulfide		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon tetrachloride		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chlorobenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroform		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloromethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroprene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** C88004.01 **Project Manager:** Keith Mayes	**Reported:** 01/05/2026

E5-25'

LL02006-06 (Soil) Sampled: 12/02/25 10:20

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
cis-1,3-Dichloropropene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromochloromethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromomethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethanol		ND	0.041	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl methacrylate		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethylbenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Hexachlorobutadiene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Iodomethane		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Isopropylbenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
m,p-Xylene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl Methacrylate		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methylene chloride		ND	0.0016	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Naphthalene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Butylbenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Propylbenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
o-Xylene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
p-Isopropyltoluene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
sec-Butylbenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Styrene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.016	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butylbenzene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Toluene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl acetate		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl chloride		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Xylenes		ND	0.00082	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*89.0%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Dibromofluoromethane		*104%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Toluene-d8		*97.6%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E6-15'

LL02006-07 (Soil) Sampled: 12/02/25 07:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		ND	0.40	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Chromium		**10**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Lead		ND	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Nickel		**16**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Zinc		**9.4**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*51.7%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloropropene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0047	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloropropane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichloropropane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2,2-Dichloropropane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Butanone (MEK)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chlorotoluene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Hexanone		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Chlorotoluene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acetone		ND	0.019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrolein		ND	0.047	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrylonitrile		ND	0.0094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Benzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromobenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E6-15'

LL02006-07 (Soil) Sampled: 12/02/25 07:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Bromochloromethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromodichloromethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromoform		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromomethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon disulfide		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon tetrachloride		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chlorobenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroform		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloromethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroprene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromochloromethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromomethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethanol		ND	0.047	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl methacrylate		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethylbenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Hexachlorobutadiene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Iodomethane		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Isopropylbenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
m,p-Xylene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl Methacrylate		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methylene chloride		ND	0.0019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Naphthalene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Butylbenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Propylbenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
o-Xylene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
p-Isopropyltoluene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
sec-Butylbenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Styrene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.019	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butylbenzene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Toluene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichloroethene (TCE)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
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MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E6-15'

LL02006-07 (Soil) Sampled: 12/02/25 07:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Trichlorofluoromethane (CFC-11)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl acetate		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl chloride		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Xylenes		ND	0.00094	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*90.1%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Dibromofluoromethane		*103%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Toluene-d8		*99.7%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*

E6-25'

LL02006-08 (Soil) Sampled: 12/02/25 07:58

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Cadmium		**0.52**	0.40	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Chromium		**11**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Lead		**6.5**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Nickel		**20**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Zinc		**50**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B
Semi-Volatile Organics									
TPH-D (C10-C28)									
Diesel		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Surr: o-Terphenyl		*56.7%*	*Recovery Limits: 11.8% - 130%*			*B5L0211*	12/03/25	12/04/25	*EPA 8015B*
TPH-MO (C14-C40)									
Motor Oil		ND	10	mg/kg	1	B5L0211	12/03/25	12/04/25	EPA 8015B
Volatile Organics									
8260B Twining									
1,1,1,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1,2-Trichloroethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloroethene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,1-Dichloropropene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trichlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2,4-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	0.0050	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E6-25'

LL02006-08 (Soil) Sampled: 12/02/25 07:58

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
1,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,3-Dichloropropane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
1,4-Dichlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2,2-Dichloropropane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Butanone (MEK)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chloroethylvinyl ether		ND	0.020	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
2-Hexanone		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Chlorotoluene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acetone		ND	0.020	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrolein		ND	0.050	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Acrylonitrile		ND	0.010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Benzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromochloromethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromodichloromethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromoform		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Bromomethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon disulfide		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Carbon tetrachloride		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chlorobenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroform		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloromethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Chloroprene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
cis-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromochloromethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dibromomethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Dichlorodifluoromethane (CFC-12)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethanol		ND	0.050	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl methacrylate		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Ethylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Hexachlorobutadiene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Iodomethane		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Isopropylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
m,p-Xylene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl Methacrylate		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B

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MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88004.01	01/05/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

E6-25'

LL02006-08 (Soil) Sampled: 12/02/25 07:58

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
8260B Twining									
Methylene chloride		ND	0.0020	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Naphthalene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Butylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
n-Propylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
o-Xylene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
p-Isopropyltoluene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
sec-Butylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Styrene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butyl alcohol (TBA)		ND	0.020	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
tert-Butylbenzene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Tetrachloroethene (PCE)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Toluene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,2-Dichloroethene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,3-Dichloropropene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichloroethene (TCE)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl acetate		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Vinyl chloride		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Xylenes		ND	0.0010	mg/kg	1	B5L0824	12/08/25	12/08/25	EPA 8260B
Surr: 4-Bromofluorobenzene		*87.5%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Dibromofluoromethane		*103%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*
Surr: Toluene-d8		*99.0%*	*Recovery Limits: 70% - 130%*			*B5L0824*	12/08/25	12/08/25	*EPA 8260B*

Notes and Definitions

MS3	Matrix Spike Recovery for this analyte was biased low; associated blank spike recovery is within range.
RPD	The RPD result exceeded the QC control limits. However, both percent recoveries were acceptable.
µg/L	micrograms per liter (parts per billion concentration units)
mg/L	milligrams per liter (parts per million concentration units)
mg/kg	milligrams per kilogram (parts per million concentration units)
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
	Analysis of pH, filtration, and residual chlorine is to take place immediately after sampling in the field. If the test was performed in the laboratory, the hold time was exceeded. **(for aqueous matrices only)**

BSK Associates Laboratory Fresno
687 N. Laverne Avenue
Fresno, CA 93727
559-497-2888 (Main)

AIL0259
12/11/2025
Invoice: AI32004

Susan Federico
Moore Twining Associates
2527 Fresno Street
Fresno, CA 93721

RE: Report for AIL0259 General

Dear Susan Federico,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 12/2/2025. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2016 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

This certificate of analysis shall not be reproduced except in full, without written approval of the laboratory.

If additional clarification of any information is required, please contact your Client Services Representative, Heather S. Johnson , at 559-497-2888.

Thank you again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Heather Johnson

Heather S. Johnson, Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

Case Narrative

Project and Report Details		Invoice Details	
Client:	Moore Twining Associates	**Invoice To:**	Moore Twining Associates
Report To:	Susan Federico	**Invoice Attn:**	Denise Willis
Project #:	LL02006	**Project PO#:**	43463
Received:	12/02/2025 - 13:09		
Report Due:	12/16/2025		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 5.3

Containers Intact
COC/Labels Agree
Received On Ice
Sample(s) arrived at lab on same day sampled.
Packing Material - Bubble Wrap
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Danielle Abrames	FINAL.RPT	susanf@mooretwining.com;laurenc@mooretwining.com;gregb@mooretwining.com

Certificate of Analysis

Sample ID: AIL0259-01
Sampled By: Keith Mayes
Sample Description: LL02006-01 // E3-15'

Sample Date - Time: 12/02/2025 - 08:35
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIL0212	12/08/25	12/09/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	101 %	*Acceptable range: 50-150 %*						

Certificate of Analysis

Sample ID: AIL0259-02
Sampled By: Keith Mayes
Sample Description: LL02006-02 // E3-25'

Sample Date - Time: 12/02/2025 - 08:50
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIL0701	12/10/25	12/11/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	103 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIL0259-03
Sampled By: Keith Mayes
Sample Description: LL02006-03 // E4-20'

Sample Date - Time: 12/02/2025 - 09:25
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIL0701	12/10/25	12/11/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	99 %	*Acceptable range: 50-150 %*						

Certificate of Analysis

Sample ID: AIL0259-04
Sampled By: Keith Mayes
Sample Description: LL02006-04 // E4-25'

Sample Date - Time: 12/02/2025 - 09:32
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIL0701	12/10/25	12/11/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	106 %	*Acceptable range: 50-150 %*						

Certificate of Analysis

Sample ID: AIL0259-05
Sampled By: Keith Mayes
Sample Description: LL02006-05 // E5-15'

Sample Date - Time: 12/02/2025 - 10:04
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIL0701	12/10/25	12/11/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	102 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIL0259-06
Sampled By: Keith Mayes
Sample Description: LL02006-06 // E5-25'

Sample Date - Time: 12/02/2025 - 10:20
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIL0701	12/10/25	12/11/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	101 %	*Acceptable range: 50-150 %*						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Sample ID: AIL0259-07
Sampled By: Keith Mayes
Sample Description: LL02006-07 // E6-15'

Sample Date - Time: 12/02/2025 - 07:40
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIL0701	12/10/25	12/11/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	100 %	*Acceptable range: 50-150 %*						

Certificate of Analysis

Sample ID: AIL0259-08
Sampled By: Keith Mayes
Sample Description: LL02006-08 // E6-25'

Sample Date - Time: 12/02/2025 - 07:58
Matrix: Solid
Sample Type: Grab

BSK Associates Laboratory Fresno

Organics

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
TPH-Gasoline by GC-MS									
Gasoline Range Organics (C6-10)	EPA 8260D	ND	1000	ug/kg	1	AIL0701	12/10/25	12/11/25	
Surrogate: 1,2-Dichloroethane-d4	EPA 8260D	101 %	*Acceptable range: 50-150 %*						

BSK Associates Laboratory Fresno

Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 8260D - Quality Control											
Batch: AIL0212										Prepared: 12/8/2025	
Prep Method: no prep-volatiles										Analyst: ETH	
Blank (AIL0212-BLK1)											
Gasoline Range Organics (C6-10)	ND	1000	ug/kg							12/09/25	
Surrogate: 1,2-Dichloroethane-d4	*52*			*50*		*103*	*50-150*			12/09/25	
Blank Spike (AIL0212-BS3)											
Gasoline Range Organics (C6-10)	4900	1000	ug/kg	5000	ND	99	50-150			12/08/25	
Surrogate: 1,2-Dichloroethane-d4	*49*			*50*		*98*	*50-150*			12/08/25	
Duplicate (AIL0212-DUP1), Source: AIL0027-01RE1											
Gasoline Range Organics (C6-10)	2400	1000	ug/kg		ND					12/09/25	
Surrogate: 1,2-Dichloroethane-d4	*50*			*50*		*99*	*50-150*			12/09/25	
EPA 8260D - Quality Control											
Batch: AIL0701										Prepared: 12/10/2025	
Prep Method: no prep-volatiles										Analyst: ETH	
Blank (AIL0701-BLK1)											
Gasoline Range Organics (C6-10)	ND	1000	ug/kg							12/11/25	
Surrogate: 1,2-Dichloroethane-d4	*52*			*50*		*104*	*50-150*			12/11/25	
Blank Spike (AIL0701-BS1)											
Gasoline Range Organics (C6-10)	4900	1000	ug/kg	5000	ND	97	50-150			12/11/25	
Surrogate: 1,2-Dichloroethane-d4	*51*			*50*		*102*	*50-150*			12/11/25	
Blank Spike Dup (AIL0701-BSD1)											
Gasoline Range Organics (C6-10)	4700	1000	ug/kg	5000	ND	94	50-150	3	30	12/11/25	
Surrogate: 1,2-Dichloroethane-d4	*51*			*50*		*103*	*50-150*			12/11/25	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Field tests are outside the scope of laboratory accreditation and there is no certification available for field testing.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.
- (2) - Formerly known as Bis(2-Chloroisopropyl) ether.
  Unless otherwise noted, TOC results by SM 5310C method do not include purgeable organic carbon, which is removed along with the inorganic carbon interference. The POC contribution to TOC is considered to be negligible.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Certificate of Analysis

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected below MRL/MDL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	PicoCuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit	U:	The analyte was not detected at or above the reported sample quantitation limit.

Please see the individual Subcontract Lab's report for applicable certifications.

The following parameters are not available for certification through CA ELAP:

Odor Diisopropyl ether (DIPE) by EPA 524.2

The following parameters are calculated values and are outside the scope of our NELAP accreditation:

Total Nitrogen Aggressive Index Trivalent Chromium

BSK is not accredited under the NELAP program for the following additional parameters: **NA**

Certificate of Analysis

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Bakersfield

State of California - ELAP	1180-S3

Fresno

State of California - ELAP	1180	State of Hawaii	4021
Los Angeles CSD	9254479	NELAP certified	4021-025
State of Nevada	NV-C25-00264	State of Oregon - NELAP	4021-025
EPA UCMR5	CA00079	State of Washington	C997-25

Sacramento

State of California - ELAP	1180-S1

San Bernardino

State of California - ELAP	1180-S2	Los Angeles CSD	9254478
NELAP certified	4119-010	State of Oregon - NELAP	4119-010

Vancouver

NELAP certified	WA100008-021	State of Oregon - NELAP	WA100008-021
State of Washington	C824-25		

AIL0259 Moore7021 12/02/2025

MOORE TWINING ASSOCIATES, INC

Analytical Chemistry Division
California ELAP Certification # 1371

10

Purchase Order # 43463
MTA Project # LL02006

Please reference these numbers on all reports and invoices.
We also request QC data be provided with final report.

SENDING LABORATORY:	PROJECT MANAGER / REPORT TO:	RECEIVING LABORATORY:
Moore Twining Associates, Inc 2527 Fresno Street Fresno, CA 93721 Phone: (559) 268-7021 Fax: (559) 268-0740	Susan Federico SusanF@mooretwining.com **INVOICE TO:** Denise Willis AccountsPayable@MooreTwining.com	BSK Analytical Laboratories 687 N. Laverne Avenue Fresno, CA 93727 Phone: (559) 497-2880 Fax: (559) 485-6935

SAMPLE INFORMATION — **COMMENTS / SOURCE ID**

1 **Client Sample ID: E3-15'**
MTA Sample ID: LL02006-01 **Matrix:** Soil **Sampled Date/Time:** 12/02/25 08:35
Requested Analysis: TPH-G **Holding Time Expires:** 12/16/25 08:35
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Sampled by: Keith Mayes

2 **Client Sample ID: E3-25'**
MTA Sample ID: LL02006-02 **Matrix:** Soil **Sampled Date/Time:** 12/02/25 08:50
Requested Analysis: TPH-G **Holding Time Expires:** 12/16/25 08:50
Containers Supplied:
5g Encore (D) *5g Encore (E)*

3 **Client Sample ID: E4-20'**
MTA Sample ID: LL02006-03 **Matrix:** Soil **Sampled Date/Time:** 12/02/25 09:25
Requested Analysis: TPH-G **Holding Time Expires:** 12/16/25 09:25
Containers Supplied:
5g Encore (D) *5g Encore (E)*

4 **Client Sample ID: E4-25'**
MTA Sample ID: LL02006-04 **Matrix:** Soil **Sampled Date/Time:** 12/02/25 09:32
Requested Analysis: TPH-G **Holding Time Expires:** 12/16/25 09:32
Containers Supplied:
5g Encore (D) *5g Encore (E)*

5 **Client Sample ID: E5-15'**
MTA Sample ID: LL02006-05 **Matrix:** Soil **Sampled Date/Time:** 12/02/25 10:04
Requested Analysis: TPH-G **Holding Time Expires:** 12/16/25 10:04
Containers Supplied:
5g Encore (D) *5g Encore (E)*

Temp °C 5.3

WF, BW, WalkIn

Thermometer # 42

Greg Botts 1-2-25 — BW 12-02-25

Released By	Date / Time	Received By	Date / Time
			12-02-25 1309
Released By	Date / Time	Received By	Date / Time

Please email copy of receipt with your assigned Sample ID Number to SusanF@MooreTwining.com

MOORE TWINING ASSOCIATES, INC

Analytical Chemistry Division
California ELAP Certification # 1371

AIL0259 Moore7021 12/02/2025

10

Purchase Order # 43463
MTA Project # LL02006

Please reference these numbers on all reports and invoices.
We also request QC data be provided with final report.

SAMPLE INFORMATION			COMMENTS / SOURCE ID
Client Sample ID: E5-25'			
MTA Sample ID: LL02006-06	**Matrix:** Soil	**Sampled Date/Time:** 12/02/25 10:20	
Requested Analysis: TPH-G		**Holding Time Expires:** 12/16/25 10:20	
Containers Supplied:			
5g Encore (D)	*5g Encore (E)*		
Client Sample ID: E6-15'			
MTA Sample ID: LL02006-07	**Matrix:** Soil	**Sampled Date/Time:** 12/02/25 07:40	
Requested Analysis: TPH-G		**Holding Time Expires:** 12/16/25 07:40	
Containers Supplied:			
5g Encore (D)	*5g Encore (E)*		
Client Sample ID: E6-25'			
MTA Sample ID: LL02006-08	**Matrix:** Soil	**Sampled Date/Time:** 12/02/25 07:58	
Requested Analysis: TPH-G		**Holding Time Expires:** 12/16/25 07:58	
Containers Supplied:			
5g Encore (D)	*5g Encore (E)*		

Temp °C 5.3 WI, BW, Walk-In

Thermometer # 42

BM 12-02-25

Released By	Date / Time	Received By	Date / Time
Meg Betts	1-2-25	BM	12-02-25
Released By	Date / Time	Received By	Date / Time
			12-02-25 1309

Please email copy of receipt with your assigned Sample ID Number to SusanF@MooreTwining.com

AIL0259 Moore7021 12/02/2025 10

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 8°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No
If samples were taken today, is there evidence that chilling has begun?	Yes (No) NA	Bubbles Present VOAs (524.2/TTHM/TCP)? TB Received? (Check Method Below)	Yes No (NA) Yes No (NA)
Did all bottles arrive unbroken and intact?	(Yes) No	Was a sufficient amount of sample received?	(Yes) No
Did all bottle labels agree with COC?	(Yes) No	**Do samples have a hold time <72 hours?**	(Yes) No
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes (NA)	Was PM notified of discrepancies? PM: dt: email scan copy	Yes No (NA)

Bottles Received

"-" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40mlVOA(V) 125ml(D)	Checks*	Passed?	
Bacti $Na_2S_2O_3$	—	—	FB
None (P) White Label	—	—	
Cr6 (P) Lt. Green Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **DW**	Cl, pH > 8	P F	
Cr6 (P) Pink Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **WW**	pH 9.3-9.7	P F	
Cr6 (P) Black Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **7199** ***24 HOUR HOLD TIME***	pH 9.0-9.5	P F	
HNO_3 (P) Red Label or HCl (P) Purple Cap/Lt. Blue Label	—	—	
H_2SO_4 (P) or (AG) Yellow Label	pH < 2	P F	
NaOH (P) Green Cap/Label	Cl, pH >10	P F	
NaOH + ZnAc (P)	pH > 9	P F	
Dissolved Oxygen 300ml (g)	—	—	
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—	
HCl (AG) Lt. Blue Label O&G, Diesel	—	—	
Ascorbic, EDTA, KH_2Ct (AG) Pink Label 525	—	—	
Na_2SO_3 (AG) Neon Green Label 515	—	—	
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—	
$Na_2S_2O_3$ (AG) Blue Label 548, THM, 524	—	—	
$Na_2S_2O_3$ (CG) Blue Label 504, 505, 547	—	—	
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	P F	
NH_4Cl (AG) Purple Label 552	—	—	
EDA (P) or (AG) Brown Label DBPs	—	—	
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—	
Ascorbic Acid (AG) **TCP DWRL**	—	—	
Buffer pH 4 (CG)	—	—	
H_3PO_4 (CG) Salmon Label	---	---	
Trizma – EPA 537.1 Light Blue Label **FB**	—	—	
Ammonia Acetate - EPA 533 Purple Label **FB**	—	—	
Bottle Water	—	—	
Clear Glass: Jar / VOA	—	—	
OTHER: Plastic Bag	—	—	

Split

	Container	Preservative	Lot #	Initials	Date/Time
S P					
S P					

Preservation Check
pH Lot #
Cl Lot #

Comments

*Preservation check completed by lab performing analysis.

✓ **Indicates Blanks Received**

504 ___ 524.2 ___ TTHM ___ 537/533 ___ TCP___

✓ **MS/MSD Received Method:** _____

Labeled by: **Checked by:**

Scanned: _____ Rush/Short HT Page: _____ Time: _____

MOORE TWINING ASSOCIATES, INC.
EST. 1898
ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #: LL02006
PAGE 1 **OF** 2

REPORT TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ INVOICE TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ REPORT COPY TO:

REPORTING:
X STANDARD FORMAT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS :
☐ Environmental Health Agency :
☐ OTHER:
Standard Excel/J-flag report

SAMPLE INFORMATION
SAMPLED BY (PRINT): Keith Mayes
SIGNATURE: Keith Mayes

☐ PUBLIC SYSTEM ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ REPLACEMENT

TURN AROUND TIME: ☐ RUSH, DUE ON:
X STANDARD

SAMPLE TYPES:
SOLID:
BS – BIOSOLID
CR – CERAMIC
SL – SOIL/SOLID
LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW – WASTE WATER

PROJECT INFORMATION
CONTRACT/P.O. NO.:
PROJECT: Judicial Council of California Courthouse Park Redevelopment, 2200 Fresno Street, Fresno, CA
PROJECT NUMBER: C88004.01
PROJECT MANAGER: Keith Mayes

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
X ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
4 °C

ANALYSIS REQUESTED

LAB USE	CLIENT SAMPLE ID	DATE	TIME	TYPE	TPHg (8015)	TPHd/mo (8015)	VOCs (8260B)	LUFT 5 Metals						
1	E3-15'	12/2/25	08:35	SL	X	X	X	X						
2	E3-25'	12/2/25	08:50	SL	X	X	X	X						
3	E4-20'	12/2/25	09:25	SL	X	X	X	X						
4	E4-25'	12/2/25	09:32	SL	X	X	X	X						
5	E5-15'	12/2/25	10:04	SL	X	X	X	X						
6	E5-25'	12/2/25	10:20	SL	X	X	X	X						
7	E6-15'	12/2/25	07:40	SL	X	X	X	X						
8	E6-25'	12/2/25	07:58	SL	X	X	X	X						

COMMENTS/ADDITIONAL INSTRUCTIONS: Samples to be analyzed for TPHg and VOCs were collected in Encore devices per EPA Method 5035

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
Keith Mayes	MTA	12/2/25	1450		

Sample Integrity — Page 2 of 2 — Moore Twining Associates — WO# 200206 — MTA Bottles: (Yes) or No

COC Info

Was temperature within range? Chemistry ≤6°C Micro <10°C Temp 4.0 °C	(Yes) No N/A	Did all bottle labels agree with COC?	(Yes) No N/A	Were there bubbles in VOA vials? (Volatiles Only)	Yes No (N/A)
If samples were taken today, is there evidence that chilling has begun? Recvd ____ C°	(Yes) No N/A	Was a sufficient amount of sample received?	(Yes) No N/A	Was PM notified of discrepancies? PM: By/Time:	Yes No (N/A)
Did all bottles arrive unbroken and intact?	(Yes) No N/A	Were correct containers and preservatives received for the tests requested?	(Yes) No N/A		
Do samples have a hold time <72 hours?	(Yes) No N/A				

Bottles Received

125ml (A) 250ml (B) 1Liter (C) 40ml VOA (V)	128																			
Bacti $Na_2S_2O_3$ Thio 120mL																				
None (P)																				
None (AG)																				
None (CG) 500ml																				
Cr6 Buffer (P) Borate Carbonate Buffer-EPA 7196A																				
Dissolved Oxygen 300ml (P)																				
HNO_3 (P)																				
HCl (AG)																				
H_2SO_4 (P)																				
H_3PO_4 (AG) - TOC																				
NaOH (P), cyanide																				
NaOH + ZnAc (P) sodium hydroxid+zinc acetate																				
$Na_2S_2O_3$ (AG) Thio EPA 547, 538, TTHM																				
$Na_2S_2O_3$ (CG) Thio EPA, 504.1																				
$Na_2S_2O_3$ 250ml (Brown P) EPA 549																				
Thio/K Citrate(AG) EPA 531.2																				
NH_4Cl (AG) 552- ammonium chloride EPA HAA5																				
Other:																				
Client Own																				
Low Level Hg/Metals Double Bag																				
Plastic Bag																				
Glass Jar: 125 / 250 / 500																				
Soil Tube: Brass / (Steel) / Plastic																				
5g Encore	4																			
Cubitaner 1G / 2.5 G																				

Comments

Filter or Split

	Container	Preservative	Date/Time/Initials
S P F			
S P F			
S P F			
S P F			
S P F			

Page 40 of 40

Labeled by: ____ @ ____ Labels checked by: [illegible] @ 1156

FL-SC-0003-07

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

January 07, 2026

Work Order #: **LL04014**

Keith Mayes
MTA Environmental Division
2527 Fresno Street
Fresno, CA 93721

RE: J.C.C.Courthouse Park Redevelopement,2200 FresnoSt

Enclosed are the analytical results for samples received by our laboratory on **12/04/25** . For your reference, these analyses have been assigned laboratory work order number **LL04014**.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.



Lauren Cox
Client Services Representative

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88001.01	01/07/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

Analytical Report for the Following Samples

Sample ID	Notes	Laboratory ID	Matrix	Date Sampled	Date Received
L1- 0'		LL04014-01	Soil	12/04/25 10:16	12/04/25 13:00
L2- 0'		LL04014-02	Soil	12/04/25 10:19	12/04/25 13:00
L3- 0'		LL04014-03	Soil	12/04/25 10:22	12/04/25 13:00
L4- 0'		LL04014-04	Soil	12/04/25 10:27	12/04/25 13:00
L5- 0'		LL04014-05	Soil	12/04/25 10:31	12/04/25 13:00
L6- 0'		LL04014-06	Soil	12/04/25 10:36	12/04/25 13:00
L7- 0'		LL04014-07	Soil	12/04/25 10:41	12/04/25 13:00
L8- 0'		LL04014-08	Soil	12/04/25 10:44	12/04/25 13:00
L9- 0'		LL04014-09	Soil	12/04/25 10:47	12/04/25 13:00
L10- 0'		LL04014-10	Soil	12/04/25 10:51	12/04/25 13:00
L11- 0'		LL04014-11	Soil	12/04/25 10:55	12/04/25 13:00
L12- 0'		LL04014-12	Soil	12/04/25 11:02	12/04/25 13:00
L13- 0'		LL04014-13	Soil	12/04/25 11:05	12/04/25 13:00
L14- 0'		LL04014-14	Soil	12/04/25 11:08	12/04/25 13:00
L15- 0'		LL04014-15	Soil	12/04/25 11:15	12/04/25 13:00
L16- 0'		LL04014-16	Soil	12/04/25 11:19	12/04/25 13:00
L17- 0'		LL04014-17	Soil	12/04/25 11:24	12/04/25 13:00
L18- 0'		LL04014-18	Soil	12/04/25 11:30	12/04/25 13:00
L19- 0'		LL04014-19	Soil	12/04/25 11:34	12/04/25 13:00
L20- 0'		LL04014-20	Soil	12/04/25 11:40	12/04/25 13:00
L21- 0'		LL04014-21	Soil	12/04/25 11:44	12/04/25 13:00
L22- 0'		LL04014-22	Soil	12/04/25 11:48	12/04/25 13:00
L23- 0'		LL04014-23	Soil	12/04/25 11:52	12/04/25 13:00
L24- 0'		LL04014-24	Soil	12/04/25 11:55	12/04/25 13:00
L25- 0'		LL04014-25	Soil	12/04/25 11:58	12/04/25 13:00

Amended report to run Lead STLC per client request. (LRC 1/07/26)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** C88001.01 **Project Manager:** Keith Mayes	**Reported:** 01/07/2026

L1- 0'

LL04014-01 (Soil) Sampled: 12/04/25 10:16

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**33**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B

L2- 0'

LL04014-02 (Soil) Sampled: 12/04/25 10:19

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**26**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B

L3- 0'

LL04014-03 (Soil) Sampled: 12/04/25 10:22

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**33**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B

L4- 0'

LL04014-04 (Soil) Sampled: 12/04/25 10:27

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**31**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B

L5- 0'

LL04014-05 (Soil) Sampled: 12/04/25 10:31

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**30**	2.0	mg/kg	1	B5L0212	12/08/25	12/10/25	EPA 6010B

L6- 0'

LL04014-06 (Soil) Sampled: 12/04/25 10:36

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**47**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88001.01	01/07/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

L7- 0'

LL04014-07 (Soil) Sampled: 12/04/25 10:41

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**70**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B
Metals (STLC/Citrate Buffer)									
Lead		**4.2**	0.50	mg/L	1	B5L2202	12/29/25	12/29/25	EPA 6010B

L8- 0'

LL04014-08 (Soil) Sampled: 12/04/25 10:44

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**39**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L9- 0'

LL04014-09 (Soil) Sampled: 12/04/25 10:47

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**38**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L10- 0'

LL04014-10 (Soil) Sampled: 12/04/25 10:51

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**33**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L11- 0'

LL04014-11 (Soil) Sampled: 12/04/25 10:55

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**29**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L12- 0'

LL04014-12 (Soil) Sampled: 12/04/25 11:02

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**22**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88001.01	01/07/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

L13- 0'

LL04014-13 (Soil) Sampled: 12/04/25 11:05

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**21**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L14- 0'

LL04014-14 (Soil) Sampled: 12/04/25 11:08

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**20**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L15- 0'

LL04014-15 (Soil) Sampled: 12/04/25 11:15

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**16**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L16- 0'

LL04014-16 (Soil) Sampled: 12/04/25 11:19

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**11**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L17- 0'

LL04014-17 (Soil) Sampled: 12/04/25 11:24

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**19**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L18- 0'

LL04014-18 (Soil) Sampled: 12/04/25 11:30

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**38**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division 2527 Fresno Street Fresno CA, 93721	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt **Project Number:** C88001.01 **Project Manager:** Keith Mayes	**Reported:** 01/07/2026

L19- 0'

LL04014-19 (Soil) Sampled: 12/04/25 11:34

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**31**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L20- 0'

LL04014-20 (Soil) Sampled: 12/04/25 11:40

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**21**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L21- 0'

LL04014-21 (Soil) Sampled: 12/04/25 11:44

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**53**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B
Metals (STLC/Citrate Buffer)									
Lead		**3.7**	0.50	mg/L	1	B5L2202	12/29/25	12/29/25	EPA 6010B

L22- 0'

LL04014-22 (Soil) Sampled: 12/04/25 11:48

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**27**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L23- 0'

LL04014-23 (Soil) Sampled: 12/04/25 11:52

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**14**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

L24- 0'

LL04014-24 (Soil) Sampled: 12/04/25 11:55

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**16**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Environmental Division	**Project:** J.C.C.Courthouse Park Redevelopement,2200 FresnoSt	**Reported:**
2527 Fresno Street	**Project Number:** C88001.01	01/07/2026
Fresno CA, 93721	**Project Manager:** Keith Mayes	

L25- 0'

LL04014-25 (Soil) Sampled: 12/04/25 11:58

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Metals (Total)									
Lead		**11**	2.0	mg/kg	1	B5L0420	12/09/25	12/11/25	EPA 6010B

Notes and Definitions

MS2	Matrix Spike Recovery for this analyte was biased high; associated blank spike recovery is within range.
µg/L	micrograms per liter (parts per billion concentration units)
mg/L	milligrams per liter (parts per million concentration units)
mg/kg	milligrams per kilogram (parts per million concentration units)
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
	Analysis of pH, filtration, and residual chlorine is to take place immediately after sampling in the field. If the test was performed in the laboratory, the hold time was exceeded. **(for aqueous matrices only)**

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Lauren Cox

From: Keith Mayes
Sent: Friday, December 19, 2025 4:26 PM
To: Lauren Cox
Subject: RE: Judicial Council of California Courthouse Park Redevelopment - LL04014

Thanks Lauren. Can you request the lab to run a STLC lead on the following samples.

Sample 07 (L7-0')
Sample 21 (L21-0')

Please confirm that you can do this

Thanks

Keith Mayes, PG
Project Manager
Moore Twining Associates, Inc.
2527 Fresno Street
Fresno, California 93721
Office (559) 268-7021
Mobile (559) 978-9561

From: Lauren Cox <LaurenC@mooretwining.com>
Sent: Thursday, December 18, 2025 9:37 AM
To: Keith Mayes <KeithM@mooretwining.com>
Subject: Judicial Council of California Courthouse Park Redevelopment - LL04014

Keith,
Here is the report you needed.
Have a good one!

Lauren Cox
Client Services Representative

Moore Twining Associates, Inc.
2527 Fresno St.
Fresno, CA 93721
Ph: (559) 268-7021 ext. 231
Fax: (559) 268-7126
www.mooretwining.com

We accept VISA and MasterCard. * Effective October 1st, 2021 there will be a 3% surcharge for all credit card transactions.

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MOORE TWINING ASSOCIATES, INC.
EST. 1898
ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #: LL04014
PAGE 1 OF 3

REPORT TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ INVOICE TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ REPORT COPY TO:

REPORTING:
X STANDARD FORMAT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS :
☐ Environmental Health Agency :
☐ OTHER:
Standard Excel/J-flag report

SAMPLE INFORMATION
SAMPLED BY (PRINT): Keith Mayes
SIGNATURE:

☐ PUBLIC SYSTEM ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ REPLACEMENT

TURN AROUND TIME: ☐ RUSH, DUE ON:
X STANDARD

SAMPLE TYPES:
SOLID:
BS – BIOSOLID
CR – CERAMIC
SL – SOIL/SOLID
LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW – WASTE WATER

PROJECT INFORMATION
CONTRACT/P.O. NO.:
PROJECT: Judicial Council of California Courthouse Park Redevelopment, 2200 Fresno Street, Fresno, CA
PROJECT NUMBER: C88004.01
PROJECT MANAGER: Keith Mayes

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
6.0

ANALYSIS REQUESTED

	CLIENT SAMPLE ID	DATE	TIME	TYPE	Total Lead
1	L1-0'	12/4/25	1016	SL	X
2	L2-0'	12/4/25	1019	SL	X
3	L3-0'	12/4/25	1022	SL	X
4	L4-0'	12/4/25	1027	SL	X
5	L5-0'	12/4/25	1031	SL	X
6	L6-0'	12/4/25	1036	SL	X
7	L7-0'	12/4/25	1041	SL	X
8	L8-0'	12/4/25	1044	SL	X
9	L9-0'	12/4/25	1047	SL	X
10	L10-0'	12/4/25	1051	SL	X
11	L11-0'	12/4/25	1055	SL	X
12	L12-0'	12/4/25	1102	SL	X
13	L13-0'	12/4/25	1105	SL	X

COMMENTS/ADDITIONAL INSTRUCTIONS:

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
	MTA	12/4/25	1300		

MTA MOORE TWINING ASSOCIATES, INC. EST. 1898

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #: LL04014
PAGE 2 **OF** 3

REPORT TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ INVOICE TO:

ATTENTION: Keith Mayes
NAME: MTA Environmental
ADDRESS: 2527 Fresno Street
Fresno, CA 93721
PHONE: (559) 268-7021
FAX: (559) 268-7126

☐ REPORT COPY TO:

REPORTING:

X STANDARD FORMAT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS :
☐ Environmental Health Agency :
☐ OTHER:
Standard Excel/J-flag report

SAMPLE INFORMATION

SAMPLED BY (PRINT): Keith Mayes
SIGNATURE:

☐ PUBLIC SYSTEM ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ REPLACEMENT

TURN AROUND TIME: ☐ RUSH, DUE ON:
X STANDARD

SAMPLE TYPES:
SOLID:
BS – BIOSOLID
CR – CERAMIC
SL – SOIL/SOLID
LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW – WASTE WATER

PROJECT INFORMATION

CONTRACT/P.O. NO.:
PROJECT: Judicial Council of California Courthouse Park Redevelopment, 2200 Fresno Street, Fresno, CA
PROJECT NUMBER: C88004.01
PROJECT MANAGER: Keith Mayes

ANALYSIS REQUESTED

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
6.0

	CLIENT SAMPLE ID	DATE	TIME	TYPE	Total Lead									
14	L14-0'	12/4/25	1108	SL	X									
15	L15-0'	12/4/25	1115	SL	X									
16	L16-0'	12/4/25	1119	SL	X									
17	L17-0'	12/4/25	1124	SL	X									
18	L18-0'	12/4/25	1130	SL	X									
19	L19-0'	12/4/25	1134	SL	X									
20	L20-0'	12/4/25	1140	SL	X									
21	L21-0'	12/4/25	1144	SL	X									
22	L22-0'	12/4/25	1148	SL	X									
23	L23-0'	12/4/25	1152	SL	X									
24	L24-0'	12/4/25	1155	SL	X									
25	L25-0'	12/4/25	1158	SL	X									
		12/4/25		SL	X									

COMMENTS/ADDITIONAL INSTRUCTIONS:

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
	MTA	12/4/25	1300		

Sample Integrity — Page 3 of 3 — Moore Twining Associates WO# 240414 — MTA Bottles: Yes or No

COC Info

Was temperature within range? Chemistry ≤6°C Micro <10°C Temp 2.0 °C	Yes	No	N/A	Did all bottle labels agree with COC?	Yes	No	N/A	Were there bubbles in VOA vials? **(Volatiles Only)**	Yes	No	N/A
If samples were taken today, is there evidence that chilling has begun? Recvd ____ C°	Yes	No	N/A	Was a sufficient amount of sample received?	Yes	No	N/A	Was PM notified of discrepancies? PM: By/Time:	Yes	No	N/A
Did all bottles arrive unbroken and intact?	Yes	No	N/A	Were correct containers and preservatives received for the tests requested?	Yes	No	N/A				
Do samples have a hold time <72 hours?	Yes	No	N/A								

Bottles Received

125ml (A) 250ml (B) 1Liter (C) 40ml VOA (V)		
Bacti $Na_2S_2O_3$ Thio 120mL		
None (P)		
None (AG)		
None (CG) 500ml		
Cr6 Buffer (P) Borate Carbonate Buffer-EPA 7196A		
Dissolved Oxygen 300ml (P)		
HNO_3 (P)		
HCl (AG)		
H_2SO_4 (P)		
H_3PO_4 (AG) - TOC		
NaOH (P) , cyanide		
NaOH + ZnAc (P) sodium hydroxid+zinc acetate		
$Na_2S_2O_3$ (AG) Thio EPA 547, 538, TTHM		
$Na_2S_2O_3$ (CG) Thio EPA , 504.1		
$Na_2S_2O_3$ 250ml (Brown P) EPA 549		
Thio/K Citrate(AG) EPA 531.2		
NH_4Cl (AG) 552- ammonium chloride EPA HAA5		
Other:		
Client Own		
Low Level Hg/Metals Double Bag		
Plastic Bag		
Glass Jar: 125 / 250 / 500	1	
Soil Tube: Brass / Steel / Plastic		
5g Encore		
Cubitaner 1G / 2.5 G		

Comments

Filter or Split

	Container	Preservative	Date/Time/Initials
S P F			
S P F			
S P F			
S P F			
S P F			

Labeled by: ____ @ ____ Labels checked by: ____ @ ____

FL-SC-0003-07

ENVIRONMENTAL
Analytical Service, Inc.

Thursday, January 8, 2026

Sample Delivery Group (SDG) 225333
EAS Project Number: 17921

Keith Mayes
Moore Twining Associates
2527 Fresno Street
Fresno, CA 93721

Keith,

Enclosed is the analytical report for the samples received and analyzed by Environmental Analytical Service, Inc. for the following Project.

Client Project Name: Fresno Courthouse
PO Number:
Client Project Number: C88004.01
Sample Event Date: 12/8/2025

If you have any questions on the report or the analytical data please contact me at (805) 781-3585.

Sincerely,

Steven D. Hoyt Ph.D.
Laboratory Director

SDH/LIMS

173 Cross Street
San Luis Obispo
CA
93401-7597
805.781.3585
Fax 805.541.4550

ENVIRONMENTAL
Analytical Service, Inc.

Analytical Report

Project Name:

Fresno Courthouse

EAS SDG Number: **225333**

Client Project Manager: Keith Mayes

Prepared For:
Moore Twining Associates
2527 Fresno Street
Fresno CA 93721

Project Number: 17921
Sample Event Date: 12/8/2025
Received Date: 12/9/2025
Report Date: 1/8/2026

Project Number: C88004.01
PO Number:

This is the Laboratory Report for the samples in the indicated Sample Delivery Group (SDG). Each sample received in the group is assigned a Laboratory ID number. The combination of the SDG number and the Lab ID number is an unique identifier for the sample.

This Report Contains:

Laboratory Work Order
Project Sample Media
Laboratory Case Narrative and Chain of Custody
Method Description (when applicable)
Quality Control Reports
Analytical Reports

NELAC Certification: Florida E871125

173 Cross Street, San Luis Obispo, CA 93401 (805) 781-3585

Laboratory Work Order

SDG Number: 225333
Client: Keith Mayes
Moore Twining Associates

Project Number: 17921
Received: 12/9/2025

SAMPLE DESCRIPTION AND ANALYSIS REQUESTED

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
SG-1	225333 1	EPA TO-15 VOC, TPHg, IPA	12/8/2025
SG-2	225333 2	EPA TO-15 VOC, TPHg, IPA	12/8/2025
SG-3	225333 3	EPA TO-15 VOC, TPHd, IPA	12/8/2025
SG4-10'	225333 4	EPA TO-15 VOC, TPHd, IPA	12/8/2025
SG4-25'	225333 5	EPA TO-15 VOC, TPHd, IPA	12/8/2025
SG5-10'	225333 6	EPA TO-15 VOC, TPHd, IPA	12/8/2025
SG5-25'	225333 7	EPA TO-15 VOC, TPHd, IPA	12/8/2025
OA-1	225333 8	EPA TO-15 VOC, TPHg/d, IPA	12/8/2025

Project Sample Media

SDG Number: 225333

The following sample media was used for this Sample Delivery Group (SDG). The Sample Media column identifies the type of media. For canisters, the Sample Media Batch gives the canister number followed by the cleaning batch number, which is a unique identification. The initial pressure of the canister when it is received is recorded. If the canister is not pressurized, the final pressure will be the same as the initial pressure. If the canister is pessurized the final pressure will be recorded, and the canister dilution factor is calculated as the ratio of the final to initial pressure. The results are adjusted for the can dilution factor.

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Pressure, torr Final	Can Factor
225333	1	SG-1	332		696	696	1.00
225333	2	SG-2	301		633	633	1.00
225333	3	SG-3	383		665	665	1.00
225333	4	SG4-10'	370		579	579	1.00
225333	5	SG4-25'	389		437	437	1.00
225333	6	SG5-10'	306		646	646	1.00
225333	7	SG5-25'	348		602	602	1.00
225333	8	OA-1	358		657	657	1.00

Laboratory Case Narrative

EAS SDG Number: 225333 **Project Number:** 17921

Client: Moore Twining Associates

The Laboratory Case Narrative for the SDG is below. The Chain of Custody form(s) follow the Laboratory Case Narrative.

Sample Control Narrative

The samples were all received in good condition and with proper preservation.

Analytical Methods

The methods used for sample analysis are listed on the Analytyical Report header, and have been modified as described in the EAS Quality Manual..

Case Narrative

QC Narrative

All analyses met EAS method criteria as defined in the Quality Manual, except as noted in the report or QC reports with data qualifiers.

Subcontract Narrative

No sample analysis was subcontracted for this project

Laboratory Certification

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness other than the condition(s) noted above. The Laboratory Report is property of EAS and its client. The entire report has been reviewed and approved.



Date Approved: 1/8/2026

Steven D. Hoyt, Ph.D.
Environmental Analytical Service
Laboratory Director

ENVIRONMENTAL
Analytical Service, Inc.

173 Cross Street
San Luis Obispo, CA 93401
805 781-3585

CHAIN OF CUSTODY RECORD

Project Number C880004.01	Project Name Fresno Courthouse		Quote	Requested TAT Normal

REPORT TO:	
Attention	Keith Mayes
Company	Moore Twining Associates
Address	2527 Fresno St
City, State, Zip	Fresno CA 93721
Phone/Fax	559 268 7021
e-mail	keithm@mooretwining.com

Matrix
A - Ambient Air
SG - Soil Gas
S - Source
I - Indoor Air

SDG

Sample Description	Sample Date	Start Time	Stop Date	Stop Time	Canister Number	Flow Reg Number	Matrix	Initial Pressure	Final Pressure	Laboratory ID	Analytical Tests: TO-15	TO-15	VOCs	TPH (Diesel)		Comments
SG-1	12/8/25	0936	12/8/25	0955	332	2585	SG	27	4		X		X	X		
SG-2		0933		0958	301	2578		28	5		X		X	X		
SG-3		1118		1149	382	2639		28	4			X	X	X		
~~SG4~~ SG4-10'		1308		1335	370	2512		26	4			X	X	X		
SG4-25'		1255		1327	389	2643		27	5			X	X	X		
SG5-10'		1152		1219	306	2586		28	5			X	X	X		
SG5-25'		1157		1220	348	2275		27	5			X	X	X		
DA-1		0936		1003	358	2569	A	27	4		X	X	X	X		

Comments

BILLING INFORMATION:		SAMPLED BY	Date/Time		
ATTENTION	SAME	Keith Mayes	12/8/25 1430	COC Number	
Company				Cooler Temp	
Address				Airbill	
City, State, Zip		RECEIVED FOR LAB			
Purchase Order					

Quality Control Report

EAS SDG Number: 225333

Project Number: 17921

QC Narrative

Samples were anlayzed in a daily analytical batch (DAB) designated by a QC batch number, and were analyzed using EAS standard laboratory QC specified in the EAS Quality Manual which may be different then the referrenced agency method. Any deviations from the EAS QC criteria are flagged in the Laboratory Control Reports or in the sample Analytical Reports.

Standard Laboratory QC Report

Unless project specific QC was requested, this Section containing the standard laboratory QC (Level 2) supplied with the Analytical Reports. Each sample is analyzed in a Daily Analytical Batch (DAB) which includes the method blank, a laboratory control spike (LCS) and a laboratory control duplicate (LCD). A Daily Analytical Batch QC report is supplied for each method requested.

Method Blank

The method blank is a laboratory generated sample which assesses the degree to which laboratory operations cause a false positive. The target analytes in the analytical reports for a daily analytical batch are "B" flagged if their concentrations are present in the Method Blank above the RL, unless the result is greater then ten times the blank value..

Laboratory Control Spike

A laboratory control spike is a well characterized matrix similar to the sample which is spiked and run in duplicate with each Daily Analytical Batch. The laboratory control spike results are reported as a percent recovery. The QC Criteria for the control spike is listed in the Laboratory Control Report. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report. The control spike contains an abbreviated list of compounds in the method, and may contain compounds not on the target list for the specified report.

Laboratory Control Duplicate

The laboratory control duplicate is a duplicate analysis of the laboratory control spike, a standard, or a sample depending on the method. The results are reported as a relative percent difference (RPD). The criteria for the duplicate is in the Laboratory Control Report for the Daily Analytical Batch. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report.

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: LABQC

Analytical Method: TO-15

Laboratory ID: B12175

File Name: B12175C.D
Description: METHOD BLANK
Canister:
QC_Batch: 121725-MA1

Date Sampled:
Date Analyzed: 12/17/25
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 10:56

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.65	0.83	ND	3.22	4.13	ND	
74-87-3	Chloromethane	0.65	0.84	ND	1.34	1.74	ND	
76-14-2	Freon 114	0.17	0.84	ND	1.17	5.87	ND	
75-01-4	Vinyl chloride	0.17	0.84	ND	0.43	2.15	ND	
106-99-0	1,3-Butadiene	0.33	0.84	ND	0.74	1.86	ND	
74-83-9	Bromomethane	0.33	0.84	ND	1.30	3.26	ND	
75-00-3	Chloroethane	0.17	0.84	ND	0.44	2.21	ND	
64-17-5	Ethanol	0.83	2.50	ND	1.57	4.72	ND	
75-69-4	Trichlorofluoromethane	0.35	0.84	ND	1.97	4.73	ND	
67-64-1	Acetone	2.00	2.50	ND	4.76	5.95	ND	
67-63-0	2-propanol	0.83	2.50	ND	2.05	6.15	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.28	ND	
76-13-1	Freon 113	0.17	0.80	ND	1.28	6.12	ND	
75-09-2	Dichloromethane	0.33	0.80	ND	1.16	2.79	ND	
75-15-0	Carbon disulfide	0.83	1.55	ND	2.60	4.82	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.60	ND	0.66	2.39	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.61	ND	1.20	2.22	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.68	3.37	ND	
108-05-4	Vinyl acetate	0.17	0.73	ND	0.59	2.58	ND	
78-93-3	2-Butanone	0.67	1.70	ND	1.97	5.01	ND	
141-78-6	Ethyl acetate	0.33	0.73	ND	1.20	2.63	ND	
74-97-5	Bromochloromethane	0.17	0.44	ND	0.88	2.35	ND	
109-99-9	Tetrahydrofuran	0.33	0.84	ND	0.98	2.48	ND	
156-59-2	cis-1,2-Dichloroethene	0.33	0.90	ND	1.32	3.56	ND	
67-66-3	Chloroform	0.17	0.79	ND	0.82	3.88	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.74	ND	0.91	4.04	ND	
107-06-2	1,2-Dichloroethane	0.17	0.76	ND	0.68	3.08	ND	
110-82-7	Cyclohexane	0.17	0.64	2.78	0.58	2.21	9.60	
71-43-2	Benzene	0.67	1.00	ND	2.13	3.20	ND	
56-23-5	Carbon tetrachloride	0.15	0.79	ND	0.94	4.98	ND	
142-82-5	n-Heptane	0.83	2.02	ND	3.42	8.29	ND	
78-87-5	1,2-Dichloropropane	0.17	0.80	ND	0.77	3.71	ND	
123-91-1	1,4 Dioxane	0.67	1.36	ND	2.41	4.92	ND	
79-01-6	Trichloroethene	0.10	0.78	ND	0.54	4.18	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-27-4	Bromodichloromethane	0.17	0.34	ND	1.12	2.26	ND	
80-62-6	Methyl methacrylate	0.67	2.25	ND	2.73	9.24	ND	
108-10-1	4-Methyl-2-pentanone	0.67	2.52	ND	2.74	10.35	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
108-88-3	Toluene	0.33	0.87	ND	1.26	3.28	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.86	ND	0.91	4.68	ND	
591-78-6	2-Hexanone	0.83	2.36	ND	3.42	9.70	ND	
124-48-1	Dibromochloromethane	0.17	0.33	ND	1.42	2.84	ND	
106-93-4	1,2-Dibromoethane	0.17	0.40	ND	1.28	3.11	ND	
127-18-4	Tetrachloroethene	0.10	0.41	ND	0.68	2.75	ND	
108-90-7	Chlorobenzene	0.17	0.76	ND	0.77	3.50	ND	
100-41-4	Ethylbenzene	0.35	0.88	ND	1.53	3.83	ND	
1330-20-7	m,p-Xylenes	0.35	0.88	ND	1.54	3.84	ND	
100-42-5	Styrene	0.35	0.86	ND	1.47	3.68	ND	
75-25-2	Bromoform	0.33	0.22	ND	3.45	2.31	ND	
95-47-6	o-Xylene	0.34	0.86	ND	1.49	3.74	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.33	0.41	ND	2.29	2.84	ND	
622-96-8	4-Ethyltoluene	0.55	1.38	ND	2.72	6.80	ND	
108-67-8	1,3,5-Trimethylbenzene	0.34	0.86	ND	1.70	4.24	ND	
95-63-6	1,2,4-Trimethylbenzene	0.34	0.85	ND	1.67	4.17	ND	
541-73-1	1,3-Dichlorobenzene	0.33	0.62	ND	2.01	3.71	ND	
100-44-7	Benzyl chloride	0.33	2.02	ND	1.73	10.47	ND	
106-46-7	1,4-Dichlorobenzene	0.33	0.58	ND	2.01	3.47	ND	
95-50-1	1,2-Dichlorobenzene	0.67	0.83	ND	4.01	5.02	ND	
120-82-1	1,2,4-Trichlorobenzene	0.83	1.15	ND	6.19	8.52	ND	
91-20-3	Naphthalene	0.17	0.27	ND	0.89	1.40	ND	
87-68-3	Hexachlorobutadiene	0.17	0.21	ND	1.78	2.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	99	70	130	

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12175

File Name: B12175C.D
Description: METHOD BLANK
Can/Tube#:
QC_Batch: 121725-MA1

Date Sampled:
Date Analyzed: 12/17/25
Can Dilution Factor: 1.00
Air Volume: 300 ml

Time:
Time: 10:56

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
67-63-0	2-propanol (Isopropyl alcohol)	0.83	2.50	ND	2.05	6.15	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	QC Limits UCL	Flag
2037-26-5	Toluene-d8	99	70	130	

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified TPH

SDG: LABQC
Analytical Method: TO-15 **Laboratory ID:** B12175

File Name: B12175C.D **Date Sampled:** **Time:**
Description: METHOD BLANK **Date Analyzed:** 12/17/25 **Time:** 10:56
Canister: **Can Dilution Factor:** 1.00
QC_Batch: 121725-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
1330-20-7	TPH Gasoline	13.33	40.00	ND	67.76	203.28	ND	
68334-30-5	TPH Diesel	13.33	40.00	ND	78.69	236.07	ND	

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: LABQC

Analytical Method: TO-15 **Laboratory ID: B12225**

File Name: B12225D.D **Date Sampled:** **Time:**
Description: METHOD BLANK **Date Analyzed:** 12/22/25 **Time:** 10:56
Canister: **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300.00 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.65	0.83	ND	3.22	4.13	ND	
74-87-3	Chloromethane	0.65	0.84	ND	1.34	1.74	ND	
76-14-2	Freon 114	0.17	0.84	ND	1.17	5.87	ND	
75-01-4	Vinyl chloride	0.17	0.84	ND	0.43	2.15	ND	
106-99-0	1,3-Butadiene	0.33	0.84	ND	0.74	1.86	ND	
74-83-9	Bromomethane	0.33	0.84	ND	1.30	3.26	ND	
75-00-3	Chloroethane	0.17	0.84	ND	0.44	2.21	ND	
64-17-5	Ethanol	0.83	2.50	ND	1.57	4.72	ND	
75-69-4	Trichlorofluoromethane	0.35	0.84	ND	1.97	4.73	ND	
67-64-1	Acetone	2.00	2.50	ND	4.76	5.95	ND	
67-63-0	2-propanol	0.83	2.50	ND	2.05	6.15	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.28	ND	
76-13-1	Freon 113	0.17	0.80	ND	1.28	6.12	ND	
75-09-2	Dichloromethane	0.33	0.80	ND	1.16	2.79	ND	
75-15-0	Carbon disulfide	0.83	1.55	ND	2.60	4.82	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.60	ND	0.66	2.39	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.61	ND	1.20	2.22	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.68	3.37	ND	
108-05-4	Vinyl acetate	0.17	0.73	ND	0.59	2.58	ND	
78-93-3	2-Butanone	0.67	1.70	ND	1.97	5.01	ND	
141-78-6	Ethyl acetate	0.33	0.73	ND	1.20	2.63	ND	
74-97-5	Bromochloromethane	0.17	0.44	ND	0.88	2.35	ND	
109-99-9	Tetrahydrofuran	0.33	0.84	ND	0.98	2.48	ND	
156-59-2	cis-1,2-Dichloroethene	0.33	0.90	ND	1.32	3.56	ND	
67-66-3	Chloroform	0.17	0.79	ND	0.82	3.88	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.74	ND	0.91	4.04	ND	
107-06-2	1,2-Dichloroethane	0.17	0.76	ND	0.68	3.08	ND	
110-82-7	Cyclohexane	0.17	0.64	ND	0.58	2.21	ND	
71-43-2	Benzene	0.67	1.00	ND	2.13	3.20	ND	
56-23-5	Carbon tetrachloride	0.15	0.79	ND	0.94	4.98	ND	
142-82-5	n-Heptane	0.83	2.02	ND	3.42	8.29	ND	
78-87-5	1,2-Dichloropropane	0.17	0.80	ND	0.77	3.71	ND	
123-91-1	1,4 Dioxane	0.67	1.36	ND	2.41	4.92	ND	
79-01-6	Trichloroethene	0.10	0.78	ND	0.54	4.18	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-27-4	Bromodichloromethane	0.17	0.34	ND	1.12	2.26	ND	
80-62-6	Methyl methacrylate	0.67	2.25	ND	2.73	9.24	ND	
108-10-1	4-Methyl-2-pentanone	0.67	2.52	ND	2.74	10.35	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
108-88-3	Toluene	0.33	0.87	ND	1.26	3.28	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.86	ND	0.91	4.68	ND	
591-78-6	2-Hexanone	0.83	2.36	ND	3.42	9.70	ND	
124-48-1	Dibromochloromethane	0.17	0.33	ND	1.42	2.84	ND	
106-93-4	1,2-Dibromoethane	0.17	0.40	ND	1.28	3.11	ND	
127-18-4	Tetrachloroethene	0.10	0.41	ND	0.68	2.75	ND	
108-90-7	Chlorobenzene	0.17	0.76	ND	0.77	3.50	ND	
100-41-4	Ethylbenzene	0.35	0.88	ND	1.53	3.83	ND	
1330-20-7	m,p-Xylenes	0.35	0.88	ND	1.54	3.84	ND	
100-42-5	Styrene	0.35	0.86	ND	1.47	3.68	ND	
75-25-2	Bromoform	0.33	0.22	ND	3.45	2.31	ND	
95-47-6	o-Xylene	0.34	0.86	ND	1.49	3.74	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.33	0.41	ND	2.29	2.84	ND	
622-96-8	4-Ethyltoluene	0.55	1.38	ND	2.72	6.80	ND	
108-67-8	1,3,5-Trimethylbenzene	0.34	0.86	ND	1.70	4.24	ND	
95-63-6	1,2,4-Trimethylbenzene	0.34	0.85	ND	1.67	4.17	ND	
541-73-1	1,3-Dichlorobenzene	0.33	0.62	ND	2.01	3.71	ND	
100-44-7	Benzyl chloride	0.33	2.02	ND	1.73	10.47	ND	
106-46-7	1,4-Dichlorobenzene	0.33	0.58	ND	2.01	3.47	ND	
95-50-1	1,2-Dichlorobenzene	0.67	0.83	ND	4.01	5.02	ND	
120-82-1	1,2,4-Trichlorobenzene	0.83	1.15	ND	6.19	8.52	ND	
91-20-3	Naphthalene	0.17	0.27	ND	0.89	1.40	ND	
87-68-3	Hexachlorobutadiene	0.17	0.21	ND	1.78	2.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	98	70	130	

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12225

File Name: B12225D.D
Description: METHOD BLANK
Can/Tube#:
QC_Batch: 122225-MA1

Date Sampled:
Date Analyzed: 12/22/25
Can Dilution Factor: 1.00
Air Volume: 300 ml

Time:
Time: 10:56

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
67-63-0	2-propanol (Isopropyl alcohol)	0.83	2.50	ND	2.05	6.15	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	QC Limits UCL	Flag
2037-26-5	Toluene-d8	98	70	130	

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified TPH

SDG: LABQC
Analytical Method: TO-15 **Laboratory ID:** B12225

File Name: B12225D.D **Date Sampled:** **Time:**
Description: METHOD BLANK **Date Analyzed:** 12/22/25 **Time:** 16:11
Canister: **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
1330-20-7	TPH Gasoline	13.33	40.00	ND	67.76	203.28	ND	
68334-30-5	TPH Diesel	13.33	40.00	ND	78.69	236.07	ND	

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121725-MA1
Date: 12/17/25

		LCS Recovery		LCD Recovery		Spike Limit LCL	Spike Limit UCL	Duplicate	Duplicate Limit	
CAS#	Compound	%	Flag	%	Flag	%	%	%	%	Flag
75-01-4	Vinyl chloride	82		89		70	130	8	25	
75-35-4	1,1-Dichloroethene	103		108		70	130	4	25	
75-09-2	Dichloromethane	97		101		70	130	5	25	
75-34-3	1,1-Dichloroethane	104		115		70	130	10	25	
67-66-3	Chloroform	103		109		70	130	6	25	
71-55-6	1,1,1-Trichloroethane	112		117		70	130	5	25	
107-06-2	1,2-Dichloroethane	113		118		70	130	5	25	
71-43-2	Benzene	104		114		70	130	9	25	
56-23-5	Carbon tetrachloride	111		111		70	130	0	25	
79-01-6	Trichloroethene	101		106		70	130	5	25	
108-88-3	Toluene	113		111		70	130	2	25	
106-93-4	1,2-Dibromoethane	96		103		70	130	8	25	
127-18-4	Tetrachloroethene	114		115		70	130	1	25	
100-41-4	Ethylbenzene	122		120		70	130	2	25	
1330-20-7	m,p-Xylenes	119		115		70	130	4	25	
95-47-6	o-Xylene	121		123		70	130	2	25	
108-67-8	1,3,5-Trimethylbenzene	88		93		70	130	5	25	
95-63-6	1,2,4-Trimethylbenzene	102		106		70	130	4	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 122225-MA1
Date: 12/22/25

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	102		106		70	130	4	25	
75-35-4	1,1-Dichloroethene	120		103		70	130	15	25	
75-09-2	Dichloromethane	110		93		70	130	17	25	
75-34-3	1,1-Dichloroethane	119		105		70	130	12	25	
67-66-3	Chloroform	110		105		70	130	4	25	
71-55-6	1,1,1-Trichloroethane	115		105		70	130	9	25	
107-06-2	1,2-Dichloroethane	122		109		70	130	11	25	
71-43-2	Benzene	115		113		70	130	2	25	
56-23-5	Carbon tetrachloride	83		71		70	130	14	25	
79-01-6	Trichloroethene	109		101		70	130	7	25	
108-88-3	Toluene	112		102		70	130	9	25	
106-93-4	1,2-Dibromoethane	103		95		70	130	8	25	
127-18-4	Tetrachloroethene	114		102		70	130	10	25	
100-41-4	Ethylbenzene	120		100		70	130	18	25	
1330-20-7	m,p-Xylenes	116		102		70	130	13	25	
95-47-6	o-Xylene	115		101		70	130	13	25	
108-67-8	1,3,5-Trimethylbenzene	88		78		70	130	12	25	
95-63-6	1,2,4-Trimethylbenzene	103		87		70	130	17	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

Analytical Reports

EAS SDG Number: 225333

Project Number: 17921

The following pages contain the certified Analytical Reports for the samples submitted in the Sample Delivery Group (SDG) and are in order of the EAS Lab ID number. All of the analytical methods used are modifications of the published methods. Procedural method modifications, QC modifications, QC Criteria modifications, target lists, definitions of detection limits, and flags are all explained in detail in the EAS Quality Manual. The Analytical Report has columns for the method detection limit (MDL), the reporting limit (RL), and the Amount. The Amount is the concentration of the compound in the sample. The report usually has the results reported with two commonly used units. The MDL, RL, and Amount are adjusted for the canister dilution factor and any dilution caused by sample matrix effects.

NELAC CERTIFICATION

EAS is accredited by the National Environmental Laboratory Accreditation (NELAC) with the Florida Department of Health, one of the NELAC certifying states. EAS is certified for the EPA TO-15, EPA TO-11 and EPA TO-4 methods. A list of accredited compounds is available on request.

DETECTION LIMITS

MDL: The MDL is lowest concentration that can be measured to be statistically above the noise level and is determined using the EPA 2016 method which uses the standard deviation of replicate measurements made over time. The method also incorporates systematic instrumentation blank levels. See Quality Manual for detailed explanation.

RL: The reporting limit (RL) is the lowest concentration that can be reliably reported for each compound that meets the QC Criteria for the method, background levels, or project specific considerations. The QC criteria level for the method blank is to be less then the RL See Quality Manual for more information.

DATA FLAGS

In the standard report, if a compound is not detected above the method detection limit, a "ND" is in the Amount column. The flag column is used for both the not detect flag and for any data flags.

B - This compound was detected in the batch method blank above the reporting limit and is greater then one tenth the amount in the sample.

E - This compound exceeds the calibration range for this sample volume.

J - The amount reported is estimated because it was below the RL and could be below the lowest calibration point, have higher uncertainty, or could be the result of system background

SIGNIFICANT FIGURES

Based on the uncertainty in the methods, the numbers on the Analytical Reports should be used with only two significant digits. Additional significant figures are reported for ease of use and to avoid rounding errors when used in further calculations.

UNITS

PPBV or PPMV: Parts-per-billion (or million) by volume is a mole (volume) ratio of the moles of analyte divided by the moles of air (gas). This is the primary unit used to report air or gas concentrations and is independent of temperature and pressure.

UG/M3 OR MG/M3: The reported result was calculated based on 1 atm pressure and a temperature of 25C. The conversion from PPBV is: UG/M3 = PPBV x MW/24.46 where 24.26 is the gas constant and MW is the Compounds Molecular Weight (sometimes called Formula Weight)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333

Analytical Method: TO-15 **Laboratory ID:** 01

File Name: 2533301A.D **Date Sampled:** 12/08/25 **Time:** 09:36
Description: SG-1 **Date Analyzed:** 12/17/25 **Time:** 20:24
Canister: 332 **Can Dilution Factor:** 1.00
QC_Batch: 121725-MA1 **Air Volume:** 300.00 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.65	0.83	ND	3.22	4.13	ND	
74-87-3	Chloromethane	0.65	0.84	ND	1.34	1.74	ND	
76-14-2	Freon 114	0.17	0.84	ND	1.17	5.87	ND	
75-01-4	Vinyl chloride	0.17	0.84	ND	0.43	2.15	ND	
106-99-0	1,3-Butadiene	0.33	0.84	ND	0.74	1.86	ND	
74-83-9	Bromomethane	0.33	0.84	ND	1.30	3.26	ND	
75-00-3	Chloroethane	0.17	0.84	ND	0.44	2.21	ND	
64-17-5	Ethanol	0.83	2.50	2.95	1.57	4.72	5.57	
75-69-4	Trichlorofluoromethane	0.35	0.84	ND	1.97	4.73	ND	
67-64-1	Acetone	2.00	2.50	6.35	4.76	5.95	15.11	
67-63-0	2-propanol	0.83	2.50	ND	2.05	6.15	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.28	ND	
76-13-1	Freon 113	0.17	0.80	ND	1.28	6.12	ND	
75-09-2	Dichloromethane	0.33	0.80	ND	1.16	2.79	ND	
75-15-0	Carbon disulfide	0.83	1.55	ND	2.60	4.82	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.60	ND	0.66	2.39	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.61	ND	1.20	2.22	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.68	3.37	ND	
108-05-4	Vinyl acetate	0.17	0.73	ND	0.59	2.58	ND	
78-93-3	2-Butanone	0.67	1.70	1.27	1.97	5.01	3.74	J
141-78-6	Ethyl acetate	0.33	0.73	ND	1.20	2.63	ND	
74-97-5	Bromochloromethane	0.17	0.44	ND	0.88	2.35	ND	
109-99-9	Tetrahydrofuran	0.33	0.84	1.14	0.98	2.48	3.35	
156-59-2	cis-1,2-Dichloroethene	0.33	0.90	ND	1.32	3.56	ND	
67-66-3	Chloroform	0.17	0.79	0.33	0.82	3.88	1.60	J
71-55-6	1,1,1-Trichloroethane	0.17	0.74	ND	0.91	4.04	ND	
107-06-2	1,2-Dichloroethane	0.17	0.76	ND	0.68	3.08	ND	
110-82-7	Cyclohexane	0.17	0.64	ND	0.58	2.21	ND	
71-43-2	Benzene	0.67	1.00	0.96	2.13	3.20	3.09	J
56-23-5	Carbon tetrachloride	0.15	0.79	ND	0.94	4.98	ND	
142-82-5	n-Heptane	0.83	2.02	ND	3.42	8.29	ND	
78-87-5	1,2-Dichloropropane	0.17	0.80	ND	0.77	3.71	ND	
123-91-1	1,4 Dioxane	0.67	1.36	ND	2.41	4.92	ND	
79-01-6	Trichloroethene	0.10	0.78	ND	0.54	4.18	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-27-4	Bromodichloromethane	0.17	0.34	ND	1.12	2.26	ND	
80-62-6	Methyl methacrylate	0.67	2.25	ND	2.73	9.24	ND	
108-10-1	4-Methyl-2-pentanone	0.67	2.52	ND	2.74	10.35	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
108-88-3	Toluene	0.33	0.87	0.54	1.26	3.28	2.04	J
10061-02-6	trans-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.86	ND	0.91	4.68	ND	
591-78-6	2-Hexanone	0.83	2.36	ND	3.42	9.70	ND	
124-48-1	Dibromochloromethane	0.17	0.33	ND	1.42	2.84	ND	
106-93-4	1,2-Dibromoethane	0.17	0.40	ND	1.28	3.11	ND	
127-18-4	Tetrachloroethene	0.10	0.41	ND	0.68	2.75	ND	
108-90-7	Chlorobenzene	0.17	0.76	ND	0.77	3.50	ND	
100-41-4	Ethylbenzene	0.35	0.88	ND	1.53	3.83	ND	
1330-20-7	m,p-Xylenes	0.35	0.88	ND	1.54	3.84	ND	
100-42-5	Styrene	0.35	0.86	ND	1.47	3.68	ND	
75-25-2	Bromoform	0.33	0.22	ND	3.45	2.31	ND	
95-47-6	o-Xylene	0.34	0.86	ND	1.49	3.74	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.33	0.41	ND	2.29	2.84	ND	
622-96-8	4-Ethyltoluene	0.55	1.38	ND	2.72	6.80	ND	
108-67-8	1,3,5-Trimethylbenzene	0.34	0.86	ND	1.70	4.24	ND	
95-63-6	1,2,4-Trimethylbenzene	0.34	0.85	ND	1.67	4.17	ND	
541-73-1	1,3-Dichlorobenzene	0.33	0.62	ND	2.01	3.71	ND	
100-44-7	Benzyl chloride	0.33	2.02	ND	1.73	10.47	ND	
106-46-7	1,4-Dichlorobenzene	0.33	0.58	ND	2.01	3.47	ND	
95-50-1	1,2-Dichlorobenzene	0.67	0.83	ND	4.01	5.02	ND	
120-82-1	1,2,4-Trichlorobenzene	0.83	1.15	ND	6.19	8.52	ND	
91-20-3	Naphthalene	0.17	0.27	ND	0.89	1.40	ND	
87-68-3	Hexachlorobutadiene	0.17	0.21	ND	1.78	2.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	99	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified TPH

SDG: 225333
Analytical Method: TO-15 **Laboratory ID:** 01

File Name: 2533301A.D **Date Sampled:** 12/08/25 **Time:** 09:36
Description: SG-1 **Date Analyzed:** 12/17/25 **Time:** 20:24
Canister: 332 **Can Dilution Factor:** 1.00
QC_Batch: 121725-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
1330-20-7	TPH Gasoline	13.33	40.00	44.97	67.76	203.28	265.38	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333
Analytical Method: TO-15 **Laboratory ID:** 01

File Name: 2533301A.D **Date Sampled:** 12/08/25 **Time:** 09:36
Description: SG-1 **Date Analyzed:** 12/17/25 **Time:** 20:24
Can/Tube#: 332 **Can Dilution Factor:** 1.00
QC_Batch: 121725-MA1 **Air Volume:** 300 ml

CAS#	Compound		MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
67-63-0	2-propanol	(Isopropyl alcohol)	0.83	2.50	ND	2.05	6.15	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	99	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333

Analytical Method: TO-15

Laboratory ID: 02

File Name: 2533302A.D
Description: SG-2
Canister: 301
QC_Batch: 121725-MA1

Date Sampled: 12/08/25 **Time:** 09:33
Date Analyzed: 12/17/25 **Time:** 21:04
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.65	0.83	ND	3.22	4.13	ND	
74-87-3	Chloromethane	0.65	0.84	ND	1.34	1.74	ND	
76-14-2	Freon 114	0.17	0.84	ND	1.17	5.87	ND	
75-01-4	Vinyl chloride	0.17	0.84	ND	0.43	2.15	ND	
106-99-0	1,3-Butadiene	0.33	0.84	ND	0.74	1.86	ND	
74-83-9	Bromomethane	0.33	0.84	ND	1.30	3.26	ND	
75-00-3	Chloroethane	0.17	0.84	ND	0.44	2.21	ND	
64-17-5	Ethanol	0.83	2.50	ND	1.57	4.72	ND	
75-69-4	Trichlorofluoromethane	0.35	0.84	ND	1.97	4.73	ND	
67-64-1	Acetone	2.00	2.50	2.79	4.76	5.95	6.63	
67-63-0	2-propanol	0.83	2.50	ND	2.05	6.15	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.28	ND	
76-13-1	Freon 113	0.17	0.80	ND	1.28	6.12	ND	
75-09-2	Dichloromethane	0.33	0.80	ND	1.16	2.79	ND	
75-15-0	Carbon disulfide	0.83	1.55	ND	2.60	4.82	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.60	ND	0.66	2.39	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.61	ND	1.20	2.22	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.68	3.37	ND	
108-05-4	Vinyl acetate	0.17	0.73	ND	0.59	2.58	ND	
78-93-3	2-Butanone	0.67	1.70	ND	1.97	5.01	ND	
141-78-6	Ethyl acetate	0.33	0.73	ND	1.20	2.63	ND	
74-97-5	Bromochloromethane	0.17	0.44	ND	0.88	2.35	ND	
109-99-9	Tetrahydrofuran	0.33	0.84	ND	0.98	2.48	ND	
156-59-2	cis-1,2-Dichloroethene	0.33	0.90	ND	1.32	3.56	ND	
67-66-3	Chloroform	0.17	0.79	ND	0.82	3.88	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.74	ND	0.91	4.04	ND	
107-06-2	1,2-Dichloroethane	0.17	0.76	ND	0.68	3.08	ND	
110-82-7	Cyclohexane	0.17	0.64	ND	0.58	2.21	ND	
71-43-2	Benzene	0.67	1.00	ND	2.13	3.20	ND	
56-23-5	Carbon tetrachloride	0.15	0.79	ND	0.94	4.98	ND	
142-82-5	n-Heptane	0.83	2.02	ND	3.42	8.29	ND	
78-87-5	1,2-Dichloropropane	0.17	0.80	ND	0.77	3.71	ND	
123-91-1	1,4 Dioxane	0.67	1.36	ND	2.41	4.92	ND	
79-01-6	Trichloroethene	0.10	0.78	ND	0.54	4.18	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-27-4	Bromodichloromethane	0.17	0.34	ND	1.12	2.26	ND	
80-62-6	Methyl methacrylate	0.67	2.25	ND	2.73	9.24	ND	
108-10-1	4-Methyl-2-pentanone	0.67	2.52	ND	2.74	10.35	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
108-88-3	Toluene	0.33	0.87	ND	1.26	3.28	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.86	ND	0.91	4.68	ND	
591-78-6	2-Hexanone	0.83	2.36	ND	3.42	9.70	ND	
124-48-1	Dibromochloromethane	0.17	0.33	ND	1.42	2.84	ND	
106-93-4	1,2-Dibromoethane	0.17	0.40	ND	1.28	3.11	ND	
127-18-4	Tetrachloroethene	0.10	0.41	ND	0.68	2.75	ND	
108-90-7	Chlorobenzene	0.17	0.76	ND	0.77	3.50	ND	
100-41-4	Ethylbenzene	0.35	0.88	ND	1.53	3.83	ND	
1330-20-7	m,p-Xylenes	0.35	0.88	ND	1.54	3.84	ND	
100-42-5	Styrene	0.35	0.86	ND	1.47	3.68	ND	
75-25-2	Bromoform	0.33	0.22	ND	3.45	2.31	ND	
95-47-6	o-Xylene	0.34	0.86	ND	1.49	3.74	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.33	0.41	ND	2.29	2.84	ND	
622-96-8	4-Ethyltoluene	0.55	1.38	ND	2.72	6.80	ND	
108-67-8	1,3,5-Trimethylbenzene	0.34	0.86	ND	1.70	4.24	ND	
95-63-6	1,2,4-Trimethylbenzene	0.34	0.85	ND	1.67	4.17	ND	
541-73-1	1,3-Dichlorobenzene	0.33	0.62	ND	2.01	3.71	ND	
100-44-7	Benzyl chloride	0.33	2.02	ND	1.73	10.47	ND	
106-46-7	1,4-Dichlorobenzene	0.33	0.58	ND	2.01	3.47	ND	
95-50-1	1,2-Dichlorobenzene	0.67	0.83	ND	4.01	5.02	ND	
120-82-1	1,2,4-Trichlorobenzene	0.83	1.15	ND	6.19	8.52	ND	
91-20-3	Naphthalene	0.17	0.27	ND	0.89	1.40	ND	
87-68-3	Hexachlorobutadiene	0.17	0.21	ND	1.78	2.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	102	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified TPH

SDG: 225333

Analytical Method: TO-15 **Laboratory ID:** 02

File Name: 2533302A.D **Date Sampled:** 12/08/25 **Time:** 09:33
Description: SG-2 **Date Analyzed:** 12/17/25 **Time:** 21:04
Canister: 301 **Can Dilution Factor:** 1.00
QC_Batch: 121725-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
1330-20-7	TPH Gasoline	13.33	40.00	19.79	67.76	203.28	116.81	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333
Analytical Method: TO-15 **Laboratory ID:** 02

File Name: 2533302A.D **Date Sampled:** 12/08/25 **Time:** 09:33
Description: SG-2 **Date Analyzed:** 12/17/25 **Time:** 21:04
Can/Tube#: 301 **Can Dilution Factor:** 1.00
QC_Batch: 121725-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
67-63-0	2-propanol (Isopropyl alcohol)	0.83	2.50	ND	2.05	6.15	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	102	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333

Analytical Method: TO-15

Laboratory ID: 03

File Name: 2533303A.D
Description: SG-3
Canister: 383
QC_Batch: 122225-MA1

Date Sampled: 12/08/25 **Time:** 11:18
Date Analyzed: 12/22/25 **Time:** 20:34
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.65	0.83	ND	3.22	4.13	ND	
74-87-3	Chloromethane	0.65	0.84	ND	1.34	1.74	ND	
76-14-2	Freon 114	0.17	0.84	ND	1.17	5.87	ND	
75-01-4	Vinyl chloride	0.17	0.84	ND	0.43	2.15	ND	
106-99-0	1,3-Butadiene	0.33	0.84	ND	0.74	1.86	ND	
74-83-9	Bromomethane	0.33	0.84	ND	1.30	3.26	ND	
75-00-3	Chloroethane	0.17	0.84	ND	0.44	2.21	ND	
64-17-5	Ethanol	0.83	2.50	71.34	1.57	4.72	134.69	
75-69-4	Trichlorofluoromethane	0.35	0.84	ND	1.97	4.73	ND	
67-64-1	Acetone	2.00	2.50	10.37	4.76	5.95	24.68	
67-63-0	2-propanol	0.83	2.50	ND	2.05	6.15	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.28	ND	
76-13-1	Freon 113	0.17	0.80	ND	1.28	6.12	ND	
75-09-2	Dichloromethane	0.33	0.80	ND	1.16	2.79	ND	
75-15-0	Carbon disulfide	0.83	1.55	0.91	2.60	4.82	2.84	J
156-60-5	trans-1,2-Dichloroethene	0.17	0.60	ND	0.66	2.39	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.61	ND	1.20	2.22	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.68	3.37	ND	
108-05-4	Vinyl acetate	0.17	0.73	ND	0.59	2.58	ND	
78-93-3	2-Butanone	0.67	1.70	4.85	1.97	5.01	14.31	
141-78-6	Ethyl acetate	0.33	0.73	ND	1.20	2.63	ND	
74-97-5	Bromochloromethane	0.17	0.44	ND	0.88	2.35	ND	
109-99-9	Tetrahydrofuran	0.33	0.84	ND	0.98	2.48	ND	
156-59-2	cis-1,2-Dichloroethene	0.33	0.90	ND	1.32	3.56	ND	
67-66-3	Chloroform	0.17	0.79	ND	0.82	3.88	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.74	ND	0.91	4.04	ND	
107-06-2	1,2-Dichloroethane	0.17	0.76	ND	0.68	3.08	ND	
110-82-7	Cyclohexane	0.17	0.64	ND	0.58	2.21	ND	
71-43-2	Benzene	0.67	1.00	1.21	2.13	3.20	3.88	
56-23-5	Carbon tetrachloride	0.15	0.79	ND	0.94	4.98	ND	
142-82-5	n-Heptane	0.83	2.02	ND	3.42	8.29	ND	
78-87-5	1,2-Dichloropropane	0.17	0.80	ND	0.77	3.71	ND	
123-91-1	1,4 Dioxane	0.67	1.36	ND	2.41	4.92	ND	
79-01-6	Trichloroethene	0.10	0.78	ND	0.54	4.18	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-27-4	Bromodichloromethane	0.17	0.34	ND	1.12	2.26	ND	
80-62-6	Methyl methacrylate	0.67	2.25	ND	2.73	9.24	ND	
108-10-1	4-Methyl-2-pentanone	0.67	2.52	ND	2.74	10.35	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
108-88-3	Toluene	0.33	0.87	ND	1.26	3.28	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.86	ND	0.91	4.68	ND	
591-78-6	2-Hexanone	0.83	2.36	ND	3.42	9.70	ND	
124-48-1	Dibromochloromethane	0.17	0.33	ND	1.42	2.84	ND	
106-93-4	1,2-Dibromoethane	0.17	0.40	ND	1.28	3.11	ND	
127-18-4	Tetrachloroethene	0.10	0.41	ND	0.68	2.75	ND	
108-90-7	Chlorobenzene	0.17	0.76	ND	0.77	3.50	ND	
100-41-4	Ethylbenzene	0.35	0.88	ND	1.53	3.83	ND	
1330-20-7	m,p-Xylenes	0.35	0.88	ND	1.54	3.84	ND	
100-42-5	Styrene	0.35	0.86	ND	1.47	3.68	ND	
75-25-2	Bromoform	0.33	0.22	ND	3.45	2.31	ND	
95-47-6	o-Xylene	0.34	0.86	ND	1.49	3.74	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.33	0.41	ND	2.29	2.84	ND	
622-96-8	4-Ethyltoluene	0.55	1.38	ND	2.72	6.80	ND	
108-67-8	1,3,5-Trimethylbenzene	0.34	0.86	ND	1.70	4.24	ND	
95-63-6	1,2,4-Trimethylbenzene	0.34	0.85	ND	1.67	4.17	ND	
541-73-1	1,3-Dichlorobenzene	0.33	0.62	ND	2.01	3.71	ND	
100-44-7	Benzyl chloride	0.33	2.02	ND	1.73	10.47	ND	
106-46-7	1,4-Dichlorobenzene	0.33	0.58	ND	2.01	3.47	ND	
95-50-1	1,2-Dichlorobenzene	0.67	0.83	ND	4.01	5.02	ND	
120-82-1	1,2,4-Trichlorobenzene	0.83	1.15	ND	6.19	8.52	ND	
91-20-3	Naphthalene	0.17	0.27	ND	0.89	1.40	ND	
87-68-3	Hexachlorobutadiene	0.17	0.21	ND	1.78	2.24	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	101	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified TPH

SDG: 225333
Analytical Method: TO-15 **Laboratory ID:** 03

File Name: 2533303A.D **Date Sampled:** 12/08/25 **Time:** 11:18
Description: SG-3 **Date Analyzed:** 12/22/25 **Time:** 20:34
Canister: 383 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
68334-30-5	TPH Diesel	13.33	40.00	20.24	78.69	236.07	119.44	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333
Analytical Method: TO-15
Laboratory ID: 03

File Name: 2533303A.D
Description: SG-3
Can/Tube#: 383
QC_Batch: 122225-MA1

Date Sampled: 12/08/25 **Time:** 11:18
Date Analyzed: 12/22/25 **Time:** 20:34
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound		MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
67-63-0	2-propanol	(Isopropyl alcohol)	0.83	2.50	ND	2.05	6.15	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	101	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333

Analytical Method: TO-15 **Laboratory ID:** 04

File Name: 2533304A.D **Date Sampled:** 12/08/25 **Time:** 13:08
Description: SG4-10' **Date Analyzed:** 12/22/25 **Time:** 21:15
Canister: 370 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300.00 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.65	0.83	ND	3.22	4.13	ND	
74-87-3	Chloromethane	0.65	0.84	ND	1.34	1.74	ND	
76-14-2	Freon 114	0.17	0.84	ND	1.17	5.87	ND	
75-01-4	Vinyl chloride	0.17	0.84	ND	0.43	2.15	ND	
106-99-0	1,3-Butadiene	0.33	0.84	ND	0.74	1.86	ND	
74-83-9	Bromomethane	0.33	0.84	ND	1.30	3.26	ND	
75-00-3	Chloroethane	0.17	0.84	ND	0.44	2.21	ND	
64-17-5	Ethanol	0.83	2.50	10.73	1.57	4.72	20.26	
75-69-4	Trichlorofluoromethane	0.35	0.84	ND	1.97	4.73	ND	
67-64-1	Acetone	2.00	2.50	6.83	4.76	5.95	16.25	
67-63-0	2-propanol	0.83	2.50	ND	2.05	6.15	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.28	ND	
76-13-1	Freon 113	0.17	0.80	ND	1.28	6.12	ND	
75-09-2	Dichloromethane	0.33	0.80	ND	1.16	2.79	ND	
75-15-0	Carbon disulfide	0.83	1.55	ND	2.60	4.82	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.60	ND	0.66	2.39	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.61	ND	1.20	2.22	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.68	3.37	ND	
108-05-4	Vinyl acetate	0.17	0.73	ND	0.59	2.58	ND	
78-93-3	2-Butanone	0.67	1.70	2.55	1.97	5.01	7.52	
141-78-6	Ethyl acetate	0.33	0.73	ND	1.20	2.63	ND	
74-97-5	Bromochloromethane	0.17	0.44	ND	0.88	2.35	ND	
109-99-9	Tetrahydrofuran	0.33	0.84	0.66	0.98	2.48	1.96	J
156-59-2	cis-1,2-Dichloroethene	0.33	0.90	ND	1.32	3.56	ND	
67-66-3	Chloroform	0.17	0.79	1.26	0.82	3.88	6.18	
71-55-6	1,1,1-Trichloroethane	0.17	0.74	ND	0.91	4.04	ND	
107-06-2	1,2-Dichloroethane	0.17	0.76	ND	0.68	3.08	ND	
110-82-7	Cyclohexane	0.17	0.64	ND	0.58	2.21	ND	
71-43-2	Benzene	0.67	1.00	1.37	2.13	3.20	4.37	
56-23-5	Carbon tetrachloride	0.15	0.79	ND	0.94	4.98	ND	
142-82-5	n-Heptane	0.83	2.02	ND	3.42	8.29	ND	
78-87-5	1,2-Dichloropropane	0.17	0.80	ND	0.77	3.71	ND	
123-91-1	1,4 Dioxane	0.67	1.36	ND	2.41	4.92	ND	
79-01-6	Trichloroethene	0.10	0.78	ND	0.54	4.18	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-27-4	Bromodichloromethane	0.17	0.34	ND	1.12	2.26	ND	
80-62-6	Methyl methacrylate	0.67	2.25	ND	2.73	9.24	ND	
108-10-1	4-Methyl-2-pentanone	0.67	2.52	ND	2.74	10.35	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
108-88-3	Toluene	0.33	0.87	ND	1.26	3.28	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.86	ND	0.91	4.68	ND	
591-78-6	2-Hexanone	0.83	2.36	ND	3.42	9.70	ND	
124-48-1	Dibromochloromethane	0.17	0.33	ND	1.42	2.84	ND	
106-93-4	1,2-Dibromoethane	0.17	0.40	ND	1.28	3.11	ND	
127-18-4	Tetrachloroethene	0.10	0.41	0.11	0.68	2.75	0.77	J
108-90-7	Chlorobenzene	0.17	0.76	ND	0.77	3.50	ND	
100-41-4	Ethylbenzene	0.35	0.88	ND	1.53	3.83	ND	
1330-20-7	m,p-Xylenes	0.35	0.88	ND	1.54	3.84	ND	
100-42-5	Styrene	0.35	0.86	ND	1.47	3.68	ND	
75-25-2	Bromoform	0.33	0.22	ND	3.45	2.31	ND	
95-47-6	o-Xylene	0.34	0.86	ND	1.49	3.74	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.33	0.41	ND	2.29	2.84	ND	
622-96-8	4-Ethyltoluene	0.55	1.38	ND	2.72	6.80	ND	
108-67-8	1,3,5-Trimethylbenzene	0.34	0.86	ND	1.70	4.24	ND	
95-63-6	1,2,4-Trimethylbenzene	0.34	0.85	ND	1.67	4.17	ND	
541-73-1	1,3-Dichlorobenzene	0.33	0.62	ND	2.01	3.71	ND	
100-44-7	Benzyl chloride	0.33	2.02	ND	1.73	10.47	ND	
106-46-7	1,4-Dichlorobenzene	0.33	0.58	ND	2.01	3.47	ND	
95-50-1	1,2-Dichlorobenzene	0.67	0.83	ND	4.01	5.02	ND	
120-82-1	1,2,4-Trichlorobenzene	0.83	1.15	ND	6.19	8.52	ND	
91-20-3	Naphthalene	0.17	0.27	ND	0.89	1.40	ND	
87-68-3	Hexachlorobutadiene	0.17	0.21	ND	1.78	2.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	102	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified TPH

SDG: 225333

Analytical Method: TO-15 **Laboratory ID:** 04

File Name: 2533304A.D **Date Sampled:** 12/08/25 **Time:** 13:08
Description: SG4-10' **Date Analyzed:** 12/22/25 **Time:** 21:15
Canister: 370 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
68334-30-5	TPH Diesel	13.33	40.00	ND	78.69	236.07	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333
Analytical Method: TO-15 **Laboratory ID:** 04

File Name: 2533304A.D **Date Sampled:** 12/08/25 **Time:** 13:08
Description: SG4-10' **Date Analyzed:** 12/22/25 **Time:** 21:15
Can/Tube#: 370 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300 ml

CAS#	Compound		MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
67-63-0	2-propanol	(Isopropyl alcohol)	0.83	2.50	ND	2.05	6.15	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	102	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333

Analytical Method: TO-15 **Laboratory ID:** 05

File Name: 2533305A.D **Date Sampled:** 12/08/25 **Time:** 11:18
Description: SG4-25' **Date Analyzed:** 12/23/25 **Time:** 7:26
Canister: 389 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300.00 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.65	0.83	ND	3.22	4.13	ND	
74-87-3	Chloromethane	0.65	0.84	ND	1.34	1.74	ND	
76-14-2	Freon 114	0.17	0.84	ND	1.17	5.87	ND	
75-01-4	Vinyl chloride	0.17	0.84	ND	0.43	2.15	ND	
106-99-0	1,3-Butadiene	0.33	0.84	ND	0.74	1.86	ND	
74-83-9	Bromomethane	0.33	0.84	ND	1.30	3.26	ND	
75-00-3	Chloroethane	0.17	0.84	ND	0.44	2.21	ND	
64-17-5	Ethanol	0.83	2.50	41.23	1.57	4.72	77.85	
75-69-4	Trichlorofluoromethane	0.35	0.84	ND	1.97	4.73	ND	
67-64-1	Acetone	2.00	2.50	36.63	4.76	5.95	87.15	
67-63-0	2-propanol	0.83	2.50	2.40	2.05	6.15	5.90	J
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.28	ND	
76-13-1	Freon 113	0.17	0.80	ND	1.28	6.12	ND	
75-09-2	Dichloromethane	0.33	0.80	ND	1.16	2.79	ND	
75-15-0	Carbon disulfide	0.83	1.55	14.87	2.60	4.82	46.36	
156-60-5	trans-1,2-Dichloroethene	0.17	0.60	ND	0.66	2.39	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.61	ND	1.20	2.22	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.68	3.37	ND	
108-05-4	Vinyl acetate	0.17	0.73	ND	0.59	2.58	ND	
78-93-3	2-Butanone	0.67	1.70	18.82	1.97	5.01	55.57	
141-78-6	Ethyl acetate	0.33	0.73	ND	1.20	2.63	ND	
74-97-5	Bromochloromethane	0.17	0.44	ND	0.88	2.35	ND	
109-99-9	Tetrahydrofuran	0.33	0.84	2.11	0.98	2.48	6.22	
156-59-2	cis-1,2-Dichloroethene	0.33	0.90	ND	1.32	3.56	ND	
67-66-3	Chloroform	0.17	0.79	ND	0.82	3.88	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.74	ND	0.91	4.04	ND	
107-06-2	1,2-Dichloroethane	0.17	0.76	ND	0.68	3.08	ND	
110-82-7	Cyclohexane	0.17	0.64	ND	0.58	2.21	ND	
71-43-2	Benzene	0.67	1.00	4.31	2.13	3.20	13.78	
56-23-5	Carbon tetrachloride	0.15	0.79	ND	0.94	4.98	ND	
142-82-5	n-Heptane	0.83	2.02	ND	3.42	8.29	ND	
78-87-5	1,2-Dichloropropane	0.17	0.80	ND	0.77	3.71	ND	
123-91-1	1,4 Dioxane	0.67	1.36	ND	2.41	4.92	ND	
79-01-6	Trichloroethene	0.10	0.78	ND	0.54	4.18	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-27-4	Bromodichloromethane	0.17	0.34	ND	1.12	2.26	ND	
80-62-6	Methyl methacrylate	0.67	2.25	ND	2.73	9.24	ND	
108-10-1	4-Methyl-2-pentanone	0.67	2.52	1.40	2.74	10.35	5.73	J
10061-01-5	cis-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
108-88-3	Toluene	0.33	0.87	1.77	1.26	3.28	6.66	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.86	ND	0.91	4.68	ND	
591-78-6	2-Hexanone	0.83	2.36	1.43	3.42	9.70	5.86	J
124-48-1	Dibromochloromethane	0.17	0.33	ND	1.42	2.84	ND	
106-93-4	1,2-Dibromoethane	0.17	0.40	ND	1.28	3.11	ND	
127-18-4	Tetrachloroethene	0.10	0.41	0.15	0.68	2.75	1.01	J
108-90-7	Chlorobenzene	0.17	0.76	ND	0.77	3.50	ND	
100-41-4	Ethylbenzene	0.35	0.88	ND	1.53	3.83	ND	
1330-20-7	m,p-Xylenes	0.35	0.88	0.39	1.54	3.84	1.72	J
100-42-5	Styrene	0.35	0.86	0.48	1.47	3.68	2.06	J
75-25-2	Bromoform	0.33	0.22	ND	3.45	2.31	ND	
95-47-6	o-Xylene	0.34	0.86	ND	1.49	3.74	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.33	0.41	ND	2.29	2.84	ND	
622-96-8	4-Ethyltoluene	0.55	1.38	ND	2.72	6.80	ND	
108-67-8	1,3,5-Trimethylbenzene	0.34	0.86	ND	1.70	4.24	ND	
95-63-6	1,2,4-Trimethylbenzene	0.34	0.85	ND	1.67	4.17	ND	
541-73-1	1,3-Dichlorobenzene	0.33	0.62	ND	2.01	3.71	ND	
100-44-7	Benzyl chloride	0.33	2.02	ND	1.73	10.47	ND	
106-46-7	1,4-Dichlorobenzene	0.33	0.58	ND	2.01	3.47	ND	
95-50-1	1,2-Dichlorobenzene	0.67	0.83	ND	4.01	5.02	ND	
120-82-1	1,2,4-Trichlorobenzene	0.83	1.15	ND	6.19	8.52	ND	
91-20-3	Naphthalene	0.17	0.27	ND	0.89	1.40	ND	
87-68-3	Hexachlorobutadiene	0.17	0.21	ND	1.78	2.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	104	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified TPH

SDG: 225333
Analytical Method: TO-15 **Laboratory ID:** 05

File Name: 2533305A.D **Date Sampled:** 12/08/25 **Time:** 12:55
Description: SG4-25' **Date Analyzed:** 12/23/25 **Time:** 7:26
Canister: 389 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
68334-30-5	TPH Diesel	13.33	40.00	215.96	78.69	236.07	1,274.50	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333
Analytical Method: TO-15
Laboratory ID: 05

File Name: 2533305A.D
Description: SG4-25'
Can/Tube#: 389
QC_Batch: 122225-MA1

Date Sampled: 12/08/25 **Time:** 11:18
Date Analyzed: 12/23/25 **Time:** 7:26
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
67-63-0	2-propanol (Isopropyl alcohol)	0.83	2.50	2.40	2.05	6.15	5.90	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	104	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333

Analytical Method: TO-15

Laboratory ID: 06

File Name: 2533306A.D
Description: SG5-10'
Canister: 306
QC_Batch: 122225-MA1

Date Sampled: 12/08/25 **Time:** 11:52
Date Analyzed: 12/23/25 **Time:** 8:04
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.65	0.83	ND	3.22	4.13	ND	
74-87-3	Chloromethane	0.65	0.84	ND	1.34	1.74	ND	
76-14-2	Freon 114	0.17	0.84	ND	1.17	5.87	ND	
75-01-4	Vinyl chloride	0.17	0.84	ND	0.43	2.15	ND	
106-99-0	1,3-Butadiene	0.33	0.84	ND	0.74	1.86	ND	
74-83-9	Bromomethane	0.33	0.84	ND	1.30	3.26	ND	
75-00-3	Chloroethane	0.17	0.84	ND	0.44	2.21	ND	
64-17-5	Ethanol	0.83	2.50	2.29	1.57	4.72	4.32	J
75-69-4	Trichlorofluoromethane	0.35	0.84	ND	1.97	4.73	ND	
67-64-1	Acetone	2.00	2.50	4.10	4.76	5.95	9.75	
67-63-0	2-propanol	0.83	2.50	ND	2.05	6.15	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.28	ND	
76-13-1	Freon 113	0.17	0.80	ND	1.28	6.12	ND	
75-09-2	Dichloromethane	0.33	0.80	ND	1.16	2.79	ND	
75-15-0	Carbon disulfide	0.83	1.55	1.14	2.60	4.82	3.56	J
156-60-5	trans-1,2-Dichloroethene	0.17	0.60	ND	0.66	2.39	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.61	ND	1.20	2.22	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.68	3.37	ND	
108-05-4	Vinyl acetate	0.17	0.73	ND	0.59	2.58	ND	
78-93-3	2-Butanone	0.67	1.70	1.20	1.97	5.01	3.54	J
141-78-6	Ethyl acetate	0.33	0.73	ND	1.20	2.63	ND	
74-97-5	Bromochloromethane	0.17	0.44	ND	0.88	2.35	ND	
109-99-9	Tetrahydrofuran	0.33	0.84	1.39	0.98	2.48	4.11	
156-59-2	cis-1,2-Dichloroethene	0.33	0.90	ND	1.32	3.56	ND	
67-66-3	Chloroform	0.17	0.79	0.91	0.82	3.88	4.47	
71-55-6	1,1,1-Trichloroethane	0.17	0.74	ND	0.91	4.04	ND	
107-06-2	1,2-Dichloroethane	0.17	0.76	ND	0.68	3.08	ND	
110-82-7	Cyclohexane	0.17	0.64	ND	0.58	2.21	ND	
71-43-2	Benzene	0.67	1.00	0.77	2.13	3.20	2.46	J
56-23-5	Carbon tetrachloride	0.15	0.79	ND	0.94	4.98	ND	
142-82-5	n-Heptane	0.83	2.02	ND	3.42	8.29	ND	
78-87-5	1,2-Dichloropropane	0.17	0.80	ND	0.77	3.71	ND	
123-91-1	1,4 Dioxane	0.67	1.36	ND	2.41	4.92	ND	
79-01-6	Trichloroethene	0.10	0.78	ND	0.54	4.18	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-27-4	Bromodichloromethane	0.17	0.34	ND	1.12	2.26	ND	
80-62-6	Methyl methacrylate	0.67	2.25	ND	2.73	9.24	ND	
108-10-1	4-Methyl-2-pentanone	0.67	2.52	ND	2.74	10.35	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
108-88-3	Toluene	0.33	0.87	ND	1.26	3.28	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.86	ND	0.91	4.68	ND	
591-78-6	2-Hexanone	0.83	2.36	ND	3.42	9.70	ND	
124-48-1	Dibromochloromethane	0.17	0.33	ND	1.42	2.84	ND	
106-93-4	1,2-Dibromoethane	0.17	0.40	ND	1.28	3.11	ND	
127-18-4	Tetrachloroethene	0.10	0.41	0.19	0.68	2.75	1.31	J
108-90-7	Chlorobenzene	0.17	0.76	ND	0.77	3.50	ND	
100-41-4	Ethylbenzene	0.35	0.88	ND	1.53	3.83	ND	
1330-20-7	m,p-Xylenes	0.35	0.88	ND	1.54	3.84	ND	
100-42-5	Styrene	0.35	0.86	ND	1.47	3.68	ND	
75-25-2	Bromoform	0.33	0.22	ND	3.45	2.31	ND	
95-47-6	o-Xylene	0.34	0.86	ND	1.49	3.74	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.33	0.41	ND	2.29	2.84	ND	
622-96-8	4-Ethyltoluene	0.55	1.38	ND	2.72	6.80	ND	
108-67-8	1,3,5-Trimethylbenzene	0.34	0.86	ND	1.70	4.24	ND	
95-63-6	1,2,4-Trimethylbenzene	0.34	0.85	ND	1.67	4.17	ND	
541-73-1	1,3-Dichlorobenzene	0.33	0.62	ND	2.01	3.71	ND	
100-44-7	Benzyl chloride	0.33	2.02	ND	1.73	10.47	ND	
106-46-7	1,4-Dichlorobenzene	0.33	0.58	ND	2.01	3.47	ND	
95-50-1	1,2-Dichlorobenzene	0.67	0.83	ND	4.01	5.02	ND	
120-82-1	1,2,4-Trichlorobenzene	0.83	1.15	ND	6.19	8.52	ND	
91-20-3	Naphthalene	0.17	0.27	ND	0.89	1.40	ND	
87-68-3	Hexachlorobutadiene	0.17	0.21	ND	1.78	2.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	105	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified TPH

SDG: 225333

Analytical Method: TO-15 **Laboratory ID:** 06

File Name: 2533306A.D **Date Sampled:** 12/08/25 **Time:** 11:52
Description: SG5-10' **Date Analyzed:** 12/23/25 **Time:** 8:04
Canister: 306 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
68334-30-5	TPH Diesel	13.33	40.00	88.80	78.69	236.07	524.05	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333
Analytical Method: TO-15
Laboratory ID: 06

File Name: 2533306A.D
Description: SG5-10'
Can/Tube#: 306
QC_Batch: 122225-MA1

Date Sampled: 12/08/25 **Time:** 11:52
Date Analyzed: 12/23/25 **Time:** 8:04
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
67-63-0	2-propanol (Isopropyl alcohol)	0.83	2.50	ND	2.05	6.15	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	105	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333

Analytical Method: TO-15 **Laboratory ID:** 07

File Name: 2533307A.D **Date Sampled:** 12/08/25 **Time:** 11:57
Description: SG5-25' **Date Analyzed:** 12/23/25 **Time:** 8:44
Canister: 348 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300.00 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.65	0.83	ND	3.22	4.13	ND	
74-87-3	Chloromethane	0.65	0.84	ND	1.34	1.74	ND	
76-14-2	Freon 114	0.17	0.84	0.42	1.17	5.87	2.92	J
75-01-4	Vinyl chloride	0.17	0.84	ND	0.43	2.15	ND	
106-99-0	1,3-Butadiene	0.33	0.84	0.63	0.74	1.86	1.41	J
74-83-9	Bromomethane	0.33	0.84	ND	1.30	3.26	ND	
75-00-3	Chloroethane	0.17	0.84	ND	0.44	2.21	ND	
64-17-5	Ethanol	0.83	2.50	ND	1.57	4.72	ND	
75-69-4	Trichlorofluoromethane	0.35	0.84	ND	1.97	4.73	ND	
67-64-1	Acetone	2.00	2.50	6.31	4.76	5.95	15.02	
67-63-0	2-propanol	0.83	2.50	ND	2.05	6.15	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.28	ND	
76-13-1	Freon 113	0.17	0.80	ND	1.28	6.12	ND	
75-09-2	Dichloromethane	0.33	0.80	ND	1.16	2.79	ND	
75-15-0	Carbon disulfide	0.83	1.55	ND	2.60	4.82	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.60	ND	0.66	2.39	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.61	ND	1.20	2.22	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.68	3.37	ND	
108-05-4	Vinyl acetate	0.17	0.73	ND	0.59	2.58	ND	
78-93-3	2-Butanone	0.67	1.70	4.85	1.97	5.01	14.32	
141-78-6	Ethyl acetate	0.33	0.73	ND	1.20	2.63	ND	
74-97-5	Bromochloromethane	0.17	0.44	ND	0.88	2.35	ND	
109-99-9	Tetrahydrofuran	0.33	0.84	ND	0.98	2.48	ND	
156-59-2	cis-1,2-Dichloroethene	0.33	0.90	ND	1.32	3.56	ND	
67-66-3	Chloroform	0.17	0.79	0.53	0.82	3.88	2.58	J
71-55-6	1,1,1-Trichloroethane	0.17	0.74	ND	0.91	4.04	ND	
107-06-2	1,2-Dichloroethane	0.17	0.76	ND	0.68	3.08	ND	
110-82-7	Cyclohexane	0.17	0.64	1.51	0.58	2.21	5.22	
71-43-2	Benzene	0.67	1.00	1.38	2.13	3.20	4.41	
56-23-5	Carbon tetrachloride	0.15	0.79	ND	0.94	4.98	ND	
142-82-5	n-Heptane	0.83	2.02	ND	3.42	8.29	ND	
78-87-5	1,2-Dichloropropane	0.17	0.80	ND	0.77	3.71	ND	
123-91-1	1,4 Dioxane	0.67	1.36	ND	2.41	4.92	ND	
79-01-6	Trichloroethene	0.10	0.78	ND	0.54	4.18	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-27-4	Bromodichloromethane	0.17	0.34	ND	1.12	2.26	ND	
80-62-6	Methyl methacrylate	0.67	2.25	ND	2.73	9.24	ND	
108-10-1	4-Methyl-2-pentanone	0.67	2.52	ND	2.74	10.35	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
108-88-3	Toluene	0.33	0.87	ND	1.26	3.28	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.86	ND	0.91	4.68	ND	
591-78-6	2-Hexanone	0.83	2.36	ND	3.42	9.70	ND	
124-48-1	Dibromochloromethane	0.17	0.33	ND	1.42	2.84	ND	
106-93-4	1,2-Dibromoethane	0.17	0.40	ND	1.28	3.11	ND	
127-18-4	Tetrachloroethene	0.10	0.41	0.24	0.68	2.75	1.64	J
108-90-7	Chlorobenzene	0.17	0.76	ND	0.77	3.50	ND	
100-41-4	Ethylbenzene	0.35	0.88	ND	1.53	3.83	ND	
1330-20-7	m,p-Xylenes	0.35	0.88	ND	1.54	3.84	ND	
100-42-5	Styrene	0.35	0.86	ND	1.47	3.68	ND	
75-25-2	Bromoform	0.33	0.22	ND	3.45	2.31	ND	
95-47-6	o-Xylene	0.34	0.86	ND	1.49	3.74	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.33	0.41	ND	2.29	2.84	ND	
622-96-8	4-Ethyltoluene	0.55	1.38	ND	2.72	6.80	ND	
108-67-8	1,3,5-Trimethylbenzene	0.34	0.86	ND	1.70	4.24	ND	
95-63-6	1,2,4-Trimethylbenzene	0.34	0.85	ND	1.67	4.17	ND	
541-73-1	1,3-Dichlorobenzene	0.33	0.62	ND	2.01	3.71	ND	
100-44-7	Benzyl chloride	0.33	2.02	ND	1.73	10.47	ND	
106-46-7	1,4-Dichlorobenzene	0.33	0.58	ND	2.01	3.47	ND	
95-50-1	1,2-Dichlorobenzene	0.67	0.83	ND	4.01	5.02	ND	
120-82-1	1,2,4-Trichlorobenzene	0.83	1.15	ND	6.19	8.52	ND	
91-20-3	Naphthalene	0.17	0.27	ND	0.89	1.40	ND	
87-68-3	Hexachlorobutadiene	0.17	0.21	ND	1.78	2.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	102	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified TPH

SDG: 225333

Analytical Method: TO-15 **Laboratory ID:** 07

File Name: 2533307A.D **Date Sampled:** 12/08/25 **Time:** 11:57
Description: SG5-25' **Date Analyzed:** 12/23/25 **Time:** 8:44
Canister: 348 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
68334-30-5	TPH Diesel	13.33	40.00	19.17	78.69	236.07	113.15	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333

Analytical Method: TO-15 **Laboratory ID:** 07

File Name: 2533307A.D **Date Sampled:** 12/08/25 **Time:** 11:57
Description: SG5-25' **Date Analyzed:** 12/23/25 **Time:** 8:44
Can/Tube#: 348 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
67-63-0	2-propanol (Isopropyl alcohol)	0.83	2.50	ND	2.05	6.15	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	102	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333

Analytical Method: TO-15 **Laboratory ID:** 08

File Name: 2533308A.D **Date Sampled:** 12/08/25 **Time:** 09:36
Description: OA-1 **Date Analyzed:** 12/23/25 **Time:** 9:26
Canister: 358 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300.00 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.65	0.83	ND	3.22	4.13	ND	
74-87-3	Chloromethane	0.65	0.84	ND	1.34	1.74	ND	
76-14-2	Freon 114	0.17	0.84	ND	1.17	5.87	ND	
75-01-4	Vinyl chloride	0.17	0.84	ND	0.43	2.15	ND	
106-99-0	1,3-Butadiene	0.33	0.84	ND	0.74	1.86	ND	
74-83-9	Bromomethane	0.33	0.84	ND	1.30	3.26	ND	
75-00-3	Chloroethane	0.17	0.84	ND	0.44	2.21	ND	
64-17-5	Ethanol	0.83	2.50	ND	1.57	4.72	ND	
75-69-4	Trichlorofluoromethane	0.35	0.84	ND	1.97	4.73	ND	
67-64-1	Acetone	2.00	2.50	3.59	4.76	5.95	8.55	
67-63-0	2-propanol	0.83	2.50	ND	2.05	6.15	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.28	ND	
76-13-1	Freon 113	0.17	0.80	ND	1.28	6.12	ND	
75-09-2	Dichloromethane	0.33	0.80	ND	1.16	2.79	ND	
75-15-0	Carbon disulfide	0.83	1.55	ND	2.60	4.82	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.60	ND	0.66	2.39	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.61	ND	1.20	2.22	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.68	3.37	ND	
108-05-4	Vinyl acetate	0.17	0.73	ND	0.59	2.58	ND	
78-93-3	2-Butanone	0.67	1.70	1.25	1.97	5.01	3.69	J
141-78-6	Ethyl acetate	0.33	0.73	ND	1.20	2.63	ND	
74-97-5	Bromochloromethane	0.17	0.44	ND	0.88	2.35	ND	
109-99-9	Tetrahydrofuran	0.33	0.84	ND	0.98	2.48	ND	
156-59-2	cis-1,2-Dichloroethene	0.33	0.90	ND	1.32	3.56	ND	
67-66-3	Chloroform	0.17	0.79	ND	0.82	3.88	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.74	ND	0.91	4.04	ND	
107-06-2	1,2-Dichloroethane	0.17	0.76	ND	0.68	3.08	ND	
110-82-7	Cyclohexane	0.17	0.64	ND	0.58	2.21	ND	
71-43-2	Benzene	0.67	1.00	1.18	2.13	3.20	3.77	
56-23-5	Carbon tetrachloride	0.15	0.79	ND	0.94	4.98	ND	
142-82-5	n-Heptane	0.83	2.02	ND	3.42	8.29	ND	
78-87-5	1,2-Dichloropropane	0.17	0.80	ND	0.77	3.71	ND	
123-91-1	1,4 Dioxane	0.67	1.36	ND	2.41	4.92	ND	
79-01-6	Trichloroethene	0.10	0.78	ND	0.54	4.18	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-27-4	Bromodichloromethane	0.17	0.34	ND	1.12	2.26	ND	
80-62-6	Methyl methacrylate	0.67	2.25	ND	2.73	9.24	ND	
108-10-1	4-Methyl-2-pentanone	0.67	2.52	ND	2.74	10.35	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
108-88-3	Toluene	0.33	0.87	0.42	1.26	3.28	1.60	J
10061-02-6	trans-1,3-Dichloropropene	0.17	0.86	ND	0.76	3.93	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.86	ND	0.91	4.68	ND	
591-78-6	2-Hexanone	0.83	2.36	ND	3.42	9.70	ND	
124-48-1	Dibromochloromethane	0.17	0.33	ND	1.42	2.84	ND	
106-93-4	1,2-Dibromoethane	0.17	0.40	ND	1.28	3.11	ND	
127-18-4	Tetrachloroethene	0.10	0.41	ND	0.68	2.75	ND	
108-90-7	Chlorobenzene	0.17	0.76	ND	0.77	3.50	ND	
100-41-4	Ethylbenzene	0.35	0.88	ND	1.53	3.83	ND	
1330-20-7	m,p-Xylenes	0.35	0.88	ND	1.54	3.84	ND	
100-42-5	Styrene	0.35	0.86	ND	1.47	3.68	ND	
75-25-2	Bromoform	0.33	0.22	ND	3.45	2.31	ND	
95-47-6	o-Xylene	0.34	0.86	ND	1.49	3.74	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.33	0.41	ND	2.29	2.84	ND	
622-96-8	4-Ethyltoluene	0.55	1.38	ND	2.72	6.80	ND	
108-67-8	1,3,5-Trimethylbenzene	0.34	0.86	ND	1.70	4.24	ND	
95-63-6	1,2,4-Trimethylbenzene	0.34	0.85	ND	1.67	4.17	ND	
541-73-1	1,3-Dichlorobenzene	0.33	0.62	ND	2.01	3.71	ND	
100-44-7	Benzyl chloride	0.33	2.02	ND	1.73	10.47	ND	
106-46-7	1,4-Dichlorobenzene	0.33	0.58	ND	2.01	3.47	ND	
95-50-1	1,2-Dichlorobenzene	0.67	0.83	ND	4.01	5.02	ND	
120-82-1	1,2,4-Trichlorobenzene	0.83	1.15	ND	6.19	8.52	ND	
91-20-3	Naphthalene	0.17	0.27	ND	0.89	1.40	ND	
87-68-3	Hexachlorobutadiene	0.17	0.21	ND	1.78	2.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	106	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified TPH

SDG: 225333
Analytical Method: TO-15 **Laboratory ID:** 08

File Name: 2533308A.D **Date Sampled:** 12/08/25 **Time:** 09:36
Description: OA-1 **Date Analyzed:** 12/23/25 **Time:** 9:26
Canister: 358 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
1330-20-7	TPH Gasoline	13.33	40.00	ND	67.76	203.28	ND	
68334-30-5	TPH Diesel	13.33	40.00	ND	78.69	236.07	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 225333
Analytical Method: TO-15 **Laboratory ID:** 08

File Name: 2533308A.D **Date Sampled:** 12/08/25 **Time:** 09:36
Description: OA-1 **Date Analyzed:** 12/23/25 **Time:** 9:26
Can/Tube#: 358 **Can Dilution Factor:** 1.00
QC_Batch: 122225-MA1 **Air Volume:** 300 ml

CAS#	Compound		MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
67-63-0	2-propanol	(Isopropyl alcohol)	0.83	2.50	ND	2.05	6.15	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	106	70	130	

Appendix I Pre-Demolition Asbestos, Lead-Based Paint, Polychlorinated Biphenyls, and Visual Hazardous Materials Survey Report

Pre-Demolition Asbestos, Lead-Based Paint, Polychlorinated Biphenyls, and Visual Hazardous Materials Survey Report

New Fresno Courthouse

Fresno, California

July 2, 2026

Prepared for:

Judicial Council of California

Prepared by:

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Project Number:

185806843

The conclusions in the Report titled Pre-Demolition Asbestos, Lead-Based Paint, Polychlorinated Biphenyls, and Visual Hazardous Materials Survey Report are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

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Abbreviations

ACCM	asbestos-containing construction material
ACM	asbestos-containing material
AHERA	Federal Asbestos Hazard Emergency Response Act
CCR	California Code of Regulations
CDPH	State of California, Department of Public Health
CFR	Code of Federal Regulations
City	Fresno
DOSH	State of California, Division of Occupational Safety and Health
DTSC	Department of Toxic Substance Control
EPA	United States Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
EMSL	EMSL Analytical, Inc.
HA	homogenous area
HUD	United States Housing and Urban Development
HVAC	heating, ventilation, and air conditioning
LBP	lead-based paint
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NRC	Nuclear Regulatory Commission
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyls
PLM	polarized light microscopy
PLM/DS	polarized light microscopy with dispersion staining
ppm	parts per million
Project	Proposed New Fresno Courthouse
SF	square foot
Site	Project Site
TSI	thermal system insulations
VFT	Vinyl floor tile

1.0 Introduction

This Pre-Demolition Asbestos, Lead-Based Paint, Polychlorinated Biphenyls, and Visual Hazardous Materials Survey Report has been prepared to evaluate the presence of asbestos-containing materials (ACM), lead-based paint (LBP) in fair and/or poor condition, polychlorinated biphenyls (PCB) in building materials, and other hazardous materials that would require special handling and/or disposal in accordance with applicable federal, state, and local regulations, for the Proposed New Fresno Courthouse (Project). The property includes an approximately 80,000 square foot (SF), multi-story Fresno County Sheriff's Administration Building constructed in 1970 and an approximately 120,000 SF multi-story South Annex Jail constructed in 1942, with an annex added in 1960, located on the northeastern portion of the Property. Stantec understands that demolition of these multi-story buildings is proposed, as part of site preparation.

The Sheriff's Administration Building is currently occupied; therefore, assessment was limited to a desktop review only; no samples were collected for the Sheriff's Administration Building. Of note, access was provided to the Sheriff's Administration Building for the purpose of performing a visual universal waste assessment only. The South Annex Jail (Site) was vacant; therefore, both desktop survey of existing data as well as a field survey of the building were conducted.

The field survey was conducted on April 22-23, 2026, by the following Stantec personnel:

- **Mr. Scott Edblad**, Senior Scientist with Stantec, State of California, Division of Occupational Safety and Health (DOSH) Certified Asbestos Consultant (CAC; #15-5414) and State of California, Department of Public Health (CDPH) Lead-Related Construction Inspector/Assessor (LRCIA; #LRC-00014821), and
- **Ms. Bella Santos**, Environmental Scientist with Stantec, DOSH CAC (#26-8049) and State of California, Department of Public Health (CDPH) Lead-Related Construction Sampling Technician (#LRC-00011042).

All work was performed under the guidance of Mr. Scott Edblad, Senior Scientist with Stantec, DOSH CAC (#15-5414) and CDPH LRCIA (#LRC-00014821).

The purpose of this survey was to determine the asbestos content of suspect ACMs and suspect asbestos-containing construction materials (ACCM) in accordance with the National Emissions Standards for Hazardous Air Pollutants (NESHAP [40 Code of Federal Regulations (CFR), Part 61]). Additionally, the ACM survey satisfies certain requirements of DOSH, Construction Industry Standards (Title 8, California Code of Regulations [CCR], Section 1529) and documented identified ACMs. Stantec documented potential LBP observed to be in fair and/or poor condition, PCBs in building materials, and other hazardous materials that would require special handling and/or disposal in accordance with applicable federal, state, and local regulations.

The scope of the survey and the services provided by Stantec included:

- Performing a visual inspection of the survey areas to identify accessible suspect ACM;
- Collecting and analyzing bulk samples of select suspect materials for determination of asbestos content;
- Performing a visual inspection and collecting paint chip samples of painted surfaces observed to be in a fair or poor/deteriorated (i.e., flaking or peeling) condition for lead content following criteria outlined in applicable sections of Chapter 7 and Appendix 13.2 of the United States Housing and Urban Development (HUD) guidelines;
- Collecting bulk samples of building materials for PCB content as outlined in the United States Environmental Protection Agency's (EPA) October 24, 2012, PCB Bulk Product Waste Reinterpretation memorandum;
- Submitting samples to an accredited laboratory for analysis;
- Performing a visual inspection of the survey areas to identify any other hazardous materials (i.e., universal wastes);
- Ensuring the technical quality of all work by using appropriately certified personnel; and
- Consolidating data and findings into a report format.

Additionally, no sample collection was performed in the process of identifying universal wastes.

2.0 Project Description

The property includes an approximately 80,000 SF, multi-story Fresno County Sheriff's Administration Building constructed in 1970 and an approximately 120,000 SF multi-story South Annex Jail constructed in 1942, with an annex added in 1960, located on the northeastern portion of the Property.

As part of the proposed New Fresno Courthouse Project, demolition activities would include removal of the existing Sheriff Administration Building and South Annex Jail within the Project site. These activities would prepare the Project site for future construction and site development associated with the Project.

Demolition would include the systematic removal and off-haul of aboveground structures, foundations, utilities, and associated improvements. All demolition work would occur within the existing developed footprint of the Project site, and no new ground disturbance would extend beyond the Project site boundaries.

The Sheriff's Administration Building is currently occupied and operational; therefore, assessment activities for this structure are presently limited to a desktop review of available documentation and records. Due to occupancy constraints and limitations on intrusive access, Stantec was not able to perform a comprehensive field survey, destructive testing, or full hazardous materials inspection within the building at this time. As such, observations and conclusions related to the Sheriff's Administration Building are based primarily on previously prepared reports, available construction and renovation information, and limited visual observations obtained during the site visit.

Stantec did, however, conduct a field survey of the South Annex Jail, including accessible interior and exterior areas, to evaluate potential hazardous building materials and other environmental considerations associated with the proposed demolition activities. Observations and conclusions related to the South Jail Annex are based on previously prepared reports, available construction and renovation information, visual observations, and sample collection and analysis obtained during the site visit.

3.0 Desktop Analysis

3.1 Desktop Review Summary and Preliminary Demolition Evaluation Considerations

Stantec reviewed available historical hazardous building material reports, limited assessment documentation, and prior sampling data associated with the Fresno County Sheriff's Administration Building and the South Annex Jail. The reviewed documents are provided in Appendix A. The purpose of this desktop review is to summarize known regulated building materials, identify data gaps and assumptions associated with demolition planning, and provide preliminary considerations that may affect demolition sequencing, worker health and safety, waste characterization, regulatory compliance, and project scheduling.

Because portions of the facilities remain occupied and/or inaccessible, this desktop review should be considered a preliminary evaluation only. Additional intrusive inspection and comprehensive pre-demolition hazardous materials surveys are anticipated to be required prior to structural demolition activities. The age, historical use, and institutional nature of the buildings indicate a moderate to high likelihood that additional regulated materials may remain concealed within inaccessible building systems, wall cavities, mechanical spaces, utility infrastructure, roofing systems, and below-grade components.

3.2 General Building Age and Historical Construction Assumptions

Based on the architectural style, institutional use, and available historical documentation, the Sheriff's Administration Building and South Annex Jail are assumed to have been constructed during an era when ACM, LBP, and other regulated building materials were commonly incorporated into commercial and public institutional construction. Buildings constructed prior to the 1980s frequently incorporated ACM in fireproofing, thermal system insulation, roofing materials, mastics, flooring systems, joint compounds, and miscellaneous surfacing materials. Similarly, lead-containing coatings were commonly applied to structural steel, railings, doors, piping, and exterior painted surfaces.

Given the age and operational history of these facilities, additional regulated materials not identified in prior limited surveys may reasonably be anticipated during demolition planning, including but not limited to:

- Additional concealed friable and non-friable ACM within wall systems, mechanical rooms, pipe chases, crawlspaces, attics, ducting, and utility tunnels;
- Lead-containing paints and industrial coatings on structural steel, doors, frames, piping, mechanical equipment, and exterior architectural components;

- Universal wastes including fluorescent light tubes, ballasts, batteries, emergency lighting, and electronic equipment;
- PCBs in older electrical equipment, transformers, capacitors, fluorescent light ballasts, mastics, caulking, and glazing compounds;
- Mercury-containing equipment such as switches, thermostats, gauges, and fluorescent lamps;
- Refrigerants and oils associated with heating, ventilation, and air conditioning (HVAC) systems and mechanical equipment;
- Potentially impacted soil or subsurface materials associated with historical maintenance operations, fuel storage, emergency generators, hydraulic equipment, or vehicle-related activities;
- Silica-containing building materials that may generate airborne dust during demolition;
- Mold, biological contamination, or water-damaged materials in concealed or historically moisture-impacted areas;
- Regulated wastes associated with detention facility infrastructure, security systems, medical storage areas, communications systems, or evidence handling operations.

Institutional and correctional facilities often undergo multiple renovations, phased repairs, and undocumented maintenance activities over decades of operation. As a result, the presence of previously unidentified hazardous materials should be anticipated during demolition and renovation activities. Historical abatement records may also be incomplete, and previously abated materials may remain in inaccessible areas or beneath newer construction finishes.

3.3 Sheriff's Administration Building

The Sheriff's Administration Building is currently occupied, and, at the time of this report, assessment activities were limited to a desktop review of available historical reports and sampling data. Due to occupancy limitations and restricted access to concealed building systems, the findings summarized below should not be considered comprehensive for demolition purposes.

3.3.1 Bulk Sample Collection and Analysis for Asbestos

Bulk samples of homogeneous materials have previously been collected at the Sheriff's Administration Building and analyzed by polarized light microscopy (PLM). The following ACM were identified:

- Fireproofing, gray, upper ceiling in Records Office, 10 percent Chrysotile, friable ACM, *Leon Environmental Services (LES), Asbestos Bulk Samples, Sheriff Administration Building, 1st Floor, 2200 Fresno St., Fresno, CA, Job No. B166-24, August 9, 2024.*

- Fireproofing, 1st floor lobby IT closet ceiling beam and basement hallway attic beam, 5 to 6 percent Chrysotile, friable ACM, *LES, Asbestos Bulk Samples, Fresno County Sheriff's Admin Office, 2200 Fresno St., Fresno, CA, Job No. C85-19, June 24, 2019*.

- Fireproofing debris, basement hallway attic, 5 to 6% Chrysotile, friable ACM, *LES, Asbestos Bulk Samples, Fresno County Sheriff's Admin Office, 2200 Fresno St., Fresno, CA, Job No. C85-19, June 24, 2019*.

The identified ACM consists primarily of spray-applied fireproofing and associated debris located on structural members and concealed building areas. Spray-applied fireproofing is generally considered a high-risk friable ACM due to its potential to become airborne when disturbed during demolition activities. The identification of ACM debris within attic and concealed areas also suggests that previous disturbance, deterioration, or historical maintenance activities may have impacted material condition.

Of note, LES's 2016 Asbestos Air Samples letter report references unspecified asbestos abatement within the Fresno County Sheriff's Office building. Clearance air samples were collected in the Sheriff's Evidence Hallway in December 2016, analyzed by phase contrast microscopy, and results were reportedly below the 0.01 fibers per cubic centimeter (f/cc) clearance level. However, the available documentation does not clearly define the extent of the prior abatement activities, type and quantities of materials removed, or whether additional ACM remains.

Based on the age and construction type of the building, additional suspect ACM that may remain present includes, but may not be limited to:

- Thermal system insulation associated with piping, boilers, elbows, fittings, and mechanical equipment;

- Vinyl floor tile and associated mastics;

- Roofing materials, mastics, and flashing compounds;

- Drywall joint compound and wall texture;

- HVAC duct insulation and vibration dampening materials;

- Window glazing, caulking, and sealants;

- Electrical panel backing, transite components, or cementitious materials;

- Elevator components and associated equipment insulation.

Because demolition activities will likely disturb concealed building systems and inaccessible structural areas not previously surveyed, a comprehensive Pre-Demolition Asbestos survey consistent with San Joaquin Valley Air Pollution Control District Rule 4002 and NESHAP requirements are recommended prior to demolition.

3.3.2 Sample Collection and Analysis for Lead-Based Paint

X-Ray fluorescence sampling has previously been performed at the Sheriff's Administration Building. The following LBP was identified:

- Gray paint, exterior metal handrails and guardrails, 1-3.2 mg/cm^2, LBP, *LES, Limited LBP Inspection Report, Sheriff's Administration Building, Front Exterior Railings, Columns, and Flashings, 2200 Fresno Street, Fresno, CA, LES Job #L04-20, March 13, 2020*.

The identified LBP was associated with exterior painted metal components; however, given the limited scope of prior inspection activities and the age of the structure, additional lead-containing coatings are likely present throughout the facility. Lead-containing paints were historically common on structural steel, industrial coatings, mechanical equipment, piping, door frames, and exterior architectural components.

Disturbance of painted surfaces during demolition may generate lead-containing dust and debris requiring implementation of worker protection measures, waste profiling, and appropriate disposal procedures. Depending on waste characterization results, painted demolition debris may require handling as California hazardous waste or non-RCRA regulated waste subject to additional disposal requirements.

Additional assumptions and considerations associated with demolition of the Sheriff's Administration Building include:

- Potential presence of inaccessible ACM and LBP within secure or operational areas that could not be surveyed during occupancy;
- Possible undocumented renovations resulting in mixed building materials and concealed hazardous materials;
- Potential operational constraints associated with maintaining occupancy, security, utilities, and emergency access during phased demolition or abatement activities;
- Requirement for utility isolation and verification prior to intrusive demolition;
- Potential need for negative pressure containment, regulated areas, and phased abatement sequencing prior to structural demolition;
- Potential need for additional air monitoring during demolition due to identified friable ACM.

3.4 South Annex Jail

A pre-demolition regulated building materials survey was performed by Stantec in April 2026. Prior to field activities, Stantec reviewed available historical reports and sampling data associated with the South Annex Jail. The facility's operational history as a correctional and detention-related structure, combined with the apparent age of construction, suggests that additional regulated materials may remain in concealed or inaccessible areas.

3.4.1 Bulk Sample Collection and Analysis for Asbestos

Bulk samples of homogeneous areas have previously been collected at the South Annex Jail and analyzed by PLM. The following ACM were identified:

- Roof core, black, stairwell roof/walkway, 10% Chrysotile, non-friable ACM, *LES, Asbestos Bulk Samples, South Annex Jail, Roof, 2280 Fresno St., Fresno, CA, Job No. B56-24, March 15, 2024*.
- Roof mastic, black, stairwell roof/walkway, 5% Chrysotile, non-friable ACM, *LES, Asbestos Bulk Samples, South Annex Jail, Roof, 2280 Fresno St., Fresno, CA, Job No. B56-24, March 15, 2024*.
- Membrane/liner, black, on concrete under courtyard grass, 3% Chrysotile, non-friable ACM, *LES, Asbestos Bulk Sample Report, South Annex Jail, Courtyard Grass, 2280 Fresno St., Fresno, CA, LES Job No. B219-22, September 20, 2022*.

The identified ACM consists primarily of roofing and membrane materials containing Chrysotile asbestos. Although currently characterized as non-friable ACM, these materials may become friable during demolition, cutting, crushing, grinding, or mechanical disturbance. Roofing materials and mastics may also require segregation and special handling depending on disposal facility acceptance criteria.

The identification of an asbestos-containing membrane beneath courtyard grass suggests the potential presence of buried or concealed construction materials associated with historical site modifications, waterproofing systems, or below-grade infrastructure. Additional concealed ACM may remain beneath hardscape, landscaping features, buried utilities, or undocumented site improvements.

3.4.2 Sample Collection and Analysis for Lead-Based Paint

No prior reports pertaining to paint sample collection or analysis were provided for the South Annex Jail. Potential lead-containing coatings may include:

- Structural steel coatings;
- Detention doors, bars, frames, and railings;
- Mechanical and plumbing piping systems;
- Exterior painted surfaces and industrial coatings;
- Equipment coatings and specialty security infrastructure.

Stantec's April 2026, methods and findings of the South Annex Jail survey are discussed in the below sections of this report.

4.0 Survey Methods

The following survey methods were implemented for the South Annex Jail building.

4.1 Visual Inspection

4.1.1 Visual Inspection for Asbestos

Building materials were visually inspected for asbestos using the methods presented in applicable sections of the Federal Asbestos Hazard Emergency Response Act (AHERA) regulations (40 CFR, Part 763). The principles presented under AHERA are generally accepted as the industry standard for ACM inspections. Suspect ACMs were also physically assessed for friability, condition, and disturbance factors.

It is a widely accepted practice, and Stantec's recommendation, to collect additional bulk samples during actual abatement, renovation, or demolition activities when concealed suspect ACMs are discovered that are not consistent with those identified in this report. Alternatively, these suspect ACMs can be assumed to be an ACM and handled accordingly.

4.1.2 Visual Inspection for Lead-Based Paint

Stantec assessed the condition of painted surfaces of the Site and collected paint chip samples of painted surfaces observed to be in fair and/or poor condition as defined within Chapter 5 of HUD guidelines. The definitions of paint condition are dependent on the location of the paint and component involved. The following table defines HUD categories for paint condition under various circumstances.

Table 1. HUD Categories of Paint Film Quality

Type of Building Component	Total Area of Deteriorated Paint		
	Intact	Fair	Poor
Exterior components with large surface areas.	Entire surface is intact.	Less than or equal to 10 square feet.	More than 10 square feet.
Interior components with large surface areas (walls, ceilings, floors, doors).	Entire surface is intact.	Less than or equal to 2 square feet.	More than 2 square feet.
Interior and exterior components with small surface areas (windowsills, baseboards, soffits, trim).	Entire surface is intact.	Less than or equal to 10 percent of the total surface area of the component.	More than 10 percent of the total surface area of the component.

4.1.3 Visual Inspection for PCBS

Stantec performed a visual inspection of existing building material for the presence of PCB-containing building materials. Stantec makes no warranty as to the possible existence or absence of such materials or to their evaluation in respect to PCB content in concealed locations.

4.1.4 Visual Inspection for Other Hazardous Materials and Universal Wastes

Stantec performed a visual inspection of existing building equipment for the presence of other hazardous materials and universal wastes. Universal wastes are hazardous wastes that pose a lower immediate risk to the environment compared to other hazardous wastes. The visual inspection was limited to fixtures and equipment in the buildings at the Site that were easily accessible. Assessment of these hazardous materials was based solely on the identification placards on the equipment or general knowledge of historical use. If the presence and/or absence of a material was not clearly marked, then the piece of equipment was assumed to contain a concentration of the material in question. No sample collection was performed in the process of identifying universal wastes.

4.2 Sample Collection and Analysis

4.2.1 Bulk Sample Collection and Analysis for Asbestos

Bulk samples were collected of identified homogeneous areas which may be impacted by renovation/demolition activities. The EPA defines a homogeneous area as a surfacing material, thermal system insulation, or miscellaneous material that is uniform in color and texture. The use or application of the homogeneous area is also used to identify suspect ACMs. Examples of homogeneous materials include:

- Ceiling tiles of same color and size in contiguous areas; and
- Flooring of same color and size in contiguous areas.

Bulk samples were collected in general accordance with the AHERA sampling guidelines as outlined in 40 CFR Part 763. The location, condition, friability, and the potential for suspected ACMs to be impacted (i.e., disturbed) were assessed and documented. Bulk samples of readily accessible suspect ACMs were collected. Consistent with building demolition and renovation regulatory requirements, building material sampling was conducted regardless of the age and/or condition of the structure.

At least one sample was collected of each suspect ACM. The samples were collected by removing the materials using a hand tool to extract a representative piece. Plastic bags were used to contain the samples of suspect materials and sealed to prevent the introduction of contamination from outside sources. A unique sample number was assigned to each sample.

A total of 224 bulk samples were collected from 71 homogeneous areas at the Site during the survey. Occupied portions of the Site's basement and first floor were inaccessible at the time of the survey and not sampled.

The samples were analyzed by polarized light microscopy with dispersion staining (PLM/DS) in accordance with the EPA "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R93/116, July 1993). Analysis was performed by EMSL Analytical, Inc. (EMSL) located in Cinnaminson, New Jersey (NVLAP #101048-0). This laboratory is certified by the CDPH and are participants in the Environmental Laboratory Accreditation Program and the National Institute of Standards and Testing, National Voluntary Laboratory Accreditation Program. This laboratory is also accredited by the American Industrial Hygiene Association.

The EPA, under their asbestos NESHAP regulations, define and regulate ACMs, which are materials containing more than one percent (>1%) asbestos. Please note, in California, asbestos exposure in construction is regulated when construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof contain asbestos [§1529 (a)(1)(C)]. Additionally, materials containing greater than one-tenth of one percent (> 0.1%) are regulated as ACCMs. For the purpose of this report, materials with any detectable concentration of asbestos are considered positive.

A summary of the asbestos laboratory analytical results is included in Table 1 in Appendix B. The summary table includes the asbestos analytical results of all materials sampled as a part of this survey with details including location, quantity, and type of ACM and ACCM identified. Sample location figures are provided in Appendix C; a photographic log is provided in Appendix D; laboratory analytical results and bulk sample logs are provided in Appendix E; and personnel and laboratory accreditations are provided in Appendix F.

4.2.2 Bulk Sample Collection and Analysis for Lead-Based Paint

Stantec made observations to assess the condition of painted surfaces of the Site. Occupied portions of the Site's basement and first[t] floor were inaccessible at the time of the survey and not sampled. Paint chip samples were collected by removing painted materials using hand tools to extract representative pieces. Hard-sided containers were used to contain the sample of suspect materials. A unique sample number was assigned to each sample.

Eight samples of paint types observed to be in poor condition were collected at the time of the survey. The samples were analyzed using flame atomic absorption spectrometry following the EPA SW 846-7000B/7420 analytical protocol. The samples were submitted to EMSL in Cinnaminson, New Jersey. This laboratory is accredited by the American Industrial Hygiene Association (AIHA-LAP #100194) under the Environmental Lead Laboratory Accreditation Program (ELAP) as well as the CDPH ELAP for bulk paint chip analysis.

A summary of the paint chip sample laboratory analytical results is included in Table 2 in Appendix B; sample location figures are provided in Appendix C; a photographic log is provided in Appendix D; laboratory analytical results and bulk sample logs are provided in Appendix E; personnel and laboratory

accreditations are provided in Appendix F; and the CDPH Lead Hazard Evaluation Report is provided in Appendix G.

4.2.3 Bulk Sample Collection and Analysis for PCBS

Stantec conducted a visual observation for accessible suspect PCB-containing materials throughout the Site. No caulking was observed that may be suspect PCB-containing material, and therefore, no bulk samples were collected for PCB analysis.

4.2.4 Other Hazardous Materials

Stantec performed a visual inspection of the Site for the presence of other hazardous materials and universal wastes (pursuant to 40 CFR 273.9, 40 CFR 260.10, and 22 CCR §66261.9). The survey was limited to above grade only and did not include a soil or subsurface investigation. Materials evaluated as part of this inspection included: PCB-containing units such as lighting ballasts and PCB-containing electrical units (i.e., electrical transformers); lead-containing units such as car batteries or emergency exit sign batteries; fluorescent lighting tubes; mercury-containing units such as light switches and thermostats; refrigerants, halon, and other chlorofluorocarbons such as fire extinguishing systems and Freon™ used in association with building drinking fountains; heavy metals as may be found in cooling tower water treatment systems; solvents, paints, fuel (storage tanks), lubricants, and other associated maintenance and cleaning products; radioactive materials that may be contained in units such as smoke detectors, or medical equipment; office materials, supplies, and equipment such as computer monitors and printing supplies, and miscellaneous materials such as unlabeled materials or substances of concern. Stantec's visual inspection was limited to fixtures and equipment at the Site that were readily accessible. Assessment of these hazardous materials was based solely on the identification placards on the equipment or general knowledge of historical use. If the presence and/or absence of a material was not clearly marked, then the piece of equipment was assumed to contain a concentration of the material in question. No sample collection was performed in the process of identifying other hazardous materials or universal wastes.

5.0 Regulatory Context

5.1 Asbestos

Asbestos is a potential health hazard capable of causing respiratory system fibrosis and various forms of systemic cancers. Its condition, handling and disposal are regulated by federal, state, and local agencies. Materials that contain asbestos generally do not pose a health threat unless the asbestos fibers are disturbed by renovation, construction, or demolition, and may then become airborne and inhaled. If the Property buildings are not going to be demolished, then written notification to employees, tenants, contractors, or purchasers of the property with regards to the presence and location of ACMs and ACCMs is required pursuant to the California Health and Safety Code 25915.

5.1.1 US EPA National Emissions Standard for Hazardous Air Pollutants 40 CFR Part 61

Under the NESHAP regulation, no visible emissions are allowed during facility demolition or renovation activities, which involve regulated ACM. For this reason, all facilities must be surveyed for ACM prior to demolition or renovation. The EPA, and/or the local air quality management district which has delegated authority from the EPA NESHAP, must be notified prior to any building demolition, even if no ACM are present. Assessments are made by the inspector as to the condition of each material and whether or not the materials are "friable." The EPA NESHAP regulation defines “friable” materials as:

*Materials that, when dry, **can** be crumbled, pulverized or reduced to a powder using hand pressure.*

Conversely, a non-friable material **cannot**, when dry, be crumbled, pulverized, or reduced to a powder.

Generally, undamaged vinyl asbestos floor tiles/adhesives, carpet mastic, plaster, roofing materials, wallboard, concrete, electrical insulation, cove base adhesives, fire doors, and exterior facing materials and similar materials are considered to be "non-friable." These materials present a low risk of asbestos fiber release unless impacted by maintenance, construction, demolition, or another activity that disturbs the material.

Materials such as acoustical ceiling texture and many thermal system insulations (TSI), ceiling tile and similar materials are considered to be "friable" materials that may become damaged more readily through less intrusive contact. Many of these materials result in a much higher airborne concentration of asbestos than do non-friable materials. Therefore, extra care should be taken not to disturb this type of material.

The EPA defines a homogeneous area as a surface material, thermal system insulation, or miscellaneous material that is uniform in color and texture. The use or application of the homogeneous area is also used to identify suspect ACMs. The EPA and DOSH define ACM as any material that contains more than one percent (by weight) of asbestos (>1%). Only one sample from a homogeneous area with an asbestos concentration >1% is required to collectively identify that material as an ACM. The EPA additionally categorizes ACM as follows:

- Category I non-friable ACM - asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos as determined using the PLM/DS method.
- Category II non-friable ACM - any material, excluding Category I non-friable ACM, containing more than 1% asbestos as determined using the PLM/DS method that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- Regulated asbestos-containing material - (a) Friable asbestos material, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

Potential asbestos exposure in construction is regulated when construction, alteration, repair, maintenance, renovation or demolition of structures, substrates, or portions thereof contain asbestos (CCR, Title 8, Section 1529 [Asbestos in Construction Standard (a)(1)(C)]). Additionally, in California, materials containing greater than one-tenth of one percent (>0.1%) asbestos by weight are regulated as ACCMs. For the purpose of this report, materials with any detectable concentration of asbestos are considered positive.

5.1.2 Asbestos Hazard Emergency Response Act, 40 CFR Part 763, Subpart E

The AHERA requires performance of asbestos surveys and the development of Asbestos Management Plans for all K-12 public and non-profit private schools in the United States and its territories. Although this regulation applies to such schools only, the procedures mandated under AHERA are considered the industry standard and are applied to all surveys performed by Stantec in accordance with Federal Occupational Safety and Health Administration (OSHA) mandates in 29 CFR 1926.1101, Subsections (k)(1), (2), and (5) and DOSH CCR, Title 8, Section 1529.

5.1.3 California Assembly Bill 3713, Health and Safety Code Div. 20, Ch. 10.4, Sec. 25915-25924

The state of California has enacted legislation that requires building owners, employers, lessees, etc. to notify tenants, employees, and contractors of the presence of asbestos in both friable and non-friable forms. In addition, preventive maintenance activities must be developed and communicated to these parties. Notification is required 15 days after the identification of ACM in the building, and annually thereafter.

5.1.4 California Division of Occupational Safety and Health

Pursuant to DOSH standard 1529, an ACM is any material containing greater than one percent (>1%) asbestos. However, for worker classifications, DOSH follows the California Health and Safety Code

definition of ACCMs which are defined as any materials with an asbestos content greater than one-tenth of one percent (>0.1%). The DOSH set forth licensing and work requirements for disturbance of ACMs and ACCMs. The requirements have been divided into four classes of work: Class I, Class II, Class III, and Class IV work. The classes are distinguished by the potential of materials to release fibers when damaged. The DOSH prescribes specific engineering controls and work practices for each Class of work:

- Class I – This Class refers to removal of ACMs identified as TSI or surfacing (sprayed-on or troweled-on) materials. These materials are generally considered friable.
- Class II – This Class refers to removal of ACMs identified that are not TSI or surfacing materials. These materials are generally considered non-friable.
- Class III – This Class refers to repair and maintenance operations of all identified ACMs.
- Class IV – This Class refers to incidental contact with identified ACMs such as custodial staff.

5.1.5 Hazardous Waste

The Department of Toxic Substance Control (DTSC), a department of California EPA, has the regulatory and enforcement authority for hazardous waste's deposited or transported in California. DTSC regulates "hazardous wastes" as generated wastes containing more than one percent (>1%) asbestos that have been determined to be "friable." DTSC uses the same methods for determining percentage of asbestos and friability, as does the EPA. However, local agencies and DOSH may regulate waste handling and packaging even if the material contains one percent or less or is determined to be non-friable.

5.2 Lead-Based Paint

Lead is a potential health hazard. Its condition, handling and disposal are regulated by federal, state, and local agencies. Lead in paint generally does not pose a health threat unless the material is disturbed or sufficiently deteriorated to produce dust, which may become airborne and inhaled or ingested. Contractors working in the facility should be informed of the type and the location of lead-containing materials. Applicable Federal and DOSH regulations may apply depending on the work being performed.

5.2.1 Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards (Title 17 California Code of Regulations, Division 1, Chapter 8)

The State of California, Title 17, Division 1, Chapter 8 (Title 17) pertains to all public and residential buildings in California and is enforced by the CDPH. Pursuant to Title 17 and EPA regulations, LBP is defined as paint or other surface coatings containing an amount of lead equal to or greater than one milligram per square centimeter or half of one percent (≥0.5% or ≥5,000 parts per million [ppm]) by weight. Title 17 also defines a lead hazard as deteriorated LBP, disturbing LBP or presumed LBP without containment, or any other nuisances which may result in persistent or quantifiable lead exposure. Additionally, worker exposure to materials containing lead during construction work is regulated by the

OSHA (29 CFR 1926.62(a)) and the DOSH (8 CCR §1532.1(a)). These regulations require worker protection during construction "…*where lead or materials containing lead are present."*

5.2.2 California Division of Occupational Safety and Health

Pursuant to Section 1532.1 in Title 8 of CCR, construction employers are responsible for recognizing lead hazards and submitting samples of suspect materials to an EPA lead accredited laboratory for analysis.

When lead is present on construction jobs, the following is required:

- Housekeeping methods (including high efficiency particulate air "HEPA" vacuuming, wet clean-up, or other effective methods) must be implemented to remove lead dust on surfaces;
- Hand and face washing facilities with soap and water must be provided for workers;
- Workers must receive training on lead hazards and how to protect themselves; and
- Employee breathing-zone air sampling must be conducted to assess the amount of lead breathed by workers to determine protective measures and the type of respirator required for employee protection.

Special protective measures are required for highly hazardous tasks, commonly referred to as trigger tasks, until employee airborne exposures to lead are determined to be below levels specified in Section 1532.1. Pre-job notification is required for all jobs involving trigger tasks. Written notification must be made to the local DOSH district office at least 24 hours before the job starts. Trigger tasks are described below:

- Level 1–Any of the following with lead-containing coating or materials: spray painting, manual demolition, manual scraping, or sanding, use of a heat gun, or power tool cleaning with dust collection system. Minimum required protection is a half-face respirator with N-100, R-100, or P-100 filters.
- Level 2–Any of the following with lead-containing coating or materials: using lead-containing mortar, lead burning, rivet busting, power tool cleaning without dust collection system, clean-up activities using dry expendable abrasives, or abrasive blasting enclosure movement or removal. Minimum required protection is an air-supplied hood or helmet or loose-fitting hood or helmet powered air-purifying respirator with N-100, R-100, or P-100 filters.
- Level 3–Abrasive blasting, welding, cutting, or torch burning on structures where lead-containing coatings or materials are present. Minimum required protection is a half-mask supplied air respirator in a positive pressure mode.

All trigger tasks require respirators, protective equipment, and clothing; clothing change areas; initial blood testing for lead and zinc protoporphyrin; basic lead hazard, respirator, and safety training; and warning signs.

If air sampling shows exposures to workers are above the permissible exposure limit, the following additional controls are required:

- Respirators appropriate to the levels of exposures measured;
- Clean areas for eating and clothing change;
- Showers;
- Full worker training;
- Medical monitoring with routine blood testing for lead and zinc protoporphyrin; and
- Certification by the CDPH for workers and supervisors working on jobs at residential and publicly accessible buildings.

5.3 PCBs in Building Materials

PCBs belong to a broad family of man-made organic chemicals known as chlorinated hydrocarbons. PCBs were domestically manufactured from 1929 until their manufacture was banned in 1979. They have a range of toxicity and vary in consistency from thin, light-colored liquids to yellow or black waxy solids. Due to their non-flammability, chemical stability, high boiling point, and electrical insulating properties. PCBs were used in hundreds of industrial and commercial applications including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other industrial applications. Although no longer commercially produced in the United States, PCBs may be present in products and materials such as caulk, produced before the 1979 PCB ban. The PCBs used in these products were chemical mixtures made up of a variety of individual chlorinated biphenyl components, known as congeners. Most commercial PCB mixtures are known in the United States by their industrial trade names. The most common trade name is Aroclor.

Prior to the 1979 ban, PCBs entered the environment during their manufacture and use in the United States. Today, PCBs associated with building demolition or renovation projects can still be released into the environment from illegal or improper dumping of PCB wastes; disposal of PCB-containing consumer products into municipal or other landfills not designed to handle hazardous waste and through improper containment during removal.

The EPA defines waste derived from materials with PCB concentrations greater than or equal to 50 ppm, (also expressed as mg/kg) as *PCB bulk product waste (40 CFR 761.3)*.

5.4 Other Hazardous Materials

5.4.1 EPA Regulations (40 CFR 273.9 and 40 CFR 260.10)

The EPA regulations (40 CFR 273.9 and 40 CFR 260.10) provide standards for universal waste management and hazardous waste management systems. The EPA regulations specify requirements for managing the following hazardous materials: batteries, pesticides, mercury-containing equipment, lamps, household, and conditionally exempt small quantity generator waste. In addition to the EPA universal waste regulations, the following federal regulations may also include, but not be limited to the following:

- Applicable Federal OSHA regulations;
- Title 40, CFR, Part 261 - Identification and Listing of Hazardous Waste;
- Title 40, CFR, Part 262 - Standards Applicable to Generators of Hazardous Waste;
- Title 40, CFR, Part 264 - Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities;
- Title 40, CFR, Part 265 - Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities;
- Title 49, CFR, Parts 100-199 - Transportation of Hazardous Materials;
- Title 40, CFR, Part 268 - Land Disposal Restrictions;
- Title 40, CFR, Part 761 - PCBs Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions; and
- NESHAP.

5.4.2 Department of Toxic Substance Control "Universal Waste Rule" (DTSC Control Number R-97-08)

The DTSC, "Universal Waste Rule" (DTSC Control Number R-97-08) provides requirements and standards for universal waste management for small quantity and large quantity handlers and universal waste transporters. Additionally, the "Universal Waste Rule" provides standards for destination facilities.

6.0 Findings

6.1 Asbestos

Based on the findings of this survey, the following ACMs were identified within accessible areas of the Site (South Annex Jail):

- Tar paper, black, roof, 30-45% Chrysotile (homogeneous area [HA] #01)
- Petromat, black, roof, 35-45% Chrysotile (layer associated with HA #01)
- Sealant, light gray, roof, 60-65% Chrysotile (HA #03)
- Sealant, white/yellow, roof, 5% Chrysotile (HA #05)
- Sealant, gray, roof, 10-15% Chrysotile (HA #11)
- Adhesive, brown, ceilings throughout, 2-3% Chrysotile (layer associated with HA #13)
- Ceiling tile, white, 12” x 12” with dots, 3rd Floor, 2-5% Amosite (HA #28)
- Fireproofing, white, ceilings and I-beams throughout, 25-30% Chrysotile (HA #37)
- Vinyl floor tile (VFT), gray/green, 9” x 9“, concealed under 12” x 12” VFT, 1st Floor lobby, offices, closets, 4-5 precent Chrysotile (HA #48)
- Adhesive, black, associated with HA #48, 3-5 percent Chrysotile (HA #49)

A summary of the asbestos laboratory analytical results is included in Table 1 in Appendix B. The summary table includes the asbestos analytical results of all materials sampled as a part of this survey with details including location, quantity, and type of ACM and ACCM identified. Sample location figures are provided in Appendix C; a photographic log is provided in Appendix D; laboratory analytical results and bulk sample logs are provided in Appendix E; and personnel and laboratory accreditations are provided in Appendix F.

6.2 Lead-Based Paint

Based on the findings of this survey, the following LBP was identified at the Site:

- Red paint associated with the basement elevator reservoir room floor (P06)

In addition, the following paint sampled had detectable concentrations of lead above the laboratory reporting limit that would require compliance with worker protection regulations.

- Multi-layer white, red paint associated with the 4th floor corridor, control door panel (P02)

Table 2 in Appendix B presents a summary of the lead analytical results from paint sampled from the Site including location and type of material sampled. Sample location figures are provided in Appendix C; laboratory analytical results and bulk sample logs are provided in Appendix D; and a CDPH Lead Hazard Evaluation Report form will be submitted to the CDPH, as required, and a copy of this form is included in Appendix G.

6.3 PCBs in Building Materials

Based on visual observations, no PCB samples were collected and analyzed.

6.4 Other Hazardous Materials

6.4.1 PCBs in Dielectric Fluid or Fluorescent Lighting Ballasts

Although no longer commercially produced in the United States, PCBs may be present in products and materials produced before the 1979 PCB ban. Historically some electrical components used PCBs within the dielectric fluid (transformers, ballasts, capacitors, etc.). As such, if these components are present and are not labeled “No PCBs”, they must be disposed of in accordance with current environmental regulations. Approximately 500 fluorescent light ballasts, marked as non-PCB, were observed throughout the Sheriff’s Administration Building; approximately 261 fluorescent light ballasts, marked as non-PCB, were observed throughout the South Annex Jail. In addition, two elevators, equipped with two 10-gallon tanks and one five-gallon used oil reservoir, are present within the Sheriff’s Administration Building. Two elevators, equipped with two 60-gallon storage tanks, are present within the South Annex Jail.

6.4.2 Mercury

Many of the interior light fixtures are equipped with fluorescent light tubes. According to the EPA, fluorescent light bulbs contain varying amounts of mercury and can be hazardous to the environment if they are disposed of improperly. Therefore, the EPA encourages the recycling of mercury-containing light bulbs, regardless of the mercury content. A total of approximately 1,036 light tubes within fixtures of varying size, shape, and wattage, and/or stored onsite, were observed throughout the accessible areas of the Sheriff’s Administration Building and may contain mercury. In addition, a total of 528 light tubes were observed throughout the accessible areas of the South Annex Jail.

Older style, “silent” light switches and analog thermostat boxes are also known to have varying amounts of mercury contained in ampules that function as an electronic switch. Approximately 12 thermostats were observed throughout the accessible areas of the Sheriff’s Administration Building, and two thermostats were observed in the South Annex Jail.

6.4.3 Ozone-Depleting Substances

The EPA requires the recovery and recycling of refrigerants under the Clean Air Act (40 CFR Part 82, Subpart F). Approximately 10 refrigerators/coolers, three drinking fountains, and 14 fire extinguishers were observed within the Sheriff’s Administration Building and are assumed to contain ozone-depleting

refrigerant (i.e., Freon™). In addition, the South Annex Jail was observed to contain two refrigerators, three drinking fountains, 36 fire extinguishers, and one cylinder of refrigerant-12 (penthouse).

6.4.4 Batteries

Batteries are required to be recycled and/or disposed of in accordance with applicable hazardous waste regulations. Approximately 12 illuminated exit signs were observed within the Sheriff's Administration Building and may contain batteries. Approximately 12 illuminated exit signs were also observed within the South Annex Jail and may contain batteries.

6.4.5 Radioactive Materials

The California Health and Safety Code's Radiation Law (Sections 11495-115225) and the federal Nuclear Regulatory Commission (NRC) regulations (10 CFR Part 31.5) provide for the protection of the health and safety of workers and the public from ionizing radiation. Smoke detectors typically utilize a small radioactive source as a key component in detecting smoke particles. EPA regulations require smoke detectors to be disposed of at a nuclear waste facility or returned directly to the manufacturer. Approximately 30 smoke detectors were observed within the Sheriff's Administration Building and approximately 40 smoke detectors were observed within the South Annex Jail.

Certain emergency exits signs found in commercial buildings that glow in the dark can contain tritium, a radioactive material. While the normal use of this signage poses no threat, disposal of the signs needs to adhere to applicable NRC requirements. These types of exit signs were not observed during the inspection.

6.4.6 Miscellaneous

Additional miscellaneous items were observed during the inspection. Observed recyclable electronics included approximately 50 computers and 120 computer monitors within the Sheriff's Administration Building as well as approximately 10 computers, 10 computer monitors, and 40 televisions within the South Annex Jail.

Miscellaneous items observed within the South Annex Jail also included: water treatment chemicals (three 20-gallon containers of potassium hydroxide and 24 five-gallon containers) in the penthouse, laundry stain remover (two 55-gallon containers of hypochlorite) in the basement laundry area, compressed gas cylinders (one oxygen and one argon) in the basement, two sharps containers, and bloodborne pathogen waste (three five-gallon containers) on the second floor.

7.0 Recommendations

7.1 Asbestos-Containing Materials

Based on the findings of this survey, ACMs were identified in several of the samples analyzed. Table 1 within Appendix B presents a summary of the asbestos analytical results of materials sampled as a part of this survey. The DOSH requires employers to implement specific work practices, which protect workers from airborne asbestos exposure, when materials are found to contain detectable concentrations of asbestos. Building materials, which contain even low levels of asbestos (trace amounts), can potentially generate concentrations of airborne asbestos fibers when disturbed. Therefore, control measures should be instituted by those disturbing ACMs which adequately address worker health and safety during planned renovation or demolition activities involving these materials.

It is recommended that ACMs be removed by a licensed abatement contractor prior to renovation, refurbishing, or demolition activities in accordance with CCR, Title 8, Section 1529 (Asbestos in Construction Standard). Submission of this report will be required for compliance with NESHAP. If the entire area of ACMs is not affected by renovation, refurbishing, or demolition activities, spot abatement of the material could be completed. This would entail only abating the affected areas. If the identified ACM is going to be managed in-place, then written notification to employees, tenants, contractors, or purchasers of the Site of the presence and location of ACMs is required pursuant to the California Health and Safety Code 25915 (formerly known as The Connelly Bill).

7.2 Lead-Based Paint

Based on the findings of this survey, LBP and lead-containing paint were identified which would require compliance with the Federal OSHA 29 CFR 1926.62 and the DOSH Section 1532.1 (Lead in Construction Standards). It is recommended that the LBP be stabilized prior to renovation, refurbishing, or demolition activities. The paint stabilization work should be performed by a State of California Licensed Contractor who maintains CDPH trained and certified lead workers.

In general, bulk demolition waste does not exhibit sufficient lead concentration to be classified as a hazardous waste based on the bulk weight of the waste in comparison to the weight of lead in the painted surface. However, if the paint is stripped, the paint and stripping media may be classified as hazardous waste and regulations controlling the generation, storage, treatment, transportation, and disposal of lead-containing hazardous waste need to be implemented and observed. Additional health and safety requirements and protocols may also be required to prevent exposure and spreading of the waste material.

7.3 PCBs in Building Materials

No additional assessment of caulking appears warranted at this time.

7.4 Other Hazardous Materials

There are a variety of items at the Site that may contain PCBs, mercury, or are identified to be a universal waste. It is recommended that these materials be handled and disposed of in accordance with applicable EPA regulations (40 CFR 273.9 and 40 CFR 260.10) and DTSC's "Universal Waste Rule" (DTSC Control Number R-97-08). Additionally, EPA regulations require Freon™ related work be performed by EPA certified personnel.

8.0 Limitations

Reasonable efforts have been made by Stantec personnel to locate, sample, and/or identify suspect ACM, LBP, PCBs, and other hazardous materials associated with the South Annex Jail (Site). For any facility, the existence of unique or concealed materials and debris is a possibility. In addition, sampling and laboratory analysis constraints typically hinder the investigation. Stantec does not warrant, guarantee, or profess to have the ability to locate or identify all hazardous materials in a facility. The survey is limited in nature, as only full demolition of the Site building will reveal all concealed conditions. This survey did not include underground utilities. Historically, some underground utility piping has been known to contain asbestos (e.g., Transite pipe), as well as insulation and wire wrap that might be concealed in walls. If renovation/demolition at the Site includes removal of onsite portions of underground utilities (storm drains, sewer, domestic water laterals, etc.), evaluation of the asbestos content of these components must be performed prior to the removal process. Suspect materials identified in these locations are assumed positive for asbestos until sampling and analysis indicates otherwise. Stantec cannot warrant the effectiveness or damage thereof, at any of the patches or temporary repairs performed at sampling locations (walls, ceilings, or floors). This report is intended for use in planning based on the agreed upon scope of work. This report is not intended to be a bidding document. Quantities of materials identified are estimates only and would need to be verified by contractors bidding on future work. If, during the course of a renovation/demolition project, suspect ACM, LBPs, PCBs, or any other suspect hazardous materials are discovered that are not included within this report, those materials should be treated accordingly until additional sampling, analysis, and/or assessment can be performed.

The passage of time may result in a change in the environmental characteristics at the Site. This report does not warrant against future operations or conditions that could affect the recommendations made. The results, findings, conclusions, and recommendations expressed in this report are based only on conditions that were observed during Stantec’s survey of the Site (South Annex Jail) and test results provided by EMSL Analytical, Inc. These observations are time dependent, are subject to changing site conditions, and revisions to federal, state, and local regulations. Reliance on this letter report by third parties (i.e., other than the Judicial Council of California) shall be at the third party's sole risk.

APPENDIX A

Prior Reports

Leon Environmental Services

Richard "Danny" Leon CAC # 04-3708
Tommy Leon CAC # 05-3882

December 12, 2016

Keith McBride
County of Fresno
4590 E. Kings Canyon Rd.
Fresno, CA 93702

Re: Asbestos Air Samples
Fresno County Sheriff's Office
Sheriff's Evidence Hallway
2200 Fresno St.
Fresno, CA
Job No. A99-16

Dear Keith:

Attached are the analysis results from the air samples that were collected from the above mentioned site. The results were below the 0.01 f/cc clearance level standard set by CAL-OSHA and the EPA for reoccupation (by unprotected personnel) of an area that has undergone asbestos-abatement.

If you have any questions or need additional information, please do not hesitate to call. Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Thomas M. Leon

Digitally signed by Thomas M. Leon
DN: cn=Thomas M. Leon, o=Leon Environmental Services, ou, email=LeonEnviro@comcast.net, c=US
Date: 2016.12.13 13:23:54 -08'00'

Tommy Leon
Certified Asbestos Consultant
Certification No. 05-3882

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

Leon Environmental Services

1-9-699

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

Customer: Keith McBride Company County of Fresno

Date: 12-9-16 Job No. A99-16

Analysis: (PCM) TEM Turn Around: (2hr Rush) Same Day 24hr 48hr 3-5 days

BASELINE WORK IN PROGRESS (FINAL)

Job Site / Sample Area: Fresno County Sheriff's Office / 2200 Fresno St, Fresno, CA

Sample No	Pump Location	Time on	Time off	Flow	Minutes	Volume
01	Sheriff's Evidence Hallway	12:08	1:28	15.72	80	1257.6
02	" " "	" "	" "	" "	" "	" "

Special Instruction

Relinquished By [signature] Date 12-9-16

Received By [signature] Date 12/12/16

WESTERN ANALYTICAL LABORATORY TEST REPORT
NIOSH 7400 ANALYSIS

REPORT: 119-699

DATE RECEIVED: December 9, 2016

DATE REQUIRED: December 9, 2016

CLIENT: Leon Environmental Services
5637 N. Fig Garden Dr., Suite 104
Fresno, CA 93722

ATTN: Danny Leon

REF: A99-16
Keith McBride - County of Fresno
Fresno County Sheriff's Office
2200 Fresno St. Fresno, CA

SUBJECT: Phase Contrast Microscopy Analysis of Air Samples for Fiber Content

METHODOLOGY: NIOSH Fiber Count (Method 7400 Revision 3, A Rules)

FILTER TYPE: MCE FILTER DIAMETER: 25 mm MAGNIFICATION: 400X

FILTER AREA: 385 mm^2 FIELD AREA: 0.00785 mm^2

Sample ID	Location / Activity	Sample Date	Fields Counted	Fibers Counted	F/mm^2	Fibers per Filter	Volume Liters	**Fibers cc of Air**
1	Sheriff's Evidence Hallway Final Clearance	12/9/16	100	3.5	4.46	1717	1257.6	**0.0014**
2	Sheriff's Evidence Hallway Final Clearance	12/9/16	100	2.5	3.18	1226	1257.6	**0.0010**

Optical Microscopist

Mike Maladzhikyan, Laboratory Director

This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by Western Analytical. The client is solely responsible for the use and interpretation of test resutls and reports requested from Western Analytical. This report must not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government. Western Analytical reserves the right to dispose of all samples after a perior of thirty (30) days according to all state and federal guidelines, unless otherwise specified. Samples are not blank corrected unless otherwise noted. All samples received in acceptable condition unless otherwise noted.

Leon Environmental Services

Richard "Danny" Leon CAC # 04-3708
Tommy Leon CAC # 05-3882

August 16, 2019

Keith McBride
Fresno County, Facility Services Dept.
4590 E. Kings Canyon Rd.
Fresno, CA 93702
Email: kmcbride@co.fresno.ca.us

Re: Asbestos Bulk Samples
Fresno County Sheriff's Admin Office
Basement Hallway Flooring
2200 Fresno St, Fresno, CA
LES Job No. B164-19

Dear Keith,

Attached is the analytical report for the bulk samples of floor tile and adhesive taken from the basement hallway of the Sheriff's Office Operation Center at the above-referenced site. The green 12x12 floor tile and associated adhesive were negative for asbestos and no further action or testing is required prior to renovation or demolition of this floor. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Yours truly,

Richard Danny Leon

Digitally signed by Richard Danny Leon
DN: cn=Richard Danny Leon, o=Leon Environmental Services, ou, email=leonenviro@comcast.net, c=US
Date: 2019.08.16 16:24:20 -07'00'

Richard "Danny" Leon
Certified Asbestos Consultant
Certification No. 04-3708

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: leonenviro@comcast.net

Leon Environmental Services

140-065

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

Customer: Keith Mc Bride Company Fresno County, Facilities Services Dept.

Date: 8/15/19 Job No. B164-19

Analysis PLM Turn Around: 2hr Rush Same Day 24hr 48hr 3-5 days

Inspection Site : Fresno Co S. O. Admin office 2200 Fresno ST Fresno, CA

Sample No	Location	Material Color	Material Type	Material Friable	Quantity
01	Basement Hallway out side S.O. OP Center		Greenish 12x12 FT		
02			Adhesive for 01		

Relinquished By [signature] Date 8/15/19

Received By [signature] Date 8/16/19

WESTERN ANALYTICAL LABORATORY, Inc.
TEST REPORT

NVLAP TESTING
NVLAP LAB CODE 200037

REPORT NO:	140-065	CLIENT:	Leon Environmental Services 4545 N. Brawley Ave., Suite 104 Fresno CA 93722
DATE COLLECTED:	August 15, 2019		
DATE RECEIVED:	August 16, 2019	ATTENTION:	Danny Leon (CAC# 04-3708)
DATE REQUIRED:	August 16, 2019	REFERENCE:	B164-19 Keith McBridge - Fresno Co. Facilities Services Dept. Fresno Co. S.O. Admin. Office 2200 Fresno Street, Fresno, CA

SUBJECT: Polarized Light Microscopy Analysis for Asbestos; 2 samples

METHODOLOGY: "Method for the Determination of Asbestos in Bulk Building Materials" (EPA 600/R-93/116)

ACCREDITED: National Institute of Standards and Technology (NVLAP) # 200037

SAMPLE ID NUMBER	SAMPLE LOCATION AND DESCRIPTION	NON-FIBROUS MATERIALS	OTHER FIBROUS MATERIALS	ASBESTIFORM MINERALS
01	Basement Hallway outside S.O. Op Center Greenish 12x12 Floor tile	Granular Minerals Resin	None Detected	None Detected
02	Basement Hallway outside S.O. Op Center Adhesive for 01	Granular Minerals Organics	None Detected	None Detected

t: Trace (>1% = greater than 1%, <1% = less than 1%)

Optical Microscopist

Mike Maladzhikyan, Laboratory Director

This report only applies to the sample(s) tested. This report must not be reproduced except in full, unless approved by Western Analytical. The client is solely responsible for the use and interpretation of test results and reports requested from Western Analytical. This report must not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

WESTERN ANALYTICAL LABORATORY, Inc.
12734 Branford St. Suite #19, Arleta, CA 91331 • Tel: (818) 899-0949 • Email: WesternAnalytical@gmail.com

Leon Environmental Services

Richard "Danny" Leon CAC # 04-3708
Tommy Leon CAC # 05-3882

March 13, 2020

Keith McBride
Fresno County, Facility Services Dept.
4590 E. Kings Canyon Road
Fresno, CA 93702
Email: kmcbride@co.fresno.ca.us

Re: Limited LBP Inspection Report
Sheriff's Administration Building
Front Exterior Railings, Columns, and Flashings
2200 Fresno Street, Fresno, CA
LES Job #L04-20

Dear Keith,

Attached is the Asbestos and Lead Based Paint Report for the above-referenced site. The report includes XRF analysis results and recommendations concerning lead containing materials identified at this site.

If you have any questions or need additional information, please do not hesitate to call. Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully yours,

Richard Danny Leon

Digitally signed by Richard Danny Leon
DN: cn=Richard Danny Leon, o=Leon Environmental Services, ou, email=leonenviro@comcast.net, c=US
Date: 2020.03.14 13:26:09 -07'00'

Richard "Danny" Leon
State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant
Certification No. 04-3708
California Dept. of Public Health
Lead-Related Construction
Inspector/Assessor ID# 5156

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: leonenviro@comcast.net

Leon Environmental Services

LEAD BASED PAINT ANALYSIS

On March 12th, 2020, a limited lead-based paint inspection was performed at the exterior of the Fresno County Sheriff's Administration Building, 2200 Fresno Street, Fresno, CA by Leon Environmental Services. Twenty-six samples of suspect lead-based paint from the exterior hand/guard rails, columns, and roof flashings on the front of the building were tested using a **Heuresis Corp X-Ray Fluorescence (XRF) Elemental Analyzer, Model Pb200i, Serial Number 2077.** The sample collection areas were determined by the information given to Leon Environmental Services by Keith McBride of the Fresno County Facility Services Department. The attached XRF report contains the list of all sample analyses performed at this site.

LBP COMMENTS AND RECOMMENDATIONS

Six samples of grey paint on the hand rails and guard rails beside the main stairs and ramps at the front of the building contain more than 1.0 mg/cm^2 of lead and are therefore considered lead based paint. All other analyses from the painted columns and flashings on the front side of building are below the level of 1.0 mg/cm^2 and are therefore NOT LBP. Leon Environmental Services recommends that only a qualified contractor with properly LBP trained and equipped personnel be used to work on or near these LBP painted surfaces. All loose and flaky LBP should be removed prior to demolition or renovation, collected and handled as one waste stream. Procedures and engineering controls must be designed to follow CAL-OSHA (CFR 1926.62) and Department of Health Services (Title 17 April 2008) requirements.

LBP CONCLUSIONS AND REGULATIONS

The federal and CAL OSHA regulations for lead in construction do not specify a level of lead in paint that classifies it as LBP, although the Department of Housing and Urban Development (HUD) considers a paint to be a lead-based paint when the content of the paint exceeds 1.0 mg/cm^2 or 0.5 percent lead by weight and the Consumer Product Safety Commission (CPSC) has determined that for a paint to be considered as "lead free", it must contain less than 0.06% or 600 parts per million (PPM). However, federal and state OSHA regulations specify *airborne lead levels* that should not be exceeded during construction without appropriate protection and training.

In California, CAL OSHA is charged with implementing and enforcing Lead in Construction rules. Title 8 of the California Code of Regulations (CCR) section 1532.1 requires employers to provide sufficient worker protection when any detectable concentration of lead is present. This standard applies to all sources of lead, including lead in painted surfaces. Lead-Containing paint, defined as any detectable concentration of lead, does not necessarily require special handling, mitigation or disposal. Factors that determine the appropriate mitigation strategy

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include the concentration of lead, the condition of the lead-containing material, and the proposed contractor work methods. Employers are required to provide sufficient worker protection when any detectable concentration of lead is present.

California Occupational Safety and Health (OSHA 29 CFR 1926.62) regulations require employee personnel monitoring at any detectable levels until statistically reliable results indicate that exposure will remain consistently below the OSHA Action Level of 30 micrograms/m2 and the Permissible Exposure Level of 50 micrograms/m3 for an 8 hour day. The employer must then produce a "Negative Exposure Assessment" to indicate that it is not possible with the specific lead-based paint product to create excessive lead exposure levels. Cal-OSHA Title 8, CCR Section 1532.1 requires a wide variety of responses including, personal protective equipment (PPE), respiratory protection, blood testing for lead and hand washing facilities if the action level of 30 ug/m^3 or the permissible exposure level of 50 ug/m^3 are exceeded

LIMITATIONS OF LIABILITY

The nature of construction renovations and demolition is such that painted surfaces can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for detection of all painted surfaces, although every effort was made during the inspection to do so. If suspect LBP other than those included herein are discovered during renovation or demolition, it must be assumed that the materials are LBP, and should be treated accordingly until further testing and analysis is performed.

The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes that site conditions or accessibility may vary, from those encountered at the time of our inspection and sample collection. Varying conditions or access could result in additional information that would lead us to revise conclusions and recommendations. Leon Environmental Services will not be responsible for the interpretation or use by others of information contained within this report. Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied.

Richard Danny Leon

Digitally signed by Richard Danny Leon
DN: cn=Richard Danny Leon, o=Leon Environmental Services, ou, email=leonenviro@comcast.net, c=US
Date: 2020.03.14 13:26:33 -07'00'

Richard "Danny" Leon
California Dept. of Public Health
Lead-Related Construction
Inspector/Assessor ID# 5156

DATE

Leon Environmental Services

5637 N. Fig Garden Dr., Suite 104, Fresno, CA 93722 Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

Client	**Keith McBride**	Company	**Fresno County, Facility Services Dept.**
Date	**March 13, 2020**	Job No.	**L04-20**
Site :	**Sheriff's Administration Building, 2200 Fresno St, Fresno, CA**		
Analysis:	**Heuresis Corp. X-Ray Fluorescence (XRF) Lead Paint Analyzer, Model Pb200i, Serial Number 2077**		

LBP Table 1

Sample	Reading No	Units	Room	Side	Component	Color	Substrate	Results	PbC
1	65	mg/cm2	EXTERIOR	A	HAND RAIL	GREY	METAL	Positive	2.9
2	66	mg/cm2	EXTERIOR	A	HAND RAIL	GREY	METAL	Positive	1.2
3	67	mg/cm2	EXTERIOR	A	HAND RAIL	GREY	METAL	Positive	1
4	68	mg/cm2	EXTERIOR	A	HAND RAIL	GREY	METAL	Positive	2.8
5	69	mg/cm2	EXTERIOR	A	GUARD RAIL	GREY	METAL	Positive	2.3
6	70	mg/cm2	EXTERIOR	A	GUARD RAIL	GREY	METAL	Positive	3.2
7	71	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0.2
8	72	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0.1
9	73	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0.1
10	74	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0
11	75	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0.1
12	76	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0.1
13	77	mg/cm2	EXTERIOR	A	FLASHING	BEIGE	METAL	Negative	0.1
14	78	mg/cm2	EXTERIOR	B	FLASHING	BEIGE	METAL	Negative	0.2
15	79	mg/cm2	EXTERIOR	C	FLASHING	BEIGE	METAL	Negative	0
16	80	mg/cm2	EXTERIOR	D	FLASHING	BEIGE	METAL	Negative	0.2
17	81	mg/cm2	EXTERIOR	D	FLASHING	BEIGE	METAL	Negative	0.2
18	82	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0.2
19	83	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0
20	84	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0.2
21	85	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0.2
22	86	mg/cm2	EXTERIOR	B	COLUMN	BEIGE	CONCRETE	Negative	0.1
23	87	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0.2
24	88	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0
25	89	mg/cm2	EXTERIOR	A	COLUMN	BEIGE	CONCRETE	Negative	0.1
26	90	mg/cm2	EXTERIOR	D	COLUMN	BEIGE	CONCRETE	Negative	0.1

Leon Environmental Services

Richard "Danny" Leon CAC # 04-3708
Tommy Leon CAC # 05-3882

September 02, 2021

Keith McBride
Fresno County, Facility Services Department
4590 E. Kings Canyon Road
Fresno, CA 93702

Re: Asbestos Bulk Samples
Fresno County Sheriff's Admin
B1 Entrance From Parking Garage
2200 Fresno St., Fresno, CA
Job No. C192-21

Dear Keith,

Attached are the asbestos sampling results for the above referenced building. This report includes conclusions, recommendations and bulk analysis results. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Richard D. Leon Digitally signed by Richard D. Leon
Date: 2021.09.02 09:42:29 -07'00'

Richard "Danny" Leon
Certified Asbestos Consultant
Certification No. 04-3708

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Phone: 559.274.9200 Fax: 559.274.9240 Email: leonenviro@comcast.net

ASBESTOS ANALYSIS RESULTS

A total of 07 samples of suspect asbestos containing materials were collected from the **Fresno County Sheriff's Admin B1 Entrance from Parking Garage at 2200 Fresno St, Fresno, CA** on August 27, 2021 by Leon Environmental Services. The suspect materials sampled and sample collection areas at this site were determined by the information given to Leon Environmental Services by Keri McBride of Fresno County, Facility Services Department about the impending repair work that is planned for this entry door. All bulk samples of suspect asbestos containing materials were taken in accordance with US EPA Guidelines and accepted industry standards. Western Analytical Laboratory, Inc., a NVLAP accredited laboratory performed a total of 07 analyses from the 7 samples of suspect ACM collected from this site. The full list of all samples taken is on the following pages.

COMMENTS AND RECOMMENDATIONS

All samples collected were NEGATIVE for Asbestos.

CONCLUSIONS AND REGULATIONS

US EPA NESHAP 40 CFR Part 61

Based on our inspection, sampling and subsequent laboratory analysis, in addition to regulatory guidelines affecting this site, **NO ACM was identified**. ACM's require removal (in most cases) prior to demolition and/or renovation procedures to comply with local, state and federal agencies. The US EPA NESHAP (40 CFR Part 61 – November 20, 1990) requires materials containing greater than one percent asbestos be removed prior to renovation or demolition. If those materials are friable or likely to become friable due to the forces expected to act upon them during renovation or demolition, they become a regulated asbestos containing material (RACM) and require a 10-day notification to the local Air Pollution Control District prior to abatement.

CAL OSHA--------Construction Industry--------8CCR, 1529

The construction industry standard covers employees engaged in demolition, construction and the following related activities likely to involve asbestos exposure: removal, encapsulation, alteration, repair, maintenance, insulation, spill emergency cleanup, transportation, disposal and storage of ACM. CAL OSHA worker health and safety regulations apply during any disturbance of ACM by a person while in the employ of another. This is true regardless of friability or quantity disturbed. If there is greater than 100 square feet of ACM which will be

affected by the demolition, a California Licensed Contractor who is registered with CAL OSHA for asbestos is required. The regulations regarding asbestos are found in Title 8 CCR Section 1529, and also include formal notification requirements to CAL OSHA at least 24 hours prior to removal.

LIMITATIONS OF LIABILITY

The nature of demolition and asbestos abatement is such that materials can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for materials not previously detected due to lack of accessibility or concealment, although every effort was made during the inspection to detect all suspect materials. If any materials other than those included herein are discovered during renovation or demolition, it must be assumed that the materials are asbestos containing and should be treated accordingly until further testing and analysis is performed.

The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes that site conditions or accessibility may vary from those encountered at the time of our inspection and sample collection. Varying conditions or access could result in additional information that would lead us to revise conclusions and recommendations.

Leon Environmental Services will not be responsible for the interpretation or use by others of information contained within this report. Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied.

Richard D. Leon Digitally signed by Richard D. Leon
Date: 2021.09.02 09:42:53 -07'00'

Richard "Danny" Leon — Date
Certified Asbestos Consultant
Certification No. 04-3708

*Abbreviation Key:
Asbestos Containing Material – ACM (Contains greater than 1% asbestos by weight)
Asbestos Containing Construction Material – ACCM (Contains less than 1% asbestos by weight)
Vinyl Asbestos Tile – VAT
No Asbestos Detected – N.A.D or N.D.
Homogeneous – H
Not Sampled – NS

Leon Environmental Services

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152-975

Customer: Keith McBride Company: Fresno County

Date: 8/27/21 Job No: C192-21

Analysis: PLM Turn Around: 2hr Rush Same Day (24hr) 48hr 3-5 days

Inspection Site: Sheriff Admin Basement 2200 Fresno St Fresno CA

Sample No	Location	Material Color	Material Type	Quantity
01	INSIDE left side		Joint Comp ~~Comp~~ COMP B 1%	
02	" "		Sheet Rock	
03	INSIDE Right side		J/C ~~Tex~~ COMP B 1%	
04			SR	
05	OUTSIDE		Texture	
06	"		Texture	
07	"		Sheet Rock	

Relinquished By: [signature] Date: 8/27/21

Received By: [signature] Date: 8/30/21

WESTERN ANALYTICAL LABORATORY, Inc.
TEST REPORT

NVLAP TESTING
NVLAP LAB CODE 200037

REPORT NO:	152-975	CLIENT:	Leon Environmental Services 4545 N. Brawley Ave., Suite 104 Fresno CA 93722
DATE COLLECTED:	August 27, 2021		
DATE RECEIVED:	August 30, 2021	ATTENTION:	Danny Leon (CAC# 04-3708)
DATE REQUIRED:	August 31, 2021	REFERENCE:	C192-21 Keith McBridge – Fresno County Sheriff Admin. Basement 2200 Fresno Street, Fresno, CA

SUBJECT: Polarized Light Microscopy Analysis for Asbestos; 7 samples

METHODOLOGY: "Method for the Determination of Asbestos in Bulk Building Materials" (EPA 600/R-93/116)*

ACCREDITED: National Institute of Standards and Technology (NVLAP) # 200037

SAMPLE ID NUMBER	SAMPLE LOCATION AND DESCRIPTION	NON-FIBROUS MATERIALS	OTHER FIBROUS MATERIALS	ASBESTIFORM MINERALS
01	Inside Left Side Joint compound	Granular Minerals Organics	None Detected	None Detected
02	Inside Left Side Sheetrock	Granular Minerals Organics Gypsum	Cellulose 10% Fiberglass 1-2%	None Detected
03	Inside Right Side Joint compound	Granular Minerals Organics	None Detected	None Detected
04	Inside Right Side Sheetrock	Granular Minerals Organics Gypsum	Cellulose 10% Fiberglass 1-2%	None Detected
05	Outside Texture	Granular Minerals Organics	None Detected	None Detected
06	Outside Texture	Granular Minerals Organics	None Detected	None Detected
07	Outside Sheetrock	Granular Minerals Organics Gypsum	Cellulose 10% Fiberglass <1%	None Detected

t: Trace (>1% = greater than 1%, <1% = less than 1%)

Optical Microscopist

Mike Maladzhikyan, Laboratory Director

This report only applies to the sample(s) tested. This report must not be reproduced except in full, unless approved by Western Analytical. The client is solely responsible for the use and interpretation of test results and reports requested from Western Analytical. This report must not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

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Leon Environmental Services

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Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

January 18, 2021

Keith McBride
Fresno County, Facility Services Dept.
4590 E. Kings Canyon Rd.
Fresno, CA 93702

Re: Asbestos Bulk Samples
Fresno County Sheriff's Admin Office
2200 Fresno St.
Fresno, CA
Job No. B11-21

Dear Keith:

Attached are the asbestos sampling results for the above referenced building. This report includes conclusions, recommendations and bulk analysis results. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Tommy Leon
Certified Asbestos Consultant
Certification No. 05-3882

Sampling Site: Fresno County Sheriff's Admin Office
2200 Fresno St, Fresno, CA
B11-21

ASBESTOS ANALYSIS RESULTS

A total of **03** samples of suspect materials were collected by a state certified asbestos inspector from the 1st and 2nd floors of the Fresno County Sheriff's Admin Office at **2200 Fresno St, Fresno, CA**. The sample collection areas were determined by the information given to the inspector by **Keith McBride of the Fresno County Facility Services Dept.** about the impending remodel/renovation that is planned for this building. Western Analytical Laboratory, Inc., a NVLAP accredited laboratory performed a total of **06** analyses from the **03** samples collected. The chain of custody from Leon Environmental Services and the report from Western Analytical contain a full list of all samples taken from this site.

Sample	Location	Material	% Of ACM	Friable
01	1st Floor Hallway Floor	Gray 12x12 Floor Tile	ND	
	1st Floor Hallway Floor	Thin Set	ND	
	1st Floor Hallway Floor	Float Material	ND	
02	2nd Floor Hallway Floor	Gray 12x12 Floor Tile	ND	
	2nd Floor Hallway Floor	Thin Set	ND	
03	2nd Floor Hallway Floor	Float Material	ND	

COMMENTS AND RECOMMENDATIONS

All samples of suspect materials from the selected areas of this site were negative for asbestos.

CONCLUSIONS AND REGULATIONS

Based on our survey, sampling and subsequent laboratory analysis and regulatory guidelines affecting this site, the types of ACM identified on this page require removal (in most cases) prior to demolition and/or renovation procedures to comply with local, state and federal agencies. The US EPA NESHAP (40 CFR Part 61 – November 20, 1990) requires materials containing greater than one percent asbestos be removed prior to renovation or demolition. If those materials are friable or likely to become friable due to the forces expected to act upon them during renovation or demolition, they become a regulated asbestos containing material (RACM) and require a 10-day notification to the local Air Pollution Control District prior to abatement.

Sampling Site: Fresno County Sheriff's Admin Office
2200 Fresno St, Fresno, CA
B11-21

Cal/OSHA worker health and safety regulations apply during any disturbance of ACM by a person while in the employ of another. This is true regardless of friability or quantity disturbed. If there is greater than 100 square feet of ACM which will be affected by the demolition, a California Licensed Contractor who is registered with Cal/OSHA for asbestos is required. The regulations regarding asbestos are found in Title 8 CCR Section 1529, and also include formal notification requirements to Cal/OSHA at least 24 hours prior to removal. It is required that removal be conducted with the material kept in a wetted state to contain dust and hazardous emissions.

CAL OSHA--------Construction Industry--------8CCR, 1529

1. The construction industry standard covers employees engaged in demolition and construction, and the following related activities likely to involve asbestos exposure: removal, encapsulation, alteration, repair, maintenance, insulation, spill emergency cleanup, transportation, disposal and storage of ACM.

2. Demolition contractors typically require that a building owner/operator accept responsibility for removal of all ACM found during the building inspection prior to start of demolition activities.

3. Non-friable and non-regulated ACM, in most cases, may be disposed of as construction debris in a landfill that accepts ordinary construction debris. All friable waste containing more than 1% asbestos (RACM) should be manifested as hazardous waste for disposal purposes.

LIMITATIONS OF LIABILITY

Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied. All quantities of materials listed herein are estimates for sampling purposes only, and should be verified by Owner representative or an abatement contractor prior to asbestos abatement.

The nature of demolition and asbestos abatement is such that materials can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for materials not previously detected due to lack of accessibility or concealment, although every effort was made during the inspection to detect all suspect materials. If any materials other than those included herein are discovered during renovation or demolition, it must be assumed that the materials are asbestos containing, and should be treated accordingly until further testing and analysis is performed.

The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes that site conditions or accessibility may vary, from those encountered at the time of our

inspection and sample collection. Varying conditions or access could result in additional information that would lead us to revise conclusions and recommendations. Leon Environmental Services will not be responsible for the interpretation or use by others of information contained within this report.

Thomas M. Leon

Digitally signed by Thomas M. Leon
DN: cn=Thomas M. Leon, o=Leon Environmental Services, ou, email=LeonEnviro@comcast.net, c=US
Date: 2021.01.18 14:28:22 -08'00'

Thomas Leon DATE:
Certified Asbestos Consultant
Certification No. 05-3882

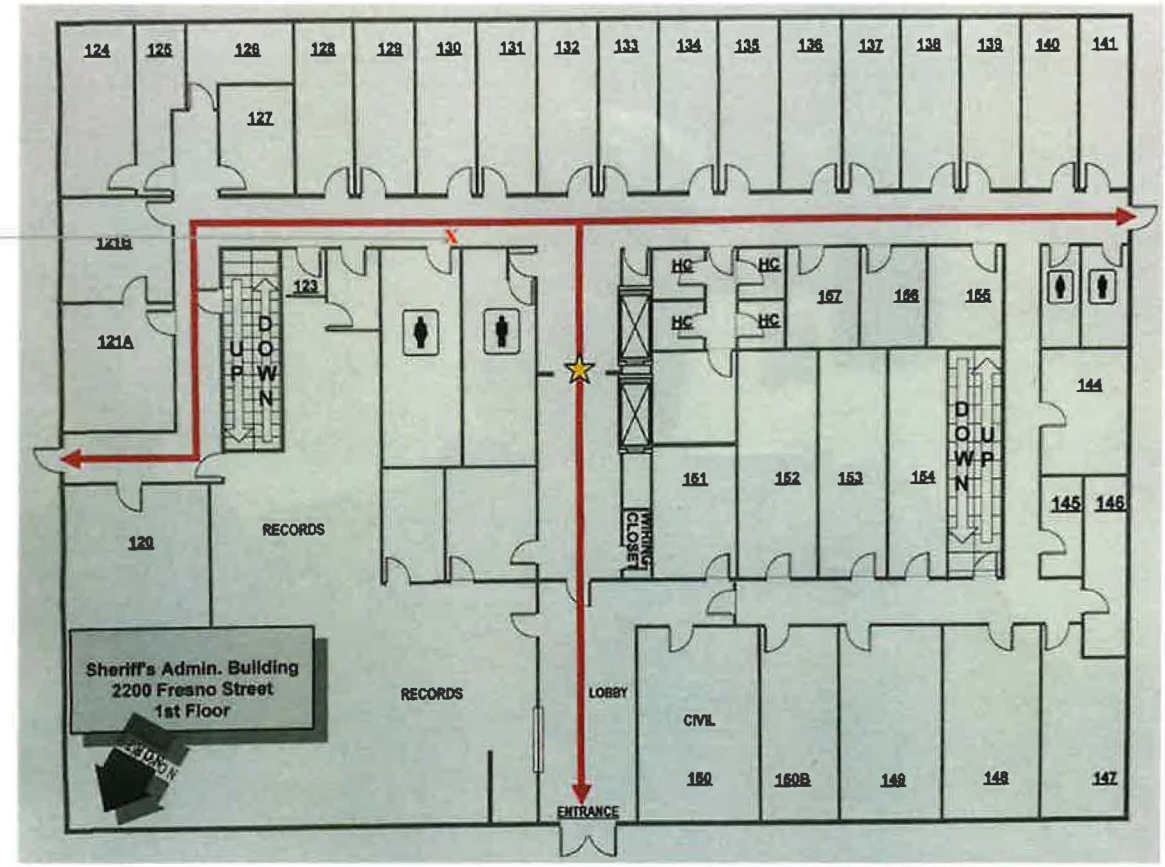
*Abbreviation Key:

Asbestos Containing Material — ACM (equal to or greater than 0.1% by weight)
Vinyl Asbestos Tile – VAT
No Asbestos Detected--N.A.D or N.D.
Homogeneous—H
Not Sampled--NS

Leon Environmental Services

Richard "Danny" Leon CAC Certification No. 04-3708
Tommy Leon CAC Certification No. 05-3882

Job B11-21 / Sample Location Diagram
Fresno County Sheriff - Administration Offices – 1st Floor / 2200 Fresno Street, Fresno, CA
Keith McBride / Fresno County – Internal Services Department – Facility Services
Drawing not to Scale



Y = Exterior Samples
X = Interior Samples
R = Roof Samples

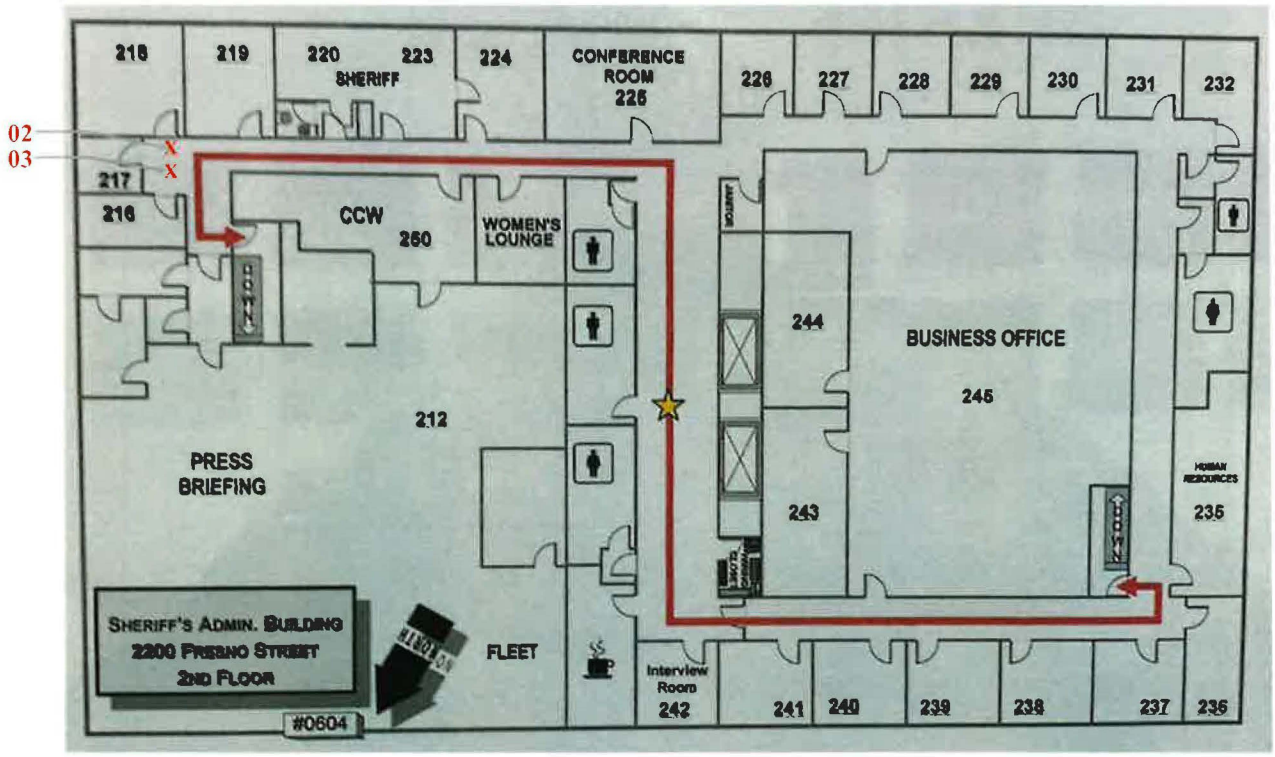
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Leon Environmental Services

Richard "Danny" Leon CAC Certification No. 04-3708
Tommy Leon CAC Certification No. 05-3882

Job B11-21 / Sample Location Diagram
Fresno County Sheriff – Administration Offices – 2nd Floor / 2200 Fresno Street, Fresno, CA
Keith McBride / Fresno County – Internal Services Department – Facility Services
Drawing not to Scale



Y = Exterior Samples
X = Interior Samples
R = Roof Samples

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Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

N

McCall and Spero
Environmental, Inc.
Specialists in Microanalysis

Williamson Court • Suite 100 • Louisville, KY 40223
Phone (502) 244-7135 • FAX (502) 244-7136
E-mail: customerservice@mselabs.com • Website: www.mselabs.com

Date: January 18, 2021

Attention: Tommy Leon
Leon Environmental Services

Subject: Analysis of bulk samples for asbestos mineral fibers by Polarized Light Microscopy (PLM) with Dispersion Staining (EPA/600/R-93/116)

RE: MSE-P1181LEO
Keith McBride; Fresno County - Fac Services Dept; 2200 Fresno St, Fresno CA Project
LEO# B11-21

Dear Mr. Leon:

McCall & Spero Environmental, Inc. has completed the analysis of the bulk samples we received from your offices on January 18, 2021. These samples represent the bulk samples from the Keith McBride; Fresno County - Fac Services Dept; 2200 Fresno St, Fresno CA Project.

The PLM bulk analysis was performed according to the "Method of the Determination of Asbestos in Bulk Building Materials", R. L. Perkins and B. W. Harvey (EPA/600/R-93/116).

The results for the six (6) samples are summarized in the following report. Please note that for samples consisting of two or more distinct components, each component is analyzed and reported individually (EPA 40 CFR Part 61 [FRL-4821-71]).

Thank you for consulting McCall & Spero Environmental, Inc. Should you have any questions concerning these results, please contact our office.

Sincerely,

Kevin R. Bean, B.A.
PLM Laboratory Director

NVLAP®
TESTING
NVLAP LAB CODE 101655-0

SUMMARY OF PLM BULK ANALYSIS RESULTS

Project Name: Keith McBride; Fresno County - Fac Services Dept; 2200 Fresno St, Fresno CA Project
McCall & Spero Environmental Project No. MSE-P1181LEO

MSE # P1181LEO	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
001 (A)	01 (A) Floor Tile	ND	Cellulose / 3%	97%	Gray
001 (B)	01 (B) Thinset	ND	Cellulose / 2%	98%	Gray
001 (C)	01 (C) Float Material	ND	Cellulose / 2%	98%	White
002 (A)	02 (A) Floor Tile	ND	Cellulose / 3%	97%	Gray
002 (B)	02 (B) Thinset	ND	Cellulose / 2%	98%	Gray
003	03 Float Material	ND	Cellulose / 2%	98%	White

NOTES:

ND = None Detected CH = Chrysotile A = Amosite AC = Actinolite
CR = Crocidolite AN = Anthophyllite TR = Tremolite

For samples consisting of separate components, each component is analyzed and reported separately.

Results apply only to items tested. Quantification is accurate to within ± 10%. Results from this report must not be reproduced, except in full, with the approval of McCall & Spero Environmental, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

** EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by polarized light microscopy that fall into one of five dominantly nonfriable categories be reanalyzed by an additional method, such as transmission electron microscopy. (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/ R-93/ 116).

Analyst: Kevin R. Bean, B.A 

McCall & Spero Environmental, Inc.

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

Customer: Keith McBride Company: Fresno County - Fac Svrcs Dept.

Date: 1-15-21 Job No. B11-21

Analysis (PLM) Turn Around: (2hr Rush) Same Day 24hr 48hr 3-5 days

Inspection Site : Admin Office: 2200 Fresno Street, Fresno, CA

Sample No	Location	Material			Quantity
		Color	Type	Friable	
01	1st Floor Hallway Floor	Gray	12"x12" Floor Tile		
	" " " "		Thin Set		
	" " " "		Float Material		
02	2nd " " "	Grey	12"x12" Floor Tile		
	" " " "		Thin Set		
03	" " " "		Float Material		

Relinquished By [signature] Date 1-15-21

Received By [signature] Date 1/18/21

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

July 17, 2023

Marshall Smith
Fresno County, Facility Services Dept.
4590 E. Kings Canyon Rd.
Fresno, CA 93702

Re: Asbestos Bulk Samples
Sheriff Administration Building
1st Floor Restroom Entry
2200 Fresno St.
Fresno, CA
Job No. B147-23

Dear Marshall:

Attached are the asbestos sampling results for the above referenced building. This report includes conclusions, recommendations and bulk analysis results. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2023.07.17 16:15:39 -07'00'

Christopher Cabral
Certified Asbestos Consultant
Certification No. 22-7151

Sampling Site: Sheriff Admin Building, 1st Floor Restroom Entry
2200 Fresno St, Fresno, CA
B147-23

ASBESTOS ANALYSIS RESULTS

A total of **2** samples of suspect materials were collected by a state certified asbestos inspector from the **1st floor restroom entry** of the **Sheriff administration building** at **2200 Fresno St, Fresno, CA**. The sample collection areas were determined by the information given to the inspector by **Michael Bowman of the County of Fresno** about the impending remodel/renovation that is planned for this building. McCall and Spero Environmental, Inc., a NVLAP accredited laboratory performed a total of **4** analyses from the **2** samples collected. The chain of custody from Leon Environmental Services and the report from McCall and Spero contain a full list of all samples taken from this site.

Sample	Location	Material	% Of ACM	Friable
01	Restroom Entry Wall	Color Coat	ND	
		Plaster	ND	
02	Restroom Entry Wall	Color Coat	ND	
		Plaster	ND	

* Determined after composite sampling with associated sheetrock
NS – Not Sampled

COMMENTS AND RECOMMENDATIONS

All samples of suspect materials from the selected areas of this site were negative for asbestos.

CONCLUSIONS AND REGULATIONS

Based on our survey, sampling and subsequent laboratory analysis and regulatory guidelines affecting this site, the types of ACM identified on this page require removal (in most cases) prior to demolition and/or renovation procedures to comply with local, state and federal agencies. The US EPA NESHAP (40 CFR Part 61 – November 20, 1990) requires materials containing greater than one percent asbestos be removed prior to renovation or demolition. If those materials are friable or likely to become friable due to the forces expected to act upon them during renovation or demolition, they become a regulated asbestos containing material (RACM) and require a 10-day notification to the local Air Pollution Control District prior to abatement.

Non-friable and non-regulated ACM, in most cases, may be disposed of as a Non-Hazardous waste in a landfill that accepts Asbestos Containing Materials. All friable

waste containing more than 1% asbestos (RACM) must be manifested as hazardous waste for disposal purposes.

CAL OSHA--------Construction Industry--------8CCR, 1529

Cal/OSHA worker health and safety regulations apply during any disturbance of ACM by a person while in the employ of another. This is true regardless of friability or quantity disturbed. If there is greater than 100 square feet of ACM which will be affected by the demolition, a California Licensed Contractor who is registered with Cal/OSHA for asbestos is required. The regulations regarding asbestos are found in Title 8 CCR Section 1529, and also include formal notification requirements to Cal/OSHA at least 24 hours prior to removal. It is required that removal be conducted with the material kept in a wetted state to contain dust and hazardous emissions.

The construction industry standard covers employees engaged in demolition and construction, and the following related activities likely to involve asbestos exposure: removal, encapsulation, alteration, repair, maintenance, insulation, spill emergency cleanup, transportation, disposal and storage of ACM.

Demolition contractors typically require that a building owner/operator accept responsibility for removal of all ACM found during the building inspection prior to start of demolition activities.

LIMITATIONS OF LIABILITY

Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied. All quantities of materials listed herein are estimates for sampling purposes only, and should be verified by Owner representative or an abatement contractor prior to asbestos abatement.

The nature of demolition and asbestos abatement is such that materials can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for materials not previously detected due to lack of accessibility or concealment, although every effort was made during the inspection to detect all suspect materials. If any materials other than those included herein are discovered during renovation or demolition, it must be assumed that the materials are asbestos containing, and should be treated accordingly until further testing and analysis is performed.
The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes that site conditions or accessibility may vary, from those encountered at the time of our inspection and sample collection. Varying conditions or access could result in additional information that would lead us to revise conclusions and recommendations. Leon

Sampling Site: Sheriff Admin Building, 1st Floor Restroom Entry
2200 Fresno St, Fresno, CA
B147-23

Environmental Services will not be responsible for the interpretation or use by others of information contained within this report.

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2023.07.17 16:16:07 -07'00'

Christopher Cabral DATE:
Certified Asbestos Consultant
Certification No. 22-7151

*Abbreviation Key:

Asbestos Containing Material — ACM (equal to or greater than 0.1% by weight)
Vinyl Asbestos Tile – VAT
No Asbestos Detected--N.A.D or N.D.
Homogeneous—H
Not Sampled--NS

McCall and Spero
Environmental, Inc.
Specialists in Microanalysis

1831 Williamson Court • Suite 100 • Louisville, KY 40223
Phone (502) 244-7135 • FAX (502) 244-7136
E-mail: customerservice@mselabs.com • Website: www.mselabs.com

Date: July 17, 2023

Attention: Tommy Leon
Leon Environmental Services

Subject: Analysis of bulk samples for asbestos mineral fibers by Polarized Light Microscopy (PLM) with Dispersion Staining (EPA/600/R-93/116)

RE: MSE-P7173LEO
Marshall Smith, Fresno County, Facility Services Dept. - Sheriff Admin Building, 1st Floor: 2200 Fresno St.; Fresno, CA Project
LEO# B147-23

Dear Mr. Leon:

McCall & Spero Environmental, Inc. has completed the analysis of the bulk samples we received from your offices on July 17, 2023. These samples represent the bulk samples from the Marshall Smith, Fresno County, Facility Services Dept. - Sheriff Admin Building, 1st Floor: 2200 Fresno St.; Fresno, CA Project.

The PLM bulk analysis was performed according to the "Method of the Determination of Asbestos in Bulk Building Materials", R. L. Perkins and B. W. Harvey (EPA/600/R-93/116).

The results for the four (4) samples are summarized in the following report. Please note that for samples consisting of two or more distinct components, each component is analyzed and reported individually (EPA 40 CFR Part 61 [FRL-4821-71]).

Thank you for consulting McCall & Spero Environmental, Inc. Should you have any questions concerning these results, please contact our office.

Sincerely,

Kevin R. Bean, B.A.
PLM Laboratory Director

NVLAP®
TESTING
NVLAP LAB CODE 101895-0

SUMMARY OF PLM BULK ANALYSIS RESULTS

Project Name: Marshall Smith, Fresno County, Facility Services Dept. - Sheriff Admin Building, 1st Floor: 2200 Fresno St.; Fresno, CA Project
McCall & Spero Environmental Project No. MSE-P7173LEO

MSE # P7173LEO	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
001 (A)	01 (A) Color Coat	ND	Cellulose / 2%	98%	Beige
001 (B)	01 (B) Plaster	ND	Cellulose / 2% Hair / 2%	96%	White
002 (A)	02 (A) Color Coat	ND	Cellulose / 2%	98%	Beige
002 (B)	02 (B) Plaster	ND	Cellulose / 2% Hair / 2%	96%	White

NOTES:

ND = None Detected CH = Chrysotile A = Amosite AC = Actinolite
CR = Crocidolite AN = Anthophyllite TR = Tremolite

For samples consisting of separate components, each component is analyzed and reported separately.

Results apply only to items tested. Quantification is accurate to within ± 10%. Results from this report must not be reproduced, except in full, with the approval of McCall & Spero Environmental, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

** EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by polarized light microscopy that fall into one of five dominantly nonfriable categories be reanalyzed by an additional method, such as transmission electron microscopy. (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/ R-93/ 116).

Analyst: Kevin R. Bean, B.A. 

McCall & Spero Environmental, Inc.

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: (559) 274-9200 Fax: (559) 274-9240 Email: Leonenviro@comcast.net

Customer: Marshall Smith **Company:** Fresno County, Facility Services Dept

Date: July 14, 2023 **Job No:** B147-23

Analysis: PLM **Turn Around:** RUSH (Same Day) Next Day 2-3 Days 4-5 Days

Inspection Site: Sheriff Admin Building, 1st Floor, 2200 Fresno St, Fresno, CA

Sample No.	Location	Material		Quantity
		Color	Type	
01	Restroom Entry Wall		Color Coat	
	Restroom Entry Wall		Plaster	
02	Restroom Entry Wall		Color Coat	
	Restroom Entry Wall		Plaster	

Relinquished By: [signature] **Date:** 7-14-23 **Received By:** [signature] **Date:** 7/17/23

Leon Environmental Services

Richard "Danny" Leon CAC # 04-3708
Tommy Leon CAC # 05-3882

August 9, 2024

Mike Bowman
Fresno County, Maintenance Services Dept
4590 E. Kings Canyon Rd.
Fresno, CA 93702

Re: Asbestos Bulk Samples
Sheriff Administration Building, 1st Floor
2200 Fresno St.
Fresno, CA
Job No. B166-24

Dear Mike:

Attached are the asbestos sampling results for the above referenced building. This report includes conclusions, recommendations and bulk analysis results. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2024.08.13 13:19:41 -07'00'

Christopher Cabral
Certified Asbestos Consultant
Certification No. 22-7151

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@leonenviro.com

Sampling Site: Sheriff Administration Building, 1st Floor
2200 Fresno St, Fresno, CA
B166-24

ASBESTOS ANALYSIS RESULTS

A total of 3 samples of suspect materials were collected by a state certified asbestos inspector from the 1st floor of **Sheriff Administration Building** at **2200 Fresno St. Fresno CA**. The sample collection areas were determined by the information given to the inspector by **Mike Bowman of the County of Fresno** about the impending remodel/renovation that is planned for this building. McCall and Spero Environmental, Inc., a NVLAP accredited laboratory performed a total of **3** analyses from the **3** samples collected. The chain of custody from Leon Environmental Services and the report from McCall and Spero contain a full list of all samples taken from this site.

Samples Positive for Asbestos

Sample	Location	Material	% Of ACM	Friable
01, 02, 03	Records Office, Upper Ceiling	Fireproofing	10%	Yes

COMMENTS AND RECOMMENDATIONS

Friable Asbestos

The Fireproofing (Samples 01, 02, 03) located on the upper ceiling above the ceiling tiles in the records office is positive for asbestos at 10%.

This material is considered ***friable hazardous ACM***. It is required that a licensed asbestos abatement contractor remove this material prior to renovation and or demolition of this structure.

CONCLUSIONS AND REGULATIONS

Based on our survey, sampling and subsequent laboratory analysis and regulatory guidelines affecting this site, the types of ACM identified on this page require removal (in most cases) prior to demolition and/or renovation procedures to comply with local, state and federal agencies. The US EPA NESHAP (40 CFR Part 61 – November 20, 1990) requires materials containing greater than one percent asbestos be removed prior to renovation or demolition. If those materials are friable or likely to become friable due to the forces expected to act upon them during renovation or demolition, they become a regulated asbestos containing material (RACM) and require a 10-day notification to the local Air Pollution Control District prior to abatement.

Non-friable and non-regulated ACM, in most cases, may be disposed of as a Non-Hazardous waste in a landfill that accepts Asbestos Containing Materials. All friable

waste containing more than 1% asbestos (RACM) must be manifested as hazardous waste for disposal purposes.

CAL OSHA--------Construction Industry--------8CCR, 1529

Cal/OSHA worker health and safety regulations apply during any disturbance of ACM by a person while in the employ of another. This is true regardless of friability or quantity disturbed. If there is greater than 100 square feet of ACM which will be affected by the demolition, a California Licensed Contractor who is registered with Cal/OSHA for asbestos is required. The regulations regarding asbestos are found in Title 8 CCR Section 1529, and also include formal notification requirements to Cal/OSHA at least 24 hours prior to removal. It is required that removal be conducted with the material kept in a wetted state to contain dust and hazardous emissions.

The construction industry standard covers employees engaged in demolition and construction, and the following related activities likely to involve asbestos exposure: removal, encapsulation, alteration, repair, maintenance, insulation, spill emergency cleanup, transportation, disposal and storage of ACM.

Demolition contractors typically require that a building owner/operator accept responsibility for removal of all ACM found during the building inspection prior to start of demolition activities.

LIMITATIONS OF LIABILITY

Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied. All quantities of materials listed herein are estimates for sampling purposes only, and should be verified by Owner representative or an abatement contractor prior to asbestos abatement.

The nature of demolition and asbestos abatement is such that materials can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for materials not previously detected due to lack of accessibility or concealment, although every effort was made during the inspection to detect all suspect materials. If any materials other than those included herein are discovered during renovation or demolition, it must be assumed that the materials are asbestos containing and should be treated accordingly until further testing and analysis is performed.

The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes that site conditions or accessibility may vary from those encountered at the time of our inspection and sample collection. Varying conditions or access could result in additional

information that would lead us to revise conclusions and recommendations. Leon Environmental Services will not be responsible for the interpretation or use by others of information contained within this report.

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2024.08.13 13:20:03 -07'00'

Christopher Cabral — Date
Certified Asbestos Consultant
Certification No. 22-7151

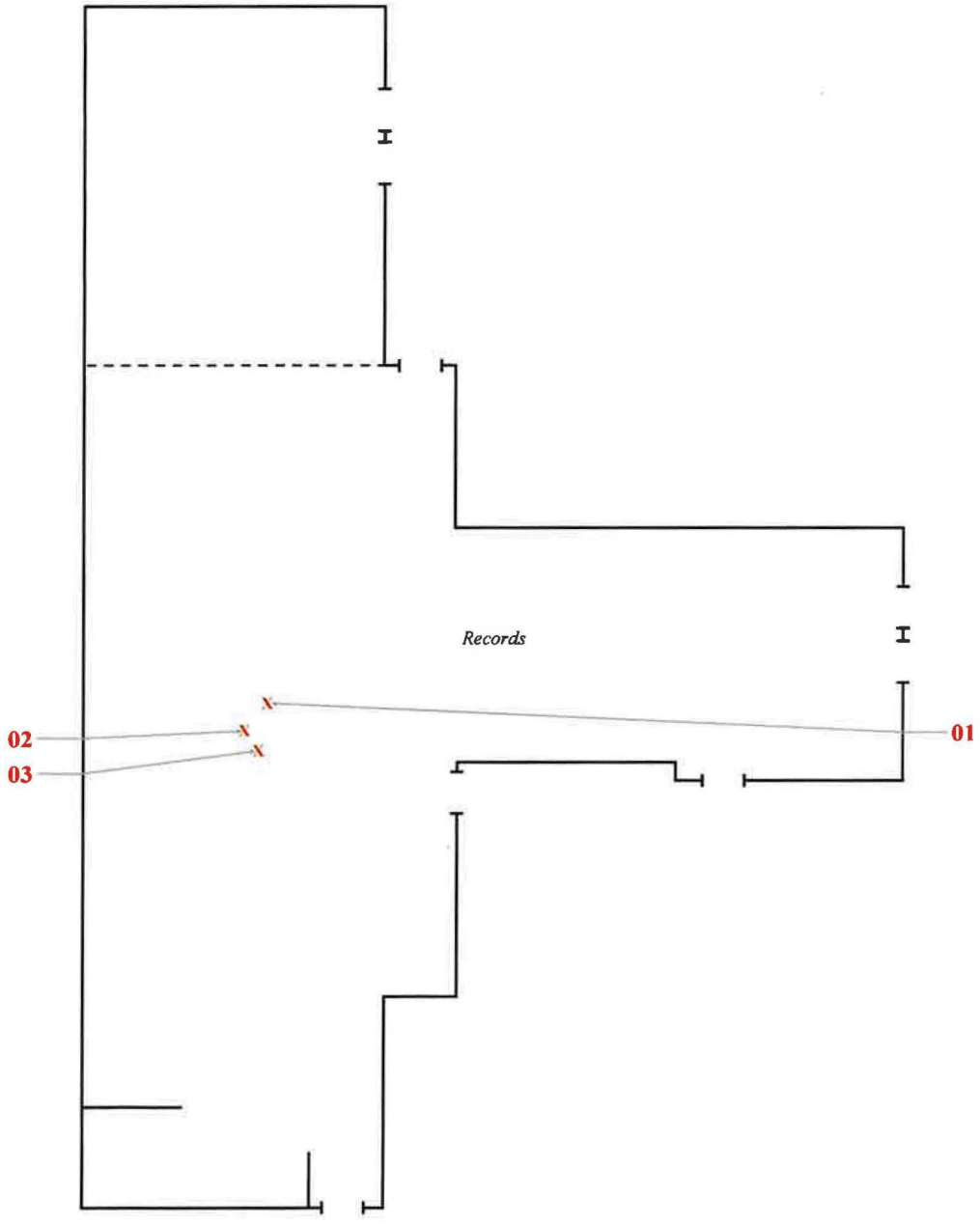
*Abbreviation Key:

Asbestos Containing Material — ACM (equal to or greater than 0.1% by weight)
Vinyl Asbestos Tile – VAT
No Asbestos Detected--N.A.D or N.D.
Homogeneous—H
Not Sampled--NS

Leon Environmental Services

Richard "Danny" Leon CAC Certification No. 04-3708
Tommy Leon CAC Certification No. 05-3882

Job B166-24 Sample Location Diagram
Sheriff Administration Office, 1st Floor / 2200 Fresno St, Fresno, CA
Mike Bowman / Fresno County, Maintenance Services Dept.
Drawing Not to Scale





X = Interior Samples
Y = Exterior Samples
R = Roof Samples

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

McCall and Spero
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1831 Williamson Court • Suite 100 • Louisville, KY 40223
Phone (502) 244-7135 • FAX (502) 244-7136
E-mail: customerservice@mselabs.com • Website: www.mselabs.com

Date: August 1, 2024

Attention: Tommy Leon
Leon Environmental Services

Subject: Analysis of bulk samples for asbestos mineral fibers by Polarized Light Microscopy (PLM) with Dispersion Staining (EPA/600/R-93/116)

RE: MSE-P814LEO
Mike Bowman, Fresno County, Maintenance Services Dept. - Sheriff Administration Building, 1st Floor: 2200 Fresno St; Fresno, CA Project
LEO # B166-24

Dear Mr. Leon:

McCall & Spero Environmental, Inc. has completed the analysis of the bulk samples we received from your offices on August 1, 2024. These samples represent the bulk samples from the Mike Bowman, Fresno County, Maintenance Services Dept. - Sheriff Administration Building, 1st Floor: 2200 Fresno St; Fresno, CA Project.

The PLM bulk analysis was performed according to the "Method of the Determination of Asbestos in Bulk Building Materials", R. L. Perkins and B. W. Harvey (EPA/600/R-93/116).

The results for the three (3) samples are summarized in the following report. Please note that for samples consisting of two or more distinct components, each component is analyzed and reported individually (EPA 40 CFR Part 61 [FRL-4821-71]).

Thank you for consulting McCall & Spero Environmental, Inc. Should you have any questions concerning these results, please contact our office.

Sincerely,

Kevin R. Bean, B.A.
PLM Laboratory Director

NVLAP®
TESTING
NVLAP LAB CODE 101895-0

SUMMARY OF PLM BULK ANALYSIS RESULTS

Project Name: Mike Bowman, Fresno County, Maintenance Services Dept. - Sheriff Administration Building, 1st Floor: 2200 Fresno St; Fresno, CA Project
McCall & Spero Environmental Project No. MSE-P814LEO

MSE # P814LEO	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
001	01 Fireproofing	CH / 10%	Cellulose / 10% Glass / 10%	70%	Gray
002	02 Fireproofing	CH / 10%	Cellulose / 10% Glass / 10%	70%	Gray
003	03 Fireproofing	CH / 10%	Cellulose / 10% Glass / 10%	70%	Gray

NOTES:

ND = None Detected CH = Chrysotile A = Amosite AC = Actinolite
CR = Crocidolite AN = Anthophyllite TR = Tremolite

For samples consisting of separate components, each component is analyzed and reported separately.

Results apply only to items tested. Quantification is accurate to within ± 10%. Results from this report must not be reproduced, except in full, with the approval of McCall & Spero Environmental, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

** EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by polarized light microscopy that fall into one of five dominantly nonfriable categories be reanalyzed by an additional method, such as transmission electron microscopy. (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/ R-93/ 116).

Analyst: Kevin R. Bean, B.A.

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: (559) 274-9200 Fax: (559) 274-9240 Email: Leonenviro@comcast.net

Customer: Mike Bowman **Company:** Fresno County, Maintenance Services Dept.

Date: July 31, 2024 **Job No:** B166-24

Analysis: PLM **Turn Around:** (RUSH) Same Day Next Day 2-3 Days 4-5 Days

Inspection Site: Sheriff Administration Building, 1st Floor, 2200 Fresno St, Fresno, CA

Sample No.	Location	Material		Quantity
		Color	Type	
01	Records Office, Upper Ceiling		Fireproofing	
02	Records Office, Upper Ceiling		Fireproofing	
03	Records Office, Upper Ceiling		Fireproofing	

Relinquished By: [signature] **Date:** 7-31-24 **Received By:** [signature] **Date:** 8/1/24

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

June 24, 2019

Keith McBride
Fresno County, Facility Services Dept
4590 E. Kings Canyon Rd.
Fresno, CA 93702

Re: Asbestos Bulk Samples
Fresno County Sheriff's Admin Office
2200 Fresno St.
Fresno, CA
Job No. C85-19

Dear Keith:

Attached are the asbestos sampling results for the above referenced building. This report includes conclusions, recommendations and bulk analysis results. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Tommy Leon
Certified Asbestos Consultant
Certification No. 05-3882

Sampling Site: Fresno County Sheriff's Admin Office
2200 Fresno St, Fresno, CA
C85-19

ASBESTOS ANALYSIS RESULTS

A total of **06** samples of suspect materials were collected by a state certified asbestos inspector the Fresno County Sheriff's admin office at **2200 Fresno St, Fresno, CA**. The sample collection areas were determined by the information given to the inspector by **Keith McBride of the County of Fresno** about the impending remodel/renovation that is planned for this building. Western Analytical Laboratory, Inc., a NVLAP accredited laboratory performed a total of **06** analyses from the **06** samples collected. The chain of custody from Leon Environmental Services and the report from Western Analytical contain a full list of all samples taken from this site.

Sample	Location	Material	% Of ACM	Friable
01	1st Floor Lobby IT Closet Ceiling Beam	Fireproofing	5-6%	Yes
02	1st Floor Lobby IT Closet Ceiling Beam	Fireproofing	5-6%	Yes
03	Basement Hallway Attic	Fireproofing Debris	5-6%	Yes
04	Basement Hallway Attic	Fireproofing Debris	5-6%	Yes
05	Basement Hallway Attic Beam	Fireproofing	5-6%	Yes
06	Basement Ceiling	White 1x1 Ceiling Tile	ND	

* Determined after composite sampling with associated sheetrock

COMMENTS AND RECOMMENDATIONS

Friable Asbestos

The Fireproofing (samples 01, 02, 03, 04, 05) located on the ceiling beams and in the attic is positive for asbestos at 5-6%.

These materials are considered ***friable hazardous ACM***. It is required that a licensed asbestos abatement contractor remove these materials prior to renovation and or demolition of this structure.

CONCLUSIONS AND REGULATIONS

Based on our survey, sampling and subsequent laboratory analysis and regulatory guidelines affecting this site, the types of ACM identified on this page require removal (in most cases) prior to demolition and/or renovation procedures to comply with local, state

and federal agencies. The US EPA NESHAP (40 CFR Part 61 – November 20, 1990) requires materials containing greater than one percent asbestos be removed prior to renovation or demolition. If those materials are friable or likely to become friable due to the forces expected to act upon them during renovation or demolition, they become a regulated asbestos containing material (RACM) and require a 10-day notification to the local Air Pollution Control District prior to abatement.

Cal/OSHA worker health and safety regulations apply during any disturbance of ACM by a person while in the employ of another. This is true regardless of friability or quantity disturbed. If there is greater than 100 square feet of ACM which will be affected by the demolition, a California Licensed Contractor who is registered with Cal/OSHA for asbestos is required. The regulations regarding asbestos are found in Title 8 CCR Section 1529, and also include formal notification requirements to Cal/OSHA at least 24 hours prior to removal. It is required that removal be conducted with the material kept in a wetted state to contain dust and hazardous emissions.

CAL OSHA--------Construction Industry--------8CCR, 1529

1. The construction industry standard covers employees engaged in demolition and construction, and the following related activities likely to involve asbestos exposure: removal, encapsulation, alteration, repair, maintenance, insulation, spill emergency cleanup, transportation, disposal and storage of ACM.

2. Demolition contractors typically require that a building owner/operator accept responsibility for removal of all ACM found during the building inspection prior to start of demolition activities.

3. Non-friable and non-regulated ACM, in most cases, may be disposed of as construction debris in a landfill that accepts ordinary construction debris. All friable waste containing more than 1% asbestos (RACM) should be manifested as hazardous waste for disposal purposes.

LIMITATIONS OF LIABILITY

Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied. All quantities of materials listed herein are estimates for sampling purposes only, and should be verified by Owner representative or an abatement contractor prior to asbestos abatement.

The nature of demolition and asbestos abatement is such that materials can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for materials not previously detected due to lack of accessibility or concealment, although every effort was made during the inspection to detect all suspect materials. If any materials other than those included herein are

discovered during renovation or demolition, it must be assumed that the materials are asbestos containing, and should be treated accordingly until further testing and analysis is performed.

The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes that site conditions or accessibility may vary, from those encountered at the time of our inspection and sample collection. Varying conditions or access could result in additional information that would lead us to revise conclusions and recommendations. Leon Environmental Services will not be responsible for the interpretation or use by others of information contained within this report.

Thomas M. Leon

Digitally signed by Thomas M. Leon
DN: cn=Thomas M. Leon, o=Leon Environmental Services, ou, email=LeonEnviro@comcast.net, c=US
Date: 2019.06.27 16:48:21 -07'00'

Thomas Leon DATE:
Certified Asbestos Consultant
Certification No. 05-3882

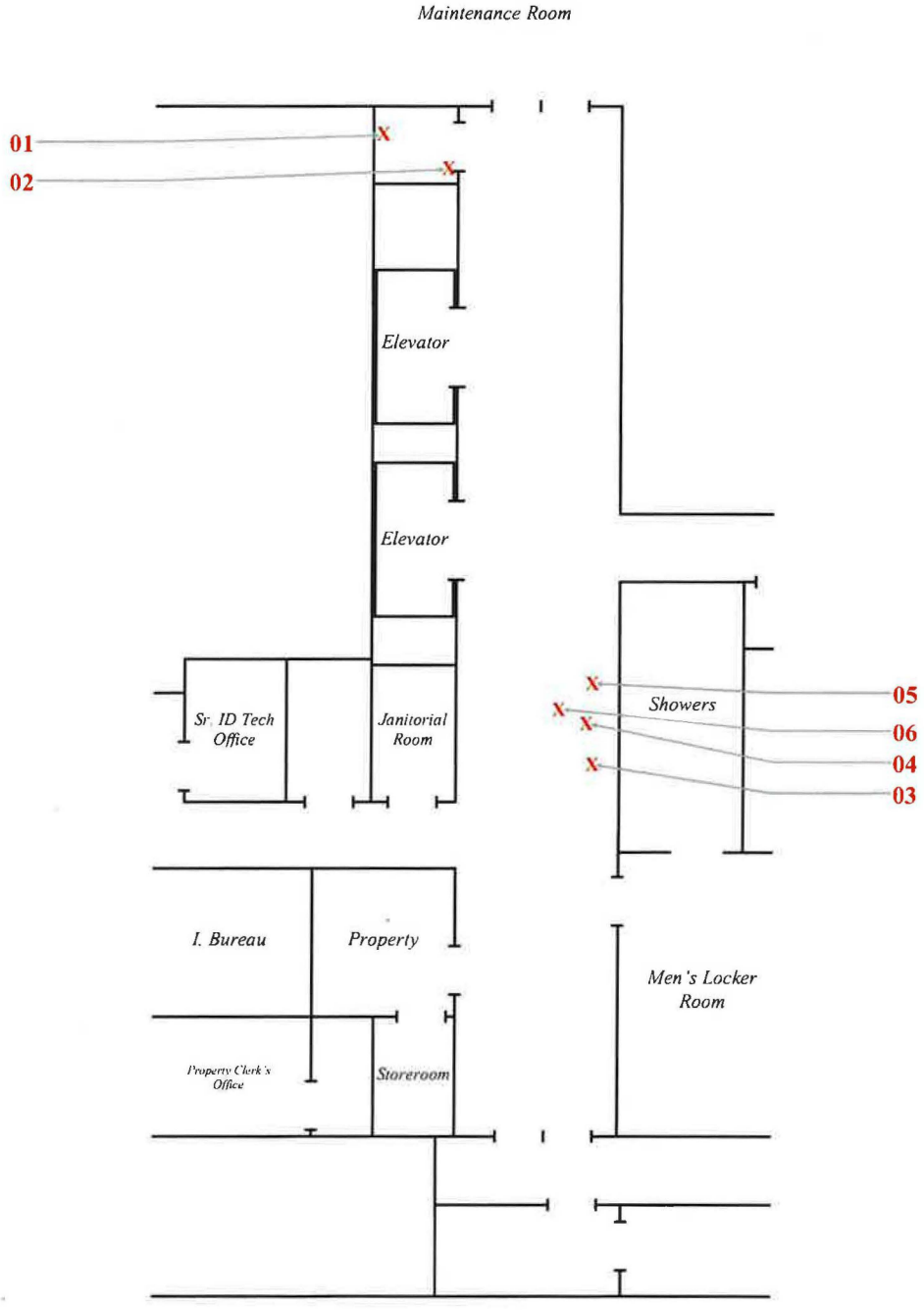
*Abbreviation Key:

Asbestos Containing Material — ACM (equal to or greater than 0.1% by weight)
Vinyl Asbestos Tile – VAT
No Asbestos Detected--N.A.D or N.D.
Homogeneous—H
Not Sampled--NS

Leon Environmental Services

Richard "Danny" Leon CAC Certification No. 04-3708
Tommy Leon CAC Certification No. 05-3882

Job C85-19 Sample Location Diagram
Fresno County Sheriff's Admin Office / 2200 Fresno St, Fresno, CA
Keith McBride / Fresno County, Facility Services Dept.
Drawing not to Scale



Y = Exterior Samples
X = Interior Samples
R = Roof Samples

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

N

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

138-932

Customer: Keith McBride Company County of Fresno

Date: June 20, 2019 Job No. C85-19

Analysis (PLM) Turn Around: 2hr Rush Same Day (24hr) 48hr 3-5 days

Inspection Site : Sheriff's Admin Office, 2200 Fresno St, Fresno, CA

Sample No	Location	Material			Quantity
		Color	Type	Friable	
01	1st Floor Lobby IT Closet - Ceiling Beam		Fireproofing		
02	1st Floor Lobby IT Closet - Ceiling Beam		Fireproofing		
03	Basement Hallway - Attic		Fireproofing Debris		
04	Basement Hallway - Attic		Fireproofing Debris		
05	Basement Hallway - Attic Beam		Fireproofing		
06	Basement Ceiling	White	1x1 Ceiling Tile		

Relinquished By Tommy Lee Date 6-20-19

Received By [signature] Date 6/21/19

WESTERN ANALYTICAL LABORATORY, Inc.
TEST REPORT

NVLAP TESTING
NVLAP LAB CODE 200037

REPORT NO:	138-932	CLIENT:	Leon Environmental Services 4545 N. Brawley Ave., Suite 104 Fresno CA 93722
DATE COLLECTED:	June 20, 2019		
DATE RECEIVED:	June 21, 2019	ATTENTION:	Danny Leon (CAC# 04-3708)
DATE REQUIRED:	June 22, 2019	REFERENCE:	C85-19 Keith McBride – County of Fresno Sheriff's Admin. Office 2200 Fresno Street, Fresno, CA

SUBJECT: Polarized Light Microscopy Analysis for Asbestos; 6 samples

METHODOLOGY: "Method for the Determination of Asbestos in Bulk Building Materials" (EPA 600/R-93/116)*

ACCREDITED: National Institute of Standards and Technology (NVLAP) # 200037

SAMPLE ID NUMBER	SAMPLE LOCATION AND DESCRIPTION	NON-FIBROUS MATERIALS	OTHER FIBROUS MATERIALS	ASBESTIFORM MINERALS
01	1st Floor Lobby IT Closet – Ceiling Beam Fireproofing	Granular Minerals Organics Vermiculite	None Detected	Chrysotile 5-6%
02	1st Floor Lobby IT Closet – Ceiling Beam Fireproofing	Granular Minerals Organics Vermiculite	None Detected	Chrysotile 5-6%
03	Basement Hallway – Attic Fireproofing debris	Granular Minerals Organics Vermiculite	None Detected	Chrysotile 5-6%
04	Basement Hallway – Attic Fireproofing debris	Granular Minerals Organics Vermiculite	None Detected	Chrysotile 5-6%
05	Basement Hallway – Attic Beam Fireproofing	Granular Minerals Organics Vermiculite	None Detected	Chrysotile 5-6%
06	Basement Ceiling White 1x1 Ceiling tile	Granular Minerals Organics	Glass Wool 70% Cellulose 1-2%	None Detected

t: Trace (>1% = greater than 1%, <1% = less than 1%)

Optical Microscopist

Mike Maladzhikyan, Laboratory Director

This report only applies to the sample(s) tested. This report must not be reproduced except in full, unless approved by Western Analytical. The client is solely responsible for the use and interpretation of test results and reports requested from Western Analytical. This report must not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Leon Environmental Services

Richard "Danny" Leon CAC # 04-3708
Tommy Leon CAC # 05-3882

September 20, 2022

Marshall Smith
Fresno County, Facility Services Dept.
4590 E. Kings Canyon Rd.
Fresno, CA 93702
Email: msmith@fresnocountyca.gov

Re: Asbestos Bulk Sample Report
South Annex Jail, Courtyard Grass
2280 Fresno St, Fresno, CA
LES Job No. B219-22

Dear Marshall,

Attached are the asbestos sampling results for the above referenced building. The report includes inspection observations, a list of all samples taken, bulk sample analysis results, a sample location diagram and recommendations concerning asbestos containing materials identified at this site. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Richard Danny Leon

Digitally signed by Richard Danny Leon
Date: 2022.09.27 16:22:17 -07'00'

Richard "Danny" Leon
Certified Asbestos Consultant
Certification No. 04-3708

ASBESTOS ANALYSIS RESULTS

A total of 07 samples of suspect asbestos containing materials were collected from the under the grass of the courtyard on the south side of the South Annex Jail and the concrete basement parking structure below at 2280 Fresno St, Fresno, CA by Leon Environmental Services. The suspect materials sampled and sample collection areas at this site were determined by the information given to Leon Environmental Services by Marshall Smith of the Fresno County Facilities services Department. All bulk samples of suspect asbestos containing materials were taken in accordance with US EPA Guidelines and accepted industry standards. McCall and Spero Environmental, Inc., a NVLAP accredited laboratory performed a total of 04 analyses from the 04 samples of suspect ACM collected from this site. The samples listed on the following table were positive for asbestos. The full list of all samples taken is on the following pages.

#	Location	Material	%	Friable	Sq.Ft
01	Under Grass	Black Membrane/Liner	3	No	NQ

NQ – Not Quantified.

COMMENTS AND RECOMMENDATIONS

The black membrane/liner (sample 01) on the concrete under the courtyard grass is positive for asbestos at 3% by weight. This material is considered ***non-hazardous non-friable ACM*** and can be disposed of as construction waste in most cases after properly being abated. It is required that a licensed asbestos abatement contractor remove this material prior to concrete replacement and or structure demolition. The quantity of this material is uncertain as it is buried and not all the uncovered concrete had this membrane on it (see attached Picture).

CONCLUSIONS AND REGULATIONS

US EPA NESHAP 40 CFR Part 61

Based on our inspection, sampling and subsequent laboratory analysis, in addition to regulatory guidelines affecting this site, the types of ACM identified in this report require removal (in most cases) prior to demolition and/or renovation procedures to comply with local, state and federal agencies. **The US EPA NESHAP (40 CFR Part 61 – November 20, 1990) requires materials containing greater than one percent asbestos be removed prior to renovation or demolition.**

If those materials are friable or likely to become friable due to the forces expected to act upon them during renovation or demolition, they become a regulated asbestos containing material (RACM) and require a 10-day notification

to the local Air Pollution Control District prior to abatement. Non-friable and non-regulated ACM, in most cases, may be disposed of as construction debris in a landfill which accepts ordinary construction debris. All friable waste containing more than 1% asbestos (RACM) should be manifested as hazardous waste for disposal purposes.

CAL OSHA--------Construction Industry--------8CCR, 1529

The construction industry standard covers employees engaged in demolition, construction and the following related activities likely to involve asbestos exposure: removal, encapsulation, alteration, repair, maintenance, insulation, spill emergency cleanup, transportation, disposal and storage of ACM. **CAL OSHA worker health and safety regulations apply during any disturbance of ACM by a person while in the employ of another.** This is true regardless of friability or quantity disturbed.

If there is greater than 100 square feet of ACM which will be affected by the demolition, a California Licensed Contractor who is registered with CAL OSHA for asbestos is required. The regulations regarding asbestos are found in Title 8 CCR Section 1529, and also include formal notification requirements to CAL OSHA at least 24 hours prior to removal. It is required that removal be conducted with the material(s) kept in a wetted state in order to contain dust and hazardous emissions.

Demolition contractors typically require that a building owner/operator accept responsibility for removal of all ACM found during the building inspection prior to start of demolition activities.

LIMITATIONS OF LIABILITY

Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied. All quantities of materials listed herein are estimates for sampling purposes only and should be verified by Owner representative or an abatement contractor prior to asbestos abatement.

The nature of demolition and asbestos abatement is such that materials can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for materials not previously detected due to lack of accessibility or concealment, although every effort was made during the inspection to detect all suspect materials. If any materials other than those included herein are discovered during renovation or demolition, it must be assumed that the materials are asbestos containing and should be treated accordingly until further testing and analysis is performed.

The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes that site conditions or accessibility may vary from those encountered at the time of our inspection and sample collection. Varying conditions or access could result in additional information that would lead us to revise conclusions and recommendations. Leon Environmental Services will not be responsible for the interpretation or use by others of information contained within this report.

Richard Danny Leon

Digitally signed by Richard Danny Leon
Date: 2022.09.27 16:22:43 -07'00'

Richard "Danny" Leon — Date
Certified Asbestos Consultant
Certification No. 04-3708

*Abbreviation Key:
Asbestos Containing Material – ACM (Contains greater than 1% asbestos by weight)
Asbestos Containing Construction Material – ACCM (Contains less than 1% asbestos by weight)
Vinyl Asbestos Tile – VAT
No Asbestos Detected – N.A.D or N.D.
Homogeneous – H
Not Sampled – NS
Not Quantified – NQ

Leon Environmental Services
Asbestos Bulk Sample Report B219-22
South Annex Jail, Courtyard Grass
2280 Fresno St, Fresno, CA



4545 N. Brawley Ave, Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: leonenviro@comcast.net

McCall and Spero

Williamson Court • Suite 100 • Louisville, KY 40223
Phone (502) 244-7135 • FAX (502) 244-7136

Specialists in Microanalysis

E-mail: customerservice@mselabs.com • Website: www.mselabs.com

Date: September 19, 2022

Attention: Tommy Leon
Leon Environmental

Subject: Analysis of bulk samples for asbestos mineral fibers by Polarized Light Microscopy (PLM) with Dispersion Staining (EPA/600/R-93/116)

RE: MSE-P9162LEO
Marshall Smith: Fresno County Facilities Services; Hall of Records Parking / Courthouse Grass Project
LEO# B219-22

Dear Mr. Leon:

McCall & Spero Environmental, Inc. has completed the analysis of the bulk samples we received from your offices on September 16, 2022. These samples represent the bulk samples from the Marshall Smith: Fresno County Facilities Services; Hall of Records Parking / Courthouse Grass Project.

The PLM bulk analysis was performed according to the "Method of the Determination of Asbestos in Bulk Building Materials", R. L. Perkins and B. W. Harvey (EPA/600/R-93/116).

The results for the four (4) samples are summarized in the following report. Please note that for samples consisting of two or more distinct components, each component is analyzed and reported individually (EPA 40 CFR Part 61 [FRL-4821-71]).

Thank you for consulting McCall & Spero Environmental, Inc. Should you have any questions concerning these results, please contact our office.

Sincerely,

Kevin R. Bean, B.A.
PLM Laboratory Director

NVLAP®

SUMMARY OF PLM BULK ANALYSIS RESULTS

Project Name: Marshall Smith: Fresno County Facilities Services; Hall of Records Parking / Courthouse Grass Project
McCall & Spero Environmental Project No. MSE-P9162LEO

MSE # P9162LEO	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
001	01 Membrane / Liner	CH / 3%	Cellulose / 17% Glass / 15%	65%	Black
002	02 Insulation	ND	Cellulose / 80%	20%	Brown / Black
003	03 Concrete	ND	Cellulose / 2%	98%	Gray
004	04 Tar / Membrane	ND	Cellulose / 20%	80%	Black

NOTES:

ND = None Detected CH = Chrysotile A = Amosite AC = Actinolite
CR = Crocidolite AN = Anthophyllite TR = Tremolite

For samples consisting of separate components, each component is analyzed and reported separately.

Results apply only to items tested. Quantification is accurate to within ± 10%. Results from this report must not be reproduced, except in full, with the approval of McCall & Spero Environmental, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

** EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by polarized light microscopy that fall into one of five dominantly nonfriable categories be reanalyzed by an additional method, such as transmission electron microscopy. (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/ R-93/ 116).

Analyst: Kevin R. Bean, B.A. 

McCall & Spero Environmental, Inc.

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

Customer: MARSHAL SMITH Company FRESNO COUNTY FACILITIES SERVICES

Date: 9/15/22 Job No. B219-22

Analysis PLM Turn Around: Rush (Next Day) 2-3 Day 4-5 days

Inspection Site : HALL of Records PARKING / COURTHOUSE GRASS

Sample No	Location	Material			Quantity
		Color	Type	Friable	
01	UNDER GRASS	BLACK	MEMBRANE / LINER		
02	" "		INSULATION		
03	" "		CONCRETE		
04	" " LOWER CONCRETE		TAR/MEMBRANE		

Relinquished By [signature] Date 9/15/22

Received By [signature] Date 9/16/22

McCall and Spero
Specialists in Microanalysis
Williamson Court • Suite 100 • Louisville, KY 40223
Phone (502) 244-7135 • FAX (502) 244-7136
E-mail: customerservice@mselabs.com • Website: www.mselabs.com

Date: September 26, 2022

Attention: Tommy Leon
Leon Environmental Services

Subject: Analysis of bulk samples for asbestos mineral fibers by Polarized Light Microscopy (PLM) with Dispersion Staining (EPA/600/R-93/116)

RE: MSE-P9232LEO
Marshall Smith - Fresno County Facilities Services - Hall of Records; Courthouse Underground Parking Project
LEO# B219-22

Dear Mr. Leon:

McCall & Spero Environmental, Inc. has completed the analysis of the bulk samples we received from your offices on September 23, 2022. These samples represent the bulk samples from the Marshall Smith - Fresno County Facilities Services - Hall of Records; Courthouse Underground Parking Project.

The PLM bulk analysis was performed according to the "Method of the Determination of Asbestos in Bulk Building Materials", R. L. Perkins and B. W. Harvey (EPA/600/R-93/116).

The results for the three (3) samples are summarized in the following report. Please note that for samples consisting of two or more distinct components, each component is analyzed and reported individually (EPA 40 CFR Part 61 [FRL-4821-71]).

Thank you for consulting McCall & Spero Environmental, Inc. Should you have any questions concerning these results, please contact our office.

Sincerely,

Kevin R. Bean, B.A.
PLM Laboratory Director

NVLAP®
TESTING
NVLAP LAB CODE 101656-0

SUMMARY OF PLM BULK ANALYSIS RESULTS

Project Name: Marshall Smith - Fresno County Facilities Services - Hall of Records; Courthouse Underground Parking Project
McCall & Spero Environmental Project No. MSE-P9232LEO

MSE # P9232LEO	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
001	05 Concrete	ND	Cellulose / 2%	98%	Gray
002	06 Concrete	ND	Cellulose / 2%	98%	Gray
003	07 Concrete	ND	Cellulose / 2%	98%	Gray

NOTES:

ND = None Detected CH = Chrysotile A = Amosite AC = Actinolite
CR = Crocidolite AN = Anthophyllite TR = Tremolite

For samples consisting of separate components, each component is analyzed and reported separately.

Results apply only to items tested. Quantification is accurate to within ± 10%. Results from this report must not be reproduced, except in full, with the approval of McCall & Spero Environmental, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

** EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by polarized light microscopy that fall into one of five dominantly nonfriable categories be reanalyzed by an additional method, such as transmission electron microscopy. (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/ R-93/ 116).

Analyst: Kevin R. Bean, B.A.

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

Customer: MARSHALL SMITH Company FRESNO COUNTY Facilities Services

Date: 9/21/22 Job No. B219-22

Analysis PLM Turn Around: Rush (NEXT DAY)

Inspection Site: Hall of Records / Courthouse Underground Parking

Sample No	Location	Material			Quantity
		Color	Type	Friable	
05	Level B1 Pillar at top of Ramp to B2		CONCRETE		
06	Level B1 Pillar P-6 By 213		CONCRETE		
07	Level B1 S.W. wall By STAIRWELL entrance		CONCRETE		

Relinquished By [signature] Date 9/21/22

Received By [signature] Date 9/23/22

Leon Environmental Services

Richard "Danny" Leon CAC # 04-3708
Tommy Leon CAC # 05-3882

April 6, 2023

Marshall Smith
Fresno County, Facility Services Dept.
4590 E. Kings Canyon Rd.
Fresno, CA 93702

Re: Asbestos Bulk Sample Report
South Annex Jail
2204 Fresno St, Fresno, CA
LES Job No. B84-23

Dear Marshall,

Attached are the asbestos sampling results for the above referenced building. This report includes conclusions, recommendations, and bulk analysis results. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2023.04.06 15:09:18 -07'00'

Christopher Cabral
Certified Asbestos Consultant
Certification No. 22-7151

4545 N. Brawley Ave, Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: leonenviro@comcast.net

ASBESTOS ANALYSIS RESULTS

A total of 4 samples of suspect ACM were collected from the Chaplain's office on the 2nd floor of the **South Annex Jail at 2204 Fresno St, Fresno, CA** by Leon Environmental Services. The suspect materials sampled and sample collection areas at this site were determined by the information given to Leon Environmental Services by Marshall Smith of the County of Fresno about the impending work that is planned for this building. All bulk samples of suspect ACM were taken in accordance with US EPA Guidelines and accepted industry standards. McCall and Spero Environmental, Inc., a NVLAP accredited laboratory performed a total of 7 analyses from the 4 samples of suspect ACM collected from this site. The full list of all samples taken is on the following pages.

COMMENTS AND RECOMMENDATIONS

All samples collected were NEGATIVE for Asbestos.

CONCLUSIONS AND REGULATIONS

US EPA NESHAP 40 CFR Part 61

Based on our inspection, sampling and subsequent laboratory analysis, in addition to regulatory guidelines affecting this site, **NO ACM was identified**. ACM's require removal (in most cases) prior to demolition and/or renovation procedures to comply with local, state and federal agencies. The US EPA NESHAP (40 CFR Part 61 – November 20, 1990) requires materials containing greater than one percent asbestos be removed prior to renovation or demolition. If those materials are friable or likely to become friable due to the forces expected to act upon them during renovation or demolition, they become a regulated asbestos containing material (RACM) and require a 10-day notification to the local Air Pollution Control District prior to abatement.

CAL OSHA--------Construction Industry--------8CCR, 1529

The construction industry standard covers employees engaged in demolition, construction and the following related activities likely to involve asbestos exposure: removal, encapsulation, alteration, repair, maintenance, insulation, spill emergency cleanup, transportation, disposal and storage of ACM. CAL OSHA worker health and safety regulations apply during any disturbance of ACM by a person while in the employ of another. This is true regardless of friability or quantity disturbed. If there is greater than 100 square feet of ACM which will be affected by the demolition, a California Licensed Contractor who is registered with CAL OSHA for asbestos is required.

LIMITATIONS OF LIABILITY

The nature of demolition and asbestos abatement is such that materials can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for materials not previously detected due to lack of accessibility or concealment, although every effort was made during the inspection to detect all suspect materials. If any materials other than those included herein are discovered during renovation or demolition, it must be assumed that the materials are asbestos containing and should be treated accordingly until further testing and analysis is performed.

The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes that site conditions or accessibility may vary from those encountered at the time of our inspection and sample collection. Varying conditions or access could result in additional information that would lead us to revise conclusions and recommendations.

Leon Environmental Services will not be responsible for the interpretation or use by others of information contained within this report. Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied.

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2023.04.06 15:09:38 -07'00'

Christopher Cabral — Date
Certified Asbestos Consultant
Certification No. 22-7151

*Abbreviation Key:
Asbestos Containing Material – ACM (Contains greater than 1% asbestos by weight)
Asbestos Containing Construction Material – ACCM (Contains less than 1% asbestos by weight)
Vinyl Asbestos Tile – VAT
No Asbestos Detected – N.A.D or N.D.
Homogeneous – H
Not Sampled – NS

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E-mail: customerservice@mselabs.com • Website: www.mselabs.com

Date: April 6, 2023

Attention: Tommy Leon
Leon Environmental Services

Subject: Analysis of bulk samples for asbestos mineral fibers by Polarized Light Microscopy (PLM) with Dispersion Staining (EPA/600/R-93/116)

RE: MSE-P463LEO
Marshall Smith, Facility Services Dept. of Fresno County - South Annex Jail: 2204 Fresno St; Fresno, CA Project
LEO# B84-23

Dear Mr. Leon:

McCall & Spero Environmental, Inc. has completed the analyses of the bulk sample we received from your offices on April 6, 2023. This sample represents the bulk sample from the Marshall Smith, Facility Services Dept. of Fresno County - South Annex Jail: 2204 Fresno St; Fresno, CA Project.

The PLM bulk analysis was performed according to the "Method of the Determination of Asbestos in Bulk Building Materials", R. L. Perkins and B. W. Harvey (EPA/600/R-93/116).

The results for the seven (7) samples are summarized in the following report. Please note that for samples consisting of two or more distinct components, each component is analyzed and reported individually (EPA 40 CFR Part 61 [FRL-4821-71]).

Thank you for consulting McCall & Spero Environmental, Inc. Should you have any questions concerning these results, please contact our office.

Sincerely,

Kevin R. Bean, B.A.
PLM Laboratory Director

NVLAP®
TESTING
NVLAP LAB CODE 101895-0

SUMMARY OF PLM BULK ANALYSIS RESULTS

Project Name: Marshall Smith, Facility Services Dept. of Fresno County - South Annex Jail: 2204 Fresno St; Fresno, CA Project
McCall & Spero Environmental Project No. MSE-P463LEO

MSE # P463LEO	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
001	01 Base Cove Mastic	ND	Cellulose / 2%	98%	Beige
002 (A)	02 (A) Color Coat	ND	Cellulose / 2%	98%	White
002 (B)	02 (B) Plaster	ND	Cellulose / 2%	98%	Gray
003 (A)	03 (A) Color Coat	ND	Cellulose / 2%	98%	White
003 (B)	03 (B) Plaster	ND	Cellulose / 2%	98%	Gray
004 (A)	04 (A) Color Coat	ND	Cellulose / 2%	98%	White
004 (B)	04 (B) Plaster	ND	Cellulose / 2%	98%	Gray

SUMMARY OF PLM BULK ANALYSIS RESULTS

NOTES:

ND = None Detected	CH = Chrysotile	A = Amosite	AC = Actinolite
CR = Crocidolite	AN = Anthophyllite	TR = Tremolite	

For samples consisting of separate components, each component is analyzed and reported separately.

Results apply only to items tested. Quantification is accurate to within ± 10%. Results from this report must not be reproduced, except in full, with the approval of McCall & Spero Environmental, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

** EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by polarized light microscopy that fall into one of five dominantly nonfriable categories be reanalyzed by an additional method, such as transmission electron microscopy. (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/ R-93/ 116).

Analyst: Kevin R. Bean, B.A. 

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: (559) 274-9200 Fax: (559) 274-9240 Email: Leonenviro@comcast.net

Customer: Marshall Smith **Company:** Fresno County, Facility Services Dept.

Date: April 5, 2023 **Job No:** B84-23

Analysis: PLM **Turn Around:** (RUSH) Same Day Next Day 2-3 Days 4-5 Days

Inspection Site: South Annex Jail, 2204 Fresno St, Fresno, CA

Sample No.	Location	Material		Quantity
		Color	Type	
01	2nd Floor Chaplain's Office Wall		Base Cove Mastic	
02	2nd Floor Chaplain's Office Wall		Color Coat	
	2nd Floor Chaplain's Office Wall	Grey	Plaster	
03	2nd Floor Chaplain's Office Wall		Color Coat	
	2nd Floor Chaplain's Office Wall	Grey	Plaster	
04	2nd Floor Chaplain's Office Wall Patch		Color Coat	
	2nd Floor Chaplain's Office Wall Patch	White	Plaster	

Relinquished By: [signature] **Date:** 4-5-23 **Received By:** [signature] **Date:** 4/6/23

McCall and Spero
Environmental, Inc.
Specialists in Microanalysis

1831 Williamson Court • Suite 100 • Louisville, KY 40223
Phone (502) 244-7135 • FAX (502) 244-7136
E-mail: customerservice@mselabs.com • Website: www.mselabs.com

Date: March 15, 2024

Attention: Tommy Leon
Leon Environmental Services

Subject: Analysis of bulk samples for asbestos mineral fibers by Polarized Light Microscopy (PLM) with Dispersion Staining (EPA/600/R-93/116)

RE: MSE-P3134LEO.1
Mike Bowman, Fresno County, Maintenance Services Dept. - South Annex Jail: 2280 Fresno St; Fresno, CA Project
LEO# B56-24

Dear Mr. Leon:

McCall & Spero Environmental, Inc. has completed the analysis of the bulk samples we received from your offices on March 13, 2024. These samples represent the bulk samples from the Mike Bowman, Fresno County, Maintenance Services Dept. - South Annex Jail: 2280 Fresno St; Fresno, CA Project.

The PLM bulk analysis was performed according to the "Method of the Determination of Asbestos in Bulk Building Materials", R. L. Perkins and B. W. Harvey (EPA/600/R-93/116).

The results for the four (4) samples are summarized in the following report. Please note that for samples consisting of two or more distinct components, each component is analyzed and reported individually (EPA 40 CFR Part 61 [FRL-4821-71]).

Thank you for consulting McCall & Spero Environmental, Inc. Should you have any questions concerning these results, please contact our office.

Sincerely,

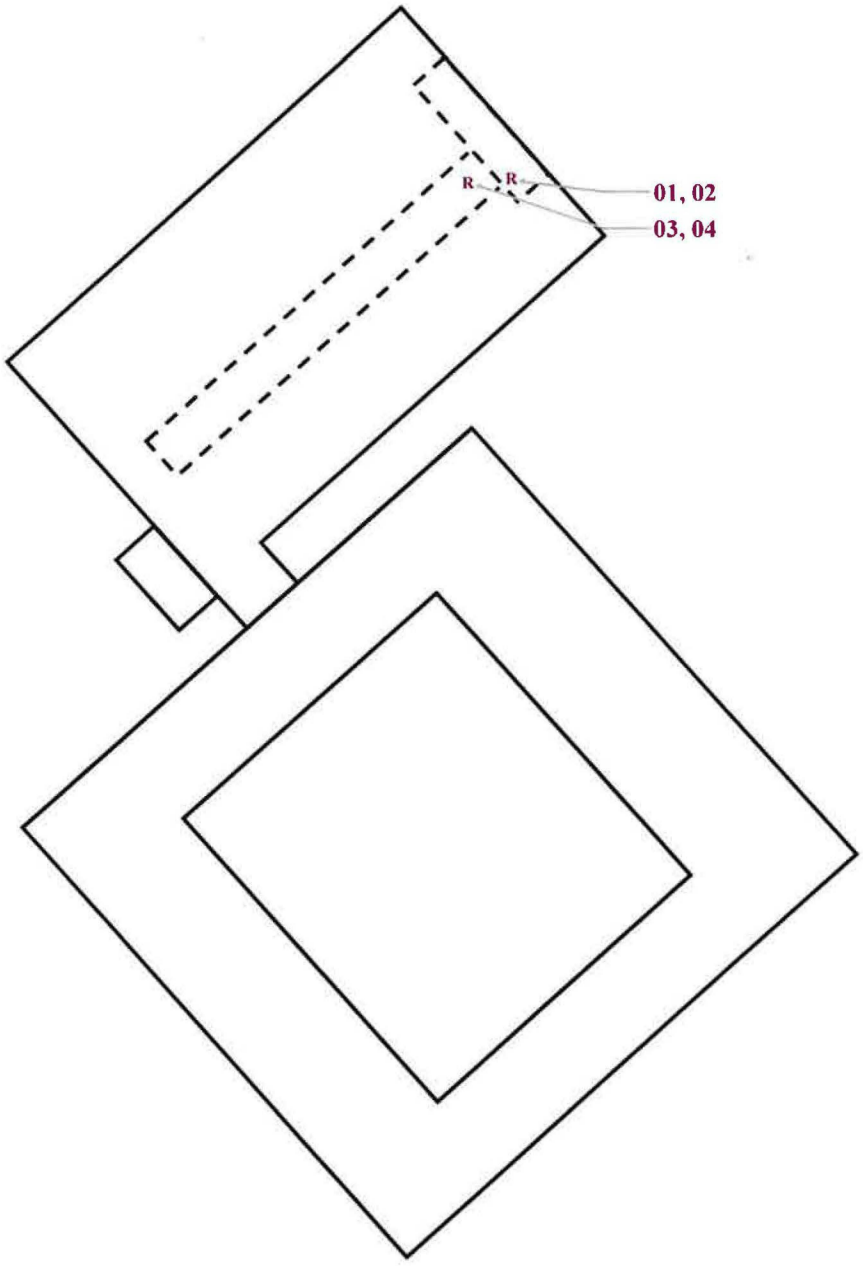
Kevin R. Bean, B.A.
PLM Laboratory Director

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NVLAP LAB CODE 101895-0

Leon Environmental Services

Richard "Danny" Leon CAC Certification No. 04-3708
Tommy Leon CAC Certification No. 05-3882

Job B56-24 Sample Location Diagram
South Annex Jail / 2280 Fresno St, Fresno, CA
Mike Bowman / Fresno County, Maintenance Services Dept.
Drawing Not to Scale



X = Interior Samples
Y = Exterior Samples
R = Roof Samples

N

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

Leon Environmental Services

Richard "Danny" Leon CAC # 04-3708
Tommy Leon CAC # 05-3882

February 29, 2024

Mike Bowman
Fresno County, Maintenance Services Dept.
4590 E. Kings Canyon Rd.
Fresno, CA 93702

Re: Asbestos Bulk samples
South Annex Jail
2280 Fresno St.
Fresno, CA
Job No. B50-24

Dear Mike:

Attached are the asbestos sampling results for the above referenced building. This report includes conclusions, recommendations and bulk analysis results. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2024.03.04 11:14:04 -08'00'

Christopher Cabral
Certified Asbestos Consultant
Certification No. 22-7151

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@leonenviro.com

Sampling Site: South Annex Jail, 2280 Fresno St, Fresno, CA B50-24

ASBESTOS ANALYSIS RESULTS

A total of 3 samples of suspect materials were collected by a state certified asbestos inspector at 2280 Fresno St, Fresno, CA. The sample collection areas were determined by the information given to the inspector by Mike Bowman of the County of Fresno about the impending remodel/renovation that is planned for this building. McCall and Spero Environmental, Inc., a NVLAP accredited laboratory performed a total of 6 analyses from the 3 samples collected. The chain of custody from Leon Environmental Services and the report from McCall and Spero contains a full list of all samples taken from this site.

Samples Negative for Asbestos

Sample	Location	Material	% Of ACM	Friable
01, 02, 03	Penthouse, Pipe Elbow	Canvas	ND	
		Styrofoam	ND	

COMMENTS AND RECOMMENDATIONS

All samples of suspect materials from the selected areas of this site were negative for asbestos.

CONCLUSIONS AND REGULATIONS

Based on our survey, sampling and subsequent laboratory analysis and regulatory guidelines affecting this site, the types of ACM identified on this page require removal (in most cases) prior to demolition and/or renovation procedures to comply with local, state and federal agencies. The US EPA NESHAP (40 CFR Part 61 – November 20, 1990) requires materials containing greater than one percent asbestos be removed prior to renovation or demolition. If those materials are friable or likely to become friable due to the forces expected to act upon them during renovation or demolition, they become a regulated asbestos containing material (RACM) and require a 10-day notification to the local Air Pollution Control District prior to abatement.

Non-friable and non-regulated ACM, in most cases, may be disposed of as a Non-Hazardous waste in a landfill that accepts Asbestos Containing Materials. All friable waste containing more than 1% asbestos (RACM) must be manifested as hazardous waste for disposal purposes.

CAL OSHA--------Construction Industry--------8CCR, 1529

Cal/OSHA worker health and safety regulations apply during any disturbance of ACM by a person while in the employ of another. This is true regardless of friability or quantity disturbed. If there is greater than 100 square feet of ACM which will be affected by the demolition, a California Licensed Contractor who is registered with Cal/OSHA for

asbestos is required. The regulations regarding asbestos are found in Title 8 CCR Section 1529, and also include formal notification requirements to Cal/OSHA at least 24 hours prior to removal. It is required that removal be conducted with the material kept in a wetted state to contain dust and hazardous emissions.

The construction industry standard covers employees engaged in demolition and construction, and the following related activities likely to involve asbestos exposure: removal, encapsulation, alteration, repair, maintenance, insulation, spill emergency cleanup, transportation, disposal and storage of ACM.

Demolition contractors typically require that a building owner/operator accept responsibility for removal of all ACM found during the building inspection prior to start of demolition activities.

LIMITATIONS OF LIABILITY

Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied. All quantities of materials listed herein are estimates for sampling purposes only, and should be verified by Owner representative or an abatement contractor prior to asbestos abatement.

The nature of demolition and asbestos abatement is such that materials can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for materials not previously detected due to lack of accessibility or concealment, although every effort was made during the inspection to detect all suspect materials. If any materials other than those included herein are discovered during renovation or demolition, it must be assumed that the materials are asbestos containing, and should be treated accordingly until further testing and analysis is performed.

The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes that site conditions or accessibility may vary, from those encountered at the time of our inspection and sample collection. Varying conditions or access could result in additional information that would lead us to revise conclusions and recommendations. Leon Environmental Services will not be responsible for the interpretation or use by others of information contained within this report.

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2024.03.04 11:14:47 -08'00'

Christopher Cabral
Certified Asbestos Consultant
Certification No. 22-7151

DATE:

<u>Sampling Site</u>: South Annex Jail, 2280 Fresno St, Fresno, CA B50-24

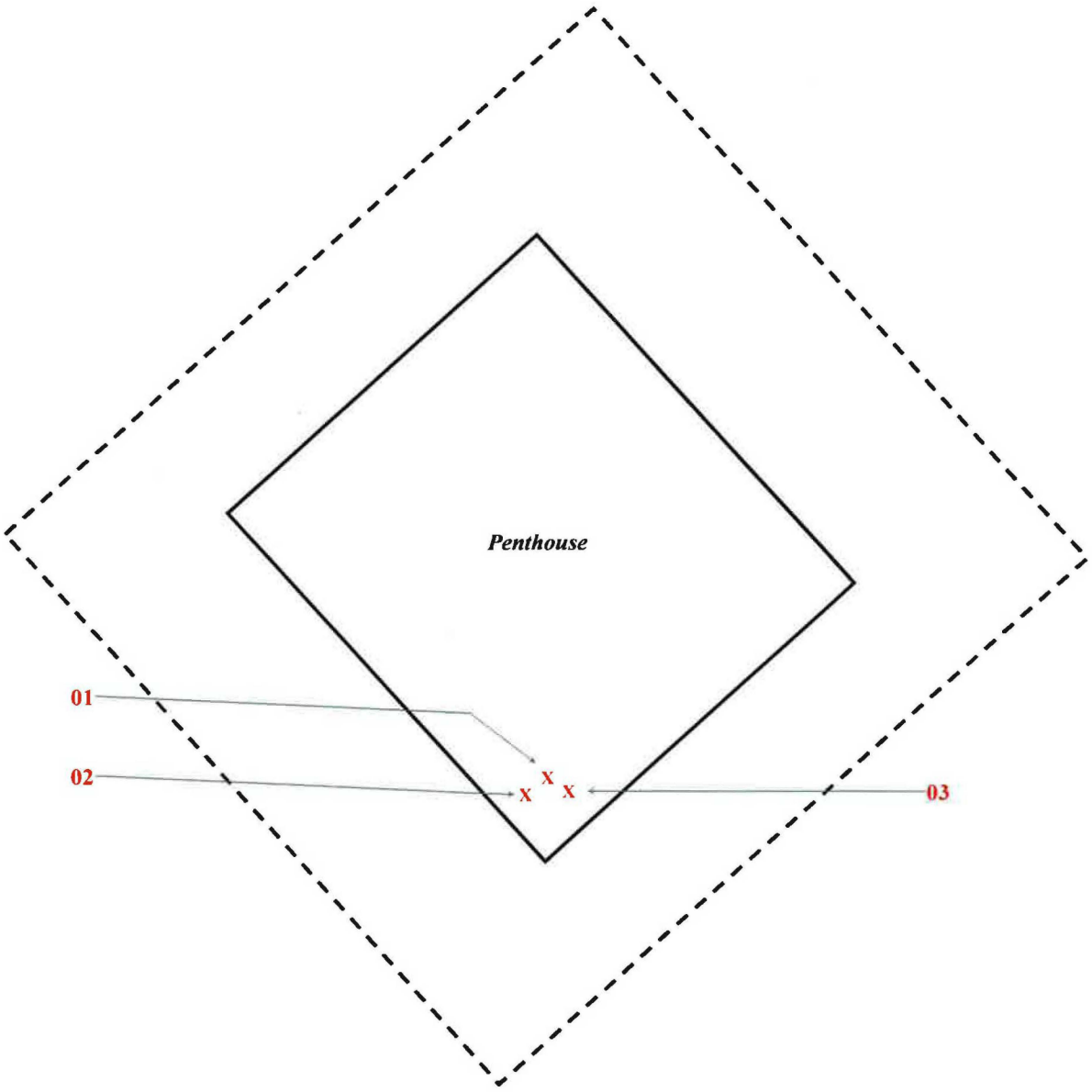
*Abbreviation Key:

Asbestos Containing Material — ACM (equal to or greater than 0.1% by weight)
Vinyl Asbestos Tile – VAT
No Asbestos Detected--N.A.D or N.D.
Homogeneous—H
Not Sampled--NS

Leon Environmental Services

Richard "Danny" Leon CAC Certification No. 04-3708
Tommy Leon CAC Certification No. 05-3882

Job B50-24 / Sample Location Diagram
South Annex Jail / 2280 Fresno St, Fresno, CA
Mike Bowman / Fresno County, Maintenance Services Dept.
Drawing not to Scale



Y = Exterior Samples
X = Interior Samples
R = Roof Samples

N

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@leonenviro.com

McCall and Spero
Environmental, Inc.
Specialists in Microanalysis

1831 Williamson Court • Suite 100 • Louisville, KY 40223
Phone (502) 244-7135 • FAX (502) 244-7136
E-mail: customerservice@mselabs.com • Website: www.mselabs.com

Date: February 29, 2024

Attention: Tommy Leon
Leon Environmental Services

Subject: Analysis of bulk samples for asbestos mineral fibers by Polarized Light Microscopy (PLM) with Dispersion Staining (EPA/600/R-93/116)

RE: MSE-P2294LEO.2
Mike Bowman, Fresno County, Maintenance Services Dept. - South Annex Jail: 2280 Fresno St; Fresno, CA Project
LEO# B50-24

Dear Mr. Leon:

McCall & Spero Environmental, Inc. has completed the analysis of the bulk samples we received from your offices on February 29, 2024. These samples represent the bulk samples from the Mike Bowman, Fresno County, Maintenance Services Dept. - South Annex Jail: 2280 Fresno St; Fresno, CA Project.

The PLM bulk analysis was performed according to the "Method of the Determination of Asbestos in Bulk Building Materials", R. L. Perkins and B. W. Harvey (EPA/600/R-93/116).

The results for the six (6) samples are summarized in the following report. Please note that for samples consisting of two or more distinct components, each component is analyzed and reported individually (EPA 40 CFR Part 61 [FRL-4821-71]).

Thank you for consulting McCall & Spero Environmental, Inc. Should you have any questions concerning these results, please contact our office.

Sincerely,

Kevin R. Bean, B.A.
PLM Laboratory Director

NVLAP®
TESTING
NVLAP LAB CODE 101895-0

SUMMARY OF PLM BULK ANALYSIS RESULTS

Project Name: Mike Bowman, Fresno County, Maintenance Services Dept. - South Annex Jail: 2280 Fresno St; Fresno, CA Project
McCall & Spero Environmental Project No. MSE-P2294LEO.2

MSE # P2294LEO.2	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
001 (A)	01 (A) Canvas	ND	Cellulose / 10% Synthetics / 10%	80%	Tan
001 (B)	01 (B) Styrofoam	ND	Synthetics / 80%	20%	White
002 (A)	02 (A) Canvas	ND	Cellulose / 10% Synthetics / 10%	80%	Tan
002 (B)	02 (B) Styrofoam	ND	Synthetics / 80%	20%	White
003 (A)	03 (A) Canvas	ND	Cellulose / 10% Synthetics / 10%	80%	Tan
003 (B)	03 (B) Styrofoam	ND	Synthetics / 80%	20%	White

NOTES:

ND = None Detected CH = Chrysotile A = Amosite AC = Actinolite
CR = Crocidolite AN = Anthophyllite TR = Tremolite

For samples consisting of separate components, each component is analyzed and reported separately.

Results apply only to items tested. Quantification is accurate to within ± 10%. Results from this report must not be reproduced, except in full, with the approval of McCall & Spero Environmental, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

** EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by polarized light microscopy that fall into one of five dominantly nonfriable categories be reanalyzed by an additional method, such as transmission electron microscopy. (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/ R-93/ 116).

Analyst: Taylor B. Stone Taylor Stone

McCall & Spero Environmental, Inc.

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: (559) 274-9200 Fax: (559) 274-9240 Email: Leonenviro@comcast.net

Customer: Mike Bowman **Company:** Fresno County, Maintenance Services Dept

Date: February 27, 2024 **Job No:** B50-24

Analysis: PLM **Turn Around:** RUSH (Same Day) Next Day 2-3 Days 4-5 Days

Inspection Site: South Annex Jail, 2280 Fresno St, Fresno, CA

Sample No.	Location	Material		Quantity
		Color	Type	
01	Penthouse, Pipe Elbow		Canvas	
	Penthouse, Pipe Elbow		Styrofoam	
02	Penthouse, Pipe Elbow		Canvas	
	Penthouse, Pipe Elbow		Styrofoam	
03	Penthouse, Pipe Elbow		Canvas	
	Penthouse, Pipe Elbow		Styrofoam	

Relinquished By: [signature] **Date:** 2-27-24 **Received By:** Taylor Stone **Date:** 2/29/24

Leon Environmental Services

Richard "Danny" Leon CAC # 04-3708
Tommy Leon CAC # 05-3882

March 15, 2024

Mike Bowman
Fresno County, Facilities Services Dept.
4590 E. Kings Canyon Rd.
Fresno, CA 93702

Re: Asbestos Bulk Samples
South Annex Jail, Roof
228 Fresno St.
Fresno, CA
Job No. B56-24

Dear Mike:

Attached are the asbestos sampling results for the above referenced building. This report includes conclusions, recommendations and bulk analysis results. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2024.03.15 16:32:58 -07'00'

Christopher Cabral
Certified Asbestos Consultant
Certification No. 22-7151

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@leonenviro.com

Sampling Site: South Annex Jail, 228 Fresno St, Fresno, CA B56-24

ASBESTOS ANALYSIS RESULTS

A total of 4 samples of suspect materials were collected by a state certified asbestos inspector from the FNG stairwell roof and the connecting walkway of the **South Annex Jail** at **228 Fresno St, Fresno, CA**. The sample collection areas were determined by the information given to the inspector by **Mike Bowman of the Maintenance Services Department of the County of Fresno** about the impending remodel/renovation that is planned for this building. McCall and Spero Environmental, Inc., a NVLAP accredited laboratory performed a total of **4** analyses from the **4** samples collected. The chain of custody from Leon Environmental Services and the report from McCall and Spero contain a full list of all samples taken from this site.

Samples Positive for Asbestos

Sample	Location	Material	% Of ACM	Friable
01	FNG Stairwell Roof	Roof Core	10%	No
02	FNG Stairwell Roof	Roof Mastic	5%	No
03	FNG Stairwell Roof Walkway	Roof Core	10%	No
04	FNG Stairwell Roof Walkway	Roof Mastic	5%	No

* Determined after composite sampling with associated sheetrock
NS – Not Sampled

COMMENTS AND RECOMMENDATIONS

Non-Friable Asbestos

The Roofing Felts (samples 01, 03) located on the FNG stairwell roof and walkway is positive for asbestos at 10%.
The Roof Mastic (samples 02, 04) located on the FNG stairwell roof and walkway is positive for asbestos at 5%.

These materials are considered a ***non-hazardous non-friable ACM***. It is required that a licensed asbestos abatement contractor remove these materials prior to renovation and or demolition of this structure.

CONCLUSIONS AND REGULATIONS

Based on our survey, sampling and subsequent laboratory analysis and regulatory guidelines affecting this site, the types of ACM identified on this page require removal (in most cases) prior to demolition and/or renovation procedures to comply with local, state and federal agencies. The US EPA NESHAP (40 CFR Part 61 – November 20, 1990) requires materials containing greater than one percent asbestos be removed prior to renovation or demolition. If those materials are friable or likely to become friable due to

the forces expected to act upon them during renovation or demolition, they become a regulated asbestos containing material (RACM) and require a 10-day notification to the local Air Pollution Control District prior to abatement.

Non-friable and non-regulated ACM, in most cases, may be disposed of as a Non-Hazardous waste in a landfill that accepts Asbestos Containing Materials. All friable waste containing more than 1% asbestos (RACM) must be manifested as hazardous waste for disposal purposes.

CAL OSHA--------Construction Industry--------8CCR, 1529

Cal/OSHA worker health and safety regulations apply during any disturbance of ACM by a person while in the employ of another. This is true regardless of friability or quantity disturbed. If there is greater than 100 square feet of ACM which will be affected by the demolition, a California Licensed Contractor who is registered with Cal/OSHA for asbestos is required. The regulations regarding asbestos are found in Title 8 CCR Section 1529, and also include formal notification requirements to Cal/OSHA at least 24 hours prior to removal. It is required that removal be conducted with the material kept in a wetted state to contain dust and hazardous emissions.

The construction industry standard covers employees engaged in demolition and construction, and the following related activities likely to involve asbestos exposure: removal, encapsulation, alteration, repair, maintenance, insulation, spill emergency cleanup, transportation, disposal and storage of ACM.

Demolition contractors typically require that a building owner/operator accept responsibility for removal of all ACM found during the building inspection prior to start of demolition activities.

LIMITATIONS OF LIABILITY

Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied. All quantities of materials listed herein are estimates for sampling purposes only, and should be verified by Owner representative or an abatement contractor prior to asbestos abatement.

The nature of demolition and asbestos abatement is such that materials can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for materials not previously detected due to lack of accessibility or concealment, although every effort was made during the inspection to detect all suspect materials. If any materials other than those included herein are discovered during renovation or demolition, it must be assumed that the materials are asbestos containing, and should be treated accordingly until further testing and analysis is performed.

The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes

that site conditions or accessibility may vary, from those encountered at the time of our inspection and sample collection. Varying conditions or access could result in additional information that would lead us to revise conclusions and recommendations. Leon Environmental Services will not be responsible for the interpretation or use by others of information contained within this report.

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2024.03.15 16:33:16 -07'00'

Christopher Cabral — Date
Certified Asbestos Consultant
Certification No. 22-7151

*Abbreviation Key:

Asbestos Containing Material — ACM (equal to or greater than 0.1% by weight)
Vinyl Asbestos Tile – VAT
No Asbestos Detected--N.A.D or N.D.
Homogeneous—H
Not Sampled--NS

SUMMARY OF PLM BULK ANALYSIS RESULTS

Project Name: Mike Bowman, Fresno County, Maintenance Services Dept. - South Annex Jail: 2280 Fresno St: Fresno, CA Project
McCall & Spero Environmental Project No. MSE-P3134LEO.1

MSE # P3134LEO.1	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
001	01 Roof Core	CH / 10%	Cellulose / 20%	70%	Black
002	02 Roof Mastic	CH / 5%	Cellulose / 5%	90%	Black
003	03 Roof Core	CH / 10%	Cellulose / 20%	70%	Black
004	04 Roof Mastic	CH / 5%	Cellulose / 5%	90%	Black

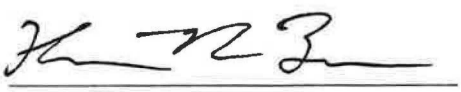
NOTES:

ND = None Detected CH = Chrysotile A = Amosite AC = Actinolite
CR = Crocidolite AN = Anthophyllite TR = Tremolite

For samples consisting of separate components, each component is analyzed and reported separately.

Results apply only to items tested. Quantification is accurate to within ± 10%. Results from this report must not be reproduced, except in full, with the approval of McCall & Spero Environmental, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

** EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by polarized light microscopy that fall into one of five dominantly nonfriable categories be reanalyzed by an additional method, such as transmission electron microscopy. (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/ R-93/ 116).

Analyst: Kevin R. Bean, B.A. 

McCall & Spero Environmental, Inc.

Leon Environmental Services

4545 N. Brawley Ave., Suite 104. Fresno, CA 93722 Phone: (559) 274-9200 Fax: (559) 274-9240 Email: Leonenviro@comcast.net

Customer: Mike Bowman **Company:** Fresno County, Maintenance Services Dept

Date: March 12, 2024 **Job No:** B56-24

Analysis: PLM **Turn Around:** RUSH Same Day Next Day (2-3 Days) 4-5 Days

Inspection Site: South Annex Jail, 2280 Fresno St, Fresno, CA

Sample No.	Location	Material		Quantity
		Color	Type	
01	FNG Stairwell Roof		Roof Core	
02	FNG Stairwell Roof		Roof Mastic	
03	FNG Stairwell Roof Walkway		Roof Core	
04	FNG Stairwell Roof Walkway		Roof Mastic	

Relinquished By: Date: 3-12-24 Received By: Date: 3/13/24

Leon Environmental Services

Tommy Leon CAC # 05-3882

November 21, 2024

Mike Bowman
Fresno County, Maintenance Services Dept.
4590 E. Kings Canyon Rd.
Fresno, CA 93702

Re: Asbestos Bulk Samples
South Annex Jail, 4th Floor
2280 Fresno St.
Fresno, CA
Job No. B234-24

Dear Mike:

Attached are the asbestos sampling results for the above referenced building. This report includes conclusions, recommendations and bulk analysis results. If you have any questions or need additional information, please do not hesitate to call.

Thank you for using Leon Environmental Services. We look forward to working with you in the future.

Respectfully,

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2024.11.21 17:14:36 -08'00'

Christopher Cabral
Certified Asbestos Consultant
Certification No. 22-7151

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@leonenviro.com

Sampling Site: South Annex Jail, 4th Floor, 2280 Fresno St.
Fresno, CA
B234-24

ASBESTOS ANALYSIS RESULTS

A total of 3 samples of suspect materials were collected by a state certified asbestos inspector from the 4th floor of the **South Annex Jail** at **2280 Fresno St., Fresno, CA**. The sample collection areas were determined by the information given to the inspector by **Mike Bowman of the County of Fresno** about the impending remodel/renovation that is planned for this building. McCall and Spero Environmental, Inc., a NVLAP accredited laboratory performed a total of **3** analyses from the **3** samples collected. The chain of custody from Leon Environmental Services and the report from McCall and Spero contains a full list of all samples taken from this site.

Samples Negative for Asbestos

Sample	Location	Material	% Of ACM	Friable
01, 02, 03	Pipe Chase near E Pod Upper Ceiling	Fireproofing	ND	

COMMENTS AND RECOMMENDATIONS

All samples of suspect materials from the selected areas of this site were negative for asbestos.

CONCLUSIONS AND REGULATIONS

Based on our survey, sampling and subsequent laboratory analysis and regulatory guidelines affecting this site, the types of ACM identified on this page require removal (in most cases) prior to demolition and/or renovation procedures to comply with local, state and federal agencies. The US EPA NESHAP (40 CFR Part 61 – November 20, 1990) requires materials containing greater than one percent asbestos be removed prior to renovation or demolition. If those materials are friable or likely to become friable due to the forces expected to act upon them during renovation or demolition, they become a regulated asbestos containing material (RACM) and require a 10-day notification to the local Air Pollution Control District prior to abatement.

Non-friable and non-regulated ACM, in most cases, may be disposed of as a Non-Hazardous waste in a landfill that accepts Asbestos Containing Materials. All friable waste containing more than 1% asbestos (RACM) must be manifested as hazardous waste for disposal purposes.

CAL OSHA--------Construction Industry--------8CCR, 1529

Cal/OSHA worker health and safety regulations apply during any disturbance of ACM by a person while in the employ of another. This is true regardless of friability or quantity disturbed. If there is greater than 100 square feet of ACM which will be affected by the

demolition, a California Licensed Contractor who is registered with Cal/OSHA for asbestos is required. The regulations regarding asbestos are found in Title 8 CCR Section 1529, and also include formal notification requirements to Cal/OSHA at least 24 hours prior to removal. It is required that removal be conducted with the material kept in a wetted state to contain dust and hazardous emissions.

The construction industry standard covers employees engaged in demolition and construction, and the following related activities likely to involve asbestos exposure: removal, encapsulation, alteration, repair, maintenance, insulation, spill emergency cleanup, transportation, disposal and storage of ACM.

Demolition contractors typically require that a building owner/operator accept responsibility for removal of all ACM found during the building inspection prior to start of demolition activities.

LIMITATIONS OF LIABILITY

Conclusions and recommendations presented in this report are qualitative judgments based on the prevailing regulations and accepted industry standards at the time of the report issuance. Leon Environmental Services provides no other guarantees, either expressed or implied. All quantities of materials listed herein are estimates for sampling purposes only, and should be verified by Owner representative or an abatement contractor prior to asbestos abatement.

The nature of demolition and asbestos abatement is such that materials can be uncovered which previously were unknown to exist. Therefore, Leon Environmental Services cannot be responsible for materials not previously detected due to lack of accessibility or concealment, although every effort was made during the inspection to detect all suspect materials. If any materials other than those included herein are discovered during renovation or demolition, it must be assumed that the materials are asbestos containing, and should be treated accordingly until further testing and analysis is performed.

The data interpretations and recommendations are based solely on information available to Leon Environmental Services at the time of our inspection. The customer recognizes that site conditions or accessibility may vary, from those encountered at the time of our inspection and sample collection. Varying conditions or access could result in additional information that would lead us to revise conclusions and recommendations. Leon Environmental Services will not be responsible for the interpretation or use by others of information contained within this report.

Christopher Cabral Digitally signed by Christopher Cabral
Date: 2024.11.21 17:15:01 -08'00'

Christopher Cabral — Date
Certified Asbestos Consultant
Certification No. 22-7151

<u>Sampling Site</u>: South Annex Jail, 4th Floor, 2280 Fresno St.
Fresno, CA
B234-24

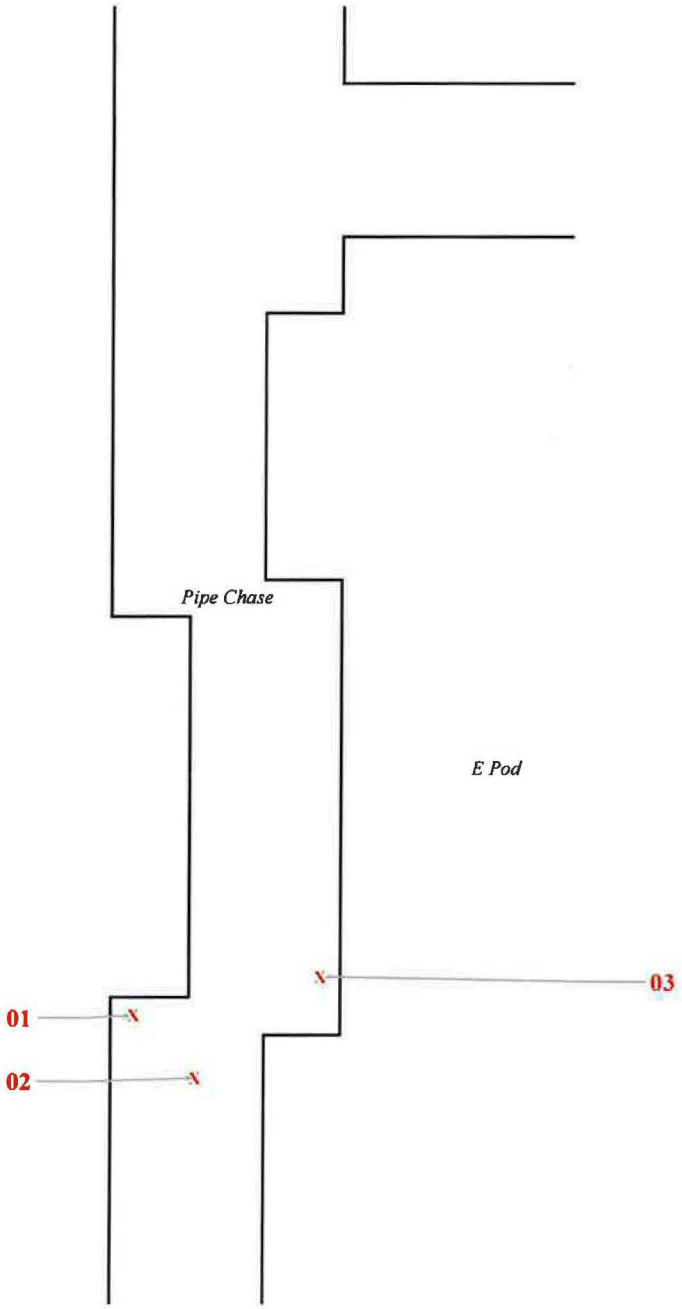
*Abbreviation Key:

Asbestos Containing Material — ACM (equal to or greater than 0.1% by weight)
Vinyl Asbestos Tile – VAT
No Asbestos Detected–N.A.D or N.D.
Homogeneous—H
Not Sampled–NS

Leon Environmental Services

Richard "Danny" Leon CAC Certification No. 04-3708
Tommy Leon CAC Certification No. 05-3882

Job B234-24 Sample Location Diagram
South Annex Jail, 4th Floor / 2280 Fresno St, Fresno, CA
Mike Bowman / Fresno County, Maintenance Services Dept.
Drawing Not to Scale



X = Interior Samples
Y = Exterior Samples
R = Roof Samples

N

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722
Phone: 559.274.9200 Fax: 559.274.9240 Email: LeonEnviro@comcast.net

McCall and Spero Environmental, Inc.
Specialists in Microanalysis

1831 Williamson Court • Suite 100 • Louisville, KY 40223
Phone (502) 244-7135 • FAX (502) 244-7136
E-mail: customerservice@mselabs.com • Website: www.mselabs.com

Date: November 21, 2024

Attention: Tommy Leon
Leon Environmental Services

Subject: Analysis of bulk samples for asbestos mineral fibers by Polarized Light Microscopy (PLM) with Dispersion Staining (EPA/600/R-93/116)

RE: MSE-PN214LEO
Mike Bowman, Fresno County, Maintenance Services Dept. - South Annex Jail: 2280 Fresno St; Fresno, CA Project
LEO# B234-24

Dear Mr. Leon:

McCall & Spero Environmental, Inc. has completed the analysis of the bulk samples we received from your offices on November 21, 2024. These samples represent the bulk samples from the Mike Bowman, Fresno County, Maintenance Services Dept. - South Annex Jail: 2280 Fresno St; Fresno, CA Project.

The PLM bulk analysis was performed according to the "Method of the Determination of Asbestos in Bulk Building Materials", R. L. Perkins and B. W. Harvey (EPA/600/R-93/116).

The results for the three (3) samples are summarized in the following report. Please note that for samples consisting of two or more distinct components, each component is analyzed and reported individually (EPA 40 CFR Part 61 [FRL-4821-71]).

Thank you for consulting McCall & Spero Environmental, Inc. Should you have any questions concerning these results, please contact our office.

Sincerely,

Taylor Stone

Taylor B. Stone
Senior Analyst

NVLAP®
TESTING
NVLAP LAB CODE 101895-0

SUMMARY OF PLM BULK ANALYSIS RESULTS

Project Name: Mike Bowman, Fresno County, Maintenance Services Dept. - South Annex Jail: 2280 Fresno St; Fresno, CA Project
McCall & Spero Environmental Project No. MSE-PN214LEO

MSE # PN214LEO	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
001	01 Fireproofing	ND	Glass / 80%	20%	Gray
002	02 Fireproofing	ND	Glass / 80%	20%	Gray
003	03 Fireproofing	ND	Glass / 80%	20%	Gray

NOTES:

ND = None Detected CH = Chrysotile A = Amosite AC = Actinolite
CR = Crocidolite AN = Anthophyllite TR = Tremolite

For samples consisting of separate components, each component is analyzed and reported separately.

Results apply only to items tested. Quantification is accurate to within ± 10%. Results from this report must not be reproduced, except in full, with the approval of McCall & Spero Environmental, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

** EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by polarized light microscopy that fall into one of five dominantly nonfriable categories be reanalyzed by an additional method, such as transmission electron microscopy. (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/ R-93/ 116).

Analyst: Taylor B. Stone Taylor Stone

McCall & Spero Environmental, Inc.

Leon Environmental Services

4545 N. Brawley Ave., Suite 104, Fresno, CA 93722 Phone: (559) 274-9200 Fax: (559) 274-9240 Email: Leonenviro@comcast.net

Customer: Mike Bowman **Company:** Fresno County, Maintenance Services Dept

Date: November 20, 2024 **Job No:** B234-24

Analysis: PLM **Turn Around:** (RUSH) Same Day Next Day 2-3 Days 4-5 Days

Inspection Site: South Annex Jail, 2280 Fresno St, Fresno, CA

Sample No.	Location	Material		Quantity
		Color	Type	
01	Pipe Chase near E Pod, Upper Ceiling		Fireproofing	
02	Pipe Chase near E Pod, Upper Ceiling		Fireproofing	
03	Pipe Chase near E Pod, Upper Ceiling		Fireproofing	

Relinquished By: [signature] Date: 11-20-24

Received By: Taylor Stone Date: 11/21/24

Sheriff's Administration Building 04-23-2026

Homogenous Area	Quanitiy (SF)	Location	Total Samples
1X1 - ceiling tile (textured mixed with fissures)	15,000	basement, 1st and 2nd floor	7
adhesive (pucks)	15,000	basement, 1st and 2nd floor	7
2X2 - ceiling panel (faux squares)	2,000	basement, 1st and 2nd floor	5
2X4 - ceiling panel (faux center)	400	basement - server room	3
2X4 - ceiling panel (dots/fissures)	8,000	basement, 1st and 2nd floor	7
2X4 - ceiling panel (dots/texture)	500	2nd Floor - chief/sheriff	3
plaster wall system	30,000	basement, 1st and 2nd floor	7
gypsum board	6,000	basement, 1st and 2nd floor	7
joint compound	6,000	basement, 1st and 2nd floor	7
FRP	150	basement, 1st and 2nd floor - janitors	3
adhesive	150	basement, 1st and 2nd floor - janitors	3
6" covebase (grey-green)	800	basement, 1st and 2nd floor	3
adhesive	800	basement, 1st and 2nd floor	3
6" covebase (tan)	50	basement	3
adhesive	50	basement	3
6" covebase (white)	10	2nd Floor - chief/sheriff	3
ahdhesive	10	2nd Floor - chief/sheriff	3
Terrazzo Flooring	9,000	basement, 1st and 2nd floor	7
gray carpet	6,000	basement, 1st and 2nd floor	7
adhesive	6,000	basement, 1st and 2nd floor	7
brown carpet	200	basement - chaplain	3
adhesive	200	basement - chaplain	3
blue carpet	200	basement - evidence lab	3
adhesive	200	basement - evidence lab	3
tan carpet (lines)	500	2nd Floor - chief/sheriff	3
ahesive	500	2nd Floor - chief/sheriff	3
12X12 VFT (tan with fleck)	25	2nd Floor - chief/sheriff	3
adhesive	25	2nd Floor - chief/sheriff	3
12X12 VFT (blue-green with fleck)	9,000	basement, 1st and 2nd floor	7
adhesive	9,000	basement, 1st and 2nd floor	7
12X12 VFT (gray with fleck)	9,000	basement, 1st and 2nd floor	7
adhesive	9,000	basement, 1st and 2nd floor	7
24X24 carpet tiles (gray -shaded)	6,000	basement, 1st and 2nd floor	7
adhesive	6,000	basement, 1st and 2nd floor	7
24X24 carpet tiles (gray-muliti-color)	6,000	basement, 1st and 2nd floor	7
adhesive	6,000	basement, 1st and 2nd floor	7
24X24 carpet tiles (gray- lines)	6,000	basement, 1st and 2nd floor	7
adhesive	6,000	basement, 1st and 2nd floor	7
24X24 carpet tiles (tan)	6,000	basement, 1st and 2nd floor	7
adhesive	6,000	basement, 1st and 2nd floor	7
9X9 VFT (stone pattern)	6,000	basement, 1st and 2nd floor	7
adhesive	6,000	basement, 1st and 2nd floor	7
VFS (pebble pattern	500	basement - technical resources	3
adhesive	500	basement - technical resources	3
sink undercoat (grey)	4	1st Floor - break room	3
black counter top	200	basement - evidence lab	3
mirror mastic	200	basement, 1st and 2nd floor	3
wall insulation	2,000	basement - maintenance room	5
8" pipe TSI	100	basement - maintenance room	3
8" pipe elbows	10	basement - maintenance room	3
4" pipe TSI	100	basement - maintenance room	3
4" pipe elbows	10	basement - maintenance room	3
2" pipe TSI	100	basement - maintenance room	3
2" pipe elbows	10	basement - maintenance room	3
4" pipe gaskets	40	basement - maintenance room	3
HVAC gaskets	20	basement - maintenance room	3
HVAC insulation	100	basement - maintenance room	3
fireproofing (white)	45,000	basement, 1st and 2nd floor	7
roof system	18,000	roof	7
roof tread system	100	roof	3
penetration sealant	40	roof	3
concrete slabs, retaining walls, sidewalks	20,000	exterior	7
concrete tilt-up walls (rock)	15,000	exterior	7
expansion joint sealant	50	exterior	3
		Total Samples	**304**

Sheriff's Administration Building 04-23-2026

Fair/Poor Condition Paint	Quanitiy (SF)	Location	Total Samples
metal door trim (green)	10	basement	1
metal door trim (white)	10	basement	1
elevator reservoir room floor (red)	50	basement	1
canvas pipe insulation (tan)	100	maintenance room	1
exterior trim (green)	500	roof	1
exterior walls/retaining walls (tan)	12,500	exterior walls	1
		Total Samples	**6**

APPENDIX B

Tables 1-2 – Summary of Analytical Results

Table 1
Summary of Asbestos Results
Proposed New Fresno Courthouse
Fresno, California

Building Area	Sample No.	Homogeneous Area	Location of Material	Asbestos Content	Condition	Quantity Estimate	DOSH Definition	EPA Category
Roof	01A	Tar Paper, Black; Petromat, Black	Roof, Interior Parapet Wall	30-45% Chrysotile (Tar Paper, Black); 35-45% Chrysotile (Petromat, Black)	Significantly Damaged	2,000 SF	ACM	CAT I
	01B							
	01C							
	01D							
	01E							
Roof	02A	Clay (Pipe), Orange	Roof	ND	Damaged	200 SF	NA	NA
	02B							
	02C							
Roof	03A	Sealant, Light Gray	Roof	60-65% Chrysotile	Damaged	200 SF	ACM	CAT II
	03B							
	03C							
Roof	04A	Roof Tread, Black	Roof	ND	Good	100 SF	NA	NA
	04B							
	04C							
Roof	05A	Sealant, White/Yellow	Roof Penetrations	5% Chrysotile	Good	100 SF	ACM	CAT II
	05B							
	05C							
Throughout	06A	Plaster, White/Gray; Skim Coat, White	Interior Walls	ND	Damaged	60,000 SF	NA	NA
	06B							
	06C							
	06D							
	06E							
	06F							
	06G							
Throughout	07A	Thermal System Insulation (TSI), Gray, Pipe Elbow; Pipe Elbow Wrap, White/Tan	Throughout	ND	Significantly Damaged	50 SF	NA	NA
	07B							
	07C							
Throughout	08A	TSI, White/Yellow, 4" and 8" Pipe Insulation; Pipe Wrap, Tan/White/Silver	Throughout	ND	Damaged	500 SF	NA	NA
	08B							
	08C							
Roof Penthouse	09A	Foam Adhesive, Black	Roof Penthouse, Attached to Boiler	ND	Good	20 SF	NA	NA
	09B							
	09C							
Roof	10A	Roof Tread/Adhesive, Black	Roof, Near Basketball Court	ND	Significantly Damaged	150 SF	NA	NA
	10B							
	10C							
Roof	11A	Sealant, Gray	Roof, Near Basketball Court	10-15% Chrysotile	Good	20 SF	ACM	CAT II
	11B							
	11C							
Exterior	12A*	Stucco, Gray/Yellow	Exterior Wall System, Throughout	<0.1% Chrysotile	Good	50,000 SF	NA	NA
	12B							
	12C							
	12D							
	12E							
	12F							
	12G							
Throughout	13A	Ceiling Tile, White, 12" x 12"; Adhesive, Yellow/Brown	Ceilings, Throughout	2-3% Chrysotile (Adhesive, Brown)	Significantly Damaged	25,000 SF	ACM	CAT II
	13B							
	13C							
	13D							
	13E							
	13F							
	13G							
4th Floor	14A	Concrete Curb, Blue	Wall Base	ND	Damaged	50 SF	NA	NA
	14B							
	14C							
4th Floor	15A	Vinyl Floor Tile (VFT), Gray, Associated with HA #16	4th Floor	ND	Damaged	400 SF	NA	NA
	15B							
	15C							
4th Floor	16A	Adhesive, Brown, Associated with HA #15	4th Floor	ND	Good	400 SF	NA	NA
	16B							
	16C							
4th Floor	17A	VFT, Blue/Gray, Associated with HA #18	4th Floor Control Room, Offices	ND	Damaged	400 SF	NA	NA
	17B							
	17C							
4th Floor	18A	Adhesive, Dark Brown, Associated with HA #17	4th Floor Control Room, Offices	ND	Damaged	400 SF	NA	NA
	18B							
	18C							
Throughout	19A	Leveling Compound, White, Associated with 12" x 12" VFT	Throughout	ND	Damaged	400 SF	NA	NA
	19B							
	19C							

Table 1
Summary of Asbestos Results
Proposed New Fresno Courthouse
Fresno, California

Building Area	Sample No.	Homogeneous Area	Location of Material	Asbestos Content	Condition	Quantity Estimate	DOSH Definition	EPA Category
Throughout	20A	Cove Base, Black, 6", Associated with HA #21	Throughout	ND	Good	200 SF	NA	NA
	20B							
	20C							
Throughout	21A	Adhesive, White, Associated with HA #20	Throughout	ND	Good	200 SF	NA	NA
	21B							
	21C							
3rd Floor	22A	Carpet, Gray; Adhesive, Gray/Clear	Light Blue Cells Area	ND	Good	300 SF	NA	NA
	22B							
	22C							
3rd Floor	23A	Epoxy, Tan, Under Black Carpet	Throughout	ND	Good	300 SF	NA	NA
	23B							
	23C							
3rd Floor	24A	Vinyl Floor Sheeting (VFS), Gray/Black, Associated with HA #25	Medical Office	ND	Good	100 SF	NA	NA
	24B							
	24C							
3rd Floor	25A	Adhesive, Dark Brown, Associated with HA #24	Medical Office	ND	Good	100 SF	NA	NA
	25B							
	25C							
1st & 3rd Floors	26A	Cove Base, Black, 4", Associated with HA #27	Medical Office	ND	Good	100 SF	NA	NA
	26B							
	26C							
1st & 3rd Floors	27A	Adhesive, Clear, Associated with HA #26	Medical Office	ND	Good	100 SF	NA	NA
	27B							
	27C							
3rd Floor	**28A**	**Ceiling Tile, White, 12" x 12" with Dots; Adhesive, Brown**	**3rd Floor**	**2-5% Amosite (Ceiling Tile)**	**Damaged**	**100 SF**	**ACM**	**RACM**
	28B							
	28C							
1st, 2nd, & 3rd Floors	29A	VFT, White, Associated with HA #30	Throughout	ND	Damaged	200 SF	NA	NA
	29B							
	29C							
1st, 2nd, & 3rd Floors	30A	Adhesive, Black, Associated with HA #29	Throughout	ND	Damaged	200 SF	NA	NA
	30B							
	30C							
Throughout	31A	Ceiling Tile, White, 2' x 4' with Dots and Fissures	Throughout	ND	Damaged	6,000 SF	NA	NA
	31B							
	31C							
	31D							
	31E							
	31F							
	31G							
Throughout	32A	Epoxy, Gray	Showers	ND	Good	300 SF	NA	NA
	32B							
	32C							
1st & 2nd Floors	33A	Cove Base, Gray, Associated with HA #34	Near Library	ND	Good	100 SF	NA	NA
	33B							
	33C							
1st & 2nd Floors	34A	Adhesive, Brown, Associated with HA #33	Near Library	ND	Good	100 SF	NA	NA
	34B							
	34C							
2nd Floor	35A	Plaster, White, Wall Patch	Near Library	ND	Damaged	10 SF	NA	NA
	35B							
	35C							
1st & 2nd Floors	36A	Adhesive, Yellow/Clear; Carpet Tile, Gray/White/Blue, 24" x 24"	Library Offices, Offices	ND	Good	900 SF	NA	NA
	36B							
	36C							
Throughout	**37A**	**Fireproofing, White**	**Ceilings and I-Beams Throughout**	**25-30% Chrysotile**	**Good**	**100,000 SF**	**ACM**	**RACM**
	37B							
	37C							
	37D							
Throughout	38A	Firestop, Red/Pink	Wall Penetrations Throughout	ND	Good	50 SF	NA	NA
	38B							
	38C							
Throughout	39A	Sealant, White, Associated with HVAC Ducting Seams	Throughout	ND	Good	600 SF	NA	NA
	39B							
	39C							
1st & 2nd Floors	40A	VFS, Gray, Pebble Pattern, Associated with HA #41	Medical Exam Rooms	ND	Good	400 SF	NA	NA
	40B							
	40C							
1st & 2nd Floors	41A	Adhesive, Brown, Associated with HA #40	Medical Exam Rooms	ND	Good	400 SF	NA	NA
	41B							
	41C							

Table 1
Summary of Asbestos Results
Proposed New Fresno Courthouse
Fresno, California

Building Area	Sample No.	Homogeneous Area	Location of Material	Asbestos Content	Condition	Quantity Estimate	DOSH Definition	EPA Category
1st & 2nd Floors	42A	Gypsum Board, White, Associated with HA #43	Offices, Exam Rooms	ND	Good	600 SF	NA	NA
	42B							
	42C							
1st & 2nd Floors	43A	Joint Compound, White, Associated with HA #42	Offices, Exam Rooms	ND	Good	600 SF	NA	NA
	43B							
	43C							
1st & 2nd Floors	44A	Carpet, Black/White, 24" x 24" with Line Pattern, Associated with HA #45	Offices, Library	ND	Good	400 SF	NA	NA
	44B							
	44C							
1st & 2nd Floors	45A	Adhesive, Yellow/Clear, Associated with HA #44	Offices, Library	ND	Good	400 SF	NA	NA
	45B							
	45C							
1st & 2nd Floors, Basement	46A	Cove Base, Black, 4", Associated with HA #47	Throughout	ND	Good	400 SF	NA	NA
	46B							
	46C							
1st & 2nd Floors, Basement	47A	Adhesive, White, Associated with HA #46	Throughout	ND	Good	400 SF	NA	NA
	47B							
	47C							
1st Floor	**48A**	**VFT, Gray/Green, 9" x 9", Associated with HA #49, Concealed Under 12" x 12" VFT; VFT, White**	**Lobby, Offices, Closets**	**4-5% Chrysotile (VFT, Gray/Green)**	**Damaged**	**400 SF**	**ACM**	**CAT I**
	48B							
	48C							
1st Floor	**49A**	**Adhesive, Black, Associated with HA #48**	**Lobby, Offices, Closets, Residual in Corridors**	**3-5% Chrysotile**	**Damaged**	**500 SF**	**ACM**	**CAT I**
	49B							
	49C							
1st Floor	50A	TSI, Pink, Duct Insulation; Duct Wrap, Silver/Clear	Throughout	ND	Good	100 SF	NA	NA
	50B							
	50C							
1st, 2nd, & 3rd Floors	51A	Texture, White, Associated with Gypsum Board Walls	Throughout	ND	Good	600 SF	NA	NA
	51B							
	51C							
Throughout	52A	Adhesive, Orange, Associated with FRP; Texture, White	Janitor Closets, Employee Restroom	ND	Good	150 SF	NA	NA
	52B							
	52C							
Basement	53A	Grout, Gray, Associated with HA #54	Laundry Rooms	ND	Good	800 SF	NA	NA
	53B							
	53C							
Basement	54A	Ceramic Tile, Red, 9" x 9", Associated with HA #53	Laundry Rooms	ND	Good	800 SF	NA	NA
	54B							
	54C							
1st Floor, Basement	55A	VFS, Gray, Associated with HA #56	Corridors, Hallways	ND	Damaged	3,000 SF	NA	NA
	55B							
	55C							
	55D							
	55E							
1st Floor, Basement	56A	Adhesive, Brown, Associated with HA #55	Corridors, Hallways	ND	Damaged	3,000 SF	NA	NA
	56B							
	56C							
	56D							
	56E							
Basement	57A	Grout, Gray/White, Associated with 4" x 4" Ceramic Tile (White, Tan)	Hallway, Restrooms	ND	Damaged	500 SF	NA	NA
	57B							
	57C							
2nd Floor	58A	Ceiling Panel, White/Brown, 2' x 4', Gypsum Board Type	Staff Restroom	ND	Good	100 SF	NA	NA
	58B							
	58C							
Throughout	59A	Concrete Masonry Unit (CMU), Gray/Black, 8" x 16", Associated with HA #60	Throughout	ND	Good	800 SF	NA	NA
	59B							
	59C							
Throughout	60A	Mortar, Gray, Associated with HA #59	Throughout	ND	Good	800 SF	NA	NA
	60B							
	60C							
Basement	61A	Thermal Clay Tile, Red, 12" x 12" Wall Tile	Mechanical / Boiler Room Walls	ND	Good	100 SF	NA	NA
	61B							
	61C							
Exterior	62A	Concrete (Rock), Tan/Gray	Exterior Walls and Floors Throughout	ND	Good	50,000 SF	NA	NA
	62B							
	62C							
	62D							
	62E							
	62F							

Table 1
Summary of Asbestos Results
Proposed New Fresno Courthouse
Fresno, California

Building Area	Sample No.	Homogeneous Area	Location of Material	Asbestos Content	Condition	Quantity Estimate	DOSH Definition	EPA Category
	62G							
Exterior	63A	Sealant, Gray, Expansion Joints	Exterior Expansion Joints	ND	Good	200 SF	NA	NA
	63B							
	63C							
Penthouse	64A	Paint, White, 4" Pipe TSI	Penthouse	ND	Damaged	20 SF	NA	NA
4th Floor	65A	Paint, White/Red, Control Panel Door	4th Floor	ND	Damaged	15 SF	NA	NA
Basement	66A	Paint, White, Wall	Laundry	ND	Damaged	500 SF	NA	NA
4th Floor	67A	Paint, Light Blue/Red, Desk	Work Area Desk	ND	Damaged	15 SF	NA	NA
4th Floor	68A	Paint, Powder Blue/Tan, Wall	Work Area	ND	Damaged	50 SF	NA	NA
Basement	69A	Paint, Red, Floor	Elevator Reservoir Room	ND	Damaged	100 SF	NA	NA
2nd Floor	70A	Paint, Green/Blue/Red, Door Frame	Medical Office	ND	Damaged	10 SF	NA	NA
1st Floor	71A	Paint, Gray, Floor	Training Room	ND	Damaged	200 SF	NA	NA

Notes:

ACM = Asbestos-Containing Material

Red BOLD = asbestos was detected in sample at a concentration above laboratory reporting limit

RACM = Regulated Asbestos-Containing Material

CAT I = Category I Non Friable ACM

CAT II = Category II Non Friable ACM

ND = Non Detect

NA = Not Applicable

SF = Square Feet

* Sample Analyzed by 1,000 Point Count Method. At less than 0.1%, the suspect material is not considered ACM in accordance with EPA regulations and is not considered Asbestos-Containing Construction Material (ACCM) in accordance with DOSH regulations. It is important for contractors to recognize that some quantity of asbestos is likely present in the homogeneous area.

APPENDIX C

Sample Location Figures

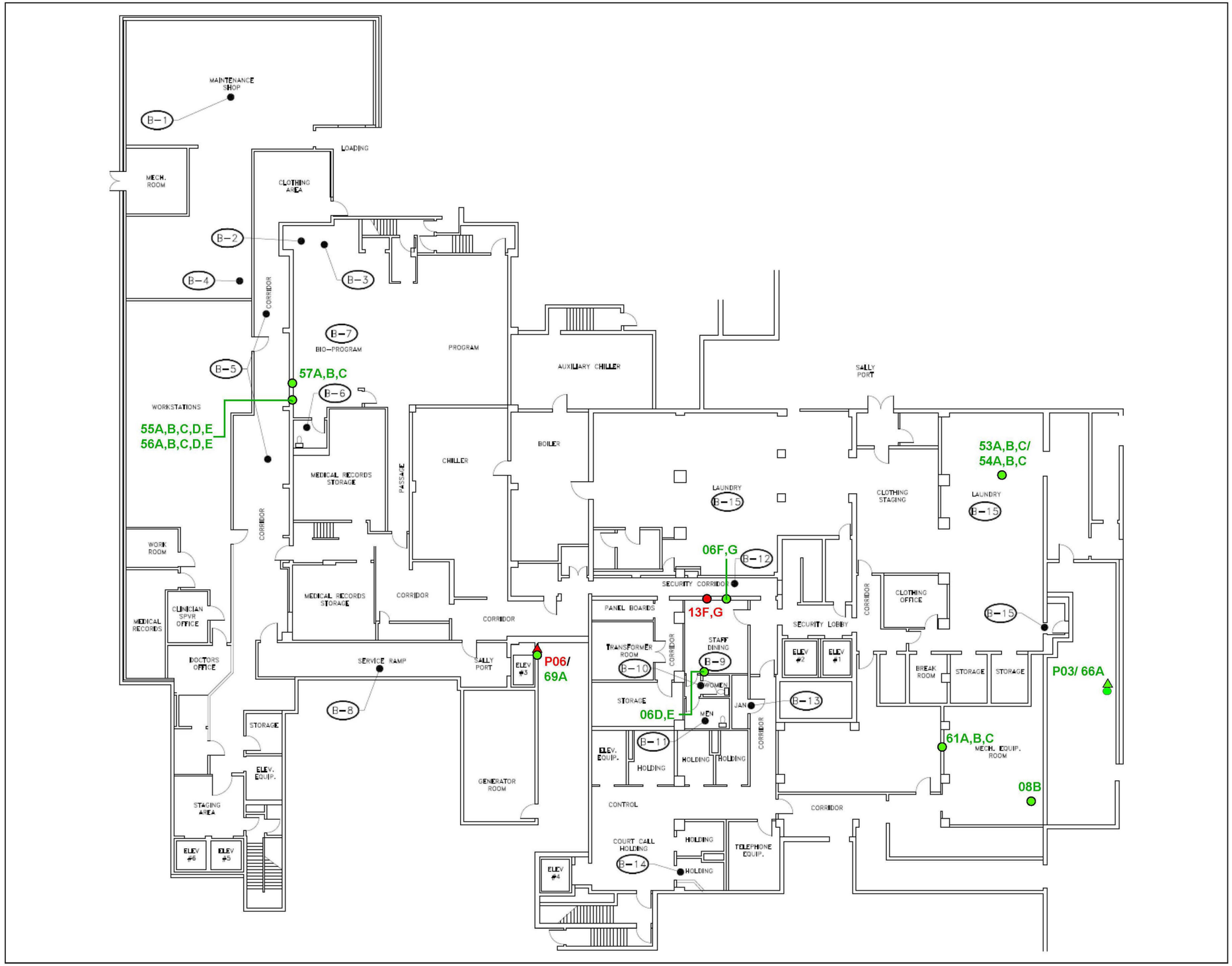


Figure No.

1

Title

Basement - Sample Locations

Client/Project 185806843

New Fresno Courthouse Project
Hazardous Building Materials Survey

Project Location
City of Fresno
Fresno County, California

Prepared by DL on 2026-05-08
TR by SET on 2026-05-08
IR by SR on 2026-05-08

- Asbestos-Containing Material Sample
- Non Asbestos Bulk Sample Location
- Lead-Based Paint Sample
- Non Lead-Based Paint Sample

Notes

1. Data Sources: Stantec 2026.
2. Background: South Annex Jail ADA Transition Plan Report | Lars Anderson & Associates, Inc | Civil Engineers - Land Surveyors - Planners | South Annex Jail - Basement Locations Map | 2014

Stantec

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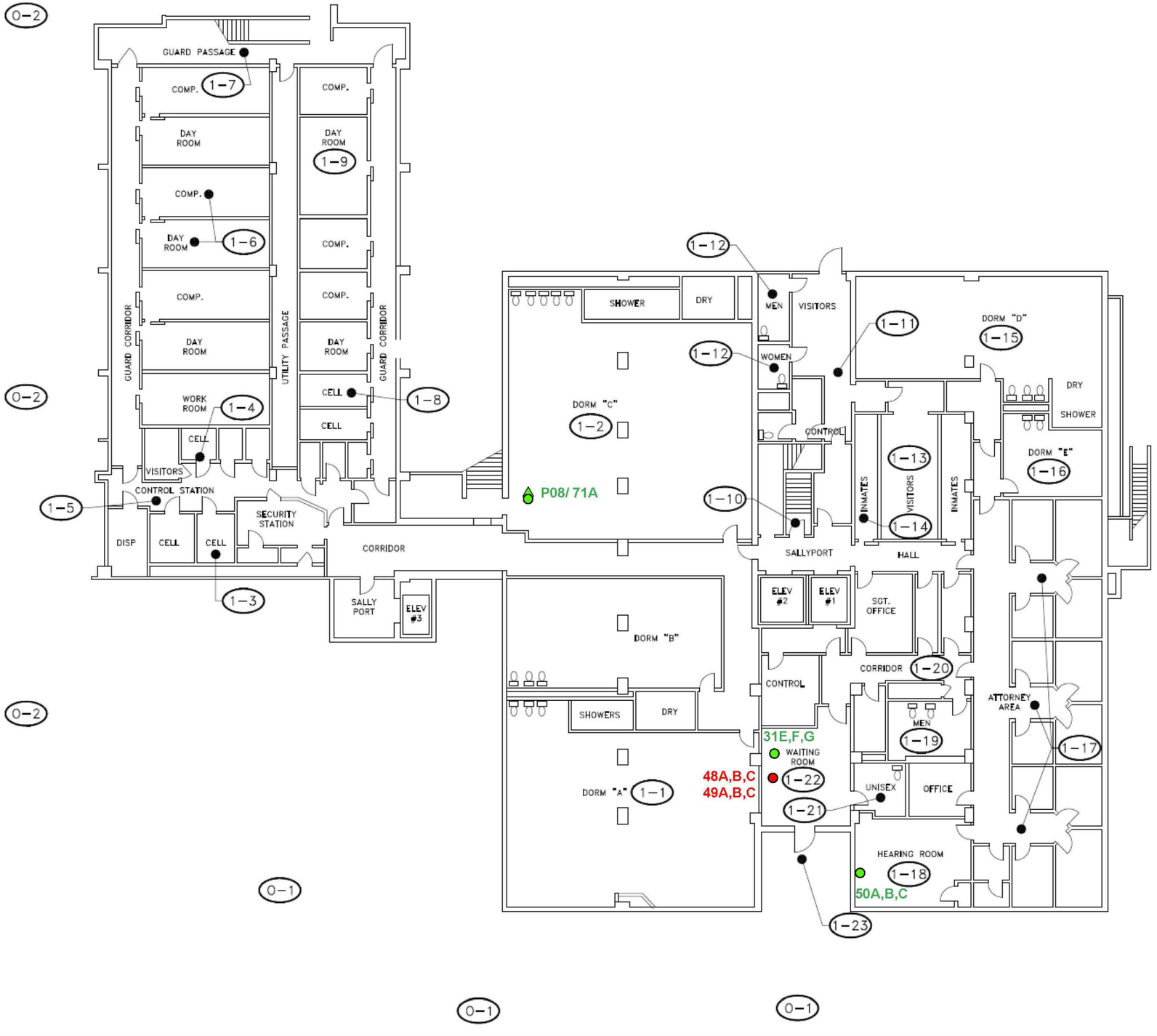


Figure No.

2

Title

First Floor - Sample Locations

Client/Project

185806843

New Fresno Courthouse Project
Hazardous Building Materials Survey

Project Location
City of Fresno
Fresno County, California

Prepared by DL on 2026-05-08
TR by SET on 2026-05-08
IR by SR on 2026-05-08

- Asbestos-Containing Material Sample
- Non Asbestos Bulk Sample Location
- Non Lead-Based Paint Sample

Notes

1. Data Sources: Stantec 2026.
2. Background: South Annex Jail ADA Transition Plan Report | Lars Anderson & Associates, Inc | Civil Engineers - Land Surveyors - Planners | South Annex Jail - First Floor Locations Map | 2014

Stantec

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Figure No.

3

Title

Second Floor - Sample Locations

Client/Project 185806843

New Fresno Courthouse Project
Hazardous Building Materials Survey

Project Location
City of Fresno
Fresno County, California

Prepared by DL on 2026-05-08
TR by SET on 2026-05-08
IR by SR on 2026-05-08

- Asbestos-Containing Material Sample
- Non Asbestos Bulk Sample Location
- Non Lead-Based Paint Sample

Notes

1. Data Sources: Stantec 2026.
2. Background: South Annex Jail ADA Transition Plan Report | Lars Anderson & Associates, Inc | Civil Engineers - Land Surveyors - Planners | South Annex Jail - Second Floor Locations Map | 2014

Stantec

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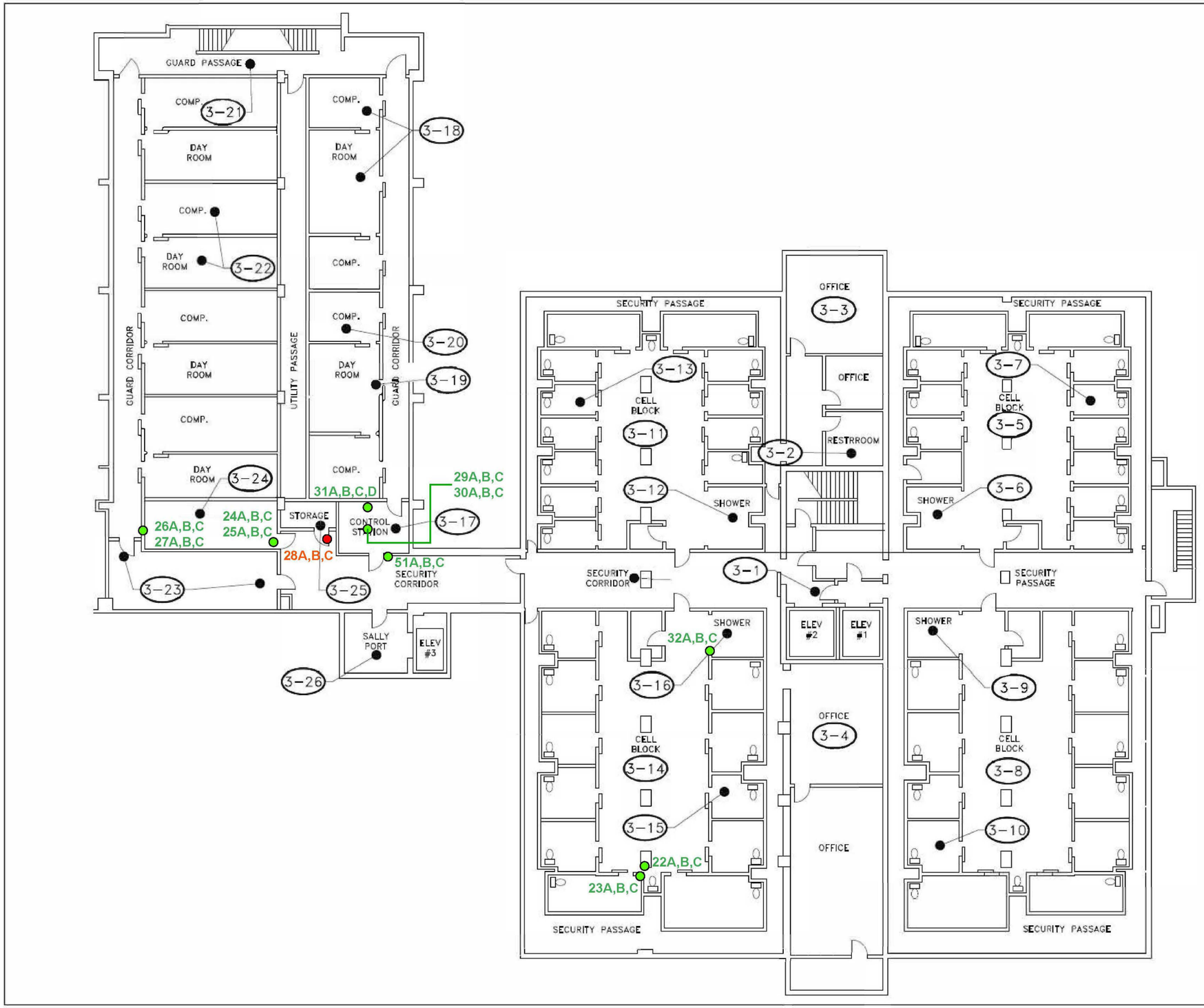


Figure No.

4

Title

Third Floor - Sample Locations

Client/Project 185806843

New Fresno Courthouse Project
Hazardous Building Materials Survey

Project Location
City of Fresno
Fresno County, California

Prepared by DL on 2026-05-08
TR by SET on 2026-05-08
IR by SR on 2026-05-08

- Asbestos - Containing Material Sample
- Non Asbestos Bulk Sample Location

Notes

1. Data Sources: Stantec 2026.
2. Background: South Annex Jail ADA Transition Plan Report | Lars Anderson & Associates, Inc | Civil Engineers - Land Surveyors - Planners | South Annex Jail - Third Floor Locations Map | 2014

Stantec

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Figure No.
5

Title
Fourth Floor - Sample Locations

Client/Project 185806843

New Fresno Courthouse Project
Hazardous Building Materials Survey

Project Location
City of Fresno
Fresno County, California

Prepared by DL on 2026-05-08
TR by SET on 2026-05-08
IR by SR on 2026-05-08

- Asbestos-Containing Material Sample
- Non Asbestos Bulk Sample Location
- Lead-Based Paint Sample
- Non Lead-Based Paint Sample

Notes
1. Data Sources: Stantec 2026.
2. Background: South Annex Jail ADA Transition Plan Report | Lars Anderson & Associates, Inc | Civil Engineers - Land Surveyors - Planners | South Annex Jail - Fourth Floor Locations Map | 2014

Stantec

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- Asbestos-Containing Material Sample
- Non Asbestos Bulk Sample Location
- Non Lead-Based Paint Sample

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Stantec

Project Location
City of Fresno
Fresno County, California

Prepared by DL on 2026-05-22
TR by SET on 2026-05-22
IR by SR on 2026-05-22

185806843

Client/Project
New Fresno Courthouse Project
Hazardous Building Materials Survey

Figure No.
6

Title
Roof & Exterior - Sample Locations

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Data Sources: Stantec 2025.
3. Background: World Imagery: Microsoft, Vantor

U:\185811858068431185806843_JCC_Fresno_Courthouse\185806843_JCC_Fresno_Courthouse\03_data\gis_cad\gis\pro\Fresno_Courthouse_20251112\Fresno_Courthouse_20251112.aprx Revised: 2026-05-22 By: dalaw

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

APPENDIX D

Photographic Log



Photo #1 View of the Fresno County Sheriff's Administration Building (2200 Fresno Street).



Photo #2 View of South Annex Jail (2280 Fresno Street) exterior finishes.



Photo #3 View of a lobby interior (2200 Fresno Street).



Photo #4 View of a typical corridor (2200 Fresno Street).



Photo #5 View of a typical meeting room (2200 Fresno Street).



Photo #6 View of a typical meeting room (2200 Fresno Street).

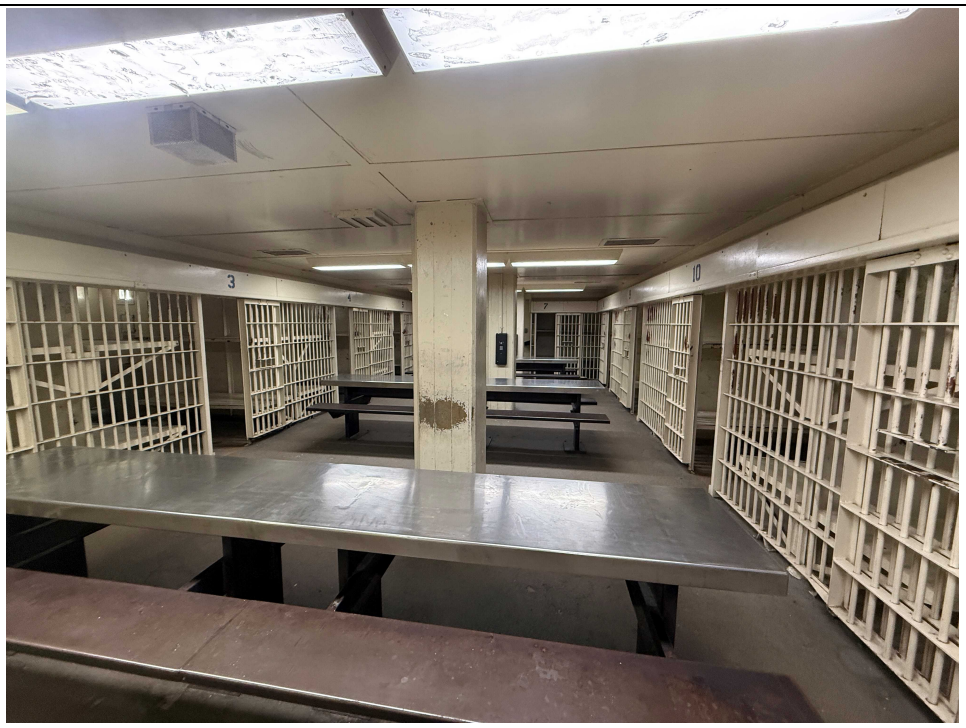


Photo #7 View of a typical jail area (2280 Fresno Street).

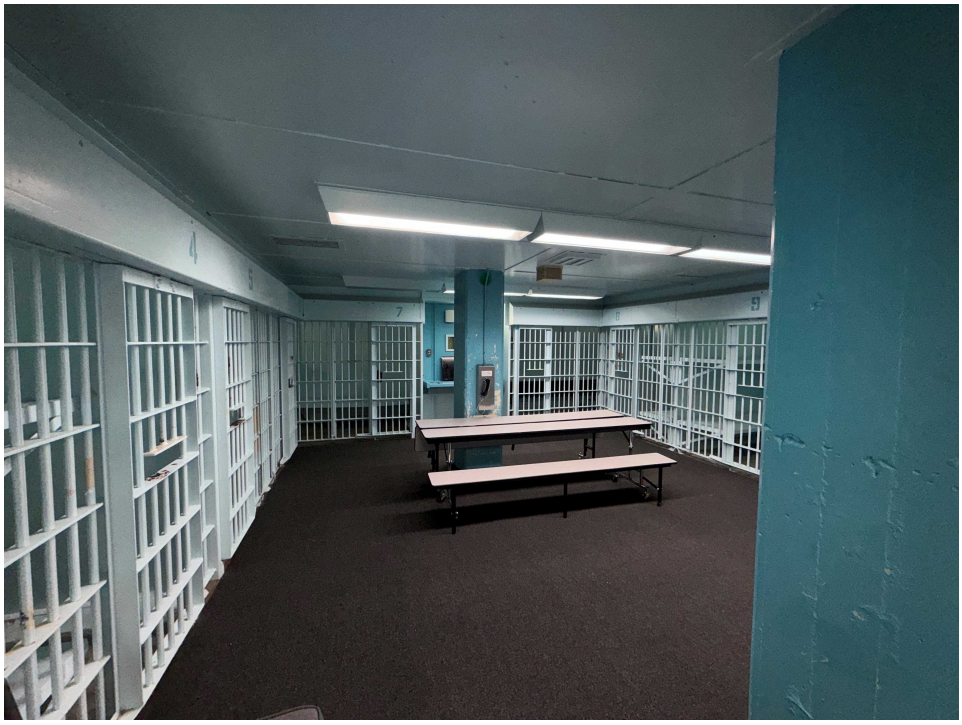


Photo #8 View of a typical jail area (2280 Fresno Street).

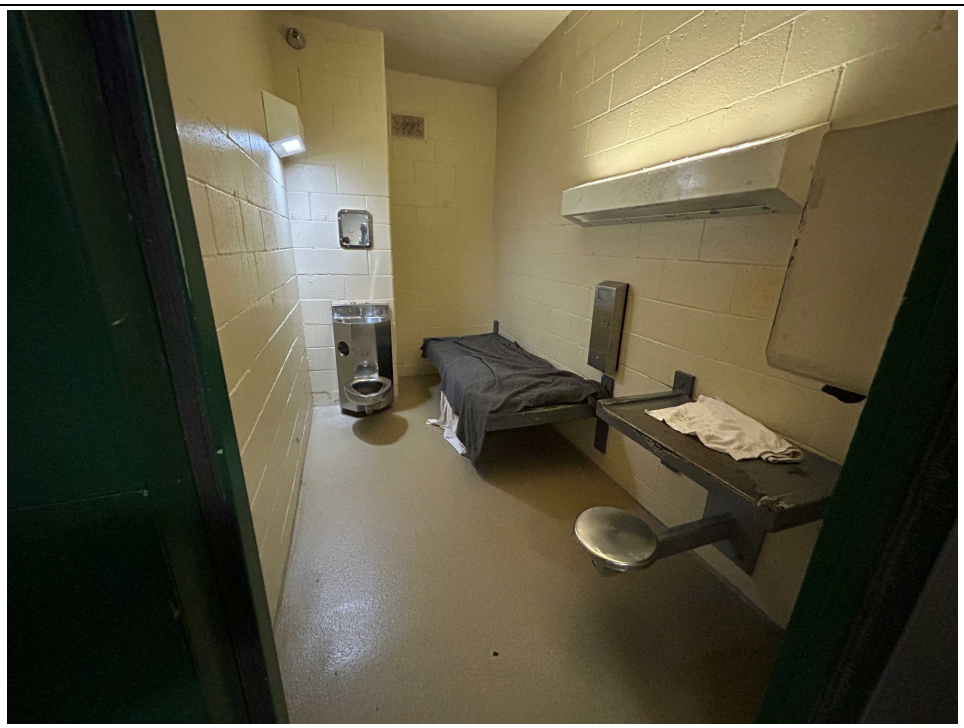


Photo #9 View of a typical jail cell (2280 Fresno Street).



Photo #10 View of a typical shower within the jail (2280 Fresno Street).



Photo #11 View of a typical corridor within the jail (2280 Fresno Street).



Photo #12 View of a typical break room (2280 Fresno Street).



Photo #13 View of a typical office area (2280 Fresno Street).



Photo #14 View of a typical medical exam room (2280 Fresno Street).



Photo #15 View of a laundry area (2280 Fresno Street).

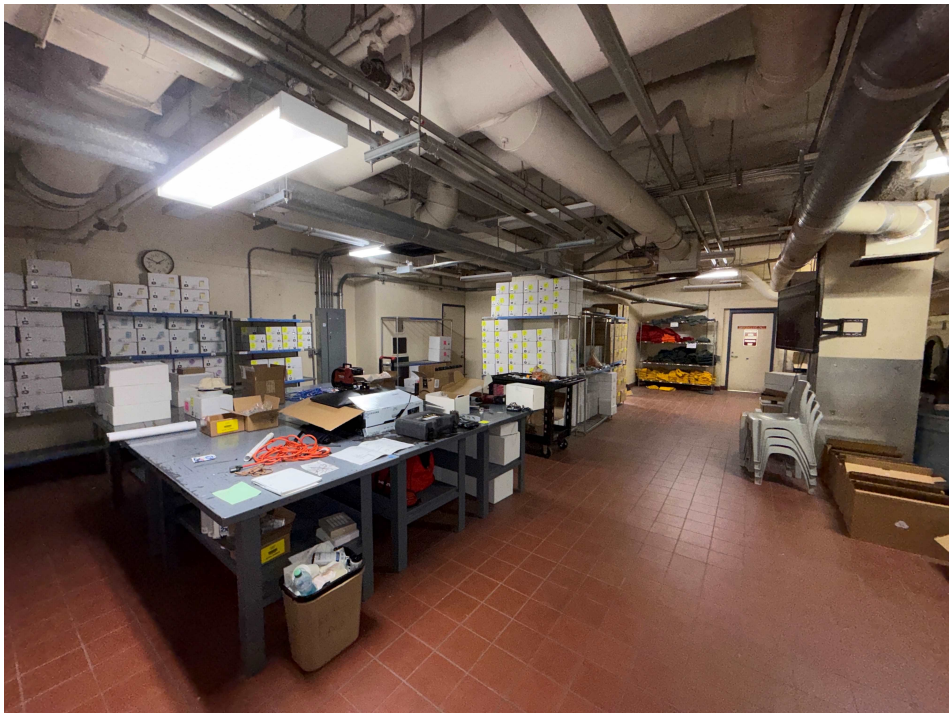


Photo #16 View of a typical storage and maintenance area (2280 Fresno Street).



Photo #17 View of typical pipes in an equipment area (2280 Fresno Street).



Photo #18 View of a mattress cleaning station (2280 Fresno Street).



Photo #19 View of typical roof finishes (2280 Fresno Street).



Photo #20 View of typical roof finishes (2280 Fresno Street).



Photo #21 View of typical roof finishes (2280 Fresno Street).



Photo #22 View of an interior parapet wall at the roof; HA #01, tar paper and petromat (ACM).



Photo #23 View of light gray roof sealant (HA #03, ACM).



Photo #24 View of white/yellow roof sealant (HA #05, ACM).



Photo #25 View of gray roof sealant (HA #11, ACM).



Photo #26 View of exterior stucco (HA #12, <0.1% Chrysotile).



Photo #27 View of ceiling tile and adhesive (HA #13, ACM [brown adhesive]).



Photo #28 View of ceiling tile and adhesive (HA #28, ACM [ceiling tile]).



Photo #29 View of fireproofing (HA #37, ACM).



Photo #30 View of gray/green 9" x 9" vinyl floor tile (HA #48, ACM) and black adhesive (HA #49, ACM).



Photo #31 View of white paint (P01).



Photo #32 View of multi-layer white, red paint (P02, lead-containing paint).



Photo #33 View of white paint (P03).



Photo #34 View of multi-layer light blue, red paint (P04).

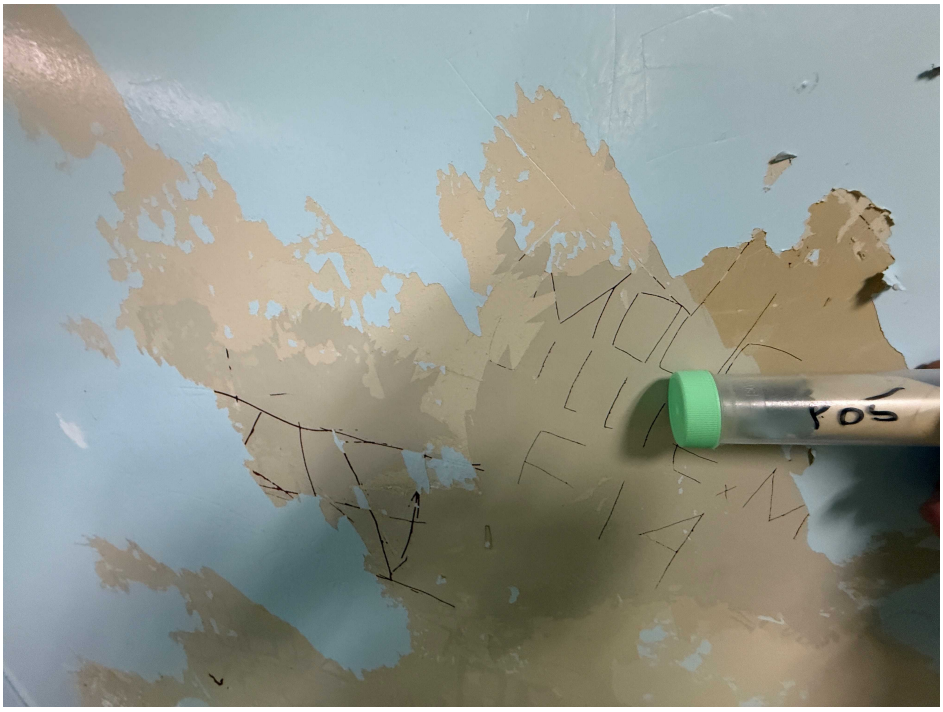


Photo #35 View of multi-layer powder blue, tan paint (P05).



Photo #36 View of red paint on concrete floor of the basement elevator reservoir room (P06, lead-based paint).



Photo #37 View of multi-layer green, blue, red paint (P07).



Photo #38 View of gray paint (P08).



Photo #39 View of typical elevator equipment.



Photo #40 View of typical elevator equipment.



Photo #41 View of typical water treatment chemical storage.



Photo #42 View of typical compressed gas storage.

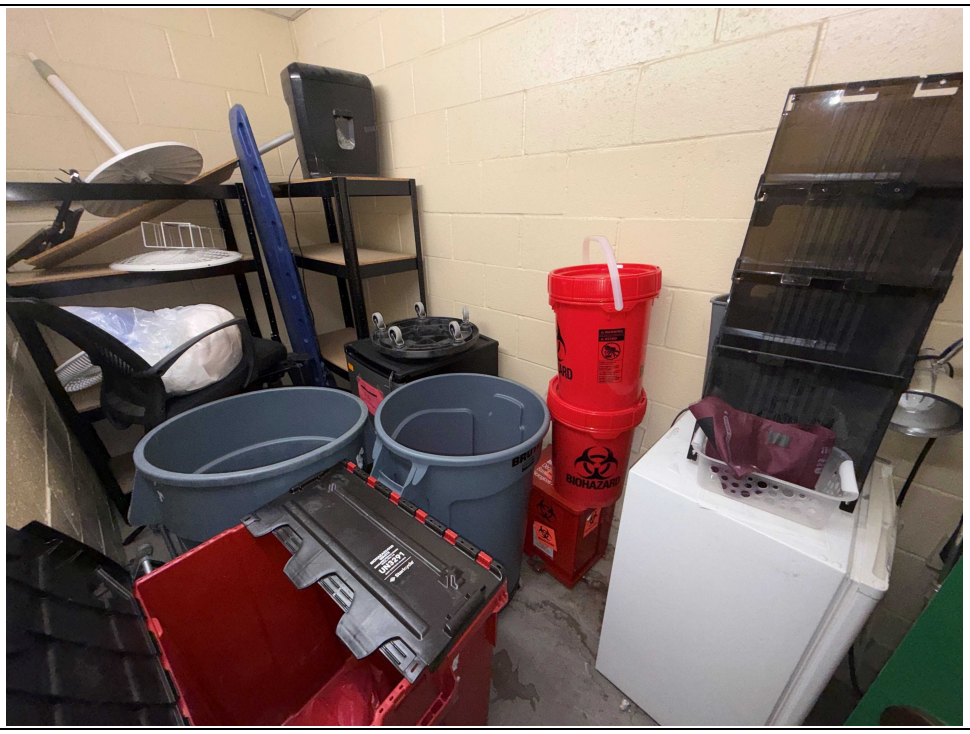


Photo #43 View of typical biohazard waste storage.



Photo #44 View of a typical light fixture.



Photo #45 View of a typical thermostat (2200 Fresno Street).



Photo #46 View of typical exit lighting (2200 Fresno Street).

APPENDIX E

Laboratory Analytical Reports and Bulk Sample Logs

EMSL Analytical, Inc.

200 Route 130, Cinnaminson, NJ, 08077
Telephone: 856-858-4800 Fax:cs@emsl.com
www.emsl.com

EMSL Order ID: 012619079
LIMS Reference ID: AE19079
EMSL Customer ID: 32ENRE78

Attention: Scott Edblad
Stantec Consulting Services Inc. [32ENRE78]
4572 Telephone Road, Suite 916
Ventura, CA 93003
(805) 644-4157
scott.edblad@stantec.com

Project Name: Fresno County Courthouse - South Annex Jail / 185806843.17.1

Customer PO: 185806843.17.1
EMSL Sales Rep: Randy Cavadini
Received: 05/04/2026 09:00
Reported: 05/08/2026 12:39

Analytical Results

Analyte	Results	RL	Weight	Prep Date & Tech	Prep Method	Analysis Date & Analyst	Analytical Method	Q	DF
Client Sample ID: P 01/Penthouse - TSI - Canvas Wrap - East Side 4" Pipe - White									**Date Sampled: 04/22/26**
Matrix: Chips									**LIMS Reference ID: AE19079-01**
Lead	<0.0064 % wt	0.0064 % wt	0.2728 g	05/06/26 TMC	SW-846 3050B	05/08/26 PMx	SW846-7000B	Pb3, Pb7	1
Client Sample ID: P 02/4th Floor - Control Door Panel - Metal - Corridor - White-Red									**Date Sampled: 04/22/26**
Matrix: Chips									**LIMS Reference ID: AE19079-02**
Lead	0.010 % wt	0.0064 % wt	0.2762 g	05/06/26 TMC	SW-846 3050B	05/08/26 PMx	SW846-7000B	Pb3, Pb7	1
Client Sample ID: P 03/Laundry - Wall - Concrete - Clothes Storage - White									**Date Sampled: 04/23/26**
Matrix: Chips									**LIMS Reference ID: AE19079-03**
Lead	<0.0064 % wt	0.0064 % wt	0.2836 g	05/06/26 TMC	SW-846 3050B	05/08/26 PMx	SW846-7000B	Pb3, Pb7	1
Client Sample ID: P 04/4th Floor - Desk - Metal - Desk Top - Work Area - Light Blue									**Date Sampled: 04/22/26**
Matrix: Chips									**LIMS Reference ID: AE19079-04**
Lead	<0.0064 % wt	0.0064 % wt	0.2529 g	05/06/26 TMC	SW-846 3050B	05/08/26 PMx	SW846-7000B	Pb3, Pb7	1
Client Sample ID: P 05/4th Floor - Desk - Metal - Metal Wall / Work Area - Powder Blue/Tan									**Date Sampled: 04/22/26**
Matrix: Chips									**LIMS Reference ID: AE19079-05**
Lead	<0.0064 % wt	0.0064 % wt	0.2702 g	05/06/26 TMC	SW-846 3050B	05/08/26 PMx	SW846-7000B	Pb3, Pb7	1
Client Sample ID: P 06/Basement - Floor - Concrete - Elevator Reservoir Room - Red									**Date Sampled: 04/23/26**
Matrix: Chips									**LIMS Reference ID: AE19079-06**
Lead	5.3 % wt	0.27 % wt	0.2948 g	05/06/26 TMC	SW-846 3050B	05/08/26 PMx	SW846-7000B	Pb3, Pb7, D	50
Client Sample ID: P 07/2nd Floor - Door Frame - Metal - Medical Office Door - Green - Blue - Red									**Date Sampled: 04/22/26**
Matrix: Chips									**LIMS Reference ID: AE19079-07**
Lead	<0.0064 % wt	0.0064 % wt	0.2878 g	05/06/26 TMC	SW-846 3050B	05/08/26 PMx	SW846-7000B	Pb3, Pb7	1
Client Sample ID: P 08/1st Floor - Floor - Concrete - Training Room / Sert - Gray									**Date Sampled: 04/22/26**
Matrix: Chips									**LIMS Reference ID: AE19079-08**
Lead	<0.0064 % wt	0.0064 % wt	0.2564 g	05/06/26 TMC	SW-846 3050B	05/08/26 PMx	SW846-7000B	Pb3, Pb7	1

EMSL Analytical, Inc.

200 Route 130, Cinnaminson, NJ, 08077
Telephone: 856-858-4800 Fax:cs@emsl.com
www.emsl.com

EMSL Order ID: 012619079
LIMS Reference ID: AE19079
EMSL Customer ID: 32ENRE78

Attention: Scott Edblad
Stantec Consulting Services Inc. [32ENRE78]
4572 Telephone Road, Suite 916
Ventura, CA 93003
(805) 644-4157
scott.edblad@stantec.com

Project Name: Fresno County Courthouse - South Annex Jail / 185806843.17.1

Customer PO: 185806843.17.1
EMSL Sales Rep: Randy Cavadini
Received: 05/04/2026 09:00
Reported: 05/08/2026 12:39

Certified Analyses included in this Report

Analyte	Certifications
SW846-7000B in Chips	
Lead	AIHA LAP

List of Certifications

Code	Description	Number	Expires
NJDEP	New Jersey Department of Environmental Protection	03036	06/30/2026
AIHA LAP	American Industrial Hygiene Association (AIHA LAP, LLC)	100194	04/01/2027
NYSDOH	New York State Department of Health ELAP	10872	04/01/2026
California ELAP	California Water Boards	1877	06/30/2026
A2LA	A2LA Environmental Certificate	2845.01	07/31/2026
21-A2LA	A2LA Food Chem/Mat Sci	2845.15	07/31/2026
PADEP	Pennsylvania Department of Environmental Protection	68-00367	11/30/2026
MADEP	Massachusetts Department of Environmental Protection	M-NJ337	06/30/2026
CTDPH	Connecticut Department of Public Health	PH-0270	06/30/2026

Please see the specific Field of Testing (FOT) on www.emsl.com <http://www.emsl.com> for a complete listing of parameters for which EMSL is certified.

Notes and Definitions

Item	Definition
D	Analyte was reported from a dilution run.
Pb3	The QC sample duplicate RPD result for Lead was outside of the method control limits.
Pb7	The RLVS recovery for Lead was outside of the method control limits.
(Dig)	For metals analysis, sample was digested.
[2C]	Reported from the second channel in dual column analysis.
DA	Direct Analysis
DF	Dilution Factor
MDL	Method Detection Limit.
ND	Analyte was NOT DETECTED at or above the reporting limit, or the mdl if provided.
NR	Spike/Surrogate showed no recovery.
Q	Qualifier
RCS	Respirable Crystalline Silica
RL	Reporting Limit For paint chips, the RL is 0.0064% by wt. (equiv. to 64 mg/kg, or ppm) based upon a minimum sample weight of 0.25 grams. For soils, the RL is 32 mg/kg (ppm) based upon a minimum sample weight of 0.5 grams. For dust wipes, the RL is 8 µg/wipe; reporting units of µg/sq. ft. are not validated by the lab based upon data provided by non-lab personnel.
Wet	Sample is not dry weight corrected.

EMSL Analytical, Inc.

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Telephone: 856-858-4800 Fax:cs@emsl.com
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EMSL Order ID: 012619079
LIMS Reference ID: AE19079
EMSL Customer ID: 32ENRE78

Attention: Scott Edblad
Stantec Consulting Services Inc. [32ENRE78]
4572 Telephone Road, Suite 916
Ventura, CA 93003
(805) 644-4157
scott.edblad@stantec.com

Project Name:	Fresno County Courthouse - South Annex Jail / 185806843.17.1
Customer PO:	185806843.17.1
EMSL Sales Rep:	Randy Cavadini
Received:	05/04/2026 09:00
Reported:	05/08/2026 12:39

Measurement of uncertainty and any applicable definitions of method modifications are available upon request. Per EPA NLLAP policy, sample results are not blank corrected.



Owen McKenna Laboratory Manager or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. QC sample results are within quality control criteria and met method specifications unless otherwise noted. All results for soil samples are reported on a dry weight basis, unless otherwise noted.

Analysis following EMSL SOP for the Determination of Environmental Lead by FLAA. The laboratory has a reporting limit of 0.0064% by wt., based upon a minimum sample weight of 0.25g submitted to the lab, and is not responsible for any result or reporting limit provided in mg/cm2 since it is dependent upon an area value provided by non-lab personnel. A "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty and definitions of modifications are available upon request. Results in this report are not blank corrected unless specified.

EMSL Analytical, Inc.

Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
EMAIL: cs@emsl.com

Lead Chain of Custody

EMSL Order Number / Lab Use Only: AE19079

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information		Billing Information	
Custo		Billing ID:	
Company Name:	Stantec, Ventura, CA 93003	Company Name:	32ENRE78
Contact Name:	Scott Edblad	Billing Contact:	Scott Edblad
Street Address:	4572 Telephone Road Suite 916	Street Address:	4572 Telephone Road, Suite 916
City, State, Zip:	Ventura CA 93003 Country: US	City, State, Zip:	Ventura CA 93003 Country: US
Phone:	(661) 754-0862	Phone:	(661) 754-0862
Email(s) for Report:	scott.edblad@stantec.com	Email(s) for Invoice:	scott.edblad@stantec.com

Project Information

Project Name/No:	Fresno County Courthouse-South Annex Jail / 185806843.17.1	Purchase Order:	185806843.17.1
EMSL LIMS Project ID: (If applicable, EMSL will provide)		US State where samples collected:	CA
State of Connecticut (CT) must select project location:	☐ Commercial (Taxable) ☐ Residential (Non-Taxable)		
Sampled By Name:	Scott Edblad	Sampled By Signature:	[signature]
No. of Samples in Shipment	8		

Turn-Around-Time (TAT)

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 32 Hour ☐ 48 Hour ☑ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

MATRIX	METHOD	INSTRUMENT	REPORTING LIMIT	SELECTION
CHIPS ☑ % by wt. ☐ ppm (mg/kg) ☐ mg/cm² *Sample Area Required below for mg/cm²	SW 846-7000B	Flame Atomic Absorption	*Please select reporting on left - 0.0064% - 64 ppm - mg/cm2 - RL is Variable	☑
*Chips reporting Limit based on a minimum 0.25g sample weight. Not appropriate for Ceramic Tiles - XRF is recommended.	SW 846-6010D	ICP-OES	*Please select reporting on left - 0.0004% - 4 ppm - mg/cm2 - RL is Variable	☐
AIR	NIOSH 7082	Flame Atomic Absorption	3.2 µg/filter	☐
	NIOSH 7303M	ICP-OES	1.0µ g/filter	☐
	NIOSH 7303M	ICP-MS	0.05 µg/filter	☐
WIPE ☐ ASTM ☐ NON-ASTM	SW 846-7000B*	Flame Atomic Absorption	8 µg/wipe	☐
*If no box is checked, non-ASTM Wipe is assumed	SW 846-6010D*	ICP-OES	1.0 µg/wipe	☐
TCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	SW 846-1311 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	SW 846-1312 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
TTLC	22 CCR App. II, 7000B	Flame Atomic Absorption	32 mg/kg (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	2 mg/kg (ppm)	☐
STLC	22 CCR App. II, 7000B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
Soil	SW 846-7000B	Flame Atomic Absorption	32 mg/kg (ppm)	☐
	SW 846-6010D*	ICP-OES	2 mg/kg (ppm)	☐
Wastewater Unpreserved ☐ Preserved with HNO3 ☐ PH<2	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	EPA 200.7 / 6010D	ICP-OES	0.020 mg/L (ppm)	☐
Drinking Water Unpreserved ☐ Preserved with HNO3 ☐ PH<2	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	☐
	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	☐
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	☐
		ICP-MS	0.6 µg/filter	☐
Other:				

RECEIVED
2026 MAY -2 A 10:40
EMSL CINNAMINSON, NJ

Sample Number	Sample Location	Volume / Area	Date / Time Sampled
	See Attached Paint Chip Sample Logs		

Method of Shipment:	FEDEX	Sample Condition Upon Receipt:	
Relinquished by:	[signature]	Date/Time: 04/29/26 1830	Received by: [signature] EF+ Date/Time: 5/1/26 16:40
Relinquished by:		Date/Time:	Received by: [signature] 5-01-26 9am Date/Time:

Controlled Document COC-25 Lead R22 03/28/2025

*6010C Available Upon Request

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

Paint Chip Sample Log

AE19079

Stantec
4572 Telephone Road, Suite 916
Ventura, CA 93003
Tel: (805) 230-1266
Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721
Date: 04/22/26 & *04/23/26
Inspector: Scott Edblad
Bella Santos

RECEIVED EMSI ENVIRONMENTAL LAB MAY - 5 2026 DAY

Sample Number	Room	Component	Substrate	Sample Location*	Quantity Estimate	Notes/Condition / Paint Color
P01	PENTHOUSE	TSI	CANVAS WRAP	EAST SIDE 4" PIPE	HA#64 20 SF	POOR/WHITE
P02	4TH FLOOR	CONTROL DOOR PANEL	METAL	CORRIDOR	HA#65 15 SF	MULTI-LAYER POOR/WHITE-RED
*P03	LAUNDRY	WALL	CONCRETE	CLOTHES STORAGE	HA#66 500SF	RESIDUAL POOR/WHITE
P04	4TH FLOOR	DESK	METAL	DESK TOP / WORK AREA	HA#67 15 SF	MULTI-LAYER POOR/LIGHT BLUE
P05	4TH FLOOR	WALL	METAL	METAL WALL / WORK AREA	HA#68 50SF	MULTI-LAYER RED POOR/POWDER BLUE TAN
*P06	BASEMENT	FLOOR	CONCRETE	ELEVATOR RESERVOIR ROOM	HA#69 100SF	POOR/RED
P07	2ND FLOOR	DOOR FRAME	METAL	MEDICAL OFFICE DOOR	HA#70 10SF	MULTI-LAYER POOR/GREEN-BLUE-RED
P08	1ST FLOOR	FLOOR	CONCRETE	TRAINING ROOM / SERT.	HA#71 200SF	POOR/GRAY

* - Include sample dimensions if trying to achieve mg/cm².

Relinquished By: [signature] Date: 04/29/26 Received By: [signature] Date: 5/5/26
Relinquished By: _____ Date: _____ Received By: E Quinn 5-04-26 Date: _____

Page 1 of 1

EMSL Analytical, Inc.

Lead Chain of Custody

EMSL Order Number / Lab Use Only: AE19079

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
EMAIL: cs@emsl.com

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information		Billing Information	
Custo		Billing ID:	
Company Name:	Stantec, Ventura, CA 93003	Company Name:	32ENRE78
Contact Name:	Scott Edblad	Billing Contact:	Scott Edblad
Street Address:	4572 Telephone Road Suite 916	Street Address:	4572 Telephone Road, Suite 916
City, State, Zip:	Ventura CA 93003	Country: US	Ventura CA 93003 Country: US
Phone:	(661) 754-0862	Phone:	(661) 754-0862
Email(s) for Report:	scott.edblad@stantec.com	Email(s) for Invoice:	scott.edblad@stantec.com

Project Information

Project Name/No:	Fresno County Courthouse-South Annex Jail / 185806843.17.1	Purchase Order:	185806843.17.1
EMSL LIMS Project ID: (If applicable, EMSL will provide)		US State where samples collected:	CA
State of Connecticut (CT) must select project location:	☐ Commercial (Taxable) ☐ Residential (Non-Taxable)		
Sampled By Name:	Scott Edblad	Sampled By Signature:	
No. of Samples in Shipment	8		

Turn-Around-Time (TAT)

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 32 Hour ☐ 48 Hour ☑ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am

MATRIX	METHOD	INSTRUMENT	REPORTING LIMIT	SELECTION
CHIPS ☑ % by wt. ☐ ppm (mg/kg) ☐ mg/cm² *Chips reporting Limit based on a minimum 0.25g sample weight. Not appropriate for Ceramic Tiles - XRF is recommended. *Sample Area Required below for mg/cm²	SW 846-7000B	Flame Atomic Absorption	*Please select reporting on left - 0.0064% - 64 ppm - mg/cm2 - RL is Variable	☑
	SW 846-6010D	ICP-OES	*Please select reporting on left - 0.0004% - 4 ppm - mg/cm2 - RL is Variable	☐
AIR	NIOSH 7082	Flame Atomic Absorption	3.2 µg/filter	☐
	NIOSH 7303M	ICP-OES	1.0µ g/filter	☐
	NIOSH 7303M	ICP-MS	0.05 µg/filter	☐
WIPE ☐ ASTM ☐ NON-ASTM	SW 846-7000B*	Flame Atomic Absorption	8 µg/wipe	☐
*If no box is checked, non-ASTM Wipe is assumed	SW 846-6010D*	ICP-OES	1.0 µg/wipe	☐
TCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	SW 846-1311 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	SW 846-1312 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
TTLC	22 CCR App. II, 7000B	Flame Atomic Absorption	32 mg/kg (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	2 mg/kg (ppm)	☐
STLC	22 CCR App. II, 7000B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
Soil	SW 846-7000B	Flame Atomic Absorption	32 mg/kg (ppm)	☐
	SW 846-6010D*	ICP-OES	2 mg/kg (ppm)	☐
Wastewater Unpreserved ☐ Preserved with HNO3 ☐ PH<2	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	EPA 200.7 / 6010D	ICP-OES	0.020 mg/L (ppm)	☐
Drinking Water Unpreserved ☐ Preserved with HNO3 ☐ PH<2	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	☐
	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	☐
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	☐
		ICP-MS	0.6 µg/filter	☐
Other:				

Sample Number	Sample Location	Volume / Area	Date / Time Sampled
	See Attached Paint Chip Sample Logs		

RECEIVED
2026 MAY -2 A 10:40
EMSL CINNAMINSON, NJ

Method of Shipment: FEDEX		Sample Condition Upon Receipt:	
Relinquished by:	Date/Time: 04/29/26 1830	Received by: EF+	Date/Time: 5/1/26 10:40
Relinquished by:	Date/Time:	Received by: 5-01-26	Date/Time: 9am

Controlled Document COC-25 Lead R22 03/28/2025

*6010C Available Upon Request

☐ **AGREE TO ELECTRONIC SIGNATURE** (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

Paint Chip Sample Log

AE19079

4572 Telephone Road, Suite 916
Ventura, CA 93003
Tel: (805) 230-1266
Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/26 & *04/23/26
Inspector: Scott Edblad
Bella Santos

RECEIVED EMAIL ON MAY - 5 2026 LAB

Sample Number	Room	Component	Substrate	Sample Location*	Quantity Estimate	Notes/Condition / Paint Color
P01	PENTHOUSE	TSI	CANVAS WRAP	EAST SIDE 4" PIPE	HA#64 20 SF	POOR/WHITE
P02	4TH FLOOR	CONTROL DOOR PANEL	METAL	CORRIDOR	HA#65 15 SF	MULTI-LAYER POOR/WHITE-RED
*P03	LAUNDRY	WALL	CONCRETE	CLOTHES STORAGE	HA#66 500SF	RESIDUAL POOR/WHITE
P04	4TH FLOOR	DESK	METAL	DESK TOP / WORK AREA	HA#67 15 SF	MULTI-LAYER POOR/LIGHT BLUE
P05	4TH FLOOR	WALL	METAL	METAL WALL / WORK AREA	HA#68 50SF	MULTI-LAYER RED POOR/POWDER BLUE TAN
*P06	BASEMENT	FLOOR	CONCRETE	ELEVATOR RESERVOIR ROOM	HA#69 100SF	POOR/RED
P07	2ND FLOOR	DOOR FRAME	METAL	MEDICAL OFFICE DOOR	HA#70 10SF	MULTI-LAYER POOR/GREEN-BLUE-RED
P08	1ST FLOOR	FLOOR	CONCRETE	TRAINING ROOM / SERT.	HA#71 200SF	POOR/GRAY

* - Include sample dimensions if trying to achieve mg/cm².

Relinquished By: [signature] Date: 04/29/26 Received By: [signature] Date: 5/8/26
Relinquished By: Date: Received By: E Quinn 5-04-26 Date:

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EMSL Order ID:	042608661
Customer ID:	32ENRE78
Customer PO:	185806843.17.1
Project ID:	

Attn:	Scott Edblad Stantec Consulting Services Inc. 4572 Telephone Road Suite 916 Ventura, CA 93003	Phone: Fax: Collected: Received: Analyzed:	(805) 644-4157 (805) 644-4157 4/23/2026 5/02/2026 5/08/2026

Proj: Fresno County Courthouse - South Annex Jail - 185806843.17.1 - 2280 Fresno Street, Fresno, CA 93721

Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 01A **Lab Sample ID:** 042608661-0001

Sample Description: Roof - South Wall/Tar Paper - Black Interior Parapet Wall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Black	0.0%	55.0%	**45% Chrysotile**	

Client Sample ID: 01B **Lab Sample ID:** 042608661-0002

Sample Description: Roof - South Wall/Tar Paper - Black Interior Parapet Wall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Black	0.0%	70.0%	**30% Chrysotile**	

Client Sample ID: 01C-Tar Paper **Lab Sample ID:** 042608661-0003

Sample Description: Roof - South Wall/Tar Paper - Black Interior Parapet Wall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown/Black	55.0%	45.0%	None Detected	

Client Sample ID: 01C-Petromat **Lab Sample ID:** 042608661-0003A

Sample Description: Roof - South Wall/Petromat

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Black	0.0%	55.0%	**45% Chrysotile**	

Client Sample ID: 01D-Tar Paper **Lab Sample ID:** 042608661-0004

Sample Description: Roof - South Wall/Tar Paper - Black Interior Parapet Wall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown/Black	55.0%	45.0%	None Detected	

Client Sample ID: 01D-Petromat **Lab Sample ID:** 042608661-0004A

Sample Description: Roof - South Wall/Petromat

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Black	0.0%	55.0%	**45% Chrysotile**	

Client Sample ID: 01E-Tar Paper **Lab Sample ID:** 042608661-0005

Sample Description: Roof - North Side/Tar Paper - Black Interior Parapet Wall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026				Layer Not Present	

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EMSL Order ID:	042608661
Customer ID:	32ENRE78
Customer PO:	185806843.17.1
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 01E-Petromat ***Lab Sample ID:*** **042608661-0005A**

Sample Description: Roof - North Side/Petromat

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	65.0%	**35% Chrysotile**	

Client Sample ID: 02A ***Lab Sample ID:*** **042608661-0006**

Sample Description: South Roof/Clay - Orange Thermal Clay Pipe; Flat Shaped

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Red/Orange	0.0%	100.0%	None Detected	

Client Sample ID: 02B ***Lab Sample ID:*** **042608661-0007**

Sample Description: South Roof/Clay - Orange Thermal Clay Pipe; Flat Shaped

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Red/Orange	0.0%	100.0%	None Detected	

Client Sample ID: 02C ***Lab Sample ID:*** **042608661-0008**

Sample Description: South Roof/Clay - Orange Thermal Clay Pipe; Flat Shaped

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red/Orange	0.0%	100.0%	None Detected	

Client Sample ID: 03A ***Lab Sample ID:*** **042608661-0009**

Sample Description: Roof - Southwest/Sealant - Light Gray

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown/Gray/Black	5.0%	30.0%	**65% Chrysotile**	

Client Sample ID: 03B ***Lab Sample ID:*** **042608661-0010**

Sample Description: Roof - Southwest/Sealant - Light Gray

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown/Gray/Black	5.0%	35.0%	**60% Chrysotile**	

Client Sample ID: 03C ***Lab Sample ID:*** **042608661-0011**

Sample Description: Roof - Southwest/Sealant - Light Gray

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Gray/Black	0.0%	40.0%	**60% Chrysotile**	

Client Sample ID: 04A ***Lab Sample ID:*** **042608661-0012**

Sample Description: Roof - South of the Penthouse/Roof Tread - Black Tread

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Black	20.0%	80.0%	None Detected	

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Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 04B **Lab Sample ID:** **042608661-0013**

Sample Description: Roof - South of the Penthouse/Roof Tread - Black Tread

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Black	20.0%	80.0%	None Detected	

Client Sample ID: 04C **Lab Sample ID:** **042608661-0014**

Sample Description: Roof - South of the Penthouse/Roof Tread - Black Tread

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	20.0%	80.0%	None Detected	

Client Sample ID: 05A **Lab Sample ID:** **042608661-0015**

Sample Description: Roof - Throughout/Sealant - White/Yellow Penetration Sealant

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White/Black/Yellow	0.0%	95.0%	**5% Chrysotile**	Result includes a small amount of inseparable attached material

Client Sample ID: 05B **Lab Sample ID:** **042608661-0016**

Sample Description: Roof - Throughout/Sealant - White/Yellow Penetration Sealant

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White/Black/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 05C **Lab Sample ID:** **042608661-0017**

Sample Description: Roof - Throughout/Sealant - White/Yellow Penetration Sealant

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 06A-Plaster **Lab Sample ID:** **042608661-0018**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 06A-Skim Coat **Lab Sample ID:** **042608661-0018A**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 06B-Plaster **Lab Sample ID:** **042608661-0019**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray	0.0%	100.0%	None Detected	

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Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 06B-Skim Coat ***Lab Sample ID:*** **042608661-0019A**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 06C-Plaster ***Lab Sample ID:*** **042608661-0020**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 06C-Skim Coat ***Lab Sample ID:*** **042608661-0020A**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White	0.0%	100.0%	None Detected	Inseparable paint / coating layer included in analysis

Client Sample ID: 06D-Plaster ***Lab Sample ID:*** **042608661-0021**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 06D-Skim Coat ***Lab Sample ID:*** **042608661-0021A**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White	0.0%	100.0%	None Detected	Inseparable paint / coating layer included in analysis

Client Sample ID: 06E-Plaster ***Lab Sample ID:*** **042608661-0022**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	2.0%	98.0%	None Detected	

Client Sample ID: 06E-Skim Coat ***Lab Sample ID:*** **042608661-0022A**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 06F ***Lab Sample ID:*** **042608661-0023**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

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Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 06G ***Lab Sample ID:*** **042608661-0024**

Sample Description: Throughout/Plaster - White/Gray Plaster Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 07A ***Lab Sample ID:*** **042608661-0025**

Sample Description: Penthouse/TSI Gray Pipe Elbow White Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Tan	15.0%	85.0%	None Detected	

Client Sample ID: 07B-TSI ***Lab Sample ID:*** **042608661-0026**

Sample Description: Penthouse/TSI Gray Pipe Elbow White Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Tan	15.0%	85.0%	None Detected	

Client Sample ID: 07B-Wrap ***Lab Sample ID:*** **042608661-0026A**

Sample Description: Penthouse/TSI Gray Pipe Elbow Wrap

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White	90.0%	10.0%	None Detected	

Client Sample ID: 07C-TSI ***Lab Sample ID:*** **042608661-0027**

Sample Description: Penthouse/TSI Gray Pipe Elbow White Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan	20.0%	80.0%	None Detected	

Client Sample ID: 07C-Wrap ***Lab Sample ID:*** **042608661-0027A**

Sample Description: Penthouse/TSI Gray Pipe Elbow Wrap

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan	90.0%	10.0%	None Detected	

Client Sample ID: 08A-TSI ***Lab Sample ID:*** **042608661-0028**

Sample Description: Penthouse/TSI White/Yellow on the 8" And 4" Pipes Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White/Silver/Yellow	80.0%	20.0%	None Detected	Sample is wrap

Client Sample ID: 08A-Wrap 2 ***Lab Sample ID:*** **042608661-0028A**

Sample Description: Penthouse/TSI White/Yellow on the 8" And 4" Pipes Pipe Wrap

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Tan/White	90.0%	10.0%	None Detected	

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Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 08B-TSI ***Lab Sample ID:*** **042608661-0029**

Sample Description: Basement/TSI White/Yellow on the 8" And 4" Pipes Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White/Yellow	90.0%	10.0%	None Detected	

Client Sample ID: 08B-Wrap ***Lab Sample ID:*** **042608661-0029A**

Sample Description: Basement/TSI White/Yellow on the 8" And 4" Pipes Pipe Wrap

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Silver/Clear	20.0%	80.0%	None Detected	

Client Sample ID: 08C-TSI ***Lab Sample ID:*** **042608661-0030**

Sample Description: Penthouse/TSI White/Yellow on the 8" And 4" Pipes Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Yellow	90.0%	10.0%	None Detected	

Client Sample ID: 08C-Wrap ***Lab Sample ID:*** **042608661-0030A**

Sample Description: Penthouse/TSI White/Yellow on the 8" And 4" Pipes Pipe Wrap

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Silver/Orange	0.0%	100.0%	None Detected	

Client Sample ID: 09A ***Lab Sample ID:*** **042608661-0031**

Sample Description: Penthouse/Foam Adhesive - Black Attached to Boiler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 09B ***Lab Sample ID:*** **042608661-0032**

Sample Description: Penthouse/Foam Adhesive - Black Attached to Boiler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 09C ***Lab Sample ID:*** **042608661-0033**

Sample Description: Penthouse/Foam Adhesive - Black Attached to Boiler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 10A ***Lab Sample ID:*** **042608661-0034**

Sample Description: Roof/Roof Tread - Black Tread Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Black	20.0%	80.0%	None Detected	

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Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 10B ***Lab Sample ID:*** **042608661-0035**
Sample Description: Roof/Roof Tread - Black Tread Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Black	20.0%	80.0%	None Detected	

Client Sample ID: 10C ***Lab Sample ID:*** **042608661-0036**
Sample Description: Roof/Roof Tread - Black Tread Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	15.0%	85.0%	None Detected	

Client Sample ID: 11A ***Lab Sample ID:*** **042608661-0037**
Sample Description: Roof/Sealant - Gray Roof Sealant

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Black/Silver	0.0%	85.0%	**15% Chrysotile**	Inseparable paint / coating layer included in analysis

Client Sample ID: 11B ***Lab Sample ID:*** **042608661-0038**
Sample Description: Roof/Sealant - Gray Roof Sealant

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Black/Silver	0.0%	90.0%	**10% Chrysotile**	Inseparable paint / coating layer included in analysis

Client Sample ID: 11C ***Lab Sample ID:*** **042608661-0039**
Sample Description: Roof/Sealant - Gray Roof Sealant

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Black/Silver	0.0%	88.0%	**12% Chrysotile**	Inseparable paint / coating layer included in analysis

Client Sample ID: 12A ***Lab Sample ID:*** **042608661-0040**
Sample Description: Roof/Stucco - Gray/Yellow Exterior Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Yellow	0.0%	100.0%	**<1% Chrysotile**	
1000 PLM Pt Ct	5/08/2026	Gray/Yellow	0.0%	100.0%	**<0.1% Chrysotile**	

Client Sample ID: 12B ***Lab Sample ID:*** **042608661-0041**
Sample Description: Exterior Walls/Stucco - Gray/Yellow Exterior Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 12C ***Lab Sample ID:*** **042608661-0042**
Sample Description: Exterior Walls/Stucco - Gray/Yellow Exterior Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Yellow	0.0%	100.0%	None Detected	

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EMSL Order ID:	042608661
Customer ID:	32ENRE78
Customer PO:	185806843.17.1
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 12D ***Lab Sample ID:*** **042608661-0043**

Sample Description: Exterior Walls/Stucco - Gray/Yellow Exterior Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 12E ***Lab Sample ID:*** **042608661-0044**

Sample Description: Exterior Walls/Stucco - Gray/Yellow Exterior Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 12F ***Lab Sample ID:*** **042608661-0045**

Sample Description: Exterior Walls/Stucco - Gray/Yellow Exterior Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 12G ***Lab Sample ID:*** **042608661-0046**

Sample Description: Exterior Walls/Stucco - Gray/Yellow Exterior Wall System

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 13A-Ceiling Tile ***Lab Sample ID:*** **042608661-0047**

Sample Description: 4th Floor/Ceiling Tiles - White 1'x1'

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/White	70.0%	30.0%	None Detected	

Client Sample ID: 13A-Adhesive ***Lab Sample ID:*** **042608661-0047A**

Sample Description: 4th Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 13B-Ceiling Tile ***Lab Sample ID:*** **042608661-0048**

Sample Description: 4th Floor/Ceiling Tiles - White 1'x1'

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/White	65.0%	35.0%	None Detected	

Client Sample ID: 13B-Adhesive ***Lab Sample ID:*** **042608661-0048A**

Sample Description: 4th Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Yellow	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 13C-Ceiling Tile ***Lab Sample ID:*** **042608661-0049**

Sample Description: 4th Floor/Ceiling Tiles - White 1'x1'

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/White	70.0%	30.0%	None Detected	

Client Sample ID: 13C-Adhesive ***Lab Sample ID:*** **042608661-0049A**

Sample Description: 4th Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 13D-Ceiling Tile ***Lab Sample ID:*** **042608661-0050**

Sample Description: 2nd Floor/Ceiling Tiles - White 1'x1'

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/White	65.0%	35.0%	None Detected	

Client Sample ID: 13D-Adhesive ***Lab Sample ID:*** **042608661-0050A**

Sample Description: 2nd Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown	0.0%	98.0%	**2% Chrysotile**	

Client Sample ID: 13E-Ceiling Tile ***Lab Sample ID:*** **042608661-0051**

Sample Description: 2nd Floor/Ceiling Tiles - White 1'x1'

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	70.0%	30.0%	None Detected	

Client Sample ID: 13E-Adhesive ***Lab Sample ID:*** **042608661-0051A**

Sample Description: 2nd Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	97.0%	**3% Chrysotile**	

Client Sample ID: 13F-Ceiling Tile ***Lab Sample ID:*** **042608661-0052**

Sample Description: Basement/Ceiling Tiles - White 1'x1'

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	70.0%	30.0%	None Detected	

Client Sample ID: 13F-Adhesive ***Lab Sample ID:*** **042608661-0052A**

Sample Description: Basement/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	98.0%	**2% Chrysotile**	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 13G-Ceiling Tile ***Lab Sample ID:*** **042608661-0053**

Sample Description: Basement/Ceiling Tiles - White 1'x1'

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	70.0%	30.0%	None Detected	

Client Sample ID: 13G-Adhesive ***Lab Sample ID:*** **042608661-0053A**

Sample Description: Basement/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	98.0%	**2% Chrysotile**	

Client Sample ID: 14A ***Lab Sample ID:*** **042608661-0054**

Sample Description: 4th Floor/Concrete Curb - Blue Wall Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Blue/Orange	0.0%	100.0%	None Detected	

Client Sample ID: 14B ***Lab Sample ID:*** **042608661-0055**

Sample Description: 4th Floor/Concrete Curb - Blue Wall Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Blue/Orange	0.0%	100.0%	None Detected	

Client Sample ID: 14C ***Lab Sample ID:*** **042608661-0056**

Sample Description: 4th Floor/Concrete Curb - Blue Wall Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Blue/Orange	0.0%	100.0%	None Detected	

Client Sample ID: 15A ***Lab Sample ID:*** **042608661-0057**

Sample Description: 4th Floor/Vinyl Floor Tile - Gray associated with HA#16

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 15B ***Lab Sample ID:*** **042608661-0058**

Sample Description: 4th Floor/Vinyl Floor Tile - Gray associated with HA#16

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 15C ***Lab Sample ID:*** **042608661-0059**

Sample Description: 4th Floor/Vinyl Floor Tile - Gray associated with HA#16

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 16A **Lab Sample ID:** **042608661-0060**

Sample Description: 4th Floor/Adhesive - Brown associated with HA#16

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 16B **Lab Sample ID:** **042608661-0061**

Sample Description: 4th Floor/Adhesive - Brown associated with HA#16

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 16C **Lab Sample ID:** **042608661-0062**

Sample Description: 4th Floor/Adhesive - Brown associated with HA#16

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 17A **Lab Sample ID:** **042608661-0063**

Sample Description: 4th Floor/Vinyl Floor Tile - Blue/Gray associated with HA#18

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 17B **Lab Sample ID:** **042608661-0064**

Sample Description: 4th Floor/Vinyl Floor Tile - Blue/Gray associated with HA#18

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 17C **Lab Sample ID:** **042608661-0065**

Sample Description: 4th Floor/Vinyl Floor Tile - Blue/Gray associated with HA#18

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 18A **Lab Sample ID:** **042608661-0066**

Sample Description: 4th Floor/Adhesive - Dark Brown associated with HA#17

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown/Clear	0.0%	100.0%	None Detected	

Client Sample ID: 18B **Lab Sample ID:** **042608661-0067**

Sample Description: 4th Floor/Adhesive - Dark Brown associated with HA#17

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown/Tan/Yellow	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 18C ***Lab Sample ID:*** **042608661-0068**

Sample Description: 4th Floor/Adhesive - Dark Brown associated with HA#17

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 19A ***Lab Sample ID:*** **042608661-0069**

Sample Description: 4th Floor/Leveling Compound - White associated with 12" X 12" VFT

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 19B ***Lab Sample ID:*** **042608661-0070**

Sample Description: 4th Floor/Leveling Compound - White associated with 12" X 12" VFT

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 19C ***Lab Sample ID:*** **042608661-0071**

Sample Description: 4th Floor/Leveling Compound - White associated with 12" X 12" VFT

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	0.0%	100.0%	None Detected	

Client Sample ID: 20A ***Lab Sample ID:*** **042608661-0072**

Sample Description: 4th Floor/Cove Base - Black 6" associated with HA#21

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Black/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 20B ***Lab Sample ID:*** **042608661-0073**

Sample Description: 4th Floor/Cove Base - Black 6" associated with HA#21

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Black/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 20C ***Lab Sample ID:*** **042608661-0074**

Sample Description: 4th Floor/Cove Base - Black 6" associated with HA#21

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 21A ***Lab Sample ID:*** **042608661-0075**

Sample Description: 4th Floor/Adhesive - White associated with HA#20

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White/Yellow	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached material

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 21B **Lab Sample ID:** **042608661-0076**

Sample Description: 4th Floor/Adhesive - White associated with HA#20

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 21C **Lab Sample ID:** **042608661-0077**

Sample Description: 4th Floor/Adhesive - White associated with HA#20

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 22A-Carpet **Lab Sample ID:** **042608661-0078**

Sample Description: 3rd Floor/Carpet - Dark Gray Light Blue Cells Area

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray	90.0%	10.0%	None Detected	

Client Sample ID: 22A-Adhesive **Lab Sample ID:** **042608661-0078A**

Sample Description: 3rd Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray	10.0%	90.0%	None Detected	

Client Sample ID: 22B-Carpet **Lab Sample ID:** **042608661-0079**

Sample Description: 3rd Floor/Carpet - Dark Gray Light Blue Cells Area

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray	90.0%	10.0%	None Detected	

Client Sample ID: 22B-Adhesive **Lab Sample ID:** **042608661-0079A**

Sample Description: 3rd Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray	10.0%	90.0%	None Detected	

Client Sample ID: 22C-Carpet **Lab Sample ID:** **042608661-0080**

Sample Description: 3rd Floor/Carpet - Dark Gray Light Blue Cells Area

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Black	90.0%	10.0%	None Detected	

Client Sample ID: 22C-Adhesive **Lab Sample ID:** **042608661-0080A**

Sample Description: 3rd Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Clear	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 23A ***Lab Sample ID:*** **042608661-0081**

Sample Description: 3rd Floor/Epoxy - Tan Under Black Carpet

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Tan/Clear	0.0%	100.0%	None Detected	

Client Sample ID: 23B ***Lab Sample ID:*** **042608661-0082**

Sample Description: 3rd Floor/Epoxy - Tan Under Black Carpet

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Tan/Clear	0.0%	100.0%	None Detected	

Client Sample ID: 23C ***Lab Sample ID:*** **042608661-0083**

Sample Description: 3rd Floor/Epoxy - Tan Under Black Carpet

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan/Clear	0.0%	100.0%	None Detected	

Client Sample ID: 24A ***Lab Sample ID:*** **042608661-0084**

Sample Description: 3rd Floor Medical Office/Vinyl Floor Sheeting - Gray/Black associated with HA#25

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Tan/White	20.0%	80.0%	None Detected	

Client Sample ID: 24B ***Lab Sample ID:*** **042608661-0085**

Sample Description: 3rd Floor Medical Office/Vinyl Floor Sheeting - Gray/Black associated with HA#25

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Gray/Tan/White	20.0%	80.0%	None Detected	

Client Sample ID: 24C ***Lab Sample ID:*** **042608661-0086**

Sample Description: 3rd Floor Medical Office/Vinyl Floor Sheeting - Gray/Black associated with HA#25

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White/Black	15.0%	85.0%	None Detected	

Client Sample ID: 25A ***Lab Sample ID:*** **042608661-0087**

Sample Description: 3rd Floor Medical Office/Adhesive - Dark Brown associated with HA#24

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown/Black/Clear	0.0%	100.0%	None Detected	

Client Sample ID: 25B ***Lab Sample ID:*** **042608661-0088**

Sample Description: 3rd Floor Medical Office/Adhesive - Dark Brown associated with HA#24

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown/Black/Clear	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 25C ***Lab Sample ID:*** **042608661-0089**

Sample Description: 3rd Floor Medical Office/Adhesive - Dark Brown associated with HA#24

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Black/Clear	0.0%	100.0%	None Detected	

Client Sample ID: 26A ***Lab Sample ID:*** **042608661-0090**

Sample Description: 3rd Floor Medical Office/Cove Base - Black 4" associated with HA#27

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 26B ***Lab Sample ID:*** **042608661-0091**

Sample Description: 3rd Floor Medical Office/Cove Base - Black 4" associated with HA#27

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 26C ***Lab Sample ID:*** **042608661-0092**

Sample Description: 3rd Floor Medical Office/Cove Base - Black 4" associated with HA#27

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 27A ***Lab Sample ID:*** **042608661-0093**

Sample Description: 3rd Floor Medical Office/Adhesive - Clear associated with HA#26

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 27B ***Lab Sample ID:*** **042608661-0094**

Sample Description: 3rd Floor Medical Office/Adhesive - Clear associated with HA#26

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White/Clear	0.0%	100.0%	None Detected	

Client Sample ID: 27C ***Lab Sample ID:*** **042608661-0095**

Sample Description: 3rd Floor Medical Office/Adhesive - Clear associated with HA#26

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Clear	0.0%	100.0%	None Detected	

Client Sample ID: 28A-Ceiling Tiles ***Lab Sample ID:*** **042608661-0096**

Sample Description: 3rd Floor/Ceiling Tiles White Dotted 1'x1' Ceiling Tiles

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White	77.0%	18.0%	**5% Amosite**	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 28A-Adhesive ***Lab Sample ID:*** **042608661-0096A**

Sample Description: 3rd Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 28B-Ceiling Tiles ***Lab Sample ID:*** **042608661-0097**

Sample Description: 3rd Floor/Ceiling Tiles White Dotted 1'x1' Ceiling Tiles

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/04/2026	White	77.0%	20.0%	**3% Amosite**	

Client Sample ID: 28B-Adhesive ***Lab Sample ID:*** **042608661-0097A**

Sample Description: 3rd Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 28C-Ceiling Tiles ***Lab Sample ID:*** **042608661-0098**

Sample Description: 3rd Floor/Ceiling Tiles White Dotted 1'x1' Ceiling Tiles

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	75.0%	23.0%	**2% Amosite**	

Client Sample ID: 28C-Adhesive ***Lab Sample ID:*** **042608661-0098A**

Sample Description: 3rd Floor/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 29A ***Lab Sample ID:*** **042608661-0099**

Sample Description: 3rd Floor/Vinyl Floor Tile - White associated with HA#30

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 29B ***Lab Sample ID:*** **042608661-0100**

Sample Description: 3rd Floor/Vinyl Floor Tile - White associated with HA#30

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 29C ***Lab Sample ID:*** **042608661-0101**

Sample Description: 3rd Floor/Vinyl Floor Tile - White associated with HA#30

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan/White	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 30A ***Lab Sample ID:*** **042608661-0102**

Sample Description: 3rd Floor/Adhesive - Black associated with HA#29

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 30B ***Lab Sample ID:*** **042608661-0103**

Sample Description: 3rd Floor/Adhesive - Black associated with HA#29

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 30C ***Lab Sample ID:*** **042608661-0104**

Sample Description: 3rd Floor/Adhesive - Black associated with HA#29

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 31A ***Lab Sample ID:*** **042608661-0105**

Sample Description: 3rd Floor/Ceiling Tiles - White 2' X 4" with Dots and Fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	70.0%	30.0%	None Detected	

Client Sample ID: 31B ***Lab Sample ID:*** **042608661-0106**

Sample Description: 3rd Floor/Ceiling Tiles - White 2' X 4" with Dots and Fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	70.0%	30.0%	None Detected	

Client Sample ID: 31C ***Lab Sample ID:*** **042608661-0107**

Sample Description: 3rd Floor/Ceiling Tiles - White 2' X 4" with Dots and Fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	70.0%	30.0%	None Detected	

Client Sample ID: 31D ***Lab Sample ID:*** **042608661-0108**

Sample Description: 3rd Floor/Ceiling Tiles - White 2' X 4" with Dots and Fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	70.0%	30.0%	None Detected	

Client Sample ID: 31E ***Lab Sample ID:*** **042608661-0109**

Sample Description: First Floor/Ceiling Tiles - White 2' X 4" with Dots and Fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	70.0%	30.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 31F **Lab Sample ID:** **042608661-0110**

Sample Description: First Floor/Ceiling Tiles - White 2' X 4" with Dots and Fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Tan/White	70.0%	30.0%	None Detected	

Client Sample ID: 31G **Lab Sample ID:** **042608661-0111**

Sample Description: First Floor/Ceiling Tiles - White 2' X 4" with Dots and Fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Tan/White	70.0%	30.0%	None Detected	

Client Sample ID: 32A **Lab Sample ID:** **042608661-0112**

Sample Description: 3rd Floor/Epoxy - Gray in the Shower Area

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 32B **Lab Sample ID:** **042608661-0113**

Sample Description: 3rd Floor/Epoxy - Gray in the Shower Area

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 32C **Lab Sample ID:** **042608661-0114**

Sample Description: 3rd Floor/Epoxy - Gray in the Shower Area

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 33A **Lab Sample ID:** **042608661-0115**

Sample Description: 2nd Floor/Cove Base - Gray associated with HA#34

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 33B **Lab Sample ID:** **042608661-0116**

Sample Description: 2nd Floor/Cove Base - Gray associated with HA#34

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 33C **Lab Sample ID:** **042608661-0117**

Sample Description: 2nd Floor/Cove Base - Gray associated with HA#34

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 34A ***Lab Sample ID:*** **042608661-0118**

Sample Description: 2nd Floor/Adhesive - Brown associated with HA#35

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Tan/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 34B ***Lab Sample ID:*** **042608661-0119**

Sample Description: 2nd Floor/Adhesive - Brown associated with HA#35

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Tan	0.0%	100.0%	None Detected	

Client Sample ID: 34C ***Lab Sample ID:*** **042608661-0120**

Sample Description: 2nd Floor/Adhesive - Brown associated with HA#35

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Tan	0.0%	100.0%	None Detected	

Client Sample ID: 35A ***Lab Sample ID:*** **042608661-0121**

Sample Description: 2nd Floor/Plaster - White Wall Patch

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 35B ***Lab Sample ID:*** **042608661-0122**

Sample Description: 2nd Floor/Plaster - White Wall Patch

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 35C ***Lab Sample ID:*** **042608661-0123**

Sample Description: 2nd Floor/Plaster - White Wall Patch

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 36A-Adhesive ***Lab Sample ID:*** **042608661-0124**

Sample Description: 2nd Flr Library/Adhesive - Yellow / Translucent

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Yellow	15.0%	85.0%	None Detected	

Client Sample ID: 36A-Carpet Tiles ***Lab Sample ID:*** **042608661-0124A**

Sample Description: 2nd Flr Library/24"x24" Carpet Tiles

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White/Blue	90.0%	10.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 36B-Adhesive ***Lab Sample ID:*** **042608661-0125**

Sample Description: 2nd Flr Library/Adhesive - Yellow / Translucent

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Yellow	15.0%	85.0%	None Detected	

Client Sample ID: 36B-Carpet Tiles ***Lab Sample ID:*** **042608661-0125A**

Sample Description: 2nd Flr Library/24"x24" Carpet Tiles

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White/Blue	90.0%	10.0%	None Detected	

Client Sample ID: 36C-Adhesive ***Lab Sample ID:*** **042608661-0126**

Sample Description: 2nd Flr Library/Adhesive - Yellow / Translucent

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026				Insufficient Material	

Client Sample ID: 36C-Carpet Tiles ***Lab Sample ID:*** **042608661-0126A**

Sample Description: 2nd Flr Library/24"x24" Carpet Tiles

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White/Blue	90.0%	10.0%	None Detected	Result includes a small amount of inseparable attached mastic

Client Sample ID: 37A ***Lab Sample ID:*** **042608661-0127**

Sample Description: 2nd Floor - Mechanical Room/Fire Proofing - White Metal/Concrete Ceilings and I-Beams

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	70.0%	**30% Chrysotile**	

Client Sample ID: 37B ***Lab Sample ID:*** **042608661-0128**

Sample Description: 2nd Floor - Mechanical Room/Fire Proofing - White Metal/Concrete Ceilings and I-Beams

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Gold	0.0%	70.0%	**30% Chrysotile**	

Client Sample ID: 37C ***Lab Sample ID:*** **042608661-0129**

Sample Description: Beams/Fire Proofing - White Metal/Concrete Ceilings and I-Beams

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Gold	0.0%	70.0%	**30% Chrysotile**	

Client Sample ID: 37D ***Lab Sample ID:*** **042608661-0130**

Sample Description: Beams/Fire Proofing - White Metal/Concrete Ceilings and I-Beams

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	75.0%	**25% Chrysotile**	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 38A ***Lab Sample ID:*** **042608661-0131**

Sample Description: 2nd Floor Pipe Chase/Firestop - Red/Pink Wall Penetrations

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 38B ***Lab Sample ID:*** **042608661-0132**

Sample Description: 2nd Floor Pipe Chase/Firestop - Red/Pink Wall Penetrations

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 38C ***Lab Sample ID:*** **042608661-0133**

Sample Description: 2nd Floor Pipe Chase/Firestop - Red/Pink Wall Penetrations

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red	0.0%	100.0%	None Detected	

Client Sample ID: 39A ***Lab Sample ID:*** **042608661-0134**

Sample Description: 2nd Floor Pipe Chase/Sealant - White HVAC Ducting Seams

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	10.0%	90.0%	None Detected	

Client Sample ID: 39B ***Lab Sample ID:*** **042608661-0135**

Sample Description: 2nd Floor Pipe Chase/Sealant - White HVAC Ducting Seams

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	10.0%	90.0%	None Detected	

Client Sample ID: 39C ***Lab Sample ID:*** **042608661-0136**

Sample Description: 2nd Floor Pipe Chase/Sealant - White HVAC Ducting Seams

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 40A ***Lab Sample ID:*** **042608661-0137**

Sample Description: 2nd Floor - Exam Rm./VFT - Gray Pebble Pattern associated with HA#41

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	15.0%	85.0%	None Detected	

Client Sample ID: 40B ***Lab Sample ID:*** **042608661-0138**

Sample Description: 2nd Floor - Exam Rm./VFT - Gray Pebble Pattern associated with HA#41

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	15.0%	85.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 40C ***Lab Sample ID:*** **042608661-0139**

Sample Description: 2nd Floor - Exam Rm./VFT - Gray Pebble Pattern associated with HA#41

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	15.0%	85.0%	None Detected	

Client Sample ID: 41A ***Lab Sample ID:*** **042608661-0140**

Sample Description: 2nd Floor - Exam Rm./Adhesive - Brown associated with HA#40

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Black/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 41B ***Lab Sample ID:*** **042608661-0141**

Sample Description: 2nd Floor - Exam Rm./Adhesive - Brown associated with HA#40

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Black/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 41C ***Lab Sample ID:*** **042608661-0142**

Sample Description: 2nd Floor - Exam Rm./Adhesive - Brown associated with HA#40

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Black/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 42A ***Lab Sample ID:*** **042608661-0143**

Sample Description: 2nd Floor - Office/Gypsum Board - White Interior Office Walls associated with HA#43

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Tan/White	20.0%	80.0%	None Detected	

Client Sample ID: 42B ***Lab Sample ID:*** **042608661-0144**

Sample Description: 2nd Floor - Office/Gypsum Board - White Interior Office Walls associated with HA#43

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Tan/White	20.0%	80.0%	None Detected	

Client Sample ID: 42C ***Lab Sample ID:*** **042608661-0145**

Sample Description: 2nd Floor - Office/Gypsum Board - White Interior Office Walls associated with HA#43

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/White	20.0%	80.0%	None Detected	

Client Sample ID: 43A ***Lab Sample ID:*** **042608661-0146**

Sample Description: 2nd Floor - Office/Joint Compound - White associated with HA#42

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 43B ***Lab Sample ID:*** **042608661-0147**

Sample Description: 2nd Floor - Office/Joint Compound - White associated with HA#42

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 43C ***Lab Sample ID:*** **042608661-0148**

Sample Description: 2nd Floor - Office/Joint Compound - White associated with HA#42

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan/White	0.0%	100.0%	None Detected	

Client Sample ID: 44A ***Lab Sample ID:*** **042608661-0149**

Sample Description: Library - 2nd Floor/Carpet - Black/White 24"x24" Line Pattern associated with HA#45

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Black/Blue	90.0%	10.0%	None Detected	

Client Sample ID: 44B ***Lab Sample ID:*** **042608661-0150**

Sample Description: Library - 2nd Floor/Carpet - Black/White 24"x24" Line Pattern associated with HA#45

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Black/Blue	90.0%	10.0%	None Detected	

Client Sample ID: 44C ***Lab Sample ID:*** **042608661-0151**

Sample Description: Library - 2nd Floor/Carpet - Black/White 24"x24" Line Pattern associated with HA#45

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White/Black	90.0%	10.0%	None Detected	

Client Sample ID: 45A ***Lab Sample ID:*** **042608661-0152**

Sample Description: Library - 2nd Floor/Adhesive - Yellow / Translucent associated with HA#44

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Yellow/Greer	0.0%	100.0%	None Detected	

Client Sample ID: 45B ***Lab Sample ID:*** **042608661-0153**

Sample Description: Library - 2nd Floor/Adhesive - Yellow / Translucent associated with HA#44

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Yellow/Greer	0.0%	100.0%	None Detected	

Client Sample ID: 45C ***Lab Sample ID:*** **042608661-0154**

Sample Description: Library - 2nd Floor/Adhesive - Yellow / Translucent associated with HA#44

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Yellow/Greer	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 46A ***Lab Sample ID:*** **042608661-0155**

Sample Description: Library - 2nd Floor/Cove Base - Black 4" associated with HA#47

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 46B ***Lab Sample ID:*** **042608661-0156**

Sample Description: Library - 2nd Floor/Cove Base - Black 4" associated with HA#47

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 46C ***Lab Sample ID:*** **042608661-0157**

Sample Description: Library - 2nd Floor/Cove Base - Black 4" associated with HA#47

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 47A ***Lab Sample ID:*** **042608661-0158**

Sample Description: Library - 2nd Floor/Adhesive - White associated with HA#46

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Yellow	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached material

Client Sample ID: 47B ***Lab Sample ID:*** **042608661-0159**

Sample Description: Library - 2nd Floor/Adhesive - White associated with HA#46

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Yellow	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached material

Client Sample ID: 47C ***Lab Sample ID:*** **042608661-0160**

Sample Description: Library - 2nd Floor/Adhesive - White associated with HA#46

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan/White	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached material

Client Sample ID: 48A-VFT ***Lab Sample ID:*** **042608661-0161**

Sample Description: 1st Floor Lobby/VFT - Tan Grayish Green 9"x9" associated with HA#49

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Green	0.0%	95.0%	**5% Chrysotile**	

Client Sample ID: 48A-VFT 2 ***Lab Sample ID:*** **042608661-0161A**

Sample Description: 1st Floor Lobby/VFT - Tan Grayish Green 9"x9" associated with HA#49

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 48B-VFT ***Lab Sample ID:*** **042608661-0162**

Sample Description: 1st Floor Lobby/VFT - Tan Grayish Green 9"x9" associated with HA#49

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Green	0.0%	96.0%	**4% Chrysotile**	

Client Sample ID: 48B-VFT 2 ***Lab Sample ID:*** **042608661-0162A**

Sample Description: 1st Floor Lobby/VFT - Tan Grayish Green 9"x9" associated with HA#49

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 48C-VFT ***Lab Sample ID:*** **042608661-0163**

Sample Description: 1st Floor Lobby/VFT - Tan Grayish Green 9"x9" associated with HA#49

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Green	0.0%	95.0%	**5% Chrysotile**	

Client Sample ID: 48C-VFT 2 ***Lab Sample ID:*** **042608661-0163A**

Sample Description: 1st Floor Lobby/VFT - Tan Grayish Green 9"x9" associated with HA#49

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 49A-Mastic ***Lab Sample ID:*** **042608661-0164**

Sample Description: 1st Floor Lobby/Adhesive - Black associated with HA#48

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	97.0%	**3% Chrysotile**	

Client Sample ID: 49A-Mastic 2 ***Lab Sample ID:*** **042608661-0164A**

Sample Description: 1st Floor Lobby/Adhesive associated with HA#48

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	100.0%	None Detected	

Client Sample ID: 49B-Mastic ***Lab Sample ID:*** **042608661-0165**

Sample Description: 1st Floor Lobby/Adhesive - Black associated with HA#48

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	95.0%	**5% Chrysotile**	

Client Sample ID: 49B-Mastic 2 ***Lab Sample ID:*** **042608661-0165A**

Sample Description: 1st Floor Lobby/Adhesive associated with HA#48

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 49C-Mastic ***Lab Sample ID:*** **042608661-0166**

Sample Description: 1st Floor Lobby/Adhesive - Black associated with HA#48

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Black	0.0%	96.0%	**4% Chrysotile**	

Client Sample ID: 49C-Mastic 2 ***Lab Sample ID:*** **042608661-0166A**

Sample Description: 1st Floor Lobby/Adhesive associated with HA#48

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Black	0.0%	100.0%	None Detected	

Client Sample ID: 50A-TSI ***Lab Sample ID:*** **042608661-0167**

Sample Description: 1st Floor Office/TSI - Foil / Pink Duct Insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Pink	95.0%	5.0%	None Detected	

Client Sample ID: 50A-Wrap ***Lab Sample ID:*** **042608661-0167A**

Sample Description: 1st Floor Office/TSI - Foil / Pink Duct Wrap

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Silver/Clear	20.0%	80.0%	None Detected	

Client Sample ID: 50B-TSI ***Lab Sample ID:*** **042608661-0168**

Sample Description: 1st Floor Office/TSI - Foil / Pink Duct Insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Pink	95.0%	5.0%	None Detected	

Client Sample ID: 50B-Wrap ***Lab Sample ID:*** **042608661-0168A**

Sample Description: 1st Floor Office/TSI - Foil / Pink Duct Wrap

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Silver/Clear	20.0%	80.0%	None Detected	

Client Sample ID: 50C-TSI ***Lab Sample ID:*** **042608661-0169**

Sample Description: 1st Floor Office/TSI - Foil / Pink Duct Insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Pink	90.0%	10.0%	None Detected	

Client Sample ID: 50C-Wrap ***Lab Sample ID:*** **042608661-0169A**

Sample Description: 1st Floor Office/TSI - Foil / Pink Duct Wrap

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Silver	20.0%	80.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 51A **Lab Sample ID:** **042608661-0170**

Sample Description: Third Floor/Texture - White associated with Gypsum Board Walls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 51B **Lab Sample ID:** **042608661-0171**

Sample Description: Third Floor/Texture - White associated with Gypsum Board Walls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 51C **Lab Sample ID:** **042608661-0172**

Sample Description: Third Floor/Texture - White associated with Gypsum Board Walls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan/White	0.0%	100.0%	None Detected	Inseparable paint / coating layer included in analysis

Client Sample ID: 52A-Adhesive **Lab Sample ID:** **042608661-0173**

Sample Description: 2nd Floor - Janitor's/Adhesive - Orange associated with FRP

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Orange	0.0%	100.0%	None Detected	

Client Sample ID: 52A-Texture **Lab Sample ID:** **042608661-0173A**

Sample Description: 2nd Floor - Janitor's/Texture associated with FRP

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 52B-Adhesive **Lab Sample ID:** **042608661-0174**

Sample Description: 2nd Floor - Janitor's/Adhesive - Orange associated with FRP

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Orange	0.0%	100.0%	None Detected	

Client Sample ID: 52B-Texture **Lab Sample ID:** **042608661-0174A**

Sample Description: 2nd Floor - Janitor's/Texture associated with FRP

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 52C-Adhesive **Lab Sample ID:** **042608661-0175**

Sample Description: 2nd Floor - Janitor's/Adhesive - Orange associated with FRP

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Orange	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 52C-Texture ***Lab Sample ID:*** **042608661-0175A**

Sample Description: 2nd Floor - Janitor's/Texture associated with FRP

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White	0.0%	100.0%	None Detected	

Client Sample ID: 53A ***Lab Sample ID:*** **042608661-0176**

Sample Description: Laundry/Grout - Gray associated with HA# 54

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 53B ***Lab Sample ID:*** **042608661-0177**

Sample Description: Laundry/Grout - Gray associated with HA# 54

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 53C ***Lab Sample ID:*** **042608661-0178**

Sample Description: Laundry/Grout - Gray associated with HA# 54

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Gold	0.0%	100.0%	None Detected	

Client Sample ID: 54A ***Lab Sample ID:*** **042608661-0179**

Sample Description: Laundry/Ceramic Tile - Red 9"x9" associated with #53

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red	0.0%	100.0%	None Detected	

Client Sample ID: 54B ***Lab Sample ID:*** **042608661-0180**

Sample Description: Laundry/Ceramic Tile - Red 9"x9" associated with #53

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red	0.0%	100.0%	None Detected	

Client Sample ID: 54C ***Lab Sample ID:*** **042608661-0181**

Sample Description: Laundry/Ceramic Tile - Red 9"x9" associated with #53

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red	0.0%	100.0%	None Detected	

Client Sample ID: 55A ***Lab Sample ID:*** **042608661-0182**

Sample Description: Basement Maintenance Hallway/VFS/Tread - Gray - Textured / Floors/Walls associated with HA# 56

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Blue/Green	20.0%	80.0%	None Detected	Result includes a small amount of inseparable attached material

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 55B **Lab Sample ID:** **042608661-0183**

Sample Description: Basement Maintenance Hallway/VFS/Tread - Gray - Textured / Floors/Walls associated with HA# 56

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Blue/Green	20.0%	80.0%	None Detected	Result includes a small amount of inseparable attached material

Client Sample ID: 55C **Lab Sample ID:** **042608661-0184**

Sample Description: Basement Maintenance Hallway/VFS/Tread - Gray - Textured / Floors/Walls associated with HA# 56

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Blue/Green	20.0%	80.0%	None Detected	Result includes a small amount of inseparable attached material

Client Sample ID: 55D **Lab Sample ID:** **042608661-0185**

Sample Description: Basement Maintenance Hallway/VFS/Tread - Gray - Textured / Floors/Walls associated with HA# 56

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Blue/Green	20.0%	80.0%	None Detected	

Client Sample ID: 55E **Lab Sample ID:** **042608661-0186**

Sample Description: Basement Maintenance Hallway/VFS/Tread - Gray - Textured / Floors/Walls associated with HA# 56

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Green	10.0%	90.0%	None Detected	

Client Sample ID: 56A **Lab Sample ID:** **042608661-0187**

Sample Description: Basement Maintenance Hallway/Adhesive - Brown Floors/Wall associated with HA# 55

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 56B **Lab Sample ID:** **042608661-0188**

Sample Description: Basement Maintenance Hallway/Adhesive - Brown Floors/Wall associated with HA# 55

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 56C **Lab Sample ID:** **042608661-0189**

Sample Description: Basement Maintenance Hallway/Adhesive - Brown Floors/Wall associated with HA# 55

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 56D **Lab Sample ID:** **042608661-0190**

Sample Description: Basement Maintenance Hallway/Adhesive - Brown Floors/Wall associated with HA# 55

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 56E ***Lab Sample ID:*** **042608661-0191**

Sample Description: Basement Maintenance Hallway/Adhesive - Brown Floors/Wall associated with HA# 55

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 57A ***Lab Sample ID:*** **042608661-0192**

Sample Description: Basement Maintenance Hallway/Grout - Gray/White associated with 4"x4" White and Tan Ceramic Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached material

Client Sample ID: 57B ***Lab Sample ID:*** **042608661-0193**

Sample Description: Basement Maintenance Hallway/Grout - Gray/White associated with 4"x4" White and Tan Ceramic Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached material

Client Sample ID: 57C ***Lab Sample ID:*** **042608661-0194**

Sample Description: Basement Maintenance Hallway/Grout - Gray/White associated with 4"x4" White and Tan Ceramic Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/White	0.0%	100.0%	None Detected	

Client Sample ID: 58A ***Lab Sample ID:*** **042608661-0195**

Sample Description: Basement Maintenance Hallway/Ceiling Panel – Gray/Brown 2'X4' Gypsum Board Type Panels

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan/White	15.0%	85.0%	None Detected	

Client Sample ID: 58B ***Lab Sample ID:*** **042608661-0196**

Sample Description: Basement Maintenance Hallway/Ceiling Panel – Gray/Brown 2'X4' Gypsum Board Type Panels

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan/White	15.0%	85.0%	None Detected	

Client Sample ID: 58C ***Lab Sample ID:*** **042608661-0197**

Sample Description: Basement Maintenance Hallway/Ceiling Panel – Gray/Brown 2'X4' Gypsum Board Type Panels

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Brown/Gray/White	20.0%	80.0%	None Detected	

Client Sample ID: 59A ***Lab Sample ID:*** **042608661-0198**

Sample Description: 2nd Floor Corridor/CMU - Gray/Black 8"x16" associated with HA# 60

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Black	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 59B ***Lab Sample ID:*** **042608661-0199**

Sample Description: 2nd Floor Corridor/CMU - Gray/Black 8"x16" associated with HA# 60

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Black	0.0%	100.0%	None Detected	

Client Sample ID: 59C ***Lab Sample ID:*** **042608661-0200**

Sample Description: 2nd Floor Corridor/CMU - Gray/Black 8"x16" associated with HA# 60

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan	0.0%	100.0%	None Detected	

Client Sample ID: 60A ***Lab Sample ID:*** **042608661-0201**

Sample Description: 2nd Floor Corridor/Mortar - Gray associated with HA# 59

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026				Layer Not Present	

Client Sample ID: 60B ***Lab Sample ID:*** **042608661-0202**

Sample Description: 2nd Floor Corridor/Mortar - Gray associated with HA# 59

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 60C ***Lab Sample ID:*** **042608661-0203**

Sample Description: 2nd Floor Corridor/Mortar - Gray associated with HA# 59

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 61A ***Lab Sample ID:*** **042608661-0204**

Sample Description: Boiler Room/Thermal Clay Tile - Red 12"x12" Wall Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red	0.0%	100.0%	None Detected	

Client Sample ID: 61B ***Lab Sample ID:*** **042608661-0205**

Sample Description: Boiler Room/Thermal Clay Tile - Red 12"x12" Wall Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red	0.0%	100.0%	None Detected	

Client Sample ID: 61C ***Lab Sample ID:*** **042608661-0206**

Sample Description: Boiler Room/Thermal Clay Tile - Red 12"x12" Wall Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 62A **Lab Sample ID:** **042608661-0207**

Sample Description: NE - Loading Dock/Concrete (Rock) - Tan/Gray Exterior Walls/ Floors

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Tan	0.0%	100.0%	None Detected	

Client Sample ID: 62B **Lab Sample ID:** **042608661-0208**

Sample Description: NE - Loading Dock/Concrete (Rock) - Tan/Gray Exterior Walls/ Floors

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Tan	0.0%	100.0%	None Detected	

Client Sample ID: 62C **Lab Sample ID:** **042608661-0209**

Sample Description: NE - Loading Dock/Concrete (Rock) - Tan/Gray Exterior Walls/ Floors

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Tan	0.0%	100.0%	None Detected	

Client Sample ID: 62D **Lab Sample ID:** **042608661-0210**

Sample Description: NE - Corner/Concrete (Rock) - Tan/Gray Exterior Walls/ Floors

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Tan	0.0%	100.0%	None Detected	

Client Sample ID: 62E **Lab Sample ID:** **042608661-0211**

Sample Description: NW Corner/Concrete (Rock) - Tan/Gray Exterior Walls/ Floors

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan/Red	0.0%	100.0%	None Detected	

Client Sample ID: 62F **Lab Sample ID:** **042608661-0212**

Sample Description: NW Corner/Concrete (Rock) - Tan/Gray Exterior Walls/ Floors

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Tan/Red	0.0%	100.0%	None Detected	

Client Sample ID: 62G **Lab Sample ID:** **042608661-0213**

Sample Description: NW Corner/Concrete (Rock) - Tan/Gray Exterior Walls/ Floors

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Tan/Red	0.0%	100.0%	None Detected	

Client Sample ID: 63A **Lab Sample ID:** **042608661-0214**

Sample Description: NW/Sealant - Gray Expansion Joints

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order ID:	042608661
Customer ID:	32ENRE78
Customer PO:	185806843.17.1
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 63B ***Lab Sample ID:*** **042608661-0215**

Sample Description: NW/Sealant - Gray Expansion Joints

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 63C ***Lab Sample ID:*** **042608661-0216**

Sample Description: NW/Sealant - Gray Expansion Joints

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 64A ***Lab Sample ID:*** **042608661-0217**

Sample Description: Overhead Pipe/Paint - White 4" Pipe TSI

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 65A ***Lab Sample ID:*** **042608661-0218**

Sample Description: Metal Panel Door/Paint - White/Red Control Panel Door

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	White/Red	0.0%	100.0%	None Detected	

Client Sample ID: 66A ***Lab Sample ID:*** **042608661-0219**

Sample Description: Clothes Storage/Paint - White Residual Wall Paint (Concrete)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan/White	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached material

Client Sample ID: 67A ***Lab Sample ID:*** **042608661-0220**

Sample Description: Desk Top/Paint - Light Blue/Red Metal Desk

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red/Various/Blue	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached material

Client Sample ID: 68A ***Lab Sample ID:*** **042608661-0221**

Sample Description: Metal Wall/Paint - Blue/Red Powder Blue/ Tan on Metal Wall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Tan/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 69A ***Lab Sample ID:*** **042608661-0222**

Sample Description: Concrete Floor/Paint - Red Floor Paint (Concrete)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Red	0.0%	100.0%	None Detected	

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EMSL Order ID:	042608661
Customer ID:	32ENRE78
Customer PO:	185806843.17.1
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material

Client Sample ID: 70A ***Lab Sample ID:*** **042608661-0223**

Sample Description: Metal Door Frame/Paint - Green/Blue/ Red Metal Door Frame

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Blue/Green	0.0%	100.0%	None Detected	

Client Sample ID: 71A ***Lab Sample ID:*** **042608661-0224**

Sample Description: Concrete Floor/Paint - Gray Concrete Floor

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	5/05/2026	Gray/Tan	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached material

Analyst(s):

Kiara Secula	1000 PLM Pt Ct (1)
Lindsey Van Dusen	PLM (43)
Megan Peters	PLM (153)
Russell Hayden	PLM (66)

Reviewed and approved by:



Samantha Sweeney, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This is a summary report; official reports are available on LabConnect or upon request and relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA LAP, LLC-IHLAP Lab 100194, PA ID# 68-00367, LA #04127

Report amended: 05/19/202620:13:23 Replaces amended report from: 05/19/202620:13:23 Reason Code: Client-Other (see report comment)

EMSL Analytical, Inc.

Asbestos Bulk Building Materials - Chain of Custody

EMSL Order Number / Lab Use Only: 042608661

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
EMAIL: cs@emsl.com

Customer Information		Billing Information	
Customer ID:		Billing ID:	
Company Name:	Stantec, Ventura, CA 93003	Company Name:	32ENRE78
Contact Name:	Scott Edblad	Billing Contact:	Scott Edblad
Street Address:	4572 Telephone Road Suite 916	Street Address:	4572 Telephone Road, Suite 916
City, State, Zip:	Ventura CA 93003	City, State, Zip:	Ventura CA
Country:	US	Country:	US
Phone:	(661) 754-0862	Phone:	(661) 754-0862
Email(s) for Report:	scott.edblad@stantec.com	Email(s) for Invoice:	

Project Information

Project Name/No:	Fresno County Courthouse-South Annex Jail / 185806843.17.1	Purchase Order:	185806843.17.1
EMSL LIMS Project ID: (If applicable, EMSL will provide)		US State where samples collected:	CA
State of Connecticut (CT) must select project location:	☐ Commercial (Taxable) ☐ Residential (Non-Taxable)		
Sampled By Name:	Scott Edblad	Sampled By Signature:	
Date Sampled:	04/22/26-04/23/26	No. of Samples in Shipment	224

Turn-Around-Time (TAT)

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 32 Hour ☐ 48 Hour ☑ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

Test Selection

PLM - Bulk (reporting limit)

- ☑ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)
- ☐ POINT COUNT
  - ☐ 400 (<0.25%) ☐ 1,000 (<0.1%)
- ☐ POINT COUNT w/ GRAVIMETRIC
  - ☐ 400 (<0.25%) ☐ 1,000 (<0.1%)
- ☐ NIOSH 9002 (<1%)
- ☐ NYS 198.1 (Friable - NY)
- ☐ NYS 198.6 NOB (Non-Friable - NY)
- ☐ NYS 198.8 (Vermiculite SM-V)

TEM - Bulk

- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (Non-Friable - NY)
- ☐ TEM EPA 600/R-93/116 w Milling Prep (0.1%)

Other Tests (please specify)

☐ Positive Stop - Clearly Identified Homogeneous Areas (HA)

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Sample Number	HA Number	Sample Location	Material Description
		See Attached Bulk Sample Logs	

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:	FEDEX	Sample Condition Upon Receipt:	
Relinquished by:		Date/Time: 04/29/26 1830	Received by: EPT Date/Time: 5/1/26 1155
Relinquished by:		Date/Time:	Received by: Date/Time:

Controlled Document - Asbestos Bulk R7 9/14/2021

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

224

Page 1 of 1

042608661

Stantec

Bulk Sample Log

4572 Telephone Road, Suite 916
Ventura, CA 93003
Tel: (805) 230-1266
Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	01
Material Type:	Tarpaper / Petromat
Color:	Black
Description:	Interior Parapet wall
Estimated Total Qty.:	2,000 sq ft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
Roof	Roof	2,000 sf	SD

SAMPLES

Sample #	Sample Location
01 A	Roof - South wall
B	↓
C	
D	
E	Roof - North side

Notes:

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Relinquished By: Scott Edblad Date: 04/22/2026 Received By: Date: 5/2/26

OrderID: 042608661

04 2608661

Stantec

Bulk Sample Log

4572 Telephone Road, Suite 916
Ventura, CA 93003
Tel: (805) 230-1266
Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	02
Material Type:	Clay
Color:	Orange
Description:	thermal clay Pipe; Flat shaped
Estimated Total Qty.:	200 sft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	(Low)	Med	High
Air Movement:	(Low)	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
EXT	Roof	200 sft	D

SAMPLES

Sample #	Sample Location
02 A	South Roof
B	↓
C	

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL	
HA#	03
Material Type:	Sealant
Color:	Light Gray
Description:	
Estimated Total Qty.:	200 sqft

HAZARD ASSESSMENT			
Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	(Low)	Med	High
Air Movement:	(Low)	Med	High

MATERIAL LOCATIONS			
Floor #	Location	Quantity Estimate	Cond.
EXT	Roof	200 sft	D

SAMPLES	
Sample #	Sample Location
03 A	Roof - Southwest
B	↓
C	

Notes:

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL	
HA#	04
Material Type:	Roof tread
Color:	Black
Description:	Tread and Adhesive
Estimated Total Qty.:	100 sft

HAZARD ASSESSMENT			
Friable:	Yes	(No)	
Contact by Maintenance:	(Low)	Med	High
Vibration:	(Low)	Med	High
Air Movement:	(Low)	Med	High

MATERIAL LOCATIONS			
Floor #	Location	Quantity Estimate	Cond.
EXT	Roof	100 sft	G

SAMPLES	
Sample #	Sample Location
04A	Roof - South of the Penthouse
B	↓
C	↓

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721
Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	05
Material Type:	Sealant
Color:	White/yellow
Description:	Penetration sealant
Estimated Total Qty.:	100 sft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	(Low)	Med	High
Air Movement:	(Low)	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2X7	Throughout the Roof	100	G

SAMPLES

Sample #	Sample Location
05 A	Roof - Throughout
B	↓
C	↓

Notes:

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Bulk Sample Log

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Tel: (805) 230-1266
Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721
Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	06
Material Type:	Plaster
Color:	White/Gray
Description:	Plaster wall system
Estimated Total Qty.:	60,000

HAZARD ASSESSMENT

Friable:	(Yes)		No
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
All Floors	Throughout	60,000	D

SAMPLES

Sample #	Sample Location
06 A	Throughout
B	
C	
D	
E	
F	
G	

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL	
HA#	07
Material Type:	TSI
Color:	Gray
Description:	Pipe elbow white compound
Estimated Total Qty.:	50 sq ft

MATERIAL LOCATIONS			
Floor #	Location	Quantity Estimate	Cond.
	Throughout building	50 sqft	SD

SAMPLES	
Sample #	Sample Location
07A	Penthouse
B	↓
C	

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HAZARD ASSESSMENT			
Friable:	(Yes)		No
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

Notes:

Relinquished By: Scott Edblad Date: 04/22/2026 Received By: Date: 5/8/26

OrderID: 042608661

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Bulk Sample Log

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721
Date: 04/22/2026 & 04/23/26
Inspector: S. Edblad
B. Santos

MATERIAL	
HA#	08
Material Type:	TSI
Color:	white/yellow on the 8" and 4" pipes/ Pipe insulation
Description:	
Estimated Total Qty.:	500 sft

MATERIAL LOCATIONS			
Floor #	Location	Quantity Estimate	Cond.
	Throughout Building	500 sft	D

SAMPLES	
Sample #	Sample Location
08 A	Penthouse
B	Basement
C	Penthouse

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HAZARD ASSESSMENT			
Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

Notes:

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Received By: Date: 5/2/26

OrderID: 042608661

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	09
Material Type:	Foam Adhesive
Color:	Black
Description:	Attached to boiler
Estimated Total Qty.:	20 Sq ft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
Roof	Penthouse	20 sft	G

SAMPLES

Sample #	Sample Location
09 A	Penthouse
B	↓
C	

Notes:

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	10
Material Type:	Roof tread & adhesive
Color:	Black
Description:	TREAD SYSTEM
Estimated Total Qty.:	150 sft

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
6	Near basketball court	150 sft	SD

SAMPLES

Sample #	Sample Location
10 A	Roof
B	↓
C	↓

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Notes:

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

Relinquished By: Seth Edblad Date: 04/22/2026 Received By: [signature] Date: 5/1/26

OrderID: 042608661

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Bulk Sample Log

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	11
Material Type:	Sealant
Color:	Gray
Description:	Roof sealant
Estimated Total Qty.:	20 sft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
EXT	Near basketball court	20 sft	G

SAMPLES

Sample #	Sample Location
11 A	Roof
B	↓
C	

Notes:

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Ventura, CA 93003
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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721
Date: 04/22/2026 & 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL	
HA#	12
Material Type:	Stucco
Color:	Gray / yellow
Description:	exterior wall system
Estimated Total Qty.:	50,000 sqft

MATERIAL LOCATIONS			
Floor #	Location	Quantity Estimate	Cond.
EXT	throughout Building	50,000sft	G

SAMPLES	
Sample #	Sample Location
12 A	Roof
B	Exterior walls
C	
D	
E	
F	
G	

HAZARD ASSESSMENT			
Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

Notes:

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Received By: Date: 5/2/26

OrderID: 042608661

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Tel: (805) 230-1266
Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721
Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL	
HA#	13
Material Type:	Ceiling Tiles
Color:	white
Description:	1'x1', with adhesive
Estimated Total Qty.:	25,000 sft

HAZARD ASSESSMENT			
Friable:	(Yes)		No
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS			
Floor #	Location	Quantity Estimate	Cond.
	Throughout Building	25,000 sft	SD

SAMPLES	
Sample #	Sample Location
13A	4th Floor
B	↓
C	↓
D	2nd Floor
E	↓
F	Basement
G	↓

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Relinquished By: Scott Edblad Date: 04/22/2026 Received By: Date: 5/2/26

OrderID: 042608661

042608661

Stantec

Bulk Sample Log

4572 Telephone Road, Suite 916
Ventura, CA 93003
Tel: (805) 230-1266
Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	14
Material Type:	concrete curb
Color:	Blue
Description:	wall base
Estimated Total Qty.:	50 sft

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
4th	wall base	50sft	D

SAMPLES

Sample #	Sample Location
14A	4th Floor
B	↓
C	

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B. Santos

MATERIAL

HA#	15
Material Type:	Vinyl Floor Tile
Color:	Gray
Description:	Associated with HA#16
Estimated Total Qty.:	400 sqft

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
4th	throughout building	400 sft	D

SAMPLES

Sample #	Sample Location
15A	4th Floor
B	↓
C	

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HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

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B. Santos

MATERIAL

HA#	16
Material Type:	Adhesive
Color:	Brown
Description:	Associated w/ HA # 16
Estimated Total Qty.:	400 sqft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
4th	throughout Building	400 sqft	G

SAMPLES

Sample #	Sample Location
16A	4th Floor
B	↓
C	

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B. Santos

MATERIAL

HA#	17
Material Type:	Vinyl Floor Tile
Color:	Blue/Gray
Description:	Associated w/ HA # 18
Estimated Total Qty.:	400 sq Ft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
4th	Control Room / offices	400 sqft	D

SAMPLES

Sample #	Sample Location
17A	4th Floor
B	↓
C	

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B. Santos

MATERIAL

HA#	18
Material Type:	Adhesive
Color:	Dark brown
Description:	Associated w/ HA #17
Estimated Total Qty.:	400 sft

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
4th	Control Room/ offices	400 sft	D

SAMPLES

Sample #	Sample Location
18A	4th Floor
↓ B	↓
↓ C	

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

Notes:

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B. Santos

MATERIAL

HA#	19
Material Type:	Leveling Compound
Color:	white
Description:	Associated w/ 12" x 12" VFT
Estimated Total Qty.:	400 sft

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
	Throughout Building	400 sft	D

SAMPLES

Sample #	Sample Location
19A	4th Floor
B	↓
C	

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HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

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B. Santos

MATERIAL

HA#	20
Material Type:	Cove Base
Color:	Black
Description:	6" Associated w/ HA#21
Estimated Total Qty.:	200 SFT

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
	Throughout	200sft	G

SAMPLES

Sample #	Sample Location
20A	4TH Floor
B	↓
C	

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B. Santos

MATERIAL

HA#	21
Material Type:	Adhesive
Color:	white
Description:	Associated w/ HA#20
Estimated Total Qty.:	200 sft

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
	Throughout Building	200sft	G

SAMPLES

Sample #	Sample Location
21 A	4th Floor
B	↓
C	↓

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MATERIAL

HA#	22
Material Type:	Carpet / Adhesive
Color:	Dark Gray
Description:	Light blue cells res
Estimated Total Qty.:	300 sft

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
3rd	Ligh Blue cells res/ Through out Building	300sft	G

SAMPLES

Sample #	Sample Location
22A	3rd floor
B	↓
C	↓

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	(Low)	Med	High
Air Movement:	(Low)	Med	High

Notes:

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B. Santos

MATERIAL

HA#	23
Material Type:	Epoxy
Color:	Tan
Description:	under Black Carpet
Estimated Total Qty.:	300 sft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	(Low)	Med	High
Air Movement:	(Low)	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
	throughout Building	300 sft	G

SAMPLES

Sample #	Sample Location
23A	3rd Floor
B	↓
C	

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MATERIAL

HA#	24
Material Type:	Vinyl Floor sheeting
Color:	Gray/Black
Description:	Associated w/ HA # 25
Estimated Total Qty.:	100 sft

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
3rd	Medical office	100sft	G

SAMPLES

Sample #	Sample Location
24A	3rd Floor Medical office
B	↓
C	↓

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B. Santos

MATERIAL

HA#	25
Material Type:	Adhesive
Color:	Dark Brown
Description:	Associated w/ HA # 24
Estimated Total Qty.:	100 sft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
3rd	Medical office	100sft	G

SAMPLES

Sample #	Sample Location
25A	3rd Floor Medical Office
B	↓
C	

Notes:

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B. Santos

MATERIAL

HA#	26
Material Type:	Cove base
Color:	Black
Description:	4", associated w/ HA # 27
Estimated Total Qty.:	100 sft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
1st/3rd	Medical office	100 sft	G

SAMPLES

Sample #	Sample Location
26A	3rd Floor Medical Office
B	↓
C	

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B. Santos

MATERIAL	
HA#	27
Material Type:	Adhesive
Color:	Clear
Description:	Associated w/ HA # 26
Estimated Total Qty.:	100 sft

HAZARD ASSESSMENT			
Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS			
Floor #	Location	Quantity Estimate	Cond.
3rd/1st	Medical Office	100 sft	G

SAMPLES	
Sample #	Sample Location
27 A	3rd Floor Medical office
B	↓
C	↓

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B. Santos

MATERIAL

HA#	28
Material Type:	Ceiling tiles/ Adhesive
Color:	white
Description:	Dotted 1'x1' Ceiling Tiles
Estimated Total Qty.:	100 sft

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
3rd		100 sft	D

SAMPLES

Sample #	Sample Location
28 A	3rd Floor
B	↓
C	

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B. Santos

MATERIAL

HA#	29
Material Type:	Vinyl Floor Tile
Color:	white
Description:	Associated w/ HA# 30
Estimated Total Qty.:	200 sft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
	Throughout Floors: 1st, 2nd and 3rd	200sft	D

SAMPLES

Sample #	Sample Location
29 A	3rd Floor
B	↓
C	

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Inspector: S. Edblad
B. Santos

MATERIAL

HA#	30
Material Type:	Adhesive
Color:	Black
Description:	Associated w HA # 29
Estimated Total Qty.:	200 sft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
	Throughout 1st, 2nd and 3rd Floors	200 sft	D

SAMPLES

Sample #	Sample Location
30 A	3rd Floor
B	↓
C	↓

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B. Santos

MATERIAL

HA#	31
Material Type:	Ceiling Tiles
Color:	white
Description:	2'x4" w/ dots and fissures
Estimated Total Qty.:	6,000 sft

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
	Throughout Building	6,000 sft	D

SAMPLES

Sample #	Sample Location
31 A	3rd Floor
B	↓
C	↓
D	↓
E	First Floor
F	↓
G	↓

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B. Santos

MATERIAL

HA#	32
Material Type:	Epoxy
Color:	Gray
Description:	In the shower area
Estimated Total Qty.:	300 sft

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
	Shower areas throughout Building	300 sft	G

SAMPLES

Sample #	Sample Location
32 A	3rd Floor
B	↓
C	

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B. Santos

MATERIAL

HA#	33
Material Type:	Cove Base
Color:	Gray
Description:	Associated w/ HA#34
Estimated Total Qty.:	

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2nd/1st	Near Library	100sft	G

SAMPLES

Sample #	Sample Location
33A	2nd Floor
B	↓
C	

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B. Santos

MATERIAL

HA#	34
Material Type:	Adhesive
Color:	Brown
Description:	Associated w/ HA #35
Estimated Total Qty.:	100 SFt

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	(Med)	High
Air Movement:	Low	(Med)	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2nd/1st	Near Library	100SFt	G

SAMPLES

Sample #	Sample Location
34A	2nd Floor
↓B	↓
↓C	

Notes:

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OrderID: 042608661

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Bulk Sample Log

4572 Telephone Road, Suite 916
Ventura, CA 93003
Tel: (805) 230-1266
Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	35
Material Type:	Plaster
Color:	white
Description:	wall Patch
Estimated Total Qty.:	10sft

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2nd	Near library	10sft	D

SAMPLES

Sample #	Sample Location
35 A	2nd Floor
B	↓
C	

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Notes:

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Tel: (805) 230-1266
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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
: FIRST & SECOND FLOORS

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	36
Material Type:	ADHESIVE
Color:	YELLOW / TRANSLUCENT
Description:	~~36"x36"~~ 24"x24" CARPET TILES
Estimated Total Qty.:	900sf

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	Low	Med	(High)
Air Movement:	(Low)	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2	LIBRARY OFFICES	600	G
1	OFFICES	300	G

SAMPLES

Sample #	Sample Location
36A	2ND FLR LIBRARY
B	↓
C	

Notes:

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Ventura, CA 93003
Tel: (805) 230-1266
Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	37
Material Type:	FIRE PROOFING
Color:	WHITE
Description:	METAL/CONCRETE CEILINGS AND I-BEAMS
Estimated Total Qty.:	100,000SF

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
P	THROUGHOUT	100KSF	G
4	↓		
3			
2			
1			

SAMPLES

Sample #	Sample Location
37A	2ND FLOOR – MECHANICAL ROOM
B	↓ – BEAMS
C	
D	

Notes: THREE SAMPLES COLLECTED FROM THE PENTHOUSE ON 11/21/24 BY LES

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Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	38
Material Type:	FIRESTOP
Color:	RED / PINK
Description:	WALL PENETRATIONS
Estimated Total Qty.:	50 SF

HAZARD ASSESSMENT

Friable:	Yes	(No)	
Contact by Maintenance:	(Low)	Med	High
Vibration:	Low	Med	(High)
Air Movement:	(Low)	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
P	THROUGHOUT	50 SF	G
4	↓		
3			
2			
1			
B			

SAMPLES

Sample #	Sample Location
38 A	2ND FLOOR PIPE CHASE
↓ B	↓
C	

Notes:

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	39
Material Type:	SEALANT
Color:	WHITE
Description:	HVAC DUCTING SEAMS
Estimated Total Qty.:	600SF

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
P	THROUGHOUT	600SF	G
4			
3			
2			
1			
B			

SAMPLES

Sample #	Sample Location
39 A	2ND FLOOR PIPE CHASE
B	↓
C	↓

Notes:

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Tel: (805) 230-1266
Fax: (805) 230-1277

OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	40
Material Type:	VFS
Color:	GRAY
Description:	PEBBLE PATTERN ASSOCIATED WITH HA#41
Estimated Total Qty.:	400SF

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
1	MEDICAL EXAM ~~MEDICAL EXAM~~ ROOMS	400SF	G
2	ROOMS		

SAMPLES

Sample #	Sample Location
40 A	2ND FLOOR — EXAM RM.
B	↓
C	

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

Notes:

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	41
Material Type:	ADHESIVE
Color:	BROWN
Description:	ASSOCIATED WITH HA # 40
Estimated Total Qty.:	400SF

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
1	MEDICAL EXAM	400SF	G
2	ROOMS		

SAMPLES

Sample #	Sample Location
41-A	2ND FLOOR - EXAM RM.
B	↓
C	↓

Notes:

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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	42
Material Type:	GYPSUM BOARD
Color:	WHITE
Description:	INTERIOR OFFICE WALLS ASSOCIATED WITH HA #43
Estimated Total Qty.:	600SF

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2	OFFICES/EXAMINS	300	G
1	↓	300	↓

SAMPLES

Sample #	Sample Location
42 A	2ND FLOOR-OFFICE
B	↓
C	

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Notes:

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

Relinquished By: Scott Edblad Date: 04/22/2026 Received By: Date: 5/4/26

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	43
Material Type:	JOINT COMPOUND
Color:	WHITE
Description:	ASSOCIATED WITH HA# 42
Estimated Total Qty.:	6005f

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2	OFFICES/EXAM RMS	300	G
1	↓	300	↓

SAMPLES

Sample #	Sample Location
43 A	2ND FLOOR - OFFICE
↓ B	↓
C	

Notes:

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721
Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	44
Material Type:	CARPET
Color:	BLACK/WHITE
Description:	24"x24" LINE PATTERN ASSOCIATED WITH HA # 45
Estimated Total Qty.:	400SF

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2	LIBRARY/OFFICES	200SF	G
1	OFFICES	200SF	G

SAMPLES

Sample #	Sample Location
44A	LIBRARY - 2ND FLOOR
B	↓
C	

Notes:

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	45
Material Type:	ADHESIVE
Color:	YELLOW / TRANSLUCENT
Description:	ASSOCIATED WITH HA# 44
Estimated Total Qty.:	400SF

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2	LIBRARY / OFFICES	200SF	G
1	OFFICES	200SF	G

SAMPLES

Sample #	Sample Location
45A	LIBRARY - 2ND FLOOR
↓ B	↓
C	

Notes:

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Tel: (805) 230-1266
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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721
Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	46
Material Type:	COVE BASE
Color:	BLACK
Description:	~~CHG~~ 4" ASSOCIATED WITH HA # 47
Estimated Total Qty.:	400SF

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2	THROUGHOUT	400SF	G
1	↓		
B	↓		

SAMPLES

Sample #	Sample Location
46 A	LIBRARY ~~CORRIDOR~~ – 2ND FLOOR
↓ B	↓
C	

Notes:

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Tel: (805) 230-1266
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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	47
Material Type:	ADHESIVE
Color:	WHITE
Description:	ASSOCIATED WITH HA# 46
Estimated Total Qty.:	4005F

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	Low	Med	(High)
Air Movement:	(Low)	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2	THROUGHOUT	4005F	G
1	↓		
B	↓		

SAMPLES

Sample #	Sample Location
47A	LIBRARY - 2ND FLOOR
B	↓
C	↓

Notes:

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721
Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	48
Material Type:	VFT
Color:	GRAYISH TAN GREEN
Description:	9"x9" ASSOCIATED WITH HA# 49
Estimated Total Qty.:	400SF

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
1	LOBBY/OFFICES/CLOSETS (CONCEALED UNDER 12"X12")	400SF	D

SAMPLES

Sample #	Sample Location
48 A	1ST FLOOR LOBBY
B	↓
C	↓

Notes:

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HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

Relinquished By: Scott Edblad Date: 04/22/2026 Received By: Date: 5/2/26

OrderID: 042608661

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OrderID: 042608661

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Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/ /2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	49
Material Type:	ADHESIVE
Color:	BLACK
Description:	ASSOCIATED WITH HA #48
Estimated Total Qty.:	500SF

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
1	LOBBY / OFFICES / CLOSETS / RESIDUAL IN CORRIDORS (CONCEALED UNDER 12"X12")	500SF	D

SAMPLES

Sample #	Sample Location
49 A	1ST FLOOR LOBBY
B	↓
C	↓

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Notes:

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

Relinquished By: Seth Edblad Date: 04/ /2026 Received By: Date: 5/2/26

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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	50
Material Type:	TSI
Color:	FOIL / PINK
Description:	DUCT INSULATION
Estimated Total Qty.:	100SF

HAZARD ASSESSMENT

Friable:	(Yes)		No
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
1	THROUGHOUT	100SF	G

SAMPLES

Sample #	Sample Location
50A	1ST FLOOR OFFICE
↓ B	↓
↓ C	

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	51
Material Type:	TEXTURE
Color:	WHITE
Description:	ASSOCIATED WITH GYPSUM BOARD WALLS
Estimated Total Qty.:	600SF

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
3	THROUGHOUT	600SF	G
2	↓		
1	↓		

SAMPLES

Sample #	Sample Location
51.9	THIRD FLOOR
B	↓
C	

Notes:

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HAZARD ASSESSMENT

Friable:	(Yes)		No
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

Relinquished By: Scott Edblad Date: 04/22/2026 Received By: Date: 5/1/26

04 26 08661

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	52
Material Type:	ADHESIVE
Color:	ORANGE
Description:	ASSOCIATED WITH FRP
Estimated Total Qty.:	150 sf

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	Low	Med	(High)
Air Movement:	(Low)	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
ALL	JANITOR'S	150 SF	G
	CLOSETS & EMPLOYEE		
	RESTROOM		

SAMPLES

Sample #	Sample Location
52 A	2ND FLOOR - JANITOR'S
↓ B	↓
C	

Notes:

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/29/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	53
Material Type:	GROUT
Color:	GRAY
Description:	~~Quantile~~ ASSOCIATED WITH HA# 54
Estimated Total Qty.:	800SF

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
B	BASEMENT LAUNDRY ROOMS	800SF	G

SAMPLES

Sample #	Sample Location
53A	LAUNDRY
↓ B	↓
C	

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Notes:

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

Relinquished By: Scott Edblad Date: 04/29/2026 Received By: [signature] Date: 5/1/26

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
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Fresno, CA 93721
Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	54
Material Type:	CERAMIC TILE
Color:	RED
Description:	9"X9" ASSOCIATED WITH #53
Estimated Total Qty.:	800SF

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
B	BASEMENT LAUNDRY ROOMS	800SF	G

SAMPLES

Sample #	Sample Location
54A	LAUNDRY
↓ B	↓
C	

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Ventura, CA 93003
Tel: (805) 230-1266
Fax: (805) 230-1277

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721
Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	55
Material Type:	VFS/TREAD
Color:	GRAY/TEXTURED
Description:	FLOORS/WALLS ASSOCIATED WITH HA# 56
Estimated Total Qty.:	3,000SF

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
1	CORRIDORS/	3KSF	D
B	HALLWAYS		

SAMPLES

Sample #	Sample Location
55A	BASEMENT MAINTENCE HALLWAY
1B	
C	
D	
B	

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	56
Material Type:	COHESIVE
Color:	BROWN
Description:	~~FLOORS/WALL~~ ASSOCIATED WITH HA# 55
Estimated Total Qty.:	3,000SF

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	(Low)	Med	High
Vibration:	Low	Med	(High)
Air Movement:	(Low)	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
1	CORRIDORS /	3KSF	D
B	HALLWAYS		

SAMPLES

Sample #	Sample Location
56 A	BASEMENT MAINTENANCE HALLWAY
B	
C	
D	
E	

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
Site Name: South Annex Jail
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Fresno, CA 93721
Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	57
Material Type:	GROUT / THINSET
Color:	GRAY / WHITE
Description:	ASSOCIATED WITH HA # SEE NOTES 582
Estimated Total Qty.:	500SF ~~2665F~~

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
B	~~CORRIDORS~~ HALLWAY / RESTROOM	500SF	D

SAMPLES

Sample #	Sample Location
57 A	BASEMENT MAINTENCE HALLWAY
B	
C	

Notes: ASSOCIATED WITH 4"X4" CERAMIC TILE IN HALLWAYS AND RESTROOMS (WHITE & TAN).

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:
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Fresno, CA 93721
Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	58
Material Type:	CERAMIC TILE CEILING PANEL
Color:	WHITE/TAN BROWN
Description:	4'x4' ADHERED TO THE WALL SEE NOTES 5-72
Estimated Total Qty.:	500SF 100SF

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	Hgly
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
B	HALLWAY / RESTROOMS	500SF	D
2	STAFF RESTROOM	100SF	G

SAMPLES

Sample #	Sample Location
58 A	BASEMENT STAFF RESTROOM MAINTENANCE HALLWAY
B	↓
C	↓

Notes: 2' x 4' GYPSUM BOARD TILE PANELS

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OrderID: 042608661

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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	59
Material Type:	CMU
Color:	GRAY/BLACK
Description:	8"X16" ASSOCIATED WITH HA# 60
Estimated Total Qty.:	800 SF

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
ALL	INTERIOR WALLS STAIRS - HALLWAYS	800SF	G

SAMPLES

Sample #	Sample Location
59 A	2ND FLOOR CORRIDOR
B	↓
C	

Notes:

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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	60
Material Type:	MORTAR
Color:	GRAY
Description:	ASSOCIATED WITH HA# 59
Estimated Total Qty.:	800SF

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
ALL	INTERIOR WALLS	800SF	G
	STAIRS - HALLWAYS		

SAMPLES

Sample #	Sample Location
60 A	2ND FLOOR CORRIDOR
B	↓
C	

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

Notes:

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Tel: (805) 230-1266
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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
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Fresno, CA 93721

Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	G1
Material Type:	THERMAL CLAY TILE
Color:	RED
Description:	12"x12" WALL TILE
Estimated Total Qty.:	100 SF

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
B	MECHANICAL / BOILER ROOM WALLS	100 SF	G

SAMPLES

Sample #	Sample Location
G1 a	BOILER ROOM
↓ b	↓
c	

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

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Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	62
Material Type:	CONCRETE (ROCK)
Color:	TAN / GRAY
Description:	EXTERIOR WALLS / FLOORS
Estimated Total Qty.:	50,000SF

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
EXT	THROUGHOUT	50KSF	G

SAMPLES

Sample #	Sample Location
62 A	NE - LOADING DOCK
B	
C	
D	CORNER
E	NW CORNER
F	
G	

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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	63
Material Type:	SEALANT
Color:	GRAY
Description:	EXPANSION JOINTS
Estimated Total Qty.:	200 SF

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
EXT	EXTERIOR CONCRETE AND STUCCO JOINTS	200SF	G

SAMPLES

Sample #	Sample Location
63A	NW
B	↓
C	↓

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/~~29~~ 22 2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	64
Material Type:	PAINT
Color:	WHITE
Description:	4" PIPE TSI
Estimated Total Qty.:	20SF

HAZARD ASSESSMENT

Friable:	(Yes)		No
Contact by Maintenance:	Low	(Med)	High
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
P	PENTHOUSE	20 SF	D

SAMPLES

Sample #	Sample Location
64 A	OVERHEAD PIPE

Notes: ASSOCIATED WHITE PAINT SAMPLE P01

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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

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Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	65
Material Type:	PAINT
Color:	WHITE/RED
Description:	CONTROL PANEL DOOR
Estimated Total Qty.:	15SF ~~20 SF~~

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
4	4TH FLOOR	15SF	D

SAMPLES

Sample #	Sample Location
659	METAL PANEL DOOR

Notes: ASSOCIATED WITH PAINT SAMPLE P02

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OrderID: 042608661

Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/23/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	66
Material Type:	~~UNKNOWN~~ PAINT
Color:	WHITE
Description:	RESIDUAL WALL PAINT (CONCRETE)
Estimated Total Qty.:	500SF

HAZARD ASSESSMENT

Friable:	(Yes)		No
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
B	BASEMENT LAUNDRY	500SF	D

SAMPLES

Sample #	Sample Location
669	CLOTHES STORAGE

Notes: ASSOCIATED WITH PAINT SAMPLE 003

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

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Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	67
Material Type:	PAINT
Color:	LIGHT BLUE/RED
Description:	METAL DESK
Estimated Total Qty.:	15 SF

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
4	DESK/WORK AREA	15 SF	D

SAMPLES

Sample #	Sample Location
679	DESK TOP

Notes: ASSOCIATED WITH PAINT SAMPLE #4

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B. Santos

MATERIAL

HA#	68
Material Type:	PAINT
Color:	~~BLUE/RED~~ POWDER BLUE/ TAN
Description:	~~On~~ METAL WALL
Estimated Total Qty.:	50SF

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
4	WORK AREA	50SF	D

SAMPLES

Sample #	Sample Location
68A	METAL WALL

Notes: ASSOCIATED WITH PAINT SAMPLE P05

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Fresno, CA 93721

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Inspector: S. Edblad
B. Santos

MATERIAL

HA#	69
Material Type:	PAINT
Color:	RED
Description:	FLOOR PAINT (CONCRETE)
Estimated Total Qty.:	100 SF

HAZARD ASSESSMENT

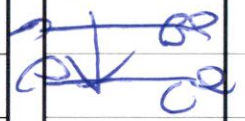
Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
B	BASEMENT –	100 SF	D
	ELEVATOR		
	RESERVOIR ROOM		

SAMPLES

Sample #	Sample Location
69A	CONCRETE FLOOR



Notes: ASSOCIATED WITH PAINT SAMPLE P06

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Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	70
Material Type:	PAINT
Color:	GREEN/BLUE/RED
Description:	METAL DOOR FRAME
Estimated Total Qty.:	10SF

HAZARD ASSESSMENT

Friable:	Yes		No
Contact by Maintenance:	Low	Med	High
Vibration:	Low	Med	High
Air Movement:	Low	Med	High

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
2	MEDICAL OFFICE	10SF	D

SAMPLES

Sample #	Sample Location
709	METAL DOOR FRAME

Notes: ASSOCIATED WITH PAINT SAMPLE 707

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Project Name: JCC Fresno County Courthouse
Project #: 185806843 Task #: 17.1
:

Site Name: South Annex Jail
Site Address: 2280 Fresno Street
Fresno, CA 93721

Date: 04/22/2026
Inspector: S. Edblad
B. Santos

MATERIAL

HA#	71
Material Type:	PAINT
Color:	GRAY
Description:	CONCRETE FLOOR
Estimated Total Qty.:	200 SF

HAZARD ASSESSMENT

Friable:	Yes		(No)
Contact by Maintenance:	Low	Med	(High)
Vibration:	Low	Med	(High)
Air Movement:	Low	Med	(High)

MATERIAL LOCATIONS

Floor #	Location	Quantity Estimate	Cond.
1	TRAINING ROOM (SHOT)	200SF	D

SAMPLES

Sample #	Sample Location
71A	CONCRETE FLOOR

Notes: ASSOCIATED WITH PAINT SAMPLE P08

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OrderID: 042608661

APPENDIX F

Personnel Certifications and Laboratory Accreditations

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health-Asbestos & Carcinogen Unit
1750 Howe Avenue, Suite 460
Sacramento, CA 95825
(916) 574-2993 Office http://www.dir.ca.gov/dosh/asbestos.html actu@dir.ca.gov

Gavin Newsom, Governor

901214483C

12/8/2025

Audrey Lundin
[redacted]
Walnut Creek CA 94595

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email w any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Dean Mochrie, CAC
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached (08/24)



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Laboratory ID: LAP-100194

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs, LLC (AIHA LAP) accreditation to the ISO/IEC 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

☑	**INDUSTRIAL HYGIENE**	Accreditation Expires: April 01, 2027
☑	**ENVIRONMENTAL LEAD**	Accreditation Expires: April 01, 2027
☑	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: April 01, 2027
☐	**FOOD**	Accreditation Expires:
☐	**UNIQUE SCOPES**	Accreditation Expires:
☐	**BE FIELD/MOBILE**	Accreditation Expires:

Specific Field(s) of Testing/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA LAP requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA LAP website (www.aihaaccreditedlabs.org) for the most current Scope.

Cheryl O. Morton

Cheryl O Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision21: 10/24/2023

Date Issued: 05/01/2025

AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

EMSL Analytical, Inc.

Laboratory ID: LAP-100194

Issue Date: 06/01/2025
Expire Date: 04/01/2027

200 Route 130 North Cinnaminson, NJ 08077

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

The EPA recognizes the AIHA LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air and composited wipes analyses are not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 01/18/1995

Component, parameter, characteristic, material, or product tested	Technology sub-type/Detector	Method	Method Description *(for internal methods only)*
Airborne Dust	AA	NIOSH 7082	N/A
Composited Wipes	AA	EPA SW-846 3050B	N/A
		EPA SW-846 7000B	N/A
Paint	AA	EPA SW-846 3050B	N/A
		EPA SW-846 7000B	N/A
	ICP	EPA SW-846 3050B	N/A
		EPA SW-846 3051A	N/A
		EPA SW-846 6010D	N/A
Settled Dust by Wipe	AA	EPA SW-846 3050B	N/A
		EPA SW-846 7000B	N/A
	ICP	EPA SW-846 3050B	N/A
		EPA SW-846 3051A	N/A
		EPA SW-846 6010D	N/A
Soil	AA	EPA SW-846 3050B	N/A
		EPA SW-846 7000B	N/A

Component, parameter, characteristic, material, or product tested	Technology sub-type/Detector	Method	Method Description *(for internal methods only)*
	ICP	EPA SW-846 3050B	N/A
		EPA SW-846 3051A	N/A
		EPA SW-846 6010D	N/A

A complete listing of currently accredited ELLAP laboratories is available on the AIHA LAP, LLC website at:
http://www.aihaaccreditedlabs.org

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Laboratory ID: LAP-100194

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs, LLC (AIHA LAP) accreditation to the ISO/IEC 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

☑	**INDUSTRIAL HYGIENE**	Accreditation Expires: April 01, 2027
☑	**ENVIRONMENTAL LEAD**	Accreditation Expires: April 01, 2027
☑	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: April 01, 2027
☐	**FOOD**	Accreditation Expires:
☐	**UNIQUE SCOPES**	Accreditation Expires:
☐	**BE FIELD/MOBILE**	Accreditation Expires:

Specific Field(s) of Testing/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA LAP requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA LAP website (www.aihaaccreditedlabs.org) for the most current Scope.

Cheryl O. Morton

Cheryl O Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision21: 10/24/2023

Date Issued: 05/01/2025

AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Laboratory ID: LAP-100194

Issue Date: 08/05/2024
Expire Date: 04/01/2027

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

Industrial Hygiene Laboratory Accreditation Program (IHLAP)

Initial Accreditation Date: 02/01/1989

IHLAP Scope Category	Field of Testing (FOT)	Technology sub-type/Detector	Published Reference Method/Title of In-house Method	Component, parameter, characteristic, material, or product tested
Asbestos/Fiber Microscopy Core	Phase Contrast Microscopy (PCM)	-	NIOSH 7400	Asbestos/Fibers
Asbestos/Fiber Microscopy Core	Polarized Light Microscopy (PLM)	-	EPA 600/R-93/116	Asbestos & Other Fibers in Bulk
Asbestos/Fiber Microscopy Core	Transmission Electron Microscopy (TEM)	-	EPA AHERA - 40 CFR Part 763	Asbestos
Asbestos/Fiber Microscopy Core	Transmission Electron Microscopy (TEM)	-	NIOSH 7402	Asbestos/Fibers
Chromatography Core	Gas Chromatography	Diffusive Sampler	NIOSH 1501	Aromatic Hydrocarbons
Chromatography Core	Gas Chromatography	GC/ECD	NIOSH 5503 Modified	Polychlorinated biphenyls
Chromatography Core	Gas Chromatography	GC/FID	NIOSH 1003 Modified	Halogenated Hydrocarbons
Chromatography Core	Gas Chromatography	GC/FID	NIOSH 1005 Modified	Methylene Chloride
Chromatography Core	Gas Chromatography	GC/FID	NIOSH 1400 Modified	Alcohols
Chromatography Core	Gas Chromatography	GC/FID	NIOSH 1500 Modified	Hydrocarbons
Chromatography Core	Gas Chromatography	GC/FID	NIOSH 1501 Modified	Aromatic Hydrocarbons
Chromatography Core	Gas Chromatography	GC/FID	NIOSH 1550 Modified	Total Petroleum Hydrocarbons
Chromatography Core	Gas Chromatography	GC/FID	NIOSH 1603 Modified	Acetic Acid
Chromatography Core	Gas Chromatography	GC/FID	NIOSH 2000 Modified	Methyl Alcohol
Chromatography Core	Gas Chromatography	GC/MS	EPA TO-15	Volatile Organic Compounds
Chromatography Core	Ion Chromatography (IC)	-	NIOSH 6004 Modified	Sulfur Dioxide/Sulfate

AIHA LAP™

IHLAP Scope Category	Field of Testing (FOT)	Technology sub-type/Detector	Published Reference Method/Title of In-house Method	Component, parameter, characteristic, material, or product tested
Chromatography Core	Ion Chromatography (IC)	-	NIOSH 6011	Chlorine & Bromine
Chromatography Core	Ion Chromatography (IC)	-	NIOSH 7903	Inorganic Acids
Chromatography Core	Ion Chromatography (IC)	-	OSHA ID-214	Ozone
Chromatography Core	Liquid Chromatography	HPLC/FL	NIOSH 2016	Formaldehyde
Chromatography Core	Liquid Chromatography	HPLC/UV	NIOSH 5506 Modified	Polynuclear Aromatic Hydrocarbons (PAHs)
Chromatography Core	Liquid Chromatography	LC/MS	NIOSH 9111 Modified	Methamphetamines
Miscellaneous Core	Gravimetric	-	NIOSH 0500	Total Dust
Miscellaneous Core	Gravimetric	-	NIOSH 0600	Respirable Dust
Miscellaneous Core	Gravimetric	-	NIOSH 5524	Metal Working Fluids
Miscellaneous Core	Thermo-optical Analysis (TOA)	-	NIOSH 5040	Elemental Carbon
Spectrometry Core	Atomic Absorption	CVAA	NIOSH 6009 Modified	Mercury
Spectrometry Core	Atomic Absorption	CVAA	OSHA ID-140 Modified	Mercury vapor
Spectrometry Core	Atomic Absorption	CVAA	OSHA ID-145	Mercury particulate
Spectrometry Core	Atomic Absorption	FAA	NIOSH 7082	Lead
Spectrometry Core	Inductively-Coupled Plasma	ICP/AES	NIOSH 7300 Modified	Lead
Spectrometry Core	Inductively-Coupled Plasma	ICP/MS	NIOSH 7300 Modified	Lead
Spectrometry Core	X-ray Diffraction (XRD)	-	NIOSH 7500	Silica
Spectrometry Core	X-ray Diffraction (XRD)	-	OSHA ID-142	Silica

A complete listing of currently accredited IHLAP laboratories is available on the AIHA LAP, LLC website at: *http://www.aihaaccreditedlabs.org*

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health-Asbestos & Carcinogen Unit
1750 Howe Avenue, Suite 460
Sacramento, CA 95825
(916) 574-2993 Office http://www.dir.ca.gov/dosh/asbestos.html actu@dir.ca.gov

Gavin Newsom, Governor

510308049C

4/15/2026

Theresa Bella Silvestre dos Santos
3700 S Plaza Drive, #A208
Santa Ana CA 92709

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email w any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Dean Mochrie, CAC
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached (08/24)



United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101048-0

EMSL Analytical, Inc.

Cinnaminson, NJ

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique on ISO/IEC 17025).

2025-07-01 through 2026-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
Ms. Samantha Rundstrom
Phone: 856-303-2577
Email: srundstrom@emsl.com
http://www.emsl.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 101048-0**

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	*Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

STATE OF CALIFORNIA Gavin Newsom, Governor
DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health-Asbestos & Carcinogen Unit
1750 Howe Avenue, Suite 460
Sacramento, CA 95825
(916) 574-2993 Office http://www.dir.ca.gov/dosh/asbestos.html actu@dir.ca.gov

201504095414C

4/27/2026

Scott Edblad
182 Walter Avenue
Newbury Park CA 91320

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email w any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Dean Mochrie, CAC
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached (08/24)



APPENDIX G

CDPH Lead Hazard Evaluation Report

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation April 22-23, 2026

Section 2 — Type of Lead Hazard Evaluation (Check one box only)

☐ Lead Inspection ☐ Risk assessment ☐ Clearance Inspection ☑ Other (specify) Paint Chip Samples

Section 3 — Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)]	City	County	Zip Code
2280 Fresno Street	Fresno	Fresno	93724

Construction date (year) of structure	Type of structure	Children living in structure?
1942, annex added in 1960	☐ Multi-unit building ☐ School or daycare ☐ Single family dwelling ☑ Other Jail	☐ Yes ☑ No ☐ Don't Know

Section 4 — Owner of Structure (if business/agency, list contact person)

Name	Telephone number
County of Fresno	

Address [number, street, apartment (if applicable)]	City	State	Zip Code

Section 5 — Results of Lead Hazard Evaluation (check all that apply)

☐ No lead-based paint detected ☐ Intact lead-based paint detected ☑ Deteriorated lead-based paint detected

☐ No lead hazards detected ☐ Lead-contaminated dust found ☐ Lead-contaminated soil found ☐ Other

Section 6 — Individual Conducting Lead Hazard Evaluation

Name	Telephone number
Scott Edblad	661-754-0862

Address [number, street, apartment (if applicable)]	City	State	Zip Code
4572 Telephone Road, Suite 916	Ventura	CA	93003

CDPH certification number	Signature	Date
LRC-14821		5/13/2026

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Scott Edblad (LRC-14821), Bella Santos (LRC-11042)

Section 7 — Attachments

A. A foundation diagram or sketch of the structure indicating the specifc locations of each lead hazard or presence of lead-based paint;
B. Each testing method, device, and sampling procedure used;
C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector

Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:

California Department of Public Health
Childhood Lead Poisoning Prevention Branch Reports
850 Marina Bay Parkway, Building P, Third Floor
Richmond, CA 94804-6403
Fax: (510) 620-5656

Appendix J Preliminary Geotechnical Study

MOORE TWINING ASSOCIATES, INC.

PRELIMINARY GEOTECHNICAL ENGINEERING AND GEOLOGIC HAZARDS INVESTIGATION REPORT FOR SITE ACQUISITION PHASE - SITE 1A

NEW FRESNO COURTHOUSE

FRESNO, FRESNO COUNTY, CALIFORNIA

Project Number: C88004.01-03

For:

Precision Civil Engineering, Inc.
1234 O Street
Fresno, CA 93721

March 24, 2026 (Revised April 27, 2026)

www.mooretwining.com

PH: 559.268.7021
FX: 559.268.7126
2527 Fresno Street
Fresno, CA 93721

MOORE TWINING ASSOCIATES, INC.

April 27, 2026 C88004.01-03

Precision Civil Engineering, Inc.
1234 O Street
Fresno, CA 93721

Attention: Mr. Craig Roberts

Subject: **Preliminary Geotechnical Engineering and Geologic Hazards Investigation**
For Site Acquisition Phase - Site 1A
New Fresno Courthouse
Fresno, Fresno County, California

Dear Mr. Roberts:

We are pleased to submit this preliminary geotechnical engineering and geologic hazards investigation prepared for the "Site 1A" acquisition phase for the proposed courthouse to be located in Fresno, Fresno County, California. As background, Moore Twining Associates, Inc. (Moore Twining) previously conducted a preliminary investigation of two potential building sites identified as site locations 1A and 1B within Courthouse Park as reported in our September 22, 2023 Preliminary Geotechnical Engineering and Geohazards Investigation Report for Site Selection Phase, dated September 22, 2023. The following report includes additional investigation of Site 1A as well as the previous geotechnical engineering data that was obtained as part of our previous investigation. Thus, the following report supersedes the September 22, 2023 report.

The contents of this report include the purpose of the investigation, scope of services, background information, investigative procedures, our findings, evaluations, and preliminary conclusions and recommendations.

We appreciate the opportunity to be of service. If you have any questions regarding this report, or if we can be of further assistance, please contact us at your convenience.

Sincerely,

MOORE TWINING ASSOCIATES, INC.
Geotechnical Engineering Division

Read L. Andersen, RGE
Manager

REGISTERED PROFESSIONAL ENGINEER
READ L. ANDERSEN
2810
EXP. 12-31-26
GEOTECHNICAL
STATE OF CALIFORNIA

www.mooretwining.com
PH: 559.268.7021
FX: 559.268.7126
2527 Fresno Street
Fresno, CA 93721

EXECUTIVE SUMMARY

Moore Twining Associates, Inc. (Moore Twining) prepared this geotechnical engineering and geohazards investigation report for the site acquisition phase of the new courthouse planned at the Site 1A location at the Courthouse Park site in downtown Fresno, California.

Site 1A is currently occupied by the South Annex Jail and a Sheriff's Office Building. This area is currently occupied by the existing South Annex Jail and the Fresno County Sheriff's Office Buildings (see Drawing No. 4 in Appendix A). The South Annex Jail and Fresno County Sheriff's Office buildings both include basement levels. The South Annex Jail basement is also connected with level P1 of the existing underground parking garage. In addition, an existing prisoner transport tunnel which extends from the County Main Jail building to buildings within Courthouse Park extends below the site.

At the time of preparation of this report, only conceptual design level information was available regarding the proposed courthouse structure. The courthouse structure is anticipated to include a jury assembly area, loading dock area, central holding area, mechanical equipment, sally port functions and other elements typical of similar structures. It is our understanding that the new courthouse will include a tower with up to about 11 stories and a mechanical floor above the 11th story. One below grade basement level is anticipated.

In July, 2023, six (6) test borings were drilled at the site to depths ranging from about 16½ to about 76½ feet below site grades (BSG). In November and December, 2025, and January, 2026, eight (8) additional test borings were drilled at the site to depths ranging from about 51½ to about 81½ feet below site grades (BSG).

The soil borings drilled for this investigation encountered fill soils ranging in depth from 4 to 6 feet BSG. Below the fill soils, the near surface native soils encountered generally consisted of very loose to dense silty sands. The near surface silty sands were underlain by interbedded layers of loose to very dense clayey sands, loose to very dense poorly graded sands with silt, loose to dense poorly graded sands, very stiff to hard sandy lean clays (or lean clays with sand), hard sandy silts, and additional loose to very dense silty sands extending to the maximum depths explored. The very loose to medium dense granular soils generally extended to depths of about 15 to 20 feet BSG in the borings. The granular soils encountered below a depth of about 15 or 20 feet BSG were generally dense to very dense, and the fine grained soils below a depth of about 15 or 20 feet BSG were generally very stiff to hard.

Free groundwater was not encountered in the test borings drilled at the time of our July 2023 field exploration, nor our November 2025 or January 2026 field exploration to the maximum depth explored, about 81½ feet BSG. However, a relatively thin lens of suspected perched groundwater was encountered within borings B-9 and B-10 at a depth of about 65 feet BSG. Refer to the logs of borings in Appendix B of this report. Due to the depth of groundwater, the potential for liquefaction to occur is low.

EXECUTIVE SUMMARY (Continued)

The potential for the geologic/seismic hazards reviewed as part of this study to impact the proposed project are considered low. However, as indicated in this report (refer to Drawing No. 8 in Appendix A), part of the site is located within the inundation zone for catastrophic failure of Fancher Creek Reservoir and Big Dry Creek Detention Reservoir. Also, as noted in this report, although the potential for radon gas levels to exceed 4 picocuries per liter appears low, considering the public nature of the building and the recommendations of CGS Special Report 247, radon gas testing would be recommended within existing nearby buildings and basement levels to obtain specific data to determine if any special soil gas control systems are needed for the proposed structure due to a potential for elevated indoor radon levels.

Due to the column spacing and the anticipated structure loads provided by HOK, a structural mat foundation system is anticipated to be used for support of the new courthouse. Based on the information provided by HOK, a maximum applied ground pressure of 3,500 pounds per square foot was assumed for consideration of a mat foundation when supported on the dense granular soils and/or very stiff to hard fine-grained soils encountered below depths of about 20 to 25 feet BSG.

Numerous below grade structures are located adjacent to the planned basement excavation. Due to the proximity of the adjacent, existing improvements including adjacent buildings with basement levels and retaining walls, the excavations required for the project have a potential to impact adjacent improvements. Thus, demolition and construction activities will need to be conducted in a manner to limit ground vibration as well as to avoid undermining support of adjacent foundations so as not to damage existing improvements which are to remain.

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PRELIMINARY GEOTECHNICAL ENGINEERING AND GEOLOGIC HAZARDS INVESTIGATION REPORT FOR SITE ACQUISITION PHASE - SITE 1A

NEW FRESNO COURTHOUSE

FRESNO, FRESNO COUNTY, CALIFORNIA

Project Number: C88004.01-03

1.0 INTRODUCTION

This report presents the results of a preliminary geotechnical engineering and geologic hazards investigation prepared for the site acquisition phase for the new courthouse to be located at "Site 1A" within Courthouse Park in Fresno, Fresno County, California. Moore Twining Associates, Inc. (Moore Twining) was authorized by Precision Civil Engineering, Inc. to conduct this investigation.

The contents of this report include the purpose of the investigation and the scope of services provided. The site history, previous studies, site description, and anticipated construction are discussed. In addition, a description of the investigative procedures used and the subsequent findings obtained are presented. Finally, the report provides an evaluation of the findings, and preliminary conclusions and recommendations. The report appendices contain the drawings (Appendix A), the logs of borings (Appendix B), the results of laboratory tests (Appendix C), site photographs (Appendix D), and the site-specific response spectra (Appendix E).

The Geotechnical Engineering Division of Moore Twining, headquartered in Fresno, California, performed the investigation.

2.0 PURPOSE AND SCOPE OF INVESTIGATION

2.1 Purpose: The purpose of this investigation is to conduct a geotechnical engineering exploration program to evaluate potential geotechnical engineering and geologic constraints to the proposed project for use in development of the project environmental documents (CEQA and NEPA), evaluate the data collected during the field and laboratory operations, and provide the following preliminary information for use in design of the Criteria Architect plans used for bidding the design-bid project work.

2.1.1 A general description of the subsurface soil and groundwater conditions encountered and review of published geologic information related to the site;

2.1.2 A summary of the site history based on review of historic, low elevation aerial photographs and Sanborn maps;

2.1.3 Discussion of geotechnical engineering and geological conditions identified during the preliminary investigation which may present significant impacts to site development;

2.1.4 Assessment of potential geotechnical engineering and geologic constraints such as faulting, expansive soils, liquefaction and seismic settlement, and compressible soils;

2.1.5 Preliminary foundation design information including recommended foundation type(s), minimum depths; and preliminary geotechnical engineering parameters for use in conceptual design;

2.1.6 Mapped seismic design coefficients based on the 2025 California Building Code (CBC) and development of a site-specific response spectra;

2.1.7 Assessment of potential geologic and seismic hazards in accordance with the November 2022 California Geological Survey, Note 48;

2.1.8 Summary of soil corrosivity potential testing; and

2.1.9 Final test boring logs and presentation of laboratory test results.

This report is a preliminary report intended for use in the site acquisition phase of the project. It is not the intent of the investigation to provide final geotechnical engineering design parameters for the foundations as we understand the final design will be developed by a design-build contractor. It is our understanding sometime after a design-build contractor is selected, the design build geotechnical engineer will conduct a geotechnical engineering investigation for use in project design. This report is provided specifically for the proposed Site 1A location described in the Anticipated Construction section of this report and shown on Drawing No.4 in Appendix A of this report.

2.2 Scope: The scope of services includes a preliminary geotechnical engineering investigation for the site acquisition phase of the project. The scope of services were coordinated with the requirements of the JCC and the Criteria Architect. The actions undertaken during the investigation are summarized as follows.

2.2.1 A visual site reconnaissance and subsurface exploration were conducted.

2.2.2 Various conceptual design-level site plans for Site 1A building location for the proposed courthouse, prepared by the project Criteria Architect (HOK), were reviewed for general project information. In addition, information regarding the project included in the Court Facilities Advisory Committee Site Selection Report, dated September 25, 2023, was reviewed.

2.2.3 The Topography Map for Fresno County Courthouse, Fresno County Sheriff's Office, and South Annex Jail, prepared by Precision Civil Engineering, Inc., dated July 10, 2023, was reviewed.

2.2.4 Various plan sheets from record drawings pertaining to the existing structures within Courthouse Park were reviewed, including the As-Built Construction Plans for Court House & Facilities For the County of Fresno Court House Park, prepared by Walter Wagner & Partners, dated January 14, 1964, the As-Built Construction Plans for Sheriff Administration Building (Office), prepared by Schoenwald, Thomas, Harris, Bode & Blayney, dated May 3, 1968, and the As-Built Construction Plans titled Jail Building for the County of Fresno, prepared by Fred L. Swartz, dated 1941.

2.2.5 The Geologic Map of California, Fresno Sheet, prepared by the Division of Mines and Geology, dated 1965, Second Printing, 1971, was reviewed.

2.2.6 Historical aerial photographs from various years between 1946 and 1998 were reviewed. In addition, Sanborn Maps from various years between 1885 and 1970, were reviewed.

2.2.7 Laboratory tests were conducted to determine selected physical and engineering properties of the subsurface soils.

2.2.8 Mr. Craig Roberts (Precision Civil Engineering, Inc.), Ms. Zorana Bosnik and Ms. Claire Moore (HOK), and Mr. Tim Murchison (Judicial Council of California) were consulted during the investigation.

2.2.9 The data obtained from the investigation were evaluated to develop an understanding of the subsurface geotechnical engineering characteristics.

2.2.10 This report was prepared to present the purpose and scope, background information, field exploration procedures, findings, evaluations, and preliminary conclusions and recommendations.

3.0 BACKGROUND INFORMATION

The site description, site history and previous studies, and the anticipated construction are summarized in the following subsections.

3.1 Site Description: The area investigated in this report includes the ~2 acre site location 1A planned for the new courthouse within Courthouse Park in downtown Fresno, California. The general site location is shown on Drawing No. 1 in Appendix A of this report. The overall Courthouse Park area is bounded by Van Ness Avenue, Fresno Street, M Street and Tulare Street. The drawings in Appendix A show a north arrow and a Project North arrow pointing to "page left" toward Fresno Street. Based on the Project North arrow shown on the drawings in Appendix A, Fresno Street is considered to be the north side of Courthouse Park. In addition to the adjacent public streets, the west side of Courthouse Park is bordered by a City of Fresno underground parking garage with a vehicular exit ramp and a ramp and concrete stairway access for pedestrians. The

underground parking garage is located below Van Ness Avenue on the west side of Courthouse Park. City of Fresno Bus pick-up/drop-off areas are also located along the Van Ness Avenue and Fresno Street frontages.

The western portion of the overall block of Courthouse Park includes a large public park space with hardscapes, statues, a fountain, mature trees, grass and public sidewalks adjacent to public streets bordering the park. Numerous existing buildings operated by Fresno County for a variety of uses, including the existing Fresno County Courthouse, Sheriff's Office, Hall of Records, and the South Annex Jail with an adjacent central plant/utility building are located within the eastern portion of the Courthouse Park block. Asphalt concrete parking lots also occur within the northeastern corner and the east side of the southern edge of the overall Courthouse Park block. In addition, a two-level underground parking structure with entrance and exit ramps is located below the existing courtyard area east of the existing Fresno County Courthouse. Furthermore, an existing underground tunnel providing secure access for transport of prisoners between the Fresno County Courthouse, South Annex Jail Building, and the existing County Main Jail Building (located at the corner of Fresno Street and M Street, across Fresno Street to the north of the subject site) is located within the Site 1A area. The existing underground structures are described further below and in Section 6.1 of this report.

Information regarding the existing finish floor and basement elevations of some of the existing buildings and a part of the existing tunnel that crosses Fresno Street from the Main Jail Building to the Courthouse Park area are shown on Drawing No. 4 in Appendix A. Photographs depicting some of the existing site features are included in Appendix D. A description of the Site 1A area is included below.

Site 1A: Northeast Portion of Courthouse Park

The site plan provided for site 1A at Courthouse Park shows the proposed courthouse to the north of the existing Fresno County Courthouse. This area is currently occupied by the existing South Annex Jail and the Fresno County Sheriff's Office Buildings (see Drawing No. 4 in Appendix A). The South Annex Jail and Fresno County Sheriff's Office buildings both include basement levels. The South Annex Jail basement is also connected with level P1 of the existing underground parking garage. In addition, the existing prisoner transport tunnel which extends from the County Main Jail building to buildings within Courthouse Park extends below the site. Additional information is described regarding this tunnel in the following paragraph. Existing concrete walkways and landscaped areas with trees and grass lawn areas also occur within the Site 1A area. The existing ground surface generally slopes slightly down to the north away from the Fresno County Sheriff's Office Building toward Fresno Street and becomes relatively flat closer to Fresno Street. The Topography Map for Fresno County Courthouse, Fresno County Sheriff's Office, and South Annex Jail, prepared by Precision Civil Engineering, Inc., dated July 10, 2023, indicates that the ground surface elevations range from about 299 feet adjacent to the Fresno County Sheriff's Office Building

to about 288 feet at the bus stop and existing parking lot area near Fresno Street. The west side of the Sheriff's office building is bordered by an about 8-foot tall westerly descending slope with an inclination of about 2.5H:1V with a short retaining wall at the toe of slope.

Other underground structures also occur within, and adjacent to the site 1A courthouse location. An existing two-level underground parking structure is located on the east side of the existing Fresno County Courthouse below a landscaped courtyard area with concrete walkways and grass landscape. An underground tunnel extends from the Fresno County Main Jail at the corner of Fresno Street and M Street, crosses below Fresno Street, and continues southerly to the South Annex Jail basement (see Drawing No. 4 in Appendix A). The tunnel system continues from the basement of the South Annex Jail to the basement below the existing Fresno County Courthouse. Furthermore, an underground fuel storage tank, or multiple fuel storage tanks are located to the north of the Site 1A courthouse location. The existing Fresno County Courthouse is located to the south of the new courthouse site. The Fresno County Courthouse includes a two-level underground basement, as well as a depressed, "moat" area around the building which consists of an open, hardscape covered area with mechanical equipment. The depressed "moat" area is bounded by a reinforced concrete retaining wall that supports the change in grade between the courtyard and the surrounding grades. Pedestrian bridges cross over the courtyard area, for pedestrian access to the ground level of the existing Fresno County Courthouse. The existing subsurface structures are further described in Section 6.1 of this report.

During our field investigation as part of underground utility clearance and by review of old utility plans, numerous underground utilities occur within the Site 1A courthouse location.

3.2 <u>Site History and Previous Studies</u>: For site history, aerial photographs were reviewed as well as information from historical Sanborn Maps.

Based on our review of the Sanborn Maps, dating from 1885 to 1970, the 1885 Sanborn Map did not show any records of the Courthouse Park property. However, the 1888 Sanborn Map does show the Courthouse Park property between Fresno Street and Tulare Street and between M Street and Van Ness Avenue. The 1888 Sanborn Map shows a courthouse labeled "Fresno County Court House" on the M Street side of the present day Courthouse Park. Based on information obtained online, it is reported that the first courthouse was established in Courthouse Park in 1875. The 1888 Sanborn Map also shows a County Jail north of the 1875 courthouse, closer to M Street. The remainder of the property closer to Fresno Street and Van Ness Avenue appears to be covered by various concrete walkways.

The 1898 Sanborn Map shows the 1875 courthouse had been expanded to include a Hall of Records/County Clerk room to the north and The Collector Supervisor Court Room to the south. The County Jail appears the same with the exception that a Jail Yard had been added on the north side of the building. The remainder of the property closer to Fresno Street and Van Ness Avenue still appeared to include various concrete walkways.

The 1906 Sanborn Map shows the County Jail building had expanded further to the north and reconfigured the Jail Yard around a new kitchen area. The remainder of the property closer to Fresno Street and Van Ness Avenue still appeared to be covered by various concrete walkways.
The 1918 Sanborn Map shows the County Jail building added an Auto building in the northeast corner of the Jail Yard area. The concrete walkways closer to Fresno Street and Van Ness Avenue do not appear on the 1918 Sanborn Map. A bandstand appears on the Courthouse Park property near the intersection of Fresno Street and Van Ness Avenue.

A historical aerial photograph, dated 1946, shows the 1875 courthouse at the location shown on the previously discussed Sanborn Maps. The County Jail building is difficult to see on the photograph. Another jail building appears to the north of the 1875 courthouse, and a Hall of Records building appears on the south side of the 1875 courthouse. The remainder of the present day Courthouse Park area to Fresno Street and Van Ness Avenue appears to be covered by dense trees.

The 1948 Sanborn Map shows that the County Jail building remains, but is identified as the "Court Ho Annex." A new building north of the 1875 courthouse is shown as the (new) Fresno County Jail, and the new building south of the Fresno County Courthouse is shown as the new Hall of Records. A smaller "Men's Comfort Station" building is shown to the west of the new Fresno County Jail building. The bandstand still appears on the Courthouse Park property near the intersection of Fresno Street and Van Ness Avenue.

The 1950 Sanborn Map is roughly unchanged from the 1948 Sanborn Map

A 1957 historical aerial photograph shows parking areas on the north and east sides of the Fresno County Jail building as well as on the east side of the Hall of Records building. An addition appears to have been added to the south side of the Hall of Records. Concrete walkways with landscaped lawn areas appear in a strip extending west of the Fresno County Courthouse. The remainder of the property closer to Fresno Street and Van Ness Avenue is still shown as being heavily vegetated with dense trees.

The 1965 historical aerial photograph shows a new courthouse (the present day Fresno County Courthouse) under construction in the present day location of the Fresno County Courthouse. The 1875 courthouse remained. Based on information obtained online, the current Fresno County Courthouse construction was completed in 1966.

The 1970 Sanborn Map shows that the 1875 courthouse had been removed, a new Fresno County Courthouse had been constructed, a law enforcement office building (present day Sheriff's Office Building) had been constructed, an underground garage structure had been constructed on the east side of the new Fresno County Courthouse, and a Jail Annex addition had been added to the north side of the Jail building. The "Court Ho Annex" and the small Men's Comfort Station building had been removed. A Hall of Records Annex building was added to the south side of the Hall of Records

building. The bandstand no longer appears on the Courthouse Park property near the intersection of Fresno Street and Van Ness Avenue. No additional Sanborn Maps were available after the 1970 Sanborn Map.

The 1972, 1984, 1987, 1998 historical aerial photographs and other satellite images from online sources from various years between 1998 and 2025 appear generally similar to the existing improvements described on the 1970 Sanborn Maps.

No previous geotechnical engineering, geological, compaction reports, or environmental studies conducted for this site were provided for review during this investigation. If available, these reports should be provided for review and consideration for this project.

3.3 Anticipated Construction: Based on the information provided, a new courthouse is planned at the Site 1A location in the northeastern portion of Courthouse Park.

At the time of preparation of this report, only conceptual design level information was available regarding the proposed courthouse. The new courthouse is anticipated to include 36 courtrooms, a jury assembly area, loading dock area, central holding area, mechanical equipment, sally port functions and other elements typical of similar structures. It is our understanding that the new courthouse will include a tower with up to about 11 stories and a mechanical floor above the 11th story, plus one basement level. It is our understanding the new courthouse will be a total of about 413,000 square feet.

The outline of the tower portion of the new courthouse is shown as a bold black line around the blue, green, red and yellow portions of the tower on the conceptual design site plan included as Drawing No. 4 in Appendix A of this report. Based on the information provided by HOK, the proposed structure will include a basement level. The basement level is anticipated to extend below the area of the tower and will also extend beyond the limits of the tower. On a preliminary basis, it is our understanding based on the information provided by HOK that the new courthouse is anticipated to have a finished (ground level) floor elevation of 294 feet, which is about 3 feet above the sidewalk elevation adjacent to Fresno Street. The basement floor is anticipated to be about 18 feet below the finished floor, which corresponds with a depth of about 15 feet below the ground surface adjacent to Fresno Street. Where a mat foundation is used for support, it is also our understanding that the bottom of the mat foundation is anticipated to be about 4 to 8 feet below the basement floor level (~elevation of 272-268 feet) so that a granular fill and a concrete slab on grade may be placed above the top of the mat foundation for installation of underground utilities above the mat foundation.

It is also our understanding the planned building construction will include a secure tunnel which will provide connection from the existing County Main Jail to the new courthouse.

As part of the proposed construction, existing surface and subsurface structures will require demolition and removal. In addition, it is anticipated the existing connected basement level of the South Annex Jail and the existing underground parking structure to the south will be modified, which may include design and construction of new retaining walls and a new connection between the existing parking garage and the new courthouse basement.

Appurtenant construction is anticipated to include concrete walkways, underground utilities and landscape improvements.

The below grade portion of the structure is anticipated to include reinforced concrete walls and columns. The above ground structure is anticipated to be include a structural steel frame system with interior column spacing of about 38 feet x 28 feet and exterior column spacing of about 25 feet x 28 feet. Based on information provided by the project architect, preliminary dead plus live loads for interior and exterior columns are anticipated to range from about 3,300 to 3,600 kips and 2,400 to 2,500 kips, respectively.

Due to the depth of the basement and the adjacent improvements, engineered shoring systems are anticipated to support the planned basement excavation for construction.

4.0 INVESTIGATION

The field exploration and laboratory testing program conducted for this investigation are summarized in the following subsections.

4.1 Field Exploration: The field exploration consisted of a site reconnaissance, drilling test borings, soil sampling, conducting standard penetration tests, and field shear wave velocity measurements.

4.1.1 Site Reconnaissance: A site reconnaissance was conducted by Moore Twining during the initial field investigation on in July, 2023, as well as during the current field investigation conducted in November and December, 2025, and on January 7, 2026. The reconnaissance consisted of walking the accessible areas of the site and noting visible surface features. The features noted are described in the "Site Description" and "Existing Surface and Subsurface Conditions" sections 3.1 and 6.1, respectively, of this report.

4.1.2 Drilling Test Borings and Soil Sampling: Prior to drilling, a private utility locator was used to scan the soil boring locations for potential utility conflicts. In addition, due to the presence of potential underground utilities, the boring locations B-7 through B-13 were potholed using hydro-vacuum excavation equipment and/or drilled with a hand auger to depths of about 4 to 15 feet BSG prior to advancing the auger with the drilling rig. On July 7, 10 and 11, 2023, six (6) test borings were drilled within the Courthouse Park area to depths ranging from about 16½ to about 76½ feet below site grades (BSG). On November 24, 25, and 26, 2025, and December 3, 4, and 5, 2025, and January 7, 2026, eight (8) additional test borings were drilled within and near the Site 1A

area to depths ranging from about 51½ to about 81½ feet below site grades (BSG). The majority of the borings were drilled with a truck-mounted CME-75 drill rig; however, the Boring B-14 was advanced inside the existing parking garage with a limited-access track-mounted CME-55. Both drill rigs were equipped with 6⅝-inch outside diameter (O.D.) hollow-stem augers.

In addition, the existing parking garage slab on grade was cored using an 8 inch diameter core barrel advanced with the limited-access track-mounted CME-55 in order to access the subgrade soils for exploration.

The borings were logged during drilling by Moore Twining. The borings were drilled at the approximate locations shown on Drawing No. 2 and No.3 in Appendix A of this report. Estimates of the ground surface elevation at each boring, rounded to the nearest half foot, are listed on the boring logs in Appendix B of this report. The ground surface elevations were estimated from the Topography Map for Fresno County Courthouse, Fresno County Sheriff's Office, and South Annex Jail, prepared by Precision Civil Engineering, Inc., dated July 10, 2023. The elevation of below-grade parking garage where boring B-14 was drilled was obtained from parking garage building plans, dated 1965, and was adjusted 2.5 feet lower due to the change in datum.

Standard penetration tests were conducted in the test borings, and both disturbed and relatively undisturbed soil samples were obtained. The standard penetration resistance, N-value, is defined as the number of blows required to drive a standard split barrel sampler into the soil. The standard split barrel sampler has a 2-inch O.D. and a 1⅜-inch inside diameter (I.D.). The sampler is driven by a 140-pound weight free falling 30 inches. The sampler is lowered to the bottom of the bore hole and set by driving it an initial 6 inches. It is then driven an additional 12 inches and the number of blows required to advance the sampler the additional 12 inches is recorded as the N-value.

Relatively undisturbed soil samples for laboratory tests were obtained by pushing or driving a California modified split barrel ring sampler into the soil. The soil was retained in stainless steel rings, 2.5 inches O.D. and 1-inch in height. The lower 6-inch portion of the samples were placed in close-fitting, plastic, airtight containers which, in turn, were placed in cushioned boxes for transport to the laboratory. Soil samples obtained were taken to Moore Twining's laboratory for classification and testing.

4.1.3 Shear Wave Velocity Measurements: As part of this investigation, geophysical test methods were used by GEOVision to measure active surface waves by a multi-channel analysis of surface waves (MASW) and passive source surface wave measurements were conducted by the array microtremor method. The measurements were used to estimate a time averaged shear wave velocity of the upper 100 feet (30 meters) to define the site class in accordance with ASCE 7-22 and for use in development of a site-specific response spectra. The GEOVision report describing the test methods and the results of the shear wave velocity measurements is included in the appendix to the Seismic Design Parameters and Site-Specific Response Spectra included in Appendix E of this report; and the Site Class is described in Section 7.4.2.2 of this report.

4.2 Laboratory Testing: The laboratory testing was programmed to determine selected physical and engineering properties of the soils sampled. The tests were conducted on disturbed and relatively undisturbed samples considered representative of the subsurface materials encountered.

The results of laboratory tests conducted on samples obtained from the test borings are summarized on the figures in Appendix C. These data, along with the field observations, were used to prepare the final test boring logs in Appendix B of this report.

5.0 FINDINGS AND RESULTS

The findings and results of the field exploration are summarized in the following subsections.

5.1 Mapped Geologic and Soils Conditions: The Geologic Map of California, Fresno Sheet, prepared by the Division of Mines and Geology, dated 1965, Second Printing, 1971 (see Drawing No. 5 in Appendix A) indicates that the site is underlain by Recent alluvial fan deposits of the Great Valley (Qf).

Based on our review of the soil survey maps, prepared by the U.S. Department of Agriculture, Natural Resources Conservation District, the soils in the upper 5 feet BSG are described as silty sands.

5.2 Pavement Thickness and Parking Structure Slab Thickness: Borings B-1, B-8, B-9, and B-12 were drilled in the existing asphalt concrete parking lot area between the South Annex Jail building and Fresno Street. The asphalt concrete pavement thickness encountered in these borings was 5 inches, 5 inches, 4 inches, and 3¾ inches, respectively. The asphalt concrete was underlain directly by the subgrade soils. Boring B-7, drilled within an asphalt concrete paved area located east of the South Annex Jail building, encountered 2½ inches of asphalt concrete underlain by 6½ inches of aggregate base.

The existing slab on grade within the lower level (P-2) of the existing underground parking structure at the Boring B-14 location measured about 6¼ inches in thickness and was underlain directly by subgrade soils. The slab on grade appeared to be reinforced with welded wire.

5.3 Soil Profile: In general, many of the soil borings encountered fill soils. For example, fill soils consisting of very loose silty sands with trace gravel were encountered to a depth of about 6 feet BSG in boring B-1, fill soils consisting of silty gravel and poorly graded sand were encountered to a depth of about 4 feet BSG in boring B-2, fill soils consisting of very loose silty sands with fragments of nails were encountered to a depth of about 5½ feet BSG in boring B-5 and fill soils consisting of poorly graded sand with silt were encountered to a depth of about 4 feet BSG in boring B-6. Fill soils could not be differentiated during logging of borings B-7 through B-13 since the upper portions of these borings were potholed using hydro-vacuum methods. However, fill soils were estimated within about the upper 2 feet BSG in boring B-13.

The near surface native soils encountered below the fill, and the near surface soils within the borings where fill soils were not encountered, generally consisted of silty sands to depths of about 6 to 15 feet BSG. The silty sands were underlain by interbedded layers of clayey sands, poorly graded sands with silt, poorly graded sands, sandy lean clays (or lean clays with sand), sandy silts, and additional silty sands extending to the maximum depth explored, about 81½ feet BSG.

The near surface soils encountered in most of the borings were generally very loose to loose to a depth of about 13½ to 18 feet BSG, where the soils commonly transitioned to a medium dense condition. Beginning at depths of about 20 to 25 feet BSG in most of the borings, the granular soils were generally dense or very dense and the fine-grained soils (silts and clays) were generally very stiff or hard.

Cross sections A-A' and B-B' showing the general subsurface soil profiles are included as Drawing Nos. 10 and 11 in Appendix A of this report.

The foregoing is a general summary of the soil conditions encountered in the test borings drilled for this investigation. Detailed descriptions of the soils encountered at each test boring location are presented in the logs of borings in Appendix B. The stratification lines in the logs represent the approximate boundary soil types; the actual in-situ transition may be gradual.

5.4 Soil Engineering Properties: The engineering properties of the subsurface soils encountered during this investigation are summarized below.

Silty Sands: The silty sands encountered were very loose to very dense based on standard penetration resistance, N-values, ranging from 2 to greater than 50 blows per foot, and an SPT equivalent N-value (estimated by driving a California Modified split barrel sampler) ranging from 5 to greater than 50 blows per foot. The moisture content of the samples tested ranged from 4.1 to 17.4 percent. Relatively undisturbed samples revealed dry densities ranging from 103.9 to 116.6 pounds per cubic foot. A direct shear test conducted on a silty sand sample collected from depths of about 8½ to 10 feet BSG from boring B-3 indicated an internal angle of friction of 31 degrees and 250 pounds per square foot of cohesion and a direct shear test conducted on silty sand sample collected from depths of about 7 to 10 feet BSG from boring B-8 indicated an internal angle of friction of 31 degrees and 280 pounds per square foot of cohesion.

Clayey Sands: The clayey sands encountered were very loose to very dense based on standard penetration resistance, N-values, ranging from 8 to 40 blows per foot, and SPT equivalent N-values (estimated by driving a California Modified split barrel sampler) ranging from 27 and greater than 50 blows per foot. The moisture content of the samples tested ranged from 10.6 to 16.6 percent. Relatively undisturbed samples indicated dry densities ranging from 109.9 to 127.1 pounds per cubic foot. A consolidation test conducted on a clayey sand sample collected from depths of about 20 to 21 feet BSG from boring B-2 indicated about 3.1 percent consolidation under a load of 16 kips per square foot. Another consolidation test conducted on a clayey sand collected from depths of between 21 and 21½ feet BSG indicated about 3.7 percent consolidation under a load of 16 kips per square

foot. A direct shear test conducted on clayey sand sample collected from depths of about 20 to 21½ feet BSG from boring B-2 indicated an internal angle of friction of 36 degrees and 760 pounds per square foot of cohesion.

Poorly Graded Sands, Poorly Graded Sands with Silt and Well Graded Sands with Silt: The poorly graded sands, poorly graded sands with silt and well graded sands with silt encountered were described as loose to very dense based on standard penetration resistance, N-values, ranging from 5 to greater than 50 blows per foot, and an SPT equivalent N-value (estimated by driving a California Modified split barrel sampler) ranging from 13 to greater than 50 blows per foot. The moisture content of samples tested ranged from 2.0 to 11 percent. Relatively undisturbed samples indicated dry densities ranging from 97.4 to 120.8 pounds per cubic foot. The results of one laboratory permeability test conducted in accordance with ASTM D5084 indicated a permeability of about 2.07 x 10^{-4} centimeters per second.

Lean Clays, Lean Clays with Sand, Sandy Lean Clay, and Silty Clays: The lean clays, lean clays with sand and sandy lean clays encountered were described as very stiff to hard based on standard penetration resistance, N-values, ranging from 18 to greater than 50 blows per foot, and an SPT equivalent N-value (estimated by driving a California Modified split barrel sampler) ranging from 28 to greater than 50 blows per foot. The moisture content of the samples tested ranged from about 11.2 to 29.6 percent. Relatively undisturbed samples indicated dry densities ranging from 93.3 to 124.6 pounds per cubic foot. A consolidation test conducted on a sandy lean clay sample collected from depths of about 30 to 31½ feet BSG from boring B-2 indicated about 4.4 percent consolidation under a load of 16 kips per square foot. A consolidation test conducted on a sandy lean clay sample collected from depths of about 35 to 36½ feet BSG from boring B-3 indicated about 4.8 percent consolidation under a load of 16 kips per square foot. A consolidation test conducted on a sandy lean clay sample collected from depths of about 35 to 36½ feet BSG from boring B-5 indicated about 5.4 percent consolidation under a load of 16 kips per square foot.

The results of atterberg limits testing conducted on clay samples indicated plasticity indices ranging from of 7 to 17 and liquid limits ranging from 24 to 31. The results of direct shear tests conducted on three (3) clay samples indicated an internal angle of friction of 36 degrees and 460 pounds per square foot of cohesion, an internal angle of friction of 35 degrees and 390 pounds per square foot of cohesion and an internal angle of friction of 42 degrees and 320 pounds per square foot of cohesion.

Sandy Silts: The sandy silts encountered were described as stiff to hard based on standard penetration resistance, N-values, ranging from 11 to greater than 50, and an SPT equivalent N-value (estimated by driving a California Modified split barrel sampler) of 42 to greater than 50 blows per foot. The moisture content of a sample tested ranged from 18.4 to 32.1 percent. Relatively undisturbed samples indicated dry densities ranging from 89.3 to 98.0 pounds per cubic foot. A consolidation test conducted on a sandy silt sample collected from depths of about 25 to 26½ feet BSG from boring B-5 indicated about 6.6 percent consolidation under a load of 16 kips per square foot.

Expansion Index Testing: An expansion index test conducted on a silty sand sample collected from depths of about 4 to 10 feet BSG from boring B-4 indicated an expansion index value of 0 and an expansion index test conducted on a silty sand sample collected from depths of about 1 to 4 feet BSG from boring B-8 indicated an expansion index value of 0. An expansion index test conducted on a lean clay sample collected from depths of about 20 to 24 feet BSG from boring B-9 indicated an expansion index value of 28.

Resistance-Value (R-Value) Testing: An R-value test conducted on a silty sand sample collected from depths of about 0 to 4 feet BSG from boring B-3 indicated an R-value of 56, an R-value test conducted on a silty sand sample collected from depths of about 0 to 4 feet BSG from boring B-8 indicated an R-value of 44 and an R-value test conducted on a silty sand sample collected from depths of about 0 to 4 feet BSG from boring B-12 indicated an R-value of 55.

Chemical Tests: The results of the corrosion potential tests performed on selected soil samples obtained during this investigation are included in the table below. Refer to the laboratory reports included in Appendix C of this report for the laboratory test methods.

CORROSION POTENTIAL TEST RESULTS

Boring and Depth (Feet)	pH	Chlorides (Percent by weight)	Sulfates (Percent by Weight)	Minimum Resistivity (ohm-cm)
B-3 @ 0'-3'	8.5	0.0040	0.0040	10,400
B-8 @ 0'-3'	8.0	ND	0.0018	21,000
B-9 @ 21'-24'	7.9	ND	0.0057	3,500
B-12 @ 0'-3'	7.8	ND	0.0014	23,000

ND = Not Detected at or above the reporting limit of 0.00060 percent by weight

5.5 Groundwater Conditions: Free groundwater was not encountered in the test borings drilled at the time of our July 2023 field exploration, nor our November 2025 or January 2026 field exploration to the maximum depth explored, about 81½ feet BSG. However, a relatively thin lens of suspected perched groundwater was encountered within borings B-9 and B-10 at a depth of about 65 feet BSG. Refer to the logs of borings in Appendix B of this report.

Historic ground water depth data from the Department of Water Resources from a well at the historic Fresno Water Tower, located about 1,000 feet northeast of the site, indicated groundwater depths ranging from about 50 feet BSG in 1951 to about 80 feet BSG in 1957 for data collected between the years 1950 and 1959. Based on our review of fairly recent groundwater data from the Department of Water Resources Sustainable Groundwater Management Act (SGMA) Data Viewer website, the

groundwater depth at the site was estimated to be about 109 feet BSG in the Spring of 2022. Furthermore, review of the groundwater contour elevations provided in the Fresno Irrigation District's "Depth to Water in Wells, Spring 2025" (as of 11/11/2025), indicated groundwater depths in the Courthouse Park area of about 100 feet BSG.

It should be recognized, however, that groundwater elevations fluctuate with time, since they are dependent upon seasonal precipitation, irrigation, land use, and climatic conditions as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered both during the construction phase and the design life of the project. The evaluation of such factors was beyond the scope of this investigation and report.

6.0 GEOTECHNICAL EVALUATIONS

6.1 Existing Surface and Subsurface Conditions: The eastern portion of the Courthouse Park site has been developed with a variety of structures since the late 1800s as described in Section 3.2 (Site History and Previous Studies) of this report. Numerous structures are currently located within and adjacent to the proposed courthouse location. About half of the Site 1A building area is currently occupied by structures, including the Sheriff's Office Building and the South Annex Jail. These structures include below grade basement levels and the South Annex Jail basement appears to be contiguous with the P1 level of the existing underground parking structure located south of the South Annex Jail. In addition, a tunnel for secure prisoner transport from the Main Jail to the existing Fresno County Courthouse crosses through part of the proposed building site. As part of the project, the Sheriff's Office Building, South Annex Jail and part of the existing prisoner transport tunnel structure would need to be removed. It is also anticipated that the existing underground fuel tanks adjacent to Fresno Street will also be removed as part of the project. The approximate locations of these features are depicted on Drawing No. 4 in Appendix A of this report. Furthermore, some previous structures which have since been removed existed in the Site 1A area as well. The type of foundation system supporting the prior structures and the extent of removal of subsurface improvements which previously existed are not known. Thus, in addition to the existing structures, there is a potential to encounter other buried improvements that may still remain within the site from prior site development. As part of the removal of the existing structures and improvements, all existing foundations, subsurface structures and improvements and all soils which are disturbed as part of the demolition activity will need to be removed to expose undisturbed native soil conditions prior to backfilling the excavations with engineered fill.

Existing improvements including structures and retaining walls which are to remain during construction of the new courthouse project are located adjacent to the area of the proposed project. Thus, there is a potential that demolition work may impact the existing adjacent improvements which are to remain. Adjacent above and below ground structures and improvements which are to remain include the underground parking structure (County underground parking structure), the retaining walls adjacent to the "moat"on the north side of the existing Fresno County Courthouse, the Fresno County

Courthouse, and a part of the existing tunnel prisoner transport system. The approximate locations of these subsurface structures are shown on Drawing No. 4 in Appendix A. Demolition activities will need to be conducted in a manner to limit ground vibration as well as to avoid undermining support of adjacent foundations so as not to damage existing improvements which are to remain. Depending on the depth of excavation for the new courthouse and the depths of adjacent foundation systems to be protected, temporary support of existing improvements may also be required.

It is anticipated that the existing underground utilities within the areas of new construction will need to be removed or rerouted. All trench backfill associated with removal of underground utilities should also be fully removed.

Large, mature trees, grass landscape, concrete walkways and other improvements also occur in the proposed building areas. As part of the site preparation, surface vegetation, trees, roots and organics will need to be removed as part of site stripping and tree removal.

The soil borings drilled for this investigation encountered fill soils ranging in depth from about 2 to 6 feet BSG. As part of the site preparation for new surface improvements which are sensitive to settlement, all undocumented fill soils should be removed to expose native undisturbed soils. Deeper fill soils are anticipated to exist as backfill of existing basement walls and subsurface structures such as the prisoner transport tunnel.

6.2 Expansive Soils: One of the potential geotechnical hazards evaluated at this site is the expansion potential of the near surface soils. Over time, expansive soils will experience cyclic drying and wetting as the dry and wet seasons pass. Expansive soils experience volumetric changes (shrink/swell) as the moisture content of the clayey soils fluctuate. These shrink/swell cycles can impact foundations and lightly loaded slabs-on-grade when not designed for the anticipated expansive soil pressures. Expansive soils cause more damage to structures, particularly light buildings and pavements, than any other natural hazard, including earthquakes and floods (Jones and Holtz, 1973). Expansion potential may not manifest itself until months or years after construction. The potential for damage to slabs-on-grade and foundations supported on expansive soils can be reduced by placing non-expansive fill underlying foundations and slabs-on-grade.

The near surface silty sand soils from the ground surface to a depth of about 3 feet BSG from Boring B-8, and from depths of 4 to 10 feet BSG from boring B-4, indicated a very low expansion potential based on an expansion index test result of 0. A sample of lean clay from depths of 21 to 24 feet BSG from boring B-9, indicated an expansive soil condition with a low expansion potential based on an expansion index test result of 28. Where expansive soils are excavated, these materials should not be used as finished subgrade directly below surface improvements such as exterior slabs on grade which are sensitive to differential movement.

6.3 Foundation Support: Based on the preliminary column loads and column spacing provided and our correspondence with the Criteria Architect, it is anticipated that mat foundations will be used for support of the proposed courthouse. Due to the column spacing and the expected size of a spread foundation system based on the anticipated structure loads, a structural mat foundation system may have benefits from an economic and/or constructability standpoint compared with a spread foundation system. In addition, mat foundations are more effective to resist differential settlement as compared with a spread foundation system. Based on the information provided by HOK, a maximum applied ground pressure of 3,500 pounds per square foot was assumed for consideration of a mat foundation with a subgrade elevation in the range of 272 to 268 feet. Provided the mat foundation excavation extends into the dense granular soils and/or the very stiff to hard fine-grained soils encountered below depths of about 20 to 25 feet BSG, preliminary estimates of foundation settlement indicate less than 1 inch of post construction settlement.

6.4 Temporary Excavations/Shoring: One of the potential geotechnical engineering concerns for construction of the proposed project will be support of temporary excavations which are in close proximity to existing structures with basements, pubic street improvements, underground utilities, and other improvements that may be planned to remain.

Based on the information provided, the basement level of the proposed courthouse is anticipated to require excavation to an elevation of about 272 to 268 feet to the bottom of the mat foundation. In addition, excavation for removal of the existing Sheriff's Office Building and the South Annex Jail will require excavations to remove existing subterranean basements and foundations. Temporary excavations will need to be conducted in a manner to protect adjacent improvements which are to remain, including the Fresno County Courthouse, and the existing underground parking structure. In addition, an existing retaining wall is located adjacent to the depressed "moat" area between the Fresno County Courthouse and the Fresno County Sheriff's Office building. These features are shown on Drawing No. 4 in Appendix A. The depths of the adjacent foundations and existing basement structures will need to be evaluated with regard to the planned depths of excavation. It should be noted that the South Annex Jail building basement is connected with the existing P1 level of the below-grade parking structure.

Due to the proximity of the adjacent, existing improvements (i.e. sidewalks, utilities, roadways, existing structures to remain, etc.), portions of the excavation for the proposed courthouse are anticipated to require shoring for temporary excavation support and to protect existing adjacent improvements from excessive movement. It is anticipated that a soldier pile and lagging system will be utilized for engineered shoring. Depending on the depth of excavation and the sensitivity of adjacent improvements to movement, bracing elements, or ground anchors may need to be incorporated into the shoring systems. However, the presence of existing adjacent below grade improvements, utilities or public right of way may restrict use of horizontal ground anchors for engineered shoring systems that may be used to support excavations for the new courthouse foundation construction.

On a preliminary basis for planning purposes, excavations which are not supported by engineered shoring systems should not extend below a 1.5H to 1V zone below existing improvements such as utilities, foundations and/or floor slabs which are to remain after construction. Excavations which are required to be advanced below the 1.5H to 1V envelope should be shored to support the soils, foundations, and slabs.

Where site constraints allow, temporary excavations may be laid back at a 1.5H to 1V repose or flatter. For areas where a 1.5H to 1V temporary slope construction is not feasible, temporary shoring should be anticipated to support excavations and protect adjacent improvements which are to remain.

Shoring design and construction will need to account for surcharges from existing improvements and construction surcharges. The earth pressures used in design (i.e., active or at-rest) and the anticipated deflections of the shoring should be considered by the designer carefully. In general, at-rest earth pressures would be appropriate to limit the deflection of shoring systems, while deflections are higher for retaining wall systems designed using active earth pressures. As shoring systems deflect, vertical and lateral movement of the backfill soils can occur, resulting in differential movement and distress of existing and new improvements within influence of the shoring systems. Therefore, design and installation of shoring systems for support of temporary excavations and limiting the deflections will be an important aspect of this project.

In addition, construction sequencing, methods of shoring installation, ground vibration, shoring removal and backfill can also result in damage to adjacent improvements. Due to the risks of distress to adjacent improvements, a condition survey would be recommended prior to construction to document the condition of all existing improvements which may be potentially effected by the proposed construction. Prior to and during construction, requirements should also be incorporated into the project for the contractor to monitor improvements outside the project site near the vicinity of the planned excavation. In general, low vibration installation methods should be used to reduce potential impacts to existing adjacent improvements which are to remain.

6.5 Soil Corrosion: The risk of corrosion of construction materials relates to the potential for soil-induced chemical reaction. Corrosion is a naturally occurring process whereby the surface of a metallic structure is oxidized or reduced to a corrosion product such as iron oxide (i.e., rust). The metallic surface is attacked through the migration of ions and loses its original strength by the thinning of the member.

Soils make up a complex environment for potential metallic corrosion. The corrosion potential of a soil depends on numerous factors including soil resistivity, texture, acidity, field moisture and chemical concentrations. In order to evaluate the potential for corrosion of metallic objects in contact with the onsite soils, chemical testing of soil samples was performed by Moore Twining as part of this report. The test results are included in Appendix C of this report. Conclusions regarding the corrosion potential of the soils tested are included in the Preliminary Conclusions and Recommendations section of this report based on the corrosion severity ratings listed in Table No. 1, below.

Table No. 1
Corrosion Severity Ratings

Soil Resistivity (ohm cm)	Corrosion Potential Rating
>20,000	Essentially non-corrosive
10,000 - 20,000	Mildly corrosive
5,000 - 10,000	Moderately corrosive
3,000 - 5,000	Corrosive
1,000 - 3,000	Highly corrosive
<1,000	Extremely corrosive

The results of soil sample analyses indicate that the near-surface soils exhibit a "mildly corrosive"corrosion potential to buried metal objects and one (1) sample of sandy lean clay obtained from a depth of about 21 to 24 feet BSG indicated a "corrosive" corrosion potential. Appropriate corrosion protection should be provided for buried improvements based on the soil corrosion potential. If piping or concrete are placed in contact with imported soils, these soils should be analyzed to evaluate the corrosion potential of these soils.

If the manufacturers or suppliers cannot determine if materials are compatible with the soil corrosion conditions, a professional consultant, i.e., a corrosion engineer, with experience in corrosion protection should be consulted to provide design parameters. Moore Twining does not provide corrosion engineering services.

6.6 Sulfate Attack of Concrete from Soils: Degradation of concrete in contact with soils due to sulfate attack involves complex physical and chemical processes. When sulfate attack occurs, these processes can reduce the durability of concrete by altering the chemical and microstructural nature of the cement paste. Sulfate attack is dependent on a variety of conditions including concrete quality, exposure to sulfates in soil, groundwater and environmental factors. The standard practice for geotechnical engineers in evaluation of the soils anticipated to be in contact with structural concrete is to perform laboratory testing to determine the concentrations of sulfates present in the soils. The test results are then compared with the exposure classes in Table 19.3.1.1 of ACI 318 to provide guidelines for concrete exposed to soils containing sulfates. It should be noted that other exposure conditions such as liquids with high salinity or dissolved sulfates in water or materials other than soils can result in sulfate exposure categories to concrete that are higher than the concentrations of sulfate in soil. The design engineer will need to determine whether other potential sources of sulfate exposure need to be considered other than exposure to sulfates in soil. The sulfate exposure classes for soils from Table 19.3.1.1 are summarized in the below table.

Table No. 2
ACI Exposure Categories for Water Soluble Sulfate in Soils

Sulfate Exposure Class (per ACI 318)	Water Soluble Sulfate in Soil (Percent by Mass)
S0	Less than 0.10 Percent
S1	0.10 to Less than 0.20 Percent
S2	0.20 to Less than or Equal to 2.00 Percent
S3	Greater than 2.00 Percent

Common methods used to resist the potential for degradation of concrete due to sulfate attack from soils include, but are not limited to the use of sulfate-resisting cements, air-entrainment and reduced water to cement ratios.

7.0 GEOLOGIC AND SEISMIC HAZARDS EVALUATION

The geologic and seismic hazards are discussed in the following sections. The conclusions obtained from the results of our evaluations of the geologic and seismic hazards are described in the Preliminary Conclusions and Recommendations section of this report.

7.1 Geomorphic and Geologic Setting: The City of Fresno is located in the central geographic portion of California, in the Great Valley geomorphic province (central portion of the San Joaquin Valley). The valley is bordered on the east by the Sierra Nevada Mountain Range consisting chiefly of crystalline rocks, and on the west by the Diablo Range tier of the Coast Range Mountains consisting of sedimentary and metamorphosed sedimentary rocks. The Sierra Nevada block has been tilted westward, caused by faulting and uplifting of the eastern edge of the range. The western boundary of the Sierra Nevada block is overlain by sedimentary deposits of the valley.

The Coast Ranges, forming a barrier between the Great Valley and the Pacific Ocean, evolved as a result of folding, faulting, and accretion of diverse geologic terrain. The Coast Ranges are composed chiefly of sedimentary and metamorphic rocks that are sharply deformed into complex structures which are broken by numerous faults, the San Andreas Fault being the most notable structural feature.

Small, intermittent streams enter the valley from the semi-arid mountains of the Diablo Range (Coast Ranges), but soon are lost on alluvial fans. Perennial rivers flow from the larger drainage areas of the Sierra Nevada Range. Large, coalescing alluvial fans have developed along each side of the valley. The larger and more gently sloping fans on the valley's east side are built up principally by deposits from granitic rock sources, whereas the smaller and more steeply sloping fans on the valley's west side are comprised of sediment originating as sedimentary rocks of the Coast Range. As a

result, the valley floor consists mainly of two kinds of alluvial materials that differ widely in provenance and their respective engineering properties.

The Geologic Map of California, Fresno Sheet, prepared by the Division of Mines and Geology, dated 1965, Second Printing, 1971 (see Drawing No. 5 in Appendix A) indicates that the site is underlain by Recent alluvial fan deposits of the Great Valley (Qf).

The subsurface soil deposits encountered during this investigation are described in Section 5.3 of this report.

Regional geologic and site geologic maps are included in Appendix A as Drawing Nos. 5 and 9, respectively, and geologic (soil profile) cross sections through the proposed building area are included as Drawing Nos. 10 and 11 in Appendix A of this report.

7.2 **Tectonics and Seismicity**: An "active fault" is defined, for the purpose of this evaluation, as a fault that has had surface displacement within the Holocene Epoch (about the last 11,700 years). In addition to active faults, "potentially active" faults also contribute to the seismicity of the site. A widely accepted definition of "potentially active" is a fault that does not show evidence of displacement during the Holocene, but shows evidence of displacement occurring less than 1.6 million years ago (after the beginning of the Pleistocene Epoch). Since the Quaternary Period includes the Holocene and Pleistocene Epochs, Quaternary faults are those that have documented latest fault displacement within the Holocene or Pleistocene Epochs, undifferentiated. Faults showing evidence of displacement older than 1.6 million years are usually classified as "Pre-Quaternary" and "inactive." Pre-Quaternary faults do not impact the site seismicity.

The following subsections briefly describe the major fault systems contributing to the seismicity of the site area.

The seismicity of the site area was evaluated based on the results of disaggregation of the 2,475 year return period event (2 percent probability of exceedance in 50 years) using the United States Geological Survey Earthquake Hazard Toolbox (https://earthquake.usgs.gov/nshmp/), Conterminous U.S. 2018. Major active regional faults occur at a distance to the east and west of the project site. The Sierra Nevada/Owens Valley Fault Zones bound the eastern edge of the Sierra Nevada block and comprise a complex of both active and potentially active fault segments. The San Andreas Fault Zone occurs in the Coast Range and contains large Quaternary fault segments, each with a different tectonic behavior. Numerous active and potentially active faults also occur in the eastern and central Coast Range. The closest active fault is the Nunez Fault, which is located about 52½ miles southwest of the site. Active faulting and surface fault rupture is also discussed in section 7.4.1 of this report.

The primary seismic sources contributing to design seismic ground motion estimates for the site are the numerous gridded fault model point sources (i.e., general seismicity which is not related directly to specific known seismic sources). These gridded fault model point sources have predominant moment magnitudes between about 5.7 and 6.1. The San Andreas fault (Creeping section), with a predominant moment magnitude 8.1, located about 68 miles southwest of the site, contributes less significantly to the site seismicity.

The major fault systems nearest to the site are in relation to the site are depicted on Drawing No. 6 in Appendix A of this report.

7.3 Geologic Hazards: The potential geologic hazards of landslides and conditional geologic hazards are described in the following subsections.

7.3.1 Landslides: The site is relatively flat and there are no significant slopes that are anticipated as part of the proposed project. Thus, the potential for landslide hazards at the site is considered to be insignificant.

7.3.2 Conditional Geologic Hazards: Conditional geologic hazards, as identified in Section 31 of California Geological Survey Note 48 are discussed in the following subsections.

7.3.2.1 Hazardous Materials: Hazardous materials such as methane gas, hydrogen-sulfide gas and tar seeps are not known to be present in the project area and are not considered to be a concern at the subject site. No other potential hazardous materials were evaluated.

7.3.2.2 Volcanic Activity: California includes six regions with a history of late Pleistocene volcanic eruptions that are subject to hazards from future eruptions (Miller, 1989). Of these six regions, the Mono Lake-Long Valley Area and the Owens River, Ubehebe Crater, Coso Area are the closest regions, located about 74 miles northeast and 84 miles southeast of the site, respectively. Based on review of Plate 1 (Miller, 1989), the subject site is not located within any designated volcanic hazard zones (such as flowage, pyroclastic flows, debris flows, or ash fall hazards). The closest volcanic hazard to the site is indicated to be ash fall hazard from an eruption in the Mono Lake-Long Valley Area, impacting areas greater than 25 miles northeast of the subject site.

Based on the distance from the site to known volcanic hazards, the prospect for volcanic hazards to impact the site during the design life of the facility is considered low.

7.3.2.3 Flooding and Dam Inundation: Based on the Flood Insurance Rate Maps distributed by the Federal Emergency Management Agency, the site is located in Zone X. According to Community Panel number 06019C110H, revised on February 18, 2009, Zone X denotes the site as being within an area having a 0.2 percent annual chance flood hazard.

The following maps were reviewed in regards to potential flooding from dam failure: Inundation areas below Corps Dams, Pine Flat Lake Breach Study, Kings River, California, prepared by the Corps of Engineers, dated January 1976; Inundation map of Friant Dam, Mid-Pacific Region, Central Valley Project, Friant Division, California prepared by the United States Department of the Interior, Bureau of Reclamation, dated December 6, 1974; and Breach of Big Dry Creek Detention Reservoir, prepared by the Corps of Engineers, dated 1988. Based on our review of these dam inundation maps, the site is located outside the inundation zone for catastrophic failure of the Friant Dam (Millerton Lake), and Pine Flat Dam (Pine Flat Reservoir). However, the Fresno Metropolitan Flood Control District's Inundation Mapping Tool website (https://fresnometroh2o.com/dams/inundation-mapping/), indicates that the northern portion of the site is located within the inundation zone for catastrophic failure of the Fancher Creek Reservoir and Big Dry Creek Detention Reservoir, which are located about 15.4 miles northeast and 11.8 miles northeast of the site, respectively. The limits of dam inundation affecting the Courthouse Park area from breach of Fancher Creek Reservoir and Big Dry Creek Detention Reservoir are depicted on Drawing No. 8 in Appendix A.

7.3.2.4 Tsunamis and Seiches: Tsunamis are waves generated in oceans from seismic activity. Due to the inland location of the site (about 109 miles northeast of the Pacific Ocean), tsunamis are not considered a significant hazard for the site.

A seiche is a wave generated by the periodic oscillation of a body of water whose period is a function of the resonant characteristics of the containing basin as controlled by its physical dimensions. These periods generally range from a few minutes to an hour or more. The site is not located near any large bodies of water, so seiches are not considered a significant hazard at the site.

7.3.2.5 Radon Gas: Naturally occurring radon gas is known to occur in some areas of California. Radon gas can accumulate in buildings and breathing air with elevated radon concentrations results in an increased risk of developing lung cancer. Radon gas forms from radioactive decay of small amounts of the elements uranium and thorium, naturally present in rocks and soils. Rock types, such as black shales, marine phosphatic rocks, and certain igneous rocks, are associated with relatively higher levels of radon gas than other rock types. These rock types are not known to be present near the ground surface at the project site.

The California Geological Survey has studied some areas of California to characterize risk levels for radon gas in some Counties; however, mapping has not been completed and/or published for Fresno County.

The U.S. EPA recommends that individuals avoid long-term exposure to radon concentrations above 4 picocuries per liter. Based on our review of a database maintained by the California Department of Public Health Services (CDPH) on the California Geologic Survey website, the California Indoor Radon Levels Sorted By Zip Code, last updated February 2017, there is no test data for the zip code at the subject site (93721). Based on our review of the Special Report 247: California Indoor Radon Potential, dated 2022, prepared by the California Department of Conservation, California Geological Survey (CGS), 22 of the 179 tests (about 12.3 percent) from various zip codes throughout the entire Fresno County area reported radon gas levels that exceeded 4 picocuries per liter. The referenced CGS document indicates: "Radon testing is encouraged in Fresno County, particularly in the Fresno-Clovis area..."

Considering the geologic conditions of the site area, the referenced data, and assuming that the building will be properly ventilated, it is our opinion that potential hazards associated with radon gas are low. However, considering the public nature of the building and the recommendations of CGS Special Report 247, radon gas testing would be recommended within nearby buildings and basement levels to obtain specific data to determine if any special soil gas control systems are needed for the proposed structure due to a potential for elevated indoor radon levels.

7.3.2.6 Naturally Occurring Asbestos: Asbestos occurs in soil and rock naturally in certain geologic settings in California. It has been documented that inhalation of asbestos fibers may cause negative health effects. Most commonly, asbestos is associated with serpentinite and partially serpentized ultramafic rocks. Ultramafic rocks are scattered throughout much of the Sierra Nevada mountain and Coast Ranges regions. Review of the referenced Open-File Report 2000-19, titled *A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos,* prepared by State of California Department of Conservation, Division of Mines and Geology, dated August, 2000, indicates the closest mapped areas with ultramafic rock are located about 20 miles east-northeast of the site.

Ultramafic rocks were not encountered during our investigation and are not common to the geologic environment of the site. Based on the cited literature and our site observations, it is our opinion that the potential to encounter surface or near surface naturally occurring asbestos containing rock at the site is insignificant.

7.3.2.7 Hydrocollapse: Some soils in the Fresno area can be susceptible to mild hydrocollapse, typically associated with leaching and disturbance of soils above hardpan layers. The results of consolidation testing did not indicate significant collapse potential for soils supporting the proposed foundation. In addition, the relatively undisturbed samples of the granular soils collected for this investigation mostly indicated dry densities greater than 100 pounds per cubic foot. Based on the laboratory testing conducted for this investigation, the relatively high dry densities of the granular soils, and our experience in the site area, the potential for hydrocollapse to be an impact is considered to be low.

7.3.2.8 Regional Subsidence: Land subsidence due to groundwater pumping is well documented in the areas of several areas within the southern San Joaquin Valley, including the western portion of Fresno County. Based on our review of the Background Report of the Fresno County General Plan, adopted February 20, 2024, some areas of the Central Valley have subsided more than 20 feet during the past 50 years. The current general plan does not include graphical figures related to subsidence. However, Figure 9-6 of the 2000 General Plan indicates the Courthouse Park area is located outside of the areas of mapped subsidence. The San Joaquin Valley is an area of ongoing studies for land subsidence. More recent published data from sources such as the California Department of Water Resources and USGS include monitoring areas of land subsidence in western Fresno County as well as areas within adjoining Counties to the north and south; however, the area of the site is outside the areas of significant subsidence. Thus, regional subsidence is not considered a significant concern for the site.

7.3.2.9 Clays and Cyclic Softening: Due to the depth of groundwater, the potential for cyclic softening of the clay soils encountered is insignificant.

7.4 Seismic Hazards: The potential for fault ground rupture, seismic groundshaking and seismic coefficients/earthquake spectral response acceleration design values, and liquefaction and seismic settlement are described in the following subsections.

7.4.1 Active Faulting and Surface Fault Rupture: Earthquakes are caused by the sudden displacement of earth along faults with a consequent release of stored strain energy. The fault slippage can often extend to the ground surface where it manifests in abrupt relative ground displacement across a rupture surface. Damage resulting directly from fault rupture ground displacement occurs only where structures are located astride a rupture surface with relative displacement.

The locations of active faults in relation to the site were reviewed based on the 2010 Fault Activity Map of California: California Geological Survey, Geologic Data Map No. 7, prepared by Jennings and Bryant. A map depicting the major active faults in the general region of the site is included on Drawing No. 6 in Appendix A of this report.

The Geologic Map of California, Fresno Sheet, prepared by the Division of Mines and Geology, dated 1965, Second Printing, 1971 was also reviewed and used to prepare the Regional Geologic Map included as Drawing No. 5 in Appendix A of this report.

No mapped active faults cross the site. The closest active fault is the Nunez Fault, which is located about 52½ miles southwest of the site. Considering the distance to the nearest known active fault, the potential for surface fault rupture due to a known active fault is considered low.

7.4.2 Groundshaking: For any given earthquake, the rock in the immediate vicinity will respond with a certain maximum acceleration and with a predominant period that depends on the nature of the rock and the source mechanism. Away from the focus of the earthquake, the ground motions begin to attenuate. The way in which the earthquake wave is altered depends to a great degree on source characteristics and to a lesser degree on the travel path.

A summary of our review of historic seismic activity relative to the site is included below.

7.4.2.1 Historic Seismic Activity: The general site region has experienced recurring seismic activity. Based on historical earthquake data obtained from the U.S. Geological Survey's earthquake database system, approximately 240 historical earthquakes with magnitude 4.5 or greater have been recorded from 1900 through January 13, 2026, within about 100 miles of the site. A map showing the location of the project site with relation to the approximate historical earthquake epicenter locations and magnitude category is presented on Drawing No. 7 in Appendix A of this report.

The nearest earthquake event (estimated magnitude of 4.6) found during the search occurred on August 3, 1975, approximately 39 miles southwest of the site. The largest magnitude earthquake identified within the 100 mile radius search was the 6.7 magnitude Coalinga earthquake which occurred on May 2, 1983, approximately 45 miles southwest of the site. The information reviewed indicates the highest peak horizontal ground acceleration at the site resulting from the historic earthquakes occurred during the Coalinga earthquake (0.08g).

7.4.2.2 Design Seismic Ground Motion Parameters and Site Class: As part of this investigation, geophysical testing was conducted by GEOVision to measure shear wave velocity. The GEOVision Surface Wave Measurements Report, dated January 12, 2026 (refer to Appendix A of the April 27, 2026 Langan "Seismic Design Parameters and Site Specific Response Spectra" report), is included in Appendix E of this report. The results of the testing indicated a time-averaged shear wave velocity to a depth of 100 feet of 1,136 feet per second, which corresponds to a Site Class CD (dense sand or very stiff clay) in accordance with ASCE 7-22.

Based on the Site Class CD designation, a table providing the recommended seismic coefficients and earthquake spectral response acceleration values for the project site is included in the Preliminary Conclusions and Recommendations section of this report. The Geometric Mean Maximum Considered Earthquake (MCE_G) peak ground acceleration adjusted for site effects (PGA_M) of 0.36g was determined for the site using the Ground Motion Parameter Calculator provided by the United States Geological Survey (https://www.seismicmaps.org/).

In addition to the mapped seismic parameters, as part of this report, a seismic hazard analysis was conducted by Langan CA, Inc. to develop a site-specific response spectra. A description of the analysis and the site-specific response spectra are included in the report attached as Appendix E.

7.4.3 Liquefaction and Seismic Settlement: Liquefaction and seismic settlement are conditions that can occur under seismic shaking from earthquake events. Liquefaction describes a phenomenon in which a saturated, cohesionless soil loses strength during an earthquake as a result of induced shearing strains. Lateral and vertical movements of the soil mass, combined with loss of bearing usually results. Fine, well sorted, loose sand, shallow groundwater conditions, higher intensity earthquakes, and particularly long duration of ground shaking are the requisite conditions for liquefaction.

Due to the depth of groundwater at the site and the dense nature of the soils which will support the new courthouse, the potential for liquefaction and seismic settlement are considered low. Due to groundwater pumping for agricultural and municipal purposes and considering the flood control dams on the major local river systems such as the San Joaquin River and Kings River, as well as flood control systems for local creeks, the potential for groundwater levels to return to pre-1950s levels is not considered likely. Although the potential for a significant rise in the depth of groundwater is not anticipated to be likely, a historical groundwater depth of 50 feet below existing site grade was applied for analysis of the potential for liquefaction and seismic settlement.

Liquefaction and seismic settlement analyses were conducted based on soil properties revealed by test borings, and the results of laboratory testing. The analyses were conducted for soils encountered in borings B-2, B-9, B-12 and B-13 using the software program LiquefyPro developed by CivilTech. A horizontal ground acceleration of 0.36g, a maximum considered earthquake of 6.3 and an historic high groundwater depth of 50 feet were used in the analysis. The Maximum Considered Earthquake magnitude of 6.3 was applied in the analysis based on the hazard disaggregation as described in Section 7.2 of this report. The N-values generated based on the boring results were used to determine the cyclic stress ratio needed to initiate liquefaction. Soil parameters, such as wet unit weight, N-value, fines content, and depth of N-value tests, were input for the soil layers encountered throughout the depths explored (see test boring logs, Appendix B).

Based on the analysis, a seismic settlement of about ½ inch was estimated; however, less than ⅛ inch of the seismic settlement occurs below the planned courthouse basement foundation depth described in this report.

8.0 PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of this preliminary investigation, the following preliminary conclusions and recommendations were prepared for the Site Aquisition phase of the project.

8.1 Based on the findings of this investigation, the site is considered suitable for the proposed development from a geotechnical engineering and geologic standpoint. Additional geotechnical engineering studies and evaluation are anticipated for the design-build phase of the project.

8.2 Many of the soil borings drilled for this investigation encountered silty sand or poorly graded sand fill soils ranging in depth from 2 to 6 feet BSG. As part of the site preparation for new surface improvements which are sensitive to settlement, all undocumented fill soils should be removed to expose native undisturbed soils. Deeper fill soils are anticipated to exist as backfill of existing basement structures and where fill soils have been placed in areas that were filled as part of previous development.

8.3 The near surface native soils encountered below the fill soils, and the near surface soils within the borings where fill soils were not encountered, generally consisted of silty sands to depths of about 6 to 15 feet BSG. The silty sands were underlain by interbedded layers of clayey sands, poorly graded sands with silt, poorly graded sands, sandy lean clays (or lean clays with sand), sandy silts, and additional silty sands extending to the maximum depth explored, about 81½ feet BSG. The near surface soils encountered in most of the borings were generally very loose to loose to a depth of about 13½ to 18 feet BSG, where the soils commonly transitioned to a medium dense condition. Beginning at depths of about 20 to 25 feet BSG in most of the borings, the granular soils were generally dense or very dense and the fine-grained soils (silts and clays) were generally very stiff or hard.

8.4 The near surface silty sands, clayey sands and poorly graded sands generally exhibited non plastic or low plastic characteristics. The near surface soils with an expansion index of less than 20 are anticipated to be suitable for use as engineered fill for the project, provided they do not contain more than 3 percent organics, roots larger than ½ inch in diameter, or irreducible debris larger than 4 inches. Thus, soils in areas of existing trees will require removal of roots in order to be used as engineered fill. Engineered fill should be placed in lifts with a maximum thickness of 8 inches, moisture conditioned to slightly above optimum and compacted to a minimum of 92 percent relative compaction based on ASTM D1557, with exception that fills placed deeper than 10 feet below finished grade should be compacted to a minimum of 95 percent relative compaction. Some large, mature trees occur within the site.

8.5 Free groundwater was not encountered in the test borings drilled at the time of our July 2023 field exploration, nor our November 2025 or January 2026 field exploration to the maximum depth explored, about 81½ feet BSG. However, a relatively thin lens of suspected perched groundwater was encountered within borings B-9 and B-10 at a depth of about 65 feet BSG.

8.6 The potential for the geologic/seismic hazards reviewed as part of this study (refer to Section 7.0 of this report) to impact the proposed project are considered low. However, as indicated in this report (refer to Drawing No. 8 in Appendix A), the inundation zone for catastrophic failure of Fancher Creek Reservoir and Big Dry Creek Detention Reservoir is shown within the northern portion of the Site 1A area. Also, as noted in Section 7.3.2.5 of this report, although the potential for radon gas levels to exceed 4 picocuries per liter appears low, considering the public nature of the building and the recommendations of CGS Special Report 247, radon gas testing would be recommended within existing nearby buildings and basement levels to obtain specific data to determine if any special soil gas control systems are needed for the proposed structure due to a potential for elevated indoor radon levels.

8.7 In addition to the existing structures and subsurface improvements that will require removal as part of the project, the overall site history indicates some previously existing structures have been removed from the Site 1A area as well. The type of foundation system supporting the prior structures and the extent of removal of subsurface improvements associated with previous development are not known. Thus, in addition to the existing structures, there is a potential to encounter other buried improvements that may still remain within the site from prior development.

8.8 Based on the preliminary structural loading provided by HOK, a structural mat foundation system is anticipated for support of the new courthouse. Based on the information provided by HOK, a maximum applied ground pressure of 3,500 pounds per square foot was assumed for consideration of a mat foundation. Based on the anticipated foundation loads, the mat foundation for the new courthouse should extend into the dense to very dense granular soils and/or the very stiff to hard fine-grained soils which were generally encountered beginning at depths ranging from 20 to 25 feet BSG. Preliminary estimates of foundation settlement indicate less than 1 inch of post construction settlement for these conditions. As part of the site/subgrade preparation to receive the foundations, the subgrade soils should be compacted to achieve a firm and stable condition at the base of the excavation, and to achieve a minimum relative compaction (based on ASTM D1557) of 92 percent to a depth of at least 12 inches. In addition, areas where excavations occur below the planned foundation such as for removal of existing structure foundations, other subsurface improvements, unstable or lower density soils, or where soils are disturbed from the demolition work, all disturbed soils should be removed to expose native, undisturbed soils and the excavations should be backfilled as engineered fill.

8.9 It is our understanding based on information provided by HOK that deep foundation elements may be considered to augment the uplift resistance of the building foundation due to seismic overturning forces at the shear wall cores. From a geotechnical engineering perspective, due to potential impacts from differential settlement of the mat foundation and in order to maintain more uniform foundation performance, if the depth and/or thickness of the mat foundation can be modified to achieve the required uplift resistance, this approach would be preferred instead of incorporating deep foundation elements for uplift resistance. In the event deep foundation uplift elements are required at the shear wall cores, on a preliminary basis it is anticipated that the deep foundation uplift elements would consist of reinforced concrete shafts in the range of about 16 inches to 30 inches in diameter. An allowable uplift resistance skin friction value of 250 pounds per square foot may be considered for conceptual design of drilled shafts extending a minimum depth of 35 feet below the bottom of the mat foundation and an allowable uplift skin friction value of 500 pounds per square foot may be considered for conceptual design of auger cast piles extending to a minimum depth of 35 feet below the bottom of the mat foundation. Where used, pile foundations should be placed no closer to each other than three pile diameters, center-to-center. For spacing less than three diameters, the uplift capacity of piles in groups should be reduced using accepted group reduction formulas. Geotechnical parameters for consideration of lateral loading effects on deep foundations are included in Section 8.11 of this report. However, note that a detailed geotechnical and structural evaluation of the differential settlement and deformation of the mat foundation will also need to be conducted to assess potential mat foundation design impacts if deep foundation uplift elements are used. Refer to Section 8.10 of this report for additional information.

8.10 At the time of preparation of this report, structural design had not been initiated. Structure design information for the mat foundation (such as loading, depth, etc.) and deep foundation uplift elements (such as diameter, depth, locations, etc.) will be needed for geotechnical engineering analysis of foundation settlement and for development of final modulus of subgrade reaction estimates for use in structural analysis and design. Thus, for the purpose of this report, the estimates of modulus of subgrade reaction in this report are preliminary in nature and are intended only for an initial structural analysis. A preliminary modulus of subgrade reaction of 30 pounds per cubic inch may be assumed for the mat foundation subgrade for initial analysis based on an assumed uniform applied foundation pressure of 3,500 pounds per square foot. For initial analysis, the modulus of subgrade reaction at the top of the deep foundation uplift element is anticipated to be several thousand times the value of the modulus of subgrade reaction for the mat foundation subgrade. The vertical modulus of subgrade reaction for deep foundation uplift elements (if used) will depend on details such as the diameter, depth and mat foundation load contribution and thus cannot be estimated at this time. Final geotechnical parameters will need to be developed through an iterative process with the structural engineer as the structural design loading and details for the mat foundation and deep foundation uplift elements are known and after initial soil-structure interaction analysis is conducted by the structural engineer.

8.11 Based on the soils encountered during our field investigation, the following tables may be used for lateral analysis of individual pile foundations using soil-structure interaction software such as LPILE by Ensoft, Inc. P-multipliers should be applied for lateral analysis of pile groups in accordance with accepted standards, such as the California Amendments to the AASHTO LRFD Bridge Design Specifications, prepared by the State of California Department of Transportation.

Table No. 3
Idealized Soil Profile and Parameters for Conceptual Lateral Design of Drilled Shafts

Soil Description	Elevation of Bottom of Layer (feet)	Total Unit Weight (pcf)	Internal Angle of Friction (degfees)	Undrained Shear Strength (psf)	Soil Modulus, K (pci)	Strain (E_{50})
Loose Silty Sand and Poorly Graded Sand	275	110	28	N/A	25	N/A
Medium Dense Poorly Graded Sand	265	115	30	N/A	90	N/A
Medium Dense to Dense Silty Sand	257	120	32	N/A	90	N/A
Very Stiff to Hard Low Plastic Clay	242	120	N/A	2,000	1,000	0.005
Medium Dense to Dense Silty Sand	212	120	32	N/A	90	N/A

Notes: 1. pcf = pounds per cubic foot
2. Psf = pounds per square foot
3. Pci = pounds per cubic inch

8.12 The new courthouse building is anticipated to include connections to other structures such as a new tunnel system for secure transport of prisoners to the Main Jail and the existing adjacent Fresno County parking structure. The potential for differential settlement between dissimilar structures will need to be evaluated to reduce potential impacts. Provisions should be incorporated in the construction of the project to reduce potential impacts from differential settlement of adjoining structures, such as allowing the majority of the foundation settlement to occur before final connections are made.

8.13 Based on the depth of excavation anticipated for the proposed basement level, cohesionless soils including poorly graded sands and well graded sands with a limited stand up capacity are anticipated to be exposed in some areas. It should be anticipated that these soils will be subject to instability in excavations and instability/yielding when preparing the subgrade soils.

8.14 For conceptual design purposes, the active and at-rest pressures of retaining wall backfill using imported, granular soils in a drained condition may be assumed to be equal to the pressures developed by a fluid with a density of 43 and 65 pounds per cubic foot, respectively. Drained conditions will require design and installation of retaining wall backdrains. A seismic earth pressure (equivalent fluid pressure) of 25 pounds per cubic foot may also be applied for conceptual design of the basement structure retaining walls, using an inverted triangular pressure distribution. These pressures also assume a level ground surface and do not include the surcharge effects of construction equipment, loads imposed by nearby foundations, roadways, hydrostatic water pressure, etc. The allowable passive resistance may be assumed to be equal to the pressure developed by a fluid with a density of 300 pounds per cubic foot. The passive pressure may be increased 1/3 for temporary loading conditions.

8.15 The proposed courthouse is anticipated to have a basement finished floor elevation extending about 15 feet below the grade adjacent to Fresno Street. Numerous existing above and below grade structures are located within and adjacent to the planned basement excavation. In addition, the existing structures to be demolished include foundations that are in close proximity to some of the existing retaining structures and foundations associated with existing structures that will remain. Due to the proximity of the adjacent, existing improvements as described in Section 6.1 of this report, the excavations conducted for the project have a potential to impact adjacent improvements. Thus, it is anticipated that some of the excavations for the project will require shoring for temporary excavation support, and to protect existing adjacent improvements from excessive movement. Special provisions to protect the adjacent structures may be required if the excavations are to be advanced below the zone of influence of existing adjacent foundations. Furthermore, demolition and removal of existing structures and foundations will need to be conducted carefully to reduce potential damage to the existing adjacent improvements. In addition, the presence of existing adjacent below grade improvements may restrict the use of ground anchors for engineered shoring systems to support the new basement level excavation for the courthouse.

8.16 Due to the presence of existing adjacent structures that will remain, potential surcharge to the new courthouse foundation/basement walls from adjacent foundations, and potential surcharge loading from the proposed courthouse to adjacent structures will need to be evaluated. If surcharge loads occurs, this condition will need to be addressed in design and construction.

8.17 Based on a Site Class CD, the following mapped seismic factors were developed for the site using the Ground Motion Parameter Calculator provided by SEOAC and OSHPD (http://seismicmaps.org), based upon a site latitude of 36.736754 degrees and a site longitude of -119.789985 degrees. **The mapped parameters provided in Table No. 5 are based upon the general procedures of ASCE 7-22 and are not based upon a site-specific ground motion hazard analysis. Refer to the site-specific response spectra in Appendix E of this report.**

Table No. 4
Mapped Seismic Factors[1,2]

Seismic Factor	2025 CBC Value
Site Class	CD
Maximum Considered Earthquake (geometric mean) peak ground acceleration adjusted for site effects (PGA_M)	0.36
Spectral Response At Short Period (0.2 Second), S_s	0.72
Spectral Response At 1-Second Period, S_1	0.24
Maximum considered earthquake spectral response acceleration for short period, S_{MS}	0.9
Maximum considered earthquake spectral response acceleration at 1 second, S_{M1}	0.48
Five percent damped design spectral response accelerations for short period, S_{DS}	0.62[3]
Five percent damped design spectral response accelerations at 1-second period, S_{D1}	0.32

Note: **1. Values in above table reflect the "mapped" seismic parameters. A site-specific response spectra is included in Appendix E of this report.**
2. The mapped seismic parameters are subject to the disclaimers listed in the website https://seismicmaps.org/
3. S_{DS} value determined in accordance with ASCE 7-22, Section 11.4.4.

8.18 The bottom surface area of the mat foundation in direct contact with soils can be used to resist lateral loads. An allowable coefficient of friction of 0.30 may be used for design. The allowable passive resistance of the native soils and engineered fill may be assumed to be equal to the pressure developed by a fluid with a density of 300 pounds per cubic foot. The passive pressure may be increased 1/3 for temporary loading conditions.

8.19 The following preliminary asphalt concrete pavement sections are based on a design R-value of 40 and traffic index values ranging from 5.0 to 8.0 in the event low volume traffic pavements are planned as part of the project. It should be noted that if pavements are constructed prior to construction, the traffic index value should account for construction traffic. The actual traffic index values applicable to the site should be determined by the project civil engineer.

Table No. 5
Preliminary Asphalt Concrete Pavement Section Thickness Recommendations

Traffic Index	AC thickness, inches	AB thickness, inches	Compacted Subgrade, inches
5.0	2.5	5.0	12
5.5	3.0	5.0	12
6.0	3.0	6.5	12
6.5	3.5	6.5	12
7.0	4.0	7.0	12
7.5	4.0	8.0	12
8.0	4.5	8.5	12

AC - Type A Asphalt Concrete in accordance with the California Department of Transportation Standard Specifications
AB - Class II Aggregate Base with a minimum R-value of 78 and compacted to at least 95 percent relative compaction (ASTM D1557)
Subgrade - Subgrade soils compacted to at least 95 percent relative compaction (ASTM D1557)

8.20 The pavement design application StreetPave www.pavementdesigner.org ("Street" Analysis) was utilized to determine preliminary Portland cement concrete (PCC) pavement section thicknesses. The following PCC pavement sections have been prepared based on the estimated Equivalent Single Axle loads using assumed traffic indexes of 6.0 to 8.0. The design pavement sections should be selected by the designer based on the

anticipated traffic loading. If the paved areas are to be used during construction, or if the type and frequency of traffic are greater than assumed in design, the pavement section should be re-evaluated for the anticipated traffic loading. The design thicknesses were based on the following parameters: 1) minimum modulus of rupture of 550 psi for the concrete, 2) a design life of 20 years, 3) load transfer by aggregate interlock or dowels, 4) concrete shoulder, 5) 5 percent cracked slabs at failure, and 6) trucks with a single axle load of 16 kips and two (2) tandem axles with a load of 32 kips each.

Table No. 6
Preliminary Portland Cement Concrete Pavement Section Thickness Recommendations

Traffic Index	ADTT (Trucks/day)	PCC thickness (inches)	Aggregate Base[1] (inches)	Compacted Subgrade[2] (inches)
6.0	2	5.5	4.0	12
7.0	7	6.0	4.0	12
8.0	22	6.5	4.0	12

ADTT - Average Daily Truck Traffic
PCC - Portland Cement Concrete (minimum Modulus of Rupture=550 psi)
Subgrade - Subgrade soils compacted to at least 95 percent relative compaction (ASTM D-1557)

8.21 Although some borings encountered poorly graded sands that exhibit a gradation and density that are favorable for infiltration, the thickness of the poorly graded sands are limited in some areas and these soils were generally underlain by dense or hard soils which would restrict vertical downward movement of water. Thus, water from stormwater infiltration systems relying on infiltration in the poorly graded sand would have a tendency to become perched and migrate laterally above the underlying dense/hard soils. Due to these subsurface conditions and since the proposed structure includes a basement level, stormwater infiltration systems would generally not be recommended.

8.22 A vapor retarder should be placed below interior building slabs in accordance with the American Concrete Institute's Guide to Concrete Floor and Slab Construction (ACI 302-1R) for selection and installation of moisture vapor retarders. As a minimum, it is recommended that a 15-mil vapor retarder such as Stegowrap 15 be used where moisture could permeate into the interior and create problems, such as where flooring or floor slab applications will contain moisture sensitive materials (or other slab applications or uses). The vapor retarder should overlay a compacted granular base layer.

8.23 The results of corrosion potential testing indicated that the near-surface soils exhibit a "mildly corrosive" corrosion potential to buried metal objects and one (1) sample of sandy lean clay obtained from a depth of about 21 to 24 feet BSG indicated a "corrosive" corrosion potential.

8.24 Based on Table 19.3.1.1 - Exposure categories and classes from Chapter 19 of ACI 318, the sulfate concentration from chemical testing falls in the S0 classification for consideration of concrete mix design requirements for concrete in contact with soils.

9.0 NOTIFICATION AND LIMITATIONS

9.1 The preliminary conclusions and primary geotechnical engineering conditions of concern presented in this report are based on the information provided regarding the anticipated construction, our evaluation of the geologic and seismic hazards and the results of the field and laboratory investigation, combined with interpolation of the subsurface conditions between boring locations.

9.2 This report presents the results of a preliminary investigation for the site acquisition phase of the project only and should not be construed as a design level investigation.

9.3 The preliminary conclusions and recommendations contained in this report are valid only for the project discussed in the Background Information section of this report. The use of the information contained in this report for structures on this site not discussed herein or for structures on other sites not discussed in this report is not recommended. The entity or entities that use or cause to use this report or any portion thereof for another structure or site not covered by this report shall hold Moore Twining, its officers and employees harmless from any and all claims and provide Moore Twining's defense in the event of a claim.

9.4 This report is issued with the understanding that it is the responsibility of the client to transmit the information and conclusions and primary geotechnical engineering conditions of concern in this report to developers, owners, buyers, architects, engineers, designers, contractors, subcontractors, and other parties having interest in the project so that the steps necessary for consideration in the design, construction and maintenance of the project are taken by the appropriate party.

9.5 Our professional services were performed, our findings obtained, and our conclusions and primary geotechnical engineering conditions of concern were prepared in accordance with generally-accepted engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied.

9.6 Reliance on this report by a third party (i.e., that is not a party to our written agreement) is at the party's sole risk. If the project and/or site are purchased by another party, the purchaser must obtain written authorization and sign an agreement with Moore Twining in order to rely upon the information provided in this report for design or construction of the project.

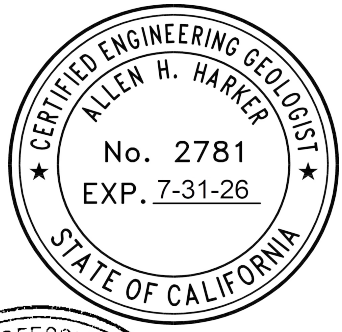
10.0 CLOSING

We appreciate the opportunity to be of service. If you have any questions regarding this report, or if we can be of further assistance, please contact us at your convenience.

Sincerely,
MOORE TWINING ASSOCIATES, INC.
Geotechnical Engineering Division

Shaun Reich, EIT
Staff Engineer

Allen H. Harker, CEG
Certified Engineering Geologist



Read L. Andersen, RGE
Division Manager



REFERENCES

California Department of Water Resources, Division of Safety of Dams website (https://fmds.water.ca.gov/maps/damim/)

California Department of Conservation, California Geological Survey, Special Report: California Indoor Radon Potential, dated 2022

California Division of Mines and Geology, Geologic Map of California, Fresno Sheet, dated 1965, Second Printing, 1971

Federal Emergency Management Agency, Flood Insurance Rate Maps, Community Panel number 06019C110H, revised on February 18, 2009

Jennings, C.W., and Bryant, W.A., 2010 Fault Activity Map of California: California Geological Survey, Geologic Data Map No. 6. And Digital Database of Quaternary and Younger Faults from the Fault Activity Map of California, Version 2.0 (Bryant, 2005; http://www.conservation.ca.gov/cgs/information/publications/Pages/quaternaryfaults_ver2.aspx).

Fresno County General Plan, Safety Element from the Background Report for Fresno County, adopted October 3, 2000

Miller, C. D., 1989, Potential Hazards from Future Volcanic Eruptions in California, U. S. Geologic Survey Bulletin 1847.

State of California Department of Conservation, Division of Mines and Geology, Open-File Report 2000-19, titled *A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos,* August, 2000

United States Geological Survey, Circular Area Earthquake https://earthquake.usgs.gov/earthquakes/search/

United States Geological Survey, Unified Hazard Tool https://earthquake.usgs.gov/hazards/interactive/

United States Geological Survey, U.S. Seismic Design Maps Application https://earthquake.usgs.gov/designmaps/us/application.php

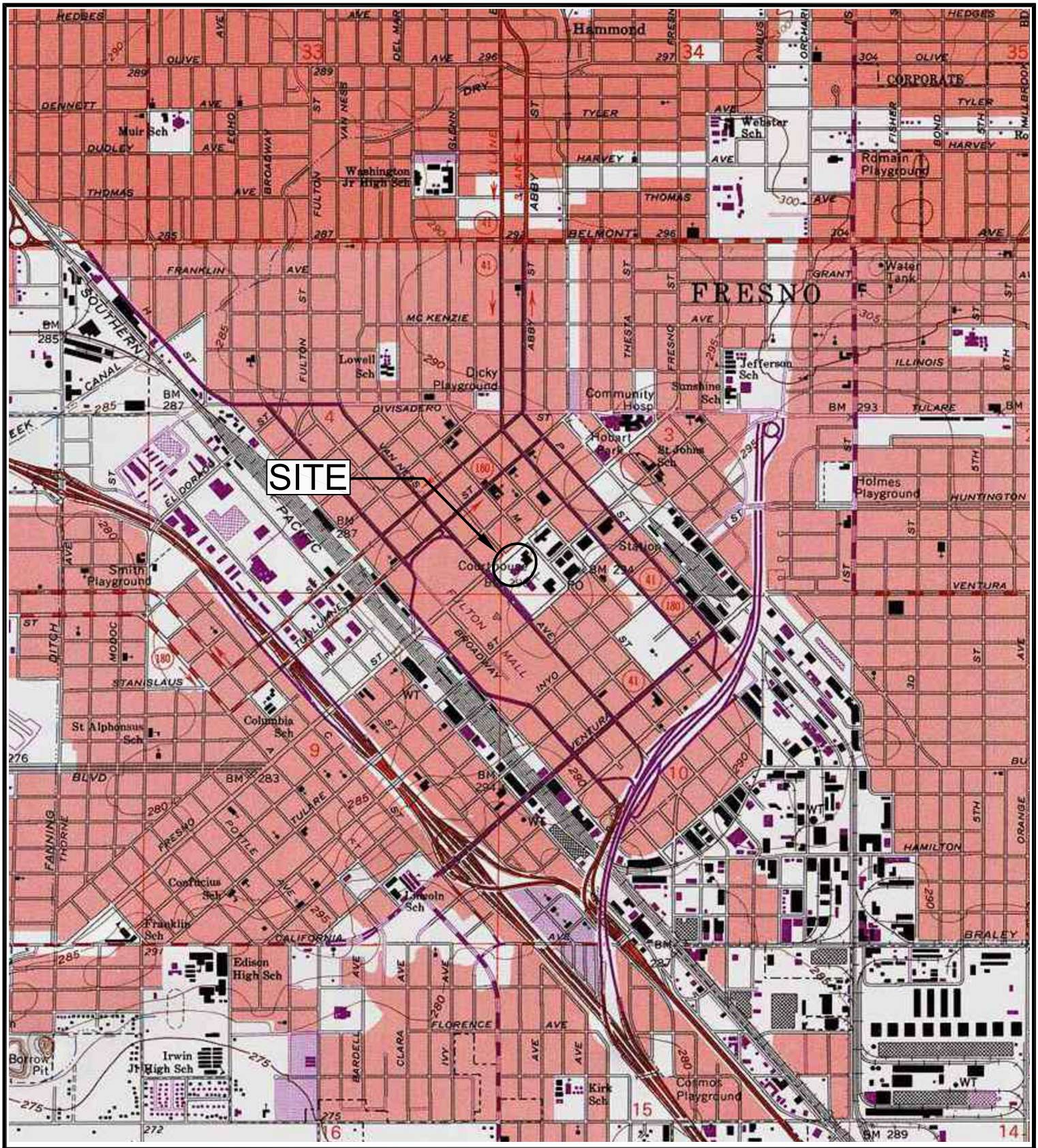
United States Geological Survey, Areas of Land Subsidence in California https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html

United States Geological Survey, Interactive U.S. Landslide Inventory map, (https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d)

APPENDIX A

DRAWINGS

Drawing No. 1 - Site Location Map
Drawing No. 2 - Overall Test Boring Location Map
Drawing No. 3 - Test Boring Location Map - Site 1A
Drawing No. 4 - Existing Subsurface Improvements Overlayed on Courthouse Site Plan Option 1A
Drawing No. 5 - Regional Geologic Map
Drawing No. 6 - Map of Faults Relative to Site
Drawing No. 7 - Historical Earthquake Epicenter Map
Drawing No. 8 - Dam Inundation at Courthouse Park from Breach of Fancher Creek Reservoir and Big Dry Creek Reservoir
Drawing No. 9 - Site Geologic Map
Drawing No. 10 - Soil Profile Cross Section A-A'
Drawing No. 11 - Soil Profile Cross Section B-B'



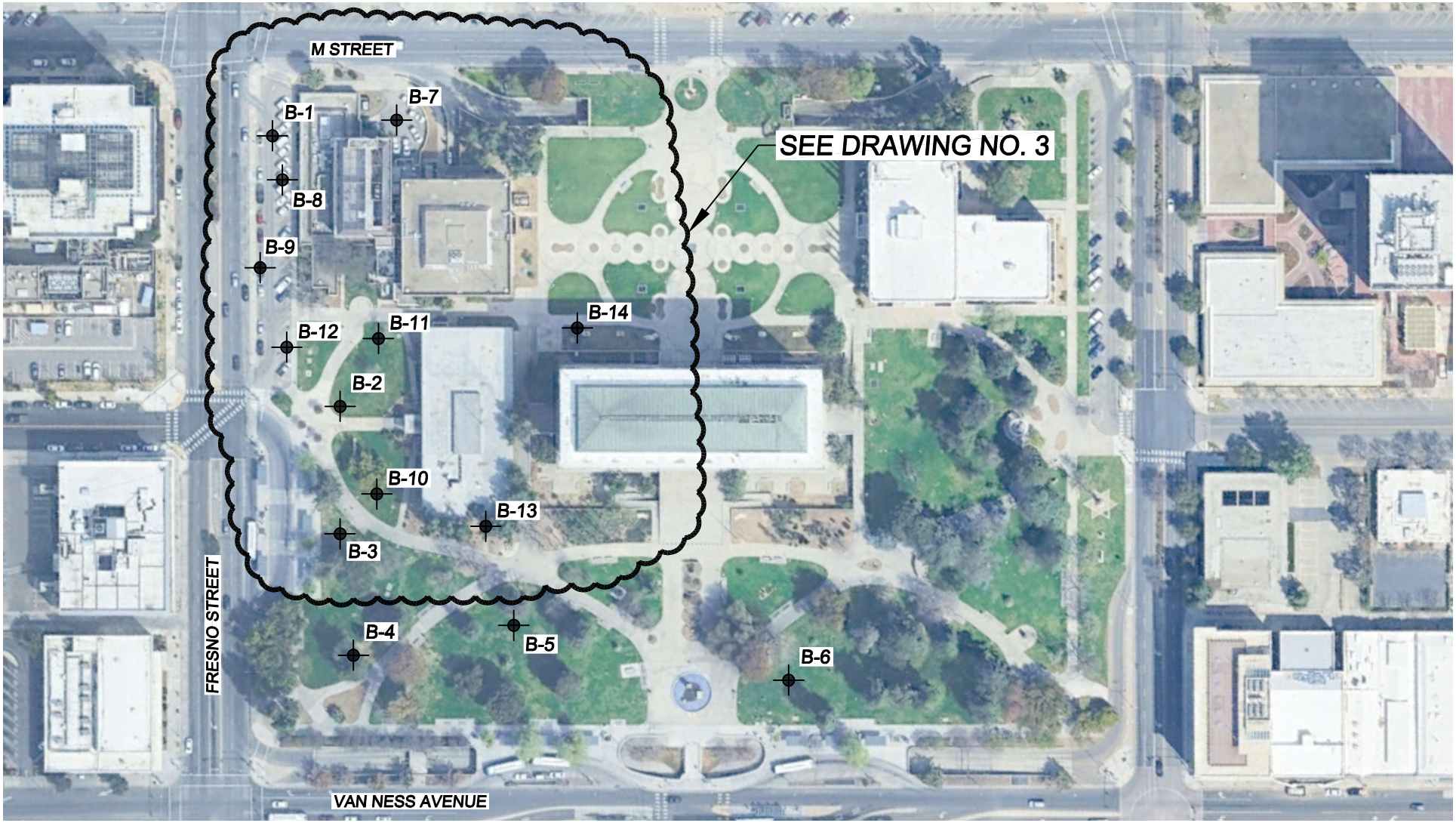
SOURCE: U.S.G.S. TOPOGRAPHIC MAP, 7 ½ MINUTE SERIES
FRESNO SOUTH, CALIFORNIA QUADRANGLE 1978, PHOTOREVISED 1981

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APPROXIMATE SCALE IN FEET

SITE LOCATION MAP
PROPOSED COURTHOUSE - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

FILE NO.:	DATE:
88004-01-01	01/13/2026
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PROJECT NO. C88004.01-03	DRAWING NO. 1

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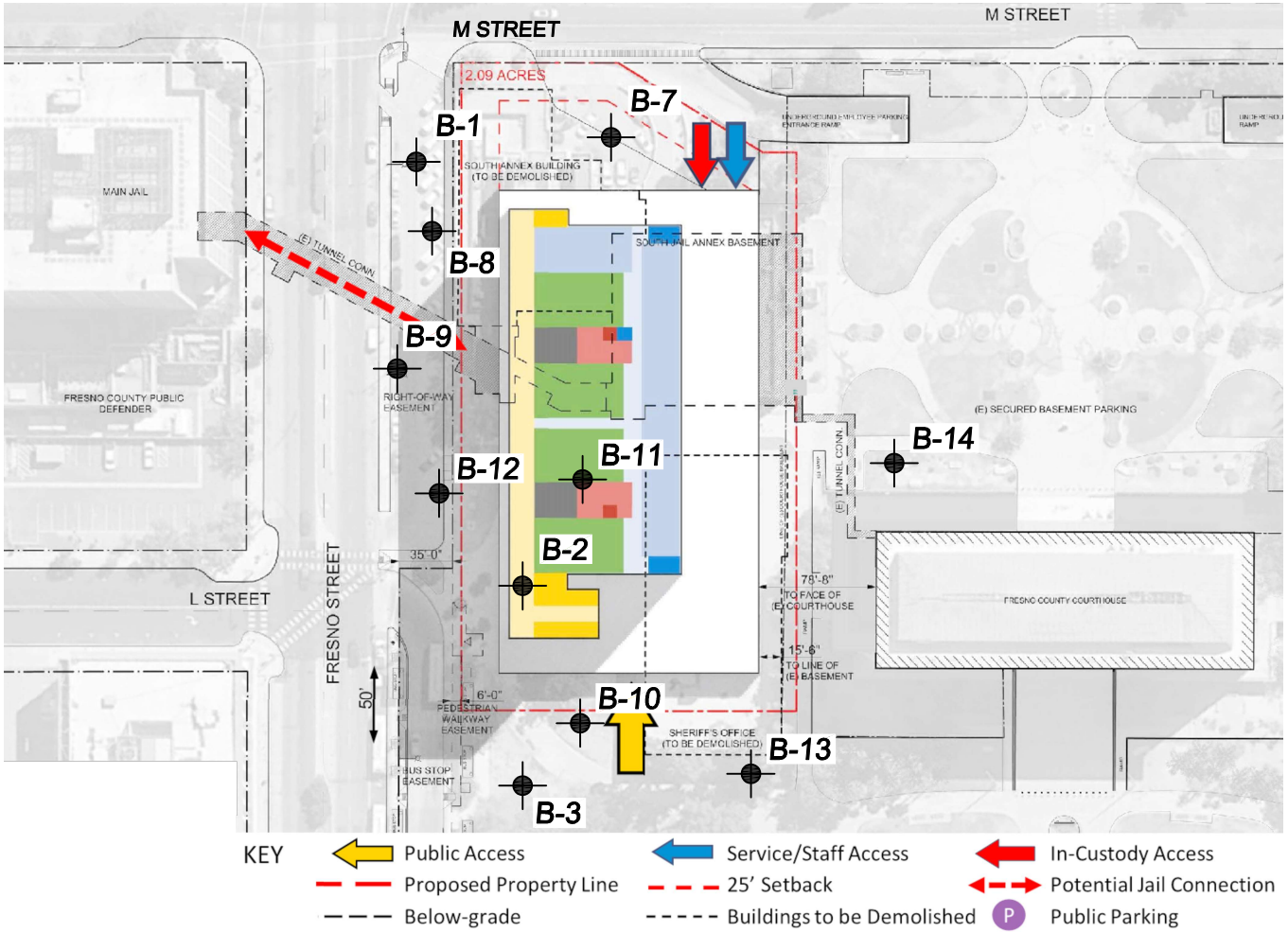
APPROXIMATE LOCATION OF TEST BORING

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PROJECT NORTH
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APPROXIMATE SCALE IN FEET

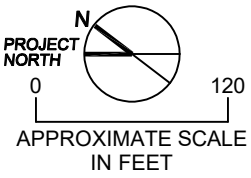
TEST BORING LOCATION MAP - OVERALL
PROPOSED COURTHOUSE - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

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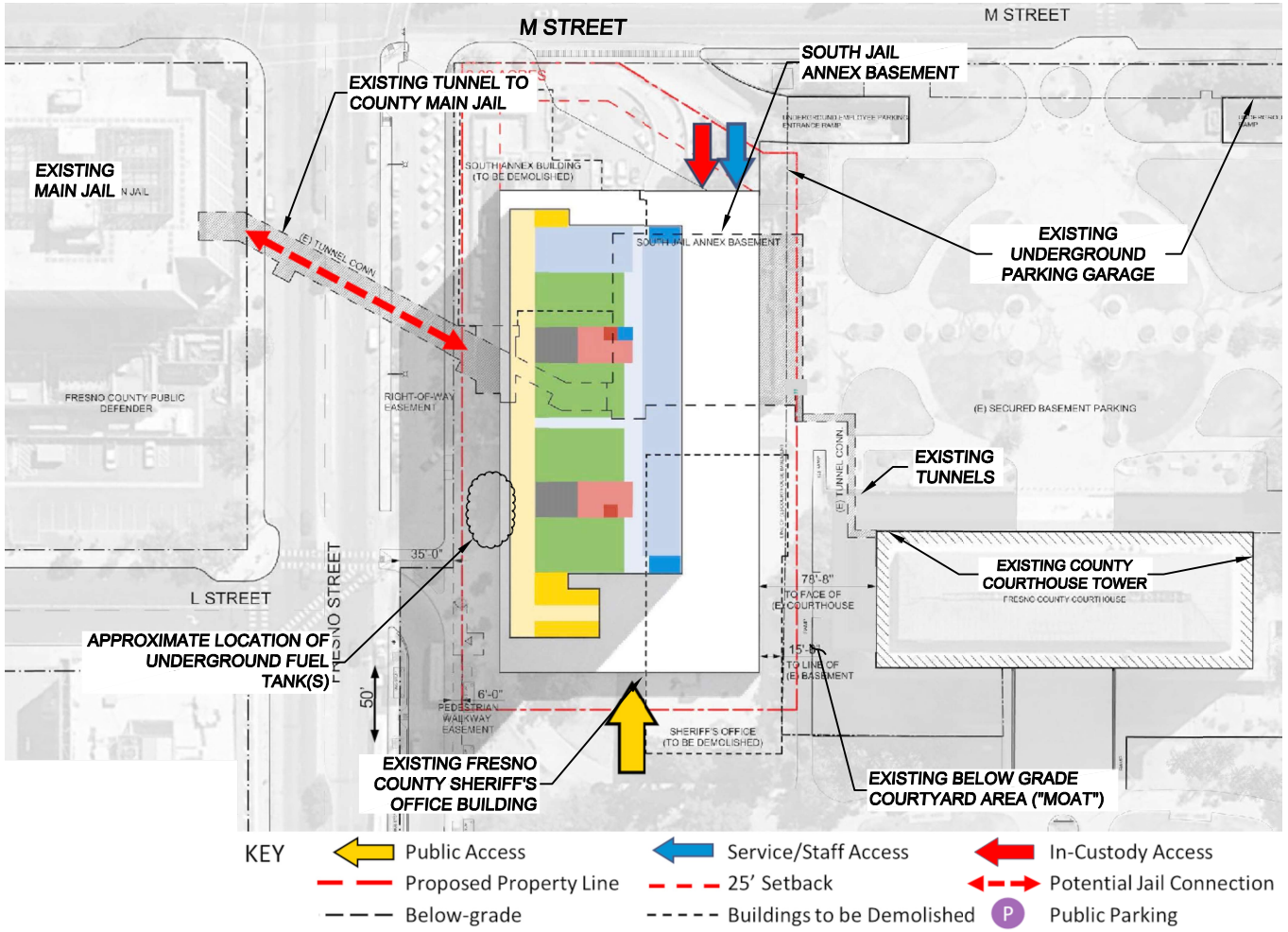
APPROXIMATE LOCATION OF TEST BORING (SEE DRAWING NO. 3 FOR OTHER TEST BORING LOCATIONS B-4, B-5 AND B-6)



TEST BORING LOCATION MAP - SITE 1A
PROPOSED COURTHOUSE - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

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NOTE: ELEVATION DATUM ON THIS DRAWING DIFFERS FROM ELEVATION DATUM USED FOR TOPOGRAPHIC MAP, PREPARED BY PRECISION CIVIL ENGINEERING, INC. DATED JULY 10, 2023

NOTE: EXISTING ELEVATIONS AND ELEVATION NOTES PROVIDED CIVIL TO VERIFY / CONFIRM ELEVATION

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APPROXIMATE SCALE IN FEET

EXISTING SUBSURFACE IMPROVEMENTS OVERLAYED ON COURTHOUSE SITE PLAN OPTION 1A - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

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SEDIMENTARY AND METASEDIMENTARY ROCKS

QUATERNARY

Recent

- Qs — Dune sand
- Qal — Alluvium
- Qsc — Stream channel deposits
- Qf — Fan deposits
- Qb — Basin deposits

GREAT VALLEY

- Qst — Salt deposits
- Ql — Quaternary lake deposits
- Qg — Glacial deposits

Pleistocene

- Qt — Quaternary nonmarine terrace deposits
- Qm — Pleistocene marine and marine terrace deposits
- Qc — Pleistocene nonmarine

IGNEOUS AND META-IGNEOUS ROCKS

- Qrv — Recent volcanic: Qrv^r —rhyolite; Qrv^a —andesite; Qrv^b —basalt; Qrv^p —pyroclastic rocks
- Qpv — Pleistocene volcanic: Qpv^r —rhyolite; Qpv^a —andesite; Qpv^b —basalt; Qpv^p —pyroclastic rocks

REFERENCE: GEOLOGIC MAP OF CALIFORNIA, FRESNO SHEET, PREPARED BY THE CALIFORNIA DIVISION OF MINES AND GEOLOGY, DATED 1965

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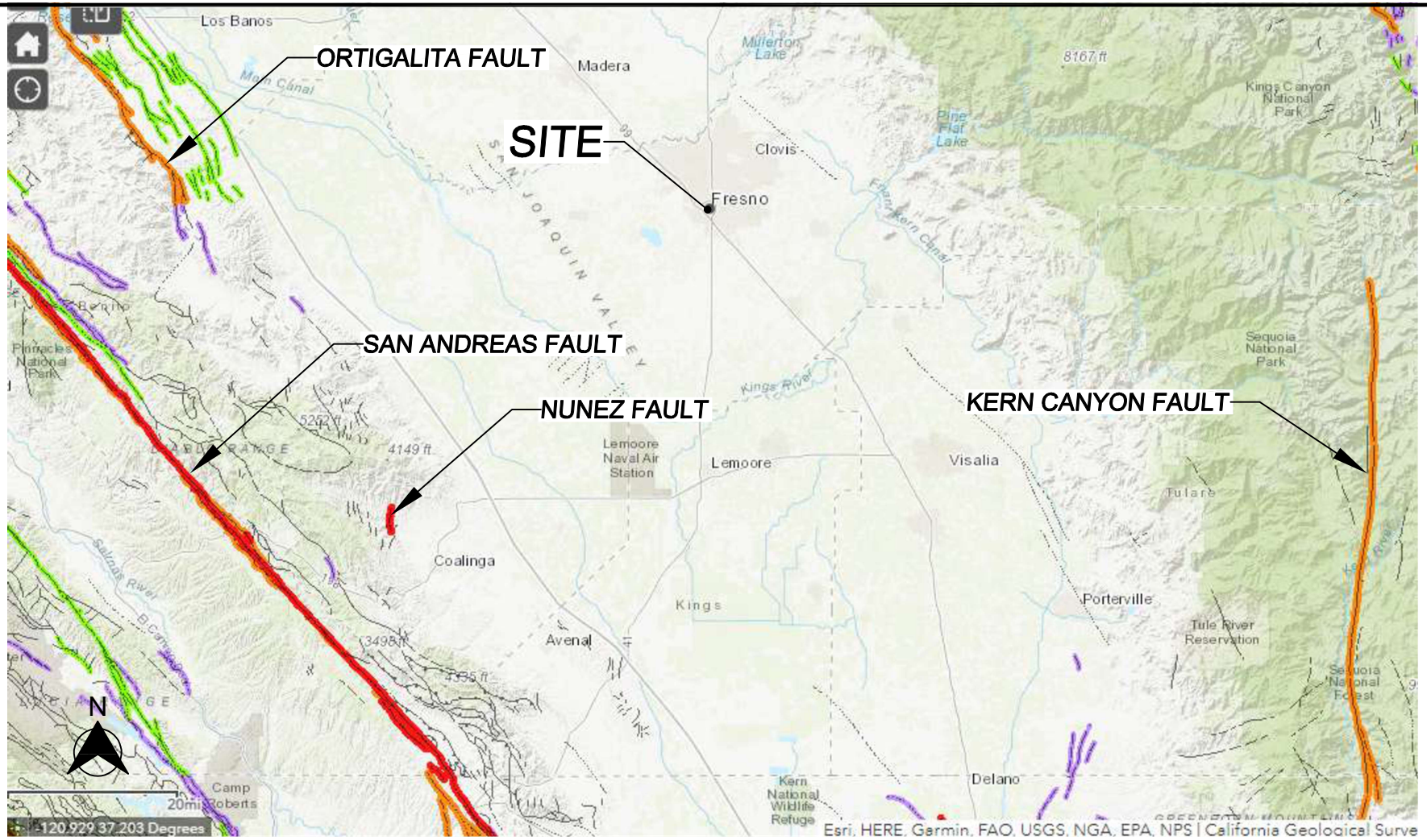
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APPROXIMATE SCALE IN MILES

REGIONAL GEOLOGIC MAP
PROPOSED COURTHOUSE - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

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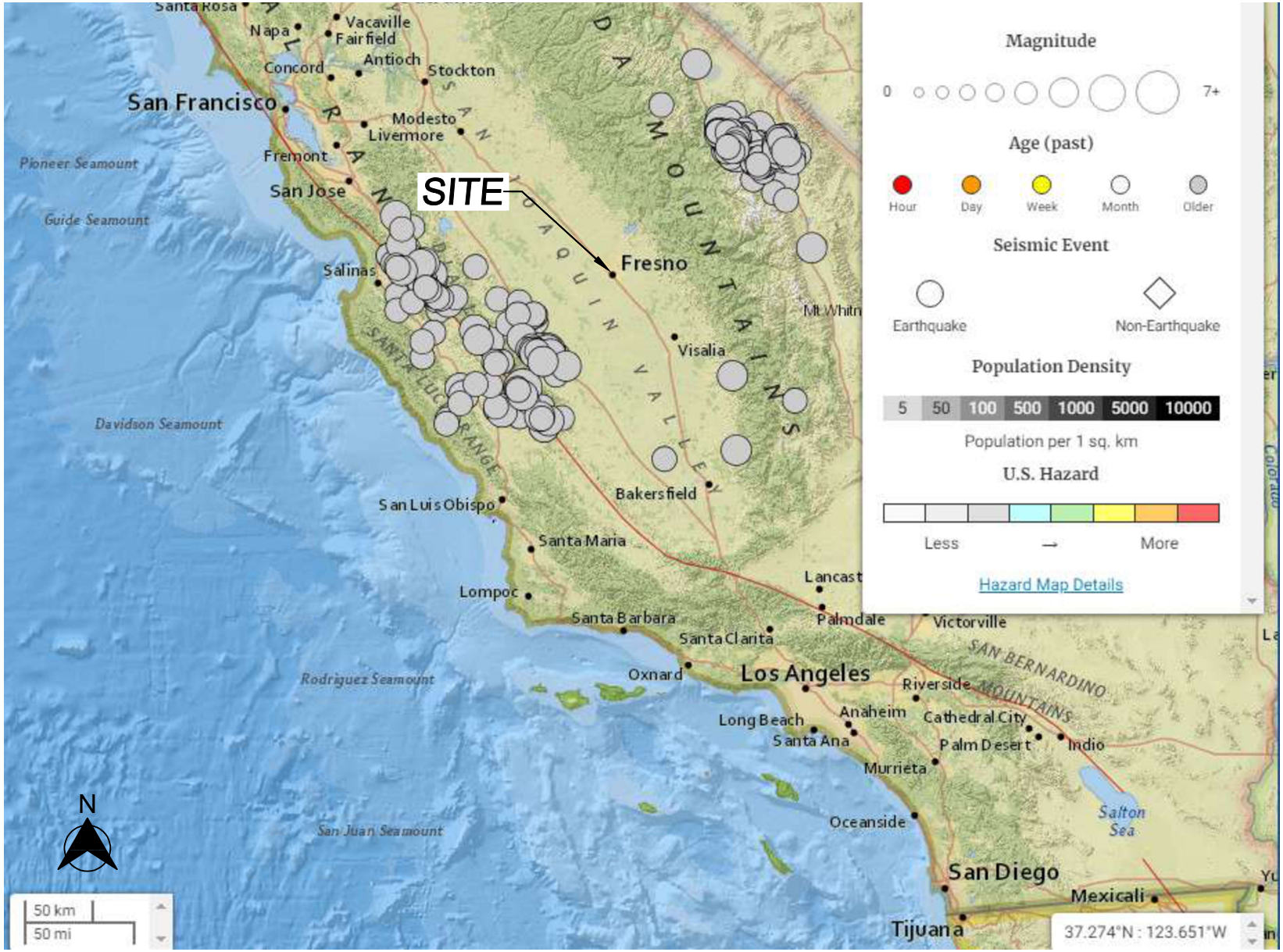
LEGEND

- Fault along which historic (last 200 years) displacement has occurred
- Holocene fault displacement (during past 11,700 years) without historic record
- Late Quaternary fault displacement (during past 700,000 years)
- Quaternary fault (age undifferentiated)

MAP OF ACTIVE AND POTENTIALLY ACTIVE FAULTS RELATIVE TO SITE
PROPOSED COURTHOUSE - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET
AND VAN NESS AVENUE
FRESNO, CALIFORNIA

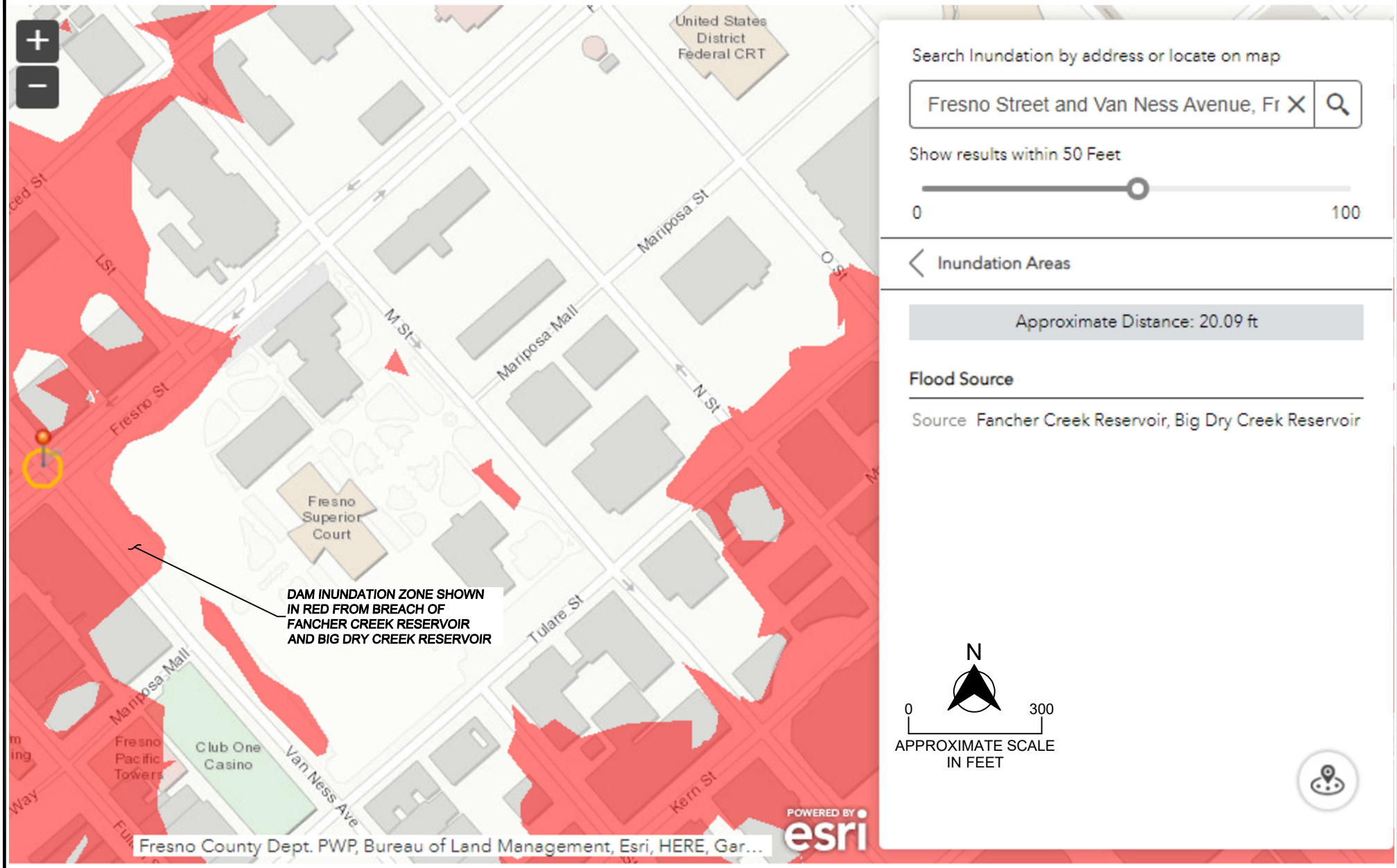
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PROJECT NO. C88004.01-03	DRAWING NO. 6

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HISTORICAL EARTHQUAKE EPICENTER MAP PROPOSED COURTHOUSE - COURTHOUSE PARK SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE FRESNO, CALIFORNIA	FILE NO. 88004-01-02	DATE DRAWN: 01/13/2026
	DRAWN BY: RM	APPROVED BY:
	PROJECT NO. C88004.01-03	DRAWING NO. 7

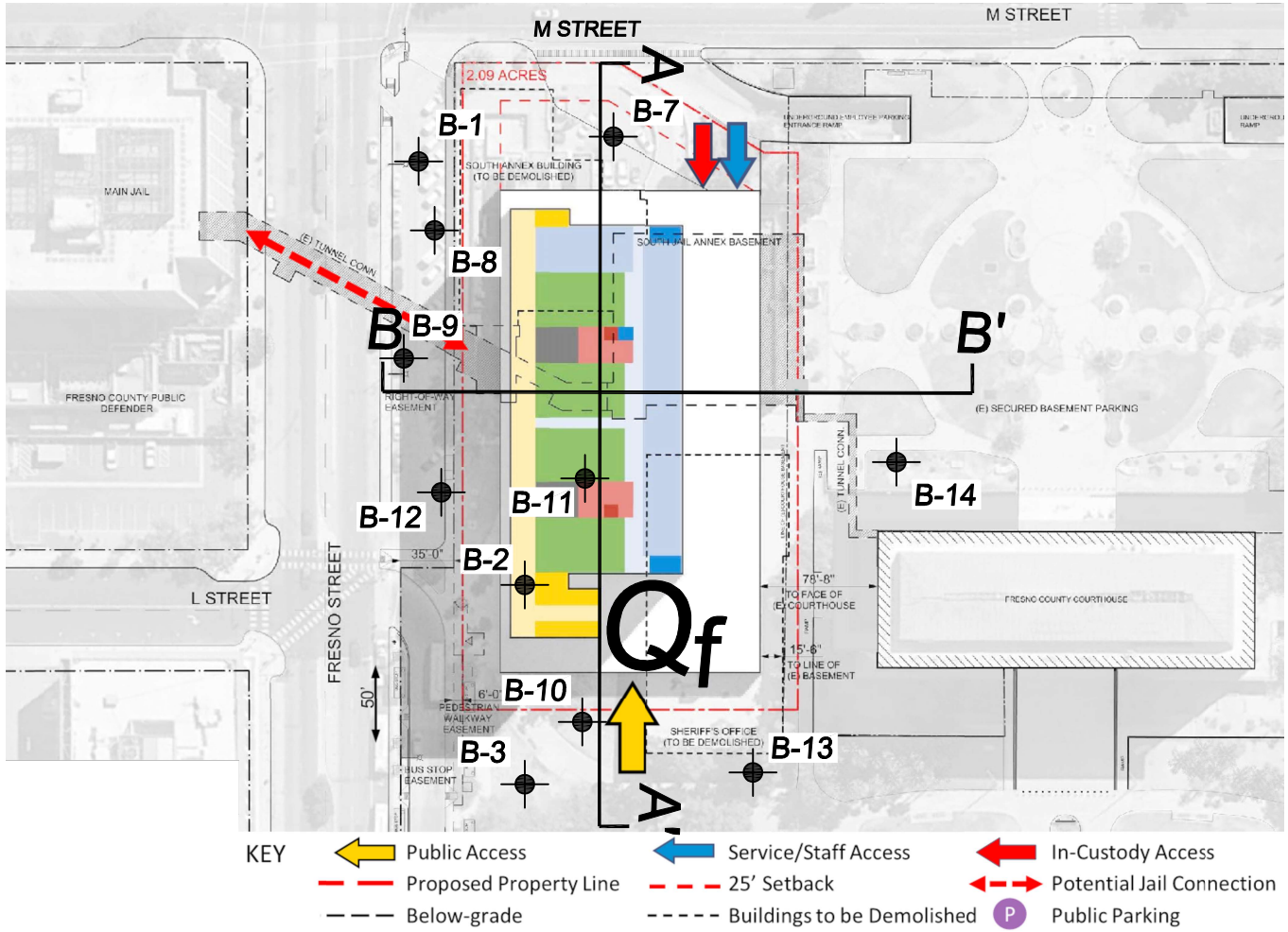
MOORE TWINING ASSOCIATES, INC.
Since 1898



DAM INUNDATION OF COURTHOUSE PARK FOM BREACH OF FANCHER CREEK RESERVOIR AND BIG DRY CREEK RESERVOIR
PROPOSED COURTHOUSE - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

FILE NO. 88004-01-02	DATE DRAWN: 01/13/2026
DRAWN BY: RM	APPROVED BY:
PROJECT NO. C88004.01-03	DRAWING NO. 8

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Qf - RECENT ALLUVIAL FAN DEPOSITS IN THE GREAT VALLEY

APPROXIMATE LOCATION OF TEST BORING (SEE DRAWING NO. 11 FOR OTHER TEST BORING LOCATIONS B-4, B-5 AND B-6)

REFERENCE: GEOLOGIC MAP OF CALIFORNIA, FRESNO SHEET, PREPARED BY THE CALIFORNIA DIVISION OF MINES AND GEOLOGY, DATED 1965

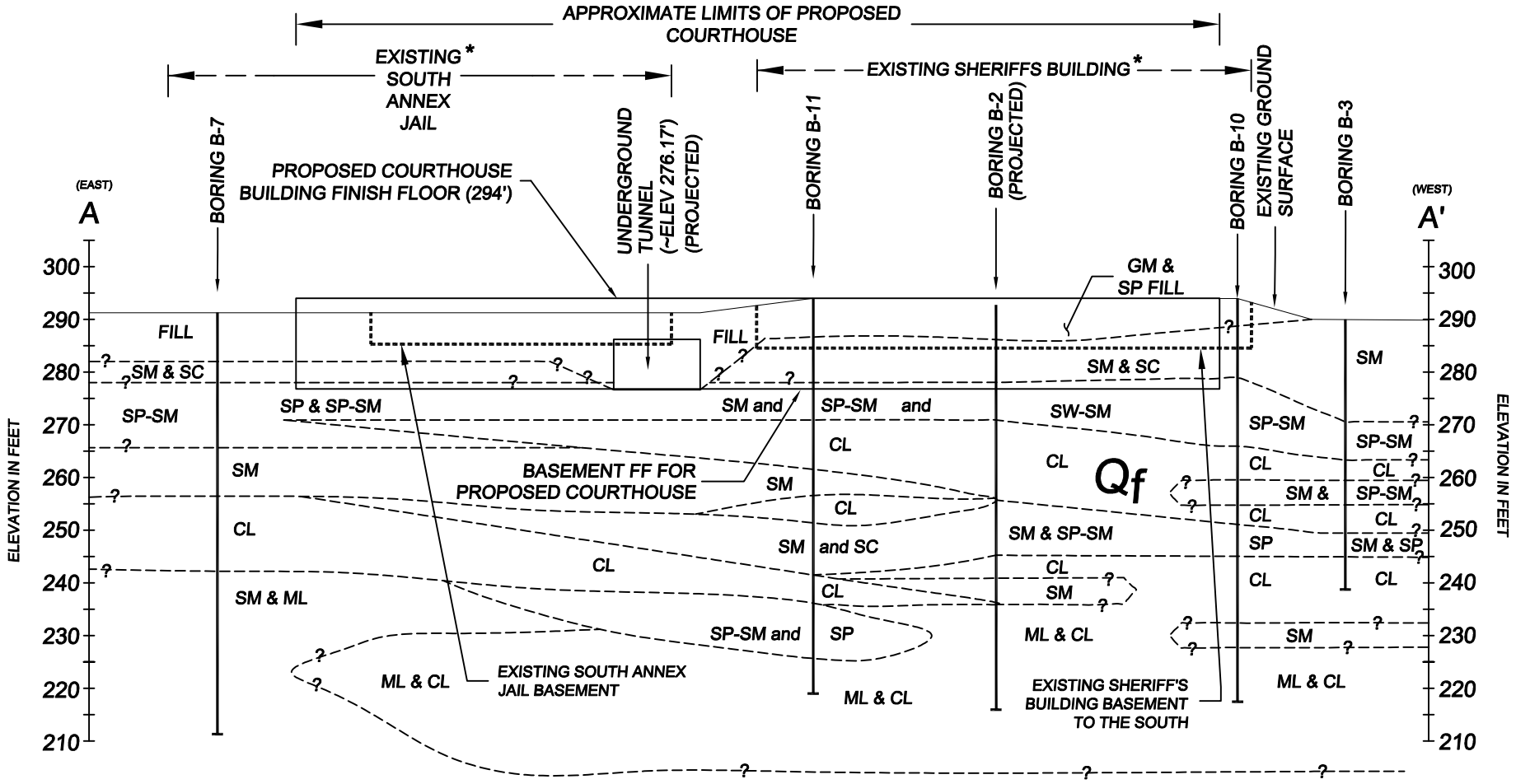
A A' GEOLOGIC CROSS SECTION

N
PROJECT NORTH
0 120
APPROXIMATE SCALE IN FEET

SITE GEOLOGIC MAP
PROPOSED COURTHOUSE - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

FILE NO. 88004-01-02	DATE DRAWN: 04/23/2026
DRAWN BY: RM	APPROVED BY:
PROJECT NO. C88004.01-03	DRAWING NO. 9

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GEOLOGIC UNITS

Q_f: RECENT ALLUVIAL FAN DEPOSITS OF THE GREAT VALLEY

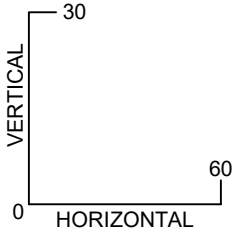
REFERENCE: GEOLOGIC MAP OF CALIFORNIA, FRESNO SHEET, PREPARED BY THE CALIFORNIA DIVISION OF MINES AND GEOLOGY, DATED 1965

* - DASHED INDICATES FEATURE BEYOND SECTION LINE

NOTE: ALL FINISH FLOOR (FF) ELEVATIONS ARE APPROXIMATE

SOIL CLASSIFICATION

GM:	SILTY GRAVEL
SP:	POORLY GRADED SAND
SM:	SILTY SAND
SC:	CLAYEY SAND
SP-SM:	POORLY GRADED SAND WITH SILT
CL:	LEAN CLAYS WITH SAND AND SANDY LEAN CLAYS
ML:	SANDY SILTS
SW-SM:	WELL GRADED SAND WITH SILT

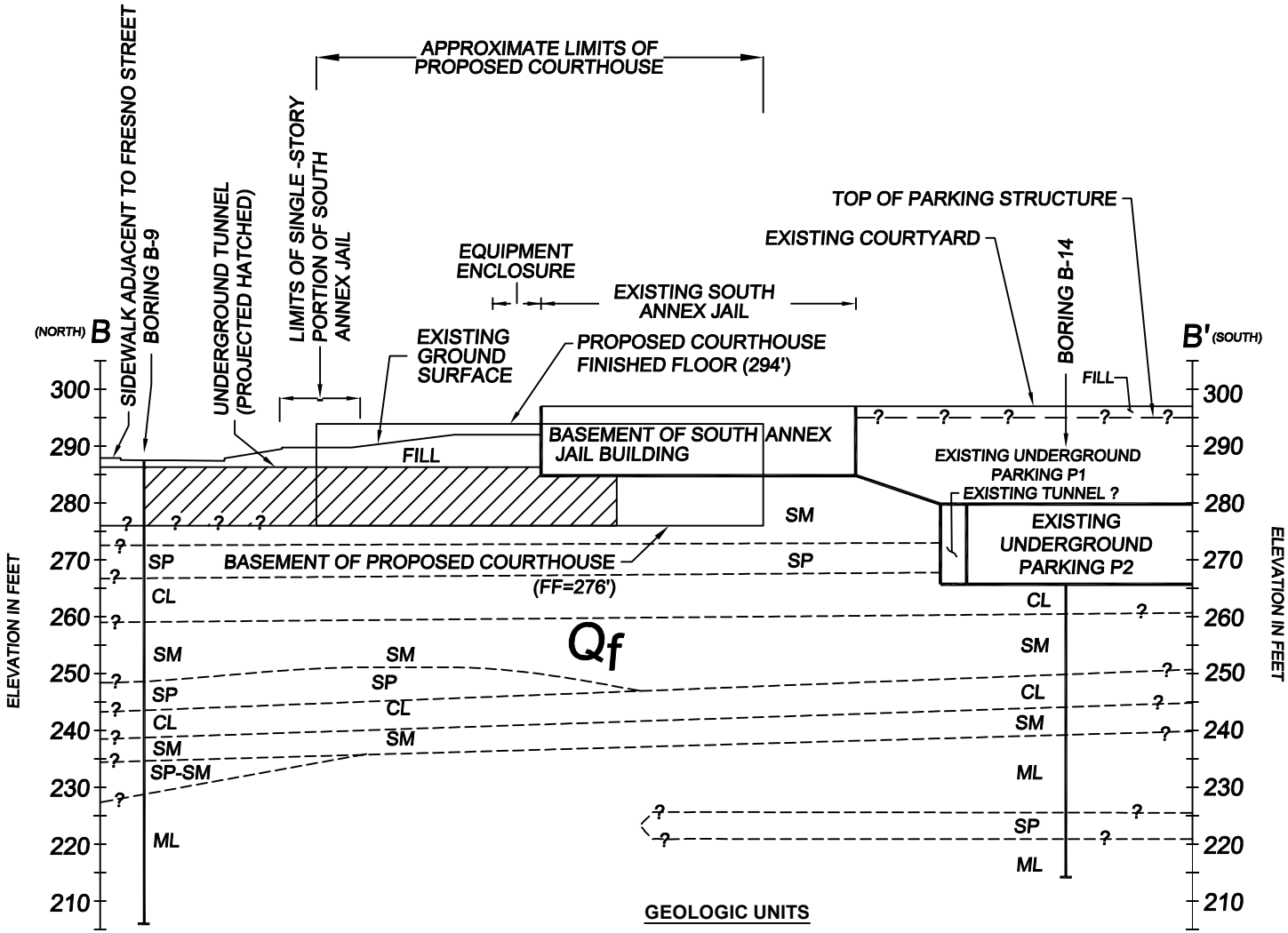


2X VERTICAL EXAGGERATION
APPROXIMATE SCALE IN FEET

GEOLOGIC SOIL PROFILE CROSS SECTION A-A'
PROPOSED COURTHOUSE - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

FILE NO. 88004-01-02	DATE DRAWN: 03/24/2026
DRAWN BY: JE	APPROVED BY:
PROJECT NO. C88004.01-03	DRAWING NO. 10

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GEOLOGIC UNITS

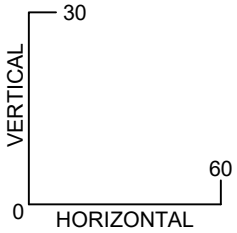
Q_f: RECENT ALLUVIAL FAN DEPOSITS OF THE GREAT VALLEY

SOIL CLASSIFICATION

SM:	SILTY SANDS
SC:	CLAYEY SANDS
SP-SM:	POORLY GRADED SANDS WITH SILT
SP:	POORLY GRADED SANDS
SW-SM:	WELL GRADED SANDS WITH SILT
CL:	SANDY LEAN CLAYS
ML:	SANDY SILTS

REFERENCE: GEOLOGIC MAP OF CALIFORNIA, FRESNO SHEET, PREPARED BY THE CALIFORNIA DIVISION OF MINES AND GEOLOGY, DATED 1965

NOTE: ALL FINISH FLOOR (FF) ELEVATIONS ARE APPROXIMATE



2X VERTICAL EXAGGERATION
APPROXIMATE SCALE IN FEET

GEOLOGIC SOIL PROFILE CROSS SECTION B-B'
PROPOSED COURTHOUSE - COURTHOUSE PARK
SOUTHEAST OF FRESNO STREET BETWEEN M STREET AND VAN NESS AVENUE
FRESNO, CALIFORNIA

FILE NO. 88004-02-02	DATE DRAWN: 03/24/2026
DRAWN BY: JE	APPROVED BY:
PROJECT NO. C88004.01-03	DRAWING NO. 11

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APPENDIX B

LOGS OF BORINGS

This appendix contains the final logs of borings. These logs represent our interpretation of the contents of the field logs and the results of the field and laboratory tests.

The logs and related information depict subsurface conditions only at these locations and at the particular time designated on the logs. Soil conditions at other locations may differ from conditions occurring at these test boring locations. Also, the passage of time may result in changes in the soil conditions at these test boring locations.

In addition, an explanation of the abbreviations used in the preparation of the logs and a description of the Unified Soil Classification System are provided at the end of Appendix B.

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-1

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Drill Type: CME 75 Drill Rig

Auger Type: 6-5/8" O.D. Hollow Stem Augers

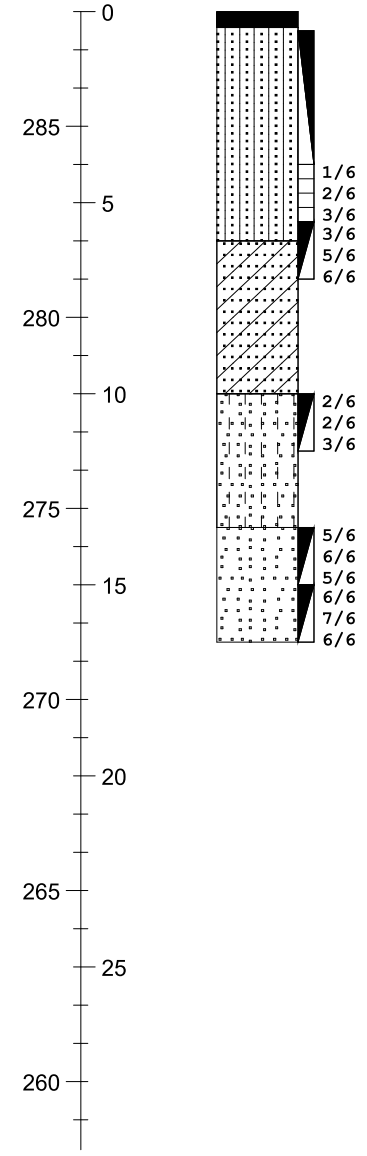
Hammer Type: 140 Pound Auto Trip

Logged By: A.V.

Date: July 11, 2023

Elevation: 288 feet

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		AC	Asphalt Concrete = 5 inches			
		SM	FILL - SILTY SAND; moist, fine to coarse grained, brown, with some gravel			
			Very loose		5	
			Medium dense		11	
		SC	NATIVE - CLAYEY SAND; medium dense, moist, fine to coarse grained, brown			
		SP-SM	POORLY GRADED SAND WITH SILT; loose, moist, fine to coarse grained, brown		5	
		SP	POORLY GRADED SAND; medium dense, moist, fine to coarse grained, light brown		11 13	
			Bottom of Boring B-1 at 16.5 feet			

Notes: *Upper 4 feet below pavement was hand augered.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-2

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Logged By: A.V.

Drill Type: CME 75 Drill Rig

Date: July 11, 2023

Auger Type: 6-5/8" O.D. Hollow Stem Augers

Elevation: 290 feet

Hammer Type: 140 Pound Auto Trip

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
290 — 0		GM	FILL - SILTY GRAVEL WITH SAND; moist, fine to coarse gravel, brown			
		SP	FILL - POORLY GRADED SAND; moist, fine to coarse grained, brown			
		SM	NATIVE - SILTY SAND; moist, fine to coarse grained, brown			
285 — 5	2/6 3/6 5/6		Loose		8	
		SC	CLAYEY SAND; loose, moist, fine to medium grained, brown			
280 — 10	4/6 6/6 7/6	SM	SILTY SAND; loose, moist, fine to coarse grained, brown, with		13	
	3/6 3/6 3/6	SP	increasing sand content wiht depth		6	
			POORLY GRADED SAND; loose, moist, fine to coarse grained, light brown			
275 — 15	6/6 7/6 5/6		Medium dense		12	
270 — 20	22/6 50/5	SC	CLAYEY SAND; very dense, moist, fine to coarse grained, brown		>50	
		CL	SANDY LEAN CLAY; hard, moist, low plasticity, brown			
265 — 25	5/6 7/6 19/6		Very stiff		26	

Notes: *Boring was hand augered to a depth of 6.5 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-2

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Logged By: A.V.

Drill Type: CME 75 Drill Rig

Date: July 11, 2023

Elevation: 290 feet

Auger Type: 6-5/8" O.D. Hollow Stem Augers

Hammer Type: 140 Pound Auto Trip

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
260 — 30	18/6 29/6 50/5.5		Hard, decrease in sand content, increase in plasticity, with iron-oxide and manganese staining		>79	
255 — 35	14/6 22/6 20/6	SM	SILTY SAND; dense, moist, fine to coarse grained, reddish brown		42	
250 — 40	19/6 42/6 42/6	SP-SM	POORLY GRADED SAND WITH SILT; very dense, moist, fine to coarse grained, light reddish brown		84	
245 — 45	5/6 10/6 16/6	CL	SANDY LEAN CLAY; very stiff, moist, low to medium plasticity, decrease in plasticity with depth, brown		26	
240 — 50	25/6 34/6 46/6	SM	SILTY SAND; very dense, moist, fine to medium grained, brown, fines content increases with depth		80	
235 — 55	6/6 12/6 23/6	ML	SANDY SILT; hard, damp, non-plastic to low plasticity, light brown		35	

Notes: *Boring was hand augered to a depth of 6.5 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-2

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Drill Type: CME 75 Drill Rig

Auger Type: 6-5/8" O.D. Hollow Stem Augers

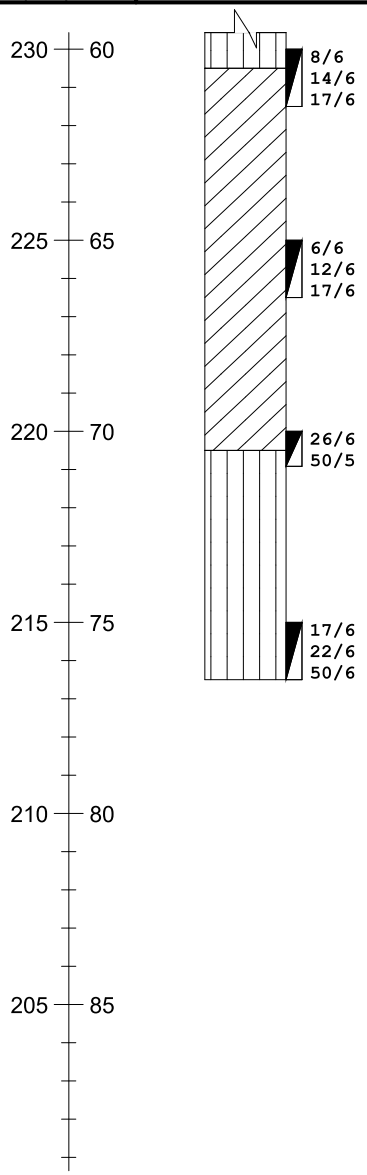
Hammer Type: 140 Pound Auto Trip

Logged By: A.V.

Date: July 11, 2023

Elevation: 290 feet

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
	CL	SANDY LEAN CLAY; hard, damp, low to medium plasticity, reddish brown, with manganese staining		31	
		Very stiff		29	
		Hard		>50	
	ML	SANDY SILT; hard, damp, non-plastic to low plasticity, light grayish brown			
		With iron-oxide staining, with an interbedded half-inch silty sand lens		72	
		Bottom of Boring B-2 at 76.5 feet			

Notes: *Boring was hand augered to a depth of 6.5 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-3

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Logged By: S.R.

Drill Type: CME 75 Drill Rig

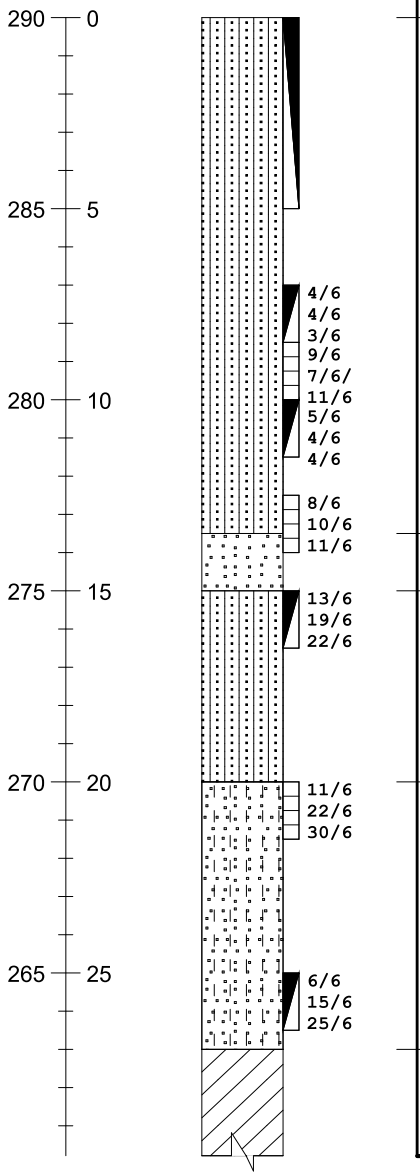
Date: July 10, 2023

Auger Type: 6-5/8" O.D. Hollow Stem Augers

Elevation: 290 feet

Hammer Type: 140 Pound Auto Trip

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		SM	SILTY SAND; moist, fine grained, brown, with trace gravel			
			Loose		7	
			Medium dense, moist, fine to medium grained, brown		18	
			Loose		8	
			Medium dense		21	
		SP	POORLY GRADED SAND; medium dense, damp, fine to coarese grained, light brown		41	
		SM	SILTY SAND; dense, moist, fine to medium grained, trace coarse sand, grayish brown			
		SP-SM	POORLY GRADED SAND WITH SILT; dense, damp, medium to coarse grained, brown		52	
			Reddish-brown, trace clay		40	
		CL	LEAN CLAY WITH SAND; moist, medium plasticity, olive-brown			

Notes: *Boring was hand augered to a depth of 6 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-3

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Logged By: S.R.

Date: July 10, 2023

Drill Type: CME 75 Drill Rig

Elevation: 290 feet

Auger Type: 6-5/8" O.D. Hollow Stem Augers

Hammer Type: 140 Pound Auto Trip

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
260 — 30	22/6 20/6 50/5		Hard		>70	
		SP-SM	POORLY GRADED SAND WITH SILT; very dense, moist, fine to coarse grained, brown, with trace clay			
255 — 35	8/6 24/6 40/6	CL	LEAN CLAY WITH SAND; hard, moist, medium plasticity, brown		64	
250 — 40	4/6 16/6 37/6				53	
		SP	POORLY GRADED SAND; dense, moist, fine to medium grained, trace coarse sand, light brown			
		SM	SILTY SAND; moist, fine to medium grained, brown			
245 — 45	10/6 10/6 22/6	CL	LEAN CLAY WITH SAND; hard, moist, medium plasticity, olive-brown		32	
240 — 50	7/6 27/6 31/6				58	
			Bottom of Boring B-3 at 51.5 feet			
235 — 55						

Notes: *Boring was hand augered to a depth of 6 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-4

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Logged By: S.R.

Drill Type: CME 75 Drill Rig

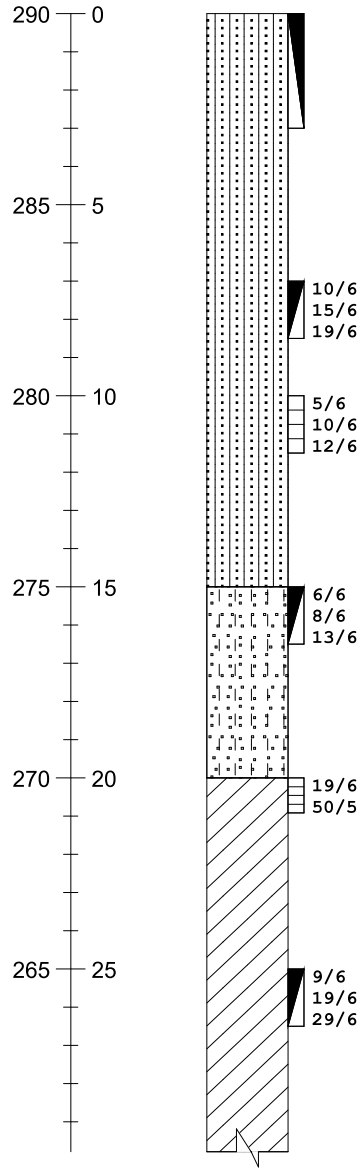
Date: July 10, 2023

Auger Type: 6-5/8" O.D. Hollow Stem Augers

Elevation: 290 feet

Hammer Type: 140 Pound Auto Trip

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0	SM	SILTY SAND; moist, fine to medium grained, brown			
5		Dense		34	
10		Medium dense, increase in medium grained sand content	Increase in drilling resistance	22	
15	SP-SM	POORLY GRADED SAND WITH SILT; medium dense, moist, medium to coarse grained, trace fine sand, brown		21	
20	CL	SANDY LEAN CLAY; hard, moist, low to medium plasticity, brown		>50	
25		Increase in moisture content, medium to high plasticity		48	

Notes: *Boring was hand augered to a depth of 6 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-4

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Logged By: S.R.

Drill Type: CME 75 Drill Rig

Date: July 10, 2023

Auger Type: 6-5/8" O.D. Hollow Stem Augers

Elevation: 290 feet

Hammer Type: 140 Pound Auto Trip

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
260 — 30	23/6 50/4		Decrease in moisture content		>50	
		SP-SM	POORLY GRADED SAND WITH SILT; very dense, damp, medium to coarse grained, with trace fine sand, reddish brown			
255 — 35	10/6 23/6 36/6				59	
250 — 40	21/6 43/6 53/6				96	
		SM	SILTY SAND; very dense, moist, fine to medium grained, brown	High drilling resistance		
245 — 45			Bottom of Boring B-4 at 42 feet (Auger refusal due to high drilling resistance)			
240 — 50						
235 — 55						

Notes: *Boring was hand augered to a depth of 6 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-5

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Logged By: A.V.

Drill Type: CME 75 Drill Rig

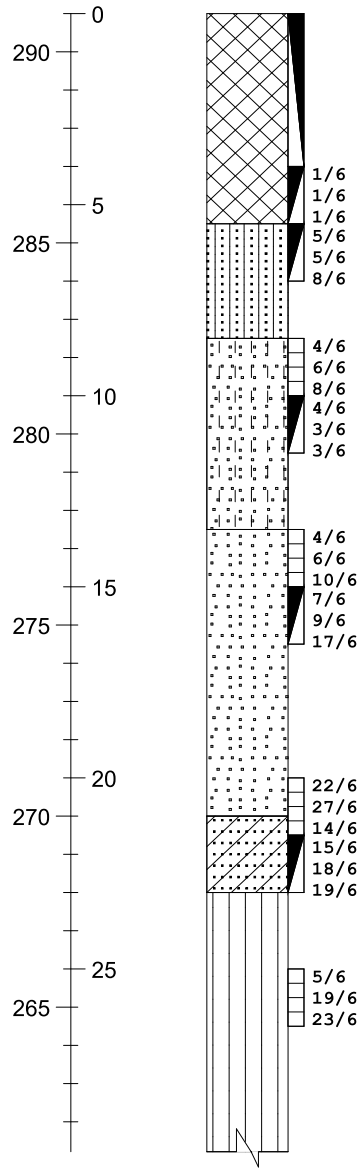
Date: July 7, 2023

Auger Type: 6-5/8" O.D. Hollow Stem Augers

Elevation: 291-1/2 feet

Hammer Type: 140 Pound Auto Trip

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
	FILL	FILL - SILTY SAND; moist, fine to coarse grained, brown, with trace gravel, with pieces of nails, with tree roots, trace clay			
		Very loose, increase in sand content		2	
	SM	NATIVE - SILTY SAND; medium dense, moist, fine to coarse grained, brown		13	
		At 6.8 feet - with seam of sandy lean clay			
	SP-SM	POORLY GRADED SAND WITH SILT; loose, moist, fine to coarse grained, brown		14 6	
	SP	POORLY GRADED SAND; loose, moist, fine to coarse grained, reddish brown		16	
		Medium dense		26	
				41	
	SC	CLAYEY SAND; medium dense, moist, fine to coarse grained, reddish brown		37	
	ML	Dense			
		SANDY SILT; hard, moist, non-plastic to low plasticity, light brown		42	
		Very stiff			

Notes: *Boring was hand augered to a depth of 4 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-5

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Drill Type: CME 75 Drill Rig

Auger Type: 6-5/8" O.D. Hollow Stem Augers

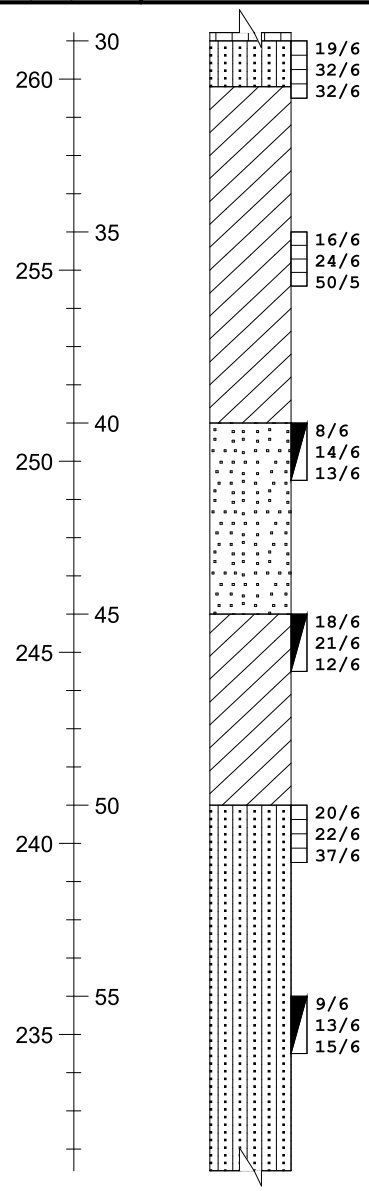
Hammer Type: 140 Pound Auto Trip

Logged By: A.V.

Date: July 7, 2023

Elevation: 291-1/2 feet

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		SM	SILTY SAND; dense, moist, fine to coarse grained, reddish brown		64	
		CL	At 31.2 feet - SANDY LEAN CLAY; hard, moist, low plasticity, brown			
			Increase in plasticity		>74	
		SP	POORLY GRADED SAND; medium dense, moist, fine to coarse grained, reddish brown		27	
		CL	SANDY LEAN CLAY; hard, moist, low plasticity, brown		33	
		SM	SILTY SAND; dense, moist, fine to medium grained, light brown, with manganese staining, high fines content		59	
			Medium dense, increase in sand content		28	

Notes: *Boring was hand augered to a depth of 4 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-5

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Logged By: A.V.

Drill Type: CME 75 Drill Rig

Date: July 7, 2023

Auger Type: 6-5/8" O.D. Hollow Stem Augers

Elevation: 291-1/2 feet

Hammer Type: 140 Pound Auto Trip

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
60 / 230	7/6, 14/6, 15/6	SP	POORLY GRADED SAND; medium dense, moist, fine to coarse grained, light brown		29	
65 / 225	9/6, 13/6, 17/6		Redish brown, slight increase in fines content		30	
70 / 220	33/6, 50/3	SM	SILTY SAND; very dense, moist, fine to medium grained, brown, with moderate cementation, trace clay		>50	
75 / 215	4/6, 14/6, 18/6		Dense		32	
		ML	SANDY SILT; hard, moist, non-plastic, light brown			
80 / 210			Bottom of Boring B-5 at 76.5 feet			
85 / 205						

Notes: *Boring was hand augered to a depth of 4 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-6

Project: Proposed Courthouse at Courthouse Park in Fresno, California

Project Number: C88004.01-01

Drilled By: J.S.

Logged By: A.V.

Date: July 7, 2023

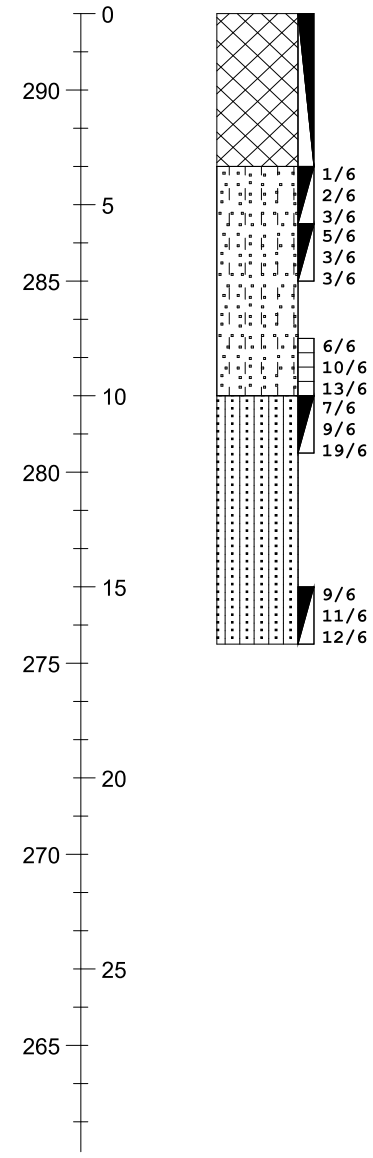
Drill Type: CME 75 Drill Rig

Elevation: 292-1/2 feet

Auger Type: 6-5/8" O.D. Hollow Stem Augers

Hammer Type: 140 Pound Auto Trip

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		FILL	FILL - POORLY GRADED SAND WITH SILT; moist, fine to coarse grained, brown, with roots to a depth of 2 feet			
		SP-SM	At 4 feet - NATIVE - POORLY GRADED SAND WITH SILT; loose, moist, fine to coarse grained, brown		5 6	
			Medium dense		23	
		SM	SILTY SAND; medium dense, moist, fine grained, light brown, with interbedded seams of sandy silt			
					23	
			Bottom of Boring B-6 at 16.5 feet			

Notes: *Boring was hand augered to a depth of 4 feet*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-7

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

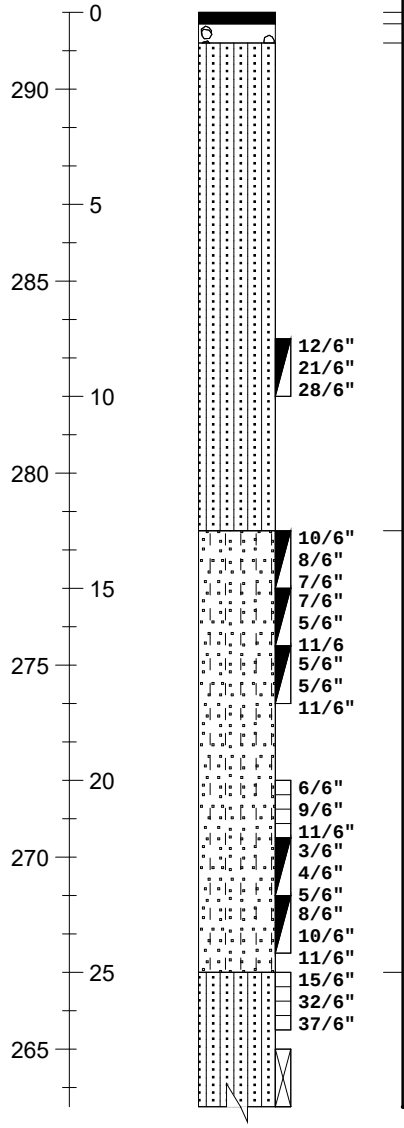
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/26/2025

Elevation: 292 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		AC	ASPHALT CONCRETE = 2.5 INCHES THICKNESS			
		AB	AGGREGATE BASE = 6.5 INCHES THICKNESS			
		SM	SILTY SAND; moist, fine-to-medium grained sand, dark brown			
	12/6" 21/6" 28/6"		Dense, fine-grained sand, increased fine sand with depth	-200 = 42.1% Sand = 57.9%	49	9.9
	10/6" 8/6" 7/6"	SP-SM	POORLY GRADED SAND with Silt; medium dense, moist, medium-to-coarse grained sand, brown		15	4.9
	7/6" 5/6"				12	
	11/6 5/6" 5/6" 11/6"		Fine-to-medium grained sand, light brown	-200 = 6.2% Sand = 93.8%	16	
	6/6" 9/6" 11/6"			DD = 99.1 pcf	20	3.6
	3/6" 4/6"		Loose, medium grained sand		9	
	5/6" 8/6" 10/6" 11/6"		Medium dense, fine-to-medium grained sand, reddish-brown		21	7.1
	15/6" 32/6" 37/6"	SM	SILTY SAND; dense, moist, fine to medium grained sand, brown	DD = 112.6 pcf -200 = 13.4% Sand = 86.6%	69	9.3

Notes: *Potholed to 5.5 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-7

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

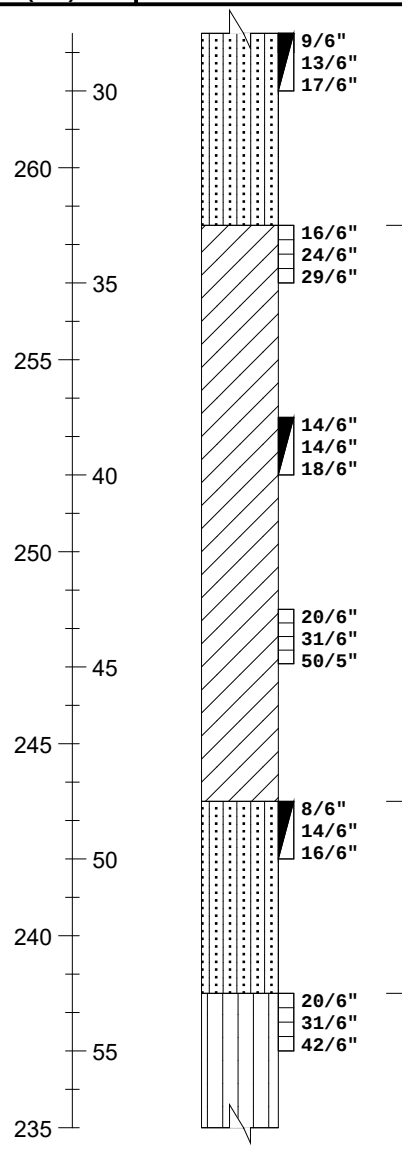
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/26/2025

Elevation: 292 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		Medium dense, moist, fine grained sand, reddish-brown, with thin interbedded clay lenses		30	
	CL	LEAN CLAY; hard, moist, low-to-medium plasticity, reddish-brown with tannish-brown seams	DD = 104.7 pcf ø = 36° c = 460 psf	53	20.6
		With interbedded lenses of fine-grained silty sand, with iron-oxide staining		32	
		Low plasticity, reddish-brown, increased sand content	DD = 117.8 pcf	>50	11.9
	SM	SILTY SAND; medium dense, moist, fine-grained sand, brown		30	
	ML	SANDY SILT; hard, moist, with fine-grained sand, trace clay, grayish-brown	DD = 89.3 pcf	73	18.4

Notes: *Potholed to 5.5 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-7

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

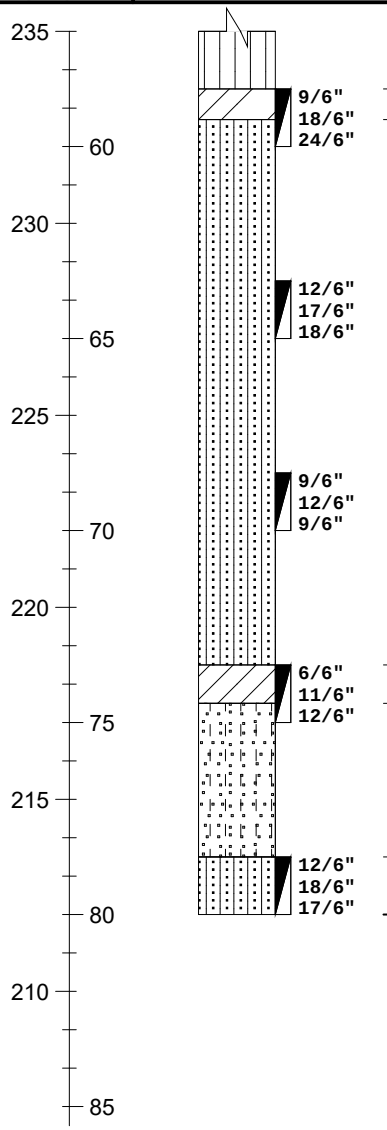
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/26/2025

Elevation: 292 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		CL	LEAN CLAY; hard, moist, low-to-medium plasticity, tannish-brown		42	
		SM	SILTY SAND; dense, moist, fine-grained sand, brown			
			Fine-grained sand, trace clay, reddish-brown		35	
			Medium dense, with interbedded tannish-brown clay		21	
		CL	LEAN CLAY; very stiff, moist, low-to-medium plasticity, tannish-brown with iron-oxide staining		23	
		SP-SM	POORLY GRADED SAND WITH SILT; medium dense, moist, fine-to medium grained sand, light brown			
		SM	SILTY SAND; dense, moist, fine-grained sand, light brown, with thin interbedded clay lenses		35	
			Bottom of boring B-7 at 80 feet BSG.			

Notes: *Potholed to 5.5 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-8

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

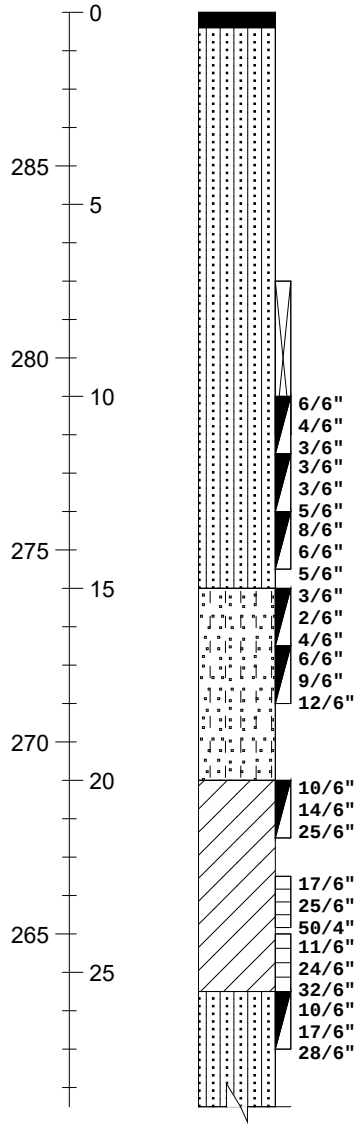
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/25/2025

Elevation: 289 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		AC	ASPHALT CONCRETE = 5.0 INCHES THICKNESS	EI = 0 RV = 44 SR = 21,000 ohm-cm pH = 8.0 SS = 0.0018% Cl = ND		
		SM	SILTY SAND; moist, fine-to-medium grained sand, dark brown	PI = NP LL = NV ø = 31° c = 280 psf -200 = 26.5% Sand = 69.9% +4 = 3.6%	7	6.7
			Loose		8	
			Medium dense, fine grained sand		11	
		SP-SM	POORLY GRADED SAND WITH SILT; loose, moist, fine-to-coarse grained sand		6	
			Medium dense, reddish-brown		21	
		CL	SANDY LEAN CLAY; hard, moist, low-to-medium plasticity, tannish-brown with iron-oxide staining	PI= 10 LL = 26 -200 = 70.8% Sand = 29.2% DD = 93.3 pcf	39	
					>50	27.5
			With thin lenses of interbedded reddish-brown fine-grained sand	DD = 102.6 pcf	56	20.2
		SM	SILTY SAND; dense, moist, fine-grained sand, reddish-brown		45	

Notes: *Potholed to 6 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-8

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

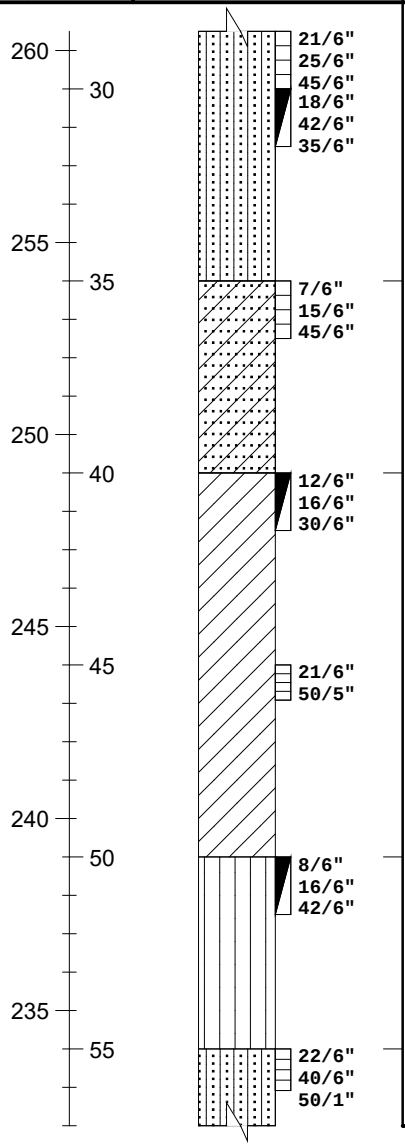
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/25/2025

Elevation: 289 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		Very dense	DD = 111.3 pcf	70 77	6.1
35	SC	CLAYEY SAND; dense, moist, fine-grained sand, brown	DD = 109.9 pcf	60	16.6
40	CL	LEAN CLAY; hard, moist, low plasticity, reddish-brown		46	
45		Tannish-brown with iron-oxide staining, moderate cementation	DD = 94.6 pcf	>50	27.6
50	ML	SILT; hard, moist, with interbedded fine-grained sand, grayish-brown		58	
55	SM	SILTY SAND; very dense, moist, fine grained, brown, with	DD = 106.5 pcf	>50	13.9

Notes: *Potholed to 6 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-8

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/25/2025

Elevation: 289 ft.

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
230 60 225 65 220 70 215 75 210 80 205 85	8/6" 8/6" 10/6"		interbedded grayish-brown silt			
		CL	SANDY LEAN CLAY; very stiff, moist, with fine-grained sand, low-to-medium plasticity, reddish-brown		18	
			Bottom of boring B-8 at 61.5 feet BSG.			

Notes: *Potholed to 6 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-9

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

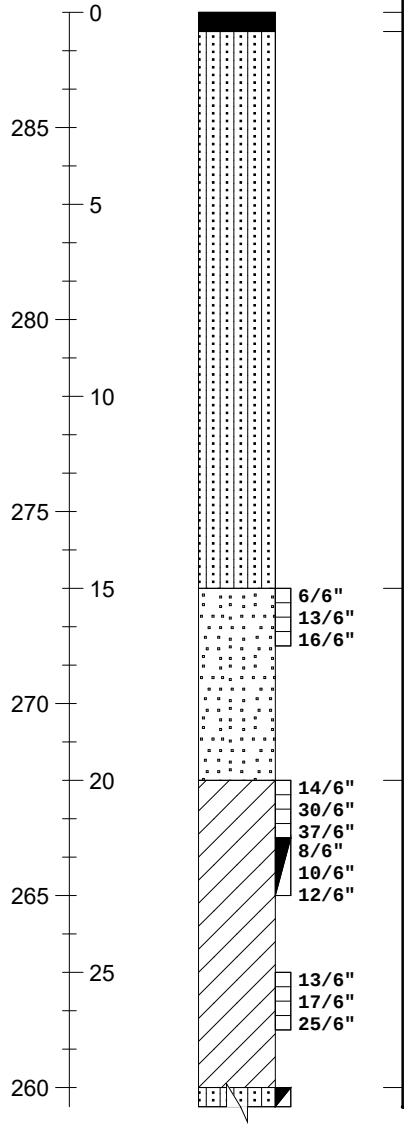
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/24/2025

Elevation: 288 ft.

Depth to Groundwater First Encountered During Drilling: See Note *



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		AC	ASPHALT CONCRETE = 4.0 INCHES THICKNESS			
		SM	SILTY SAND; moist, fine-to-medium grained sand, dark brown, trace clay			
	6/6" 13/6" 16/6"	SP	POORLY GRADED SAND; medium dense, moist, medium-to-coarse grained, reddish-brown	DD = 110.5 pcf	29	6.9
	14/6" 30/6" 37/6" 8/6" 10/6" 12/6"	CL	LEAN CLAY; hard, moist, low to medium plasticity, light brown	DD = 109.1 pcf PI = 17 LL = 29 EI = 28 SR = 3,500ohm-cm pH = 7.9 SS = 0.0057% Cl = ND DD = 104.9 pcf	67	16.0
			Very stiff, reddish-brown		22	
	13/6" 17/6" 25/6"		Very stiff, weak cementation, increased sand content		42	16.4

Notes: *Potholed to 14 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot. * Sample from 65 to 66.5 feet BSG was saturated, suspected zone of perched water.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-9

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

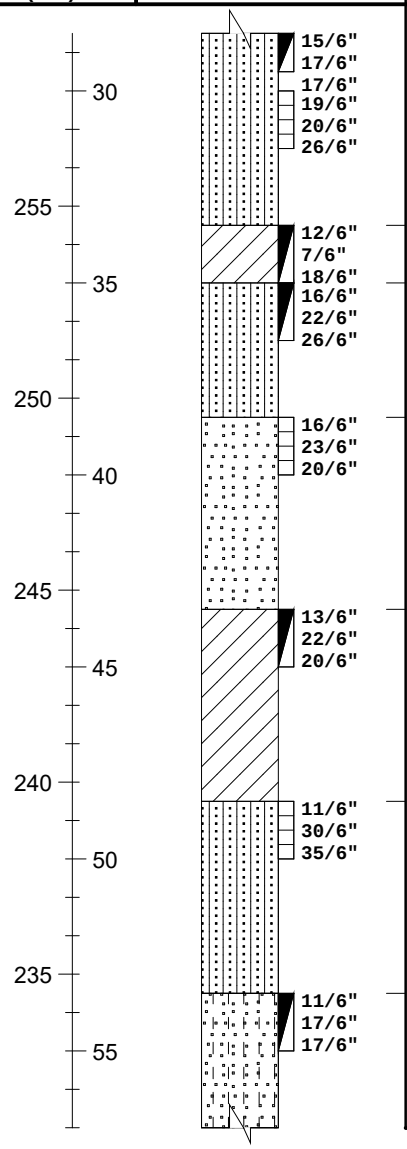
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/24/2025

Elevation: 288 ft.

Depth to Groundwater First Encountered During Drilling: See Note *



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
	SM	SILTY SAND; dense, moist, medium-grained sand, reddish-brown		34	
		Medium dense, fine-grained sand, brown	DD = 103.9 pcf	46	17.1
		Reddish-brown			
	CL	SANDY LEAN CLAY; very stiff, moist, low plasticity, reddish-brown		25	
	SM	SILTY SAND; dense, moist, fine-grained sand, reddish-brown		48	
	SP	POORLY GRADED SAND; medium dense, moist, fine-to-medium grained sand, light brown	DD = 112.6 pcf	43	8.8
	CL	LEAN CLAY; hard, moist, low plasticity, light brown		42	
	SM	SILTY SAND; dense, moist, fine-grained sand, brown	DD = 106.6 pcf	65	17.4
	SP-SM	POORLY GRADED SAND WITH SILT; dense, moist, fine-grained sand, brown with dark gray staining		34	

Notes: *Potholed to 14 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot. * Sample from 65 to 66.5 feet BSG was saturated, suspected zone of perched water.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-9

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

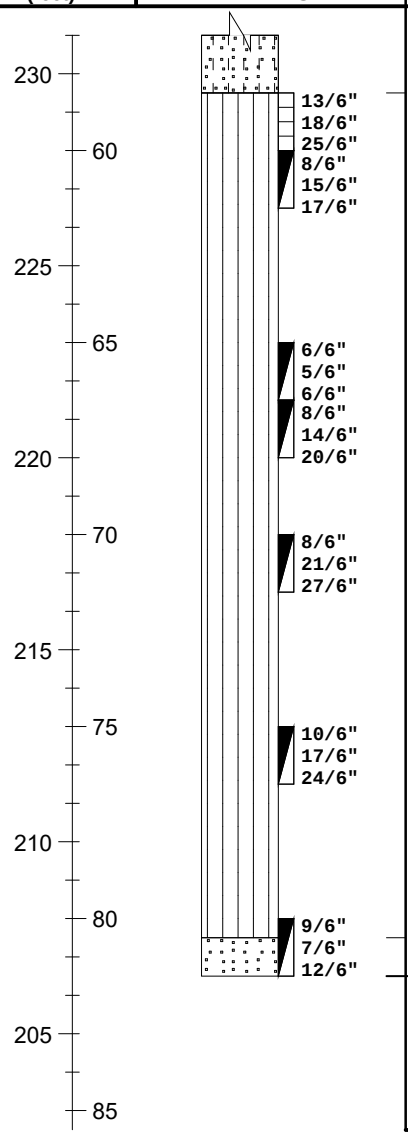
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/24/2025

Elevation: 288 ft.

Depth to Groundwater First Encountered During Drilling: See Note *



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		ML	SILT; hard, moist, non-plastic, dark brown		43	32.1
			Reddish-brown, increased fine-grained sand		32	
			Stiff, wet (perched water?)		11	
			Hard, very moist, decreased sand, weak cementation		34	
			Moist, brown with iron-oxide staining		48	
			Increasing fine-grained sand		41	
		SP	POORLY GRADED SAND; medium dense, moist, fine-grained sand, brown		19	
			Bottom of boring B-9 at 81.5 feet BSG.			

Notes: *Potholed to 14 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot. * Sample from 65 to 66.5 feet BSG was saturated, suspected zone of perched water.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-10

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

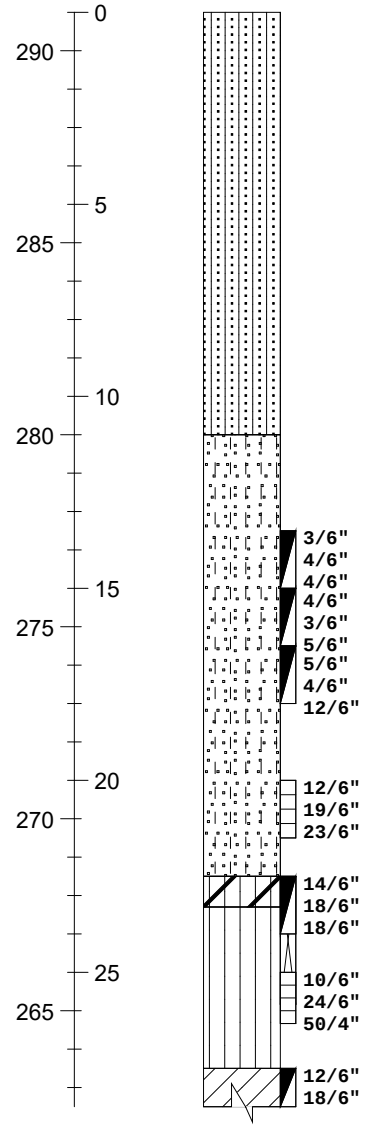
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 12/4/2025

Elevation: 291 ft

Depth to Groundwater First Encountered During Drilling: See Note *



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0	SM	SILTY SAND; moist, fine-to-medium grained sand, dark brown			
10	SP-SM	POORLY GRADED SAND with Silt, moist, medium-grained sand, light brown			
15		Loose, with coarse-grained sand	-200 = 5.8% Sand = 92.5% +4 = 2.7%	8	4.0
		Increased moisture, trace silt		8	
		Medium dense		16	
20			DD = 117.7 pcf -200 = 9.7% Sand = 87.3% +4 = 3.0%	42	7.8
	CL-ML	SILTY CLAY, hard, moist, with medium grained sand, reddish-brown, low plasticity	@ 22.5 ft BSG PI = 7 LL = 26 -200 = 89.9%	36	
25	ML	SILT; hard, moist, slight plasticity, olivish-brown	Sand = 10.1% @ 25 ft BSG DD = 94.1 pcf	>50	26.2
	CL	With iron-oxide staining, weak cementation		53	

Notes: *Potholed to 10.5 feet, encountering PVC pipe utility at 1-ft BSG, relocated boring about 5 ft. Visually logged sidewall to about 4 ft and backfilled with aggregate base prior to drilling. * Sample from 65 to 66.5 feet BSG was saturated, suspected zone of perched water.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-10

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

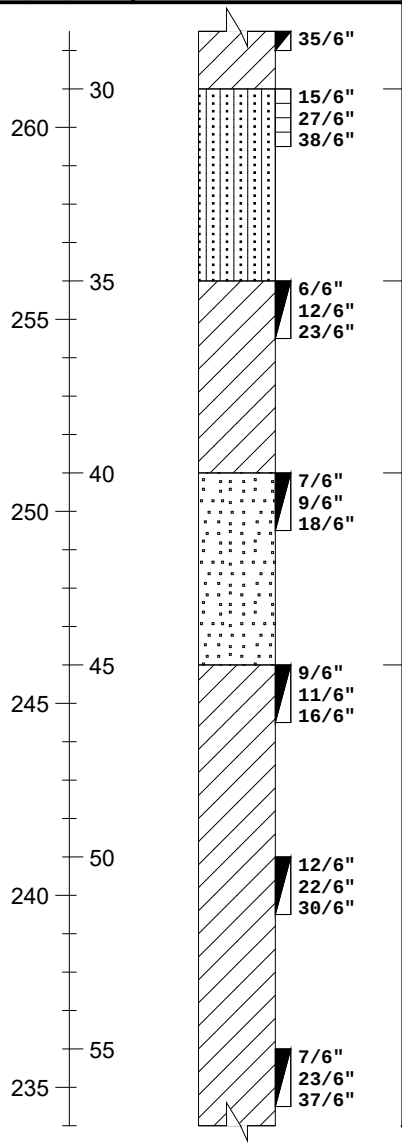
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 12/4/2025

Elevation: 291 ft

Depth to Groundwater First Encountered During Drilling: See Note *



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		SM	LEAN CLAY; hard, moist, low plasticity, tannish-brown with iron-oxide staining	DD = 110.1 pcf	65	16.4
			SILTY SAND; dense, moist, fine-grained sand, brown			
		CL	LEAN CLAY; hard, moist, medium plasticity, reddish-brown	PI = 13 LL = 25	35	
		SP	POORLY GRADED SAND; medium dense, moist, fine-grained sand, light brown with iron oxide staining		27	
		CL	SANDY LEAN CLAY; very stiff, moist, low-to-medium plasticity, brown		27	
			Hard, tannish-brown		52	
					60	

Notes: *Potholed to 10.5 feet, encountering PVC pipe utility at 1-ft BSG, relocated boring about 5 ft. Visually logged sidewall to about 4 ft and backfilled with aggregate base prior to drilling. * Sample from 65 to 66.5 feet BSG was saturated, suspected zone of perched water.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-10

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

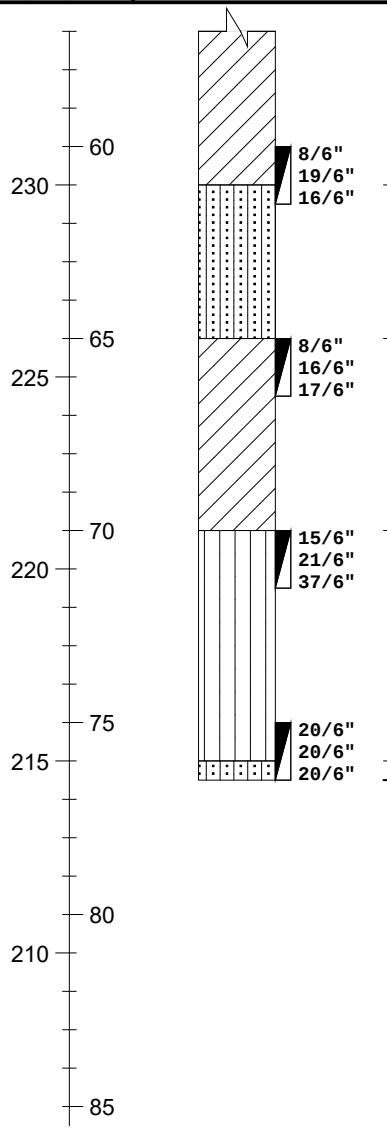
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 12/4/2025

Elevation: 291 ft

Depth to Groundwater First Encountered During Drilling: See Note *



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		SM	SILTY SAND; dense, moist, fine-grained sand, brown		35	
		CL	LEAN CLAY; hard, wet (perched water?), low-to-medium plasticity, reddish-brown		33	
		ML	SANDY SILT; hard, moist, non plastic, olive-brown with interbedded reddish-brown, moderate cementation		58	
		SM	SILTY SAND; dense, moist, fine grained sand, light brown		40	
			Bottom of boring B-10 at 76.5 BSG.			

Notes: *Potholed to 10.5 feet, encountering PVC pipe utility at 1-ft BSG, relocated boring about 5 ft. Visually logged sidewall to about 4 ft and backfilled with aggregate base prior to drilling. * Sample from 65 to 66.5 feet BSG was saturated, suspected zone of perched water.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-11

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

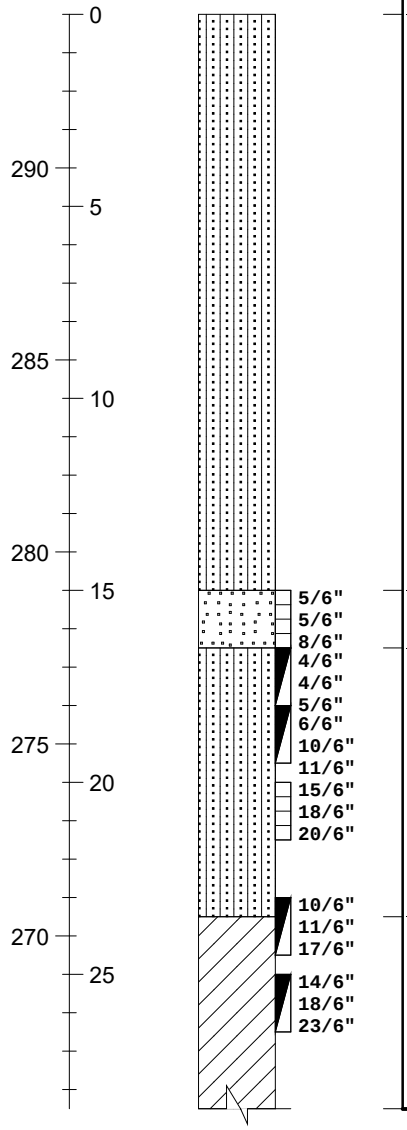
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 12/5/2025

Elevation: 294 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
	SM	SILTY SAND; moist, fine-to-medium grained sand, brown			
		Some clay			
	SP	POORLY GRADED SAND; loose, moist, fine-to-medium grained sand, brown	DD = 120.8 pcf -200 = 5.0% Sand = 93.8% +4 = 1.2%	13	4.5
	SM	SILTY SAND; loose, moist, fine-to-medium grained sand, brown		9	
		Medium dense, increased fine grained sand		21	
		Increased moisture, medium-to-coarse grained sand and trace fine gravel	DD = 112.3 pcf	38	8.8
	CL	SANDY LEAN CLAY; very stiff, moist, with fine-grained sand, low plasticity, tannish-brown with iron-oxide staining	PI = 10 LL = 24	28	
		Hard, decreased sand content		41	29.6

Notes: *Potholed to 11 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Grass landscaped area.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-11

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

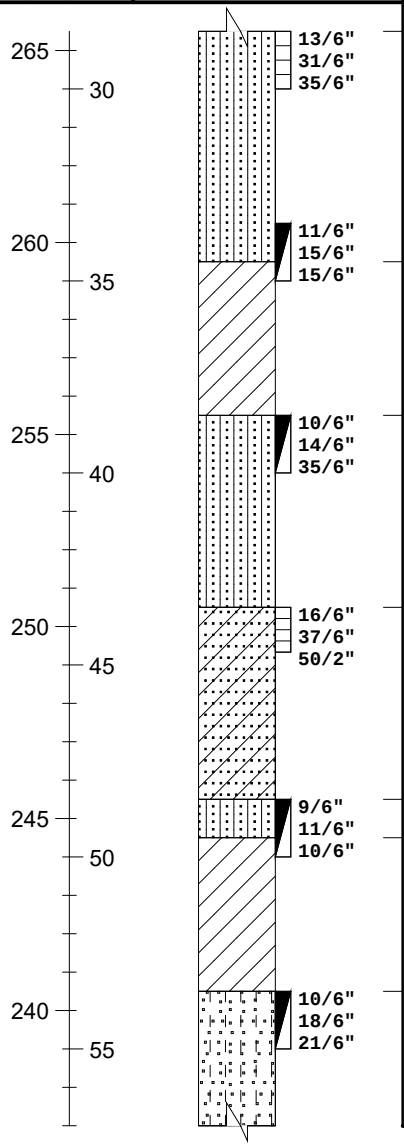
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 12/5/2025

Elevation: 294 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
	SM	SILTY SAND; dense, moist, fine-grained sand, brown		66	25.4
	CL	SANDY LEAN CLAY; very stiff, moist, with fine-grained sand, low-to-medium plasticity, dark reddish-brown		30	
	SM	SILTY SAND; dense, moist, fine-grained sand, reddish-brown, with thin interbedded cemented lens		49	
	SC	CLAYEY SAND; very dense, moist, fine-grained sand, reddish brown	DD = 114.9 pcf	>50	14.9
	SM	SILTY SAND; medium dense, moist, fine-to-medium grained sand, brown		21	
	CL	LEAN CLAY; very stiff, moist, low-to-medium plasticity, tannish-brown			
	SP-SM	POORLY GRADED SAND WITH SILT; dense, moist, fine grained, light brown		39	

Notes: *Potholed to 11 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Grass landscaped area.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-11

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 12/5/2025

Elevation: 294 ft.

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
235 / 60	10/6" 12/6" 16/6"	SP	POORLY GRADED SAND; medium dense, moist, fine-grained sand, light brown with bands of reddish-brown and gray		28	
230 / 65	12/6" 14/6" 17/6"	CL	LEAN CLAY; hard, moist, low-to-medium plasticity, brown		31	
225 / 70	5/6" 10/6" 20/6"		Very stiff, tannish-brown Increased sand content, reddish-brown		30	
220 / 75	22/6" 22/6" 13/6"	SM	SILTY SAND; dense, moist, fine-grained sand, brown		35	
			Bottom of boring B-11 at 75 feet BSG.			
215 / 80						
210 / 85						

Notes: *Potholed to 11 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Grass landscaped area.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-12

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

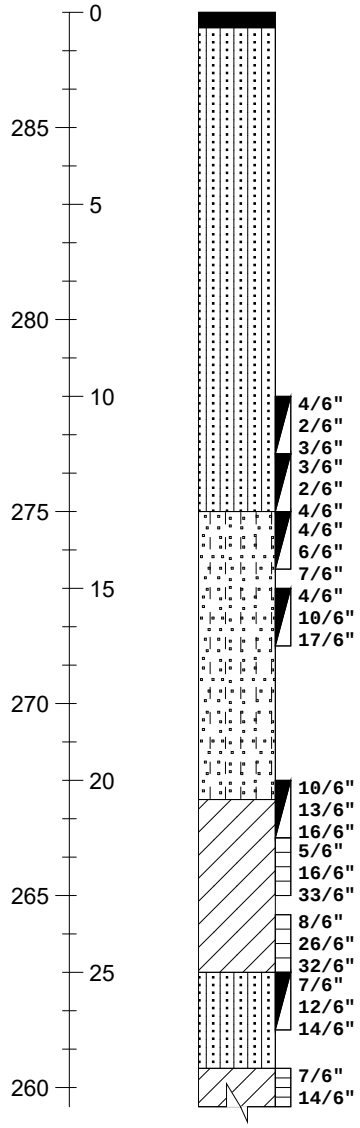
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/18/2025

Elevation: 288 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0	AC	ASPHALTIC CONCRETE = 3.75 INCHES THICKNESS			
	SM	SILTY SAND; moist, fine-to-medium grained sand, dark brown	-200 = 25.0% Sand = 74.2% +4 = 0.8% RV = 55 SR = 22,000 ohm-cm pH = 7.8 SS = 0.0014% Cl = ND		
285					
5					
280					
10		Loose	-200 = 21.3% Sand = 78.1% +4 = 0.6%	5	6.1
		Fine-to-coarse grained sand		6	
275				13	
	SP-SM	POORLY GRADED SAND WITH SILT; medium dense, moist, medium-to-coarse grained, trace fine gravel, dark brown		27	5.0
15		Reddish-brown			
270					
20				29	
	CL	LEAN CLAY; very stiff, moist, low plasticity, light brown with iron-oxide staining	PI = 9 LL = 24 ø = 35° c = 390 psf -200 = 76.9%	49	23.1
265		Hard, with fine-grained sand, low plasticity, light brown with iron-oxide staining		58	19.4
25	SM	SILTY SAND; medium dense, moist, fine-grained sand, brown	Sand = 22.7% +4 = 0.4% @ 23.5 ft BSG DD = 105.7 pcf	26	
260	CL	SANDY LEAN CLAY; hard, moist,	DD = 118.1 pcf	47	22.9

Notes: *Potholed to 12 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-12

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

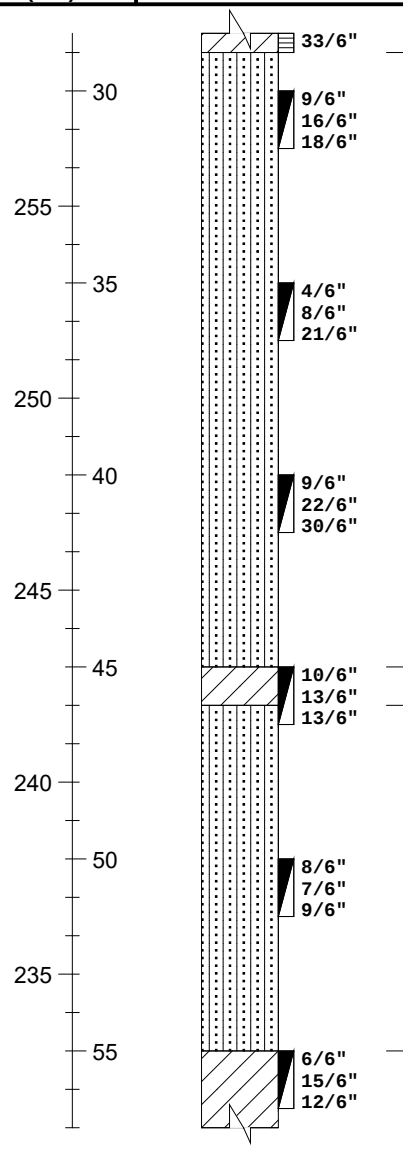
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/18/2025

Elevation: 288 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
	SM	with fine-grained sand, low to medium plasticity, tannish-brown with iron-oxide staining	ø = 42° c = 320 psf	34	
		SILTY SAND; moist, fine grained, reddish-brown Dense			
		Medium dense, with interbedded lenses of clay		29	
		Very dense, fine-to-medium grained sand		52	
	CL	LEAN CLAY; very stiff, moist, low plasticity, tannish-brown	PI = 9 LL - 31	26	
	SM	SILTY SAND; medium dense, moist, fine-grained sand, light brown			
		With interbedded cemented lenses		16	
	CL	SANDY LEAN CLAY; very stiff, moist, with fine-grained sand, low		27	

Notes: *Potholed to 12 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-12

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 11/18/2025

Elevation: 288 ft.

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
230 / 60	8/6" 12/6" 18/6"		plasticity, brown			
			Increased plasticity, reddish-brown		30	
225 / 65			Bottom of boring B-13 at 61.5 feet BSG.			
220 / 70						
215 / 75						
210 / 80						
205 / 85						

Notes: *Potholed to 12 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Paved parking lot.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-13

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

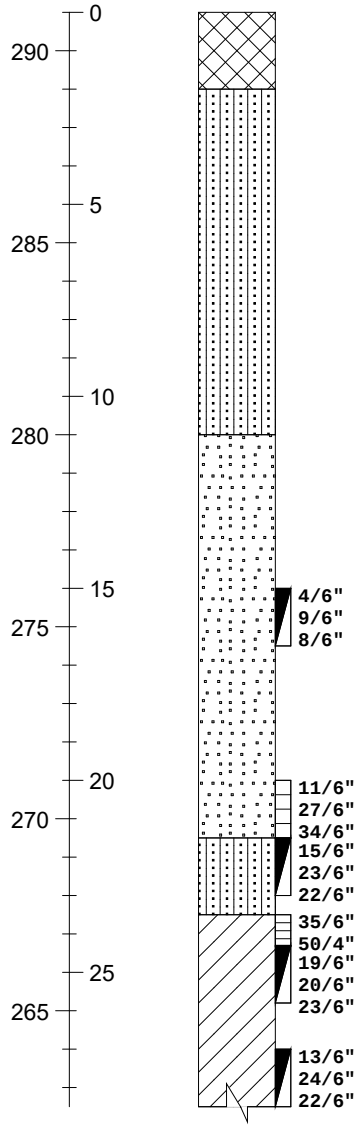
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 12/3/2025

Elevation: 291 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
	FILL	FILL-SILTY SAND; moist, fine-to-medium grained sand and some fine gravel, brown			
	SM	NATIVE-SILTY SAND; moist, fine-to-medium grained sand, brown			
	SP	POORLY GRADED SAND; damp, fine-grained sand, light brown			
		Medium dense, medium-to-coarse grained sand		17	2.0
		Dense	DD = 115.4 pcf -200 = 16.9% Sand = 79.3% +4 = 3.8%	61	4.2
	SM	SILTY SAND; dense, damp, fine-to-medium grained sand, reddish brown, with trace clay		55	
	CL	LEAN CLAY; hard, damp, medium plasticity, light brown with iron-oxide staining	DD = 97.4 pcf PI = 11 LL = 30	>50 43	21.2
		with interbedded thin lens of reddish-brown silty sand		46	

Notes: *Potholed to 10.5 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Landscaped planter area.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-13

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

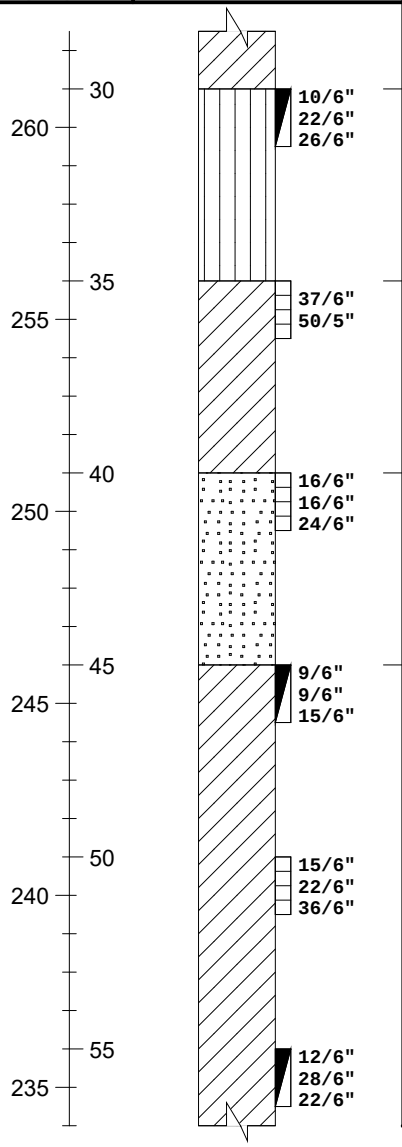
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 12/3/2025

Elevation: 291 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		ML	SILT; hard, damp, slight plasticity, brown		48	18.2
		CL	SANDY LEAN CLAY; hard, damp, low plasticity, brown, strong cementation	DD = 124.6 pcf	>50	6.3
		SP	POORLY GRADED SAND; medium dense, damp, fine grained, light brown	DD = 97.4 pcf	40	2.3
		CL	SANDY LEAN CLAY; very stiff, moist, with fine-grained sand, low-to-medium plasticity, brown		24	
			Hard, low plasticity	DD = 107.9 pcf PI = 6 LL = 20	58	16.9
			Interbedded fine-grained sand		50	

Notes: *Potholed to 10.5 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Landscaped planter area.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-13

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: JS

Drill Type: CME 75

Auger Type: 6-5/8" O.D. Hollow Stem Auger

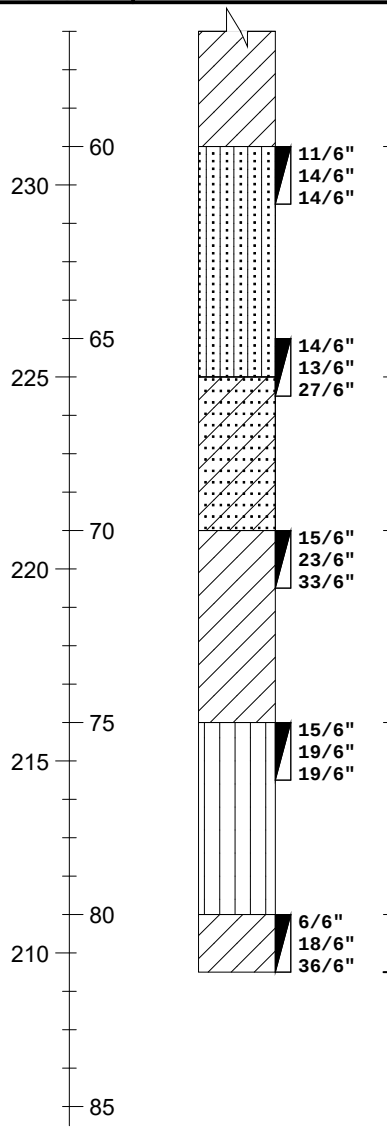
Hammer Type: 140 Pound Auto Trip

Logged By: GM

Date: 12/3/2025

Elevation: 291 ft.

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		SM	SILTY SAND; medium dense, moist, fine-grained sand, brown, some clay		28	
			Dense, fine-to-coarse grained		40	
		SC	CLAYEY SAND; dense, moist, fine-grained sand, slight plasticity, reddish-brown			
		CL	SANDY LEAN CLAY; hard, moist, with fine-grained sand, low-to-medium plasticity, reddish-brown		56	
		ML	SANDY SILT; hard, moist, with fine-grained sand, brown with iron-oxide staining		38	
		CL	LEAN CLAY; hard, moist, low-to-medium plasticity, tannish-brown		54	
			Bottom of boring B-13 at 81.5 feet BSG.			

Notes: *Potholed to 10.5 feet, visually logged sidewall to about 4 feet and backfilled with aggregate base prior to drilling. Landscaped planter area.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-14

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: Taber

Drill Type: CME 55

Auger Type: 6-5/8" O.D. Hollow Stem Auger

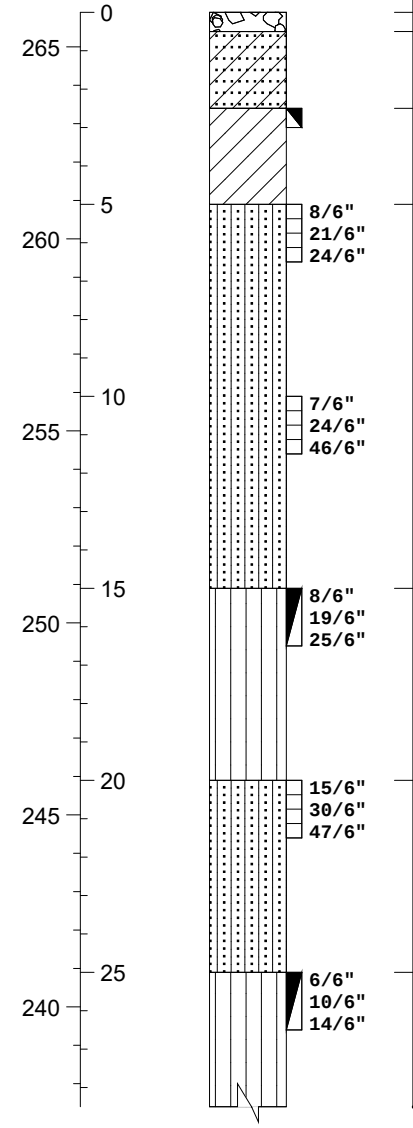
Hammer Type: 140 Pound Auto Trip

Logged By: SR

Date: 01/07/2026

Elevation: 265.9 ft.

Depth to Groundwater First Encountered During Drilling: Not Encountered



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
	PCC	PORTLAND CEMENT CONCRETE FLOOR SLAB= 6.25 INCHES	EI = 18		
	SC				
	CL	CLAYEY SAND; moist, fine-to-medium grained sand, brown, low plasticity			12.3
	SM	LEAN CLAY; moist, medium to high plasticity, light brown		45	12.2
		SILTY SAND; dense, moist, fine-to-medium grained sand, brown with iron-oxide mottling			
		Very dense	DD = 110.7 pcf	70	16.0
	ML	SANDY SILT; hard, moist, with fine-grained sand, grey with iron-oxide mottling		44	
	SM	SILTY SAND; dense, moist, fine-to-medium grained sand, brown		77	12.7
	ML	SANDY SILT; very stiff, moist, with fine and medium-grained sand, brown	#200 = 61.8%	24	

Notes: *Boring Drilled in Fresno County Underground Parking Garage Floor P-2. Elevation tsken from As-Built plan and adjusted 2.5 feet below per current datum.*

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-14

Project: Proposed Courthouse at Courthouse Park in Fresno, CA

Project Number: C88004.01-03

Drilled By: Taber

Drill Type: CME 55

Auger Type: 6-5/8" O.D. Hollow Stem Auger

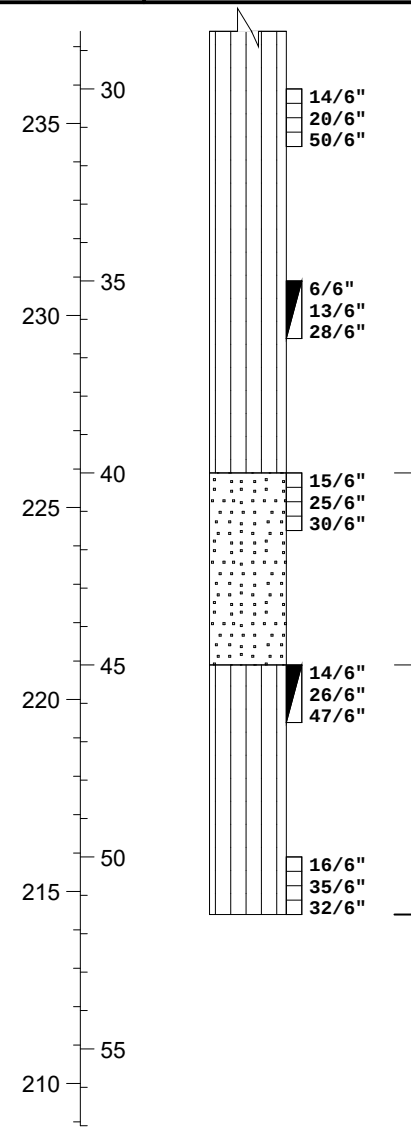
Hammer Type: 140 Pound Auto Trip

Logged By: SR

Date: 01/07/2026

Elevation: 265.9 ft.

Depth to Groundwater First Encountered During Drilling: Not Encountered



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
			Hard	DD = 96.0 pcf	70	20.8
					41	
		SP	POORLY GRADED SAND; dense, moist, fine-to-medium grained sand and trace silt, light brown	DD = 108.5 pcf	55	4.2
		ML	SANDY SILT; hard, moist, with fine-grained sand, grey		73	
			Grey with iron-oxide staining, with trace pinhole voids	DD = 89.0 pcf	67	27.1
			Bottom of boring B-14 at 51.5 feet BSG.			

Notes: *Boring Drilled in Fresno County Underground Parking Garage Floor P-2. Elevation tsken from As-Built plan and adjusted 2.5 feet below per current datum.*

Figure Number

KEY TO SYMBOLS

Symbol	Description
	Strata symbols
	Asphalt Concrete
	Aggregate Base
	SM: Silty sand
	SP-SM: Poorly graded sand with silt
	CL: Lean clay
	ML: Silt

Notes:

1. Exploratory borings were drilled between 11/24/25 and 12/5/25 using a CME 75 drill rig equpped with 6-5/8" outside diameter hollow stem augers. Boring B-14 was advanced 1/7/2026 with the 2nd floor below-grade parking structure using a limited-access CME 55LC drill rig equipped with 6-5/8" outside diameter hollow stem augers.

2. Boring B-7 through B-13 were potholed using hydro-vacuum methods as noted on logs. Logging of these borings was not practicalbetween about 4-feet BSG to the depth of potholing. Thus, the logs should not be relied upon at these depths.

3. Groundwater was not encountered during drilling of the borings.

4. Boring locations were positioned using Global Position System (GPS) coordinates based on site plan overlayed on satellite image of site.

5. These logs are subject to the limitations, conclusions, and recommendations in this report.

6. The "N-value" reported for the California Modified Split Barrel Sampler is the uncorrected field blow count. This value should not be interpreted as an SPT equivalent N-value.

7. Abbreviations used are:

DD = Natural dry density (pcf)	LL = Liquid Limit (%)
+4 = Percent retained on the No. 4 sieve (%)	PI = Plasticity Index (%)
NP = Not Plastic	NV = Not Viscous
-200 = Percent passing the No. 200 sieve (%)	EI = Expansion Index
Sand = Percent passing the No. 4 sieve and retained on No. 200 sieve (%)	Gravel = Percent passing 3-inch and retained on No. 4 sieve (%)
SR = Soil resistivity (ohm-cm)	
pH = Soil pH	SS = Soluble sulfates (%)
Cl = Soluble chlorides (%)	O.D. = Outside Diameter
ø = Internal Angle of Friction (degrees)	c = Cohesion (psf)
pcf = pounds per cubic foot	psf = pounds per square foot
N/A = Not applicable	N/E = Not encountered
BSG = Below Surrounding Grade	
ND = Not Detected at or above reporting Limit of 0.00060%	

KEY TO SYMBOLS

Symbol Description

Strata symbols



SC: Clayey sand



SP: Poorly graded sand



CL-ML: Silty clay



Fill



Portland Cement Concrete

Misc. Symbols



Boring continues

Soil Samplers



Standard penetration test



California Modified split barrel ring sampler



Bulk sample taken from auger



Bulk/Grab sample

APPENDIX C

RESULTS OF LABORATORY TESTS

This appendix contains the individual results of the following tests. The results of the moisture content and dry density tests are included on the test boring logs in Appendix B. These data, along with the field observations, were used to prepare the final test boring logs in Appendix B.

These Included:	To Determine:
Moisture Content (ASTM D2216)	Moisture contents representative of field conditions at the time the sample was taken.
Dry Density (ASTM D2937)	Dry unit weight of sample representative of in-situ or in-place undisturbed condition.
Grain-Size Distribution (ASTM D422)	Size and distribution of soil particles, i.e., sand, gravel and fines (silt and clay).
Atterberg Limits (ASTM D4318)	Determines the moisture contents where the soil behaves as a viscous material (liquid limit) and the moisture content at which the soil reaches a plastic state (plastic limit)
Expansion Index (ASTM D4829)	Swell potential of soil with increases in moisture content.
Consolidation (ASTM 2435)	The amount and rate at which a soil sample compresses when loaded, and the influence of saturation on its behavior.
Direct Shear (ASTM D3080)	Soil shearing strength under varying loads and/or moisture conditions.
R-Value (ASTM D2844)	The capacity of a subgrade or subbase to support a pavement section designed to carry a specified traffic load.
Chloride Content (Cal Test 422)	Percentage of soluble chloride in soil. Used to evaluate the potential attack on encased reinforcing steel.
Sulfate Content (Cal Test 417)	Percentage of water-soluble sulfate as (SO4) in soil samples. Used as an indication of the relative degree of sulfate attack on concrete and for selecting the cement type.
Minimum Resistivity (ASTM G187)	The minimum resistivity in ohm-centimeters of a soil. Used to determine the corrosion potential for buried metal objects
pH (Cal Test 643)	The acidity or alkalinity of subgrade material.

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.3	0.4	18.9	58.1	22.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.7		
#8	99.4		
#16	98.2		
#30	90.2		
#50	67.1		
#100	38.5		
#200	22.3		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.491 D_{60}= 0.254 D_{50}= 0.202
D_{30}= 0.110 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-1 **Source of Sample:** **Date:** 7/17/23
Location: **Elev./Depth:** 9-10.5'

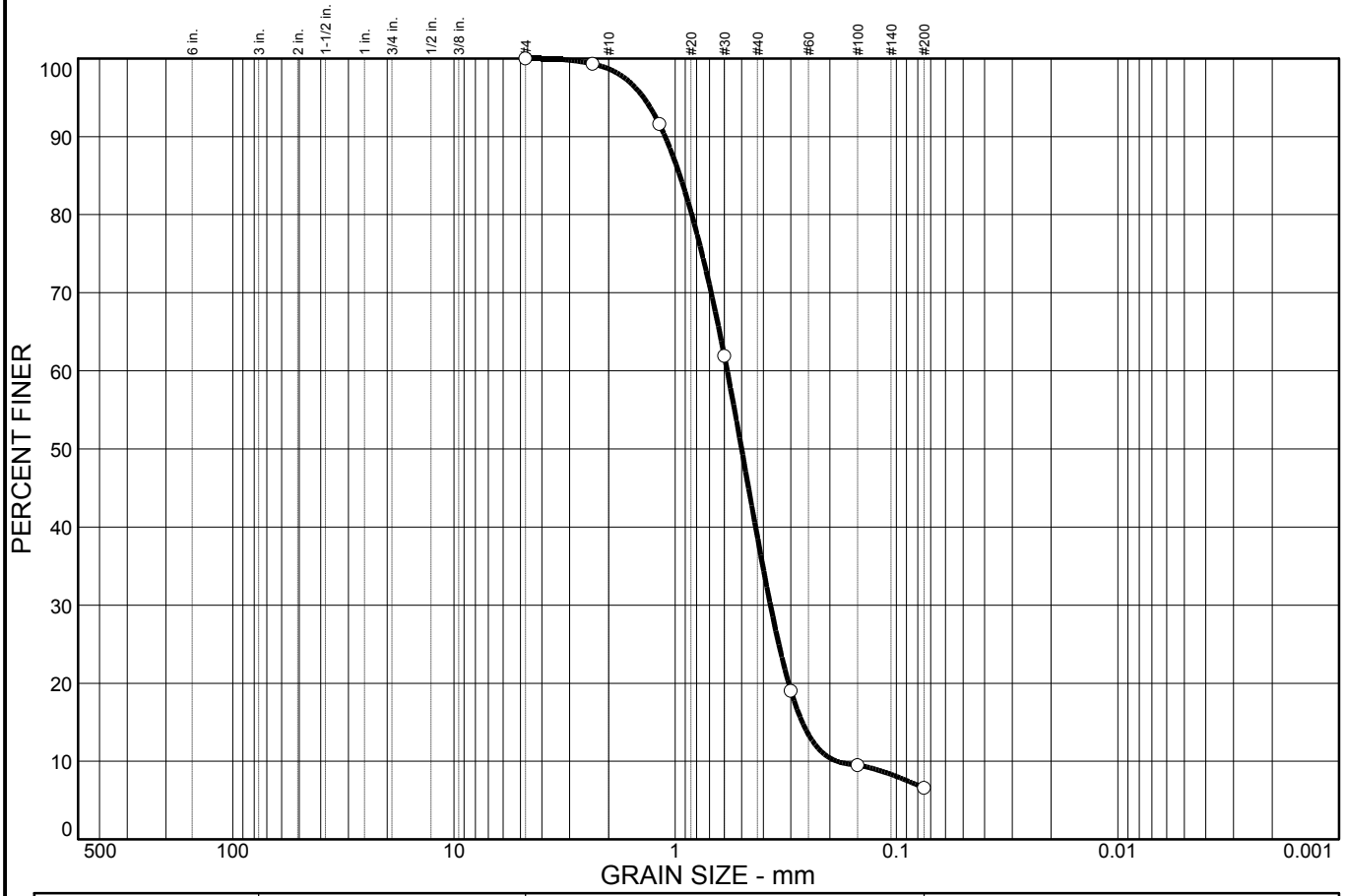
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc.
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	1.3	60.0	32.1	6.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.3		
#16	91.6		
#30	61.9		
#50	19.0		
#100	9.5		
#200	6.6		

* (no specification provided)

Material Description

Poorly graded sand with silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.953 D_{60}= 0.582 D_{50}= 0.502
D_{30}= 0.372 D_{15}= 0.266 D_{10}= 0.185
C_u= 3.14 C_c= 1.28

Classification

USCS= SP-SM AASHTO=

Remarks

Sample No.: B-1 **Source of Sample:** **Date:** 7/17/23
Location: **Elev./Depth:** 35-36.5'

Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc.
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.4	1.5	23.2	52.5	22.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.6		
#8	98.7		
#16	94.5		
#30	83.8		
#50	63.2		
#100	36.5		
#200	22.4		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.634 D_{60}= 0.276 D_{50}= 0.216
D_{30}= 0.117 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-2 **Source of Sample:** **Date:** 7/7/23
Location: **Elev./Depth:** 4-5'

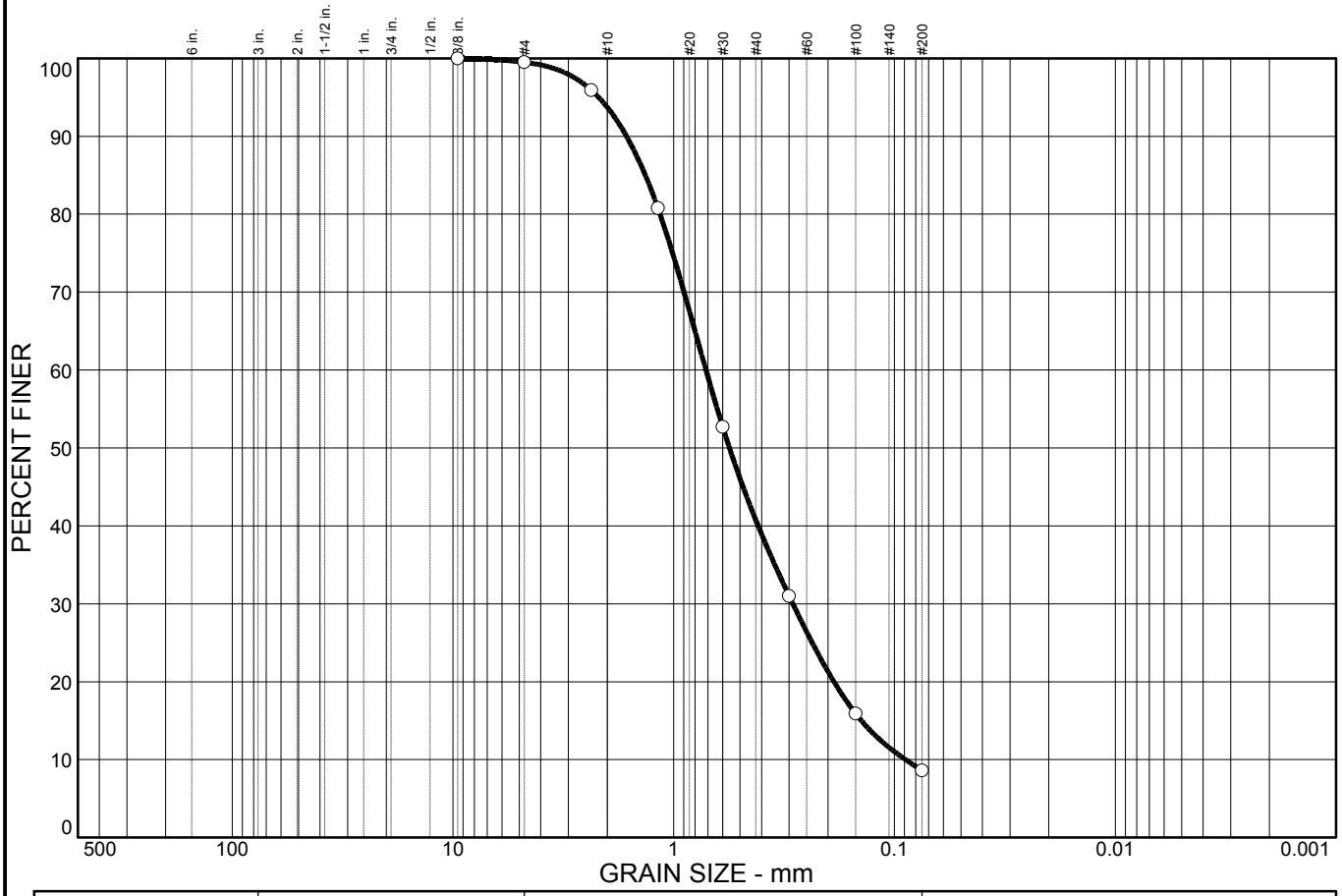
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc .
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.5	5.8	53.0	32.1	8.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.5		
#8	95.9		
#16	80.8		
#30	52.7		
#50	31.0		
#100	15.9		
#200	8.6		

* (no specification provided)

Material Description

Well-graded sand with silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.35 D_{60}= 0.715 D_{50}= 0.559
D_{30}= 0.289 D_{15}= 0.141 D_{10}= 0.0892
C_u= 8.02 C_c= 1.31

Classification

USCS= SW-SM AASHTO=

Remarks

Sample No.: B-2 **Source of Sample:** **Date:** 7/7/23
Location: **Elev./Depth:** 15-16.5'

Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc.
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.4	6.2	23.7	69.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.7		
#16	98.8		
#30	96.0		
#50	90.3		
#100	82.7		
#200	69.7		

* (no specification provided)

Material Description

Sandy lean clay

Atterberg Limits

PL= 15 LL= 28 PI= 13

Coefficients

D_{85}= 0.178 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= CL AASHTO=

Remarks

Sample No.: B-2 **Source of Sample:** **Date:** 7/7/23
Location: **Elev./Depth:** 30-31.5'

Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc.
Project: Courthouse Park Site , Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.7	1.2	20.3	48.5	29.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.3		
#8	98.5		
#16	95.5		
#30	86.2		
#50	66.9		
#100	42.9		
#200	29.3		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.567 D_{60}= 0.248 D_{50}= 0.188
D_{30}= 0.0785 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-3 **Source of Sample:** **Date:** 7/7/23
Location: **Elev./Depth:** 0-4'

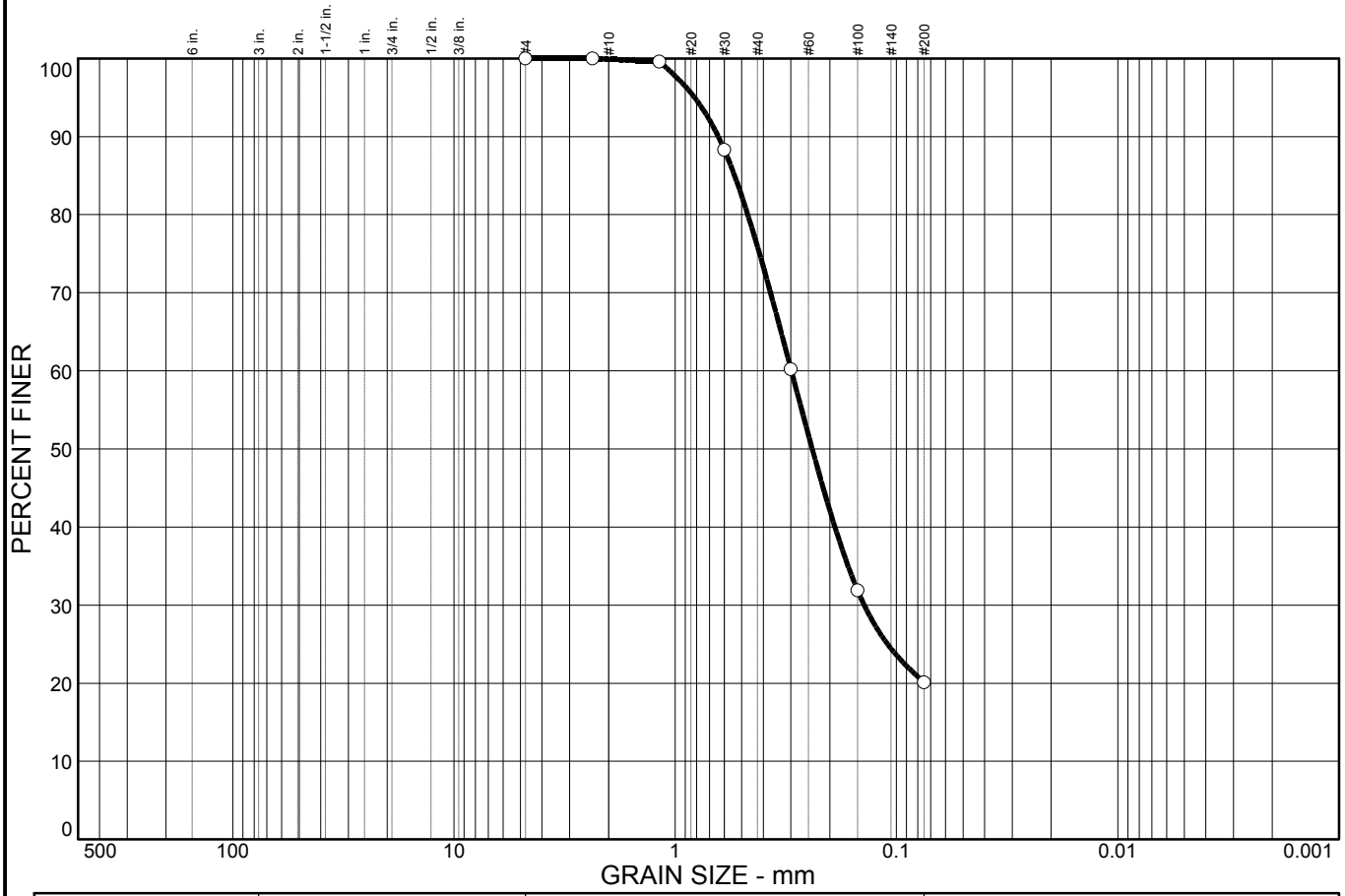
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc.
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	24.0	55.8	20.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	100.0		
#16	99.6		
#30	88.3		
#50	60.2		
#100	31.9		
#200	20.1		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{85}= 0.540 D_{60}= 0.299 D_{50}= 0.240
D_{30}= 0.140 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-4 **Source of Sample:** **Date:** 7/17/23
Location: **Elev./Depth:** 6.5-8'

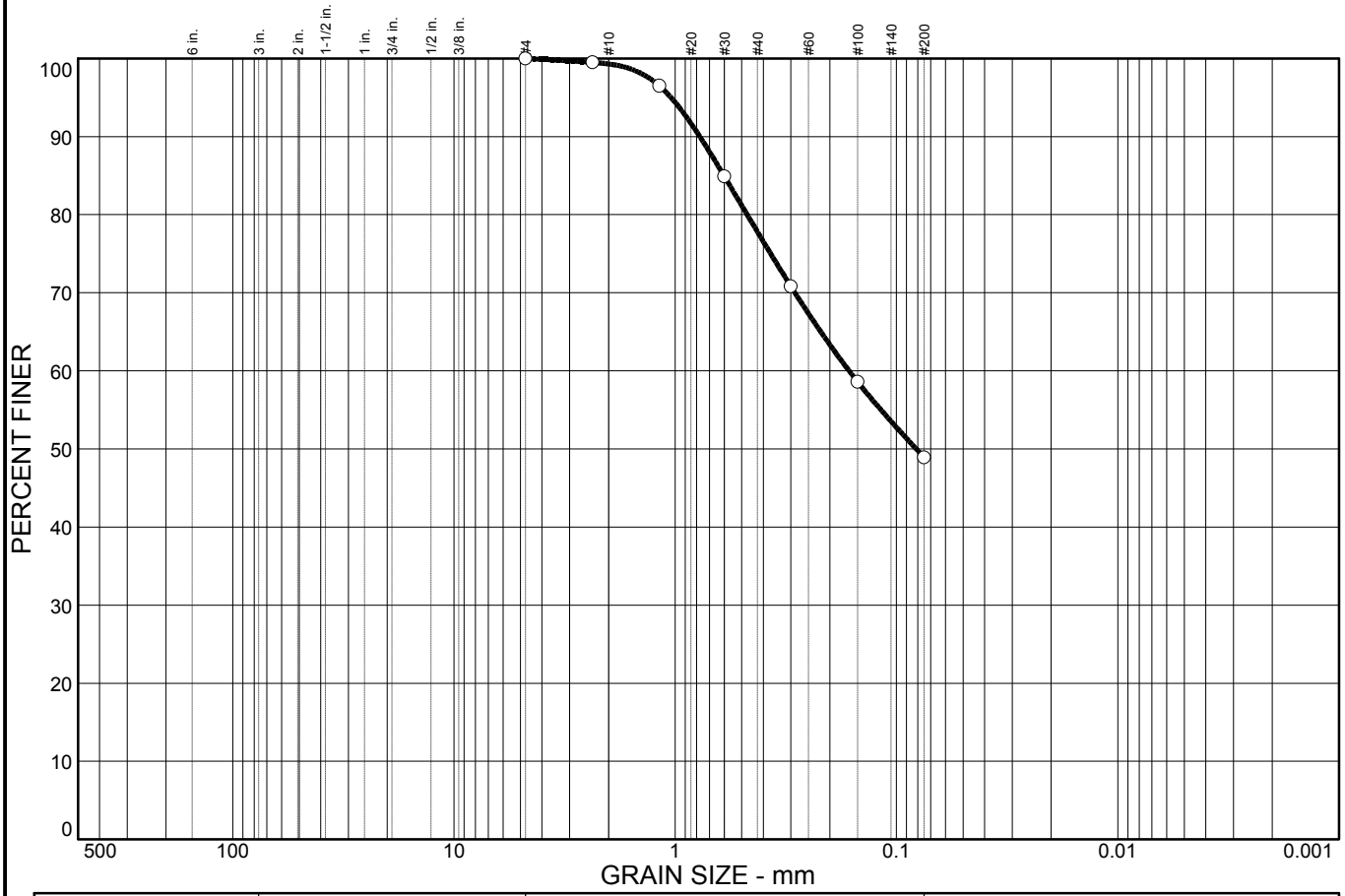
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc.
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.7	21.5	28.9	48.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.5		
#16	96.5		
#30	84.9		
#50	70.8		
#100	58.6		
#200	48.9		

* (no specification provided)

Material Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.603 D_{60}= 0.164 D_{50}= 0.0815
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: B-4 **Source of Sample:** **Date:** 7/7/23
Location: **Elev./Depth:** 7-8.5'

Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc.
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	1.8	12.3	27.6	58.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	98.9		
#16	94.8		
#30	89.0		
#50	82.6		
#100	74.0		
#200	58.3		

* (no specification provided)

Material Description

Sandy lean clay

Atterberg Limits

PL= 14 LL= 25 PI= 11

Coefficients

D_{85}= 0.387 D_{60}= 0.0802 D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= CL AASHTO=

Remarks

Sample No.: B-4 **Source of Sample:** **Date:** 7/7/23
Location: **Elev./Depth:** 20-21.5'

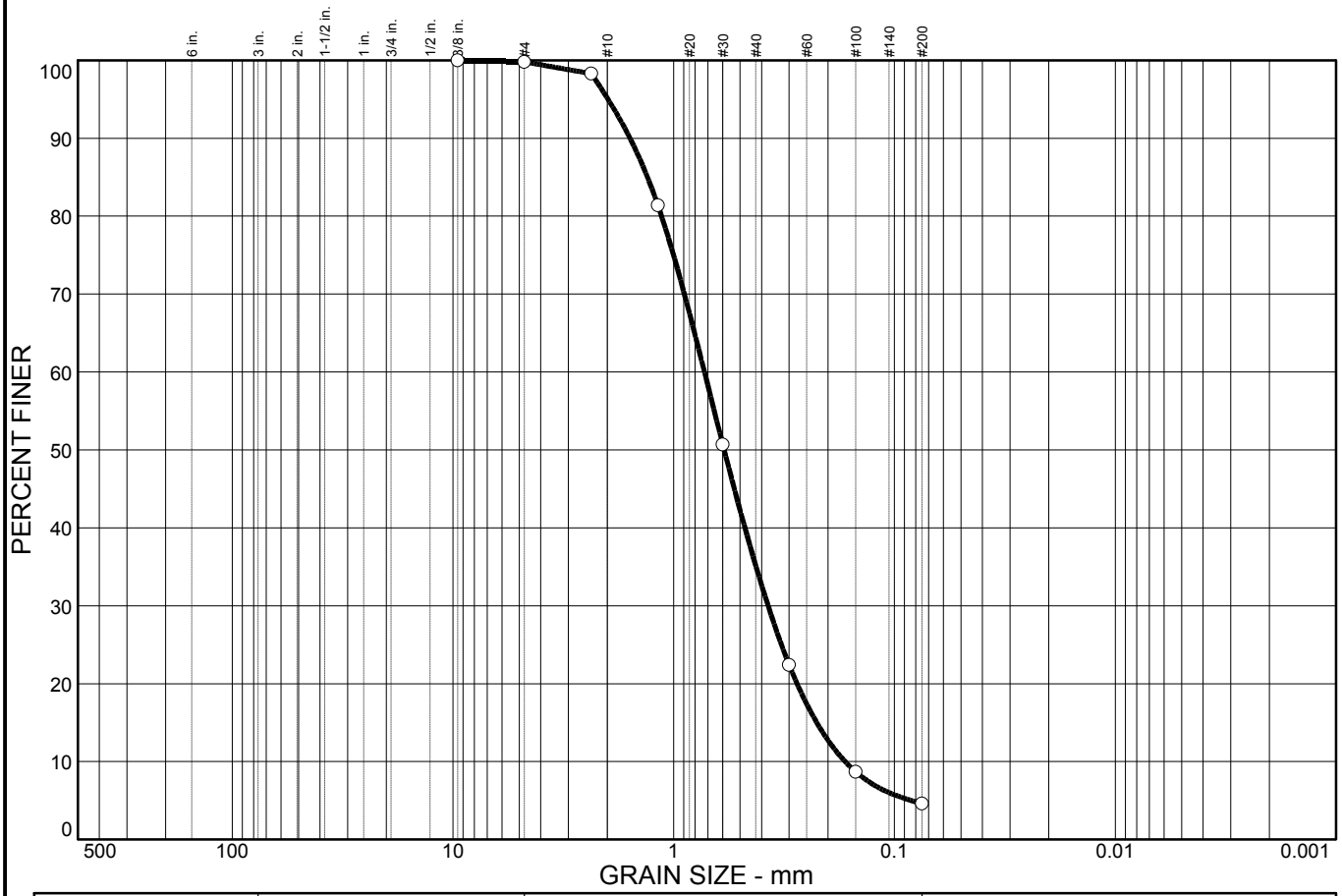
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc.
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.2	4.6	60.0	30.6	4.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.8		
#8	98.3		
#16	81.4		
#30	50.7		
#50	22.4		
#100	8.7		
#200	4.6		

* (no specification provided)

Material Description

Poorly graded sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.32 D_{60}= 0.726 D_{50}= 0.591
D_{30}= 0.374 D_{15}= 0.225 D_{10}= 0.167
C_u= 4.34 C_c= 1.15

Classification

USCS= SP AASHTO=

Remarks

Sample No.: B-4 **Source of Sample:** **Date:** 7/17/23
Location: **Elev./Depth:** 25-26.5'

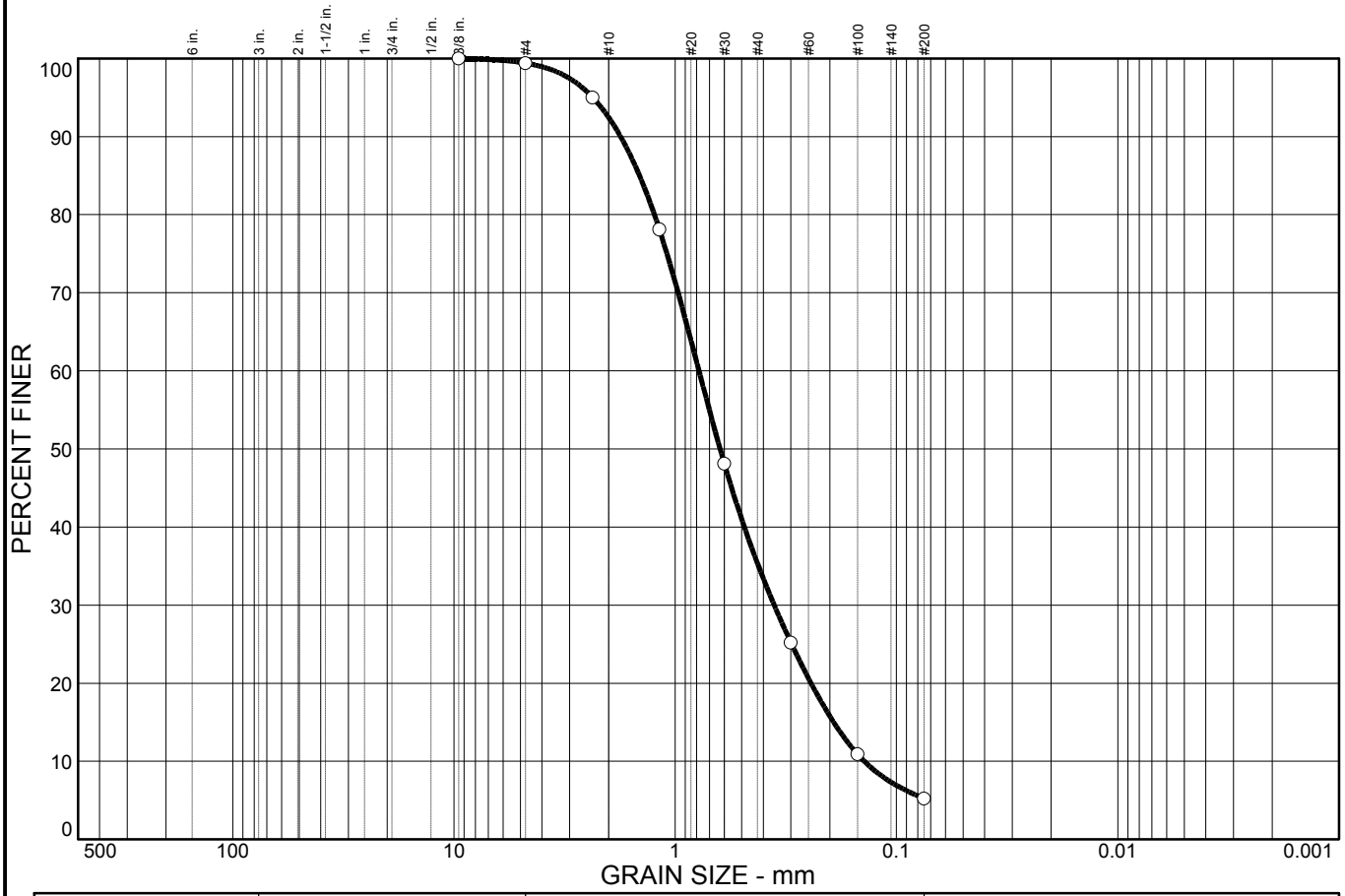
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc.
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.6	6.9	57.1	30.2	5.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.4		
#8	95.0		
#16	78.1		
#30	48.1		
#50	25.2		
#100	10.9		
#200	5.2		

* (no specification provided)

Material Description

Poorly graded sand with silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.45 D_{60}= 0.781 D_{50}= 0.627
D_{30}= 0.357 D_{15}= 0.192 D_{10}= 0.140
C_u= 5.59 C_c= 1.17

Classification

USCS= SP-SM AASHTO=

Remarks

Sample No.: B-5 **Source of Sample:** **Date:** 7/7/23
Location: **Elev./Depth:** 13.5-15'

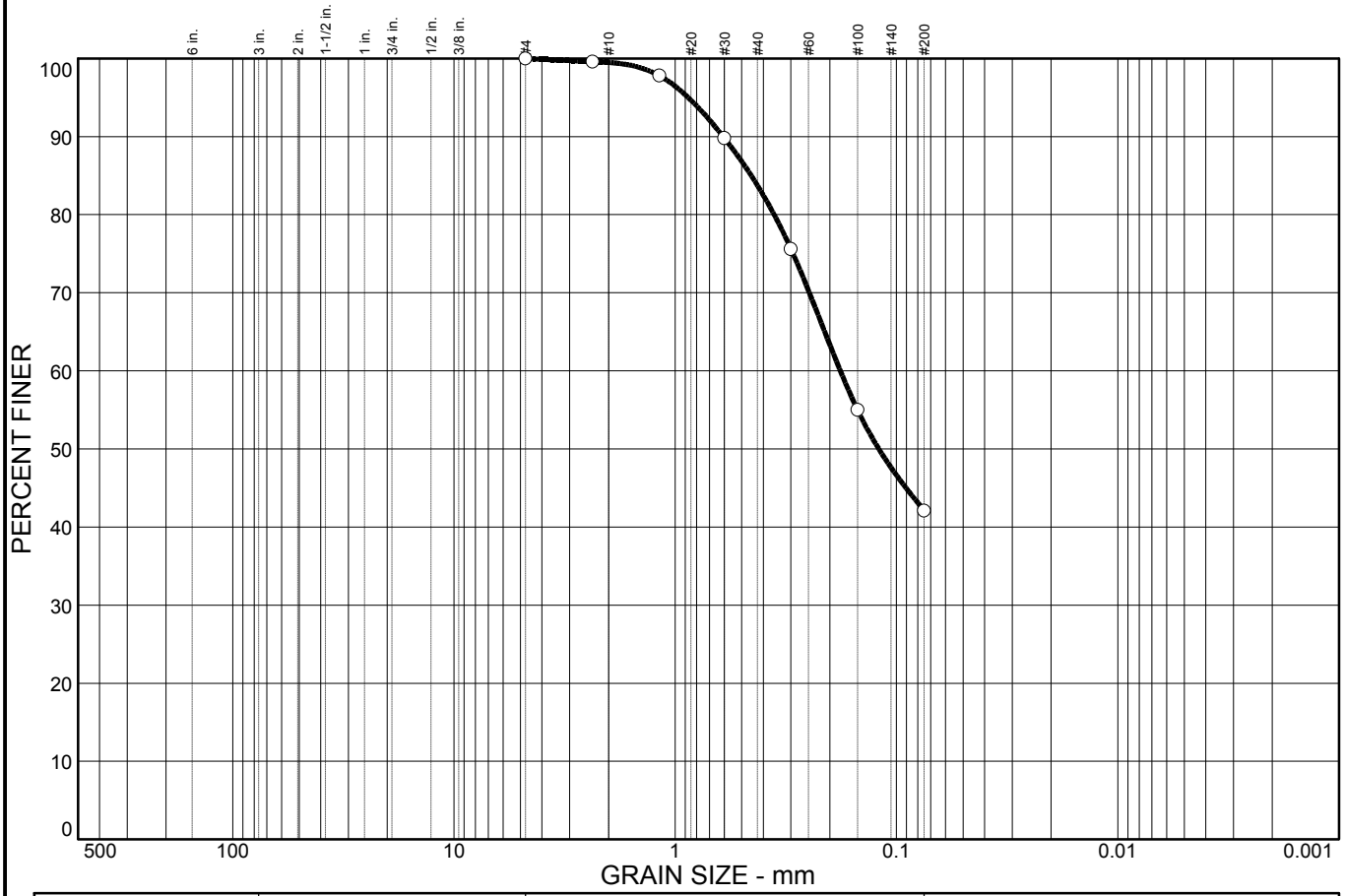
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering, Inc.
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.5	15.8	41.6	42.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.6		
#16	97.8		
#30	89.8		
#50	75.6		
#100	55.0		
#200	42.1		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.453 D_{60}= 0.179 D_{50}= 0.120
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-7 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 8.5-10'

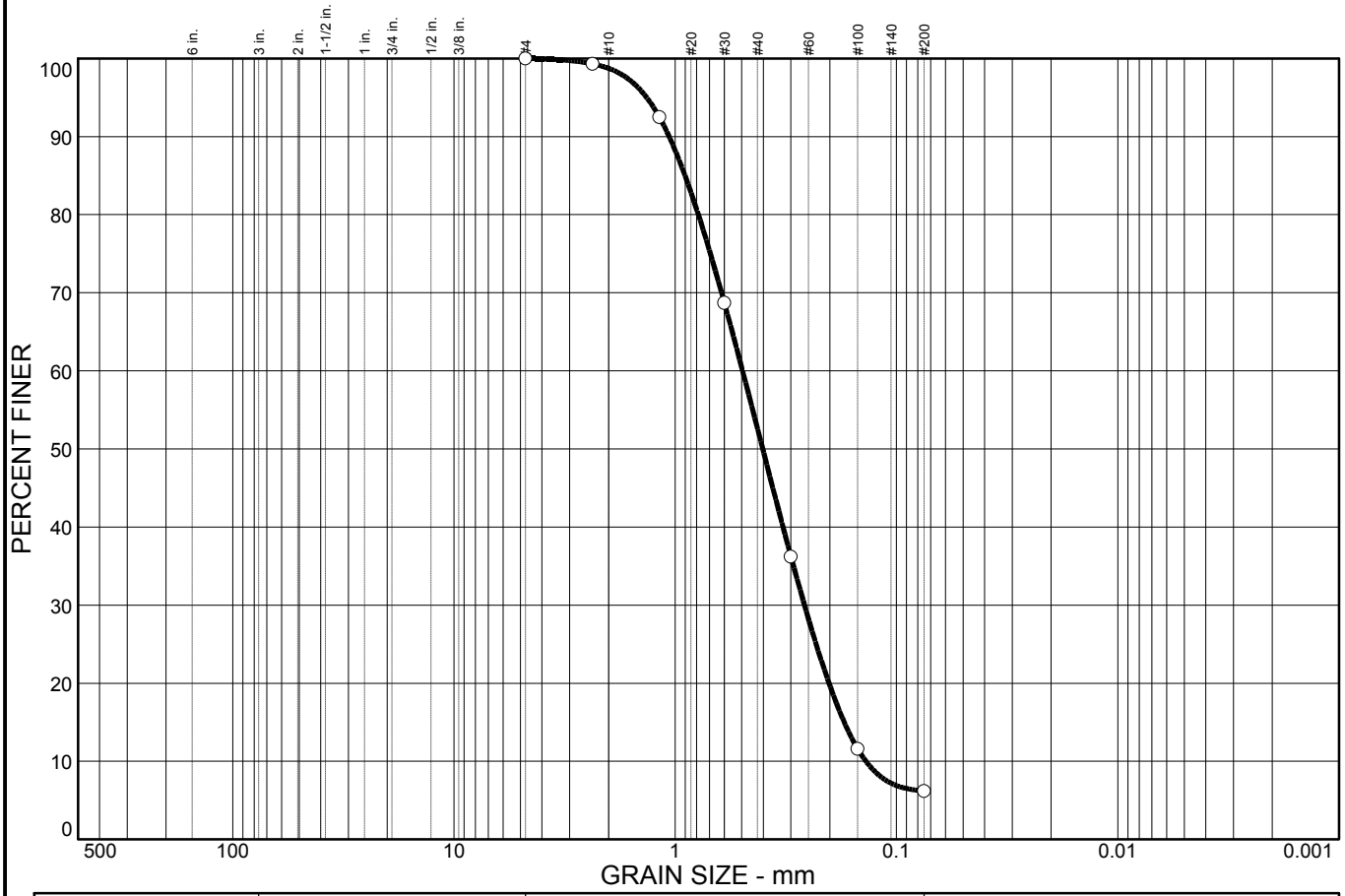
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	1.3	46.1	46.4	6.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.3		
#16	92.5		
#30	68.7		
#50	36.2		
#100	11.6		
#200	6.2		

* (no specification provided)

Material Description

Poorly graded sand with silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.904 D_{60}= 0.497 D_{50}= 0.403
D_{30}= 0.261 D_{15}= 0.172 D_{10}= 0.138
C_u= 3.61 C_c= 1.00

Classification

USCS= SP-SM AASHTO=

Remarks

Sample No.: B-7 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 16.5-18'

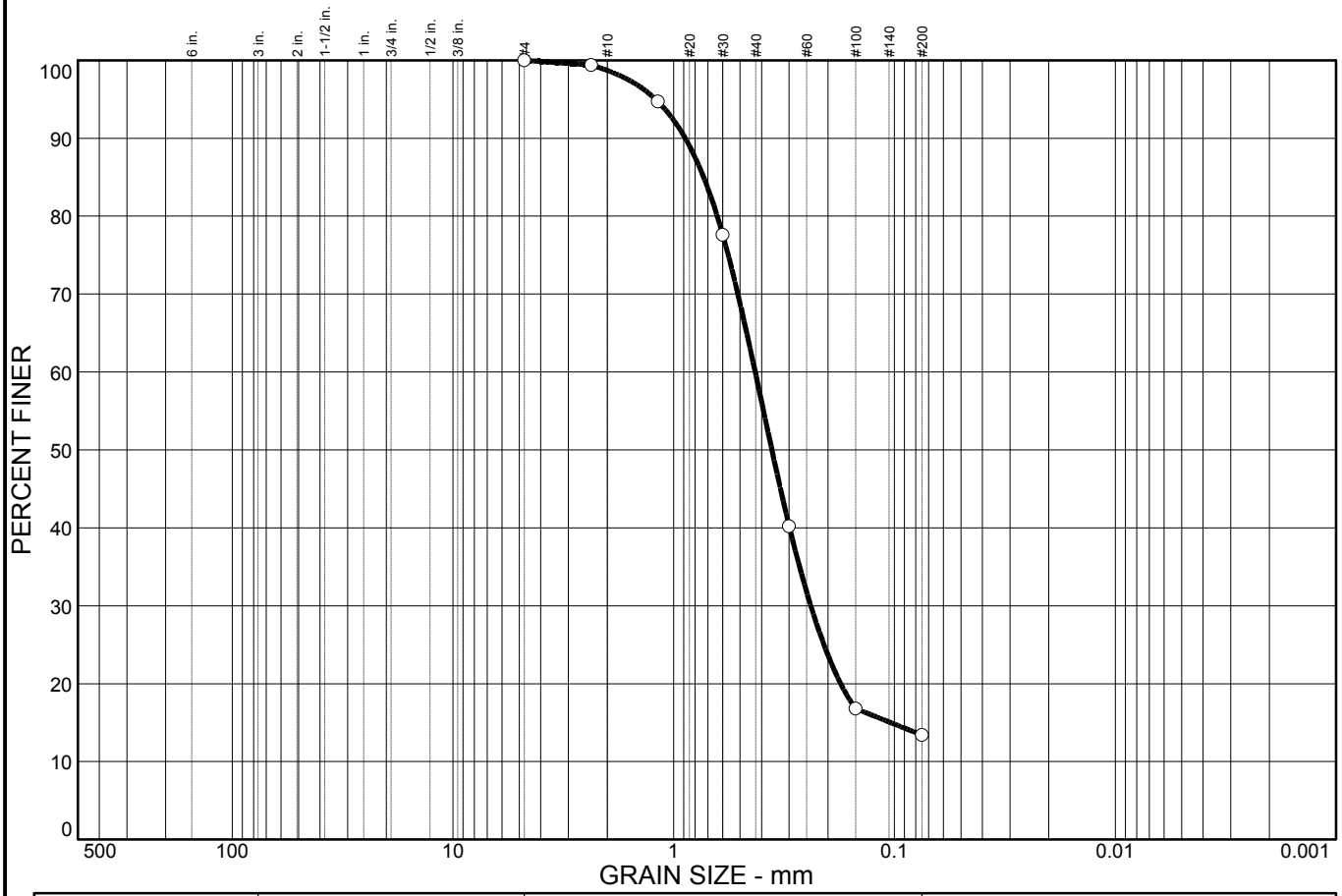
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	1.3	39.1	46.2	13.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.4		
#16	94.7		
#30	77.6		
#50	40.2		
#100	16.8		
#200	13.4		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.733 D_{60}= 0.428 D_{50}= 0.359
D_{30}= 0.240 D_{15}= 0.104 D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-7 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 25-26.5'

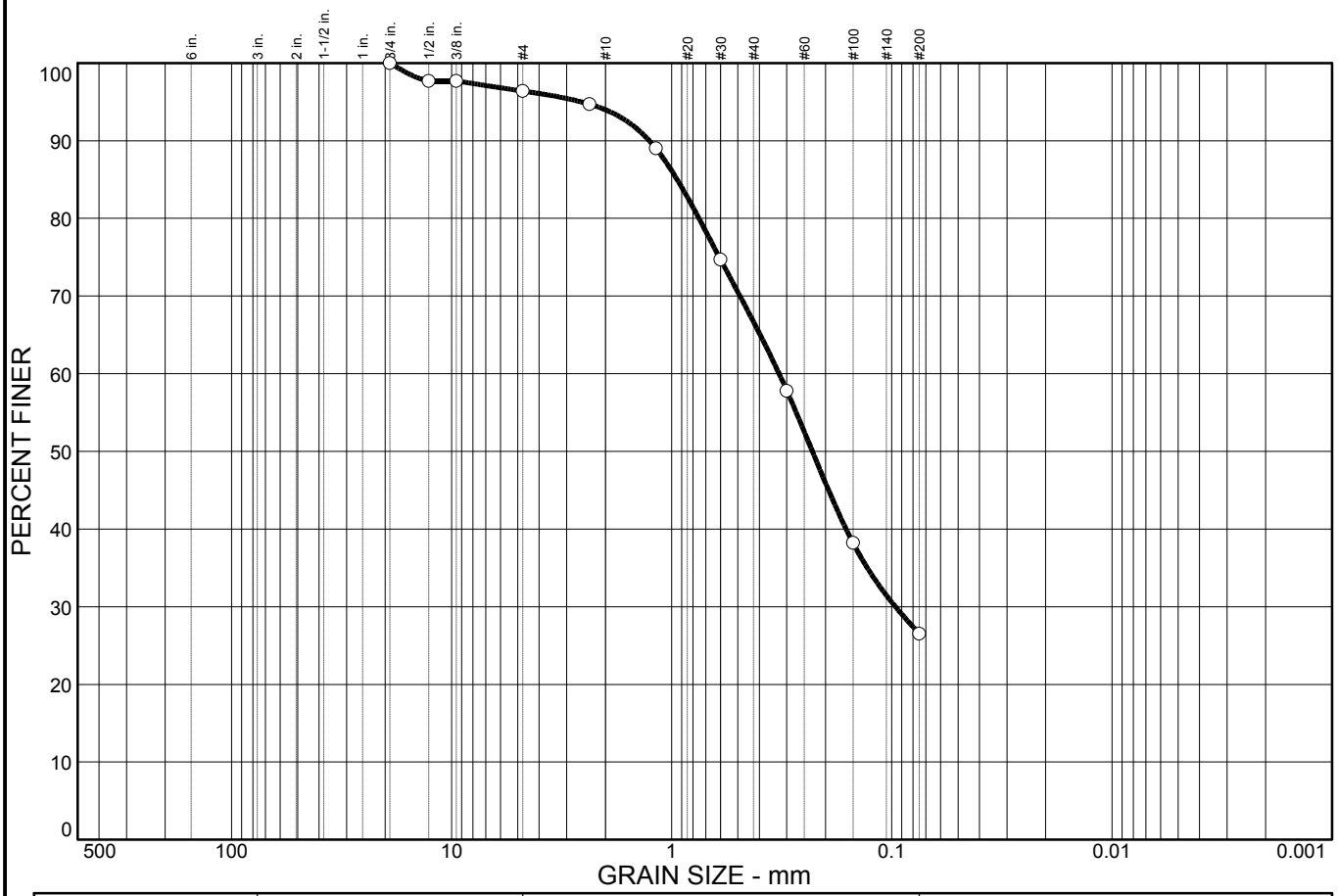
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	3.6	2.4	27.3	40.2	26.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
1/2 in.	97.7		
3/8 in.	97.7		
#4	96.4		
#8	94.7		
#16	89.0		
#30	74.7		
#50	57.8		
#100	38.2		
#200	26.5		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{85}= 0.945 D_{60}= 0.325 D_{50}= 0.230
D_{30}= 0.0963 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-8 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 7-11'

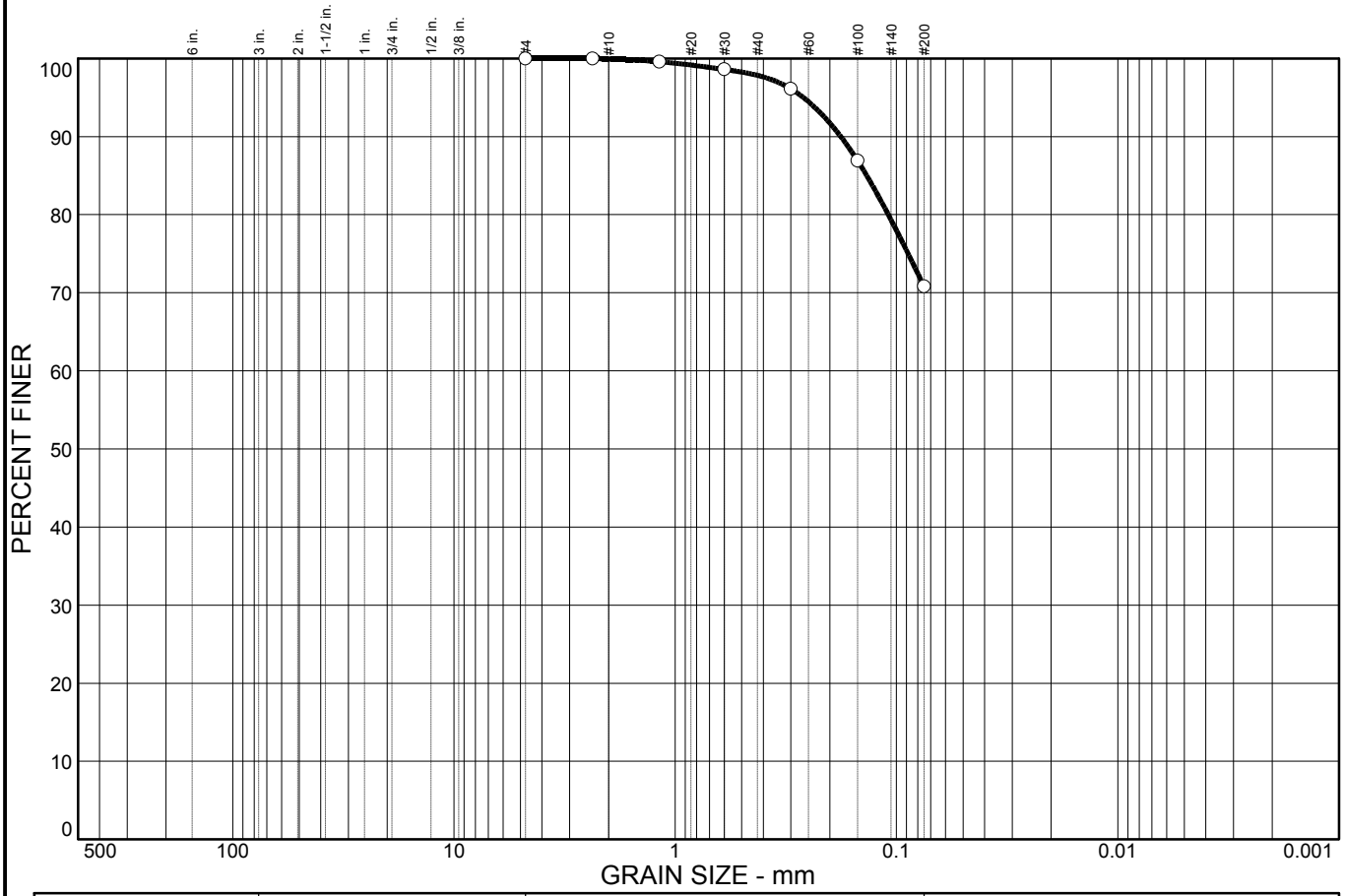
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	2.1	27.0	70.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	100.0		
#16	99.6		
#30	98.6		
#50	96.1		
#100	86.9		
#200	70.8		

* (no specification provided)

Material Description

Lean clay with sand

Atterberg Limits

PL= 16 LL= 26 PI= 10

Coefficients

D_{85}= 0.136 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= CL AASHTO=

Remarks

Sample No.: B-8 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 20-21.5'

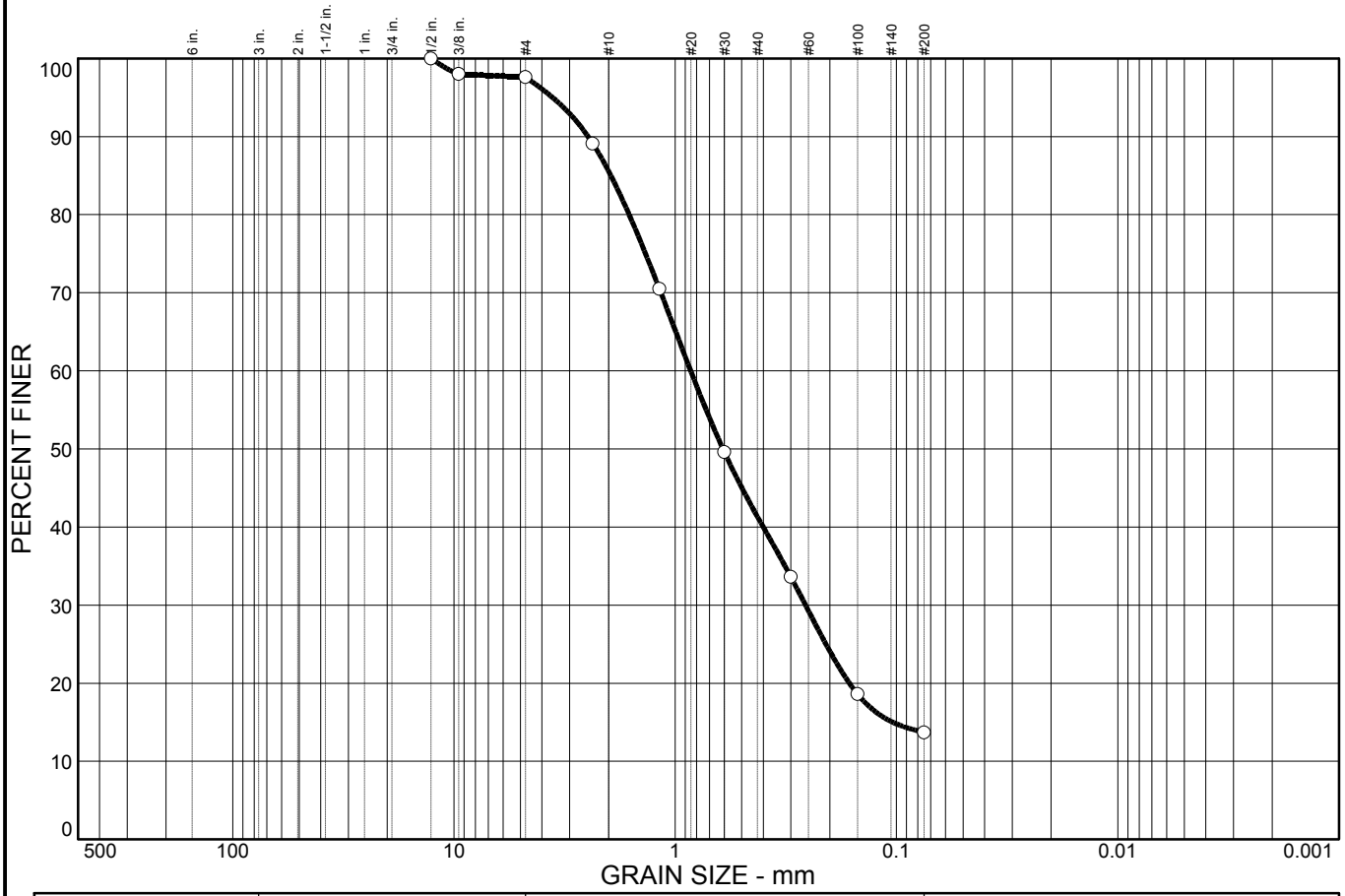
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	2.4	12.1	44.2	27.6	13.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2 in.	100.0		
3/8 in.	98.0		
#4	97.6		
#8	89.1		
#16	70.5		
#30	49.6		
#50	33.6		
#100	18.6		
#200	13.7		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.95 D_{60}= 0.851 D_{50}= 0.609
D_{30}= 0.258 D_{15}= 0.104 D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-9 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 15-16.5'

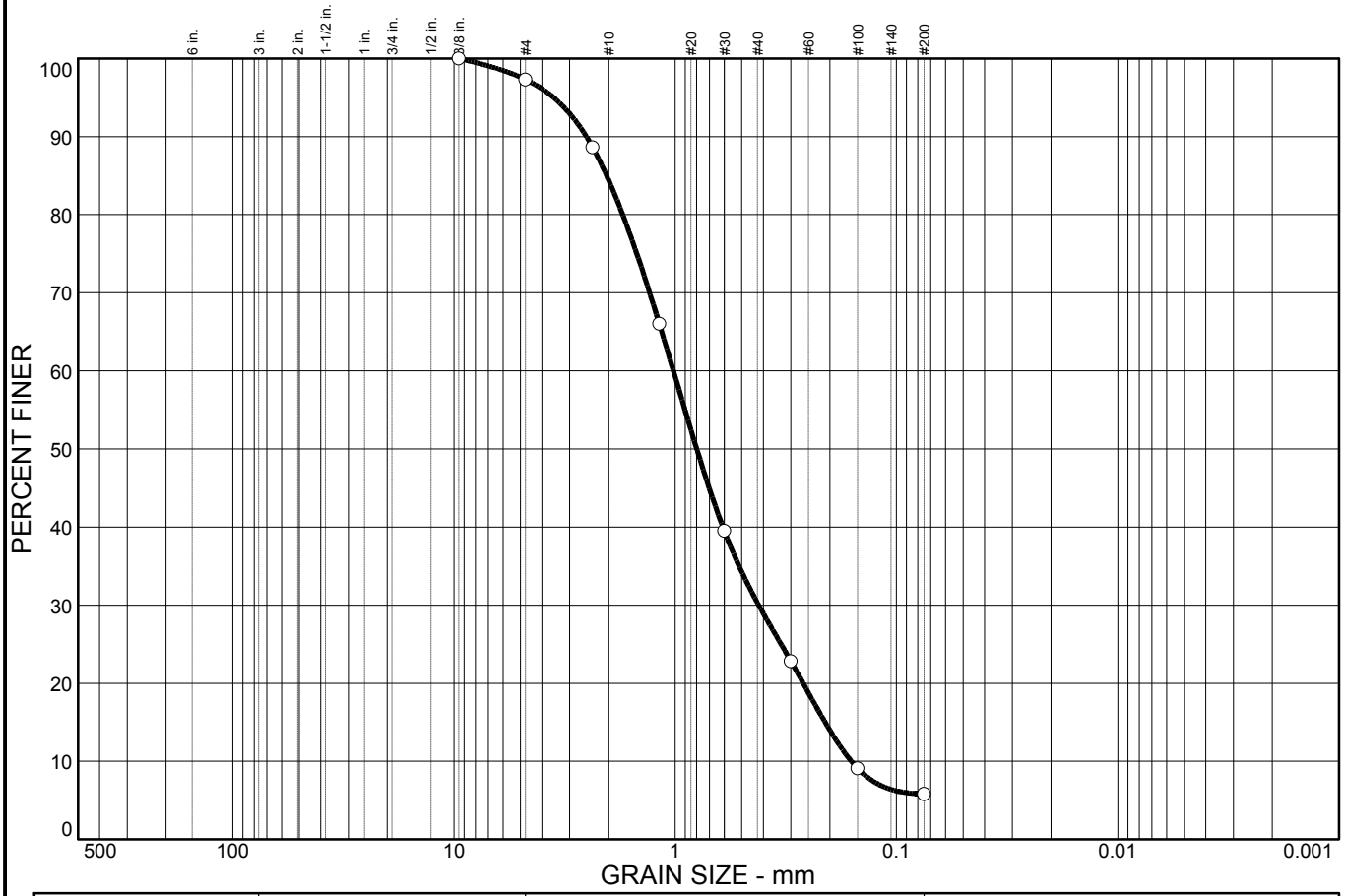
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	2.7	12.9	54.1	24.5	5.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	97.3		
#8	88.6		
#16	66.0		
#30	39.5		
#50	22.8		
#100	9.1		
#200	5.8		

* (no specification provided)

Material Description

Well-graded sand with silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 2.04 D_{60}= 1.02 D_{50}= 0.800
D_{30}= 0.420 D_{15}= 0.210 D_{10}= 0.160
C_u= 6.37 C_c= 1.08

Classification

USCS= SW-SM AASHTO=

Remarks

Sample No.: B-10 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 13.5-15'

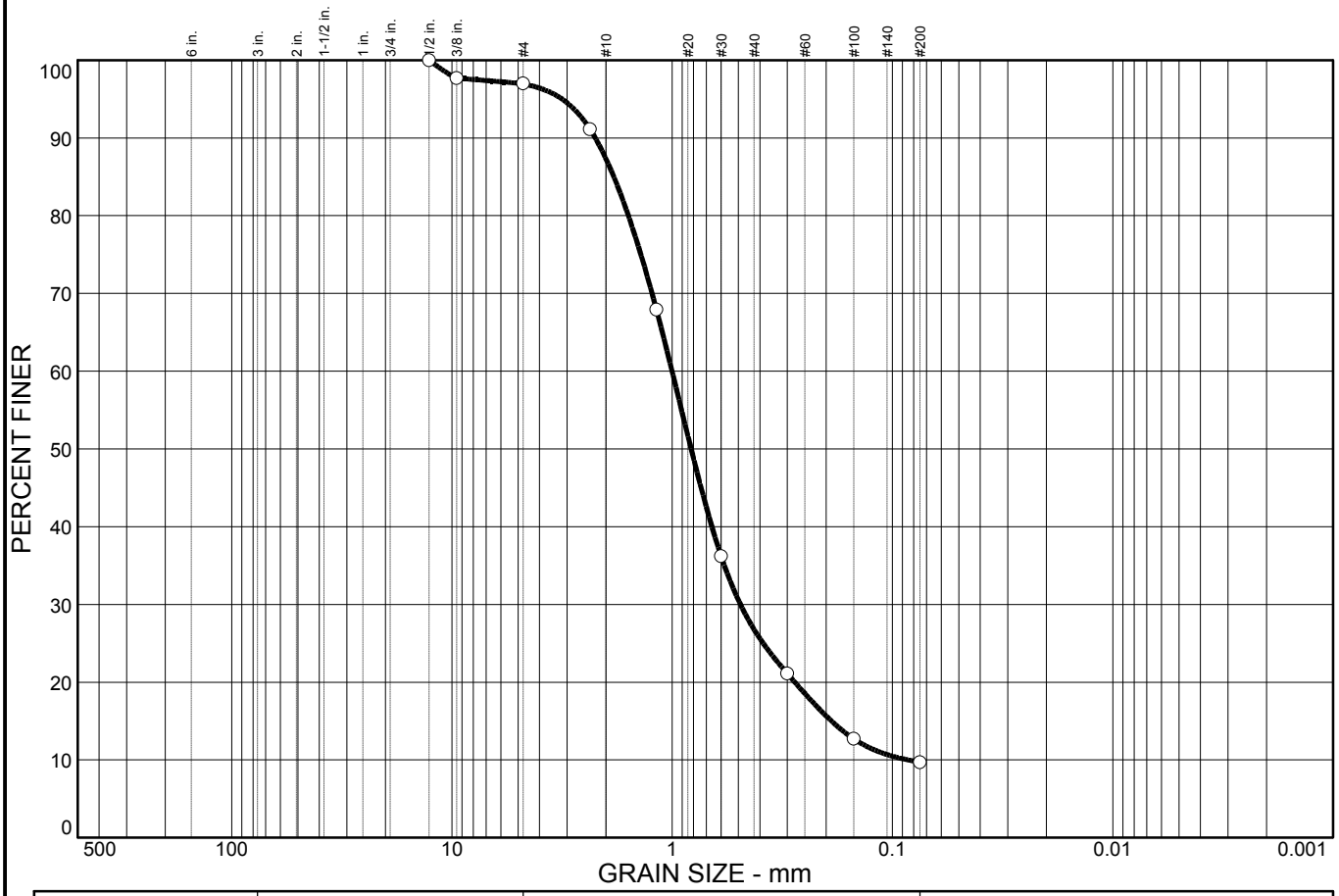
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	3.0	9.7	60.6	17.0	9.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2 in.	100.0		
3/8 in.	97.7		
#4	97.0		
#8	91.1		
#16	67.9		
#30	36.2		
#50	21.1		
#100	12.7		
#200	9.7		

* (no specification provided)

Material Description

Well-graded sand with silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.84 D_{60}= 1.00 D_{50}= 0.821
D_{30}= 0.490 D_{15}= 0.189 D_{10}= 0.0847
C_u= 11.84 C_c= 2.83

Classification

USCS= SW-SM AASHTO=

Remarks

Sample No.: B-10 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 20-21.5'

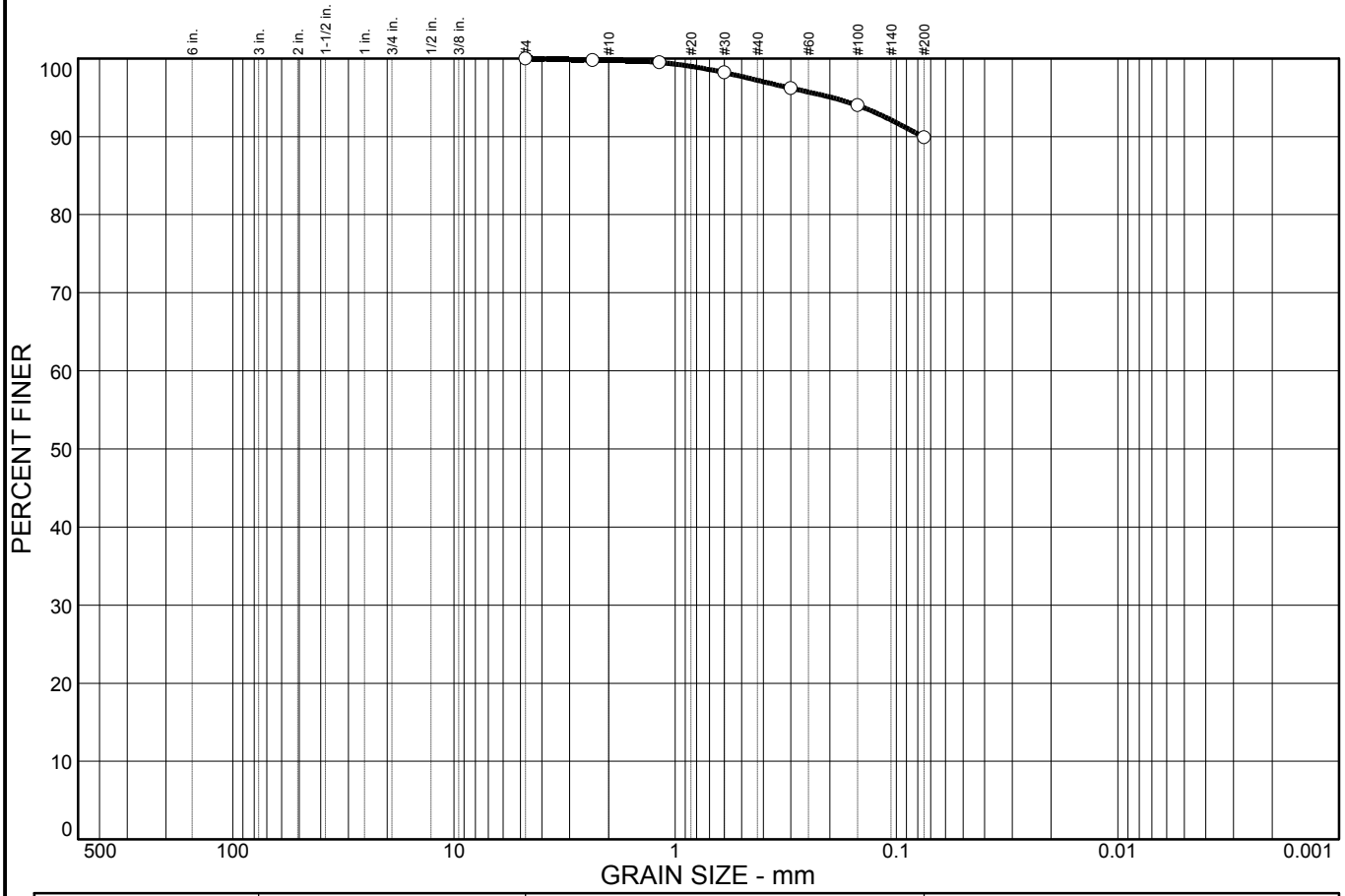
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.2	2.6	7.3	89.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.8		
#16	99.5		
#30	98.2		
#50	96.2		
#100	94.0		
#200	89.9		

* (no specification provided)

Material Description

Silty clay

Atterberg Limits

PL= 19 LL= 26 PI= 7

Coefficients

D_{85}= D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= CL-ML AASHTO=

Remarks

Sample No.: B-10 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 22.5-24.0'

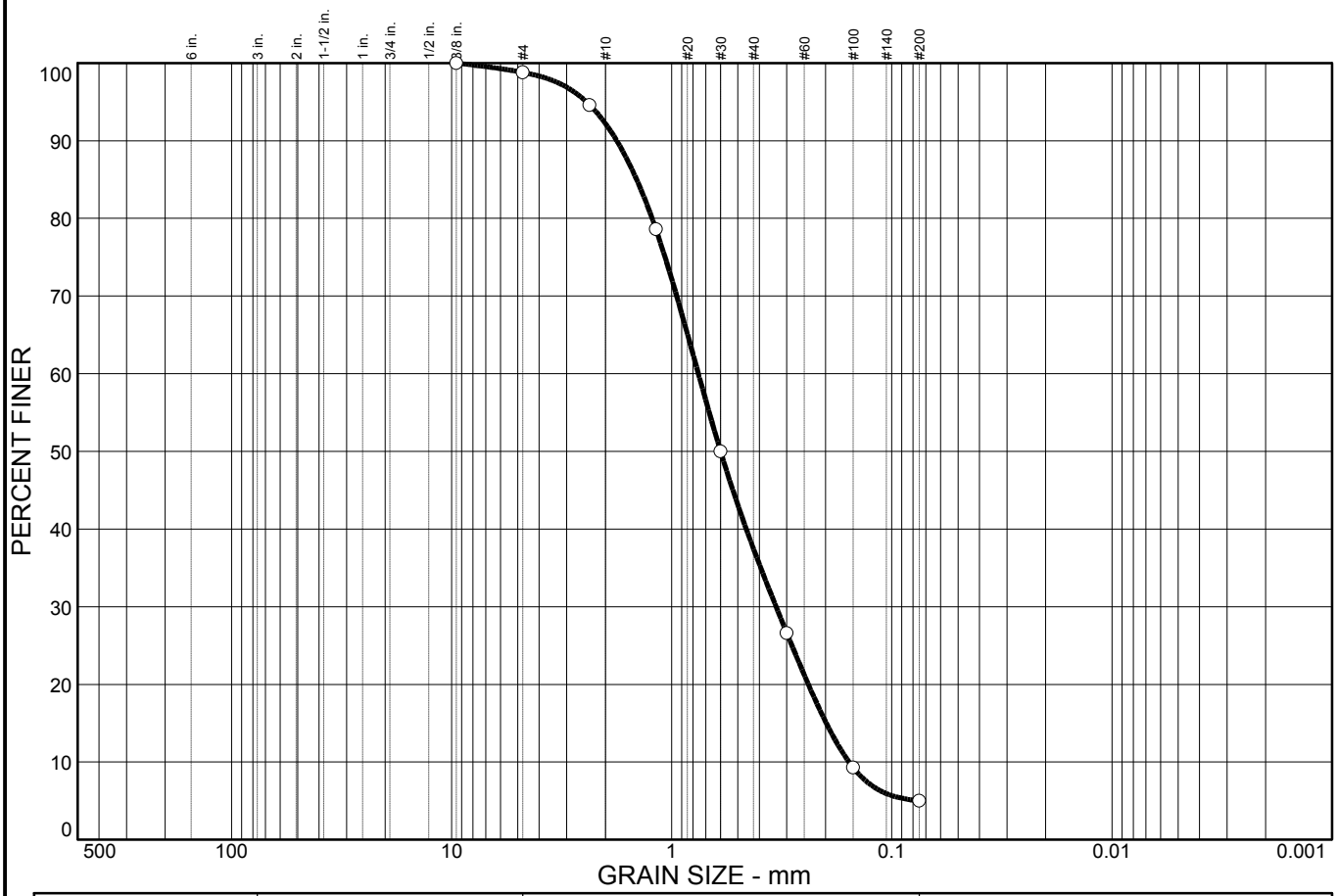
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	1.2	6.6	54.8	32.4	5.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	98.8		
#8	94.6		
#16	78.6		
#30	50.0		
#50	26.6		
#100	9.3		
#200	5.0		

* (no specification provided)

Material Description

Poorly graded sand with silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.44 D_{60}= 0.757 D_{50}= 0.600
D_{30}= 0.336 D_{15}= 0.198 D_{10}= 0.157
C_u= 4.84 C_c= 0.95

Classification

USCS= SP-SM AASHTO=

Remarks

Sample No.: B-11 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 15-16.5'

Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.8	1.0	19.4	53.8	25.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2 in.	100.0		
3/8 in.	99.7		
#4	99.2		
#8	98.5		
#16	95.9		
#30	86.9		
#50	67.8		
#100	41.5		
#200	25.0		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.547 D_{60}= 0.245 D_{50}= 0.190
D_{30}= 0.0962 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-12 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 0-3'

Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.6	2.4	25.0	50.7	21.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.4		
#8	97.8		
#16	92.3		
#30	80.0		
#50	61.8		
#100	36.3		
#200	21.3		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.764 D_{60}= 0.285 D_{50}= 0.219
D_{30}= 0.119 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-12 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 10-11.5'

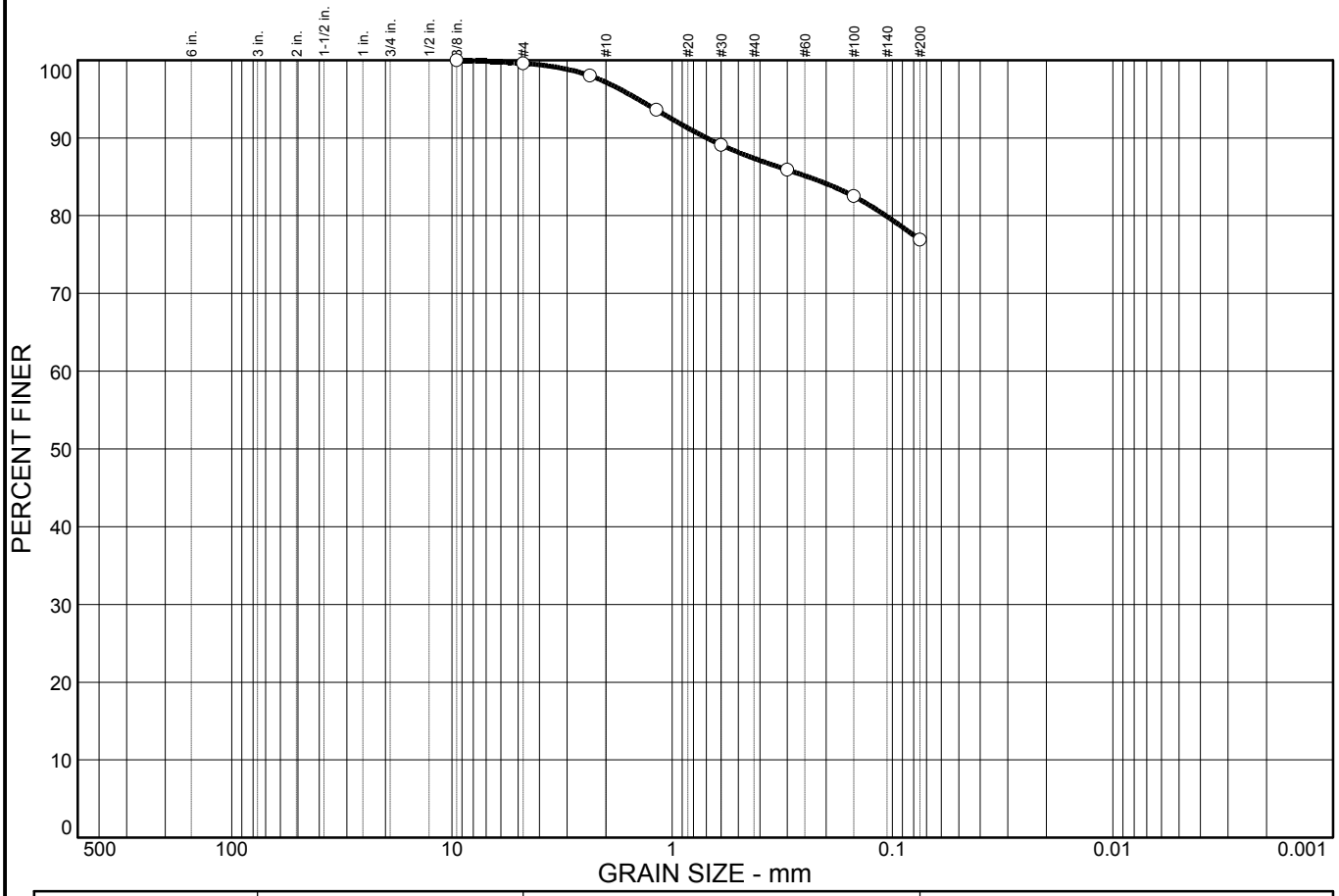
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.4	2.4	9.8	10.5	76.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.6		
#8	98.0		
#16	93.6		
#30	89.1		
#50	85.9		
#100	82.5		
#200	76.9		

* (no specification provided)

Material Description

Lean clay with sand

Atterberg Limits

PL= 15 LL= 24 PI= 9

Coefficients

D_{85}= 0.242 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= CL AASHTO=

Remarks

Sample No.: B-12 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 21.5-23.0'

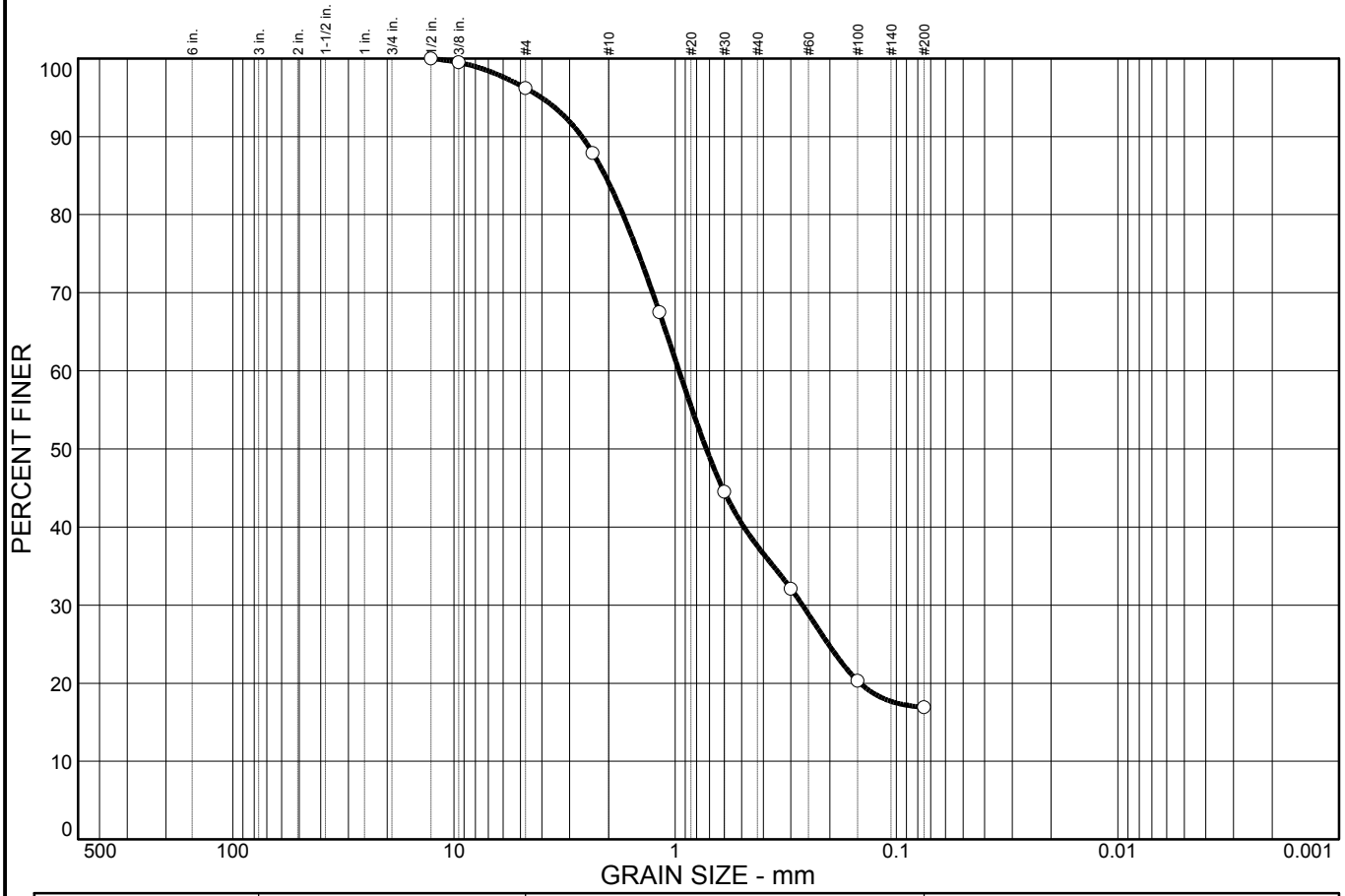
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	3.8	12.1	46.6	20.6	16.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2 in.	100.0		
3/8 in.	99.5		
#4	96.2		
#8	87.9		
#16	67.5		
#30	44.5		
#50	32.1		
#100	20.3		
#200	16.9		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 2.07 D_{60}= 0.962 D_{50}= 0.724
D_{30}= 0.266 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-13 **Source of Sample:** **Date:** 11/24/25
Location: **Elev./Depth:** 20-21.5'

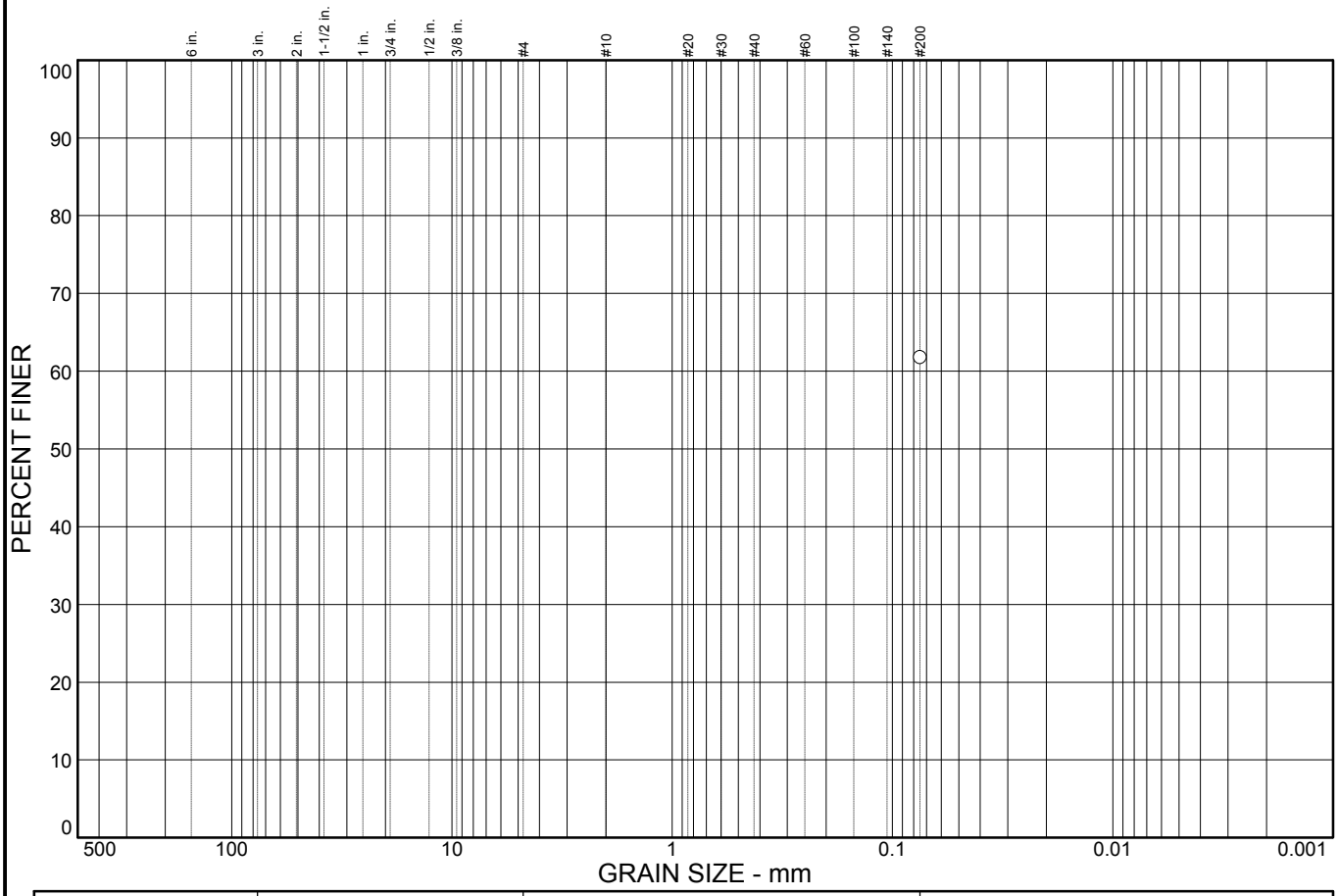
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
						61.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	61.8		

* (no specification provided)

Material Description

Sandy silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= ML AASHTO=

Remarks

Sample No.: B-14 **Source of Sample:** **Date:** 1/7/26
Location: **Elev./Depth:** 25-26.5'

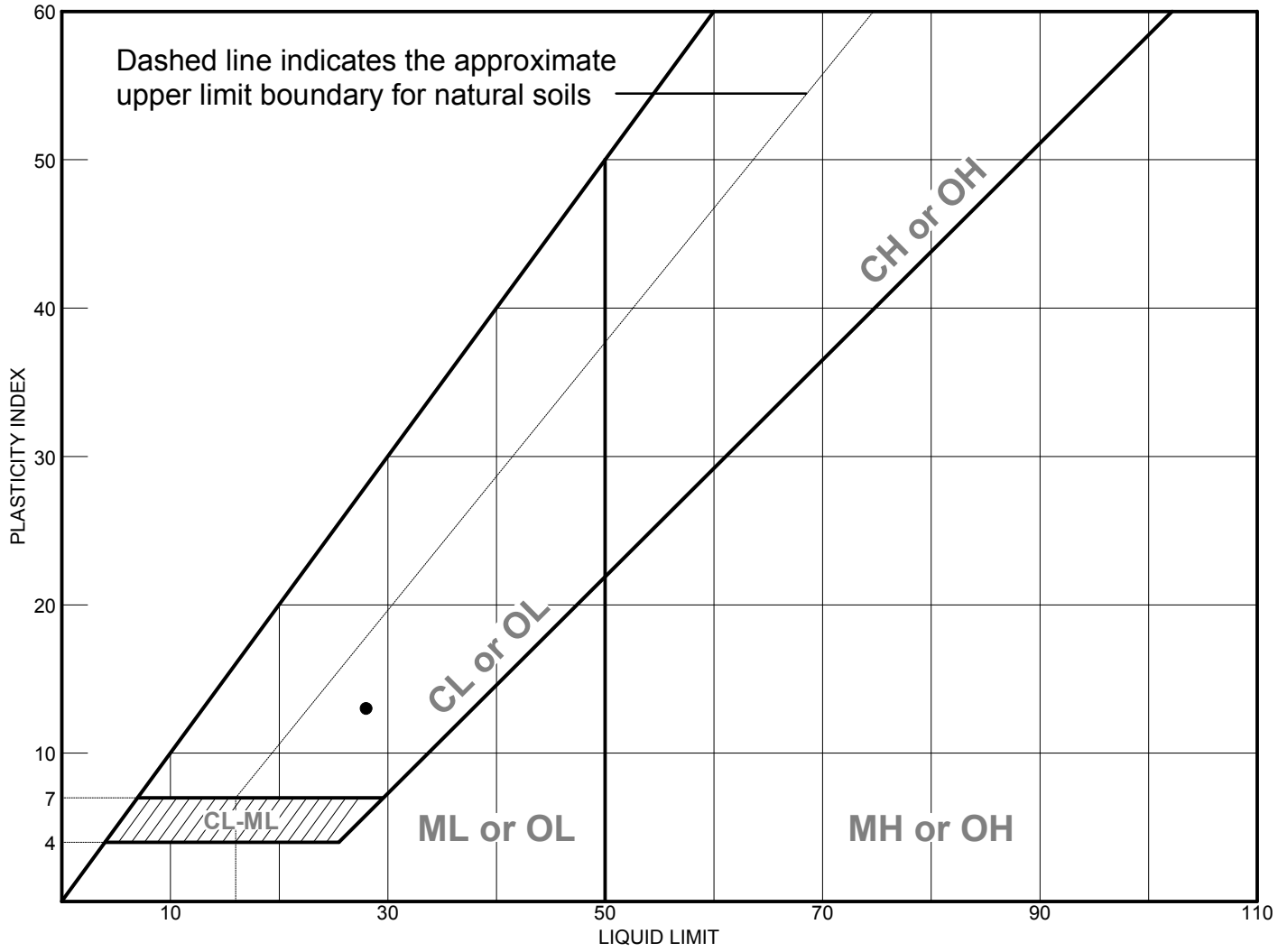
Moore Twining Associates, Inc.

Fresno, CA

Client: Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

Project No: C88004.01-03 **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Sandy lean clay	28	15	13	93.4	69.7	CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-2 **Elev./Depth:** 30-31.5'

Remarks:

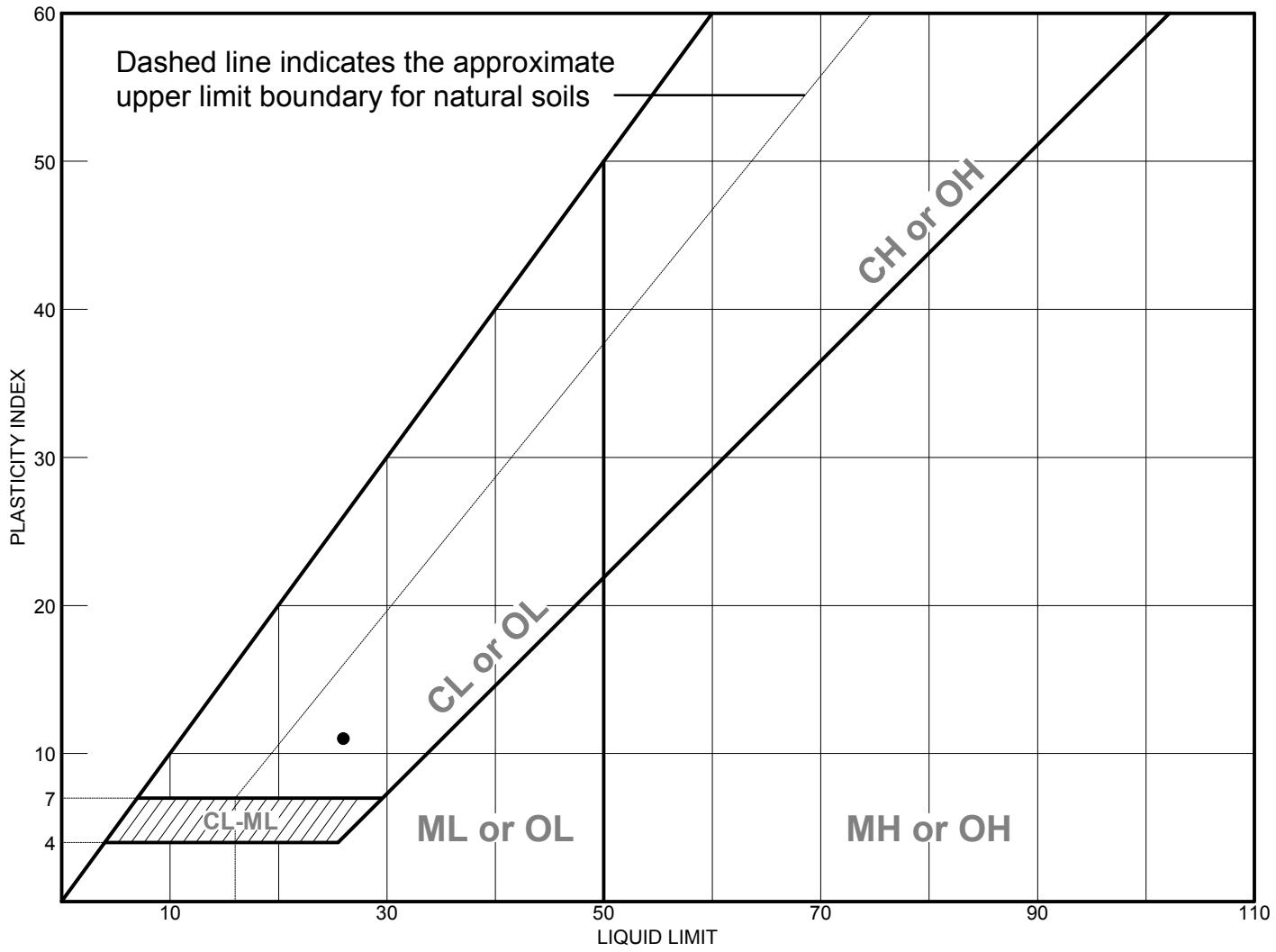
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	26	15	11			CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-3 **Elev./Depth:** 35-36.5'

Remarks:

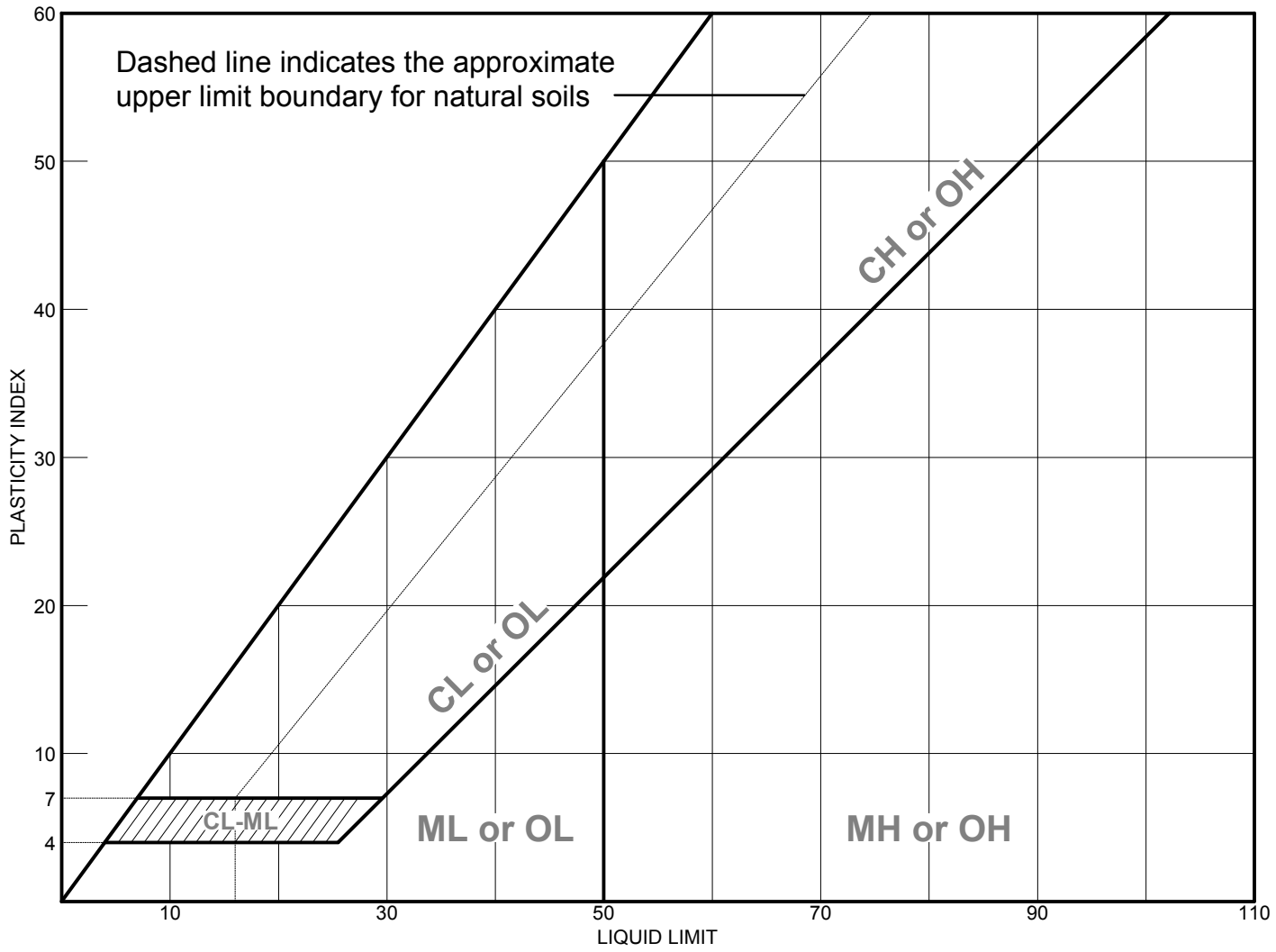
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Silty sand	NV	NP	NP	75.9	20.1	SM

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-4 **Elev./Depth:** 6.5-8'

Remarks:

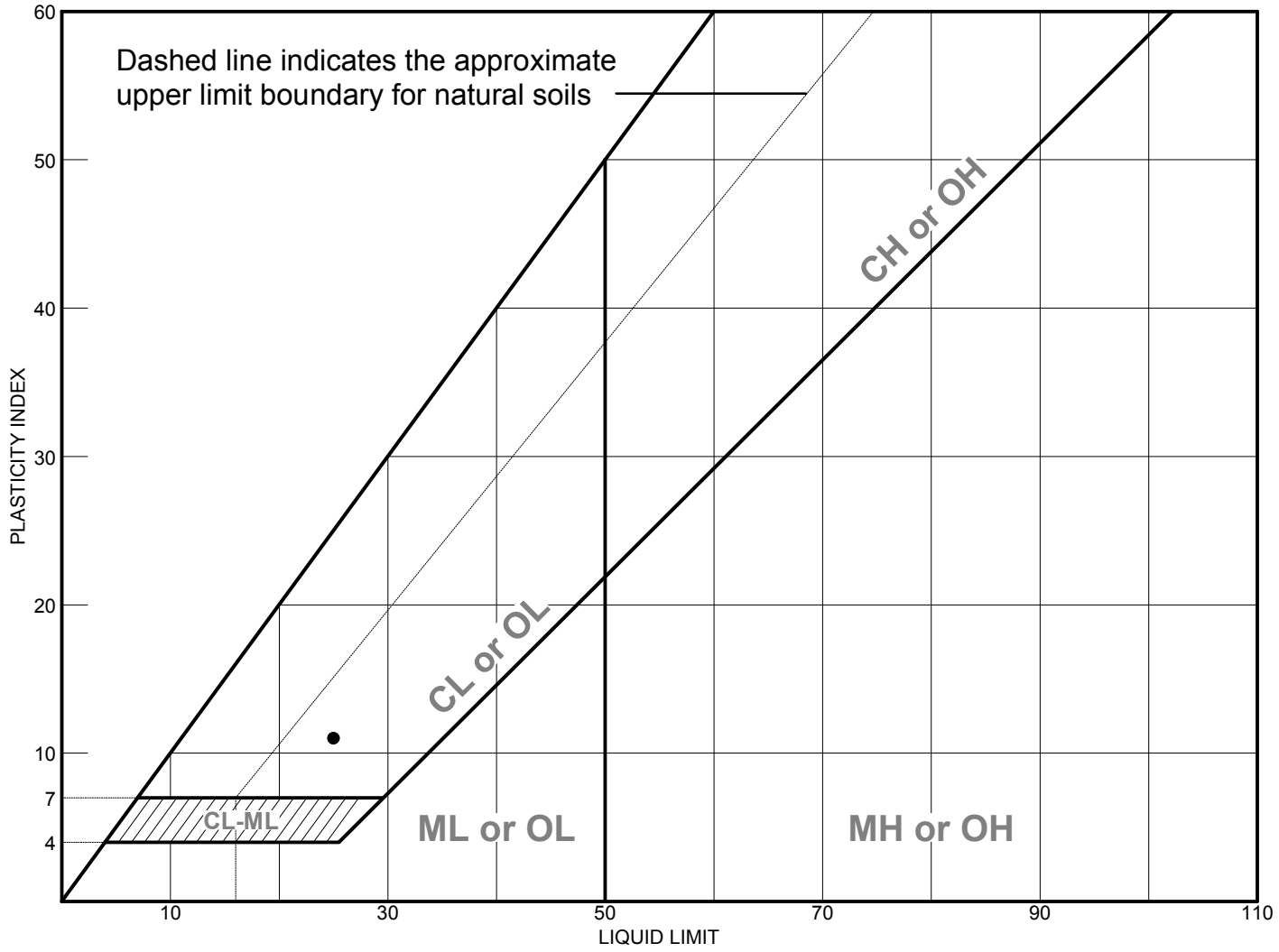
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Sandy lean clay	25	14	11	85.9	58.3	CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-4 **Elev./Depth:** 20-21.5'

Remarks:

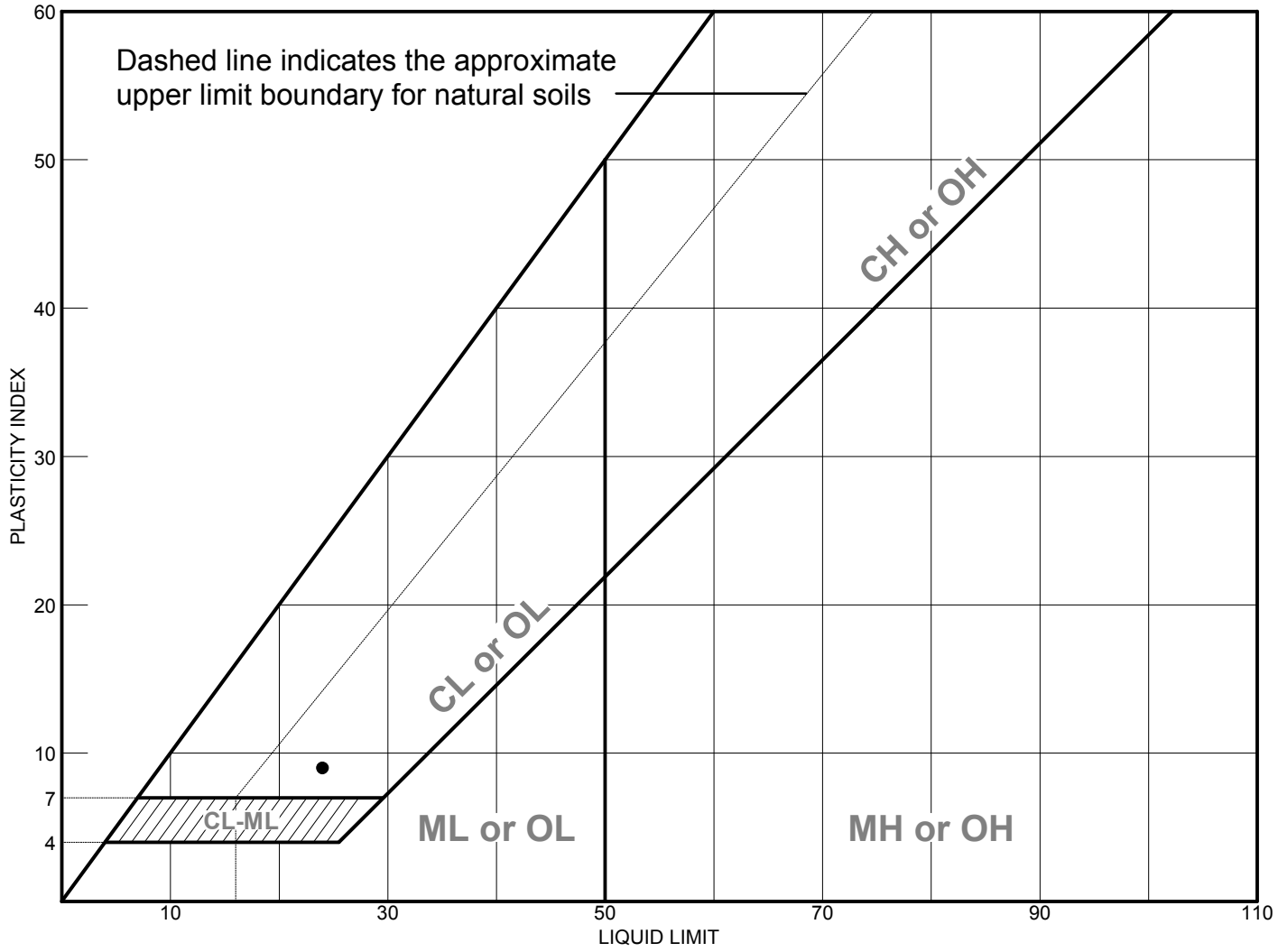
●

Moore Twining Associates, Inc.

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Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	24	15	9			CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-4 **Elev./Depth:** 35-36.5'

Remarks:

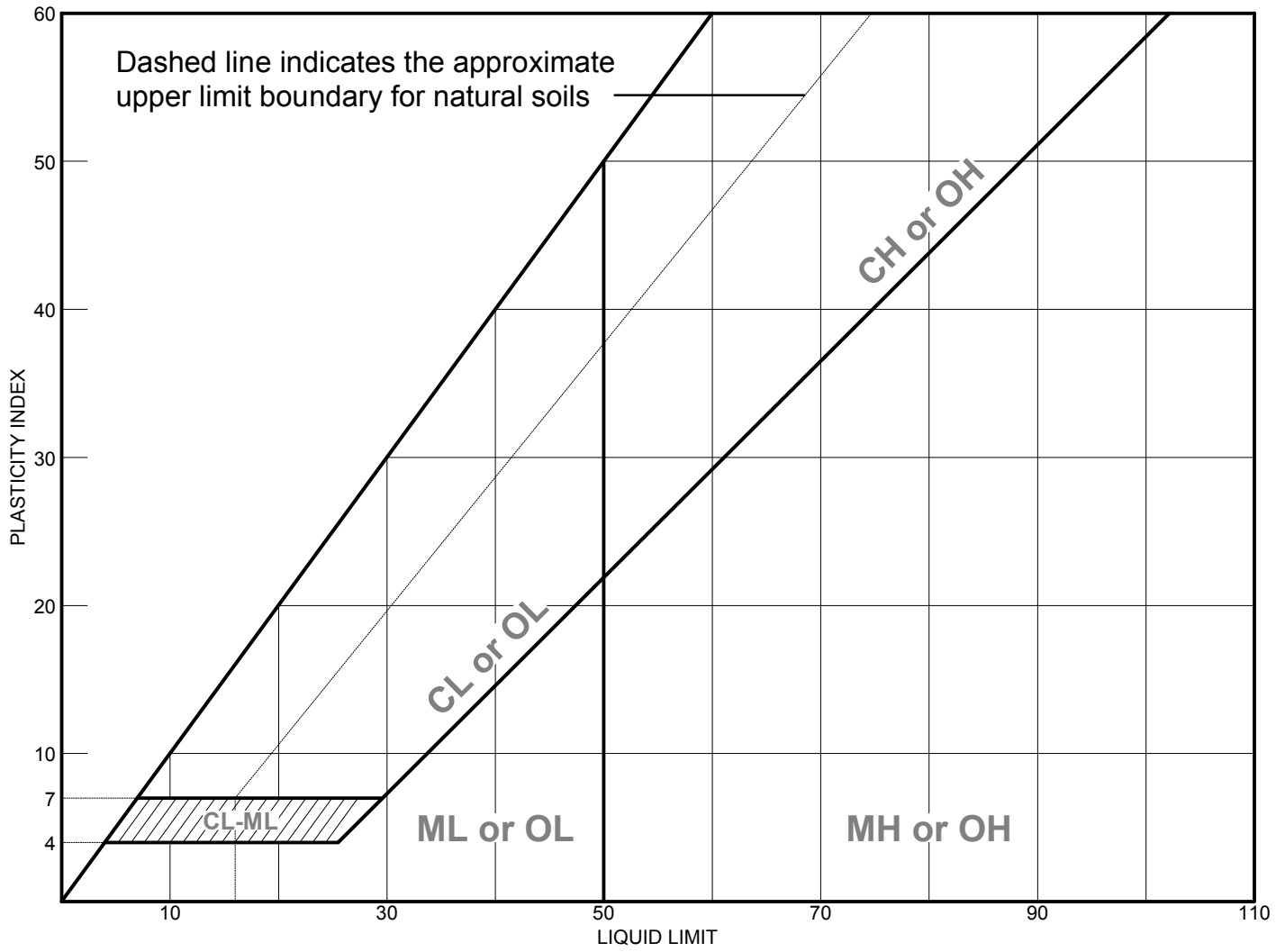
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Silty sand	NV	NP	NP	66.7	26.5	SM

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-8 **Elev./Depth:** 7-11'

Remarks:

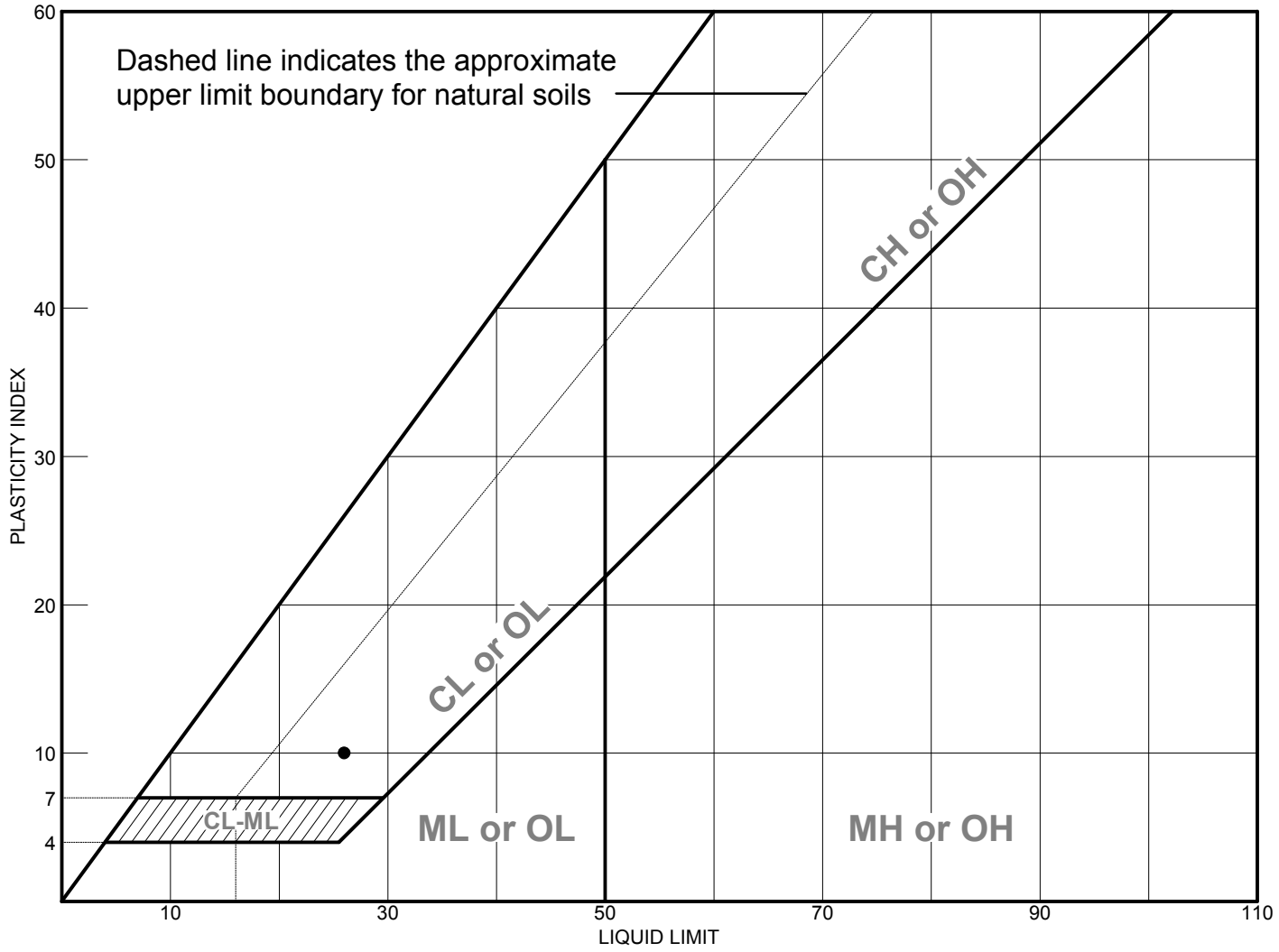
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay with sand	26	16	10	97.9	70.8	CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-8 **Elev./Depth:** 20-21.5'

Remarks:

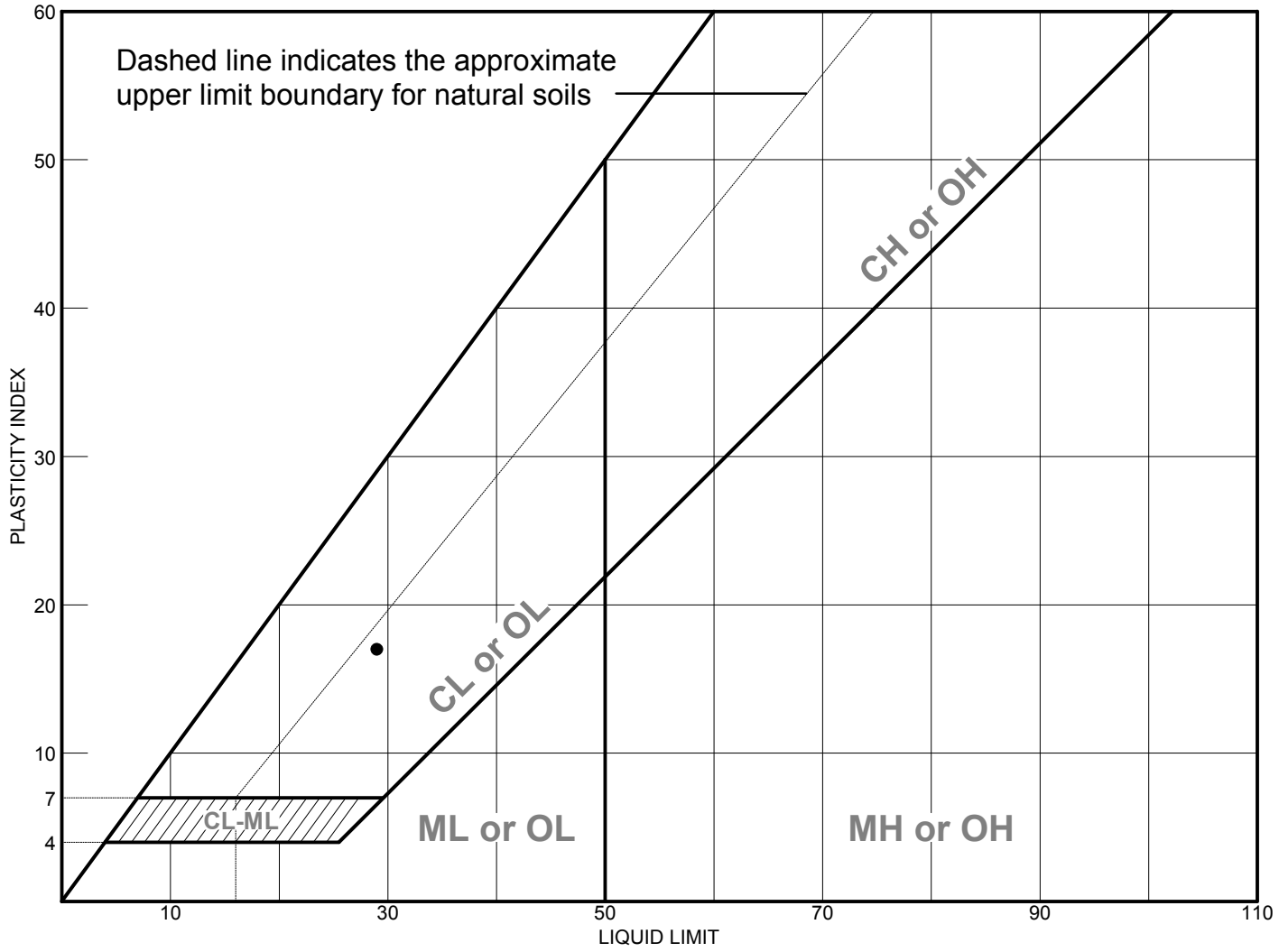
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	29	12	17			CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-9 **Elev./Depth:** 20-21.5'

Remarks:

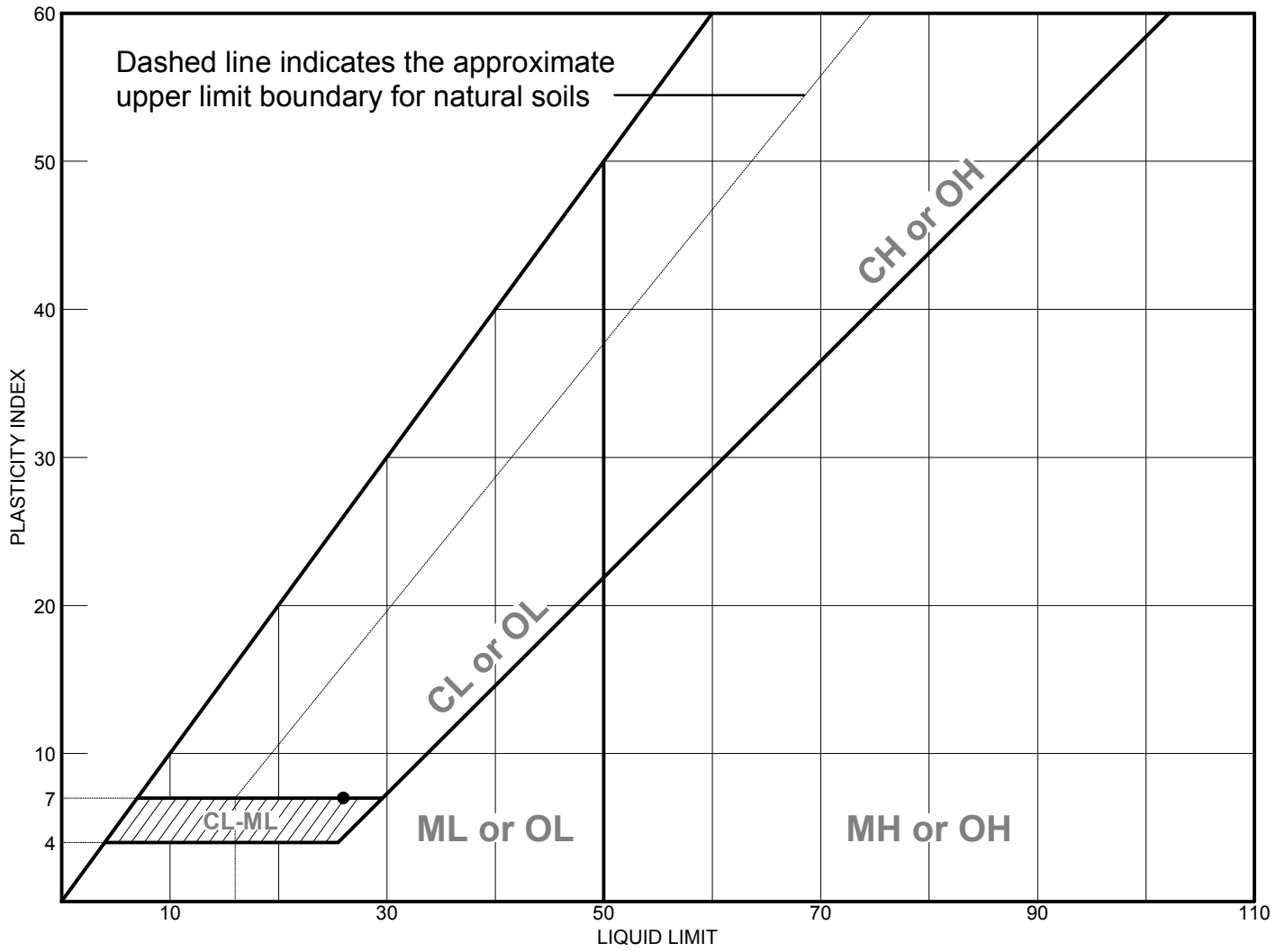
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Silty clay	26	19	7	97.2	89.9	CL-ML

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-10 **Elev./Depth:** 22.5-24.0'

Remarks:

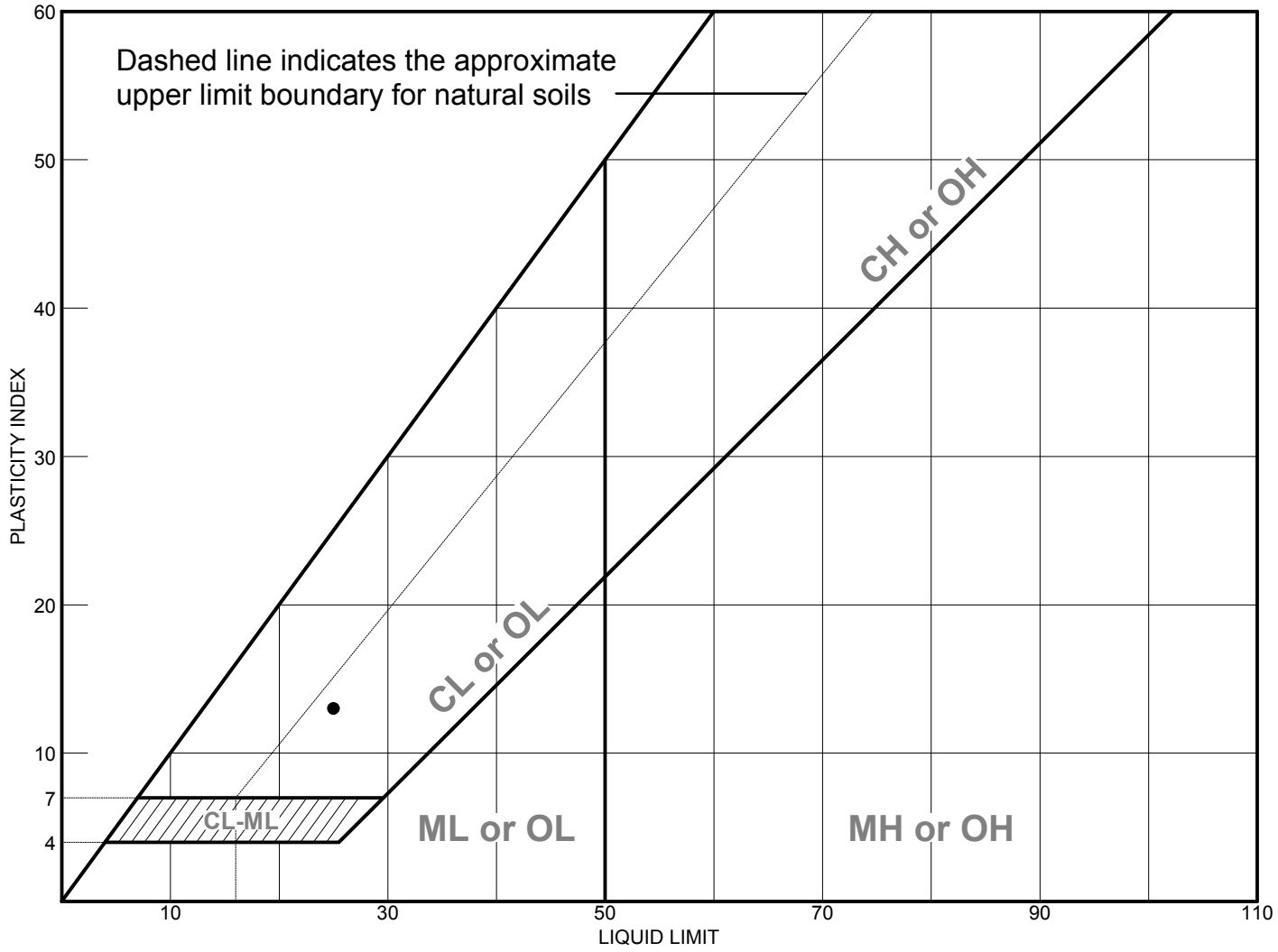
●

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Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	25	12	13			CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-10 **Elev./Depth:** 35-36.5'

Remarks:

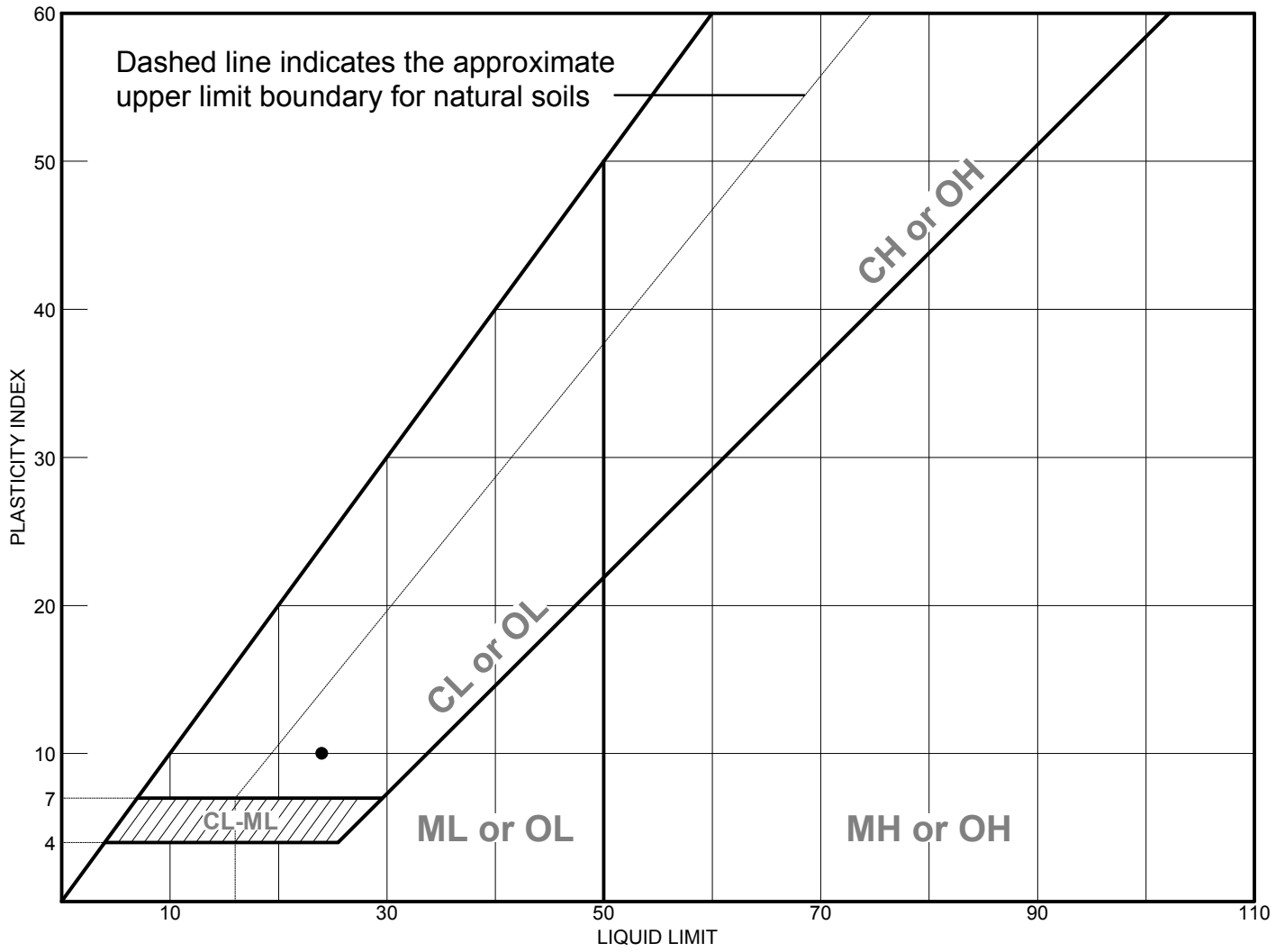
●

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Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	24	14	10			CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-11 **Elev./Depth:** 23.5-24.5'

Remarks:

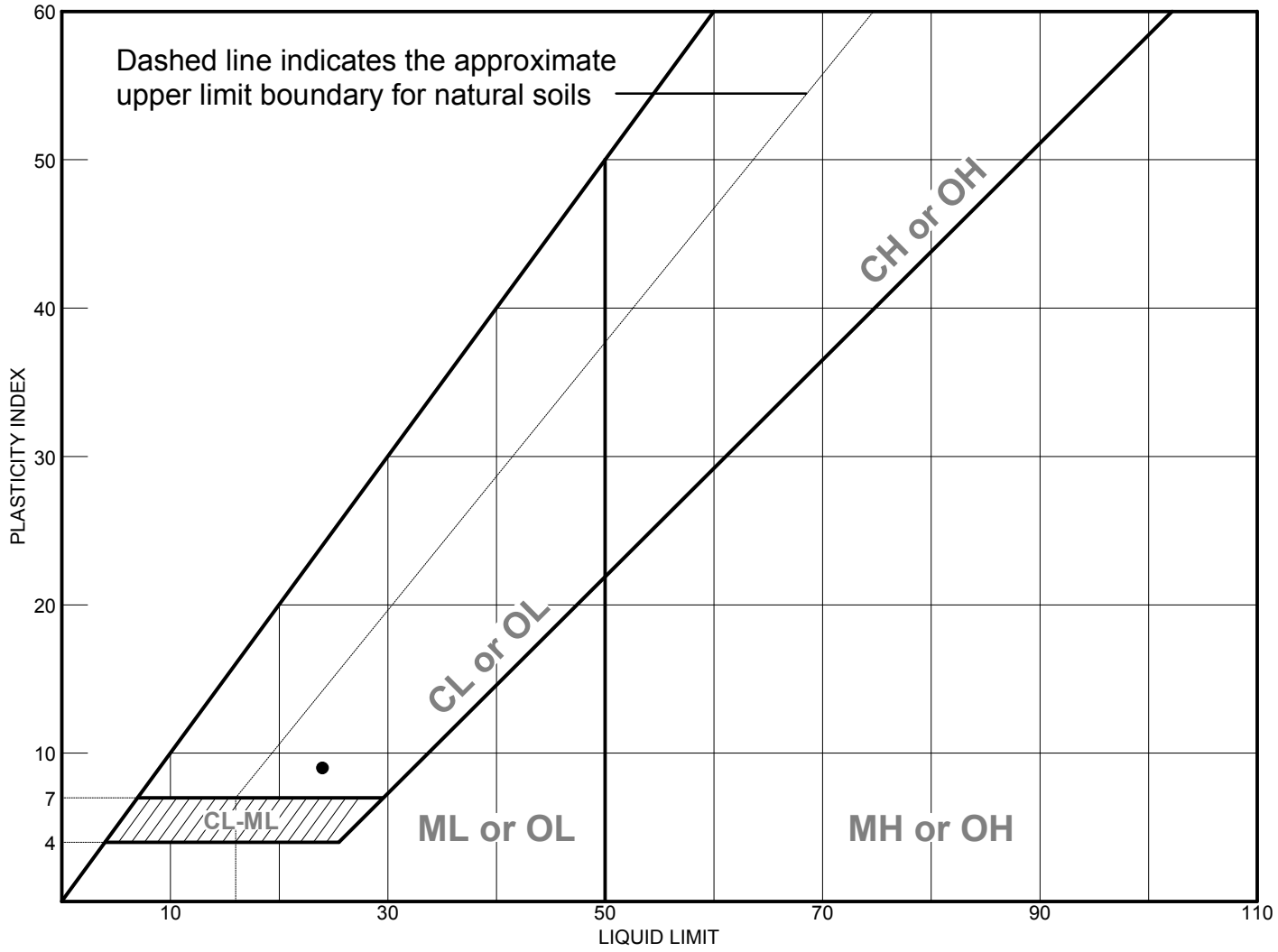
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay with sand	24	15	9	87.4	76.9	CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-12 **Elev./Depth:** 21.5-23.0'

Remarks:

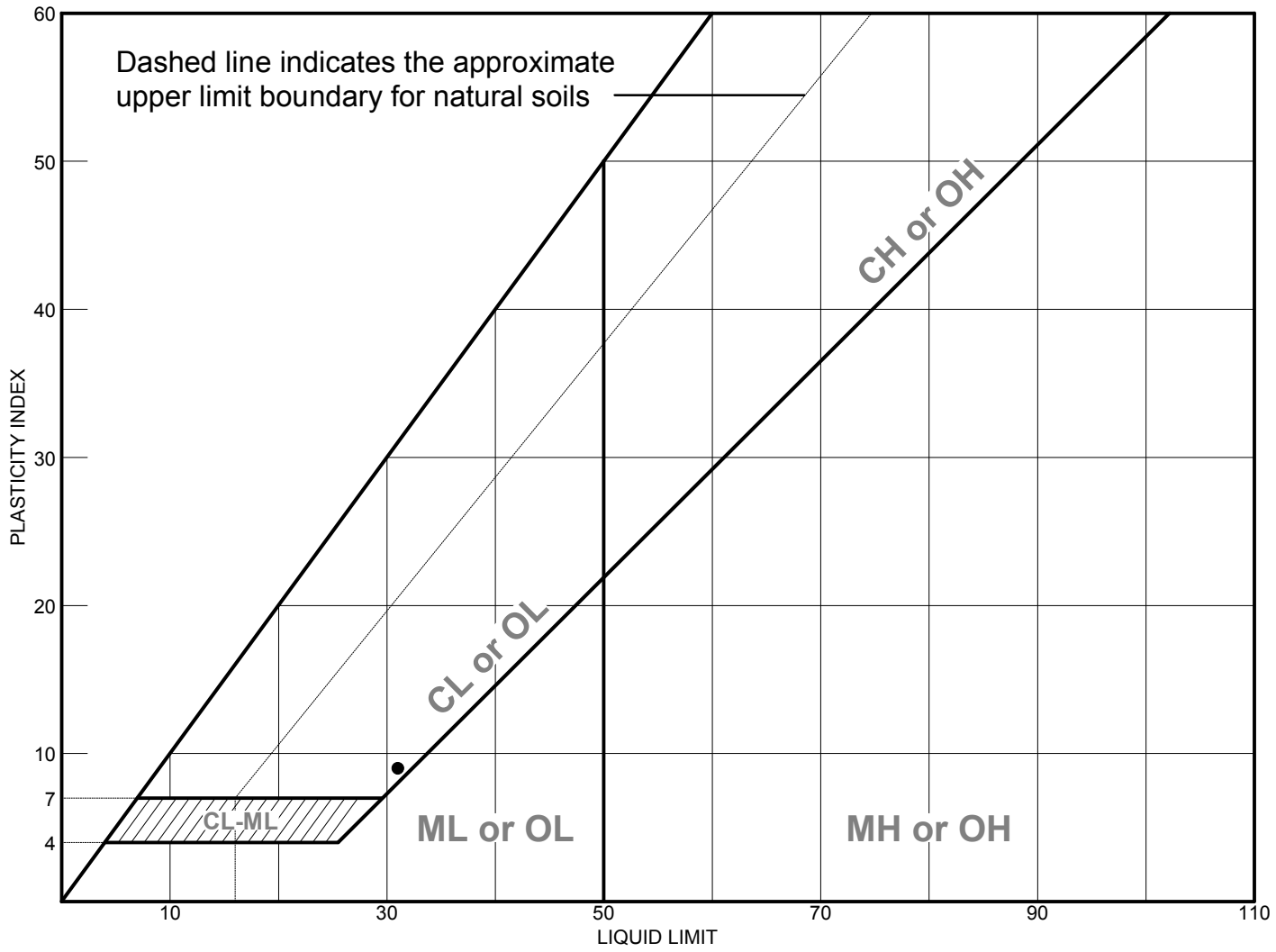
●

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Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	31	22	9			CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-12 **Elev./Depth:** 45-46'

Remarks:

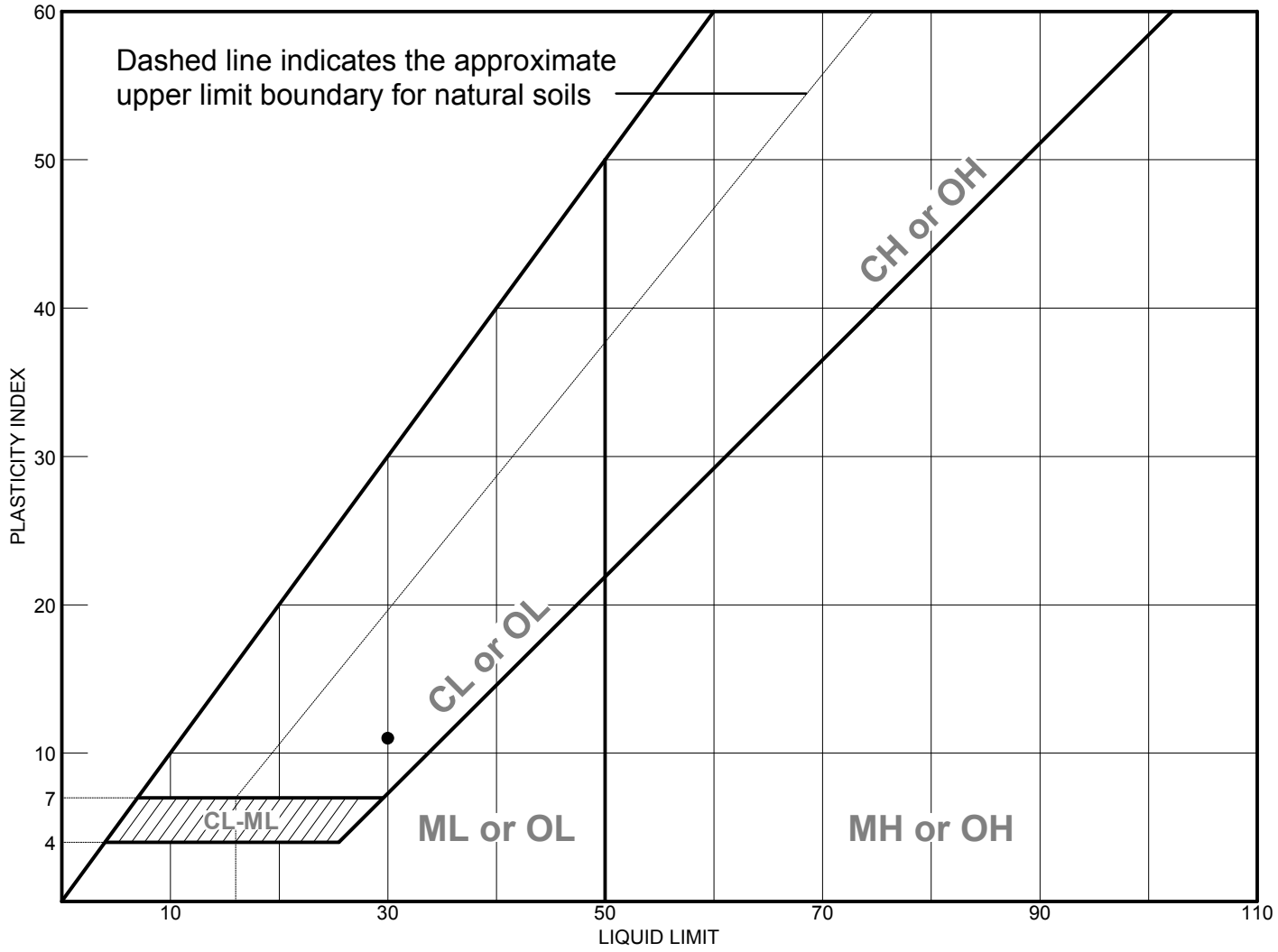
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	30	19	11			CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-13 **Elev./Depth:** 24.3-25.8'

Remarks:

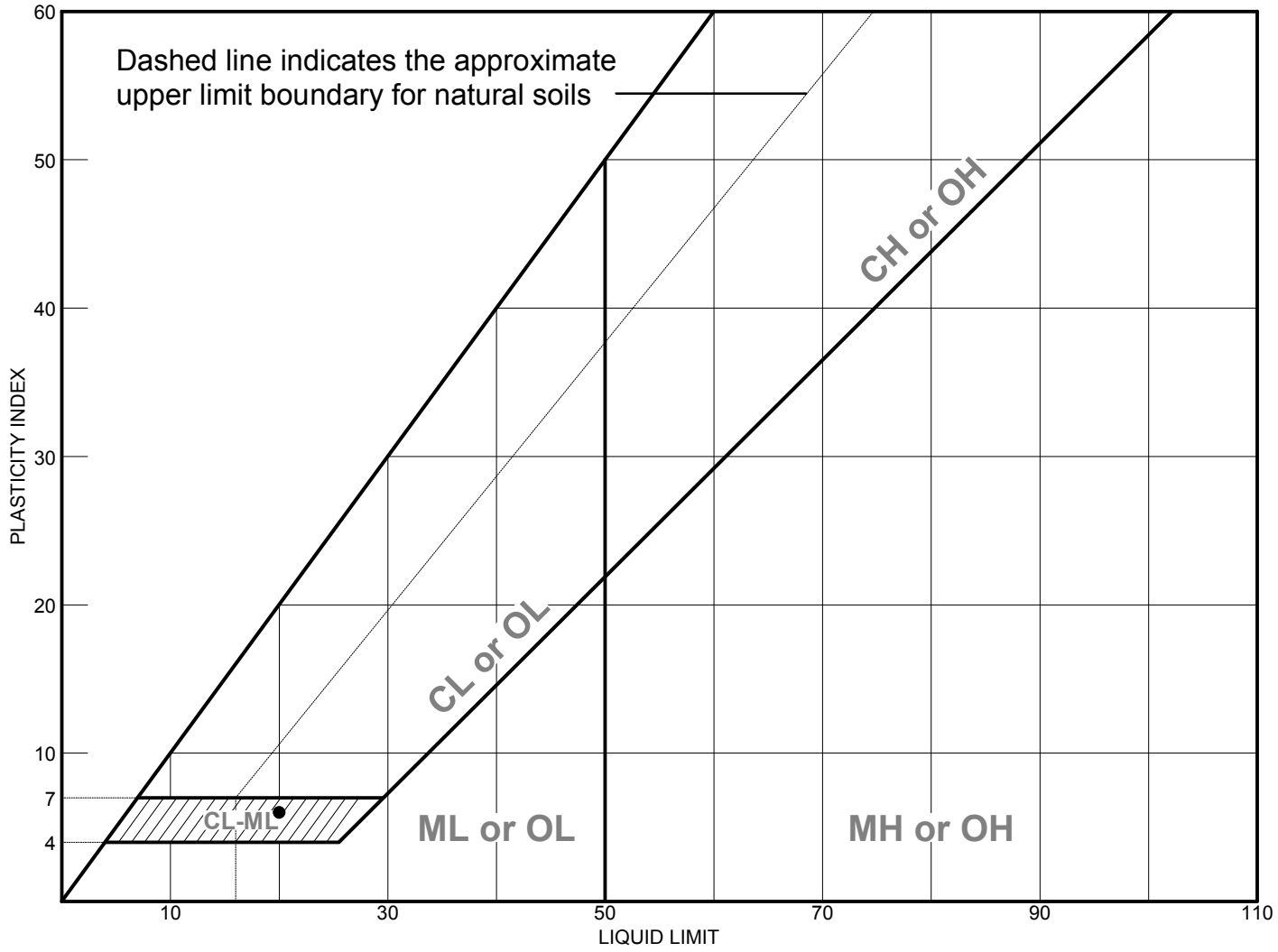
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	20	14	6			CL

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-13 **Elev./Depth:** 50-51.5'

Remarks:

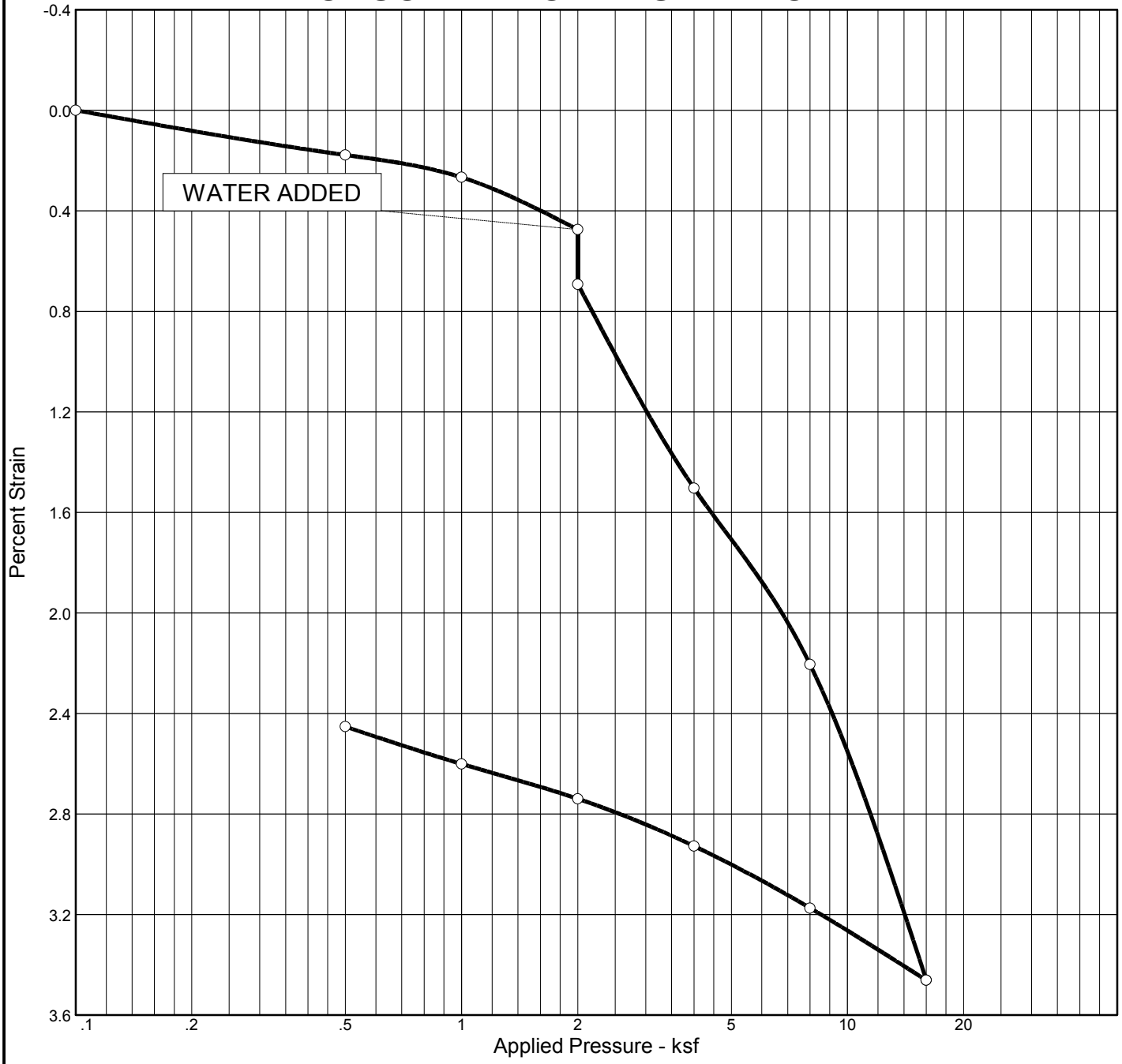
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
13.0 %	2.9 %	103.3			2.65		8.54	0.07	0.01		0.2	0.601

MATERIAL DESCRIPTION	USCS	AASHTO
Silty sand	SM	

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-1 **Elev./Depth:** 22.5-24'

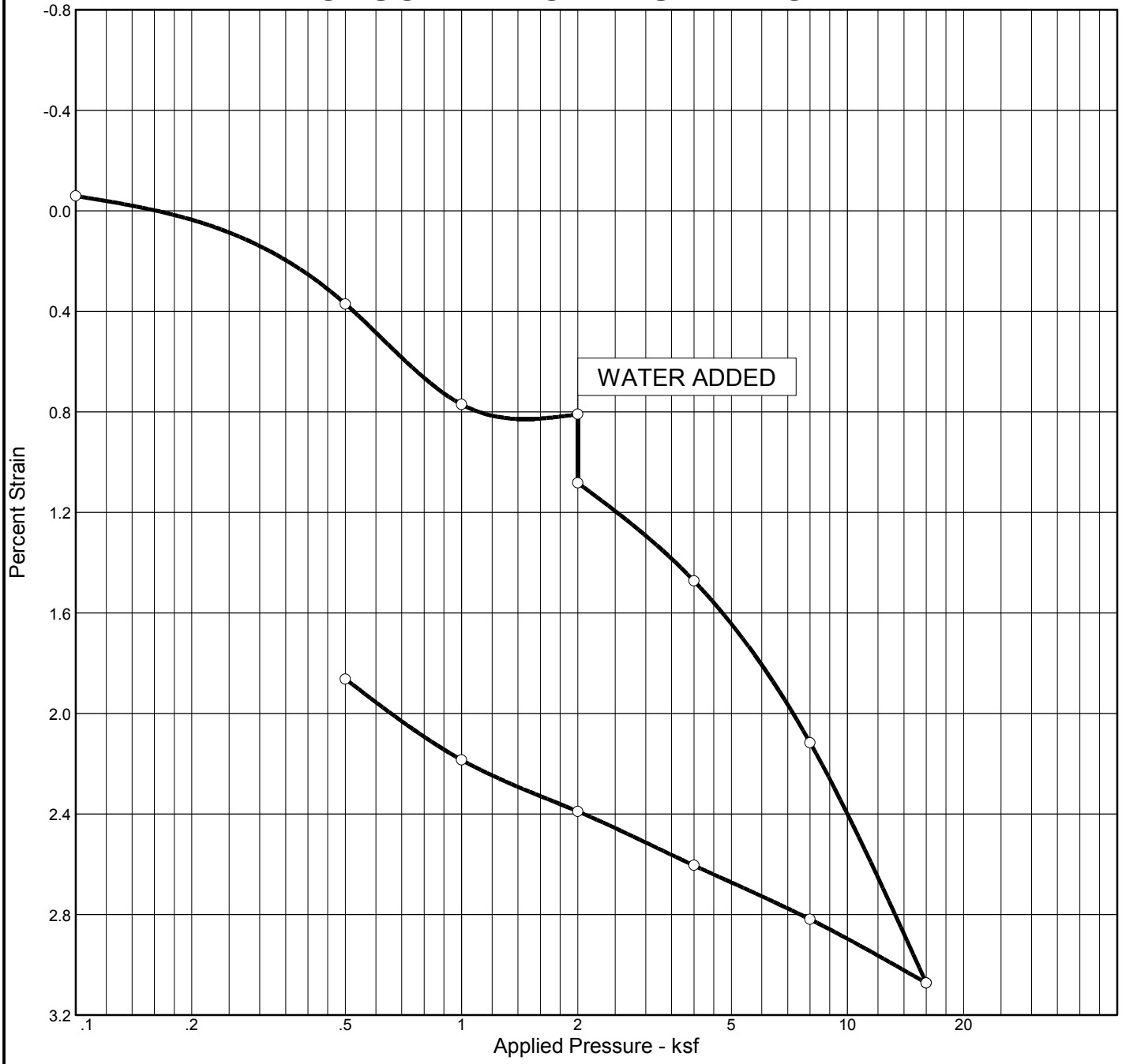
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
75.2 %	10.6 %	120.3			2.65		3.70	0.04	0.01		0.3	0.375

MATERIAL DESCRIPTION	USCS	AASHTO
Clayey sand	SC	

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-2 **Elev./Depth:** 20-21.5'

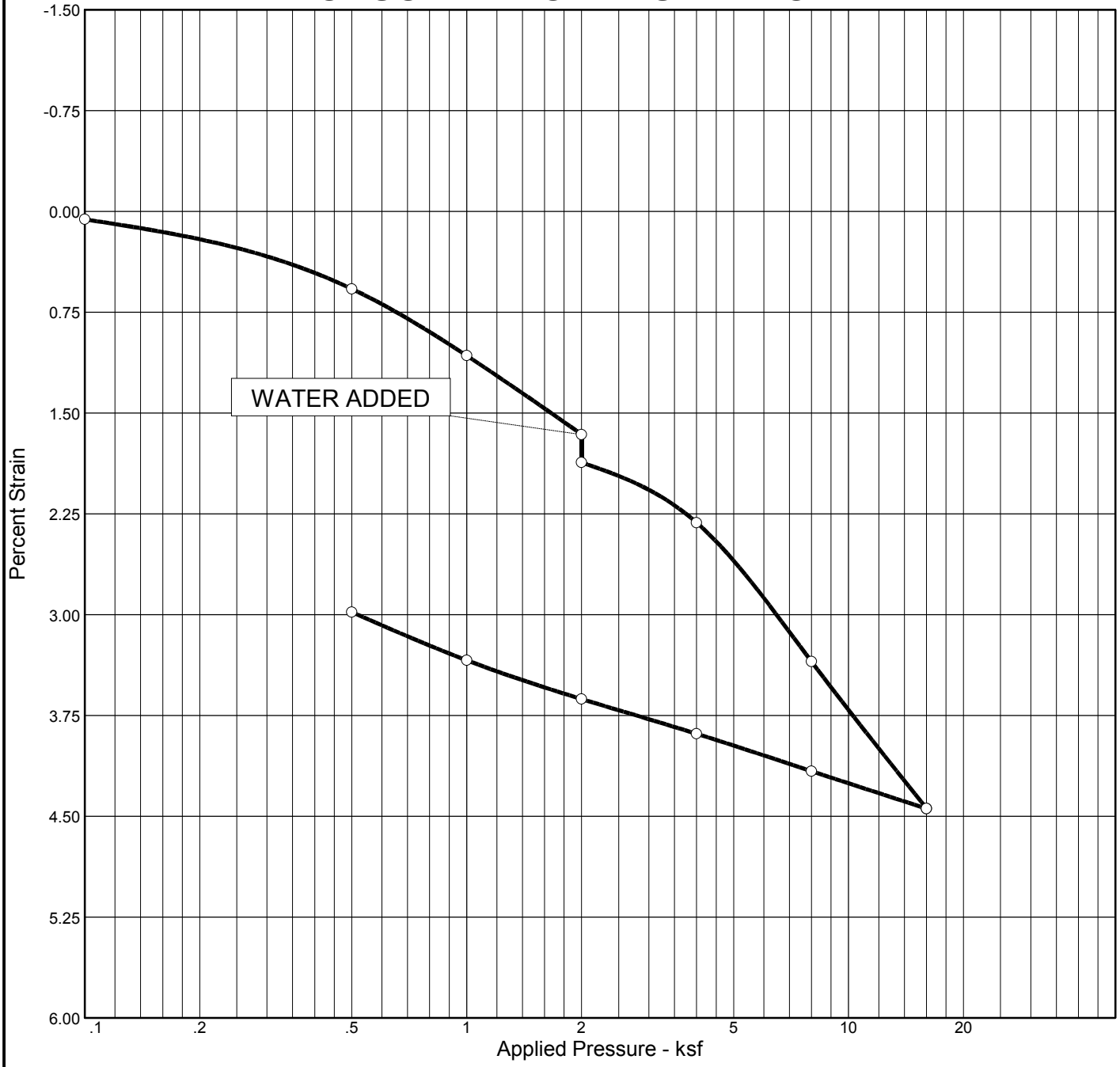
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
95.8 %	22.5 %	101.9	28	13	2.65		4.17	0.06	0.02		0.2	0.623

MATERIAL DESCRIPTION	USCS	AASHTO
Sandy lean clay	CL	

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-2 **Elev./Depth:** 30-31.5'

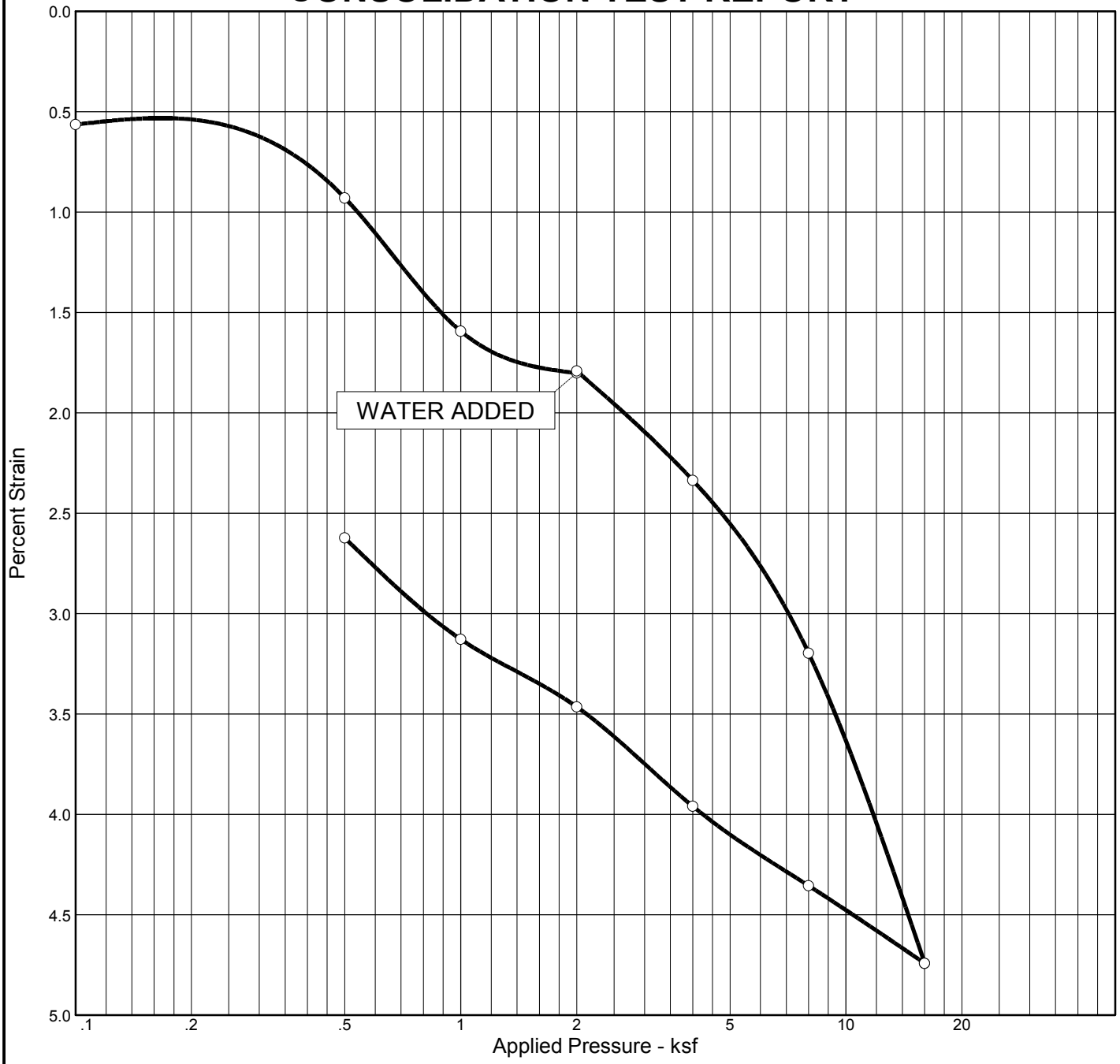
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Swell %	e_o
Sat.	Moist.											
80.6 %	10.6 %	122.7	26	11	2.65		5.30	0.07	0.02	2.03		0.349

MATERIAL DESCRIPTION	USCS	AASHTO
Lean clay	CL	

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-3 **Elev./Depth:** 35-36.5'

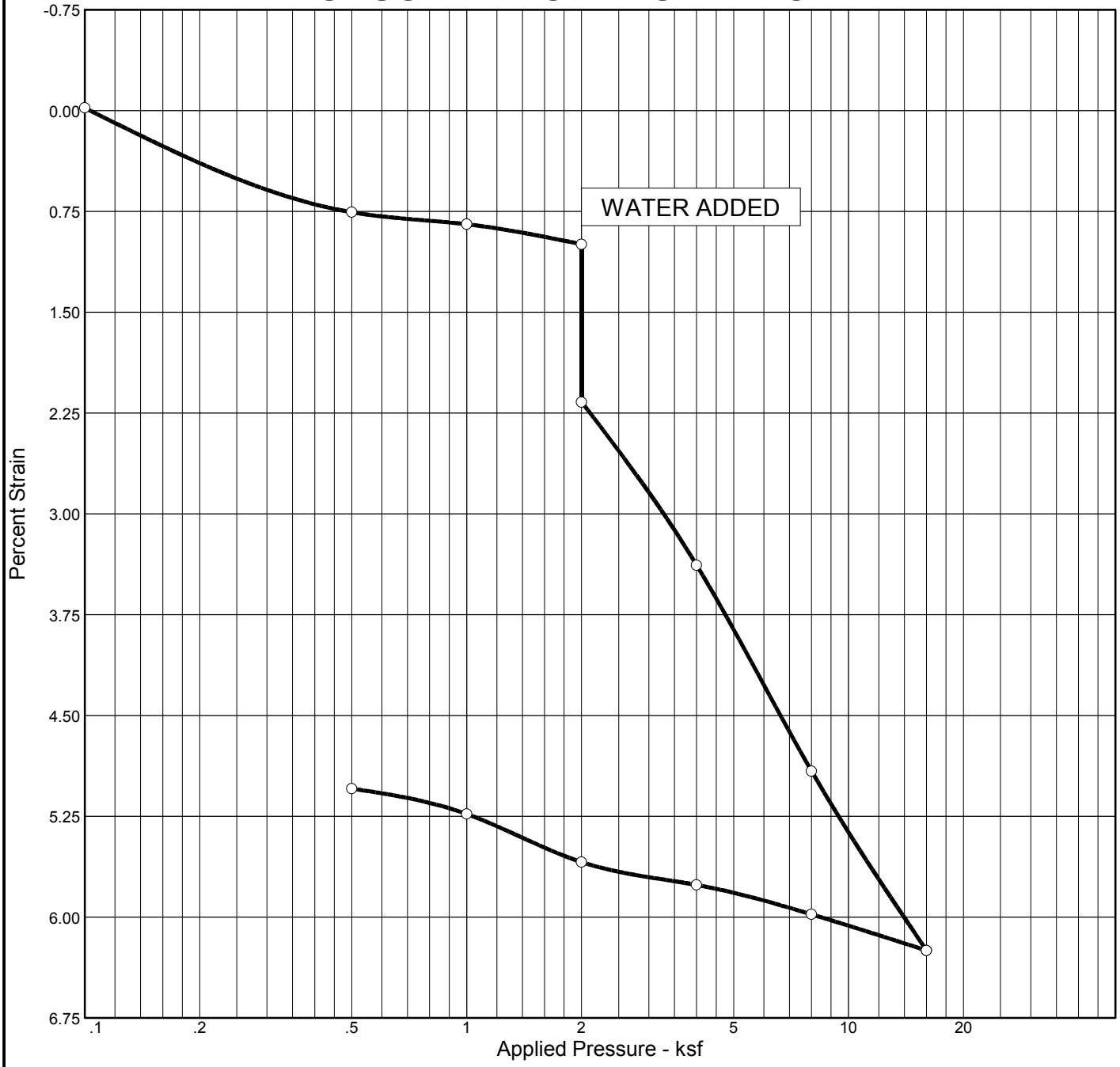
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
48.7 %	10.5 %	105.2			2.65		2.99	0.07	0.01		1.2	0.573

MATERIAL DESCRIPTION	USCS	AASHTO
Silty sand	SM	

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-4 **Elev./Depth:** 20-21.5'

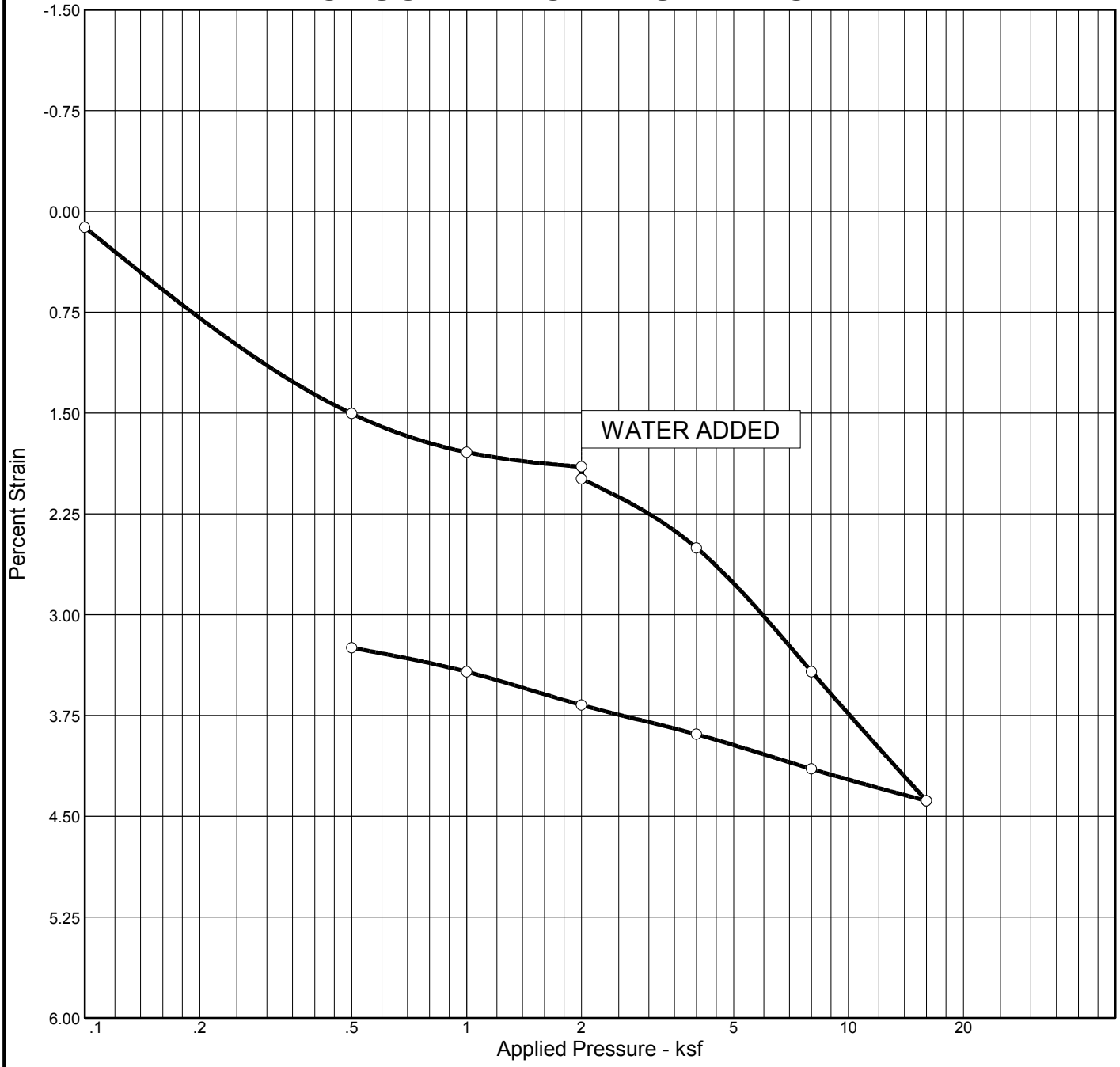
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
23.4 %	4.4 %	110.4			2.65		4.13	0.05	0.01		0.1	0.498

MATERIAL DESCRIPTION	USCS	AASHTO
Lean clay	CL	

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-5 **Elev./Depth:** 20-21.5'

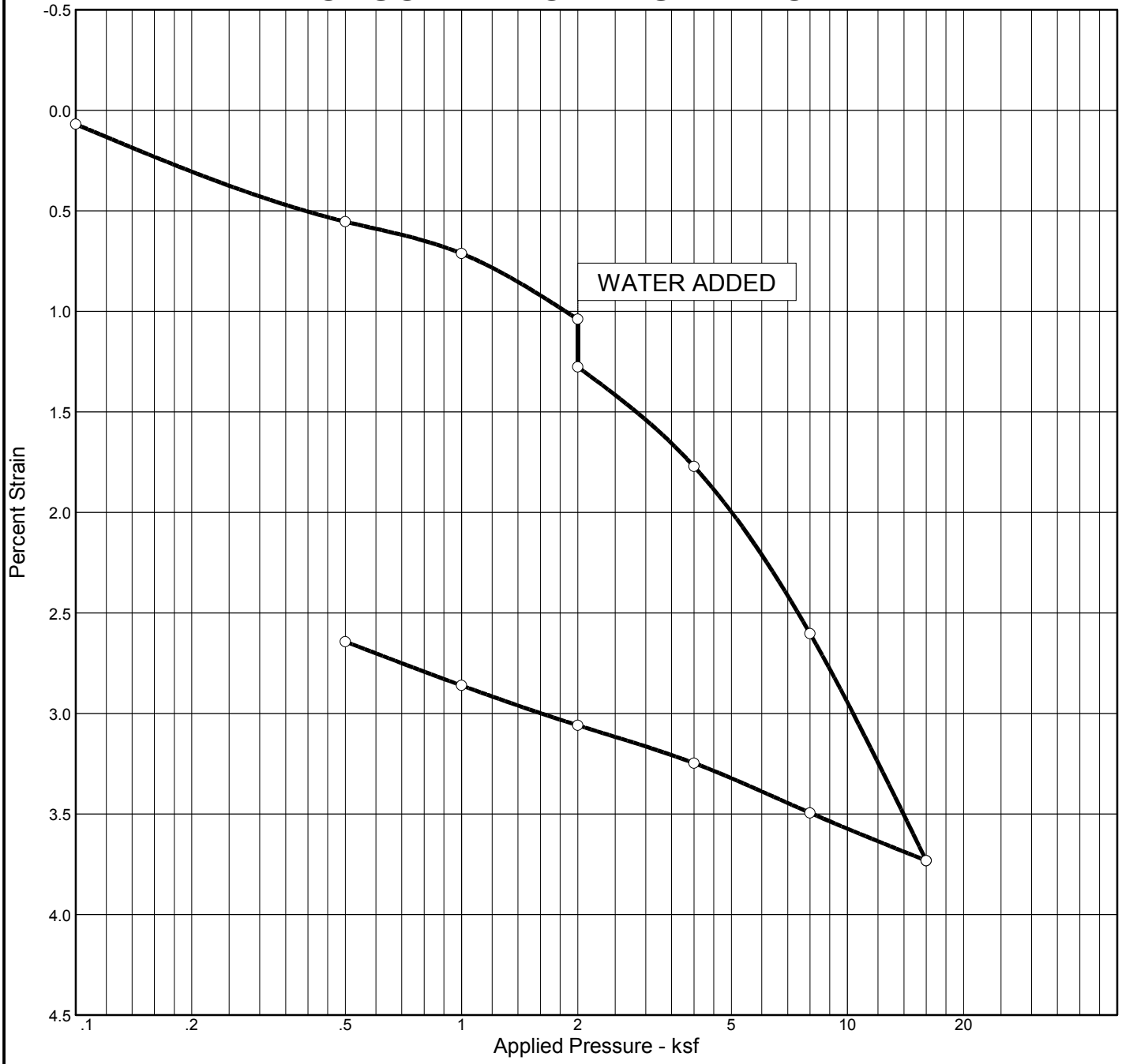
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
97.6 %	11.2 %	126.8			2.65		5.32	0.05	0.01		0.3	0.305

MATERIAL DESCRIPTION	USCS	AASHTO

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-5 **Elev./Depth:** 21-21.5'

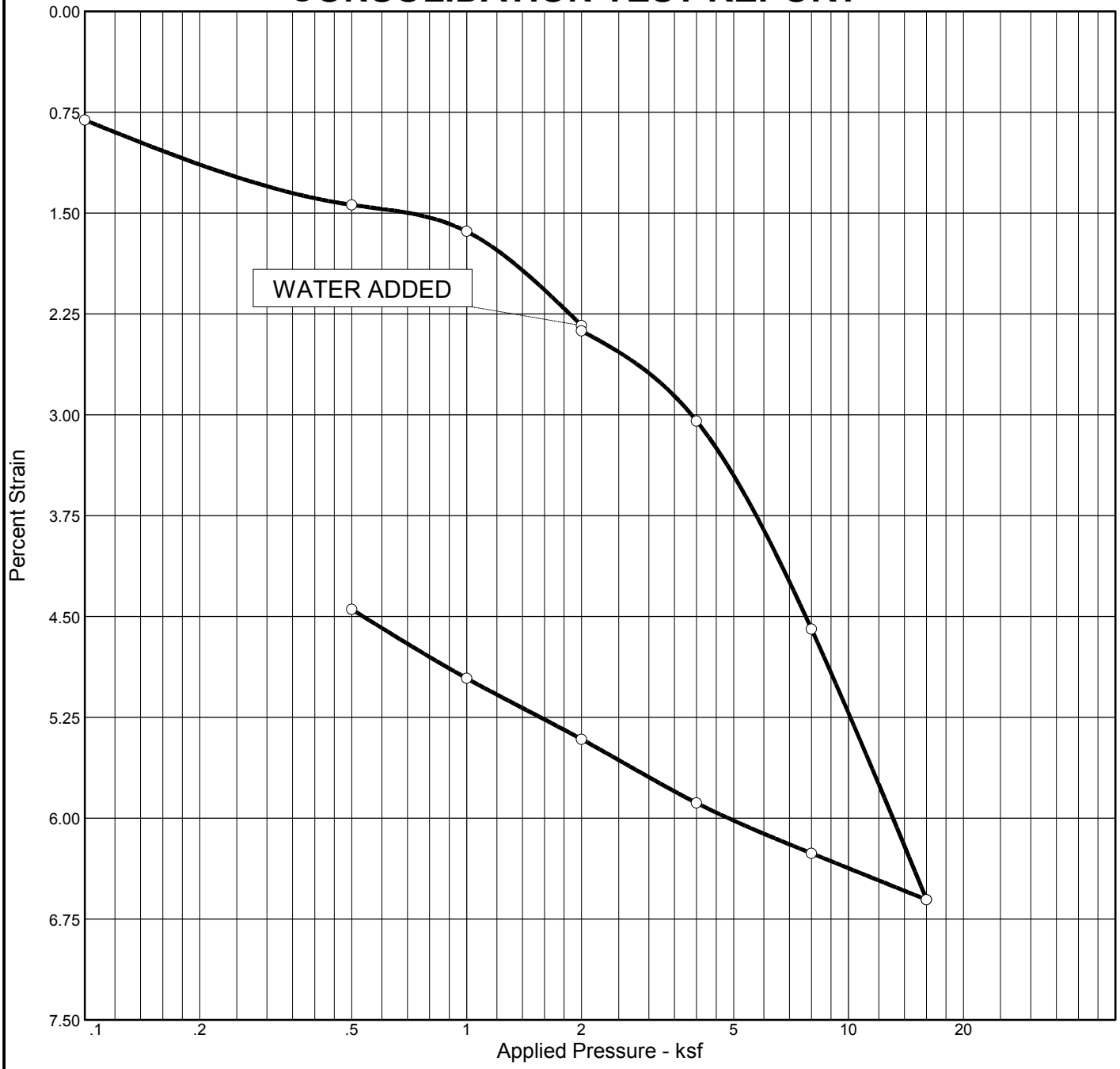
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
97.8 %	31.8 %	88.8			2.65		5.08	0.13	0.03		0.1	0.862

MATERIAL DESCRIPTION	USCS	AASHTO

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-5 **Elev./Depth:** 25-26.5'

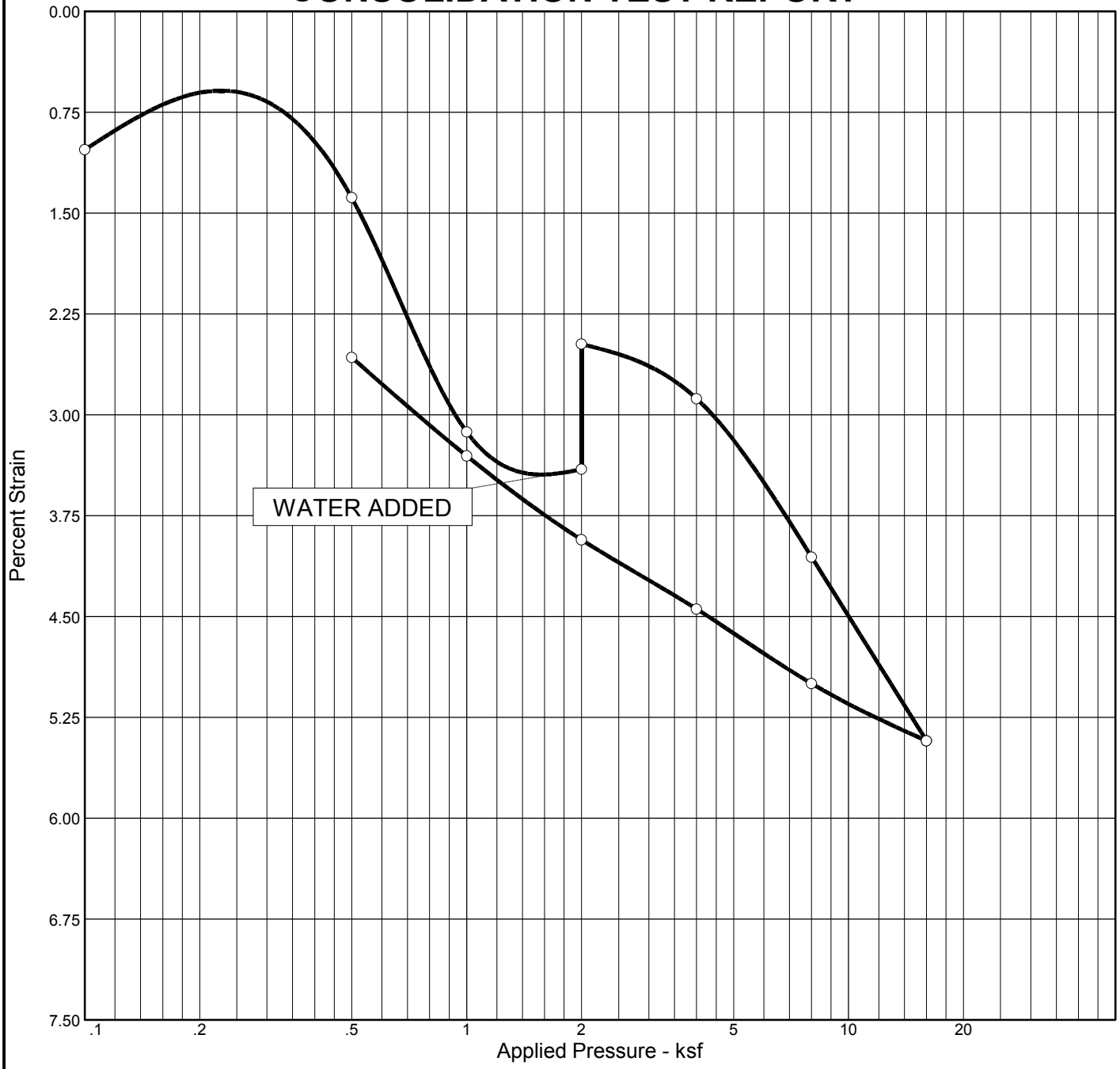
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Swell %	e_o
Sat.	Moist.											
101.9 %	18.8 %	111.1			2.65		8.88	0.07	0.03	5.68	0.9	0.489

MATERIAL DESCRIPTION	USCS	AASHTO

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno ,CA

Source: **Sample No.:** B-5 **Elev./Depth:** 35-36.5'

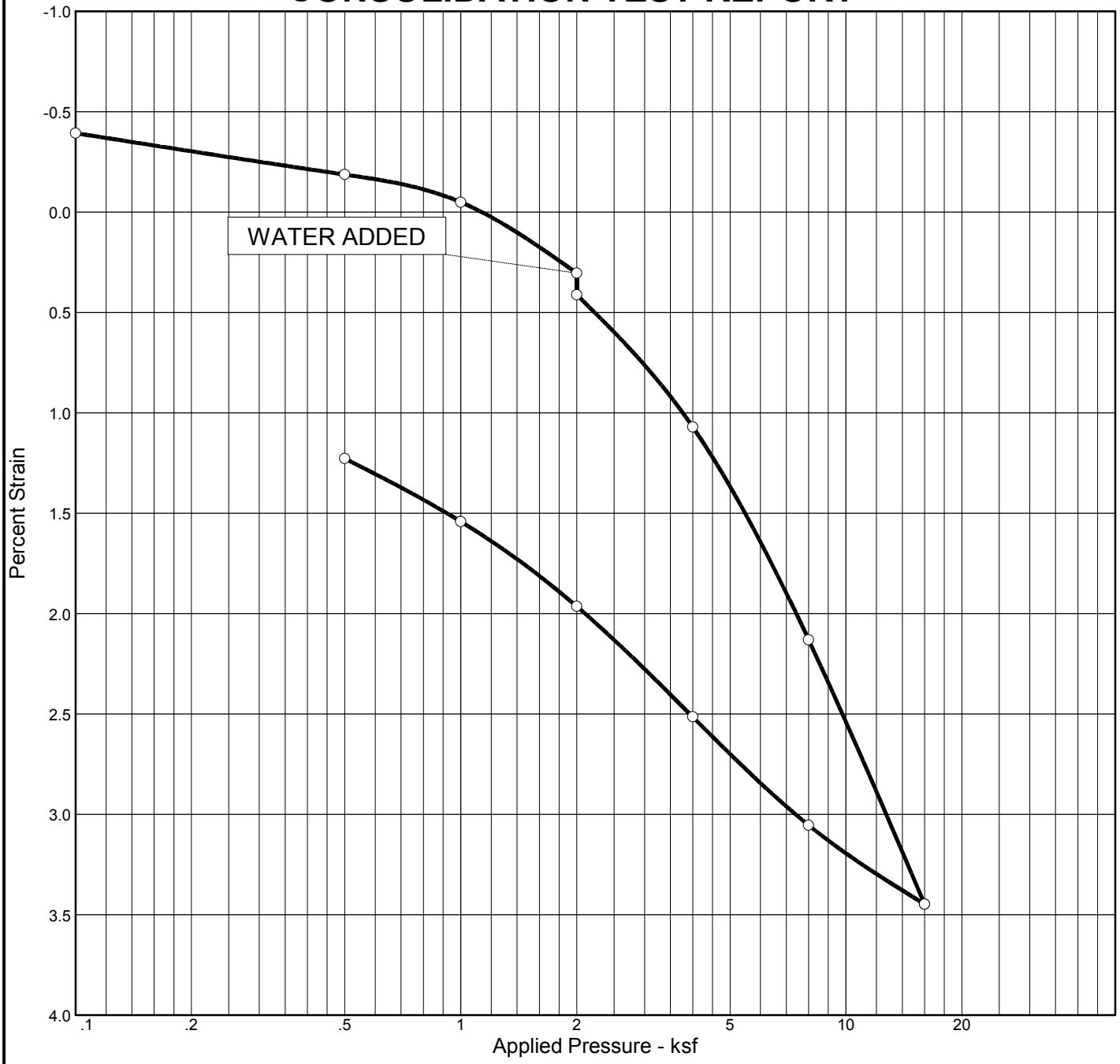
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
90.9 %	13.1 %	119.8			2.65		2.85	0.06	0.02		0.1	0.381

MATERIAL DESCRIPTION	USCS	AASHTO
Lean clay	CL	

Project No. C88004.01-03 **Client:** Precision Civil Engineering, Inc.

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-5 **Elev./Depth:** 40-41.5'

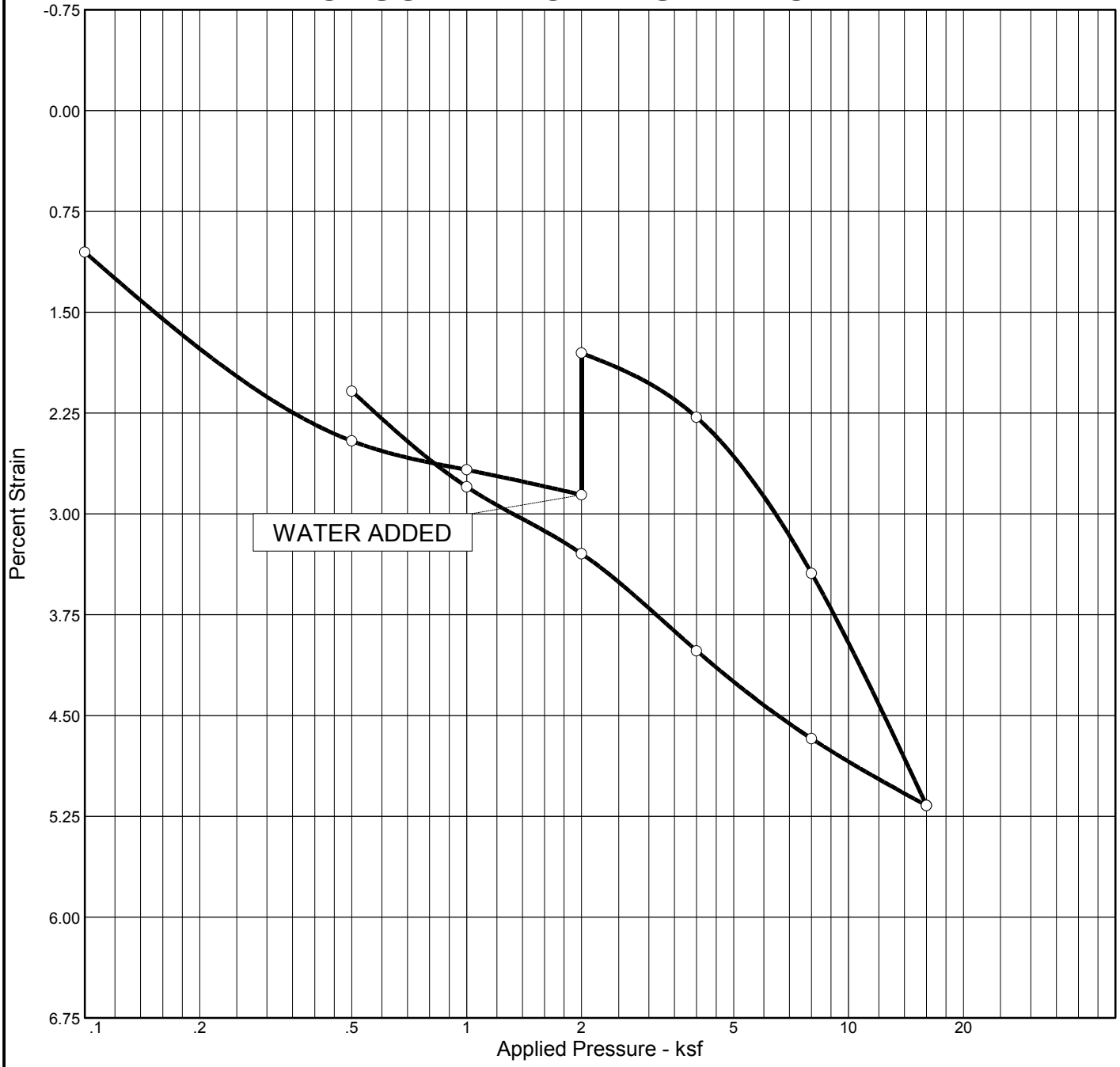
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Swell %	e_o
Sat.	Moist.											
101.2 %	23.5 %	102.4			2.65		11.09	0.09	0.03	11.91	1.1	0.616

MATERIAL DESCRIPTION	USCS	AASHTO
Lean clay	CL	

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-7 **Elev./Depth:** 33.5-35'

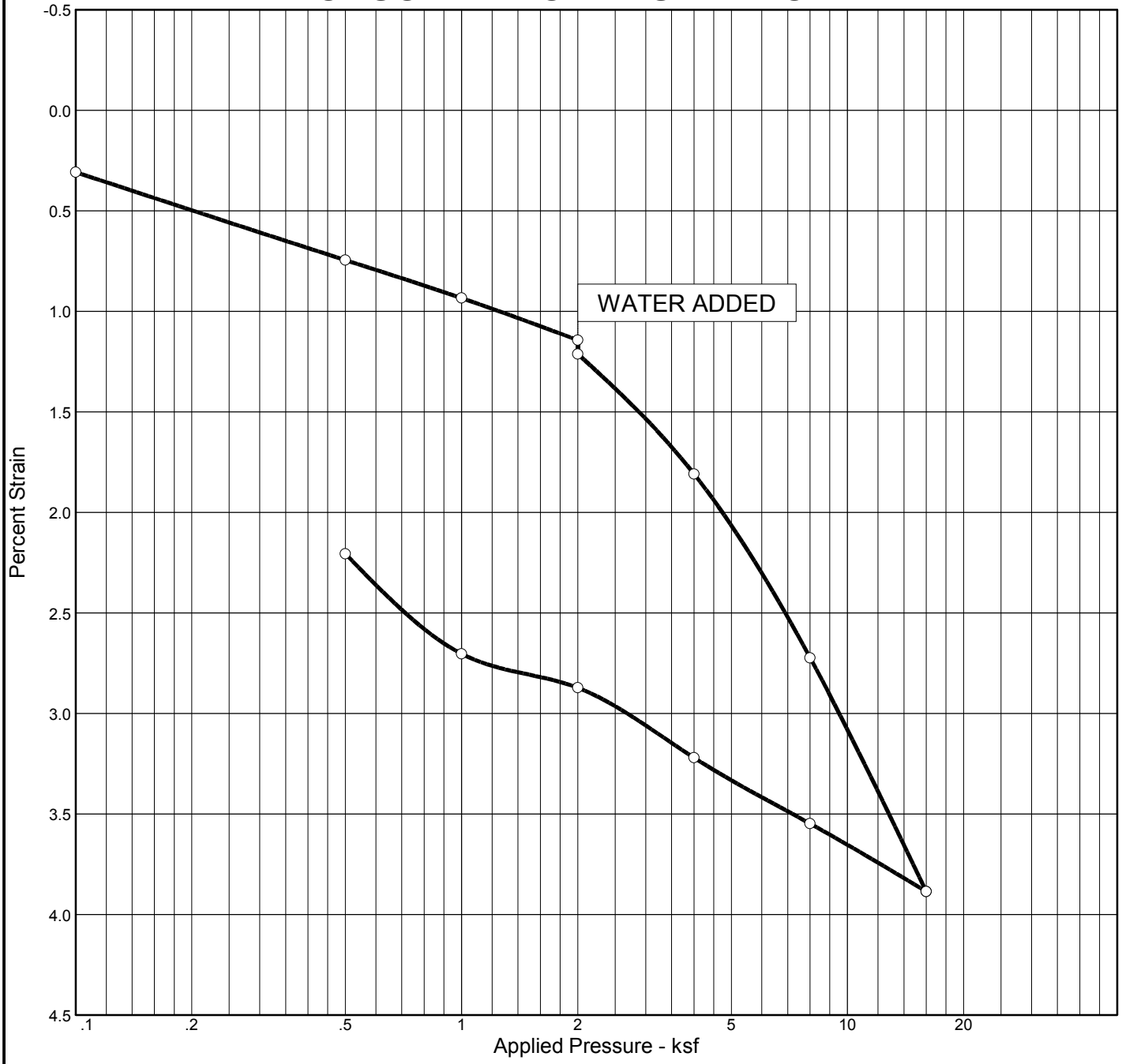
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
93.6 %	20.9 %	104.0			2.65		10.19	0.06	0.02		0.1	0.590

MATERIAL DESCRIPTION	USCS	AASHTO
Lean clay	CL	

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-8 **Elev./Depth:** 24-25.5'

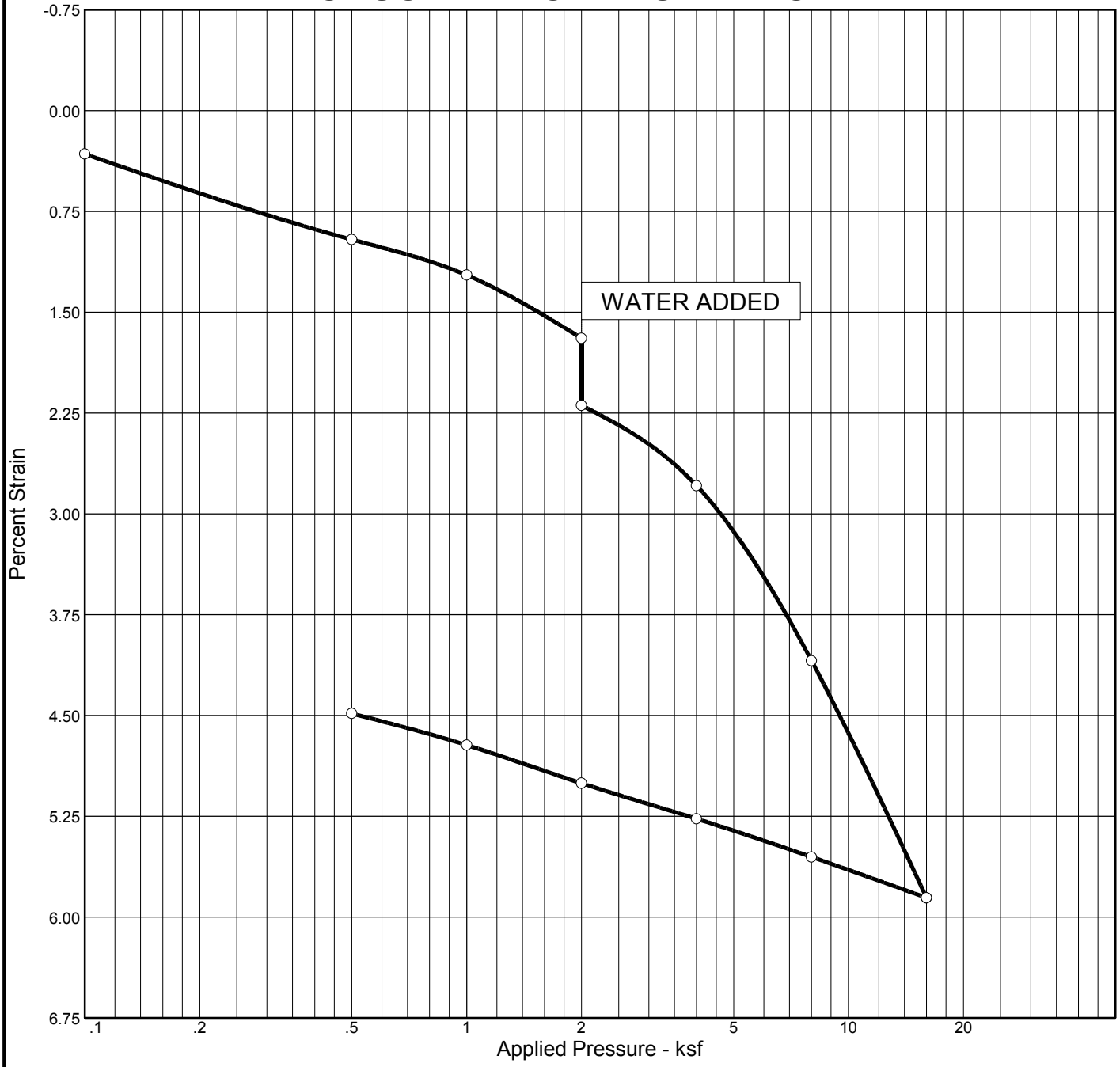
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
104.2 %	31.7 %	91.4			2.64		5.24	0.11	0.02		0.5	0.803

MATERIAL DESCRIPTION	USCS	AASHTO
Silt	ML	

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-9 **Elev./Depth:** 58.5-60'

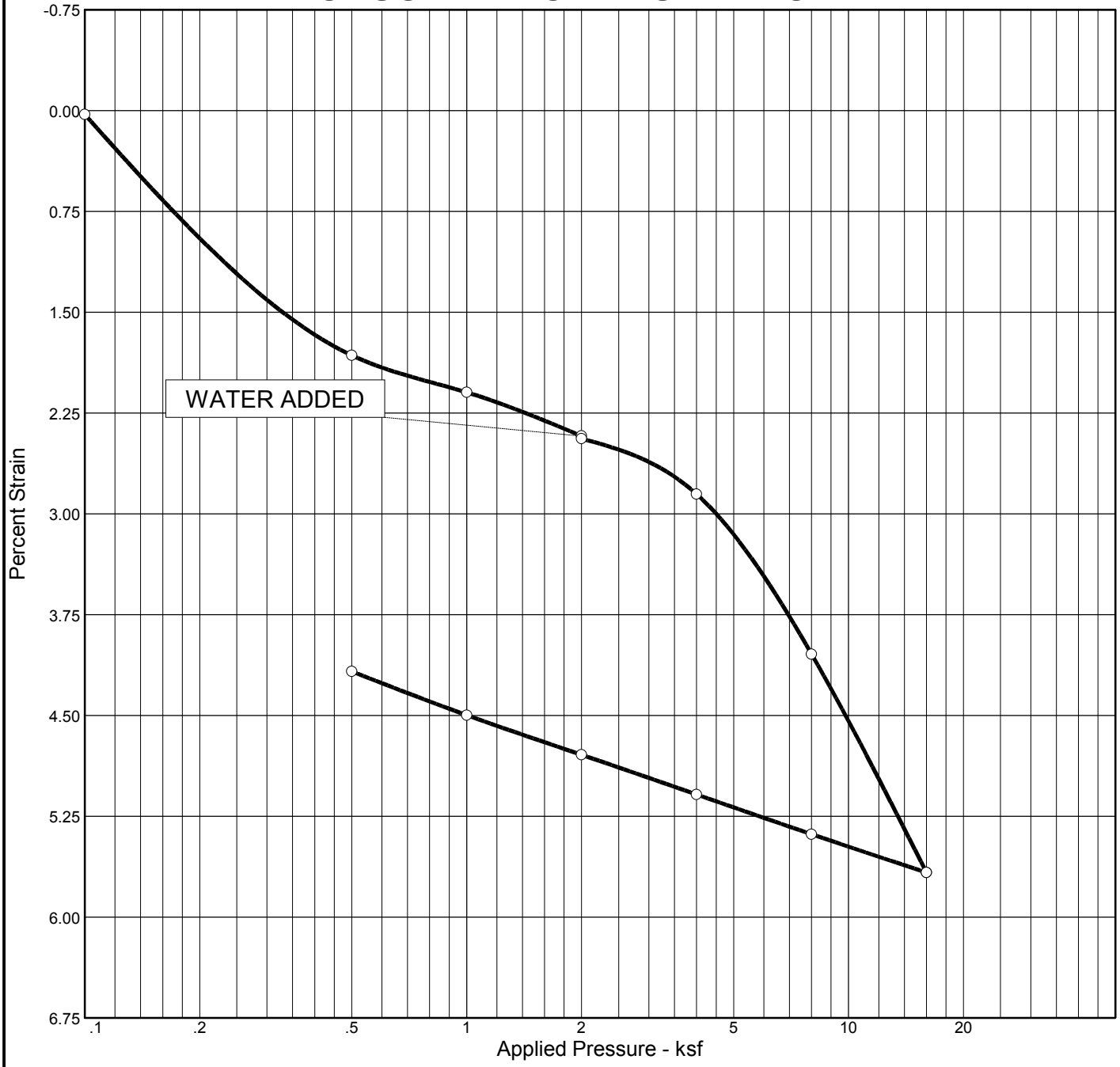
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Swell %	e_o
Sat.	Moist.											
94.1 %	22.8 %	100.7	24	9	2.65		5.22	0.09	0.02			0.643

MATERIAL DESCRIPTION	USCS	AASHTO
Lean clay with sand	CL	

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-12 **Elev./Depth:** 21.5-23.0'

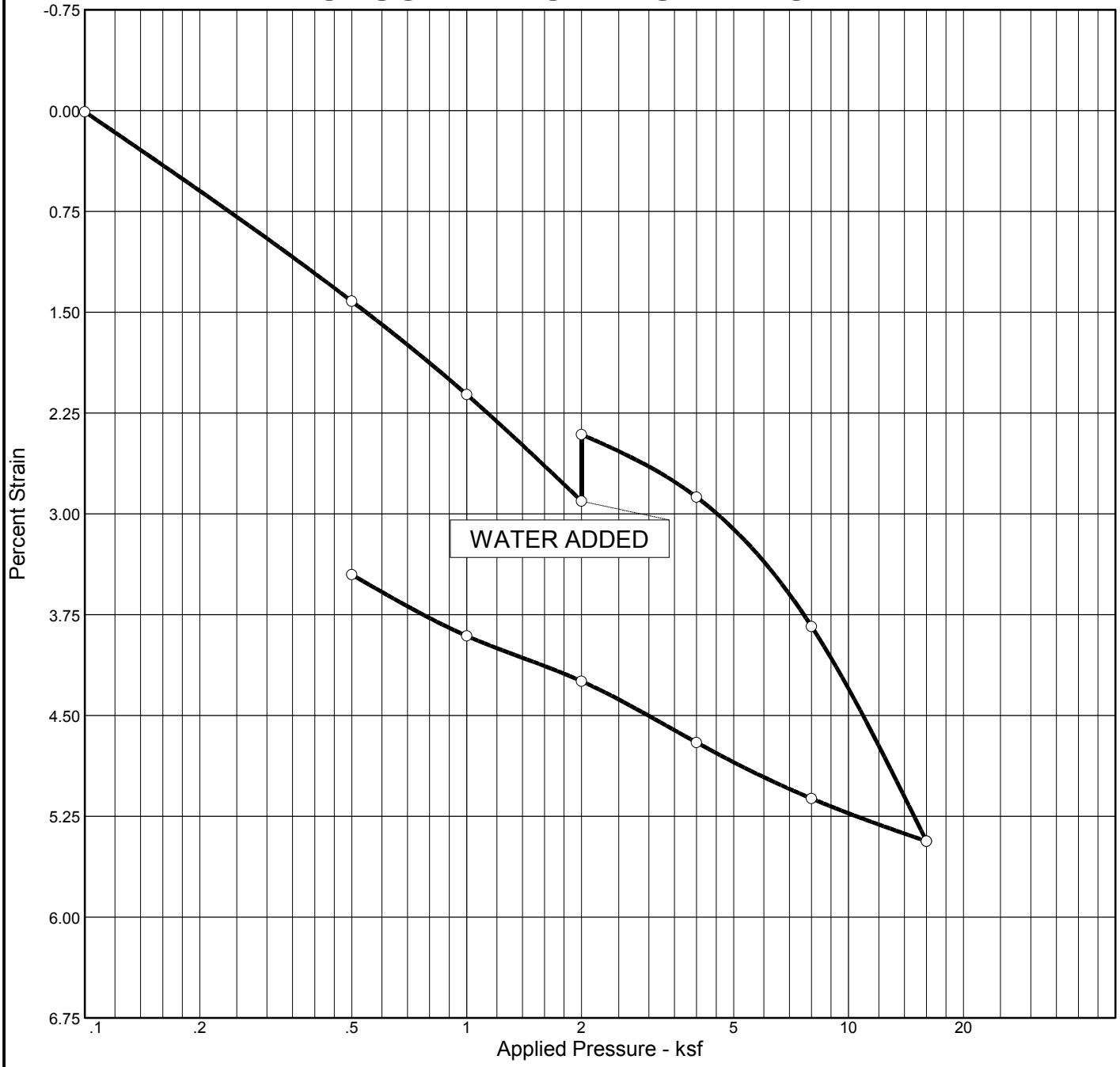
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Swell %	e_o
Sat.	Moist.											
104.0 %	23.5 %	103.5			2.65		6.38	0.09	0.02	4.13	0.5	0.599

MATERIAL DESCRIPTION	USCS	AASHTO
Lean clay	CL	

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-12 **Elev./Depth:** 27.5-29'

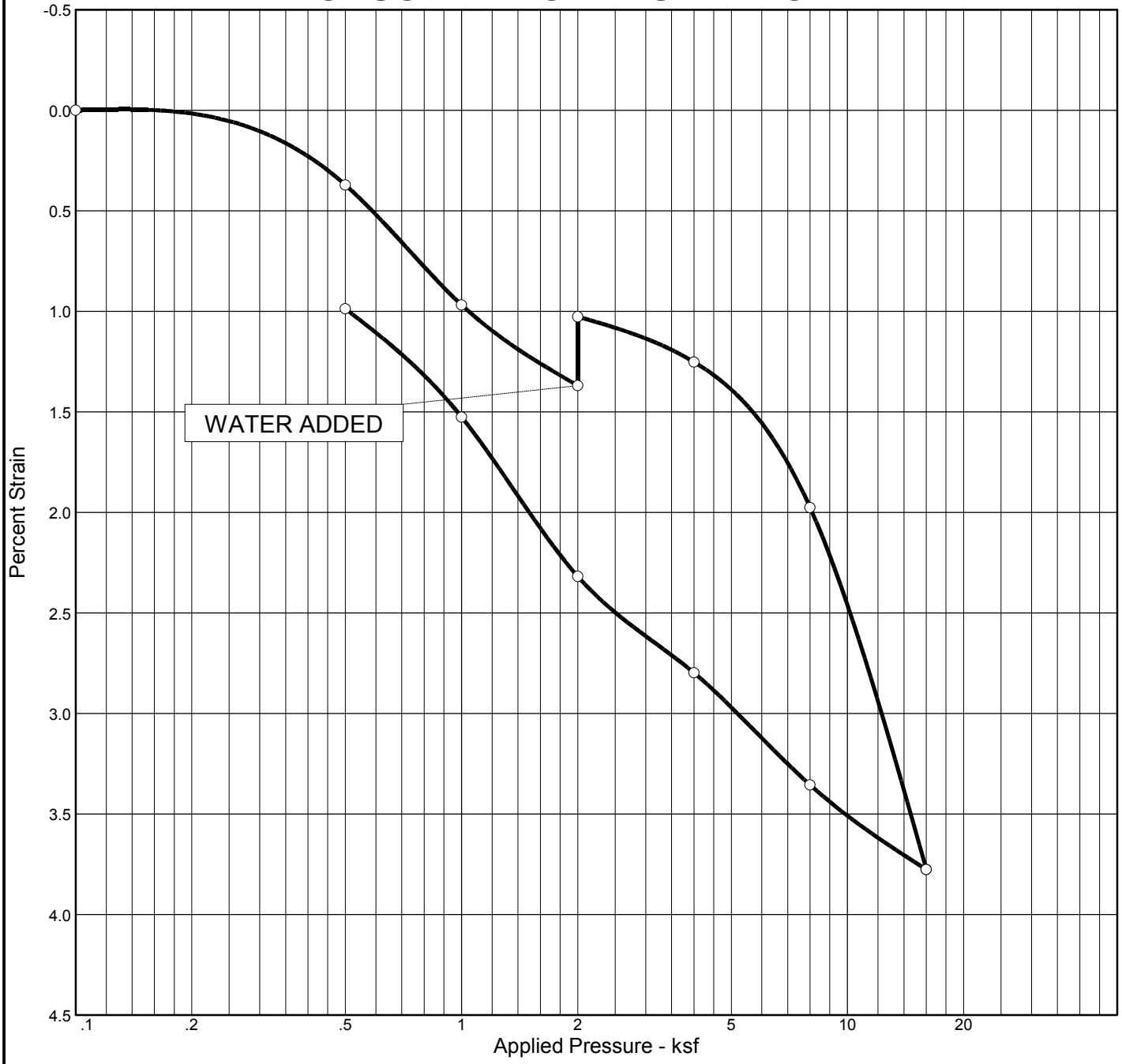
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Swell %	e_o
Sat.	Moist.											
93.0 %	24.7 %	97.1			2.65		7.42	0.11	0.03	4.87	0.4	0.704

MATERIAL DESCRIPTION	USCS	AASHTO
Lean clay	CL	

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

Source: **Sample No.:** B-13 **Elev./Depth:** 23.5-24.5'

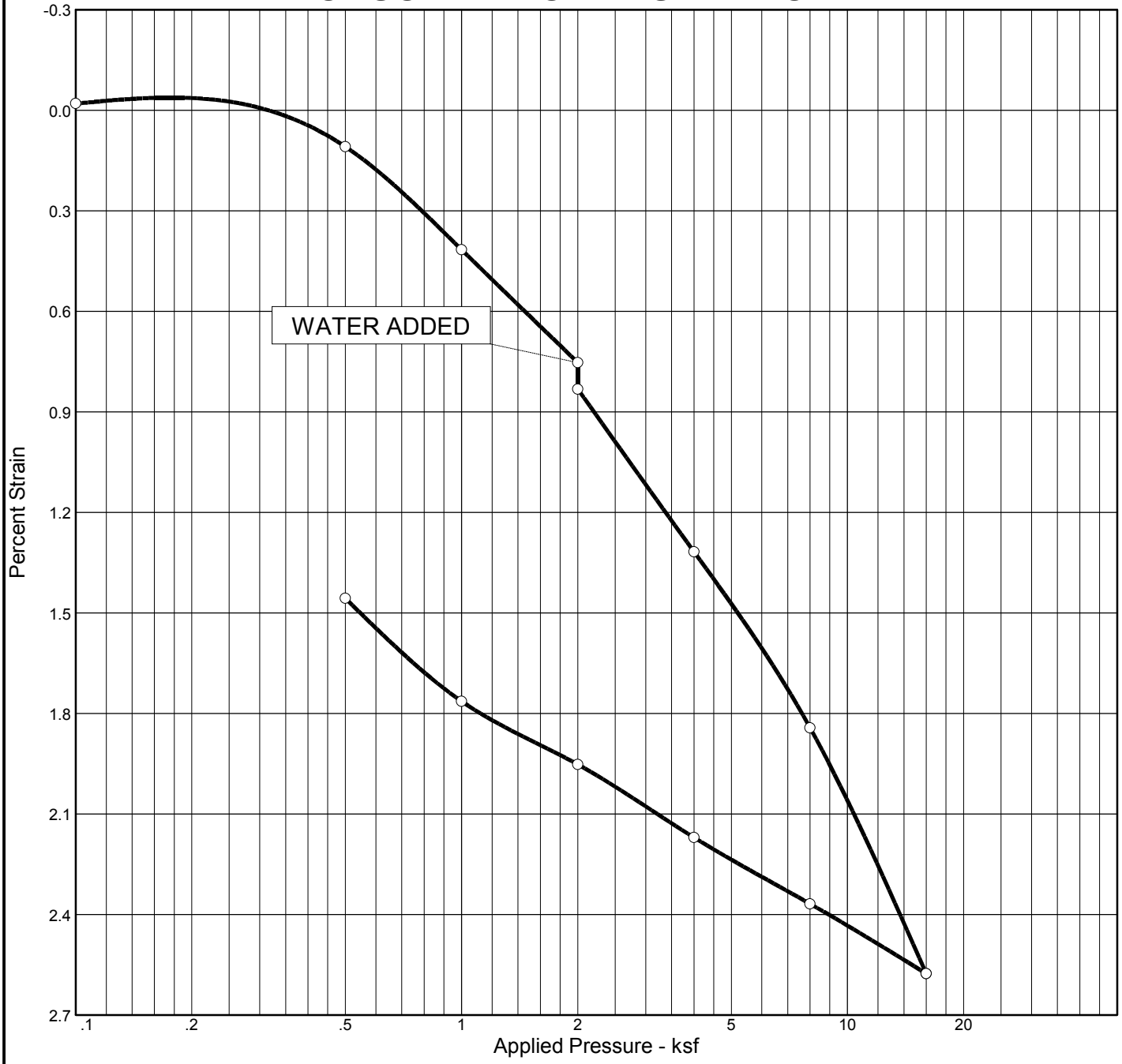
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Swell %	e_o
Sat.	Moist.											
80.5 %	13.8 %	113.7	20	6	2.65		2.04	0.04	0.01			0.456

MATERIAL DESCRIPTION	USCS	AASHTO
Lean clay	CL	

Project No. C88004.01-03 **Client:** Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

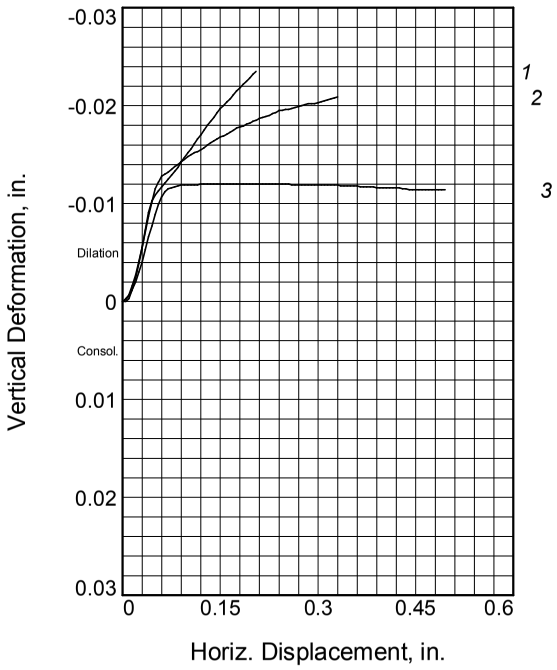
Source: **Sample No.:** B-13 **Elev./Depth:** 50-51.5'

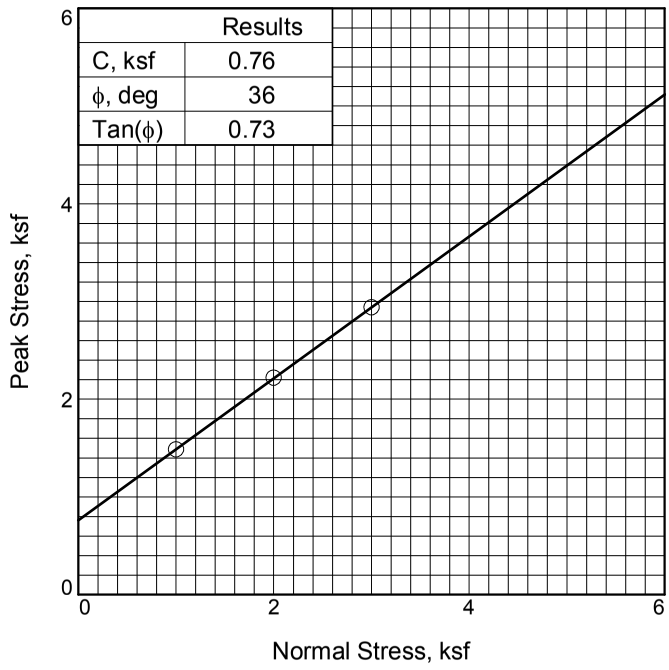
Moore Twining Associates, Inc.

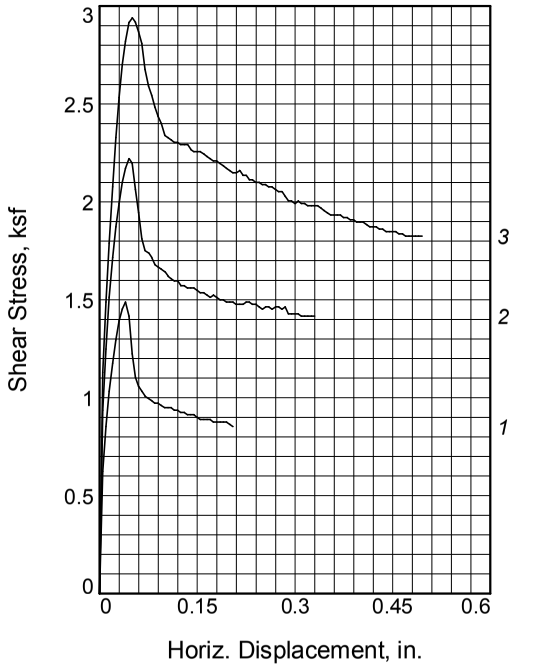
Fresno, CA

Remarks:

Figure







Sample No.		1	2	3
Initial	Water Content, %	10.7	11.4	10.9
	Dry Density, pcf	119.3	119.3	118.6
	Saturation, %	73.6	78.3	72.9
	Void Ratio	0.3864	0.3864	0.3951
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	13.6	13.3	13.5
	Dry Density, pcf	120.6	121.6	121.0
	Saturation, %	96.9	97.7	97.1
	Void Ratio	0.3715	0.3607	0.3673
	Diameter, in.	2.42	2.42	2.42
	Height, in.	0.99	0.98	0.98
Normal Stress, ksf		1.00	2.00	3.00
Peak Stress, ksf		1.49	2.22	2.94
Displacement, in.		0.04	0.05	0.05
Ultimate Stress, ksf				
Displacement, in.				
Strain at peak, %		1.7	1.9	2.1

Sample Type:
Description: Clayey sand

Specific Gravity= 2.65
Remarks:

Figure _____

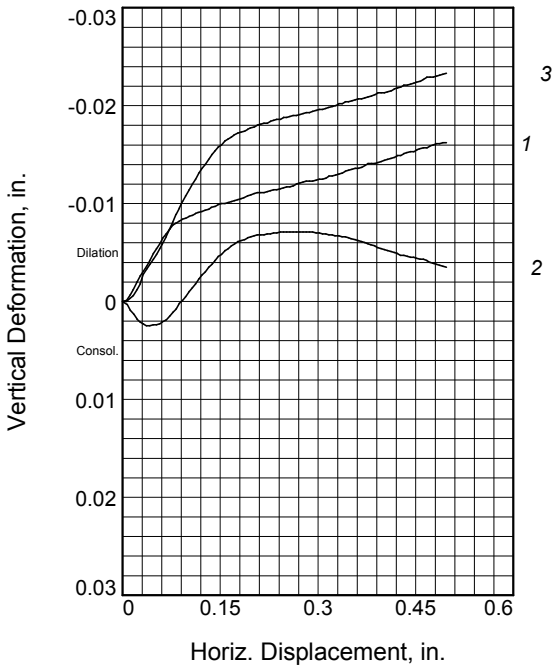
Client: Precision Civil Engineering, Inc.

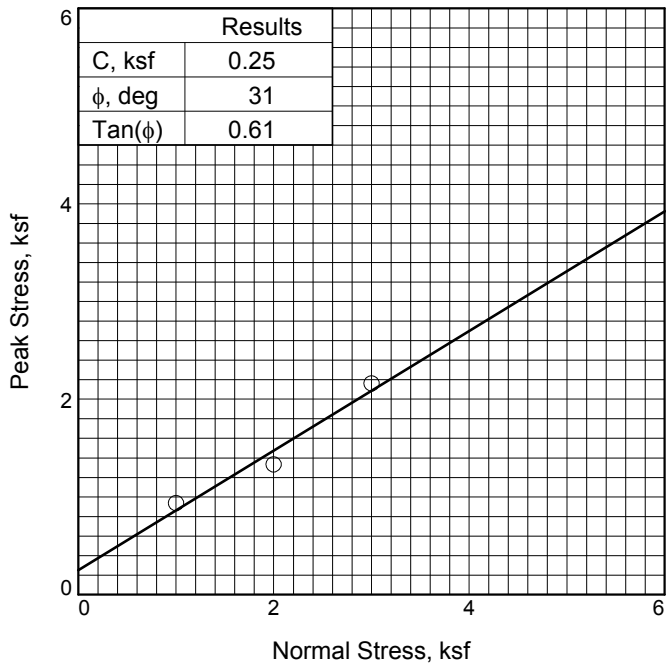
Project: Courthouse Park Site, Fresno, CA

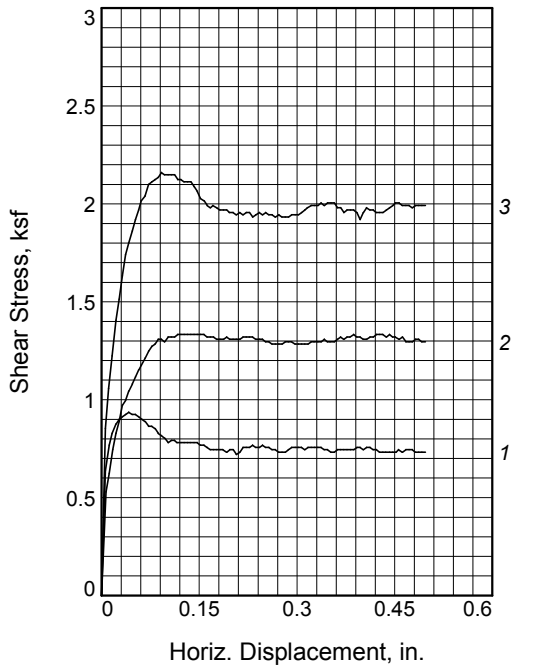
Sample Number: B-2 **Depth:** 20-21.5'

Proj. No.: C88004.01-03 **Date Sampled:** 7/7/23

DIRECT SHEAR TEST REPORT
Moore Twining Associates, Inc.
Fresno, CA







Sample No.		1	2	3
Initial	Water Content, %	4.5	4.5	5.6
	Dry Density, pcf	116.2	115.5	114.7
	Saturation, %	28.2	27.8	33.7
	Void Ratio	0.4240	0.4322	0.4422
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	15.2	15.5	15.9
	Dry Density, pcf	116.9	116.4	115.7
	Saturation, %	97.2	97.4	97.9
	Void Ratio	0.4155	0.4208	0.4292
	Diameter, in.	2.42	2.42	2.42
	Height, in.	0.99	0.99	0.99
Normal Stress, ksf		1.00	2.00	3.00
Peak Stress, ksf		0.94	1.33	2.16
Displacement, in.		0.04	0.12	0.09
Ultimate Stress, ksf				
Displacement, in.				
Strain at peak, %		1.7	4.8	3.8

Sample Type:
Description:

Specific Gravity= 2.65
Remarks:

Figure _____

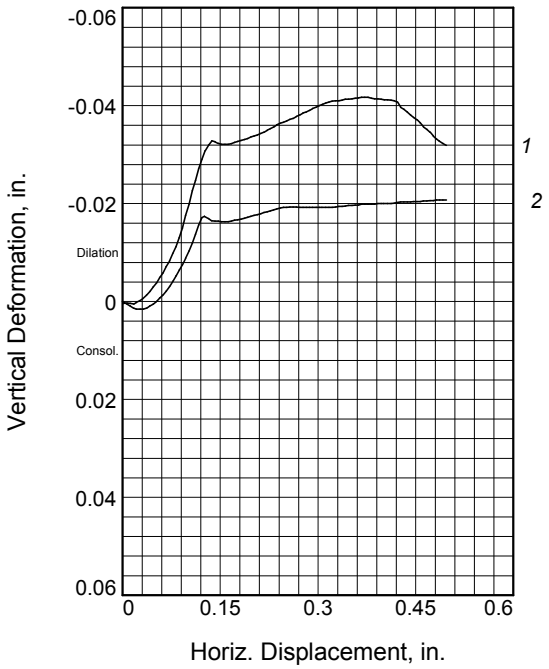
Client: Precision Civil Engineering, Inc.

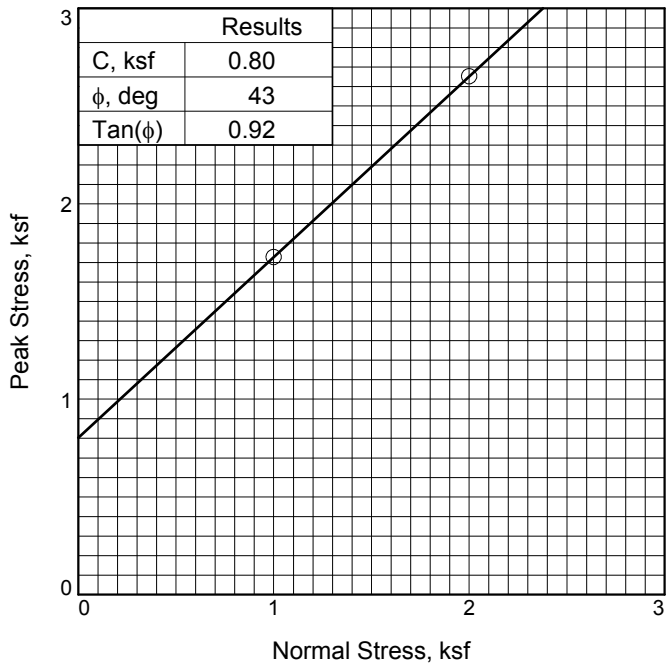
Project: Courthouse Park Site, Fresno, CA

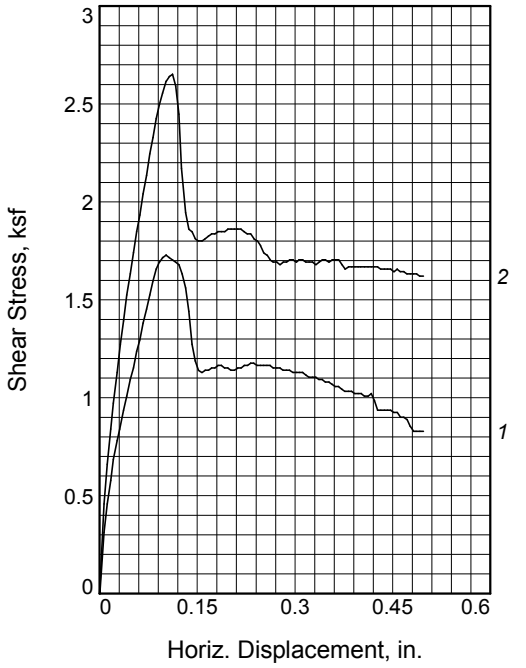
Sample Number: B-3 **Depth:** 8.5-10'

Proj. No.: C88004.01-03 **Date Sampled:** 7/7/23

DIRECT SHEAR TEST REPORT
Moore Twining Associates, Inc.
Fresno, CA







Sample No.		1	2	3
Initial	Water Content, %	11.1	10.6	10.2
	Dry Density, pcf	110.4	111.8	107.5
	Saturation, %	59.1	58.7	50.2
	Void Ratio	0.4988	0.4802	0.5385
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	21.2	16.8	18.9
	Dry Density, pcf	111.8	113.2	109.2
	Saturation, %	116.7	96.5	96.9
	Void Ratio	0.4803	0.4612	0.5154
	Diameter, in.	2.42	2.42	2.42
	Height, in.	0.99	0.99	0.98
Normal Stress, ksf		1.00	2.00	
Peak Stress, ksf		1.73	2.65	
Displacement, in.		0.10	0.11	
Ultimate Stress, ksf				
Displacement, in.				
Strain at peak, %		4.2	4.6	4.6

Sample Type:
Description: Silty sand

Specific Gravity= 2.65
Remarks:

Figure _____

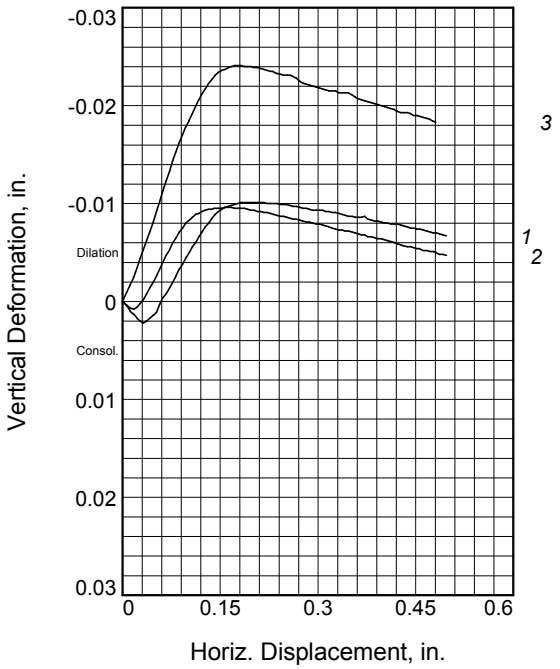
Client: Precision Civil Engineering, Inc.

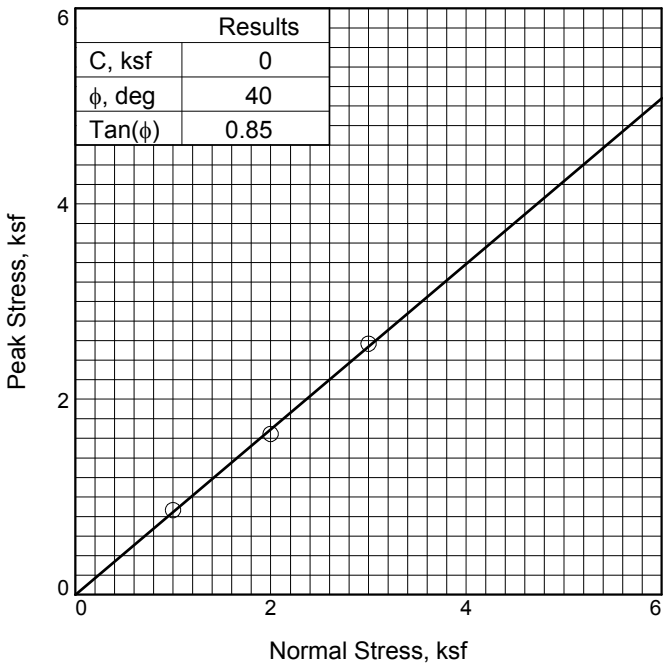
Project: Courthouse Park Site, Fresno, CA

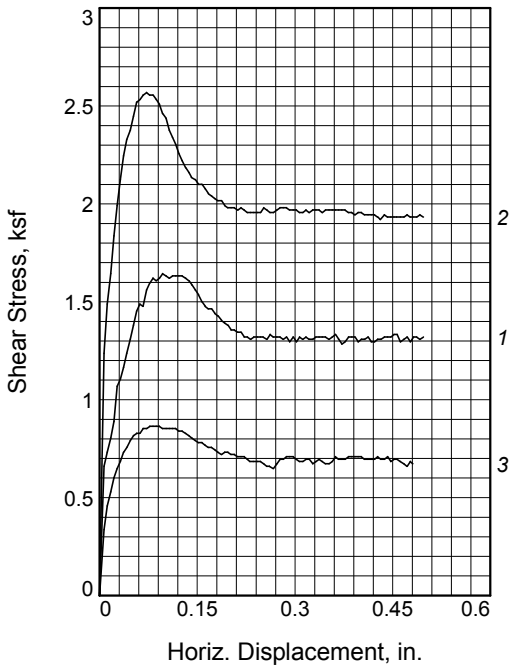
Sample Number: B-3 **Depth:** 10-11.5'

Proj. No.: C88004.01-03 **Date Sampled:** 7/17/23

DIRECT SHEAR TEST REPORT
Moore Twining Associates, Inc.
Fresno, CA







Sample No.		1	2	3
Initial	Water Content, %	14.1	13.6	12.4
	Dry Density, pcf	114.1	112.9	116.8
	Saturation, %	82.8	77.6	78.8
	Void Ratio	0.4500	0.4649	0.4159
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	16.2	17.1	15.1
	Dry Density, pcf	114.3	113.2	117.1
	Saturation, %	96.1	98.3	96.7
	Void Ratio	0.4478	0.4620	0.4133
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.00	1.00	1.00
Normal Stress, ksf		2.00	3.00	1.00
Peak Stress, ksf		1.64	2.57	0.86
Displacement, in.		0.10	0.07	0.08
Ultimate Stress, ksf				
Displacement, in.				
Strain at peak, %		4.0	3.0	3.2

Sample Type:
Description: Lean clay

Specific Gravity= 2.65
Remarks:

Figure _____

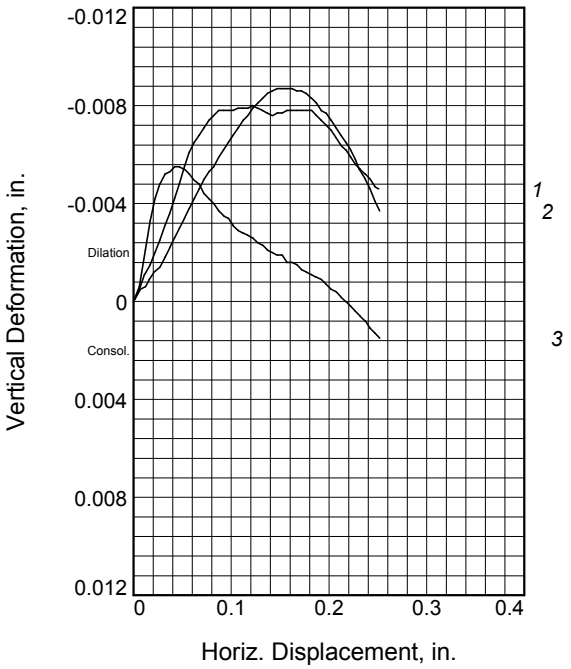
Client: Precision Civil Engineering, Inc.

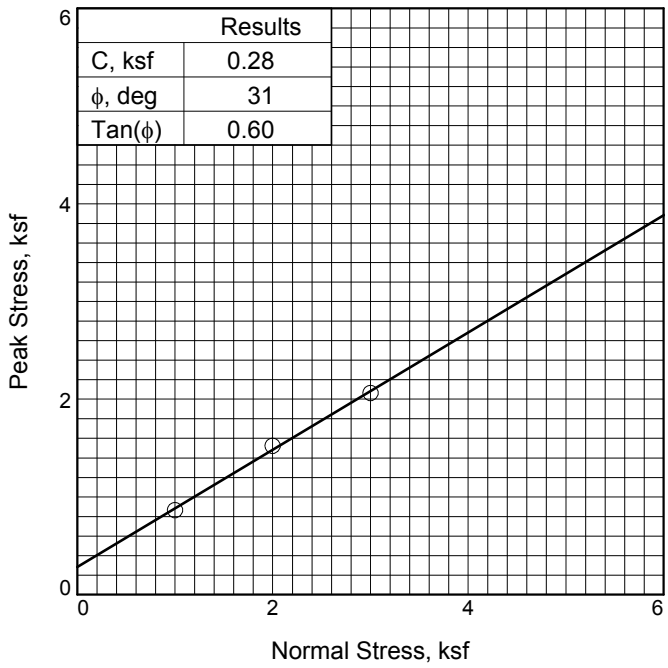
Project: Courthouse Park Site, Fresno, CA

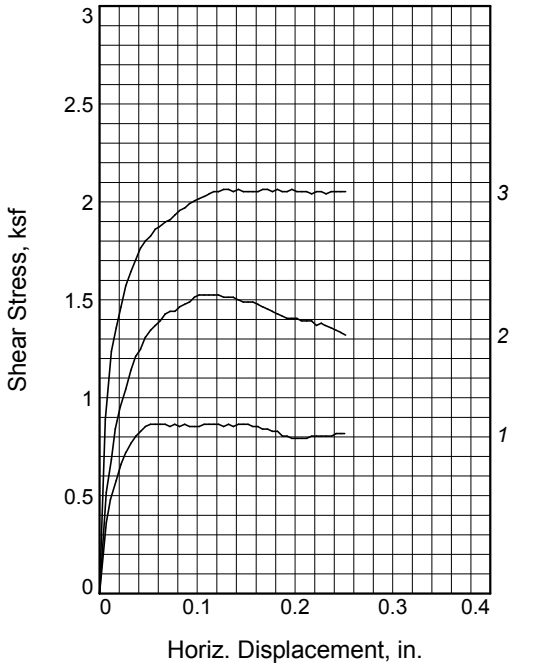
Sample Number: B-5 **Depth:** 20-21.5'

Proj. No.: C88004.01-03 **Date Sampled:** 7/17/23

DIRECT SHEAR TEST REPORT
Moore Twining Associates, Inc.
Fresno, CA







Sample No.		1	2	3
Initial	Water Content, %	9.5	9.5	9.5
	Dry Density, pcf	115.0	115.5	115.2
	Saturation, %	57.2	58.0	57.4
	Void Ratio	0.4384	0.4329	0.4365
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	12.4	14.3	14.8
	Dry Density, pcf	117.4	119.0	117.2
	Saturation, %	80.4	97.2	95.7
	Void Ratio	0.4096	0.3904	0.4111
	Diameter, in.	2.42	2.42	2.42
	Height, in.	0.98	0.97	0.98
Normal Stress, ksf		1.00	2.00	3.00
Peak Stress, ksf		0.86	1.52	2.06
Displacement, in.		0.05	0.10	0.13
Ultimate Stress, ksf				
Displacement, in.				
Strain at peak, %		2.2	4.2	5.3

Sample Type:
Description: Silty sand

LL= NV **PI=** NP
Specific Gravity= 2.65
Remarks: Remolded to 115 pcf & 9.5% Moisture

Figure _____

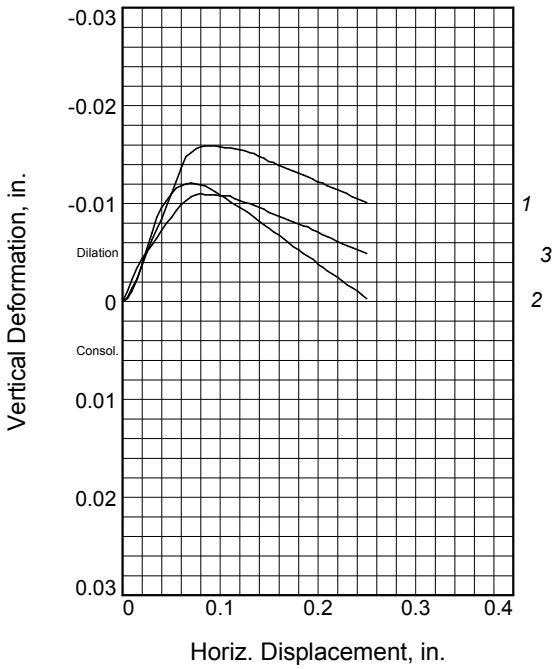
Client: Precision Civil Engineering

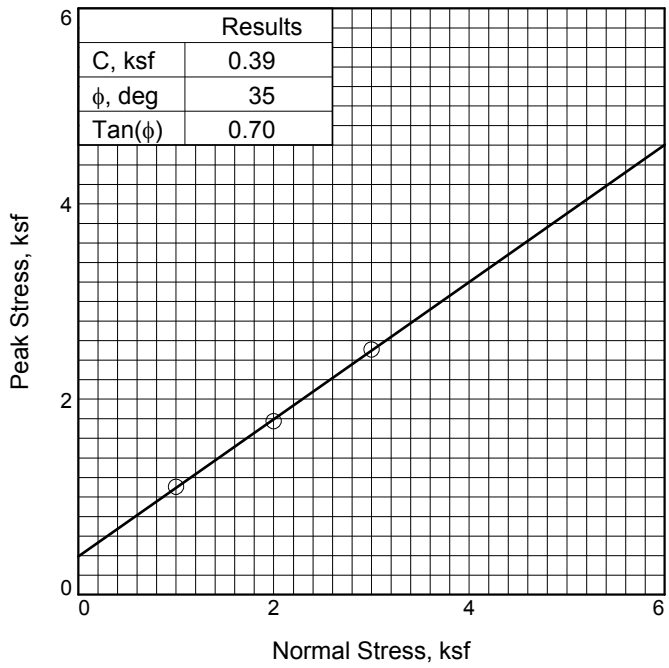
Project: Courthouse Park Site, Fresno, CA

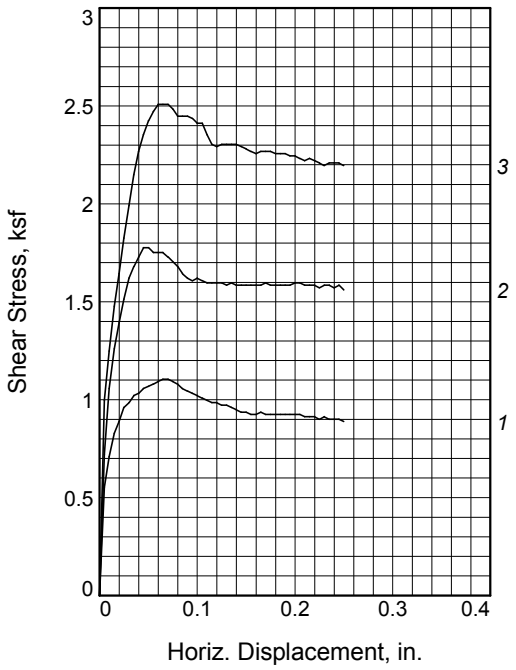
Sample Number: B-8 **Depth:** 7-11'

Proj. No.: C88004.01-03 **Date Sampled:** 11/24/25

DIRECT SHEAR TEST REPORT
Moore Twining Associates, Inc.
Fresno, CA







Sample No.		1	2	3
Initial	Water Content, %	27.9	29.2	25.7
	Dry Density, pcf	100.1	97.1	100.7
	Saturation, %	113.2	109.8	105.8
	Void Ratio	0.6535	0.7045	0.6426
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	27.2	26.8	24.7
	Dry Density, pcf	101.7	98.8	106.1
	Saturation, %	114.7	105.4	116.9
	Void Ratio	0.6274	0.6738	0.5593
	Diameter, in.	2.42	2.42	2.42
	Height, in.	0.98	0.98	0.95
Normal Stress, ksf		1.00	2.00	3.00
Peak Stress, ksf		1.10	1.78	2.51
Displacement, in.		0.07	0.05	0.06
Ultimate Stress, ksf				
Displacement, in.				
Strain at peak, %		2.7	1.9	2.5

Sample Type:
Description: Lean clay with sand

LL= 24 **PL=** 15 **PI=** 9
Specific Gravity= 2.65
Remarks:

Figure _____

Client: Precision Civil Engineering

Project: Courthouse Park Site, Fresno, CA

Sample Number: B-12 **Depth:** 21.5-23.0'

Proj. No.: C88004.01-03 **Date Sampled:** 11/24/25

DIRECT SHEAR TEST REPORT
Moore Twining Associates, Inc.
Fresno, CA

MOORE TWINING ASSOCIATES, INC.

EXPANSION INDEX TEST, ASTM D4829

MTA PROJECT NAME:	Courthouse Park Site, Fresno, CA	REPORT DATE:	8/7/2023
		TEST DATE:	8/1/2023
MTA PROJECT NO.:	C88004.01-03		
SAMPLE I.D.:	B-1 @ 5-32"		
SAMPLED BY:	SR		
SAMPLE DATE:	7/17/2023	TESTED BY:	BP
MATERIALS DESCRIPTION:	Silty sand		
% PASSING # 4 SIEVE	100		

Initial Moisture Determination:		Final Moisture Determination:	
Pan + Wet Soil Wt., gm	250.0	Wet Soil Wt., lbs	0.9537
Pan + Dry Soil Wt., gm	230.6	Dry Soil Wt., lbs	0.8431
Pan Wt., gm	0.0		
Initial % Moisture Content	8.4	Final % Moisture Content	13.1

Initial Expansion Data:		**Final Expansion Data:**	
Ring + Sample Wt., lbs	0.9140	Ring + Sample Wt., lbs	0.9537
Ring Wt., lbs	0.0000	Ring Wt., lbs	0.0000
Remolded Wt., lbs	0.9140	Remolded Wt., lbs	0.9537
Remolded Wet Density, pcf	125.7	Remolded Wet Density, pcf	131.2
Remolded Dry Density, pcf	115.9	Remolded Dry Density, pcf	116.0

Expansion Data:		Initial Volume	Final Volume
		0.00727222	0.007269
Initial Gage Reading, in:	0.0238		
Final Gage Reading, in:	0.0233		
Expansion, in:	-0.0005		
Expansion Index	0	**Comments:**	**Very Low Expansion Potential**

Classification of Expansive Soils. (Table No.1 From ASTM D4829)

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
>130	Very High

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MOORE TWINING ASSOCIATES, INC.

EXPANSION INDEX TEST, ASTM D4829

MTA PROJECT NAME:	Courthouse Park Site, Fresno, CA	REPORT DATE:	7/21/2023
		TEST DATE:	7/17/2023
MTA PROJECT NO.:	C88004.01-03		
SAMPLE I.D.:	B-4 @ 4-10'		
SAMPLED BY:	AV / SR		
SAMPLE DATE:	7/7/2023	TESTED BY:	CJ
MATERIALS DESCRIPTION:	Lean clay		
% PASSING # 4 SIEVE	100		

Initial Moisture Determination:		Final Moisture Determination:	
Pan + Wet Soil Wt., gm	250.0	Wet Soil Wt., lbs	1.0090
Pan + Dry Soil Wt., gm	233.2	Dry Soil Wt., lbs	0.8853
Pan Wt., gm	0.0		
Initial % Moisture Content	7.2	Final % Moisture Content	14.0

Initial Expansion Data:		**Final Expansion Data:**	
Ring + Sample Wt., lbs	0.9491	Ring + Sample Wt., lbs	1.0090
Ring Wt., lbs	0.0000	Ring Wt., lbs	0.0000
Remolded Wt., lbs	0.9491	Remolded Wt., lbs	1.0090
Remolded Wet Density, pcf	130.5	Remolded Wet Density, pcf	138.8
Remolded Dry Density, pcf	121.7	Remolded Dry Density, pcf	121.8

Expansion Data:		Initial Volume	Final Volume
		0.00727222	0.007271
Initial Gage Reading, in:	0.0226		
Final Gage Reading, in:	0.0224		
Expansion, in:	-0.0002		
Expansion Index	0	**Comments:**	**Very Low Expansion Potential**

Classification of Expansive Soils. (Table No.1 From ASTM D4829)

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
>130	Very High

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EXPANSION INDEX TEST, ASTM D4829

MTA PROJECT NAME:	Courthouse Park Site, Fresno, CA	REPORT DATE:	1/2/2026
		TEST DATE:	12/29/2025
MTA PROJECT NO.:	C88004.01-03		
SAMPLE I.D.:	B-8 @ 0-3'		
SAMPLED BY:	GM		
SAMPLE DATE:	11/24/2025	TESTED BY:	CJ
MATERIALS DESCRIPTION:	Silty sand		
% PASSING # 4 SIEVE	100		

Initial Moisture Determination:		Final Moisture Determination:	
Pan + Wet Soil Wt., gm	250.0	Wet Soil Wt., lbs	1.0100
Pan + Dry Soil Wt., gm	234.8	Dry Soil Wt., lbs	0.9044
Pan Wt., gm	0.0		
Initial % Moisture Content	6.5	Final % Moisture Content	11.7

Initial Expansion Data:		**Final Expansion Data:**	
Ring + Sample Wt., lbs	0.9630	Ring + Sample Wt., lbs	1.0100
Ring Wt., lbs	0.0000	Ring Wt., lbs	0.0000
Remolded Wt., lbs	0.9630	Remolded Wt., lbs	1.0100
Remolded Wet Density, pcf	132.4	Remolded Wet Density, pcf	139.0
Remolded Dry Density, pcf	124.4	Remolded Dry Density, pcf	124.5

Expansion Data:		Initial Volume	Final Volume
		0.00727222	0.007265
Initial Gage Reading, in:	0.0544		
Final Gage Reading, in:	0.0534		
Expansion, in:	-0.0010		
Expansion Index	0	**Comments:**	**Very Low Expansion Potential**

Classification of Expansive Soils. (Table No.1 From ASTM D4829)

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
>130	Very High

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MOORE TWINING ASSOCIATES, INC.

EXPANSION INDEX TEST, ASTM D4829

MTA PROJECT NAME:	Courthouse Park Site, Fresno, CA	REPORT DATE:	1/2/2026
		TEST DATE:	12/29/2025
MTA PROJECT NO.:	C88004.01-03		
SAMPLE I.D.:	B-9 @ 21-24'		
SAMPLED BY:	GM		
SAMPLE DATE:	11/24/2025	TESTED BY:	CJ

MATERIALS DESCRIPTION: Lean clay

% PASSING # 4 SIEVE 100

Initial Moisture Determination:		Final Moisture Determination:	
Pan + Wet Soil Wt., gm	250.0	Wet Soil Wt., lbs	1.0060
Pan + Dry Soil Wt., gm	231.4	Dry Soil Wt., lbs	0.8677
Pan Wt., gm	0.0		
Initial % Moisture Content	8.0	Final % Moisture Content	15.9

Initial Expansion Data:		**Final Expansion Data:**	
Ring + Sample Wt., lbs	0.9374	Ring + Sample Wt., lbs	1.0060
Ring Wt., lbs	0.0000	Ring Wt., lbs	0.0000
Remolded Wt., lbs	0.9374	Remolded Wt., lbs	1.0060
Remolded Wet Density, pcf	128.9	Remolded Wet Density, pcf	134.6
Remolded Dry Density, pcf	119.3	Remolded Dry Density, pcf	116.1

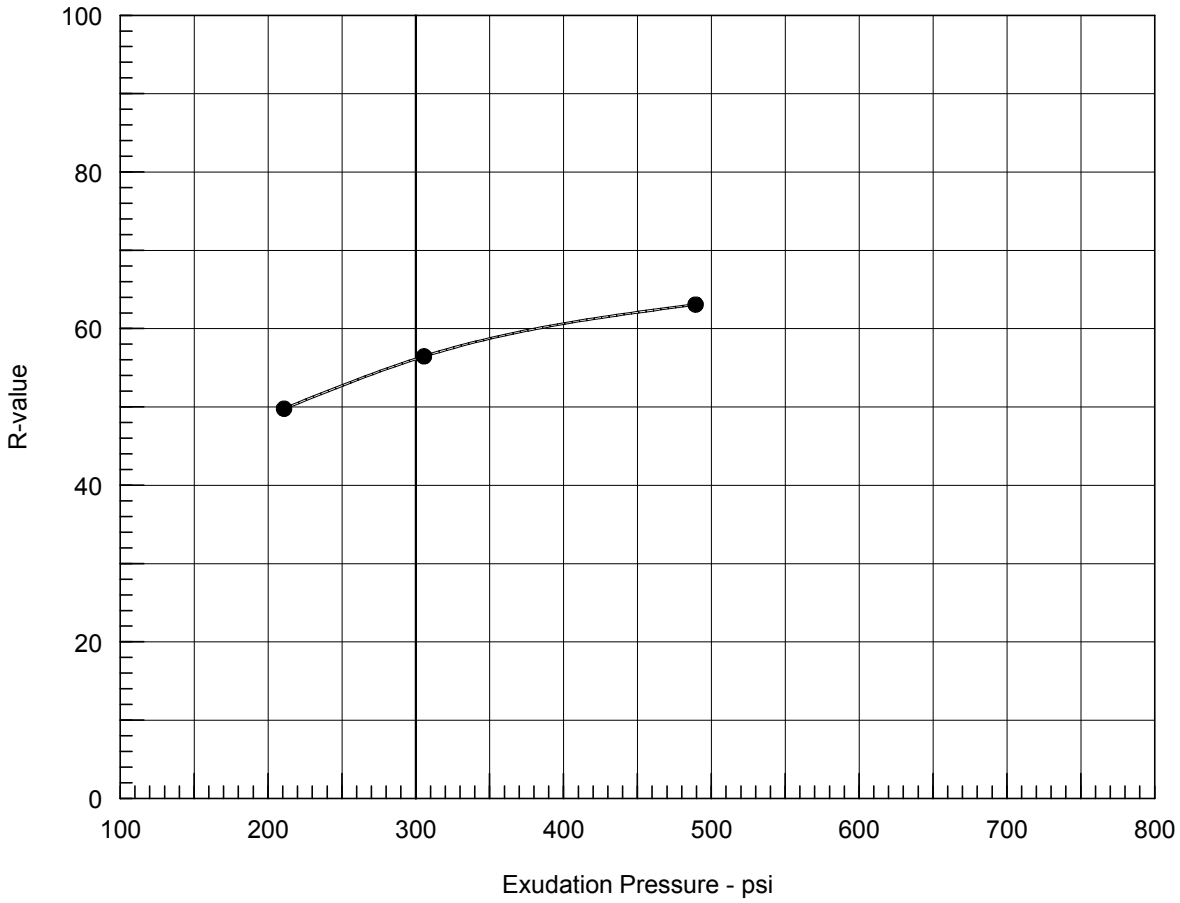
Expansion Data:		Initial Volume	Final Volume
		0.00727222	0.007475
Initial Gage Reading, in:	0.0452		
Final Gage Reading, in:	0.0731		
Expansion, in:	0.0279		
Expansion Index	28	**Comments:**	**Low Expansion Potential**

Classification of Expansive Soils. (Table No.1 From ASTM D4829)

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
>130	Very High

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R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D 2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	350	126.0	9.7	0.00	41	2.50	489	63	63
2	350	123.7	10.7	0.00	48	2.55	306	56	56
3	350	121.7	11.6	0.00	59	2.59	211	47	50

Test Results	Material Description
R-value at 300 psi exudation pressure = 56	Silty sand

Project No.: C88004.01-03
Project: Courthouse Park Site, Fresno, CA
Sample Number: B-3 **Depth:** 0-4'

Date: 1/16/2026

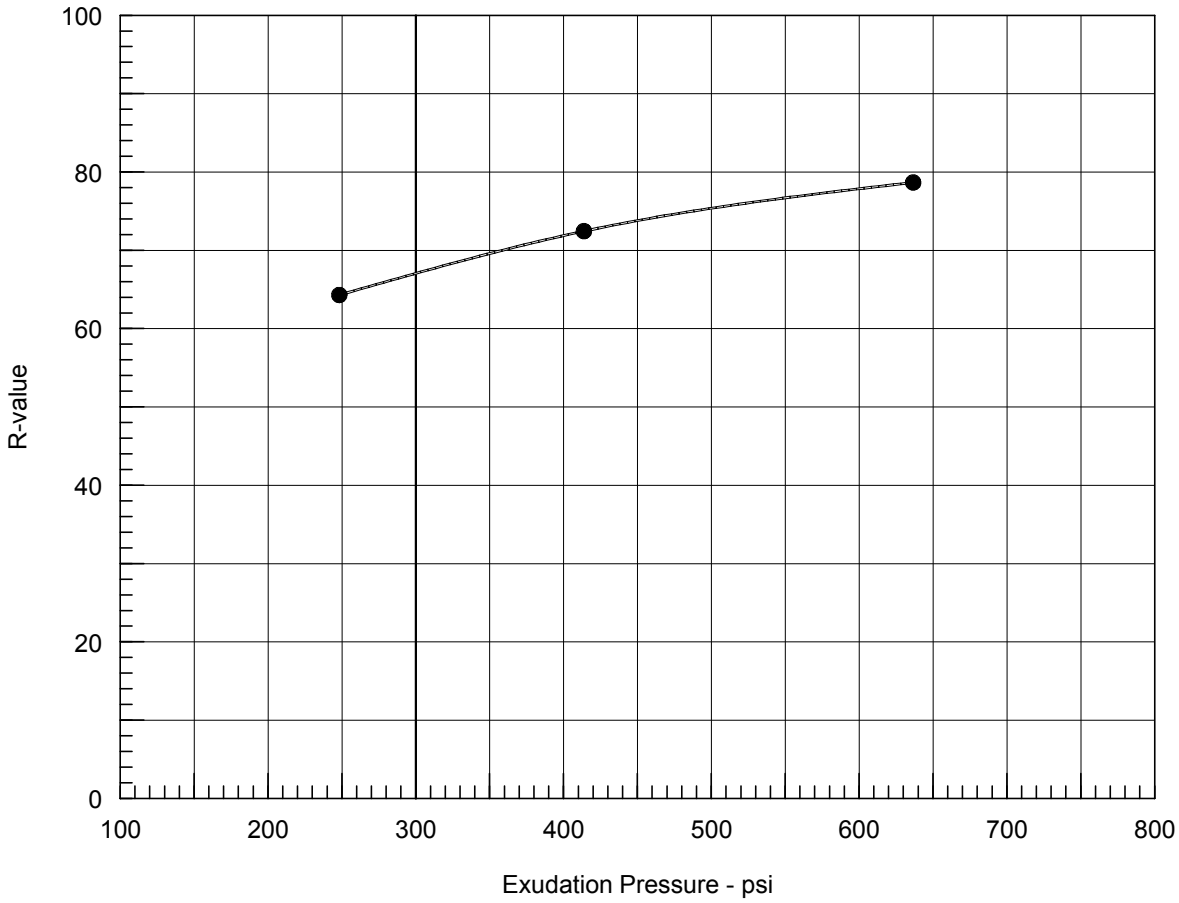
Tested by: MS
Checked by: MS
Remarks:

R-VALUE TEST REPORT

Moore Twining Associates, Inc.

Figure N/A

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D 2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	350	126.1	10.1	0.00	22	2.41	637	80	79
2	350	125.4	11.0	0.00	26	2.43	414	74	72
3	350	120.2	12.0	0.00	35	2.46	248	64	64

Test Results	Material Description
R-value at 300 psi exudation pressure = 67	Silty sand

Project No.: C88004.01-03
Project: Courthouse Park Site, Fresno, CA
Sample Number: B-5 **Depth:** 5-6'
Date: 1/15/2026

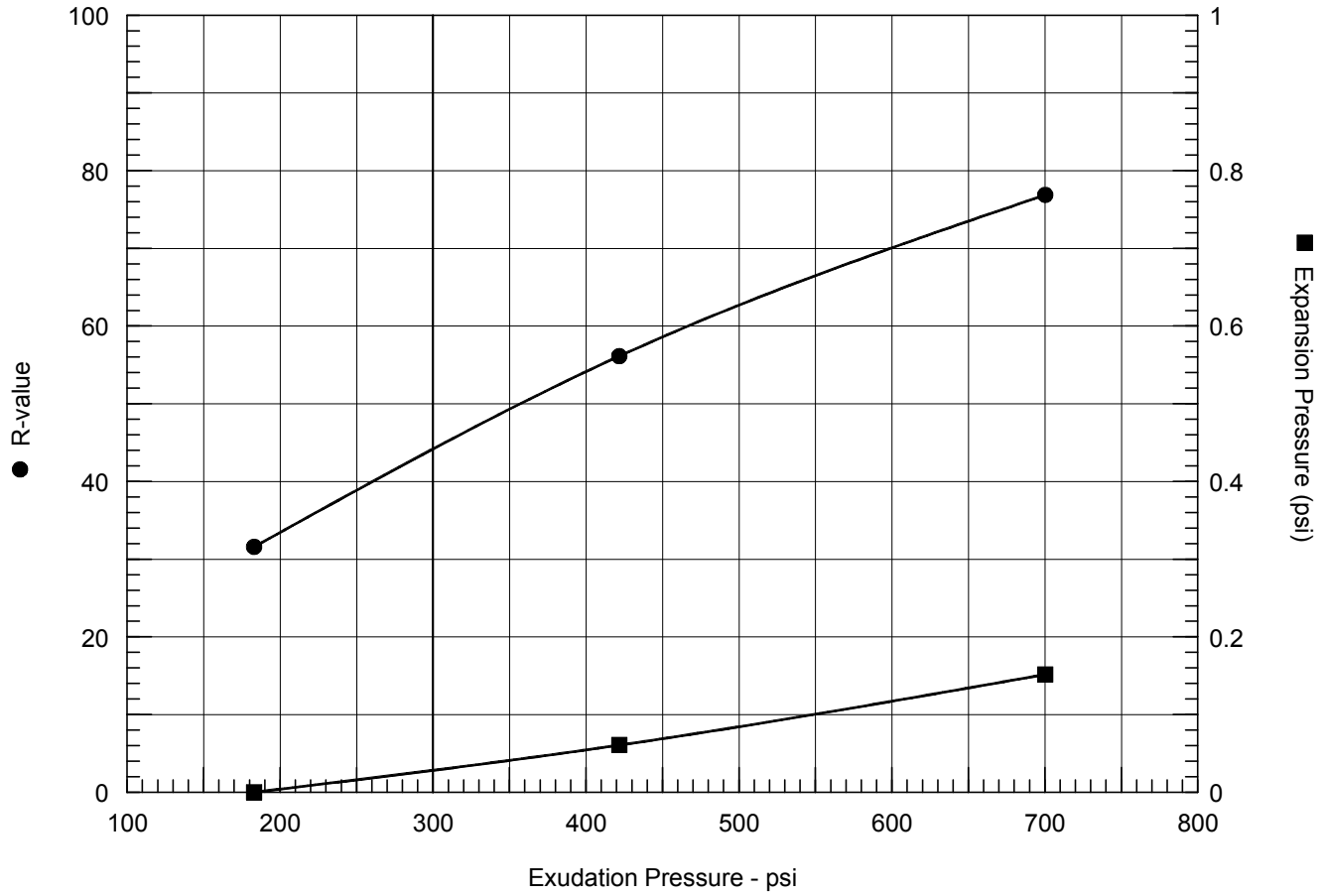
Tested by: MS
Checked by: MS
Remarks:

R-VALUE TEST REPORT

Moore Twining Associates, Inc.

Figure N/A

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D 2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	250	130.8	10.5	0.06	55	2.41	422	58	56
2	350	129.3	12.4	0.15	30	2.36	700	79	77
3	100	125.0	12.0	0.00	100	2.50	183	32	32

Test Results	Material Description
R-value at 300 psi exudation pressure = 44 **Exp. pressure at 300 psi exudation pressure =** 0.03 psi	Silty sand

Project No.: C88004.01-03
Project: Courthouse Park Site, Fresno, CA
Sample Number: B-8 **Depth:** 0-3'
Date: 1/15/2026

Tested by: GG
Checked by: MS
Remarks:

R-VALUE TEST REPORT

Moore Twining Associates, Inc.

Figure N/A

MOORE TWINING ASSOCIATES, INC.

Project Name:	Courthouse Park Site, Fresno, CA	Report Date:	8/14/2023
		Sample Date:	7/7/2023
Project Number	C88004.01-03		

CONSTANT VOLUME FLEXIBLE-WALL PERMEABILITY TEST (ASTM D-5084)
FALLING HEAD RISING TAIL

Sample Location:	B-5 @ 8.5-10'		
Sample Description:	Poorly graded sand with silt (SP-SM)		
Sampled By:	AV / SR	**Tested By:**	M. Shwiyhat
Setup Date:	8/9/2023	**Completion Date:**	8/14/2023

Stage	Initial	Final
Wet Weight, gm	429.3	484.2
Dry Weight, gm	408.0	408.0
Moisture content, %	5.2	18.7
Average Length, in	3.096	3.090
Average Diameter, in	2.415	2.410
Total Volume (Vt), ft^3	8.21E-03	8.16E-03
Volume of Water (Vw), ft^3	7.52E-04	2.69E-03
Volume of Solids (Vs), ft^3	5.33E-03	5.33E-03
Volume of Air Va), ft^3	2.12E-03	1.36E-04
Volume of Voids (Vv), ft^3	2.87E-03	2.82E-03
Degree of Saturation (S), %	26	95
Dry Density, pcf	109.5	110.1
Void Ratio (e)	0.54	0.53
Porosity (n)	35.0	34.6
"B" Value	95	
Back Pressure, psi	22	
Effective Pressure, psi	5	
Average Permeability, cm/sec	2.08E-04	
Average Permeability @ 20°C, cm/sec	2.07E-04	

Notes:

1- De-aired tap water was used as the permeant liquid.

2- Porosity was based on an assumed specific gravity of 2.70.

3- Test specimens was Insitue

4- Average temperature during trials: 20.2 °C.

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Project Name:	Courthouse Park Site, Fresno, CA		Report Date:	8/14/2023
Project Number	C88004.01-03		Sample Date:	7/7/2023
Sample location:	B-5 @ 8.5-10'			

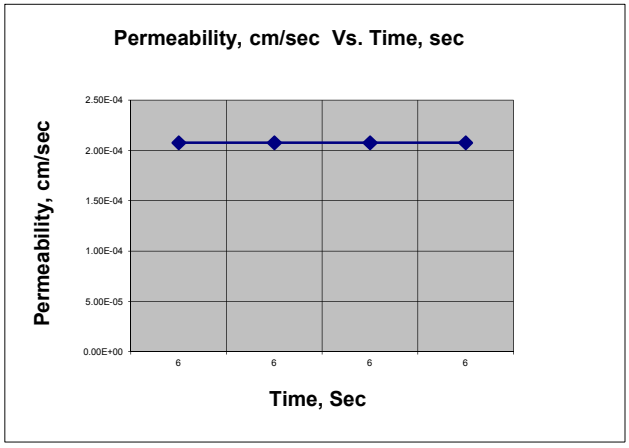
Permeability Specimen Data (ASTM D-5084):

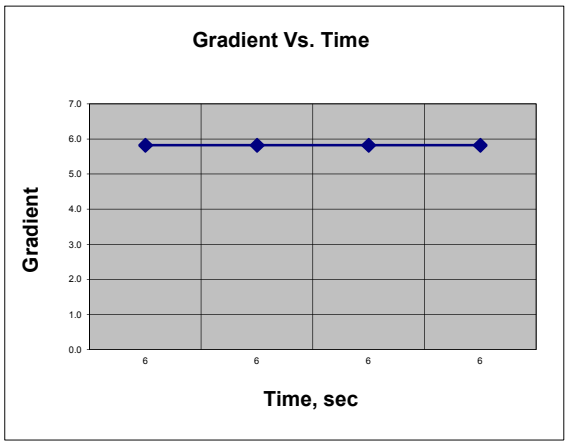
	Initial Length, in	Final Length, in	Initial Diam., in	Final Diam., in
	3.096	3.090	2.415	2.410
	3.096	3.090	2.415	2.410
	3.096	3.090	2.415	2.410
Average:	3.096	3.090	2.415	2.410

a in =	0.76712	cm^2	M1	0.03018	
a out =	0.031416	cm^2	M2	1.04095	
Length, L	7.849	cm	S	0.26682	
Area, A	29.415	cm^2	G	12.574	
GHg =	13.574		C	6.40E-04	
Gw =	1		T	0.28571	
GHg-Gw=	12.574		Z1	3.64334	
(a in*a out)/(a in + a out) =	0.03018		Zeq	1.5	Height of Mercury @ Equilibrium, cm
a out/a in =	0.040953				

Perm Trial #	Initial Head, cm Hg	Final Head, cm Hg	Elapsed Time (sec)	Hydraulic Gradient	dZ out inc.	Z1 inc.	T inc.	K Inc. (cm/sec)
	5		0					
1		2.0	6	5.8	3	3.64	0.2857	2.08E-04
2		2.0	6	5.8	3	3.64	0.2857	2.08E-04
3		2.0	6	5.8	3	3.64	0.2857	2.08E-04
4		2.0	6	5.8	3	3.64	0.2857	2.08E-04
Average:								2.08E-04

Temperature, °C	20.2
Rt	0.995374461
K=	2.08E-04
K avg. Corrected for temp.:	2.07E-04





Project Name:	Courthouse Park Site, Fresno, CA	Report Date:	8/14/2023
Project Number	C88004.01-03	Sample Date:	7/7/2023
Sample location:	B-5 @ 8.5-10'		

Glossary:

GHg:	Specific Gravity of Mercury
Gw:	Specific Gravity of Water
Rt:	Raito of the viscosity of water at test temperature to the viscosity of water at 20°C
a in:	Cross-sectional area of reservoir containing the influent/inflow liquid
a out:	Cross-sectional area of reservoir containing the effluent/outflow liquid
L:	Length of specimen
K:	Hydraulic conductivity
A:	Area of specimen

MOORE TWINING ASSOCIATES, INC.

Project Name:	Courthouse Park Site, Fresno, CA	Report Date:	8/14/2023
		Sample Date:	7/17/2023
Project Number	C88004.01-03		

CONSTANT VOLUME FLEXIBLE-WALL PERMEABILITY TEST (ASTM D-5084)
FALLING HEAD RISING TAIL

Sample Location:	B-6 @ 5-6.5'		
Sample Description:	Silty sand		
Sampled By:	SR	**Tested By:**	M. Shwiyhat
Setup Date:	8/9/2023	**Completion Date:**	8/14/2023

Stage	Initial	Final
Wet Weight, gm	422.2	469.0
Dry Weight, gm	395.5	395.5
Moisture content, %	6.8	18.6
Average Length, in	3.053	3.020
Average Diameter, in	2.416	2.400
Total Volume (Vt), ft^3	8.10E-03	7.91E-03
Volume of Water (Vw), ft^3	9.42E-04	2.59E-03
Volume of Solids (Vs), ft^3	5.17E-03	5.17E-03
Volume of Air Va), ft^3	1.99E-03	1.44E-04
Volume of Voids (Vv), ft^3	2.93E-03	2.74E-03
Degree of Saturation (S), %	32	95
Dry Density, pcf	107.5	110.2
Void Ratio (e)	0.57	0.53
Porosity (n)	36.2	34.6
"B" Value	95	
Back Pressure, psi	22	
Effective Pressure, psi	5	
Average Permeability, cm/sec	2.05E-04	
Average Permeability @ 20°C, cm/sec	2.04E-04	

Notes:

1- De-aired tap water was used as the permeant liquid.

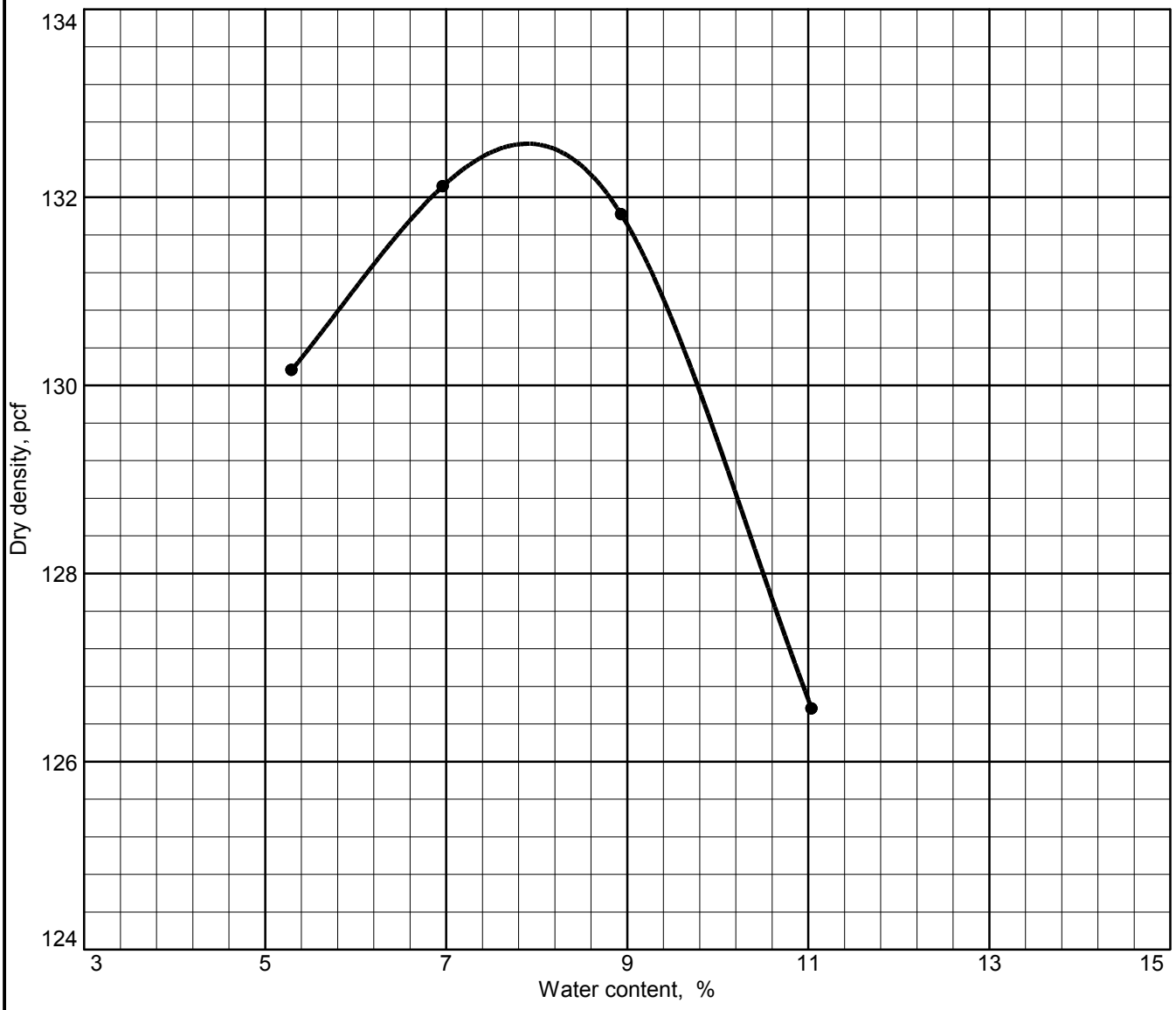
2- Porosity was based on an assumed specific gravity of 2.70.

3- Test specimens was Insitue

4- Average temperature during trials: 20.2 °C.

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COMPACTION TEST REPORT



Test specification: ASTM D 1557-12 Method A Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > No.4	% < No.200
	USCS	AASHTO						
7-11'	SM				NV	NP	3.6	26.5

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 132.6 pcf Optimum moisture = 7.9 %	Silty sand

Project No. C88004.01-03 **Client:** Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

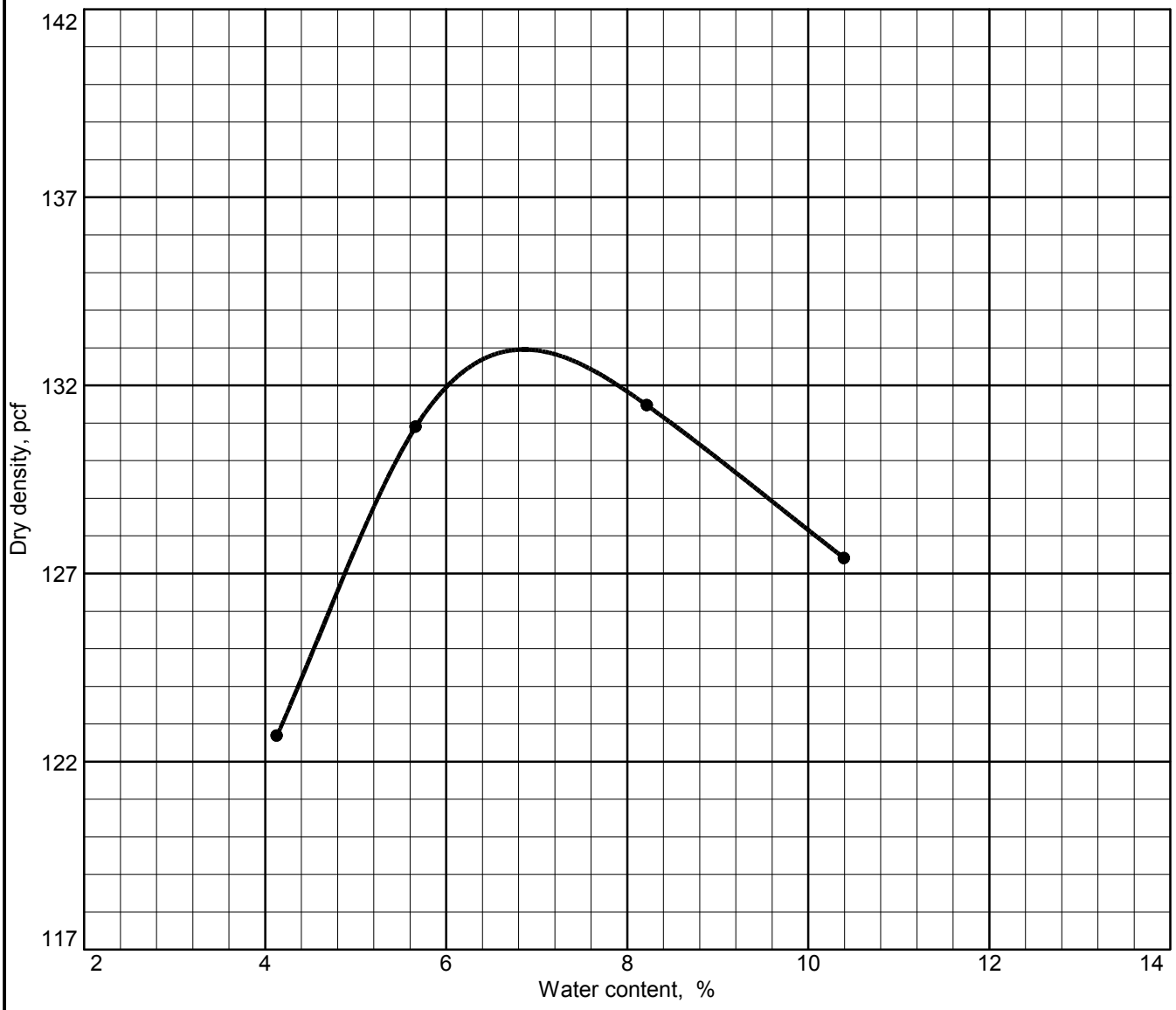
● **Source:** **Sample No.:** B-8 **Elev./Depth:** 7-11'

Moore Twining Associates, Inc.
Fresno, CA

Remarks:

Figure

COMPACTION TEST REPORT



Test specification: ASTM D 1557-12 Method A Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > No.4	% < No.200
	USCS	AASHTO						
0-3'	SM						0.8	25.0

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 133.0 pcf Optimum moisture = 6.9 %	Silty sand

Project No. C88004.01-03 **Client:** Precision Civil Engineering
Project: Courthouse Park Site, Fresno, CA

● **Source:** **Sample No.:** B-12 **Elev./Depth:** 0-3'

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Fresno, CA

Remarks:

Figure

MOORE TWINING ASSOCIATES, INC.

Project Name:	Courthouse Park Site, Fresno, CA	Report Date:	7/21/2023
		Sample Date:	7/7/2023
Project Number:	C88004.01-03		
		Sampled By:	AV / SR
Subject:	Minimum Resistivity, ASTM G187	Tested By:	RS
Material Description:	Silty sand	Test Date:	7/14/2023
Location:	B-3 @ 0-4'		

Laboratory Test Results, Minimum Resistivity - ASTM G187

Total Water Added, mls	Resistivity, Ohm-cm
25 mls	30,000
50 mls	26,000
75 mls	21,000
100 mls	20,000
125 mls	19,000
150 mls	11,000
175 mls	10,800
200 mls	10,400
225 mls	10,500

Remarks: Min. Resistivity is 10,400 Ohm-cm

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Project Name:	Courthouse Park Site, Fresno, CA	Report Date:	8/7/2023
		Sample Date:	7/17/2023
Project Number:	C88004.01-03		
		Sampled By:	SR
Subject:	Minimum Resistivity, ASTM G187	Tested By:	RS
Material Description:	Silty Sand	Test Date:	8/1/2023
Location:	B-3 @ 0.3-5.0'		

Laboratory Test Results, Minimum Resistivity - ASTM G187

Total Water Added, mls	Resistivity, Ohm-cm
25 mls	29,000
50 mls	23,000
75 mls	14,000
100 mls	9,000
125 mls	8,800
150 mls	8,400
175 mls	8,400
200 mls	8,300
225 mls	8,400

Remarks: Min. Resistivity is 8,300 Ohm-cm

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Project Name:	Courthouse Park Site, Fresno, CA	Report Date:	1/5/2026
		Sample Date:	11/24/2025
Project Number:	C88004.01-03		
		Sampled By:	GM
Subject:	Minimum Resistivity, ASTM G187	Tested By:	RS
Material Description:	Silty sand	Test Date:	12/30/2025
Location:	B-8 @ 0-3'		

Laboratory Test Results, Minimum Resistivity - ASTM G187

Total Water Added, mls	Resistivity, Ohm-cm
50 mls	24,000
75 mls	21,000
100 mls	22,000

Remarks: Min. Resistivity is 21,000 Ohm-cm

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MOORE TWINING ASSOCIATES, INC.

Project Name:	Courthouse Park Site, Fresno, CA	Report Date:	1/5/2026
		Sample Date:	11/24/2025
Project Number:	C88004.01-03		
		Sampled By:	GM
Subject:	Minimum Resistivity, ASTM G187	Tested By:	RS
Material Description:	Lean clay	Test Date:	12/30/2025
Location:	B-9 @ 21-24'		

Laboratory Test Results, Minimum Resistivity - ASTM G187

Total Water Added, mls	Resistivity, Ohm-cm
150 mls	3,900
175 mls	3,600
200 mls	3,500
225 mls	3,700

Remarks: Min. Resistivity is 3,500 Ohm-cm

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MOORE TWINING ASSOCIATES, INC.

Project Name:	Courthouse Park Site, Fresno, CA	Report Date:	1/5/2026
		Sample Date:	11/24/2025
Project Number:	C88004.01-03		
		Sampled By:	GM
Subject:	Minimum Resistivity, ASTM G187	Tested By:	RS
Material Description:	Silty sand	Test Date:	12/30/2025
Location:	B-12 @ 0-3'		

Laboratory Test Results, Minimum Resistivity - ASTM G187

Total Water Added, mls	Resistivity, Ohm-cm
25 mls	28,000
50 mls	24,000
75 mls	22,000
100 mls	23,000

Remarks: Min. Resistivity is 22,000 Ohm-cm

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APPENDIX D

SITE PHOTOS



Photograph of drill crew and equipment set up on test boring B-2 – looking south. Note Sheriff's Building in background, with the Existing County Courthouse further south.



Photograph of grass area near test boring B-2 – looking southwest. Note the congested area of existing underground utility lines marked in this area.



Photograph of area near test boring B-2 and B-10 in background – looking southwest. Note the manhole covers to the existing underground fuel tank(s) in the Site Area 1A.



Photograph of existing parking lot adjacent to Fresno Street in the Site 1A area- looking northeast.



Photograph of existing Courthouse Park area near test boring B-4 – looking northeast towards Site 1A. Note Sheriff's Building in the background.



Photograph during drilling of test boring B-3 – Looking southeast.



Photograph of Potholing Boring location B-12



Photograph of Boring B-10 looking south.



Photograph of area near test boring B-14 – within parking garage level P-2.



Photograph of area near test boring B-14 – looking northeast within parking garage level P-2.

APPENDIX E

SITE-SPECIFIC RESPONSE SPECTRA

26 January 2026
Revised 27 April 2026

Mr. Read Andersen, RGE
Geotechnical Division Manager
Moore Twining Associates, Inc.
2527 Fresno Street
Fresno, California 93721

SUBJECT: Seismic Design Parameters and Site-Specific Response Spectra
New Fresno Courthouse
Fresno, California
Langan Project No. 731816301

Dear Mr. Anderson:

This letter report presents recommended seismic design parameters and the results of our site-specific response spectra development for the new Fresno Courthouse in Fresno, California. The new Fresno Courthouse is planned as an 11-story tower above a one-level basement. The site for the new courthouse is located at the southwest corner of Fresno Street and M Street, northeast of the existing Fresno Courthouse, as shown on Figure 1.

SCOPE OF SERVICES

The scope of services for this letter report was completed in accordance with our proposal dated 15 April 2025. We reviewed the results of geotechnical borings provided by you, performed geophysical testing, and developed site-specific response spectra in accordance with the 2025 California Building Code (CBC), and by reference ASCE 7-22. As such we developed site-specific response spectra for the Risk-Targeted Maximum Considered Earthquake (MCE_R) and Design Earthquake (DE).

GEOPHYSICAL TESTING

A Multichannel Analysis of Surface Waves (MASW) survey was performed on 6 January 2026 by GEOVision Geophysical Services (GEOVision) of Corona, California in the vicinity of the proposed new courthouse, as shown on Figure 2.

MASW is a non-destructive test, where geophones are placed on the ground surface in a linear array. Active- and passive-source surface wave measurements were made as part of the survey. The active-source surface array (Array 1) included geophones spaced about 5 feet apart for a total length of 235 feet. A hammer striking a steel plate placed on the ground surface was used to generate the seismic waves. The MASW survey was used to measure shear wave velocities with depth and estimate the average shear wave velocity in the upper 100 feet, V_{S30}.

A passive-source surface wave technique consisting of the array microtremor method was used to extend the depth of investigation. The passive-source surface array (Array 2) included geophones spaced about 15 feet apart along an L-shaped array with leg lengths of 300 feet.

The MASW survey results and a brief evaluation by GEOVision are presented in Appendix A.

SEISMIC DESIGN CRITERIA

Based on the shear wave velocity measurements at the site, the measured average shear wave velocity in the upper 30 meters (V_{S30}) is approximately 1,136 feet per second, which corresponds to Site Class CD per ASCE 7-22.

Code-Based Seismic Design Values

The 2025 CBC, and by reference ASCE 7-22, provides multi-period spectra for seismic design, where required. Digitized values of the general procedure ground motion analysis multi-period spectra for Site Class CD, in accordance with the 2025 CBC, are presented in Table 1.

TABLE 1
Multi-Period Code-Based DE and MCE_R Spectra
2025 CBC (ASCE 7-22 General Procedure)

Period (seconds)	DE	MCE_R
0.01	0.27	0.41
0.10	0.52	0.78
0.20	0.67	1.00
0.30	0.66	0.99
0.40	0.60	0.9
0.50	0.55	0.82
0.75	0.42	0.62
1.00	0.32	0.48
1.50	0.21	0.32
2.00	0.16	0.23
3.00	0.10	0.15
4.00	0.074	0.11
5.00	0.058	0.087

To develop a two-period response spectrum in accordance with the provisions of 2025 CBC, we recommend the following:

- Risk-Targeted Maximum Considered Earthquake (MCE_R) S_s and S_1 of 0.72g and 0.24g, respectively.
- MCE_R and DE spectral response acceleration parameters at short periods, S_{MS} and $S_{DS,}$ of 0.90g and 0.60g, respectively.
- MCE_R and DE spectral response acceleration parameters at one-second period, S_{M1} and S_{D1}, of 0.48g and 0.32g, respectively

The code-based design values have been included as reference only. We understand the structures will be designed using the site-specific response spectra detailed below and in Appendix B.

Site-Specific Response Spectra

We developed site-specific response spectra in accordance with 2025 CBC criteria, and by reference ASCE 7-22. As such, we performed probabilistic seismic hazard analysis (PSHA) and deterministic analysis to develop recommended horizontal spectra at the ground surface for the Risk Targeted Maximum Considered Earthquake (MCE_R) and Design Earthquake (DE) consistent with ASCE 7-22 and 2025 CBC.

The recommended spectra are presented on Figure 3 for 5 percent damping for the MCE_R and DE; digitized values of the MCE_R and DE are presented in Table 2.

Details of our analysis are presented in Appendix B.

TABLE 2
Recommended MCE_R and DE Spectra
Sa (g) for 5 percent damping

Period (seconds)	MCE_R	DE
0.01	0.449	0.299
0.10	0.875	0.584
0.20	1.102	0.735
0.30	1.071	0.714
0.40	0.966	0.644
0.50	0.875	0.583
0.75	0.650	0.434
1.00	0.493	0.328
1.50	0.319	0.213
2.00	0.230	0.153
3.00	0.145	0.096
4.00	0.103	0.069
5.00	0.078	0.052

Because site-specific procedure was used to determine the recommended response spectra, the corresponding values of S_{MS}, S_{M1}, S_{DS} and S_{D1} per Section 21.4 of ASCE 7-22 should be used as shown in Table 3.

TABLE 3
Site-Specific Design Spectral Acceleration Values

Parameter	Spectral Acceleration Value (g's)
S_{MS}[1]	0.992
S_{M1}[2]	0.493
S_{DS}[1]	0.661
S_{D1}[2]	0.328

Notes:

1. S_{DS} is based on the site-specific response spectra and is based on 90 percent of the maximum spectral acceleration within the period range of 0.2 to 5 seconds; it is governed by 90 percent of the spectral acceleration at a period of 0.2 seconds. S_{MS} is 1.5 times the S_{DS}.
2. S_{D1} is based on the site-specific response spectra and is based on either (1) 90 percent of the maximum of the product of period, T, and spectral acceleration, Sa, for periods from 1.0 to 5.0 seconds or (2) 100 percent of the value of Sa at a period of 1.0 second, whichever is greater; it is governed by the value of Sa at a period of 1.0 second. S_{M1} is 1.5 times the S_{D1}.

We trust this provides the information required at this time.

Sincerely,
Langan CA, Inc.



Justin Ray, GE
Associate



Elena Ayers, GE
Associate Principal



John Gouchon, GE
Principal

Attachments: References
Figures
Appendix A – Results of Geophysical Testing
Appendix B – Site-Specific Response Spectra

REFERENCES

2014 Working Group on California Earthquake Probabilities. (2015). "UCERF3: A new Earthquake Forecast for California's Complex Fault System", U.S. Geological Survey 2015–3009. http://dx.doi.org/10.3133/fs20153009.

Abrahamson, N. A. and Silva, W.J. (1996). "Empirical Ground Motion Models." *Report to Brookhaven National Laboratory*.

Abrahamson, N. A. (2000). "Effect of Rupture Directivity on Probabilistic Seismic Hazard Analysis." Proceedings of Sixth International Conference on Seismic Zonation, Palm Springs, California, November.

Abrahamson, N. A., Silva, W. J., and Kamai, R. (2014). "Summary of the ASK14 Ground-motion Relation for Active Crustal Regions." Earthquake Spectra, Vol. 30, No. 3, p. 1025-1055.

ASCE/SEI 7-22 (2022). Minimum Design Loads for Buildings and Other Structures.

Boore, D. M., Stewart, J. P., Seyhan, E., and Atkinson, G. M. (2014). "NGA-West 2 Equations for Predicting PGA, PGV, and 5% Damped PSA for Shallow Crustal Earthquakes." Earthquake Spectra, Vol. 30, No. 3, p. 1057-1085.

Campbell, K. W., and Bozorgnia, Y. (2014). NGA-West2 Ground Motion Model for the Average Horizontal Components of PGA, PGV, and 5% Damped Linear Acceleration Response Spectra." Earthquake Spectra, Vol. 30, No. 3, p. 1087-1115.

Cao, T., Bryant, W. A., Rowshandel, B., Branum D. and Wills, C. J. (2003). "The Revised 2002 California Probabilistic Seismic Hazard Maps."

Chiou, B. S.-J. and Youngs, R. R. (2014). "Update of the Chiou and Youngs NGA Model for the Average Horizontal Component of Peak Ground Motion and Response Spectra." Earthquake Spectra, Vol. 30, No. 3, p. 1117-1153.

Cornell, C. A. (1968). "Engineering Seismic Risk Analysis." *Bulletin of the Seismological Society of America*, 58(5).

Gutenberg, B. and Richter, C. F. (1954). "Seismicity of the Earth and Associated Phenomena." Hanks, T. C., and W. H. Bakun (2008). "M-log A observations of recent large earthquakes." Bulletin of Seismological Society of America, Vol. 98, No. 1, pp 490-503.

Lienkaemper, J. J. (1992). "Map of recently active traces of the Hayward Fault, Alameda and Contra Costa counties, California." Miscellaneous Field Studies Map MF-2196.

Mazzoni, S., Al Atik, L., Gregor, N., Bozorgnia, Y. (2023). Directivity-Based PSHA Interactive Tool. The B. John Garrick Institute for the Risk Sciences. Dataset. https://doi.org/10.34948/N34S39.

McGuire, R. K. (1976). "FORTRAN computer program for seismic risk analysis." U.S. Geological Survey, Open-File Report 76-67.

REFERENCES
(Continued)

OpenSHA.org and University of Southern California (2010). Hazard Spectrum Application. Version 1.5.0.

PEER (2013). Final Report of the NGA-West2 Directivity Working Group. Paul Spudich, Jeffrey R. Bayless, Jack W. Baker, Brian S.J. Chiou, Badie Rowshandel, Shrey K. Shahi, and Paul Somerville. May.

Petersen, M.D., Shumway, A., Powers, P.M., Mueller, C., Moschetti, M.P., Frankel, A.D., Rezaeian, S., McNamara, D.E., Luco, N., Boyd, O.S., Rukstales, K.S., Jaiswal, K.S., Thompson, E.M., Hoover, S.M., Clayton, B., Field, E., and Zeng, Y. (2019). "The 2018 update of the US National Seismic Hazard Model: Overview of model and implications." Earthquake Spectra, v. 36, no. 1, p. 5-41, https://doi.org/10.1177/8755293019878199.

Shahi, S. K. and Baker, J. W. (2014). "NGA-West2 Models for Ground Motion Directionality." Earthquake Spectra, Vol. 30, No. 3, p. 1285-1300.

Silva, W., Abrahamson, N. Toro, G., and Costantino, C. (1996). "Description and Validation of the Stochastic Ground Motion Model." Report to Brookhaven National Laboratory.

Somerville, P.G., Smith, N. F., Graves, R. W., and Abrahamson, N. A. (1995). "Representation of near-fault directivity effects in design ground motion, and application to Caltrans bridges." *Seismological Research Letter*, 68(1), 199-222.

Somerville, P.G., Smith, N. F., Graves, R. W., and Abrahamson, N. A. (1997). "Modification of empirical strong ground motion attenuation relations to include amplitude and duration effects of rupture directivity." *Seismological Research Letter*, 68(1), 199-222.

Toppozada, T. R. and Borchardt G. (1998). "Re-Evaluation of the 1836 "Hayward Fault" and the 1838 San Andreas Fault earthquakes." *Bulletin of Seismological Society of America*, 88(1), 140-159.

Townley, S. D. and Allen, M. W. (1939). "Descriptive catalog of earthquakes of the Pacific coast of the United States 1769 to 1928." *Bulletin of the Seismological Society of America*, 29(1).

Wells, D. L., and Coppersmith, K. J. (1994). "New Empirical Relationships among Magnitude, Rupture Length, Rupture Width, Rupture Area, and Surface Displacement." Bulletin of the Seismological Society of America, 84(4), 974-1002.

Wesnousky, S. G. (1986). "Earthquakes, Quaternary Faults, and Seismic Hazards in California." Journal of Geophysical Research, 91(1312).

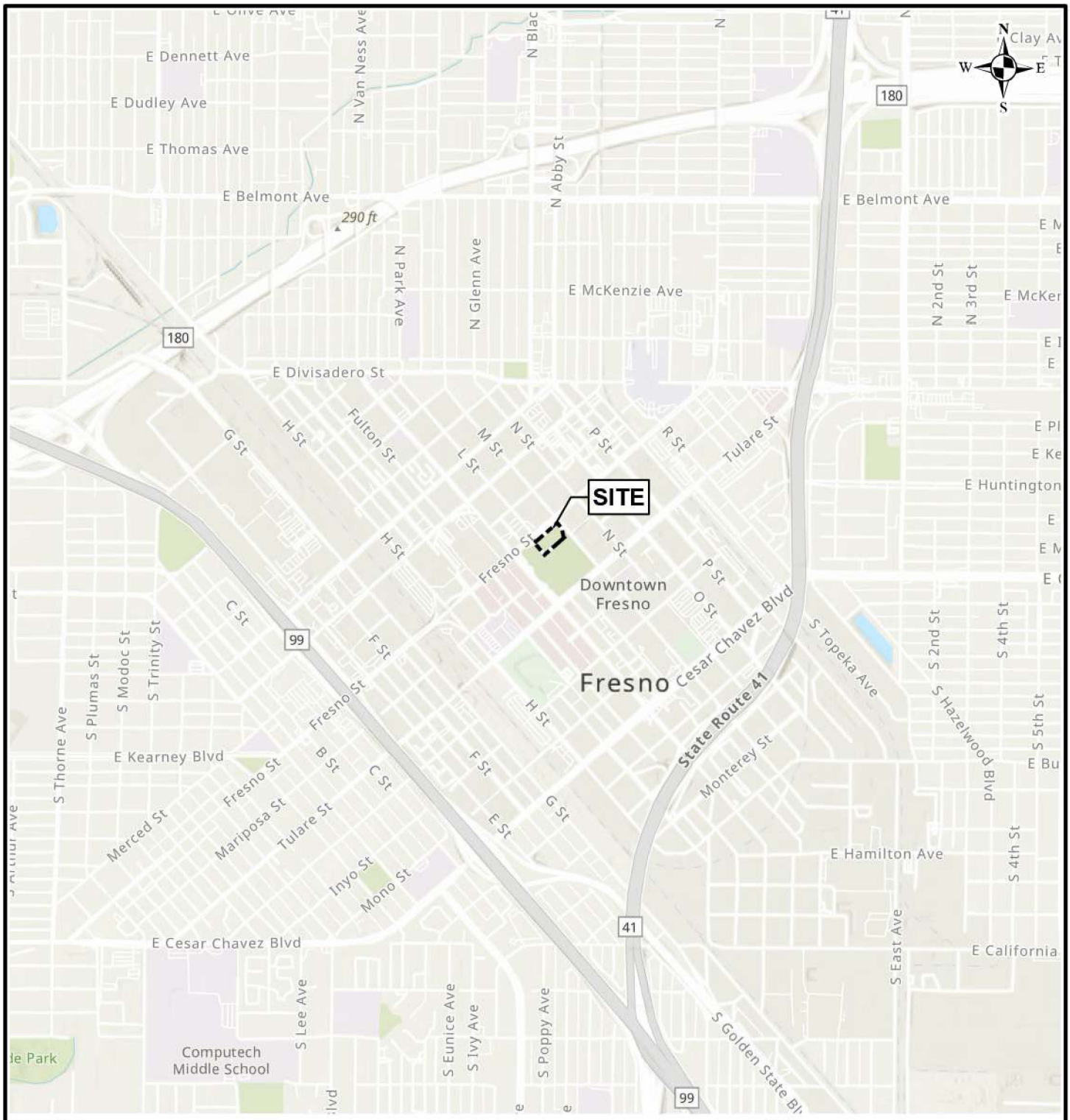
Working Group on California Earthquake Probabilities (WGCEP) (2008). "The Uniform California Earthquake Rupture Forecast, Version 2." Open File Report 2007-1437.

REFERENCES
(Continued)

Working Group on California Earthquake Probabilities (WGCEP) (2003). "Summary of Earthquake Probabilities in the San Francisco Bay Region: 2002 to 2031." Open File Report 03-214.

Youngs, R. R., and Coppersmith, K. J. (1985). "Implications of fault slip rates and earthquake recurrence models to probabilistic seismic hazard estimates." *Bulletin of the Seismological Society of America*, 75( ), 939-964.

FIGURES



Legend

Site Boundary

Notes:
1. Topographic basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online, National Geographic Society, i-cubed.

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Project
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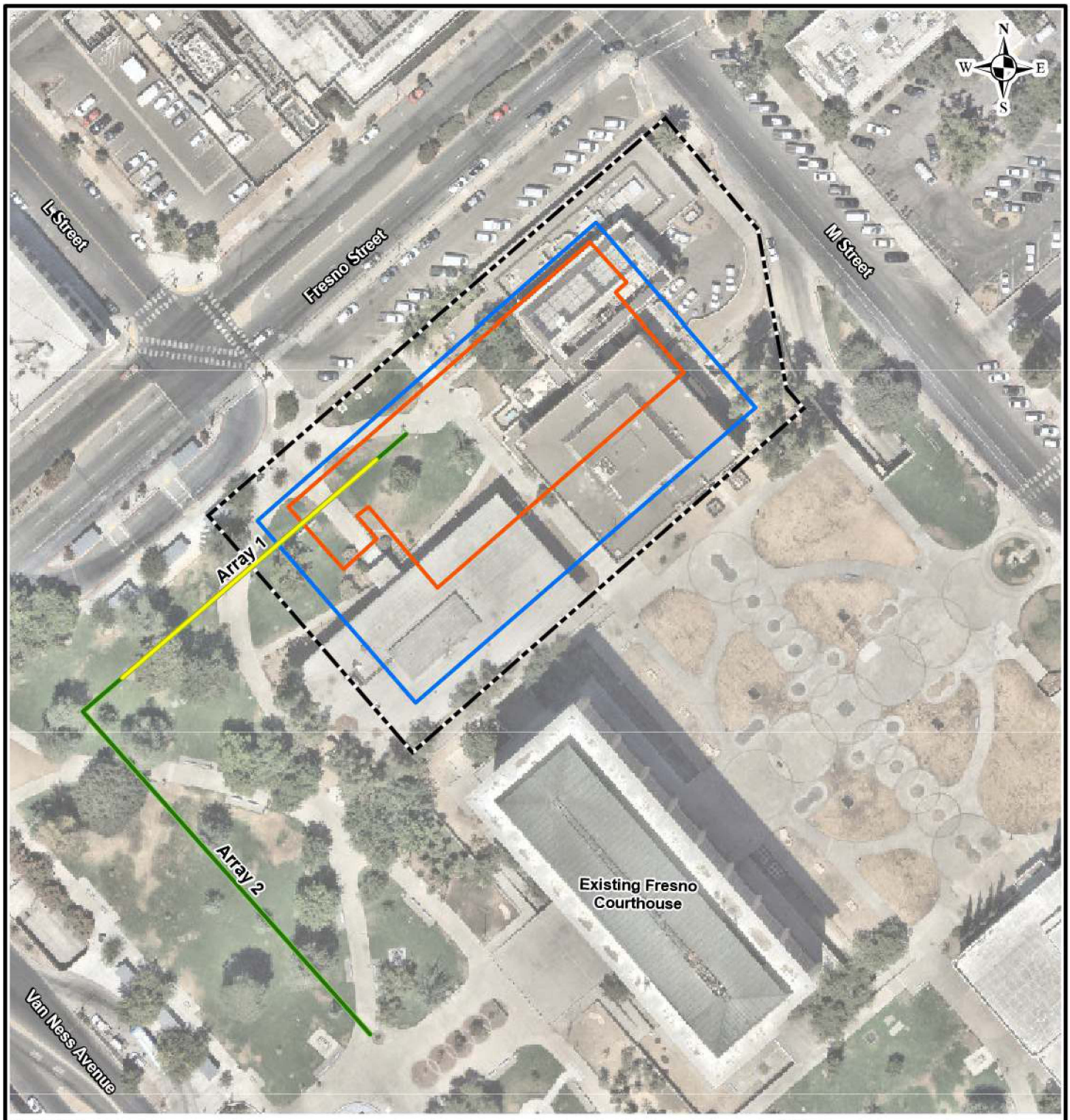
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SITE LOCATION MAP

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Figure No. 1

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Legend

- MASW Array
- Microtremor Array
- Outline of Tower
- Outline of Basement
- Site Boundary

Notes:
1. Aerial is provided by Nearmap, flown 07/24/2025.
2. All features shown are approximate.
3. Proposed structure location is approximate and based on the Site Geologic Map by Moore Twining Associates, Inc., dated 7/20/2023.

100 0 100
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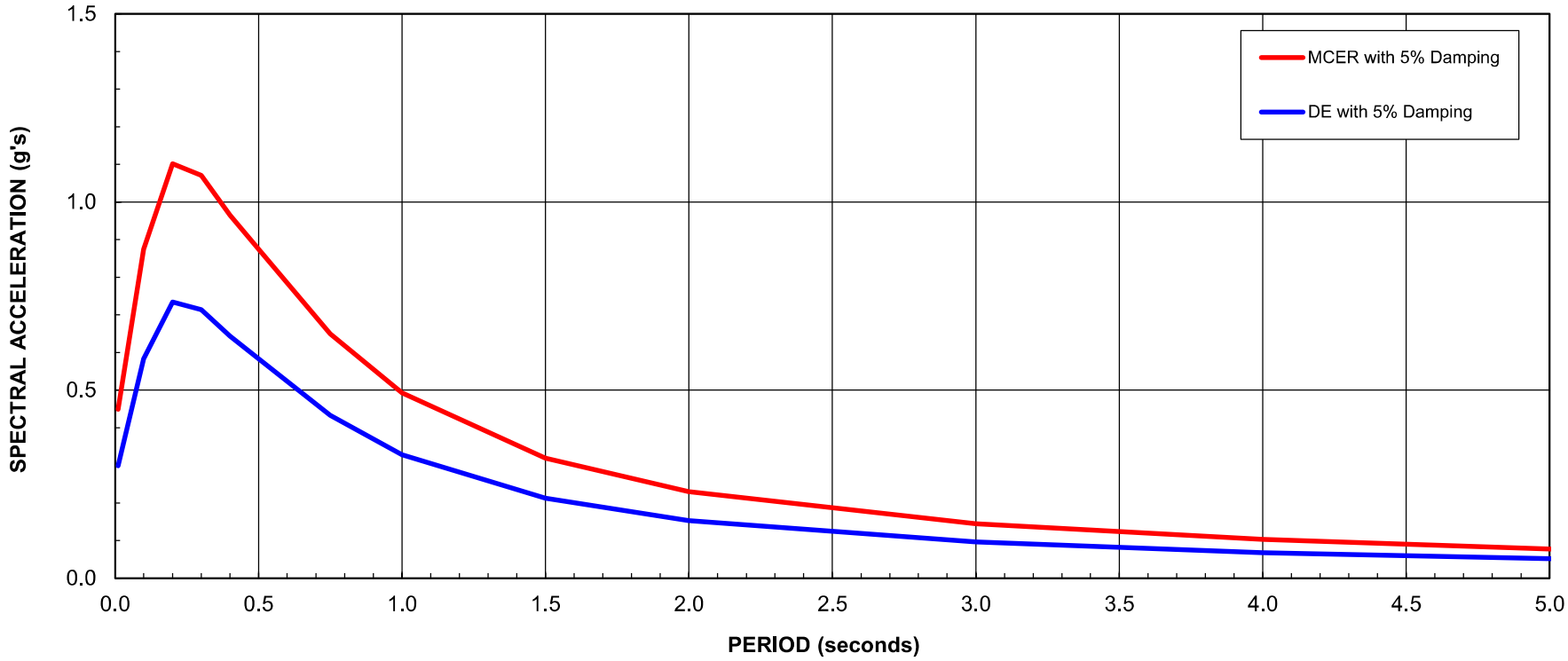
Project
NEW FRESNO COURTHOUSE
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FRESNO COUNTY CALIFORNIA

Figure Title
SITE PLAN

Project No.	Figure No.
731816301	2
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Scale: 1" = 100'	
Drawn By: TO	

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Notes

1. Damping Ratio = 5%
2. Measured V_{S30} = 346 m/s

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Project	Figure Title	Project No.	Figure No.
NEW FRESNO COURTHOUSE FRESNO FRESNO COUNTY CALIFORNIA	**RECOMMENDED HORIZONTAL SPECTRA**	731816301 Date 1/19/2026 Scale AS SHOWN Prepared By: JCR	**3**

APPENDIX A

RESULTS OF GEOPHYSICAL TESTING

GEOVision
geophysical services

REPORT

SURFACE WAVE MEASUREMENTS

PROPOSED COURTHOUSE AT COURTHOUSE PARK FRESNO, CALIFORNIA

GEO*Vision* Project No. 25473

Prepared for

Langan
135 Main Street, Suite 1500
San Francisco, California 94105
(415) 955-5200

Prepared by

GEO*Vision*, Inc.
1124 Olympic Drive
Corona, California 92881
(951) 549-1234

Report 25473-01 Rev 0

January 12, 2026

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1 INTRODUCTION

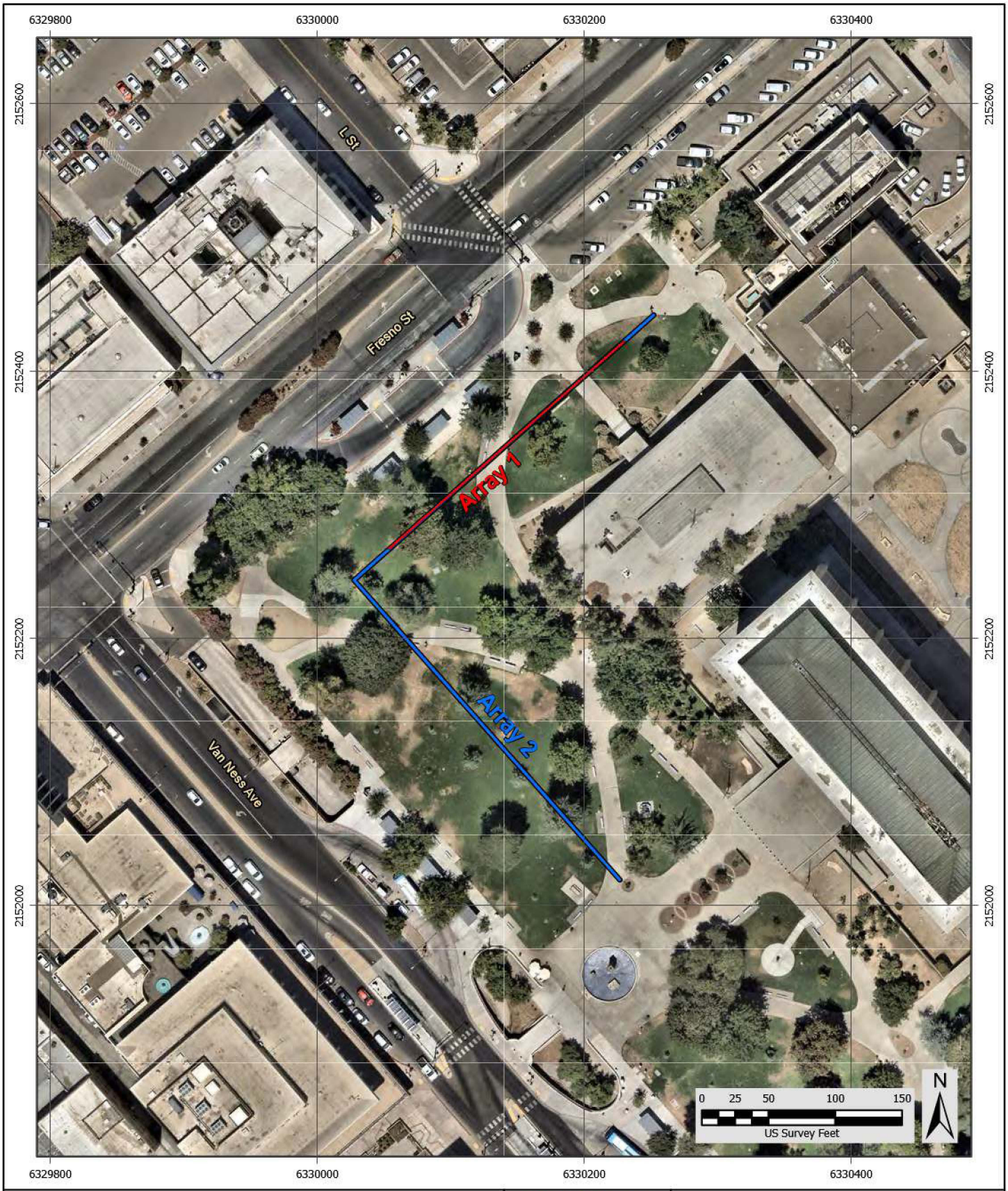
Active- and passive-source surface wave measurements were made at the Proposed Courthouse at Courthouse Park project site in Fresno, California on January 6, 2026. The purpose of this investigation was to provide a shear (S) wave velocity profile to a depth of 100 ft, or greater, and estimate the average S-wave velocity of the upper 100 ft (V_{S100ft}). The active-source surface wave technique utilized during this investigation consisted of the multi-channel analysis of surface waves (MASW) method. The passive-source surface wave technique consisted of the array microtremor method. The locations of the active- and passive-source surface wave arrays are shown in Figure 1. MASW measurements were made along a linear array (Array 1) and array microtremor measurements were made using a L-shaped array (Array 2).

For seismic design, the 2025 California Buiilding Code (CBC) references the provisions in ASCE 7-22, Chapter 20 (Minimum Design Loads and Associated Criteria for Buildings and Other Structures). The Site Classes and associated S-wave velocity ranges outlined in Table 20.2-1 of ASCE 7-22 are as follows:

Site Class A – Hard rock – $V_{S100ft} > 5{,}000$ ft/s
Site Class B – Medium hard rock – $3{,}000 < V_{S100ft} \leq 5{,}000$ ft/s
Site Class BC – Soft rock – $2{,}100 < V_{S100ft} \leq 3{,}000$ ft/s
Site Class C – Very dense sand or hard clay – $1{,}450 < V_{S100ft} \leq 2{,}100$ ft/s
Site Class CD – Dense sand or very stiff clay – $1{,}000 < V_{S100ft} \leq 1{,}450$ ft/s
Site Class D – Medium dense sand or stiff clay – $700 < V_{S100ft} \leq 1{,}000$ ft/s
Site Class DE – Loose sand or medium stiff clay – $500 < V_{S100ft} \leq 700$ ft/s
Site Class E – Very loose sand or soft clay – V_{S100} ft/s ≤ 500 ft/s
Site Class F – Soils requiring site response analysis

At many sites, active-source surface wave techniques with the utilization of portable energy sources, such as hammers and weight drops, are sufficient to obtain S-wave velocity sounding to 100 ft depth. However, at sites with high ambient noise levels and/or very soft soils, these energy sources may not be sufficient to image to 100 ft depth and a larger energy source, such as a bulldozer, is necessary. Alternatively, passive-source surface wave techniques, such as the array microtremor method, can be used to extend the depth of investigation providing the site has sufficient ambient noise. Two-dimensional passive-source surface wave arrays (e.g., triangular, circular, or L-shaped arrays) are expected to perform significantly better than linear arrays.

This report provides the results of the active and passive surface wave measurements conducted at the site. An overview of the surface wave methods is given in Section 2. Field and data reduction procedures are discussed in Sections 3 and 4, respectively. Data modeling is presented in Section 5 and interpretation and results are presented in Section 6. References and our professional certification are presented in Sections 7 and 8, respectively.



MASW Array

Microtremor Array

Notes:
Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet
Base map source: Nearmap (7-2025)

GEOVision geophysical services

Date:	1/9/2026
GV Project:	25473
Developed by:	A Martin
Drawn by:	T Rodriguez
Approved by:	A Martin
File Name:	GV_25473

FIGURE 1
SITE MAP

PROPOSED COURTHOUSE
AT COURTHOUSE PARK
FRESNO, CALIFORNIA

PREPARED FOR
LANGAN, INC.

2 OVERVIEW OF SURFACE WAVE TECHNIQUES

2.1 Introduction

Active- and passive-source (ambient vibration) surface wave techniques are routinely utilized for site characterization. Active-source surface wave techniques include the spectral analysis of surface waves (SASW) and multi-channel array surface wave (MASW) methods. Passive-source surface wave techniques include the horizontal over vertical spectral ratio (HVSR) method, and the array and refraction microtremor methods.

The basis of surface wave methods is the dispersive characteristic of Rayleigh and Love waves when propagating in a layered medium. Surface waves of different wavelengths (λ) or frequencies (f) sample different depths. As a result of the variance in the shear stiffness of the distinct layers, waves with different wavelengths propagate at different phase velocities; hence, dispersion. A surface wave dispersion curve is the variation of V_R or V_L with λ or f. The Rayleigh wave phase velocity (V_R) depends primarily on the material properties (V_S, mass density, and Poisson's ratio or compression wave velocity) over a depth of approximately one wavelength. The Love wave phase velocity (V_L) depends primarily on V_S and mass density. Rayleigh and Love wave propagation are also affected by damping or seismic quality factor (Q). Rayleigh wave techniques are utilized to measure vertically polarized S-waves (S_V-wave); whereas Love wave techniques are utilized to measure horizontally polarized S-waves (S_H-wave).

2.2 Surface Wave Techniques

The MASW and array microtremor techniques were utilized during this investigation and are discussed below.

2.2.1 MASW Technique

A description of the MASW method is given by Park, 1999a and 1999b and Foti, 2000. Ground motions are typically recorded by 24, or more, geophones typically spaced 1 to 3 m apart along a linear array and connected to a seismograph. Energy sources for shallow investigations include various sized hammers and vehicle mounted weight drops. When applying the MASW technique to develop a one-dimensional (1-D) V_S model, it is preferable to use multiple-source offsets from both ends of the array. The most routinely applied MASW technique is the Rayleigh-wave based MASW method, which we refer to as MAS_RW to distinguish from Love-wave based MASW (MAS_LW). MAS_RW and MAS_LW acquisition can easily be combined with P- and S-wave seismic refraction acquisition, respectively. MAS_RW data are generally recorded using a vertical source and vertical geophone but may also be recorded using a horizontal geophone with radial (in-line) orientation. MAS_LW data are recorded using transversely orientated horizontal source and transverse horizontal geophone.

A wavefield transform is applied to the time-history data to convert the seismic record from time-offset space to frequency-wavenumber (f-k) space in which the fundamental or higher surface-wave modes can be easily identified as energy maxima and picked. Frequency and/or wavenumber can easily be mapped to phase velocity, slowness, or wavelength using the following properties: $k = 2\pi/\lambda$, $\lambda = v/f$. Common wave-field transforms include: the f-k transform (a 2D fast Fourier transform), slant-stack transform (also referred to as intercept-slowness or τ-p transform and equivalent to linear Radon transform), frequency domain

beamformer, and phase-shift transform. The minimum wavelength that can be recovered from MASW data set without spatial aliasing is equal to the minimum receiver spacing. Occasionally, SASW analysis procedures are used to extract surface wave dispersion data, from fixed receiver pairs, at smaller wavelengths than can be recovered by wavefield transformation. Construction of a dispersion curve over the wide frequency/wavelength range necessary to develop a robust V_S model while also limiting the maximum wavelength based on an established near-field criterion (e.g., Yoon and Rix, 2009; Li and Rosenblad, 2011), generally requires multiple source offsets.

Although the clear majority of MASW surveys record Rayleigh waves, it has been shown that Love wave techniques can be more effective in some environments, particularly shallow rock sites and sites with a highly attenuative, low velocity surface layer (Xia, et al., 2012; **GEO***Vision*, 2012; Yong, et al., 2013; Martin, et al., 2014). Rayleigh wave techniques, however, are generally more effective at sites where velocity gradually increases with depth because larger energy sources are readily available for the generation of Rayleigh waves. Rayleigh wave techniques are also more applicable to sites with high velocity layers and/or velocity inversions because the presence of such structures is more apparent in the Rayleigh wave dispersion curves than in Love wave dispersion curves. Rayleigh wave techniques are preferable at sites with a high velocity surface layer because Love waves do not theoretically exist in such environments. Occasionally, the horizontal radial component of a Rayleigh wave may yield higher quality dispersion data than the vertical component because different modes of propagation may have more energy in one component than the other. Recording both the vertical and horizontal components of the Rayleigh wave is particularly useful at sites with complex modes of propagation or when attempting to recover multiple Rayleigh wave modes for multi-mode modeling as demonstrated in Dal Moro, et al, 2015. Joint inversion of Rayleigh and Love wave data may yield more accurate V_S models and offer a means to investigate anisotropy, where S_V- and S_H-wave velocity are not equal, as shown in Dal Moro and Ferigo, 2011.

2.2.2 Array Microtremor Technique

A detailed discussion of the array microtremor method can be found in Okada, 2003. Unlike active source techniques which use an active energy source (e.g., hammer), the array microtremor technique (also referred to as passive surface wave or array ambient vibration method) records background noise (ambient vibrations) emanating from ocean wave activity, wind noise, traffic, industrial activity, construction, etc. The technique uses 4, or more, receivers aligned in a 2-dimensional array. Triangle, circle, semi-circle, and “L” shaped arrays are commonly used, although any 2-dimensional arrangement of receivers can be used.

For investigations of the upper 100 m, receivers typically consist of 1 to 4.5 Hz geophones. For deeper investigations, 5 to 120 s seismometers are generally utilized. The nested triangle array, which consists of several embedded equilateral triangles, is popular as it provides accurate dispersion curves with a relatively small number of geophones. The “L” array is useful at sites located at the corner of intersecting streets. The maximum receiver separation in an array should be at a minimum equal to the desired depth of investigation.

Typically, 15 to 60 minutes of ambient vibration data is recorded depending on the size of the array, desired depth of investigation, and noise conditions. Investigations to depths on the order of 1 km may require that ambient vibrations are recorded for a much longer duration. The surface wave dispersion curve is typically estimated from array microtremor data using various f-k methods such as beamforming (Lacoss, et al., 1969), and maximum-likelihood (Capon,

1969), and the spatial-autocorrelation (SPAC) method. The beam-forming and maximum-likelihood methods are generally referred to as the frequency wavenumber (FK) and high-resolution frequency wavenumber (HRFK or HFK) methods. The SPAC method was originally based on work by Aki, 1957 and has since been extended and modified (Ling and Okada, 1993 and Ohori *et al*., 2002) to permit the use of noncircular arrays, and is now collectively referred to as extended spatial autocorrelation (ESPAC or ESAC). Further modifications to the SPAC method permit the use of irregular or random arrays (Bettig *et al*., 2001). Although it is common to apply SPAC methods to obtain a surface wave dispersion curve for modeling, other approaches involve direct modeling of the coherency data, also referred to as SPAC coefficients (Asten, 2006 and Asten, *et al*., 2015). The beam-forming and maximum-likelihood methods are generally referred to as the frequency wavenumber (FK) and high-resolution frequency wavenumber (HRFK or HFK) methods, respectively. More recently, a Rayleigh wave three-component beamforming method (RTBF) has been developed (Wathelet, et al., 2018) and appears to offer significant resolution enhancements over other methods.

FK, HRFK and RTBF methods are generally expected to perform better when ambient vibration sources are not azimuthally well-distributed (e.g., rural area where the primary noise source is a large industrial facility). SPAC methods are expected to perform better when noise sources are azimuthally well-distributed (e.g., in a large, urbanized area).

The minimum wavelength surface wave that can be extracted from an array microtremor dataset acquired utilizing a symmetric array is typically set equal to the minimum receiver spacing. The maximum wavelength is often set equal to twice the maximum receiver separation for SPAC analysis and the maximum receiver spacing for FK analysis.

2.3 Surface Wave Dispersion Curve Modeling

The dispersion curves generated from the active and passive surface wave soundings are generally combined and modeled using iterative forward and inverse modeling routines. The final model profile is assumed to represent actual site conditions. The theoretical model used to interpret the dispersion curve assumes horizontally layered, laterally invariant, homogeneous-isotropic material. Although these conditions are seldom strictly met at a site, the results of active and/or passive surface wave testing provide a good "global" estimate of the material properties along the array. The results may be more representative of the site than a borehole "point" estimate.

The surface wave forward problem is typically solved using the Thomson-Haskell transfer-matrix (Thomson, 1950; Haskell, 1953) later modified by Dunkin (1965) and Knopoff (1964), dynamic stiffness matrix (Kausel and Roësset, 1981), or reflection and transmission coefficient (Kennett, 1974) methods. All these methods can calculate fundamental- and higher-mode phase velocities, which correspond to plane waves in 2-D space. The transfer-matrix method is often used in MASW and passive surface-wave software packages, whereas the dynamic stiffness matrix is utilized in many SASW software packages. MAS$_R$W and/or passive surface-wave modeling may involve modeling of the fundamental mode, some form of effective mode, or multiple individual modes (multi-mode). As outlined in Roësset et al. (1991), several options exist for forward modeling of Rayleigh wave SASW data. One formulation considers only fundamental mode plane Rayleigh-wave motion (called the 2-D solution), whereas another includes all stress waves (e.g., body, fundamental, and higher mode surface waves) and incorporates a generalized receiver geometry (3-D global solution) or actual receiver geometry

(3-D array solution).

The fundamental mode assumption is generally applicable to modeling Rayleigh-wave dispersion data collected at normally dispersive sites, providing there are not abrupt increases in velocity or steep velocity gradients. Effective-mode or multi-mode approaches are often required for irregularly dispersive sites and sites with steep velocity gradients at shallow depth. If active and passive surface wave data are combined or MASRW data are combined from multiple seismic records with different source offsets and receiver gathers, then effective-mode computations are limited to algorithms that assume far-field plane Rayleigh wave propagation. Local search (e.g., linearized matrix inversion methods) or global search methods (e.g., Monte Carlo approaches such as simulated annealing, generic algorithm, and neighborhood algorithm) are typically used to solve the inverse problem.

The maximum wavelength (λ_{max}) recovered from a surface wave data set is typically used to estimate depth of investigation although a sensitivity analysis of the V_S models would be a more robust means to estimate depth of investigation. For normally dispersive velocity profiles with a gradual increase in V_S with depth, the maximum depth of investigation is on the order of $\lambda_{max}/2$ for both Rayleigh and Love wave dispersion data. For velocity profiles with an abrupt increase in V_S at depth, the maximum depth of investigation is on the order of $\lambda_{max}/3$ for Rayleigh wave dispersion data but less than $\lambda_{max}/3$ for Love wave dispersion data. The depth of investigation can be highly variable for sites with complex velocity structure (e.g., high velocity layers).

As with all other surface geophysical methods, the inversion of surface wave dispersion data does not yield a unique V_S model, and multiple possible solutions may equally fit the experimental data. Based on experience at other sites, the shear wave velocity models (V_S and layer thicknesses) determined by surface wave testing are within 20% of the velocities and layer thicknesses that would be determined by other seismic methods (Brown, 1998). The average velocity of the upper 30 m, however, is much more accurate, often to better than 5%, because it is not sensitive to the layering in the model. V_{S30} does not appear to suffer from the non-uniqueness inherent in V_S models derived from surface wave dispersion curves (Martin et al., 2006, Comina et al., 2011). Therefore, V_{S30} is more accurately estimated from the inversion of surface wave dispersion data than the resulting V_S models.

It may not always be possible to develop a coherent, fundamental mode dispersion curve over sufficient frequency range for modeling due to dominant higher modes with the higher modes not clearly identifiable for multi-mode modeling. It may, however, be possible to identify the Rayleigh wave phase velocity of the fundamental mode at 40 m wavelength (V_{R40}) in which case V_{S30} can at least be estimated using the Brown et al., 2000 relationship:

$$V_{S30} = 1.045V_{R40}$$

This relationship was established based on a statistical analysis of many surface wave data sets from sites with borehole velocity control and has been further evaluated by Martin and Diehl, 2004, and Albarello and Gargani, 2010. Further investigation of this approach has revealed that V_{S30} is generally between V_{R40} and V_{R45} with V_{R40} often being most appropriate for shallow groundwater sites and V_{R45} for deep ground water sites.

3 FIELD PROCEDURES

Two types of surface wave data were acquired at the site: an active-source surface wave array to characterize near-surface velocity structure and a passive-source surface wave array to characterize deeper velocity structure. The active- and passive-source surface wave sounding locations at the site are shown in Figure 1. Active-source surface wave data were acquired along a 48-channel linear array (Array 1) using the MASW technique. Passive-source surface wave data were acquired along a L-shaped array (Array 2) using the array microtremor method. The surface wave arrays were surveyed using a Trimble R10 GPS system with the RTX differential correction service.

MASW equipment used during this investigation consisted of Geometrics Geode signal enhancement seismographs, 4.5 Hz vertical geophones, seismic cables, a 4-lb hammer, and a 20-lb sledgehammer. MASW data were acquired along a linear array of 48 geophones spaced 5 ft apart for a length of 235 ft (Array 1). Source locations were offset at three locations between 5 and 60 ft from each end of the array, as space permitted, and at nominal 40 ft intervals in the interior of the array. The 20-lb sledgehammer was used at all source locations. The 4-lb hammer was also utilized at the source locations offset 5 feet from each end of the array and at all interior source locations. Data from the transient impacts (hammers) were generally averaged 5 to 10 times to improve the signal-to-noise ratio. All field data were saved to hard disk and documented on field data acquisition forms.

The array microtremor equipment consisted of Geometrics Geode signal enhancement seismographs and 4.5 Hz vertical geophones. Array 2 consisted of 41 geophones spaced at 15-foot intervals along an L-shaped array with leg lengths of 300 ft. Ambient noise measurements were made on Array 2 for 60 minutes at a 4-millisecond sample rate. The field geometry and associated files names were documented in field notes.

4 DATA REDUCTION

The MASW data were reduced using the software Seismic Pro Surface V9 developed by Geogiga and multiple in-house scripts for various data extraction and formatting tasks, with all data reduction documented in a Microsoft Excel spreadsheet.

The following steps were used for data reduction:

- Input seismic records to be used for analysis into software package.
- Check and correct source and receiver geometry as necessary.
- Select offset range used for analysis (multiple offset ranges utilized for each seismic record as discussed below) and document in spreadsheet.
- Apply phase shift transform to seismic record to convert the data from time – offset to frequency – phase velocity space.
- Identify, pick, save, and document dispersion curve.
- Change the receiver offset range and repeat process.
- Repeat process for all seismic records.
- Use in-house script to apply near-field criteria with maximum wavelength set equal to 1.0 times the source to midpoint of receiver array distance.
- Use in-house script to merge multiple dispersion curves extracted from the MASW data collected along each seismic line for a specific source type (different source locations, different receiver offset ranges, etc.).
- Edit dispersion data, as necessary (e.g., delete poor quality curves and outliers).
- Calculate a representative dispersion curve at equal log-frequency or log-wavelength spacing for the MASW dispersion data using a moving average, polynomial curve fitting routine.

This unique data reduction strategy, which can involve combination of over 50 dispersion curves for a 1-D sounding, is designed for characterizing sites with complex velocity structure that do not yield surface wave dispersion data over a wide frequency range from a single source type or source location. The data reduction strategy ensures that the dispersion curve selected for modeling is representative of average conditions beneath the array and spans as broad a frequency/wavelength range as possible while considering near field effects.

The array microtremor data were reduced using the SeisImager software packages developed by Oyo Corporation/Geometrics, Inc., and the following steps:

The processing sequence for implementation of the ESAC method in the SeisImager software package is as follows:

- Input seismic record(s) for a dataset into software.
- Optionally, extract subarrays with different apertures from the array.
- Load receiver geometry (x and y positions) for each channel in seismic record.
- Apply time-segmentation routine to break the data file(s) into multiple 30 to 60 second seismic records, as necessary.
- Calculate the SPAC coefficients for each seismic record and average.
- Optionally, select a subset of receiver offset ranges for analysis (e.g., only select receiver pairs with multiple azimuths).

- For each frequency calculate the RMS error between the SPAC coefficients and a Bessel function of the first kind and order zero over a user defined phase velocity range and velocity step.
- Plot an image of RMS error as a function for frequency (f) and phase velocity (v).
- Identify and pick the dispersion curve as the continuous trend on the f-v image with the lowest RMS error.
- Repeat the process for all arrays and time blocks.
- Use an in-house script to convert dispersion curves to appropriate format for editing.
- Edit dispersion data, as necessary, and use in-house script to combine all dispersion data after setting maximum wavelength to about 2 times the maximum receiver spacing.
- Calculate a representative dispersion curve for the passive dispersion data from each array using a moving average polynomial curve fitting routine.

The representative dispersion curves from the active and passive surface wave data were combined and the moving average polynomial curve fitting routine in WinSASW V3 was used to generate a composite representative dispersion curve for modeling. During this process, the active and passive surface wave dispersion data were given equal weights. An equal logarithm wavelength sample rate was used for the representative dispersion curve to reflect the gradual loss in model resolution with depth.

5 DATA MODELING

Surface wave data were modeled using the fundamental mode Rayleigh wave routine in the SeisImager WaveEQ software package. During this process, an initial velocity model was generated based on general characteristics of the dispersion curve and the inverse modeling routine utilized to adjust the layer V_S until an acceptable agreement with the observed data was obtained. Layer thicknesses were adjusted, and the inversion process repeated until a V_S model was developed with low RMS error between the observed and calculated dispersion curves. In many cases, once an acceptable V_S model is developed, layer thicknesses are adjusted, and the inversion process repeated to develop an ensemble of V_S models with similar RMS error to quantify non-uniqueness. Because the primary purpose of this investigation was to estimate V_{S100ft}, it was not considered necessary to develop multiple V_S models because model non-uniqueness only affects V_{S100ft} by several percent. Data inputs into the modeling software include layer thickness, S-wave velocity, P-wave velocity or Poisson's ratio, and mass density. P-wave velocity and mass density only have a very small influence (i.e., less than 10%) on the S-wave velocity model generated from a surface wave dispersion curve. However, realistic assumptions for P-wave velocity, which is significantly impacted by the location of the saturated zone, and mass density will slightly improve the accuracy of the S-wave velocity model.

Constant mass density values of 101 to 127 lb/ft^3 were used in the velocity profiles for subsurface soils/rock depending on P- and S-wave velocity. Within the normal range encountered in geotechnical engineering, variation in mass density has a negligible (±2%) effect on the estimated V_S from surface wave dispersion data. During modeling of Rayleigh wave dispersion data, the compression wave velocity, V_P, for unsaturated sediments was estimated using a Poisson's ratio, ν, of 0.333 and the relationship:

$$V_P = V_S \left[(2(1-\nu))/(1-2\nu)\right]^{0.5}$$

Poisson's ratio has a larger effect than density on the estimated V_S from Rayleigh wave dispersion data. Achenbach (1973) provides approximate relationship between Rayleigh wave velocity (V_R), V_S and ν:

$$V_R = V_S \left[(0.862 + 1.14\,\nu)/(1+\nu)\right]$$

Using this relationship, it can be shown that V_S derived from V_R only varies by about 10% over possible 0 to 0.5 range for Poisson's ratio where:

$$V_S = 1.16 V_R \text{ for } \nu = 0$$
$$V_S = 1.05 V_R \text{ for } \nu = 0.5$$

The common range of Poisson's ratio for unsaturated sediments is about 0.25 to 0.35. Over this range, V_S derived from modeling of Rayleigh wave dispersion data will vary by about 5%.

6 INTERPRETATION AND RESULTS

The fit of the calculated fundamental mode dispersion curve to the experimental data collected along Arrays 1 and 2 and the modeled V_S profile for the surface wave sounding are presented as Figure 2. The resolution decreases gradually with depth due to the loss of sensitivity of the dispersion curve to changes in V_S at greater depth. The V_S profile used to match the field data is provided in tabular form as Table 1.

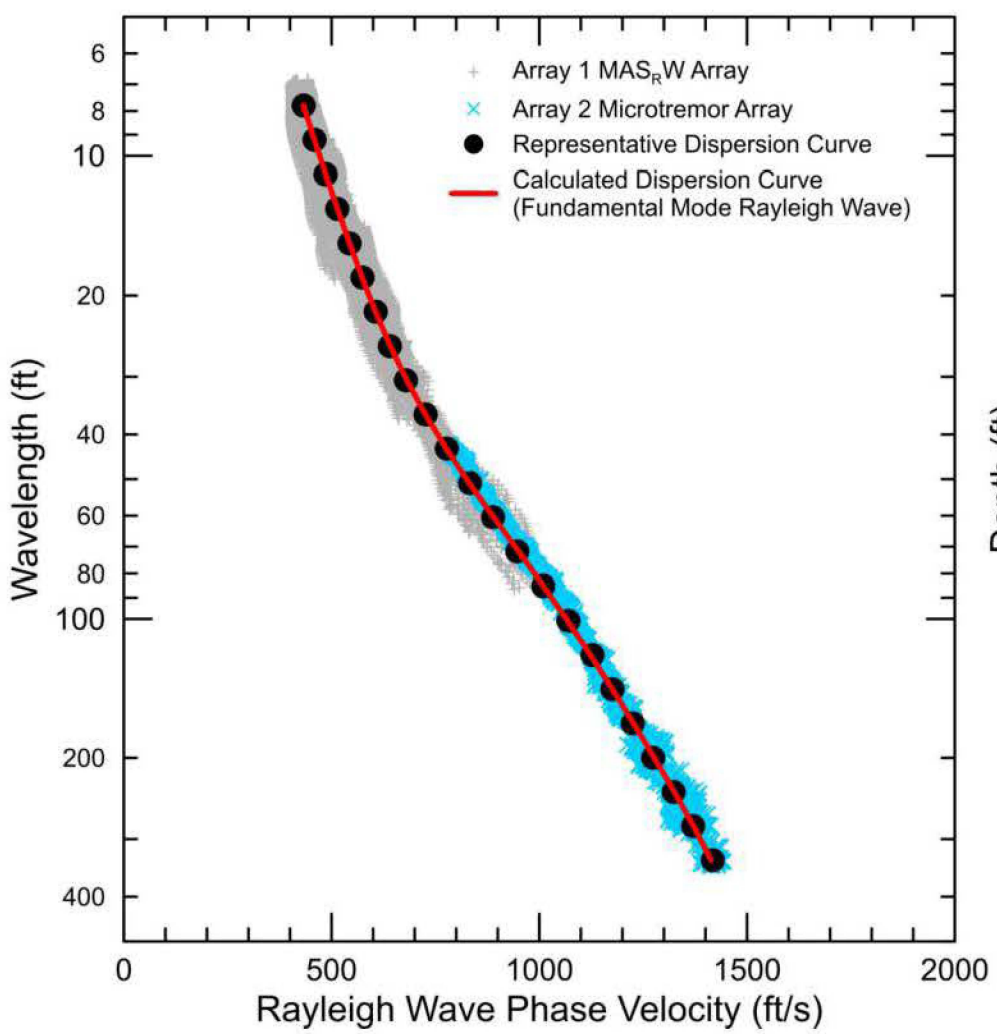
The V_S model was developed from the Rayleigh wave dispersion data derived from MASW data acquired along Array 1 and array microtremor data acquired along Array 2. The Rayleigh wave phase velocities from the microtremor array are in good agreement with those from the MASW data in the overlapping wavelength region. Scatter in dispersion data from the two arrays is expected to be primarily associated with lateral velocity variability beneath the arrays.

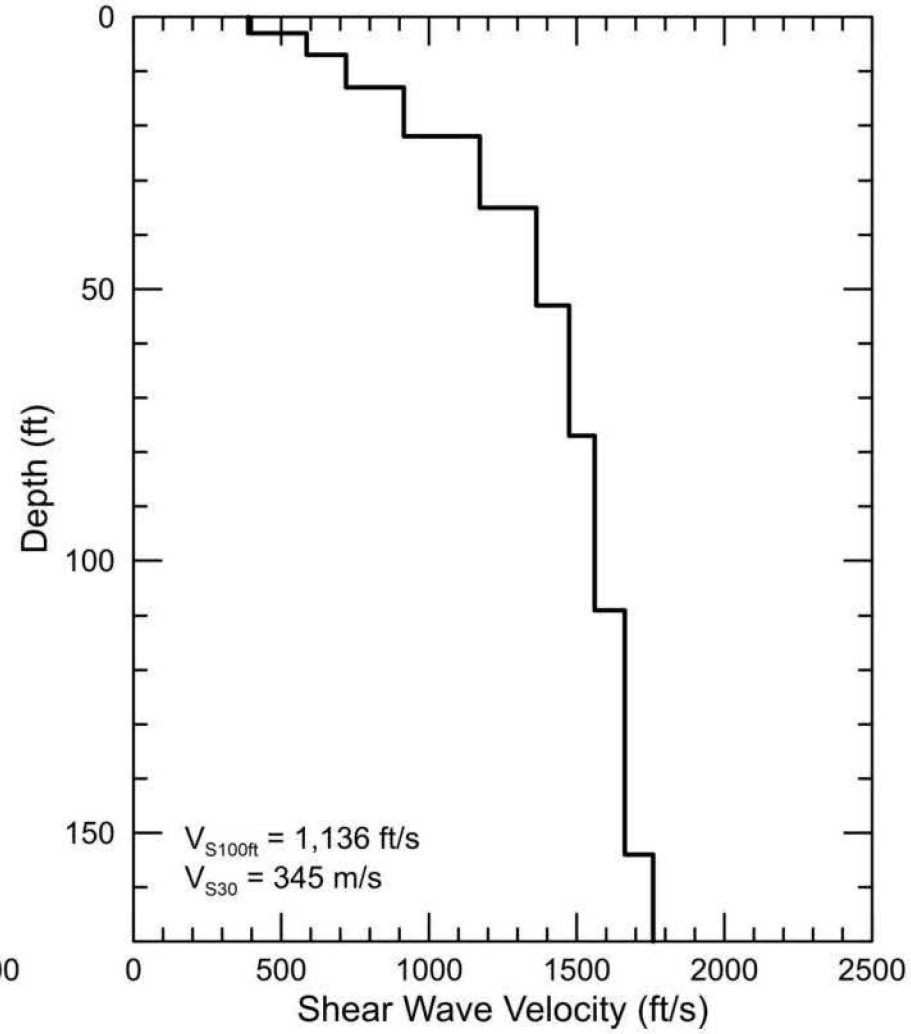
The estimated depth of investigation for the combined active- and passive-source surface wave sounding is about 170 ft. V_S gradually increases with depth from about 390 ft/s at the surface to 1,760 ft/s at a model depth of 154 ft.

The average shear wave velocity to a depth of 100 ft (V_{S100ft}) is 1136 ft/s for the V_S model. Therefore, per the criteria in the 2025 CBC and ASCE 7-22, the site is classified as Site Class CD, dense sand or very stiff clay.

Table 1 Arrays 1 and 2 V_S Model

Depth to Top of Layer (ft)	Layer Thickness (ft)	S-Wave Velocity (ft/s)	Inferred P-Wave Velocity (ft/s)	Inferred Poisson's Ratio	Inferred Unit Weight (lb/ft^3)
0.0	3.0	388	777	0.333	101.3
3.0	4.0	586	1172	0.333	111.4
7.0	6.0	719	1439	0.333	115.7
13.0	9.0	915	1830	0.333	119.5
22.0	13.0	1172	2344	0.333	122.1
35.0	18.0	1364	2727	0.333	123.8
53.0	24.0	1475	2949	0.333	124.7
77.0	32.0	1561	3122	0.333	125.4
109.0	45.0	1663	3326	0.333	126.2
154.0	Half Space	1759	3518	0.333	127.0





GEOVision geophysical services

Project No: 25473	FIGURE 2 SURFACE WAVE MODEL - ARRAYS 1 AND 2
Date: JAN 12, 2026	PROPOSED COURTHOUSE AT COURTHOUSE PARK FRESNO, CALIFORNIA
Drawn By: A MARTIN	
Approved By:	PREPARED FOR LANGAN

R:\GV\Projects\2025\25473 LANGAN\Report\Figure 2.cdr

7 REFERENCES

Achenbach J, 1973, Wave Propagation in Elastic Solids, Elsevier, Amsterdam, Netherlands.

Aki K, 1957, Space and time spectra of stationary stochastic waves, with special reference to microtremors. *Bull. Earthq. Inst. Univ. Tokyo*, Vol. 35, p 415–457.

Albarello D and Gargani G, 2010, "Providing NEHRP soil classification from the direct interpretation of effective Rayleigh-wave dispersion curves", *Bulletin of the Seismological Society of America,* Vol. 100, No. 6, p 3284-3294.

Asten M, 2006, Site shear velocity profile interpretation from microtremor array data by direct fitting of SPAC curves, in *Proceedings of the Third Int. Symp. Effects of Surface Geol. Seismic Motion*, Vol. 2, LCPC Edition, Grenoble, France, August 30–September 01, Paper No. 99, p 1069-1080.

Asten M, Stephenson WJ and Hartzell, S, 2015, The use of wavenumber normalization in computing spatially averaged coherencies (krSPAC) of microtremor data from asymmetric arrays, *Proceedings 6th International Conference on Earthquake Geotechnical Engineering*, Christchurch, New Zealand, 9 p.

Bettig B, Bard PY, Scherbaum F, Riepl J, Cotton F, Cornou C and Hatzfeld D, 2001, Analysis of dense array noise measurements using the modified spatial auto-correlation method (SPAC): application to the Grenoble area, *Bollettino di Geofisica Teoricaed Applicata*, Vol 42, p 281–304.

Brown L, 1998, Comparison of V_S profiles from SASW and borehole measurements at strong motion sites in Southern California, Master's thesis, University of Texas, Austin.

Brown L, Diehl J and Nigbor R, 2000, A simplified method to measure average shear-wave velocity in the top 30 m (V_s30), *Proc. 6th International Conference on Seismic Zonation*, p 1–6.

BSSC, 2009, *NEHRP recommended provisions for seismic regulations for new buildings and other structure (FEMA 450), Part I: Provisions*, Building Seismic Safety Council, Federal Emergency Management Agency, Washington D.C.

Capon J, 1969, High-resolution frequency-wavenumber spectrum analysis, *Proc. Institute of Electrical and Electronics Engineers (IEEE)*, Vol. 57, no. 8, p 1408–1418.

Comina C, Foti S, Boiero D, and Socco LV, 2011, Reliability of $V_{S,30}$ evaluation from surface-wave tests, *J. Geotech. Geoenviron. Eng.*, p 579–586.

Dal Moro G, Moura R, Moustafa A, 2015, Multi-component joint analysis of surface waves, *Journal of Applied Geophysics*, Vol. 119, p 128-138.

Dal Moro G and Ferigo F, 2011, Joint Analysis of Rayleigh- and Love-wave dispersion curves: Issues, criteria and improvements, *Journal of Applied Geophysics*, Vol. 75, p 573-589.

Dunkin J W, 1965, Computation of modal solutions in layered, elastic media at high frequencies, *Bulletin of the Seismological Society of America*, Vol. 55, pp. 335–358.

Foti S, 2000, Multistation Methods for Geotechnical Characterization using Surface Waves, Ph.D. Dissertation, Politecnico di Torino, Italy.

GEOVision, Inc (2012): EPRI (2004, 2006) ground-motion model (GMM) review project: Shear wave velocity measurements at seismic recording stations, http://www.epri.com/abstracts/Pages/ProductAbstract. aspx?ProductId=000000003002000719.

Haskell N A, 1953, The dispersion of surface waves on multilayered media, *Bull. Seismol. Soc. Am.*, v. 43, pp. 17–34.

García-Jerez A, Piña-Flores J, Sánchez-Sesma F, Luzón, F, Perton, M, 2016, A computer code for forward computation and inversion of the H/V spectral ratio under the diffuse field assumption, Computers & Geosciences, In Press.

Kausel, E. and J. M. Röesset (1981). Stiffness matrices for layered soils, *Bulletin of the Seismological Society of America*, v. 71, no. 6, pp. 1743–1761.

Kennett, B.L.N (1974). Reflections, rays and reverberations, *Bulletin of the Seismological Society of America*, v. 64, no. 6, pp. 1685–1696.

Knopoff L. (1964). "A matrix method for elastic wave problems." *Bulletin of the Seismological Society of America*, Vol. 54, pp. 431–438.

Lacoss R, Kelly E and Toksöz M, 1969, Estimation of seismic noise structure using arrays, *Geophysics*, v. 34, pp. 21-38.

Li J and Rosenblad B, 2011, Experimental study of near-field effects in multichannel array-based surface wave velocity measurements, *Near Surface Geophysics*, Vol. 9, 357-366.

Ling S and Okada H, 1993, An extended use of the spatial correlation technique for the estimation of geological structure using microtremors, *Proc. the 89th Conference Society of Exploration Geophysicists Japan (SEGJ)*, pp. 44–48 (in Japanese).

Martin A and Diehl J, 2004, Practical experience using a simplified procedure to measure average shear-wave velocity to a depth of 30 meters (V_S30), *Proceedings of the 13th World Conference on Earthquake Engineering*, Vancouver, B.C., Canada, August 1-6, 2004, Paper No. 952.

Martin A, Shawver J and Diehl J, 2006, Combined use of Active and Passive Surface Wave Techniques for Cost Effective UBC/IBC Site Classification, *Proceedings of the 8th National Conference on Earthquake Engineering*, San Francisco, California, Paper No. 1013.

Martin A, Yong A and Salomone L, 2014, Advantages of active Love wave techniques in geophysical characterization of seismographic station sites – case studies in California and the Central and Eastern United States, Proceedings of the Tenth U.S. National Conference on Earthquake Engineering, Frontiers of Earthquake Engineering, July 21-25, Anchorage, Alaska.

Ohori M, Nobata A, and Wakamatsu K, 2002, A comparison of ESAC and FK methods of estimating phase velocity using arbitrarily shaped microtremor arrays, *Bull. Seismol. Soc. Am.*, v. 92, no. 6, p. 2323–2332.

Okada H, 2003, The Microtremor Survey Method, *Society of Exploration Geophysics Geophysical Monograph Series*, Number 12, 135p.

Park C, Miller R and Xia J, 1999a, Multimodal analysis of high frequency surface waves, *Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems '99*, 115-121.

Park C, Miller R and Xia, J, 1999b, Multichannel analysis of surface waves, *Geophysics*, Vol 64, No. 3, 800-808.

Roesset J, Chang D and Stokoe K, 1991, Comparison of 2-D and 3-D Models for Analysis of Surface Wave Tests, *Proceedings, 5th International Conference on Soil Dynamics and Earthquake Engineering*, Karlsruhe, Germany.

Thomson W T, 1950, Transmission of elastic waves through a stratified solid medium, *J. Applied Physics*, v. 21, no. 2, pp. 89–93.

Wathelet M, Guillier B, Roux P, Cornou C and Ohrnberger M, 2018, Rayleigh wave three-component beamforming: signed ellipticity assessment from high-resolution frequency-wavenumber processing of ambient vibration arrays, *Geophysical Journal International*, Vol 215, p 507-523.

Xia J, Xu Y, Luo Y, Miller R, Cakir R and Zeng C, 2012, Advantages of using Multichannel analysis of Love waves (MALW) to estimate near-surface shear-wave velocity, *Surveys in Geophysics,* 841–860.

Yong A, Martin A, Stokoe K and Diehl J, 2013, ARRA-funded V_{S30} measurements using multi-technique method approach at strong-motion stations in California and Central-Eastern United States, Open-File Report 2013-1102, United States Geological Survey, http://pubs.usgs.gov/of/2013/1102/.

Yoon S and Rix G, 2009, Near-field effects on Array-based surface wave methods with active sources, *Journal of Geotechnical and Geoenvironmental Engineering*, Vol. 135, no. 3, 399-406.

8 CERTIFICATION

All geophysical data, analysis, interpretations, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a **GEO*Vision*** California Professional Geophysicist.

Reviewed and approved by,



01/12/2026

Antony J. Martin — Date
California Professional Geophysicist, P. Gp.
GEO*Vision* Geophysical Services

* This geophysical investigation was conducted under the supervision of a California Professional Geophysicist using industry standard methods and equipment. A high degree of professionalism was maintained during all aspects of the project from the field investigation and data acquisition, through data processing interpretation and reporting. All original field data files, field notes and observations, and other pertinent information are maintained in the project files and are available for the client to review for a period of at least one year.

  A professional geophysicist's certification of interpreted geophysical conditions comprises a declaration of his/her professional judgment. It does not constitute a warranty or guarantee, expressed or implied, nor does it relieve any other party of its responsibility to abide by contract documents, applicable codes, standards, regulations, or ordinances.

APPENDIX B

SITE-SPECIFIC RESPONSE SPECTRA

APPENDIX B
SITE-SPECIFIC RESPONSE SPECTRA

This appendix presents the details of our estimation of the level of ground shaking at the site during future earthquakes. To develop site-specific response spectra in accordance with 2025 California Building Code (CBC) criteria, and by reference ASCE 7-22, we performed probabilistic seismic hazard analysis (PSHA) and deterministic analysis to develop smooth, site-specific horizontal spectra for two levels of shaking, namely:

- Risk-Targeted Maximum Considered Earthquake (MCE_R), which corresponds to the lesser of the risk-targeted two percent probability of exceedance in 50 years (2,475-year return period) or 84th percentile of the controlling deterministic event both considering the maximum direction as described in ASCE 7-22, with appropriate lower limit checks.

- Design Earthquake (DE), which corresponds to 2/3 of the MCE_R.

B1.0 PROBABILISTIC SEISMIC HAZARD ANALYSIS

Because the location, recurrence interval, and magnitude of future earthquakes are uncertain, we performed a PSHA, which systematically accounts for these uncertainties. The results of a PSHA define a uniform hazard for a site in terms of a probability that a particular level of shaking will be exceeded during the given life of the structure.

To perform a PSHA, information regarding the seismicity, location, and geometry of each source, along with empirical relationships that describe the rate of attenuation of strong ground motion with increasing distance from the source, are needed. The assumptions necessary to perform the PSHA are that:

- the geology and seismic tectonic history of the region are sufficiently known, such that the rate of occurrence of earthquakes can be modeled by historic or geologic data;

- the level of ground motion at a particular site can be expressed by an attenuation relationship that is primarily dependent upon earthquake magnitude and distance from the source of the earthquake;

- the earthquake occurrence can be modeled as a Poisson process with a constant mean occurrence rate.

As part of the development of the site-specific spectra, we performed a PSHA to develop a site-specific response spectrum for 2 percent probability of exceedance in 50 years. The ground surface spectrum was developed using the OpenSHA Hazard Spectrum Application, Version 25.4.2. The approach used in PSHA is based on the probabilistic seismic hazard model developed by Cornell (1968) and McGuire (1976). Our analysis modeled the faults as linear sources, and earthquake activities were assigned to the faults based on historical and geologic data. The levels of shaking were estimated using ground motion models (attenuation

relationships) that are primarily dependent upon the magnitude of the earthquake and the distance from the site to the fault, as well as the average shear wave velocity of the upper 30 meters, V_{S30}.

B1.1 Probabilistic Model

In probabilistic models, the occurrence of earthquake epicenters on a given fault is assumed to be uniformly distributed along the fault. This model considers ground motions arising from the portion of the fault rupture closest to the site rather than from the epicenter. Fault rupture lengths were modeled using fault rupture length-magnitude relationships given by Wells and Coppersmith (1994).

The probability of exceedance, $P_e(Z)$, at a given ground-motion, Z, at the site within a specified time period, T, is given as:

$$P_e(Z) = 1 - e^{-V(z)T}$$

where V(z) is the mean annual rate of exceedance of ground motion level Z. V(z) can be calculated using the total-probability theorem.

$$V(z) = \sum_i v_i \iint P[Z > z \mid m, r] f_{M_i}(m) f_{R_i|M_i}(r;m)\,dr\,dm$$

where:

v_i = the annual rate of earthquakes with magnitudes greater than a threshold M_{oi} in source i

P [Z > z | m,r] = probability that an earthquake of magnitude m at distance r produces ground motion amplitude Z higher than z

f_{Mi} (m) and $f_{Ri|Mi}$ (r;m) = probability density functions for magnitude and distance

Z represents peak ground acceleration, or spectral acceleration values for a given frequency of vibration. The peak accelerations are assumed to be log-normally distributed about the mean with a standard error that is dependent upon the magnitude and attenuation relationship used.

B1.2 Source Modeling and Characterization

The segmentation of faults, maximum magnitudes, and recurrence rates were modeled using the data presented in the Uniform California Earthquake Rupture Forecast Version 3 (UCERF3) as detailed in the United States Geological Survey Open File Report 2013-1165. Table B-1 presents the distance and direction from the site to the fault, mean moment magnitude, mean slip rate, and fault length for individual fault segments in UCERF3 source model. The mean

moment magnitude presented in Table B-1 was computed assuming full rupture of the segment using Hanks and Bakun (2008) relationship.

TABLE B-1
Source Zone Parameters

Fault Name	Approx. Distance from Fault (km)	Direction from Site	Mean Moment Magnitude[B1]	Mean Slip Rate (mm/yr)	Fault Length (km)
Great Valley 12	65	West	6.2	0.8	17
Great Valley 11	65	West	6.4	1.5	24
Great Valley 13 (Coalinga)	66	Southwest	6.7	1.1	32
Great Valley 14 (Kettleman Hills)	74	Southwest	6.7	0.7	24
Great Valley 10 (Panoche)	77	West	6.3	1.1	22
Great Valley 09 (Laguna Seca)	86	West	6.6	1.6	39
Ortigalita (South)	93	West	6.9	1.2	62
Lost Hills	105	South	6.6	0.7	33
San Andreas (Creeping Section) 2011 CFM	106	Southwest	7.3	18.7	121
San Andreas (Parkfield)	107	Southwest	6.6	30.5	36
Calaveras (So) - Paicines extension 2011 CFM	111	West	6.9	7.1	60
Great Valley 08 (Quinto)	114	West	6.0	0.3	19
Ortigalita (North)	116	West	6.62	1.8	40
San Juan	117	Southwest	7.1	0.4	82
Round Valley	118	East	6.7	0.7	43
San Andreas (Cholame) rev	119	Southwest	6.9	23.0	63

Note:
1. The table above is a summary and does not include all the fault segmentation, alternate traces and low activity faults included in the UCERF3 model.

B1.3 Ground Motion Models

Based on the subsurface conditions and results of the geophysical testing, the site is classified as Site Class CD. Using the shear wave velocities measurements from the geophysical testing, we estimated the shear wave velocity of the upper 100 feet (30 meters), V_{S30}, is approximately 1,136 feet per second (346 meters per second). Furthermore, we estimated the depths Z_1 and $Z_{2.5}$ of about 417 meters and 2.02 kilometers, using the Chiou and Youngs (2013) and Campbell

[B1] Mean Moment Magnitude based on entire fault length rupturing using Hanks and Bakun (2008).

and Bozorgnia (2007) relationships, respectively. These values were used in the development of site-specific spectra.

The Pacific Earthquake Engineering Research Center (PEER) embarked on the NGA-West 2 project to update the previously developed ground motion models (GMMs), which were mostly published in 2014. We used the GMMs by Abrahamson et al. (2014), Boore et al. (2014), Campbell and Bozorgnia (2014) and Chiou and Youngs (2014). These GMMs include the average shear wave velocity in the upper 100 feet. Furthermore, these GMMs were developed using the same earthquake database, therefore, the mean of the models (using equal weights for each GMM) is appropriate and was used to develop the recommended spectra.

The NGA relationships database includes the most up-to-date recorded and processed data. The data was developed for the "mean" (Rot_{D50}) horizontal components of spectral acceleration.

B1.4 Maximum Direction

ASCE 7-22 specifies the development of MCE_R site-specific response spectra in the maximum direction. Shahi and Baker (2014) provide scaling factors that modify the Rot_{D50} spectra to provide spectral values for the maximum response (maximum direction). Therefore, we used the scaling factors presented on Table 1 of Shahi and Baker (2014) for ratios of $Sa_{RotD100}/Sa_{RotD50}$ to modify the mean PSHA results.

B2.0 PSHA RESULTS

Figure B-1 presents the mean Rot_{D50} results of the PSHA for the 2 percent probability of exceedance in 50 years hazard level (2,475-year return period) using the four GMMs discussed. The mean of these models and the mean in the maximum direction is also shown.

Figure B-2 presents the deaggregation plots of the PSHA results for the 2 percent probability of exceedance in 50 years hazard level. From the examination of these results, it can be seen that the Great Valley fault and San Andreas fault dominate the hazard at the site for various periods.

F3.0 DETERMINISTIC ANALYSIS

We performed a deterministic analysis to develop the MCE_R spectrum at the site. In a deterministic analysis, a given magnitude earthquake occurring at a certain distance from the source is considered as input into an appropriate GMM. The same GMMs, weighting factors and maximum direction factors as discussed in Sections B1.3 and B1.4 were used in our deterministic analysis.

On the basis of the deaggregation results, we developed deterministic spectra for two scenario earthquakes:

- a Moment Magnitude of 7.6 on the Great Valley 11 Creek fault at a distance of about 65.8 kilometers from the site; and

- a Moment Magnitude of 8.1 on the San Andreas fault at a distance of about 105.6 kilometers from the site.

Figure B-3 and B-4 present the 84th percentile deterministic results for the Great Valley and San Andreas scenarios, respectively, using the same four GMMs as well as the average of these models in the maximum direction.

We conclude the envelope of the two scenarios be used as the deterministic basis for the development of the MCE_R. Figure B-5 presents the average of the 84th percentile deterministic results in the maximum direction for both scenarios as well as the recommended envelope of scenarios. The Great Valley fault scenario governs for periods of up to 1.5 seconds; after which the San Andreas fault scenario governs.

F4.0 RECOMMENDED SPECTRA

The MCE_R as defined in ASCE 7-22 is the lesser of the maximum direction PSHA spectrum having a two percent probability of exceedance in 50 years (2,475-year return period) or the maximum direction 84th percentile deterministic spectrum of the governing earthquake scenario and the DE spectrum is defined as 2/3 times the MCE_R spectrum. In addition, the MCE_R spectrum is defined as a Risk-Targeted response spectrum, which corresponds to a targeted collapse probability of one percent in 50 years. The USGS Risk-Targeted Ground Motion calculator was used to determine the risk coefficients for each period of interest for the probabilistic spectrum. We used these risk coefficients to develop the risk-targeted PSHA spectrum.

Furthermore, we followed the procedures outlined in Chapter 21 of ASCE 7-22 to develop the site-specific spectra for MCE_R and DE. Table B-2 presents digitized values of the site-specific spectra for the Risk-Targeted PSHA 2,475-year return period in the maximum direction and the envelope of the 84th percentile deterministic in the maximum direction. Chapter 21 of ASCE 7-22 requires the deterministic spectrum not fall below the deterministic lower limit spectrum presented in Table 21.2-1 of ASCE 7-22.

Figure B-6 and Table B-2 present a comparison of the site-specific spectra for the Risk-Targeted 2,475-year return period PSHA and the 84th percentile deterministic spectra, both in the maximum direction and the deterministic lower limit.

As shown on Figure B-6 and in Table B-2, the deterministic lower limit is greater than the envelope of the two scenarios earthquakes and therefore the deterministic lower limit should be used as the 84th percentile deterministic spectrum. In addition, the risk-targeted PSHA spectrum for a 2 percent probability of exceedance in 50 years (2,475-year return period) is less than deterministic lower limit spectrum for all periods. Therefore, the basis for the development of the MCE_R spectrum should be the risk-targeted PSHA spectrum (for a 2 percent probability of

exceedance in 50 years, corresponding to a 2,475-year return period) for all periods. The MCE_R spectrum should not be less than 80 percent of the mapped MCE_R spectral values for the applicable site class (per Section 21.2.3 of ASCE 7-22). As shown on Figure B-6 and in Table B-2, the initial MCE_R spectrum is greater than 80 percent of the mapped MCE_R spectral values for all periods up to 5 seconds. The DE spectrum is defined as 2/3 times the MCE_R.

TABLE B-2
Comparison of Site-specific and Code Spectra for Development of MCE_R Spectrum per ASCE 7-22
Sa (g) for 5 percent damping

Period (sec.)	Risk-Targeted PSHA – 2,475-Year Return Period Max. Dir.	Deter-ministic 84th Percentile Max. Dir.	ASCE 7-22 Deter-ministic Lower Limit, Site Class CD	Lesser of PSHA and Deter-ministic (Initial MCE_R)	ASCE 7-22 - 80% MCE_R per Section 21.2.3, Site Class CD	Recommended Spectra	
						MCE_R	DE
0.01	0.449	0.216	0.75	0.449	0.328	0.449	0.299
0.10	0.875	0.371	1.24	0.875	0.624	0.875	0.584
0.20	1.102	0.494	1.66	1.102	0.800	1.102	0.735
0.30	1.071	0.537	1.83	1.071	0.792	1.071	0.714
0.40	0.966	0.516	1.82	0.966	0.720	0.966	0.644
0.50	0.875	0.478	1.73	0.875	0.656	0.875	0.583
0.75	0.650	0.374	1.41	0.650	0.496	0.650	0.434
1.00	0.493	0.291	1.17	0.493	0.384	0.493	0.328
1.50	0.319	0.208	0.84	0.319	0.256	0.319	0.213
2.00	0.230	0.159	0.64	0.230	0.184	0.230	0.153
3.00	0.145	0.113	0.45	0.145	0.120	0.145	0.096
4.00	0.103	0.086	0.34	0.103	0.088	0.103	0.069
5.00	0.078	0.066	0.26	0.078	0.070	0.078	0.052

The recommended MCE_R and DE spectra are presented in Table B-3 and on Figure B-7.

TABLE B-3
Recommended MCE_R and DE Spectra
Sa (g) for 5 percent damping

Period (seconds)	MCE_R	DE
0.01	0.449	0.299
0.10	0.875	0.584
0.20	1.102	0.735
0.30	1.071	0.714
0.40	0.966	0.644
0.50	0.875	0.583
0.75	0.650	0.434
1.00	0.493	0.328
1.50	0.319	0.213
2.00	0.230	0.153
3.00	0.145	0.096
4.00	0.103	0.069
5.00	0.078	0.052

Because site-specific procedure was used to determine the recommended response spectra, the corresponding values of S_{MS}, S_{M1}, S_{DS} and S_{D1} per Section 21.4 of ASCE 7-22 should be used as shown in Table B-4.

TABLE B-4
Design Spectral Acceleration Value

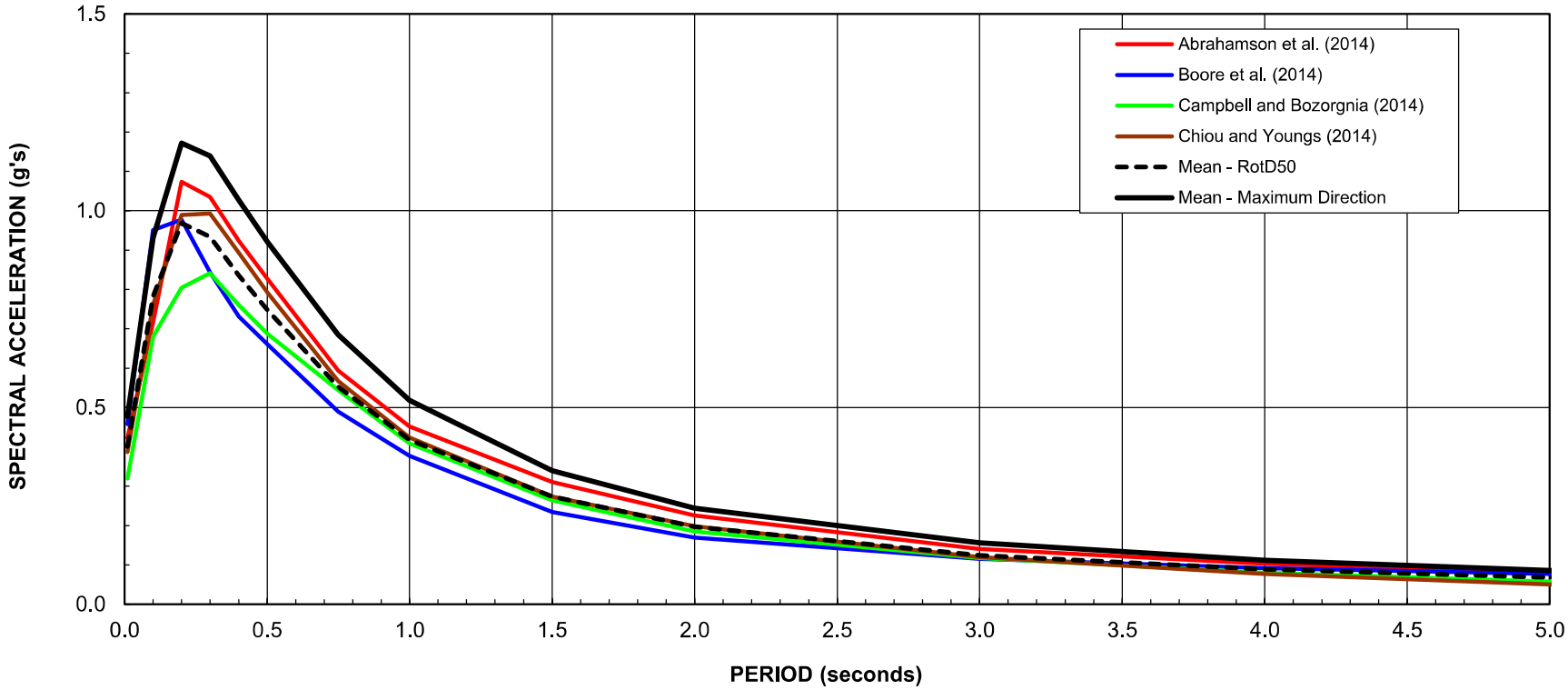
Parameter	Spectral Acceleration Value (g's)
S_{MS}[B2]	0.992
S_{M1}[B3]	0.493
S_{DS}[B2]	0.661
S_{D1}[B3]	0.328

Notes:

B2. S_{DS} is based on the site-specific response spectra and is based on 90 percent of the maximum spectral acceleration within the period range of 0.2 to 5 seconds; it is governed by 90 percent of the spectral acceleration at a period of 0.2 seconds. S_{MS} is 1.5 times the S_{DS}.

B3. S_{D1} is based on the site-specific response spectra and is based on either (1) 90 percent of the maximum of the product of period, T, and spectral acceleration, Sa, for periods from 1.0 to 5.0 seconds or (2) 100 percent of the value of Sa at a period of 1.0 second, whichever is greater; it is governed by the value of Sa at a period of 1.0 second. S_{M1} is 1.5 times the S_{D1}.

Attachments: Figures B-1 through B-7



Notes

1. Damping Ratio = 5%
2. Measured V_{S30} = 346 m/s
3. Maximum direction factors from Shahi and Baker (2014)
4. Z_1 = 417 m, $Z_{2.5}$ = 2.02 km

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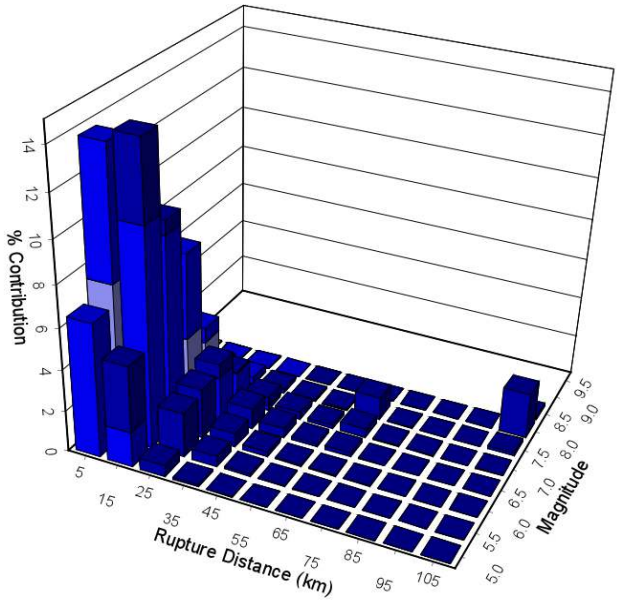
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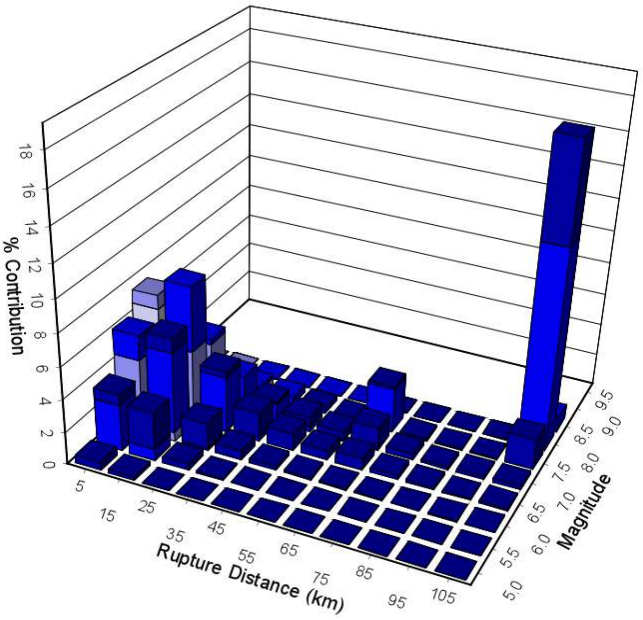
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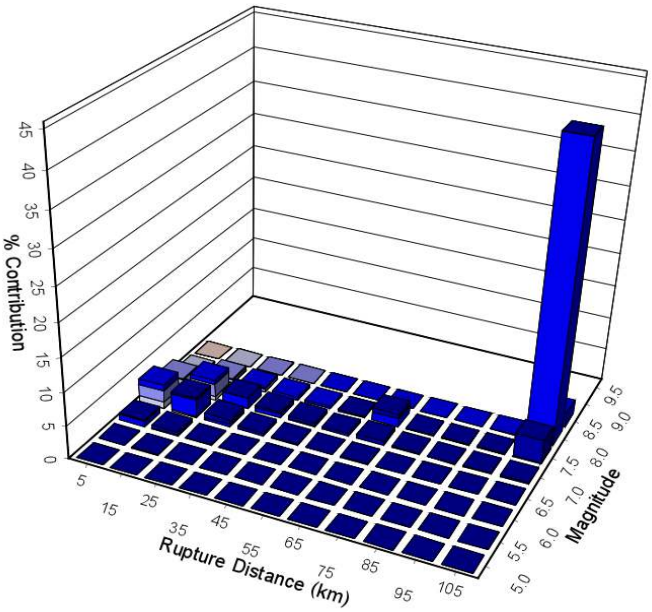
Project	Figure Title	Project No.	Figure No.
NEW FRESNO COURTHOUSE FRESNO FRESNO COUNTY CALIFORNIA	**RESULTS OF PSHA, 2 PERCENT PROBABILITY OF EXCEEDANCE IN 50 YEARS**	731816301 Date 1/19/2026 Scale AS SHOWN Prepared By: JCR	**B-1**



(a) PGA

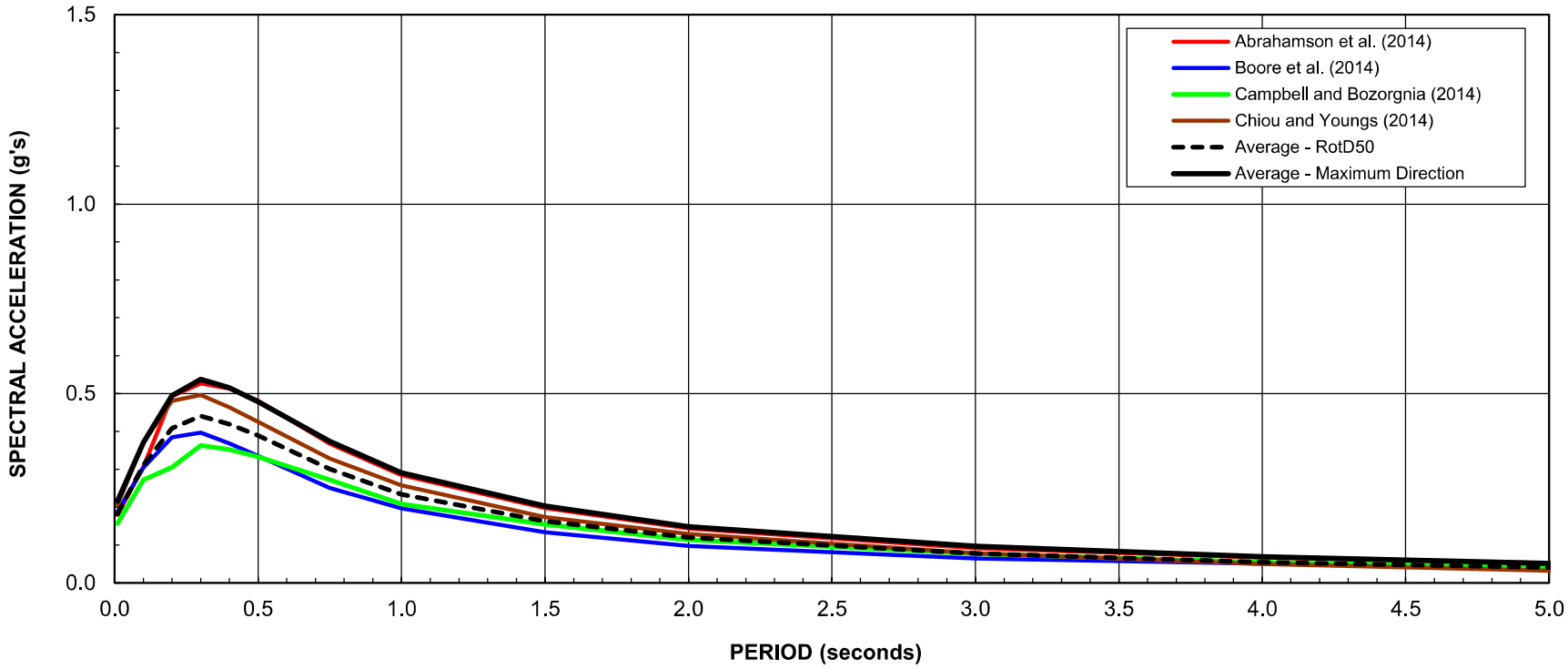


(b) S_a, T = 1.0 second



(c) S_a, T = 4.0 second

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Notes

1. Damping Ratio = 5%
2. Measured V_{S30} = 346 m/s
3. Maximum direction factors from Shahi and Baker (2014)
4. Deterministic results are for a Moment Magnitude 7.6 occuring on the Great Valley 11 fault about 65.8 km from the site

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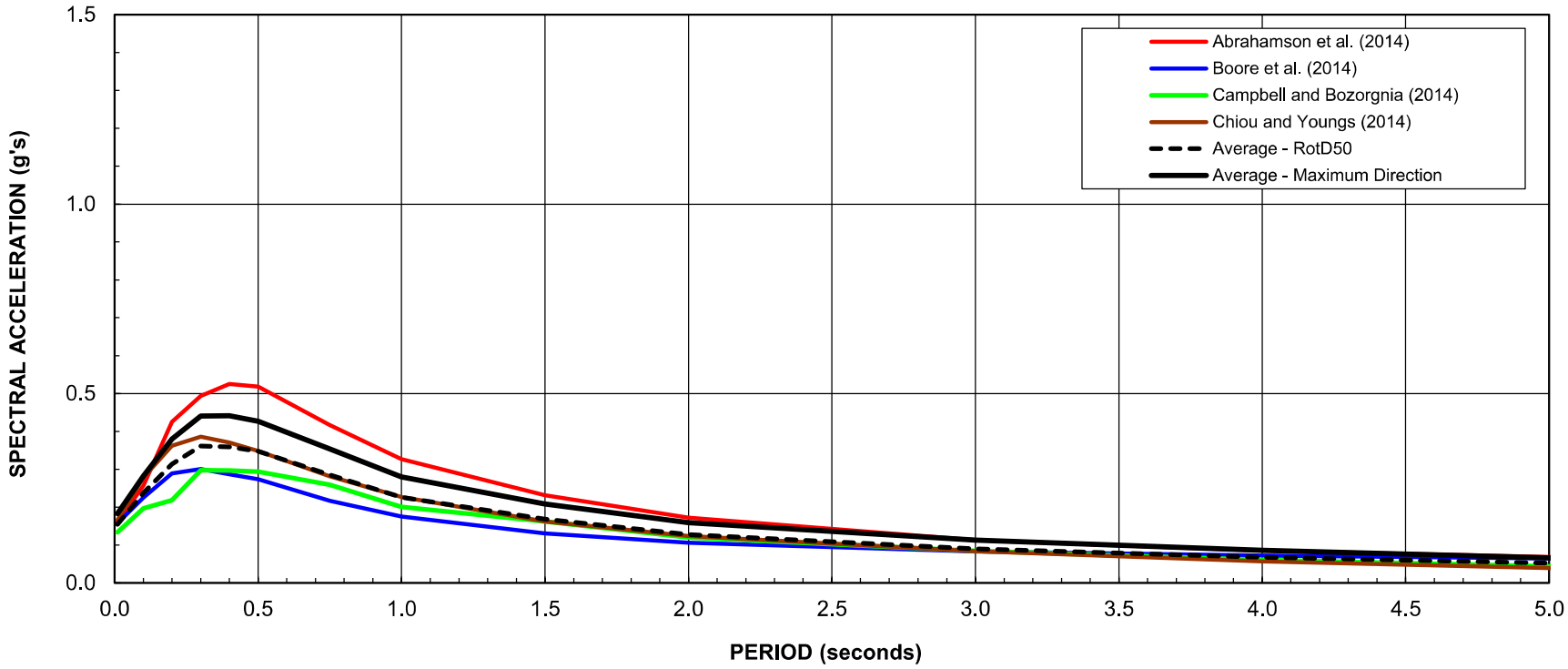
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Project	Figure Title	Project No.	Figure No.
NEW FRESNO COURTHOUSE FRESNO FRESNO COUNTY CALIFORNIA	**RESULTS OF DETERMINISTIC ANALYSIS - 84th PERCENTILE SPECTRA - GREAT VALLEY**	731816301 Date 1/19/2026 Scale AS SHOWN Prepared By: JCR	**B-3**



Notes

1. Damping Ratio = 5%
2. Measured V_{S30} = 346 m/s
3. Maximum direction factors from Shahi and Baker (2014)
4. Deterministic results are for a Moment Magnitude 8.1 occuring on the San Andreas fault about 106 km from the site

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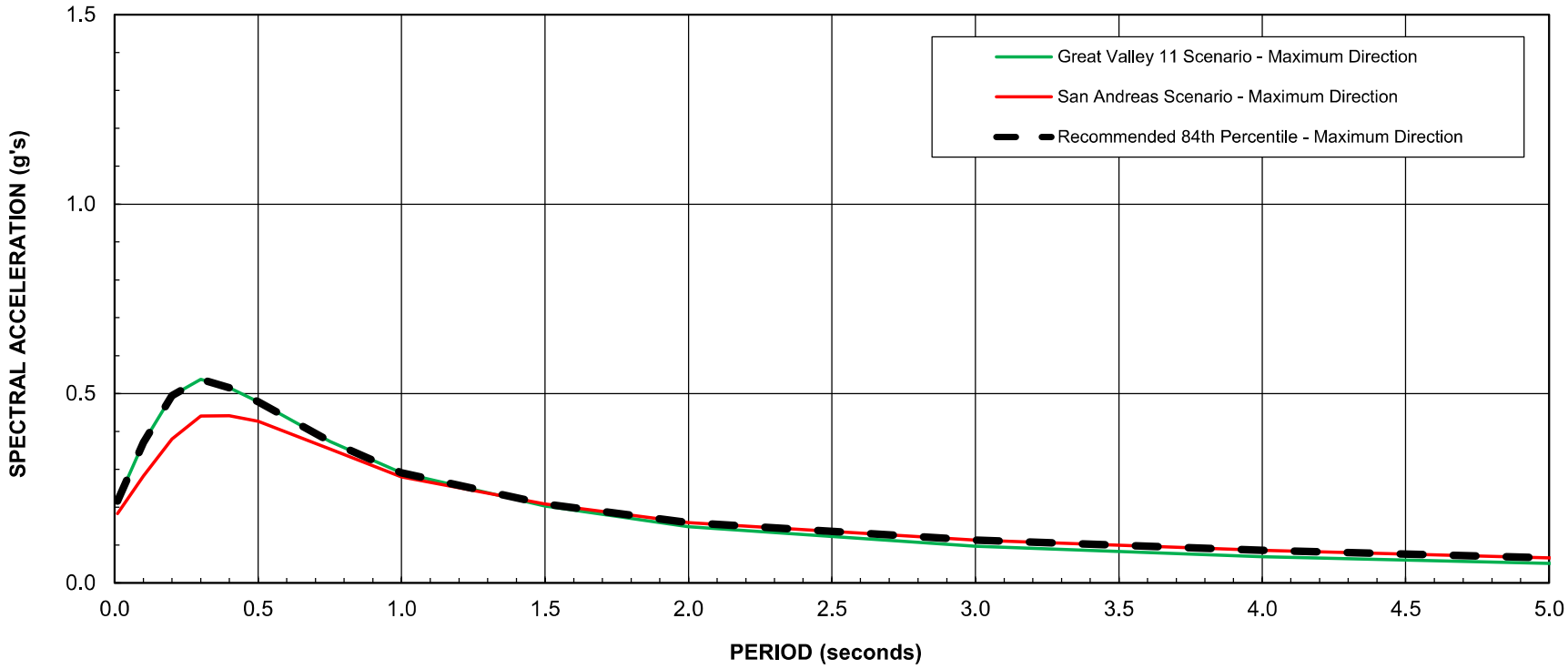
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Project	Figure Title	Project No.	Figure No.
NEW FRESNO COURTHOUSE FRESNO FRESNO COUNTY CALIFORNIA	**RESULTS OF DETERMINISTIC ANALYSIS - 84th PERCENTILE SPECTRA - SAN ANDREAS**	731816301 Date 1/19/2026 Scale AS SHOWN Prepared By: JCR	**B-4**



Notes

1. Damping Ratio = 5%
2. Measured V_{S30} = 346 m/s
3. Maximum direction factors from Shahi and Baker (2014)

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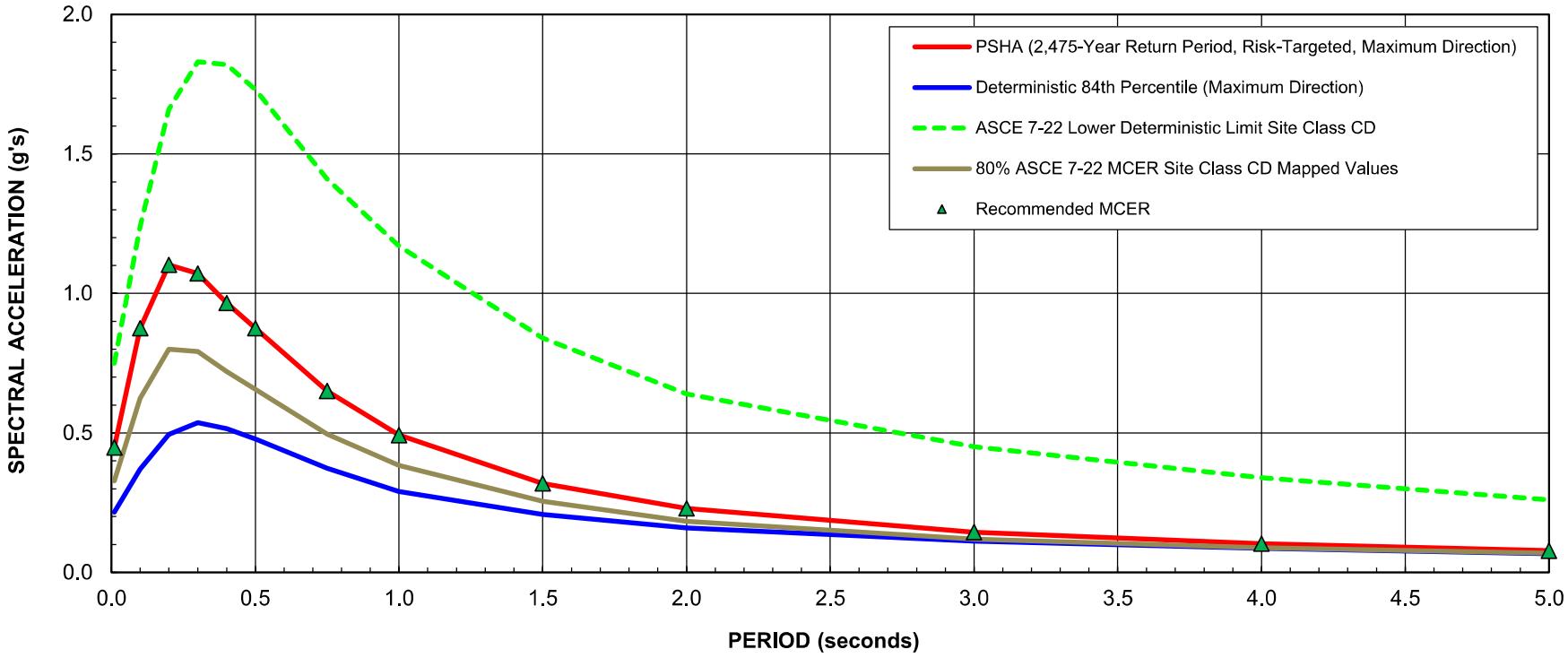
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Project	NEW FRESNO COURTHOUSE FRESNO FRESNO COUNTY CALIFORNIA
Figure Title	COMPARISON OF 84th PERCENTILE DETERMINISTIC ANALYSIS
Project No.	731816301
Date	1/19/2026
Scale	AS SHOWN
Prepared By:	JCR
Figure No.	B-5



Notes

1. Damping Ratio = 5%
2. Measured V_{S30} = 346 m/s
3. Maximum direction factors from Shahi and Baker (2014)
4. Deterministic results are an envelope for a Moment Magnitude 7.6 occuring on the Great Valley 11 fault about 65.8 km from the site and 8.1 occurring on the San Andreas fault a and a Moment Magnitude 8.1 occurring on the San Andreas fault about 105.6 km from the site.

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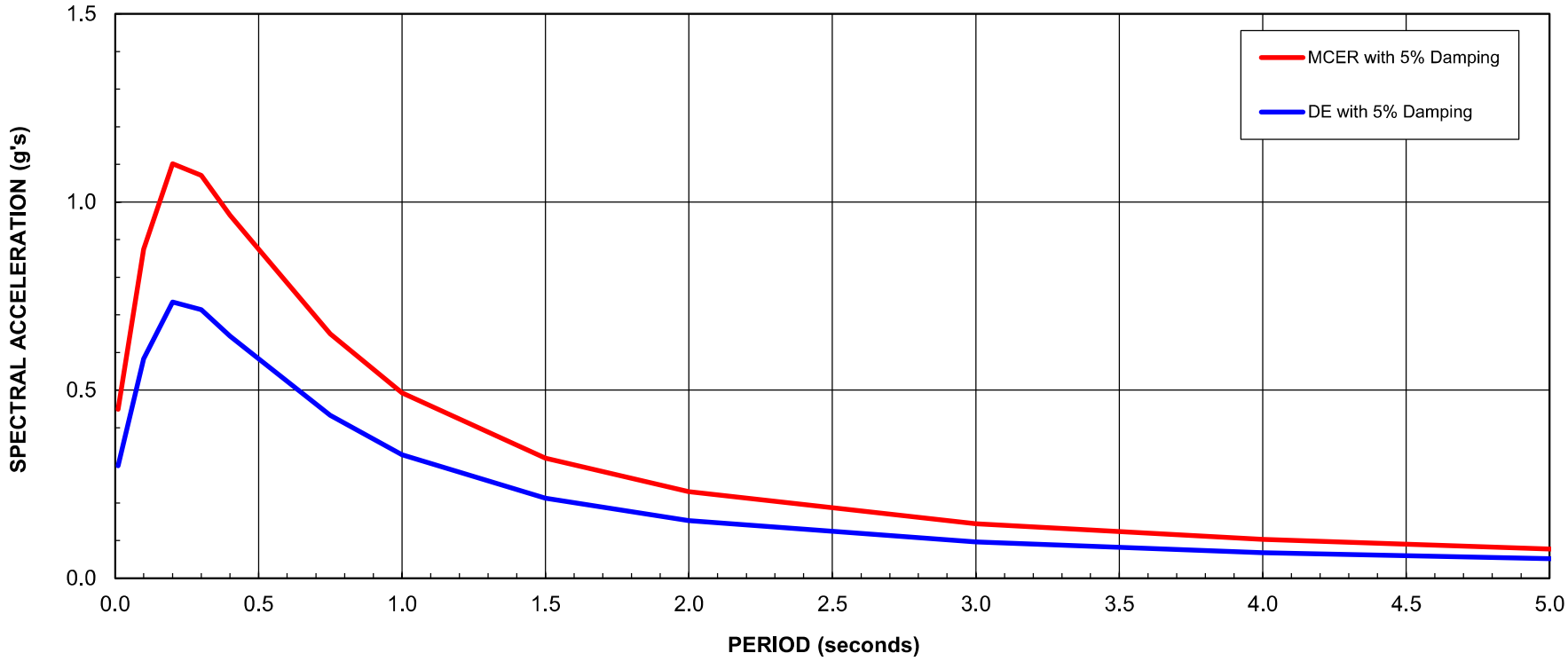
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Project	Figure Title	Project No.	Figure No.
NEW FRESNO COURTHOUSE FRESNO FRESNO COUNTY CALIFORNIA	**COMPARISON OF PROBABILISTIC, DETERMINISTIC AND DETERMINISTIC LOWER LIMIT SPECTRA**	731816301 Date 1/19/2026 Scale AS SHOWN Prepared By: JCR	**B-6**



Notes

1. Damping Ratio = 5%
2. Measured V_{S30} = 346 m/s

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Project	Figure Title	Project No.	Figure No.
NEW FRESNO COURTHOUSE FRESNO FRESNO COUNTY CALIFORNIA	**RECOMMENDED HORIZONTAL SPECTRA**	731816301 Date 1/19/2026 Scale AS SHOWN Prepared By: JCR	**B-7**

Appendix K New Fresno Courthouse - Traffic Memo

Stantec

Memo

To:	Judicial Council of California Sacramento, CA	From:	Stantec Consulting Services Inc.
Project/File:	185806843	Date:	April 1, 2026

Reference: New Fresno Courthouse - Traffic Memo

1. Introduction

This memorandum provides a comprehensive summary of transportation conditions, circulation characteristics, multimodal access, trip generation, and CEQA transportation impacts associated with the Project site. It integrates detailed findings from the Fehr & Peers Traffic Memorandum dated August 3, 2023, and Stantec's updated information for preparation of the Environmental Impact Report (EIR). The purpose of this document is to consolidate transportation-related technical data into a single, CEQA-compatible memorandum suitable for direct inclusion in the EIR.

The Project site is located within Courthouse Park in Downtown Fresno, southwest of the Fresno Street and M Street intersection. The site currently contains Fresno County Sheriff's Office buildings and the South Annex Jail, both of which would be demolished. The new courthouse would consolidate judicial operations into a modern facility adjacent to existing public transit services, regional highway access, and supporting government facilities.

2. Project Description - Transportation-Related Components

2.1 Regional Access

The Project site is centrally located with strong regional connectivity. Access is provided via:

- State Route (SR) 41 – a major north–south freeway connecting Downtown Fresno to the Sierra foothills and SR-1 on the Central Coast.
- SR-99 – the region's primary north–south freight and commuter corridor.
- SR-180 – an east–west freeway linking the project area with western Fresno County and the Sierra Nevada range.

All three freeways provide access within approximately 0.6 to 1 mile of the Project site. These connections provide efficient travel corridors for employees, jurors, law enforcement personnel, and the transport of in-custody individuals.

2.2 Local Roadway Access

Local circulation around the Project site includes:

- Fresno Street – a four-lane collector providing east–west access with direct connections to SR-99.
- M Street – a collector with two southbound lanes and on-street parking.
- Tulare Street – an east–west collector with multimodal access potential.
- Van Ness Avenue – a key Downtown corridor with pedestrian-oriented design and planned bicycle improvements.

Signalized intersections support multimodal circulation, including pedestrian crosswalks and ADA-compliant pathways.

2.3 Secured Parking, Sallyport, and Tunnel Connection

The courthouse design includes:

- 47 secured parking stalls (41 judicial, 2 executive, 4 law enforcement).
- A secure vehicular entry via a new M Street driveway.
- A redesigned underground parking entrance to meet visibility, turning radius, and security constraints.
- A dedicated Sallyport connected to the in-custody holding area.
- A direct vehicular connection to the existing County Jail tunnel network for secure inmate transfer.

This arrangement minimizes surface-level detention vehicle activity, improving safety for pedestrians and minimizing conflicts with public circulation.

2.4 Public Parking

Jurors and visitors will continue using existing public parking:

- Garage #8 (adjacent, with tunnel access)
- Garage #9 (213 stalls)
- Garage #4 (313 stalls)
- Water Tower / Federal Lot (90 stalls)
- 140+ metered spaces throughout the Downtown street grid

Parking availability is not expected to diminish because the project consolidates existing courthouse operations rather than introducing new demand.

3. Active Transportation Facilities

3.1 Pedestrian Environment

The Project site is located within one of the most pedestrian-accessible environments in Fresno. Key features include:

- Continuous sidewalks on all bounding streets
- Signalized intersections with pedestrian push buttons and marked crossings
- Raised medians aiding mid-block pedestrian refuges
- ADA-compliant curb ramps installed throughout the area
- Courthouse Park pedestrian network with 6–16 ft pathways
- Mid-block signalized pedestrian crossings along major park frontages
- An underground pedestrian tunnel approximately 400 ft from the Project site connecting Garage #8 to Courthouse Park

These pedestrian facilities support foot traffic associated with courthouse activity, including jurors, visitors, law enforcement personnel, and County employees.

3.2 Bicycle Facilities

Existing bicycle facilities include:

- A Class II (striped) bicycle lane on southbound M Street

Planned improvements per the City of Fresno Active Transportation Plan include:

- A northbound Class II bicycle lane on M Street
- Class II bicycle lanes on Van Ness Avenue north of Fresno Street
- A Class III bicycle route between Fresno Street and Tulare Street
- A Class IV (separated) bikeway along Tulare Street

These improvements will increase multimodal connectivity for employees and visitors who may choose to bicycle.

4. Transit Facilities

The Project site has ample transit access due to its proximity to the Downtown Transit Mall, which serves as a major regional transit hub.

4.1 Fresno Area Express (FAX)

The following key FAX routes serve Courthouse Park:

- Routes 1, 22, 26, 28, 30, 32, 34, and 38

Bus Shelter L on Fresno Street is located directly adjacent to the proposed courthouse entrance. Headways range from 15 minutes to 2 hours depending on route and time of day.

4.2 Regional Transit

The Fresno County Rural Transit Agency (FCRTA) also serves the area, providing regional intercity service for jurors and visitors arriving from rural communities.

4.3 Transit Facilities Affected by the Project

Pending Project design, some bus shelters may need to be temporarily relocated during construction or permanently adjusted to accommodate:

- Building footprint
- Sight-line and pedestrian flow requirements
- Driveway configuration on M Street

Coordination with the City and transit agencies will ensure continuity of service.

5. Trip Generation

5.1 Methodology

The Institute of Transportation Engineers (ITE) *Trip Generation Manual* does not have specific trip generation rates for courthouse buildings. Therefore, vehicle trip generation estimates were developed for the Project using counts collected at the Gordon D. Schaber Courthouse in Sacramento (*Revised Supplemental Transportation Analysis for the Judicial Council of California (JCC) Courthouse Project at Lot 41 – Railyards in Sacramento, CA, Fehr & Peers, January 2018)*. Trip rates per court staff (as independent variable) were calculated by dividing the total number of people entering and exiting the courthouse by the total number of staff. A survey conducted to determine the travel mode choice indicated that 85 percent arrive by personal vehicle, with the remaining 15 percent using alternate travel modes. Given that the

Sacramento courthouse in a downtown area in close proximity to the freeway system, the trip characteristics are expected to be similar to the Project.

5.2 Project Trip Estimates

The new courthouse with 404 staff is projected to generate:

- 5,212 average daily vehicle trips (ADT)
- 982 AM peak-hour trips
- 339 PM peak-hour trips

5.3 Interpretation

These trips reflect activity already occurring in the immediate vicinity because the project consolidates:

- Fresno County Courthouse
- North Annex Jail courtrooms
- M Street Courthouse

Thus, no substantial increase in net new vehicle trips is anticipated.

6. CEQA Transportation Analysis

CEQA Appendix G provides four questions for the Judicial Council's analysis of potentially significant transportation impacts. Would the project:

(a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
(b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
(c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
(d) Result in inadequate emergency access?

6.1 Conflict with Transportation Plans or Policies

The project:

- Does not alter roadway classifications
- Supports multimodal travel
- Is located in one of the most transit-rich locations in Fresno
- Provides ADA-compliant pedestrian access
- Is consistent with Fresno COG, Fresno General Plan, and RTP/SCS mobility goals
- Secured parking for executive staff and judges is proposed in the Project site basement. Driveway access to this underground parking lot is proposed along M Street between the driveway exit for the existing Sheriff's Office/North Annex Jail parking stalls along Fresno Street and the existing entrance ramp for the underground employee parking lot. The proposed underground parking driveway on M Street would require a redesign of the existing underground parking garage entrance to ensure safety and visibility requirements are satisfied.

6.2 Vehicle Miles Traveled (VMT)

The project meets three City of Fresno VMT screening criteria:

1. Located within 0.5 mile of a Transit Priority Area
2. Public facility
3. Located in a low-VMT area

CEQA Guidelines section 15064.3 provides that projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. The Project meets these conditions and is presumed to have a less than significant impact. A detailed VMT analysis is not required.

6.3 Hazards from Design Features

The Project site does not introduce new roadway hazards. The primary design consideration is:

- Secured parking for executive staff and judges is proposed in the Project site basement. Driveway access to this underground parking lot is proposed along M Street between the driveway exit for the existing Sheriff's Office/North Annex Jail parking stalls along Fresno Street and the existing entrance ramp for the underground employee parking lot. The proposed underground parking driveway on M Street would require a redesign of the existing underground parking garage entrance to ensure safety and visibility requirements are satisfied.
- Developing a Transportation Management Plan (TMP) to address temporary construction-phase circulation issues.

6.4 Emergency Access

All emergency vehicle circulation will remain functional. Fire Department review will ensure compliance with:

- Turn-around requirements
- Clear path of travel
- Water supply and fire protection standards

7. Summary of Findings

- The Project site is highly accessible across all transportation modes.
- Project trip generation reflects relocated—not new—activity.
- VMT impacts are screened and determined to be less than significant.
- Pedestrian and transit access is superior compared to alternative sites.
- Construction impacts will be managed through TMP implementation.

8. Conclusion

The Project does not conflict with transportation plans or policies, would not increase VMT or increase net vehicle trips, does not have design features which could create new hazards or incompatible uses, and would maintain existing adequate emergency access. Therefore, the Project would not have a significant effect.

Transportation Report

August 03, 2023 Pre-Final Draft



Prepared by
FEHR & PEERS
343 East Main Street
Suite 608
Stockton, CA 95202

August 2023

Memorandum

JCC Fresno Courthouse – Summary of Transportation Findings

Prepared for:
Judicial Council of California
HOK Architects

FEHR PEERS

Memorandum

Date: August 3, 2023

To: Raquel Bito, HOK Architects

From: Ian Barnes, PE, and Kayla Gonzalez, Fehr & Peers

Subject: JCC Fresno Courthouse – Summary of Transportation Findings

WC23-3999.00

HOK Architects is evaluating options to design the new Fresno City Courthouse in the city of Fresno, California. Fehr & Peers is supporting HOK by providing a preliminary comparison analysis of potential transportation trade-offs among the proposed alternatives and preliminary site plans. The primary metrics of consideration include accessibility for pedestrian, bicycle, transit, and private vehicle travel, and parking supply.

Background

The new Fresno Courthouse Project (Project) includes the design and construction of a new courthouse (approximately 413,000 square-feet in size) in the City of Fresno. The Project program includes 36 courtrooms, chambers, and administrative areas in support of criminal, civil, juvenile, drug, behavioral health, and general trial cases. Major functional components include central holding, jury assembly, and a loading dock.

The Judicial Council of California is currently evaluating four potential sites for the new courthouse as shown on **Figure 1** (all figures are provided at the end of this memorandum):

- **Site 1A** – Courthouse Park (along Fresno Street)
- **Site 1B** – Courthouse Park (along Van Ness Avenue)
- **Site 3** – Eaton Plaza
- **Site 4 –** M Street

It is important to note that the proposed site plans for each option are preliminary in nature. Our transportation findings provide an overview of key considerations, and do not encompass all potential transportation impacts. Once a site is selected, a more thorough transportation analysis should be performed.

This memorandum is primarily structured by project alternative, then by mode of travel. Special attention is paid to topics featuring the most divergence among alternatives.

Site 1A: Courthouse Park

Site 1A is located within Courthouse Park along Fresno Street, as shown on **Figure 2A**. It proposes the removal of the existing Fresno County Sheriff's Office and the South Annex Jail.

Pedestrian Accessibility

Located within Courthouse Park, the site contains various paths and walkways that measure 6–16 feet wide. The pathways travel within the park and around the outer edges of the site. This allows easy access to the existing buildings that will remain on-site, and to the surrounding network of pedestrian facilities to buildings off-site. Site 1A is located 50 feet from the Fresno County Superior Court and 500 feet from the Fresno County Jail.

An underground pedestrian tunnel also provides access to Site 1A. The underground pedestrian tunnel is located at the edge of Courthouse Park between bus shelters A and B, under Van Ness Avenue, about 500 feet south from the Van Ness Avenue/Fresno Street intersection. This connection allows pedestrians to cross underneath Van Ness Avenue and access an underground parking garage, or emerge above ground at Mariposa Street. Site 1A is roughly 400 feet away from the entrance of the pedestrian tunnel.

Many intersections near the site offer ADA accessible provisions, including curb ramps and truncated domes that afford physical warnings to people with visual disabilities. Signalized intersections near the site also have accessible pedestrian signal (APS) push buttons, such as the Van Ness Avenue/Fresno Street and L Street/Fresno Street intersections.

Pedestrian access into the courthouse is proposed along the west side of the building along Courthouse Park, adjacent to Bus Shelter L.

Bicycle Accessibility

There are currently no dedicated bicycle facilities in the surrounding area except for a Class II bike lane along M Street in the southbound direction. Due to the lack of bicycle facilities, bicyclists utilize the existing pedestrian pathways in and around the park for travel.

However, per the City of Fresno *Active Transportation Plan* (December 2016), the City plans to build a Class II bicycle facility along the northbound side of M street and along both sides of Van Ness Avenue north of Fresno Street. Planned facilities also include a Class III bike route along Van Ness Avenue between Fresno Street and Tulare Street, and a Class IV separated bikeway along Tulare Street. The existing and planned bicycle facilities for the City of Fresno are shown on **Figure 3**.

Bicycle accessibility will be improved with these planned facilities. We recommend providing secure bicycle parking on-site to encourage this mode of travel.

Transit Accessibility

Site 1A is accessible via transit and located no more than 100 feet from Bus Shelter L on Fresno Street. Site 1A has direct access to Routes 22, 26, 32, 34, and 38, as shown on **Figure 4**. All routes provide service with one- to two-hour headways. Existing transit service would be maintained after construction of Site 1A, if selected.

However, some of the physical shelters at Bus Shelter L are located within Site 1A's property line; therefore, relocation of these shelters would be necessary with the selection of Site 1A.

Vehicle Access and Circulation

Local vehicular access to Site 1A is provided via Fresno Street, M Street, Tulare Street, and Van Ness Avenue. Regional access to the site is provided via State Route 41 (SR 41), State Route 99 (SR 99) and State Route 180 (SR 180). SR 41 access is provided via interchanges along M Street and Van Ness Avenue, about 3,600 feet away from Site 1A. SR 99 access is provided via interchanges along Fresno Street, about 3,500 feet away from Site 1A. SR 180 access is provided via interchanges along Van Ness Avenue and Fulton Street, about 5,000 feet away from Site 1A.

Public Parking

Visitors to Site 1A would utilize available off-site and public parking in the surrounding area owned by the City of Fresno, as shown on **Figure 5**. Garage #8 is the closest parking structure to Site 1A. Garage #8 is located at 1077 Van Ness Avenue at the corner of Van Ness Avenue/Tulare Avenue. This garage supports the Fresno County Courthouse and businesses along Van Ness Avenue and Fulton Mall. The entrance to the garage is located on Tulare Avenue just east of Van Ness Avenue on the north side of the street. The exit is located at the north end of the garage off of Fresno Street. This garage features 968 parking stalls. Visitors can walk to Site 1A by exiting the garage through the underground pedestrian tunnel and entering Courthouse Park.

The next closest parking structures are as follows:

- Garage #9 is located at 2020 Merced Street with 213 parking stalls. It is about 850 feet away from Site 1A.
- Garage #4 is located at 1919 Tulare Street with 313 parking stalls. It is about 1,650 feet away from Site 1A.
- The Water Tower/Federal Lot is located on the 1100 block of O Street between Fresno Street and Mariposa Street with 90 parking spaces. It is about 1,200 feet away from Site 1A.

Aside from parking garages and lots, there are also several metered parking spaces surrounding the site. Approximately 140 metered parking spaces are located along Fresno Street, Van Ness Avenue north of Fresno Street, L Street north of Fresno Street, and M Street north of Fresno Street. These metered parking spaces time limits vary from 30-minute parking to 2-hour or 4-hour parking.

Secured Parking

Secured parking for staff and judges is proposed to be located in the basement. Due to its location and right-of-way boundaries, Site 1A is fundamentally limited on entry points for this secured parking. Courthouse Park is located along the west and south side of the proposed building; and Bus Shelter L and existing parking spaces are located on the north side of the proposed building, along Fresno Street.

Driveway access to the underground secured parking area is proposed along M Street, as shown on the ground level of **Figure 2A**. However, M Street also features the driveway exit for the existing parking stalls along Fresno Street, as well as the underground garage entrance for the restricted underground parking reserved for County Courthouse employees. This location is also very close to the Fresno Street/M Street signalized intersection. Placing the underground secured parking driveway on M Street would require a redesign of the existing underground parking garage entrance to ensure safety and visibility requirements are still met.

Figure 2A also depicts the underground secured parking area and Sallyport. Vehicles will enter the underground parking area by the ramp proposed along M Street. Parking stalls are proposed to the west of the ramp for judges and staff to park. The Sallyport is located southwest of the ramp for in-custody vehicles. In-custody vehicles are to pull forward into the Sallyport when entering, and they are to reverse out to the dedicated bus back-out zone before pulling forward again to exit on the ramp. Connection to the existing tunnel is proposed and allows for connection between the Fresno County Jail and the In-Custody Holding area.

Opportunities and Challenges

Table 1 presents the overall opportunities and challenges that come with Site 1A if it were to be selected by the Judicial Council of California for the location of the new courthouse.

Table 1: Site 1A Opportunities and Challenges

Category	Opportunities	Challenges
Pedestrian Accessibility	• Proximity to Fresno County Superior Court and County Jail • Walking distance to pedestrian tunnel	• Potential disruption of flow of travel in park with construction of courthouse on existing pathways

Table 1: Site 1A Opportunities and Challenges

Category	Opportunities	Challenges
Bicycle Accessibility	• Existing bike facility on M Street • Planned bicycle facilities will improve bicycle accessibility	• Proposed driveway access along M Street poses potential conflict points with bicyclists
Transit Accessibility	• Direct access to Bus Shelter L • Walking distance to Bus Shelters A, B and the Van Ness Station	• Bus shelters/stops along the park within the Project's property line will have to be relocated
Vehicle Access and Circulation	• All highways are within one mile	• Proposed driveway access along M Street poses design constraints with proximity to intersection and other existing garage entrance • Proper signage needed to ensure only authorized vehicles enter the secured parking area
Public Parking	• Proximity to various public parking garages and directly adjacent to Garage #8 • Walking distance to 140 metered parking spaces	• Public parking not provided on site
Secured Parking	• Dedicated back-out zone for in-custody vehicles • Connection to existing tunnel to Fresno County Jail	• In-custody vehicles and judges/staff vehicles enter/exit through same ramp • Safety concerns for vehicles entering/existing ramp

Source: Fehr & Peers, August 2023

Site 1B: Courthouse Park

Site 1B is also located within Courthouse Park but along Van Ness Avenue, as shown on **Figure 2B**. It proposes the removal of some existing green space and pathways within the park between the Fresno County Superior Court and Van Ness Avenue.

Pedestrian Accessibility

Like Site 1A, Site 1B contains various paths and walkways that measure 6–16 feet wide. The pathways travel within the park and around the outer edges of the site. This allows easy access to existing buildings that will remain on-site, and to the surrounding network of pedestrian facilities to buildings off-site. Site 1B is located 50 feet from the Fresno County Superior Court and 700 feet from the Fresno County Jail. However, the proposed placement of the building on this site will remove existing pedestrian pathways within the park between the Fresno County Superior

Court and Van Ness Avenue. Disrupted paths may need to be redesigned to continue the flow of pedestrian travel or removed entirely.

An underground pedestrian tunnel also provides access to Site 1B. The underground pedestrian tunnel is located at the edge of Courthouse Park between Bus Shelters A and B, under Van Ness Avenue, about 500 feet south from the Van Ness Avenue/Fresno Street intersection. This connection allows pedestrians to cross underneath Van Ness Avenue and access the underground parking garage or emerge above ground at Mariposa Street. Site 1B is about 50 feet away from the entrance of the pedestrian tunnel.

Many intersections near the site offer ADA accessible provisions, including curb ramps and truncated domes that afford physical warnings to people with visual disabilities. Signalized intersections near the site also have APS pedestrian push buttons, such as the Van Ness Avenue/Fresno Street intersection.

Pedestrian access into the courthouse is proposed along the south side of the building along Courthouse Park, adjacent to the pedestrian underground tunnel under Van Ness Avenue.

Bicycle Accessibility

There are currently no dedicated bicycle facilities in the surrounding area except for a Class II bike lane along M Street in the southbound direction. Due to the lack of bicycle facilities, bicyclists utilize the existing pedestrian pathways in and around the park for travel.

However, per the City of Fresno *Active Transportation Plan* (December 2016), the City plans to build a Class II bicycle facility along the northbound side of M street and along both sides of Van Ness Avenue north of Fresno Street. Planned facilities also include a Class III bike route along Van Ness Avenue between Fresno Street and Tulare Street, and a Class IV separated bikeway along Tulare Street. The existing and planned bicycle facilities for the City of Fresno are shown on **Figure 3**.

Bicycle accessibility will be improved with these planned facilities. We recommend providing secure bicycle parking on-site to encourage this mode of travel.

Transit Accessibility

Site 1B is accessible via transit and located no more than 50 to100 feet from Bus Shelters A and B on Van Ness Avenue. The Van Ness Station, located in the middle of Van Ness Avenue, is also about 100 feet away from Site 1B. Site 1B has direct access to Routes 1, 22, 26, 28, 32, and 34, as shown on **Figure 4**. All routes provide service with one- to two-hour headways. Existing transit service and Bus Shelters A and B and the Van Ness Station would be maintained after construction of Site 1B, if selected.

Bus Shelter L is located along the northern side of the site and the shelters will have to be relocated further east along Fresno Street due to the placement of the Project's driveway. Bus routes at this shelter must be maintained to avoid substantial adverse effects to transit.

Vehicle Access and Circulation

Local vehicular access to Site 1B is provided via Fresno Street, M Street, Tulare Street, and Van Ness Avenue. Regional access to the site is provided via State Route 41 (SR 41), State Route 99 (SR 99) and State Route 180 (SR 180). SR 41 access is provided via interchanges along M Street and Van Ness Avenue, about 3,600 feet away from Site 1B. SR 99 access is provided via interchanges along Fresno Street, about 3,500 feet away from Site 1B. SR 180 access is provided via interchanges along Van Ness Avenue and Fulton Street, about 5,000 feet away from Site 1B.

Public Parking

Visitors to Site 1B will utilize available off-site and public parking in the surrounding area owned by the City of Fresno, as shown on **Figure 5**. Like Site 1A, Garage #8 is the closest parking structure to Site 1B. Garage #8 is located at 1077 Van Ness Avenue at the corner of Van Ness Avenue/Tulare Avenue. This garage features 968 parking stalls. Visitors can walk to Site 1B by exiting the garage through the underground pedestrian tunnel and entering Courthouse Park.

The next closest parking structures are as follows:

- Garage #9 is located at 2020 Merced Street with 213 parking stalls. It is about 630 feet away from Site 1B.
- Garage #4 is located at 1919 Tulare Street with 313 parking stalls. It is about 1,250 feet away from Site 1B.
- The Water Tower/Federal Lot is located on the 1100 block of O Street between Fresno Street and Mariposa Street with 90 parking spaces. It is about 1,350 feet away from Site 1B.

Aside from parking garages and lots, there are also several metered parking spaces surrounding the site. Approximately 140 metered parking spaces are located along Fresno Street, Van Ness Avenue north of Fresno Street, L Street north of Fresno Street, and M Street north of Fresno Street. With the relocation of Bus Shelter L, the number of metered parking spaces within walking distance will decrease to 101. These metered parking spaces time limits vary from 30-minute parking to 2-hour or 4-hour parking.

Secured Parking

Secured parking for staff and judges is proposed to be located in the basement. Due to its location and right-of-way boundaries, Site 1B is fundamentally limited on entry points for this

secured parking. Site 1B is surrounded by Courthouse Park on the east and south sides, Bus Shelter A and Garage #8's exit ramp on the west side, and Bus Shelter L on the north side.

Driveway access to the underground secured parking area is proposed along Fresno Street, as shown on **Figure 2B**. With the driveway located here, Bus Shelter L would be required to relocate its shelters further east. With the relocation of the shelters in Bus Shelter L, design challenges will be met to ensure bus routes are not impacted and buses can still pull in and out of the shelter safely.

Figure 2B also depicts the underground secured parking area and Sallyport. Vehicles will enter the underground parking area by the ramp proposed along Fresno Street. Parking stalls are proposed to the east for judges and staff to park. The Sallyport is located south for in-custody vehicles. In-custody vehicles are to pull forward into the Sallyport when entering, and they are to reverse out before pulling forward again to exit on the ramp. Connection to the existing tunnel is proposed and allows for connection between the Fresno County Jail and the In-Custody Holding area.

Opportunities and Challenges

Table 2 presents the overall opportunities and challenges that come with Site 1B if it were to be selected by the Judicial Council of California for the location of the new courthouse.

Table 2: Site 1B Opportunities and Challenges

Category	Opportunities	Challenges
Pedestrian Accessibility	• Proximity to Fresno County Superior Court and County Jail • Adjacent to pedestrian tunnel	• Potential disruption of flow of travel in park with construction of courthouse on existing pathways
Bicycle Accessibility	• Planned bicycle facilities will improve bicycle accessibility	
Transit Accessibility	• Direct access to Bus Shelters A, B and the Van Ness Station • Adjacent to Bus Shelter L	• Proposed driveway access along Fresno Street requires Bus Shelter L to be redesigned/reconfigured • Potential impact to bus routes
Vehicle Access and Circulation	• All highways are within one mile	• Proper signage needed to ensure only authorized vehicles enter the secured parking area
Public Parking	• Proximity to various public parking garages and directly adjacent to Garage #8 • Walking distance to 140 metered parking spaces	• Public parking not provided on site

Table 2: Site 1B Opportunities and Challenges

Category	Opportunities	Challenges
Secured Parking	• Dedicated ramps separating judges/staff and in-custody vehicles • Space for in-custody vehicles to reverse out of Sallyport • Connection to existing tunnel to Fresno County Jail	• Proper signage needed on ramp for where in-custody vehicles and judges/staff vehicles meet when entering/exit secured area

Source: Fehr & Peers, August 2023

Site 3: Eaton Plaza

Site 3 is located at Eaton Plaza by the existing FAC Water Tower, across the Sisk Courthouse, as shown on **Figure 2C**. This option necessitates the removal of the existing City parking on this site.

Pedestrian Accessibility

Site 3 is surrounded by sidewalks that are 6–14 feet wide. All pedestrian crosswalks are marked at nearby intersections, with signalized intersections providing pedestrian push buttons and ADA accessible provisions, including curb ramps and truncated domes that afford physical warnings to people with visual disabilities. Site 3 is roughly 1,000 feet away from both the Fresno County Superior Court and the Fresno County Jail.

Pedestrian access into the courthouse is proposed along the west side of the building, adjacent to the Eaton Amphitheater Plaza.

Bicycle Accessibility

There are currently no dedicated bicycle facilities in the surrounding area except for a Class II bike lane along M Street in the southbound direction, and along P Street in the northbound direction. Due to the lack of bicycle facilities, bicyclists utilize the sidewalks around the site or ride on the streets for travel.

However, per the City of Fresno *Active Transportation Plan* (December 2016), the City plans to build a Class II bicycle facility along the northbound side of M Street. Planned facilities also include Class III bike routes along P Street and Class IV separated bikeways along Tulare Street. The existing and planned bicycle facilities for the City of Fresno are shown on **Figure 3**.

Bicyclists will still need to ride on the sidewalks or streets to get directly to Site 3, but bicycle connectivity will be improved with the implementation of these planned bicycle facilities. We recommend providing secure bicycle parking on-site to encourage this mode of travel.

Transit Accessibility

Site 3 is accessible via transit with the closest bus stop located about 200 feet north of the site along Fresno Street. Site 3 has direct access to Routes 1 and 32, as shown on **Figure 4**. Bus Shelter L is within walking distance of Site 3, about 1,000 feet west, and would give access to Routes 22, 26, 28, 34, and 38.

Vehicle Access and Circulation

Local vehicular access to Site 3 is provided via Fresno Street, O Street, Mariposa Street and N Street. Regional access to the site is provided via State Route 41 (SR 41), State Route 99 (SR 99) and State Route 180 (SR 180). SR 41 access is provided via interchanges along M Street and Van Ness Avenue, about 3,700 feet away from Site 3. SR 99 access is provided via interchanges along Fresno Street, about 4,500 feet away from Site 3. SR 180 access is provided via interchanges along Van Ness Avenue and Fulton Street, about 5,300 feet away from Site 3.

Public Parking

Visitors to this site will utilize available off-site and public parking in the surrounding area owned by the City of Fresno, as shown on **Figure 5**. Unfortunately, with the construction of the new courthouse on this site, the existing 90 parking spaces will be removed. This makes the North Lot at Fresno City Hall the closest parking lot to Site 3. The North Lot is located about 950 feet east of Site 3 at 2600 Fresno Street and provides 85 parking stalls.

The next closest parking structures are as follows:

- Garage #8 is located at 1077 Van Ness Avenue at the corner of Van Ness Avenue/Tulare Avenue with 968 parking stalls. It is about 1,350 feet away from Site 3.
- The Convention Center Garage is located on 707 O Street with 1,565 parking spaces. It is about 1,530 feet away from Site 3.
- The Promenade Lot is located on 2710 Tulare Street with 750 parking stalls. It is about 1,480 feet away from Site 3.

Aside from parking garages and lots, there are also several metered parking spaces surrounding the site along Fresno Street, O Street, N Street, and Mariposa Street. There are approximately 100 metered parking spaces around Site 3 in just the surrounding block alone. These metered parking spaces time limits vary from 30-minute parking to 2-hour parking.

However, with the proposed driveway access for in-custody vehicles, about 13 metered parking stalls will be removed, including one ADA parking space.

Secured Parking

The Sallyport for in-custody vehicles is located on the first basement level, while the secured parking for staff and judges is proposed to be in the second basement level. In custody-vehicles will enter Basement 1 on O Street and exit on N Street, as shown in **Figure 2C**. The judges will enter and exit through the existing driveway on O Street, just north of Mariposa Street. The proposed driveways would require the removal of existing metered parking spaces, including one ADA parking space.

Figure 2C also depicts the underground secured parking area and Sallyport. Judges and staff vehicles will enter the underground parking area through the dedicated ramp proposed along O Street and make their way to the second basement level where parking stalls are available. The Sallyport is located on the first basement level. In-custody vehicles are to pull forward into the Sallyport when entering from O Street, and then continue forward to exit onto N Street.

Opportunities and Challenges

Table 3 presents the overall opportunities and challenges that come with Site 3 if it were to be selected by the Judicial Council of California for the location of the new courthouse.

Table 3: Site 3 Opportunities and Challenges

Category	Opportunities	Challenges
Pedestrian Accessibility	• Adjacent to the Sisk Courthouse	• Furthest from the Fresno County Superior Court and County Jail
Bicycle Accessibility	• Planned bicycle facilities will improve bicycle accessibility	• No direct access to site, even with the planned bicycle facilities
Transit Accessibility	• Adjacent to Routes 1 and 32	• 1,000 feet away from Bus Shelter L
Vehicle Access and Circulation	• All highways are within one mile	• Proper signage needed to ensure only authorized vehicles enter the secured parking area
Public Parking	• Proximity to various public parking garages • 100 metered parking spaces in surrounding block	• Site located on an existing public parking lot; approximately 90 parking stalls will be removed • Proposed driveways will remove about 13 parking stalls, including one ADA stall • Public parking not provided on site
Secured Parking	• Dedicated ramps separating judges/staff and in-custody vehicles • Entering/exiting Sallyport made easy for in-custody vehicles	• No connection to existing tunnel to Fresno County Jail

Source: Fehr & Peers, August 2023

Site 4: M Street

Site 4 is located along M Street, across from the Fresno County Jail, as shown on **Figure 2D**. This option proposes the removal of the existing Fresno Chamber of Commerce and commercial buildings.

Pedestrian Accessibility

Site 4 is surrounded by sidewalks that are 6–14 feet wide. All pedestrian crosswalks are marked at nearby intersections, with signalized intersections providing pedestrian push buttons and ADA accessible provisions, including curb ramps and truncated domes that afford physical warnings to people with visual disabilities. Site 4 is about 800 feet away from the Fresno County Superior Court and 80 feet away from the Fresno County Jail.

Pedestrian access into the courthouse is proposed along the south side of the building along Fresno Street.

Bicycle Accessibility

The only dedicated bicycle facilities in the surrounding area are Class II bike lanes along M Street in the southbound direction and Tuolumne Street in the eastbound direction. Due to the lack of bicycle facilities, bicyclists utilize the sidewalks around the site or ride on the streets if not already traveling southbound on M Street.

However, per the City of Fresno *Active Transportation Plan* (December 2016), the City plans to build a Class II bicycle facility along the northbound side of M street, and along both sides of Merced Street. The existing and planned bicycle facilities for the City of Fresno are shown on **Figure 3**.

Bicyclists will still need to ride on the sidewalks or streets to get directly to Site 4 if not already traveling along M Street or Merced Street. But bicycle accessibility will be improved with these planned facilities. We recommend providing secure bicycle parking on-site to encourage this mode of travel.

Transit Accessibility

Site 4 is accessible via transit with the closest bus stops located at the corner of N Street/Fresno Street, on the southeast corner of the site, and about 300 feet east along Fresno Street. Site 4 has direct access to Routes 1 and 32, as shown on **Figure 4**. Bus Shelter L is within walking distance of Site 4, about 550 feet west, and would provide access to Routes 22, 26, 28, 34, and 38.

A driveway entrance for in-custody vehicles is proposed along N Street and may require the relocation of the existing bus stop on the corner of N Street/Fresno Street. Bus routes at this shelter must be maintained to avoid substantial adverse effects to transit.

Vehicle Access and Circulation

Local vehicular access to Site 4 is provided via Fresno Street, M Street, Merced Street and N Street. Regional access to the site is provided via State Route 41 (SR 41), State Route 99 (SR 99) and State Route 180 (SR 180). SR 41access is provided via interchanges along M Street and Van Ness Avenue, about 4,000 feet away from Site 4. SR 99 access is provided via interchanges along Fresno Street, about 4,000 feet away from Site 4. SR 180 access is provided via interchanges along Van Ness Avenue and Fulton Street, about 4,800 feet away from Site 4.

Public Parking

Visitors to this site will utilize available off-site and public parking in the surrounding area owned by the City of Fresno, as shown on **Figure 5**. The closest parking lot to Site 4 is the Water Tower/Federal Lot. This lot is located in the 1100 block of O Street on the southwest corner of O Street/Fresno Street. It is just west of the Sisk Courthouse and just north of the Downtown library. The lot has 90 parking stalls.

The next closest parking structures are as follows:

- Garage #9 is located on 2020 Merced Street with 213 parking stalls. It is about 880 feet away from Site 4.
- The North Lot is located at Fresno City Hall with 85 parking spots. It is about 1,300 feet away from Site 4.
- Garage #8 is located at 1077 Van Ness Avenue with 968 parking stalls. It is about 1,300 feet away from Site 4.

Aside from parking garages and lots, there are also several metered parking spaces surrounding the site along Fresno Street, M Street, N Street and Merced Street. There are about 85 metered parking spaces around Site 4 in just the surrounding block alone. These metered parking spaces time limits vary from 2-hour to 10-hour parking.

However, with the proposed driveways along N Street and Merced Street, and the possible relocation of the bus shelter, metered parking located within the block will have to be removed.

Secured Parking

Secured parking for staff and judges is proposed to be located in the basement. Driveway access to the underground secured parking area is proposed along N Street and Merced Street, as shown in **Figure 2D**. The ramp along N Street would serve as the entrance to the underground area for in-custody vehicles, and the ramp along Merced Street would serve as the entrance and exit for judges and staff, and as the exit for in-custody vehicles.

As mentioned previously, the driveway entrance along N Street may impact the existing bus stop located at the corner of N Street/Fresno Street. The driveway along Merced Street would require the removal of the existing police parking space currently there.

Figure 2D also depicts the underground secured parking area and Sallyport. Judges and staff vehicles will enter the underground parking area by the ramp proposed along Merced Street. Parking stalls are proposed to the west for judges and staff to park. The Sallyport is located on the south side of the basement for in-custody vehicles. In-custody vehicles are to enter the garage along N Street and drive forward towards the ramp on Merced Street. The vehicle will then reverse into the Sallyport and pull forward again to exit on the ramp towards Merced Street. A new connection between the Fresno County Jail and the In-Custody Holding area is proposed along the southwest side of the basement.

Opportunities and Challenges

Table 4 presents the overall opportunities and challenges that come with Site 4 if it were to be selected by the Judicial Council of California for the location of the new courthouse.

Table 4: Site 4 Opportunities and Challenges

Category	Opportunities	Challenges
Pedestrian Accessibility	• Proximity to Fresno County Superior Court and County Jail	
Bicycle Accessibility	• Planned bicycle facilities will improve bicycle accessibility	• Proposed driveway access along Merced Street poses potential conflict point with bicyclists
Transit Accessibility	• Adjacent to Routes 1 and 32 • Proximity to Bus Shelter L	• Relocation of bus stop on corner of N Street/Fresno Street required
Vehicle Access and Circulation	• All highways are within one mile	• Proper signage needed to ensure only authorized vehicles enter the secured parking area
Public Parking	• Proximity to various public parking garages • 85 metered parking spaces in surrounding block	• Relocation of bus stop and location of proposed driveways would remove existing metered parking spaces and police parking • Public parking not provided on site
Secured Parking	• Dedicated ramps separating judges/staff and in-custody vehicles when entering the secured area • New tunnel to connect to the Fresno County Jail	• In-custody vehicles and judges/staff vehicles exit through same ramp

Source: Fehr & Peers, August 2023

Summary of Findings

While there are many trade-offs, **Appendix A** provides a planning level assessment of the identified criteria. With a score range of 0 to 3 for each subcategory (0 = Poor, 1 = Fair, 2 = Good, and 3 = Excellent), Site 1B received the highest score, followed by Site 1A. Therefore, Site 1B is recommended in terms of accessibility for all modes of travel.

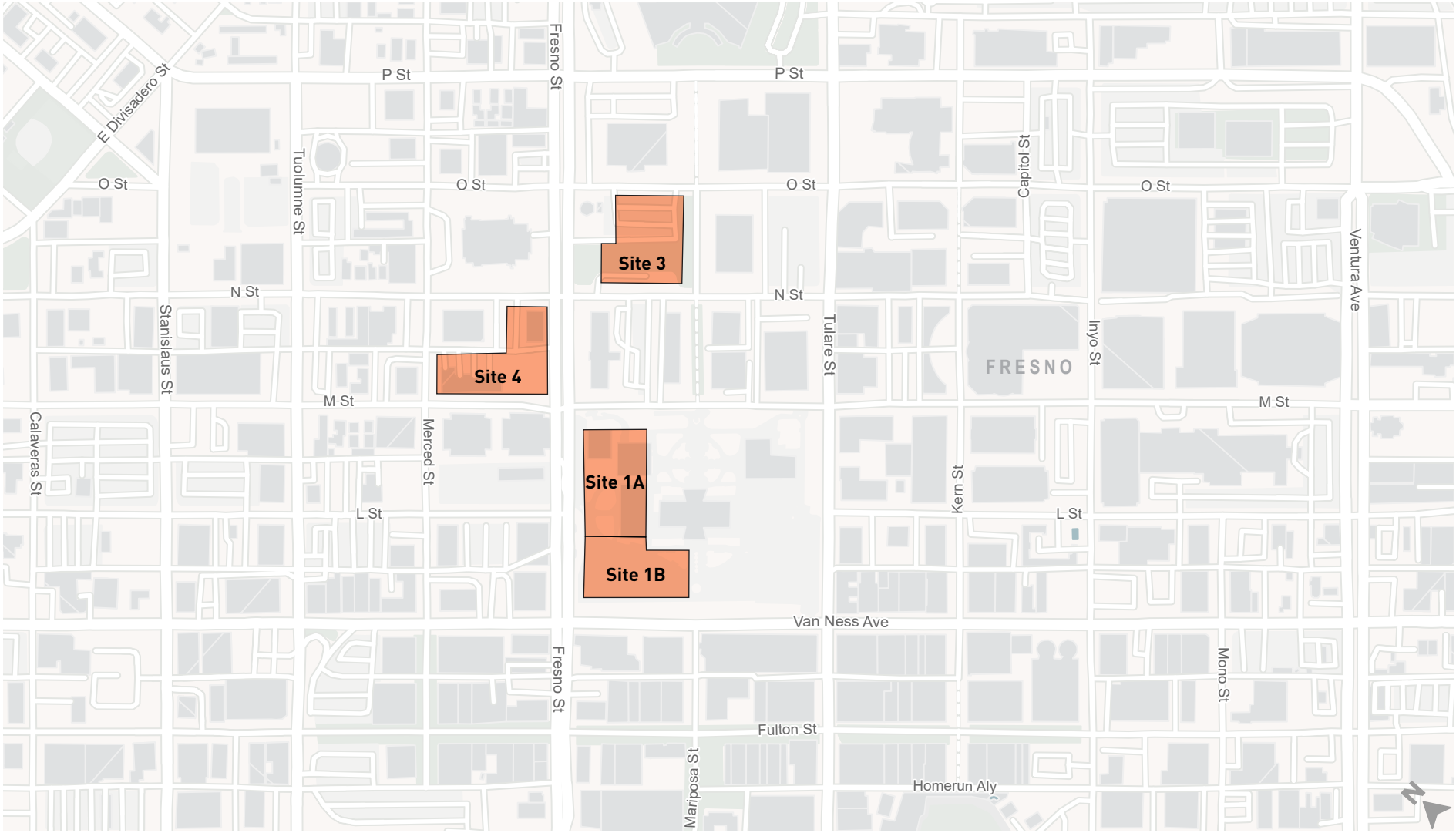
Attachments:

Figure 1	Site Options
Figure 2A.1	Site 1A – Conceptual Site Plan: Level 1
Figure 2A.2	Site 1A – Conceptual Site Plan: Basement 1
Figure 2B.1	Site 1B – Conceptual Site Plan: Level 1
Figure 2B.2	Site 1B – Conceptual Site Plan: Basement 1
Figure 2C.1	Site 3 – Conceptual Site Plan: Level 1
Figure 2C.2	Site 3 – Conceptual Site Plan: Basement 1
Figure 2C.3	Site 3 – Conceptual Site Plan: Basement 2
Figure 2D.1	Site 4 – Conceptual Site Plan: Level 1
Figure 2D.2	Site 4 – Conceptual Site Plan: Basement 1
Figure 3	Existing and Planned Bicycle Facilities
Figure 4	Existing Transit Routes
Figure 5	Public Parking Lots and Garages

APPENDIX A

JCC Fresno Courthouse Transportation Matrix

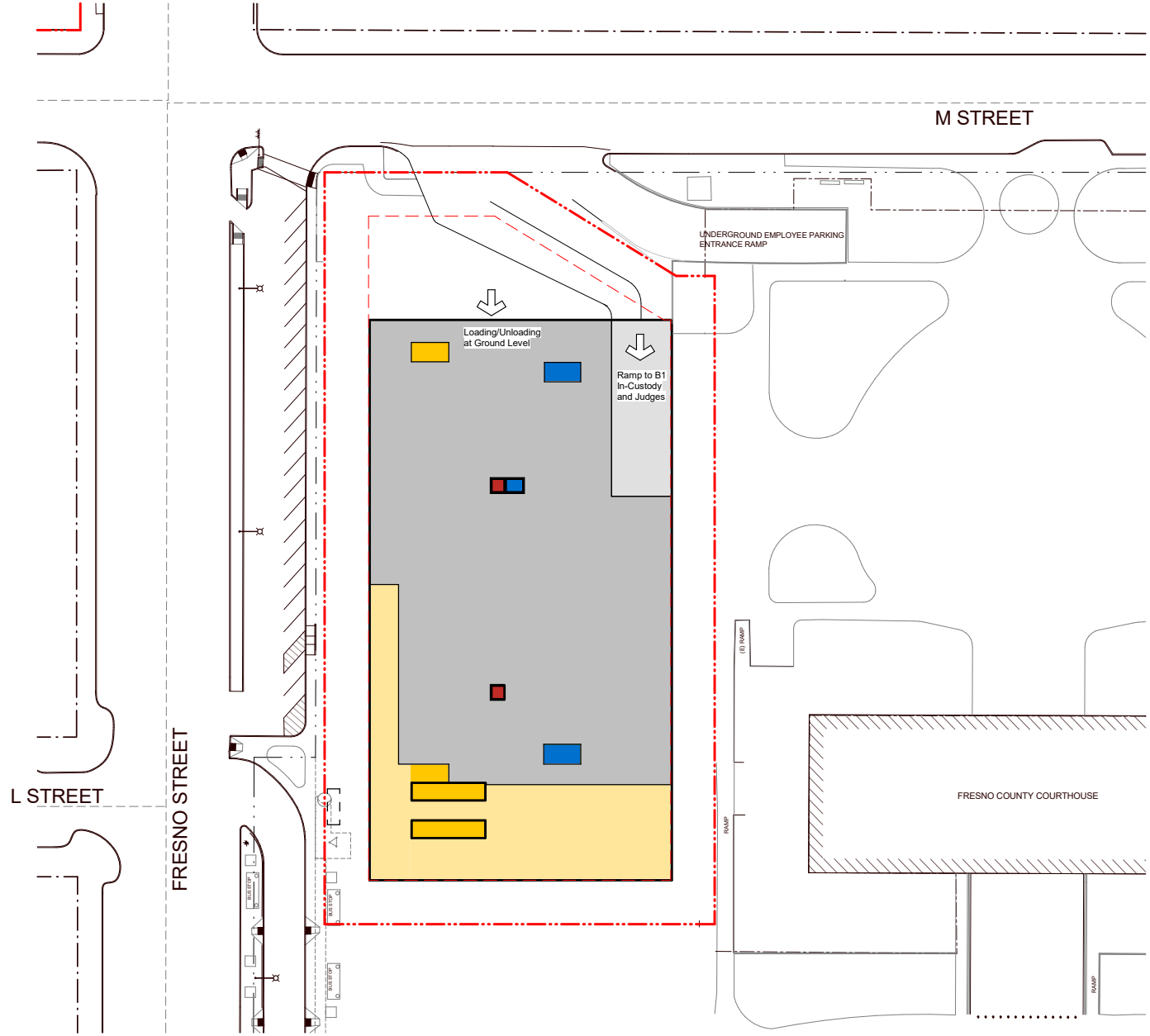
Criteria	Site 1A	Site 1A Score	Site 1B	Site 1B Score	Site 3	Site 3 Score
Description	**Courthouse Park (along Fresno Street) - removal of Sheriff's Office and South Jail Annex**		**Courthouse Park (along Van Ness Avenue) - removal of Courthouse Park space**		**Eaton Plaza - removal of City parking**	
Pedestrian accessibility	Connectivity: Excellent - Access to wide pedestrian paths within/around park; marked pedestrian crossings and facilities at intersections; direct access to pedestrian tunnel 50 feet from Fresno County Superior Court; 500 feet from Fresno County Jail	3	Connectivity: Excellent - Access to wide pedestrian paths within/around park; marked pedestrian crossings and facilities at intersections; direct access to pedestrian tunnel 50 feet from Fresno County Superior Court; 700 feet from Fresno County Jail	3	Connectivity: Good - Access to wide pedestrian paths around site; marked pedestrian crossings and facilities at intersections 1,000 feet from Fresno County Superior Court and Fresno county Jail	2
Bicycle accessibility	Connectivity: Fair - Access to wide pedestrian paths in park; only existing facility on M Street (Class II - one way) Planned bicycle facilites will improve connectivity to excellent	3	Connectivity: Fair - Access to wide pedestrian paths in park; only existing facility on M Street (Class II - one way) Planned bicycle facilites will improve connectivity to excellent	3	Connectivity: Fair - Closest exiting facilities along M Street and P Street (Class II - one way) Planned bicycle facilities will improve connectivity to good	2
Transit accessibility	Bus access: Directly adjacent to Routes 22, 26, 32, 34, 38 Bus Shelter L bus stops woud have to be relocated/reconfigured	3	Bus access: Directly adjacent to Routes 1, 22, 26, 28, 32, 34 Bus Shelter L bus stops woud have to be relocated/reconfigured	3	Bus access: Directly adjacent to Routes 1, 32; walking distance to Routes 22, 26, 28, 34, 38	2
Vehicle Access	Connectivity: Excellent - Close proximity to roadway grid and highways (SR 41, SR 99, SR 180)	3	Connectivity: Excellent - Close proximity to roadway grid and highways (SR 41, SR 99, SR 180)	3	Connectivity: Excellent - Close proximity to roadway grid and highways (SR 41, SR 99, SR 180)	3
Vehicle Circulation (Public Parking)	Excellent - Access to metered parking, surface lots and direct access to Garage #8 (968 parking spots)	3	Excellent - Access to metered parking, surface lots and direct access to Garage #8 (968 parking spots)	3	Good - Access to metered parking and walking distance to surface lots and garages Removal of existing public parking necessary	2
Vehicle Circulation (Judicial Secure Parking)	Fair - Proposed driveway access along M Street However, concern for safety and visibility on M Street and engineering design needed to construct driveway near existing parking garage ramp	1	Excellent - Proposed driveway access along Fresno Street with separate areas for judges and in-custody vehicles	3	Excellent - Proposed driveway access along N Street and O Street with separate ramps for judges and in-custody vehicles	3
Total		**16**		**18**		**14**



Site Options

Figure 1

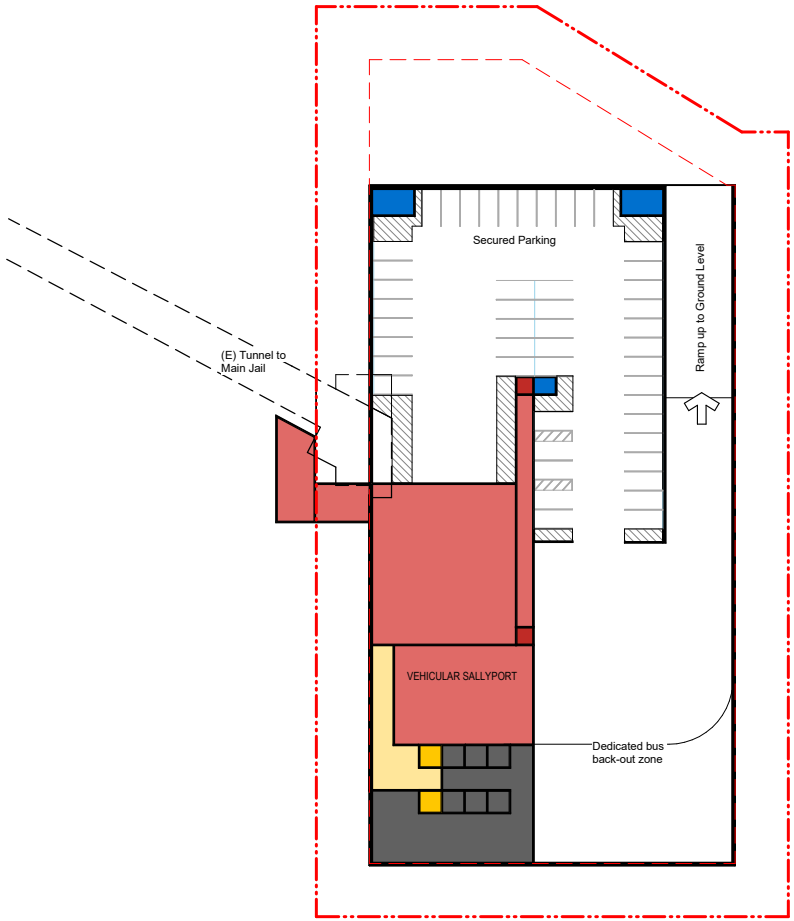
Site Options



Site Plan Source: HOK

Figure 2A.1

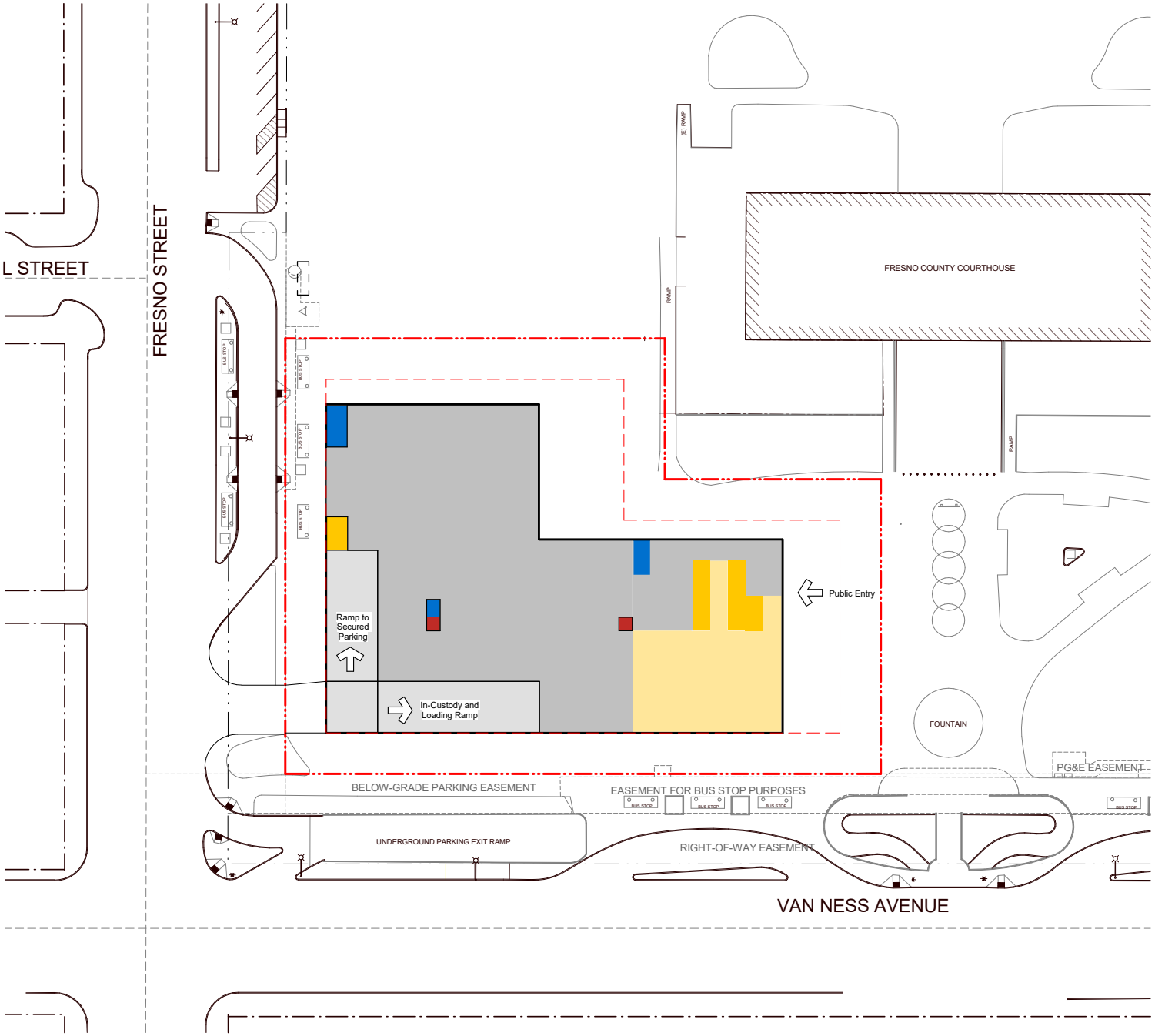
Site 1A — Conceptual Site Plan: Level 1



Site Plan Source: HOK

Figure 2A.2

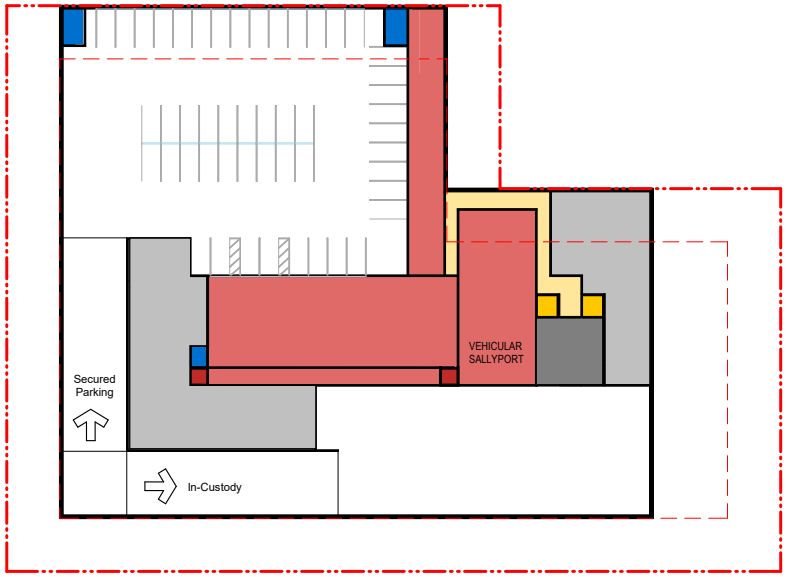
Site 1A — Conceptual Site Plan: Basement 1



Site Plan Source: HOK

Figure 2B.1

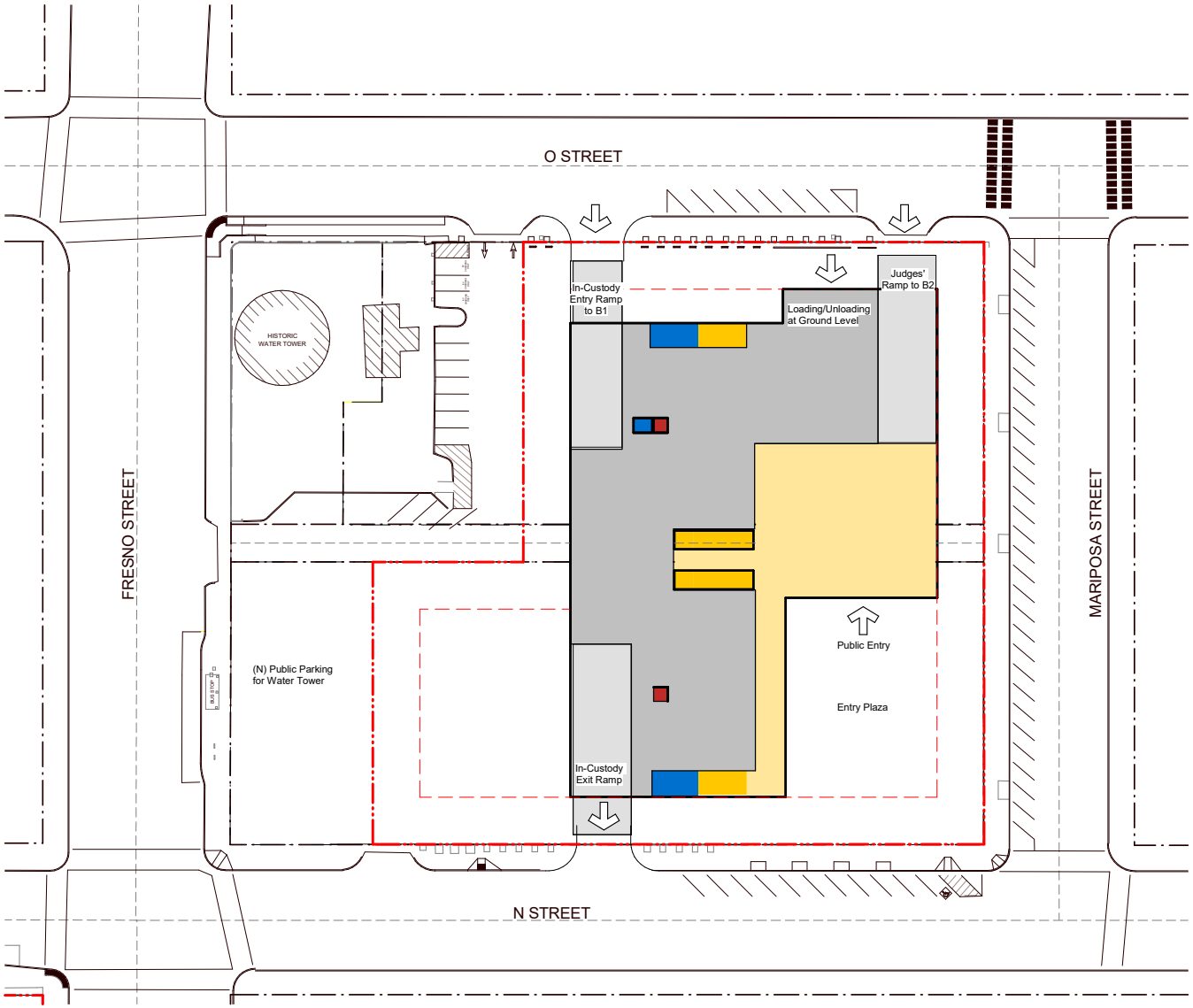
Site 1B — Conceptual Site Plan: Level 1



Site Plan Source: HOK

Figure 2B.2

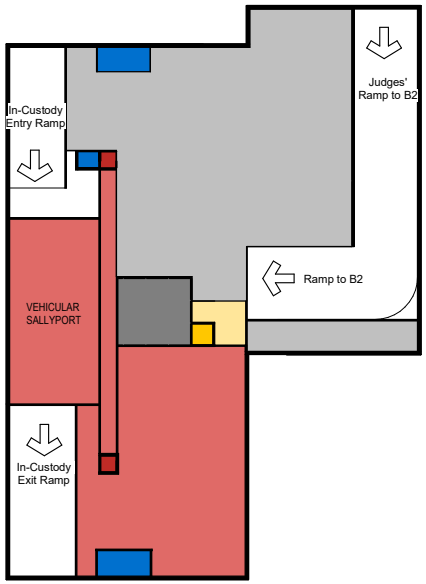
Site 1B — Conceptual Site Plan: Basement 1



Site Plan Source: HOK

Figure 2C.1

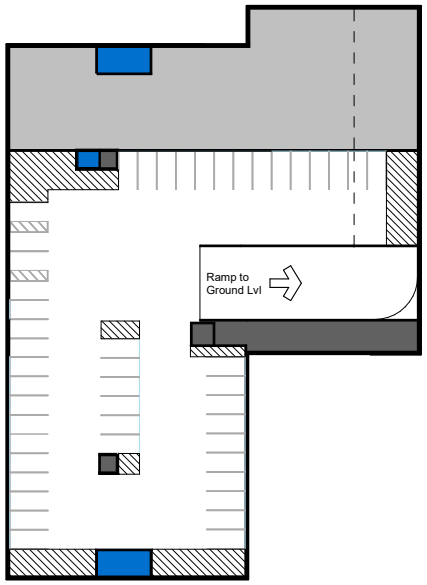
Site 3 — Conceptual Site Plan: Level 1



Site Plan Source: HOK

Figure 2C.2

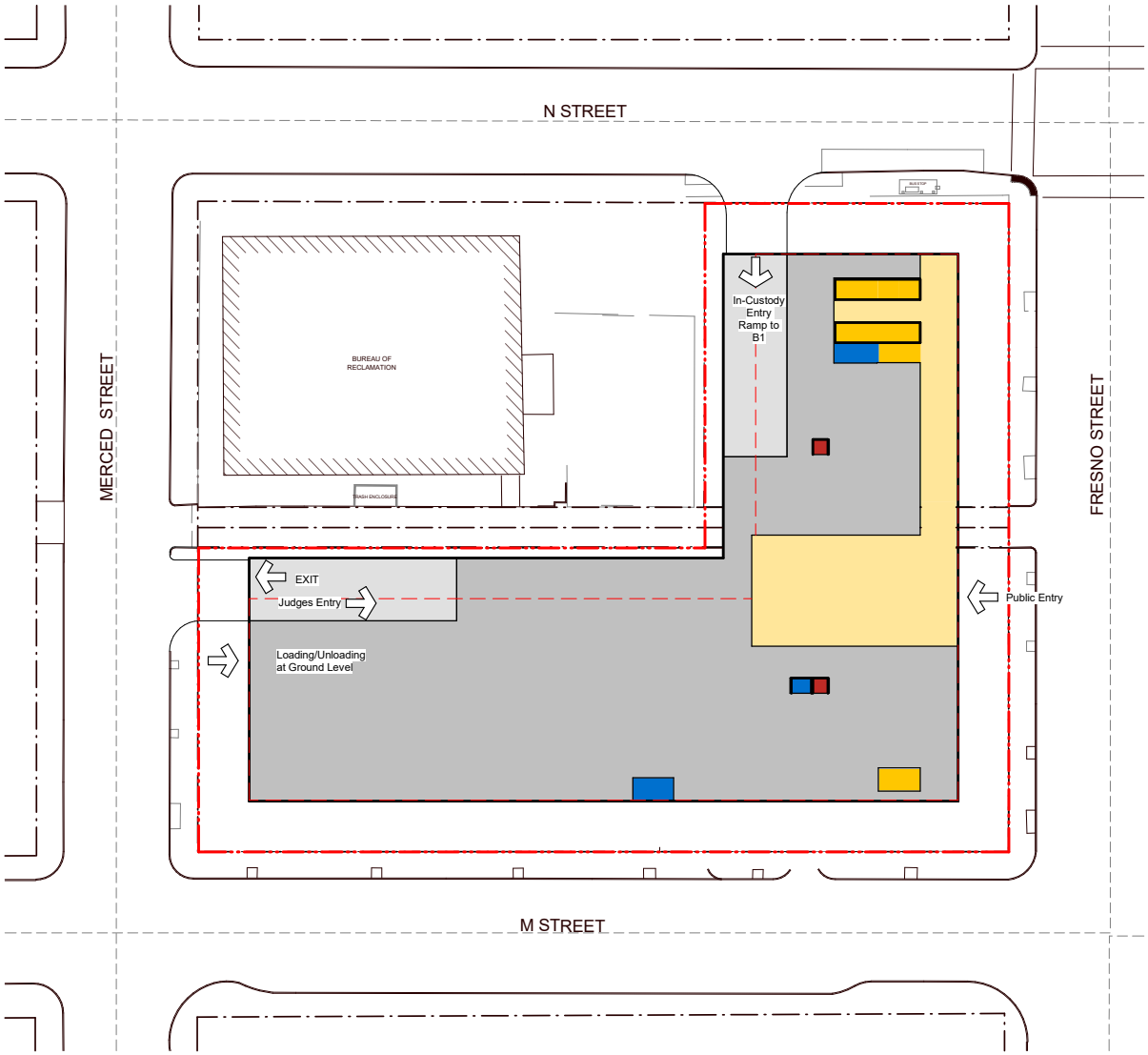
Site 3 — Conceptual Site Plan: Basement 1



Site Plan Source: HOK

Figure 2C.3

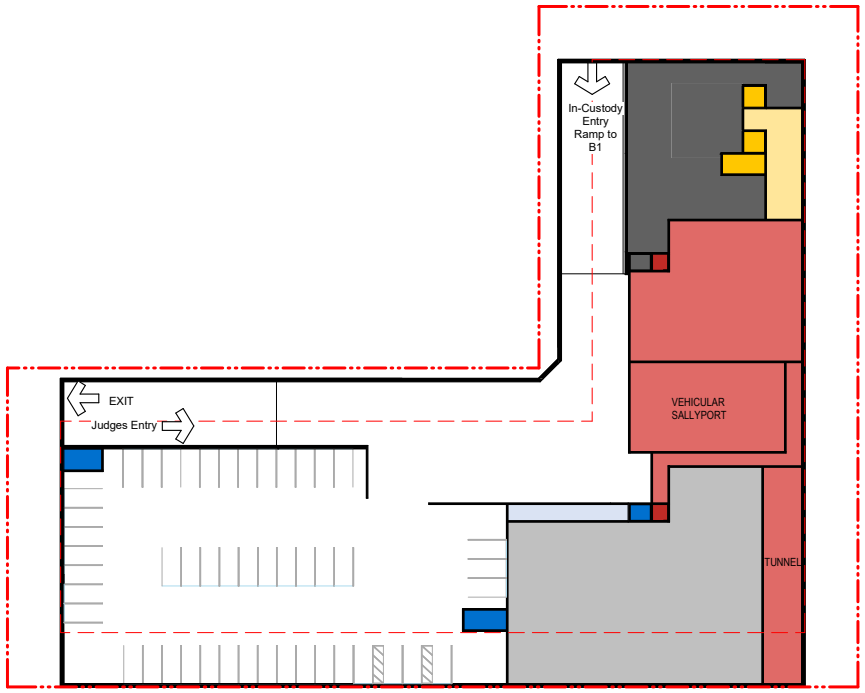
Site 3 — Conceptual Site Plan: Basement 2



Site Plan Source: HOK

Figure 2D.1

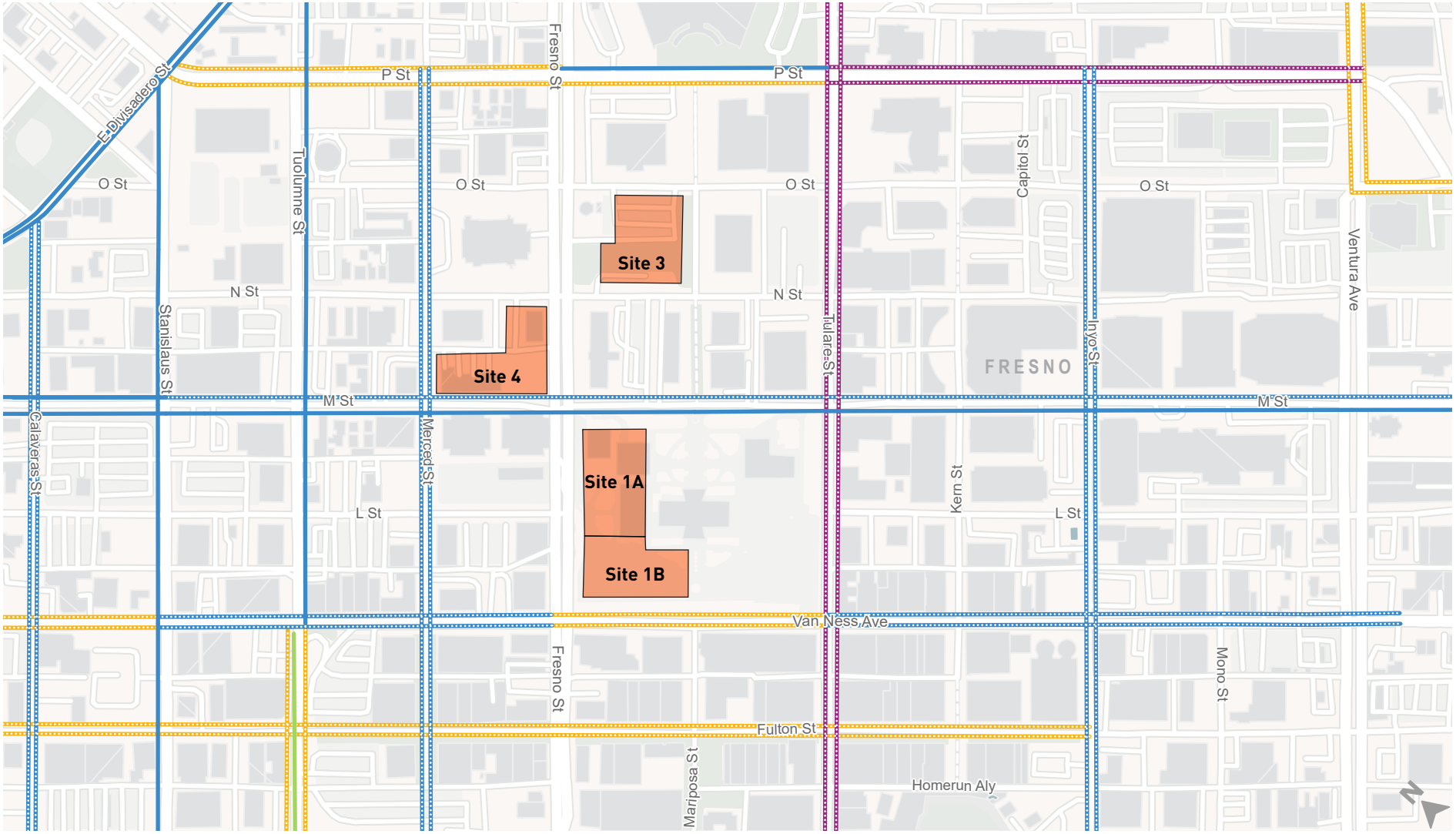
Site 4 — Conceptual Site Plan: Level 1



Site Plan Source: HOK

Figure 2D.2

Site 4 — Conceptual Site Plan: Basement 1



Site Options

Existing	*Proposed*
Class I Bike Path	Proposed Class I Bike Path
Class II Bike Lane	Proposed Class II Bike Lane
Class III Bike Route	Proposed Class III Bike Route
Class IV Separated Bikeway	Proposed Class IV Separated Bikeway

Figure 3

Existing and Planned Bicycle Facilities

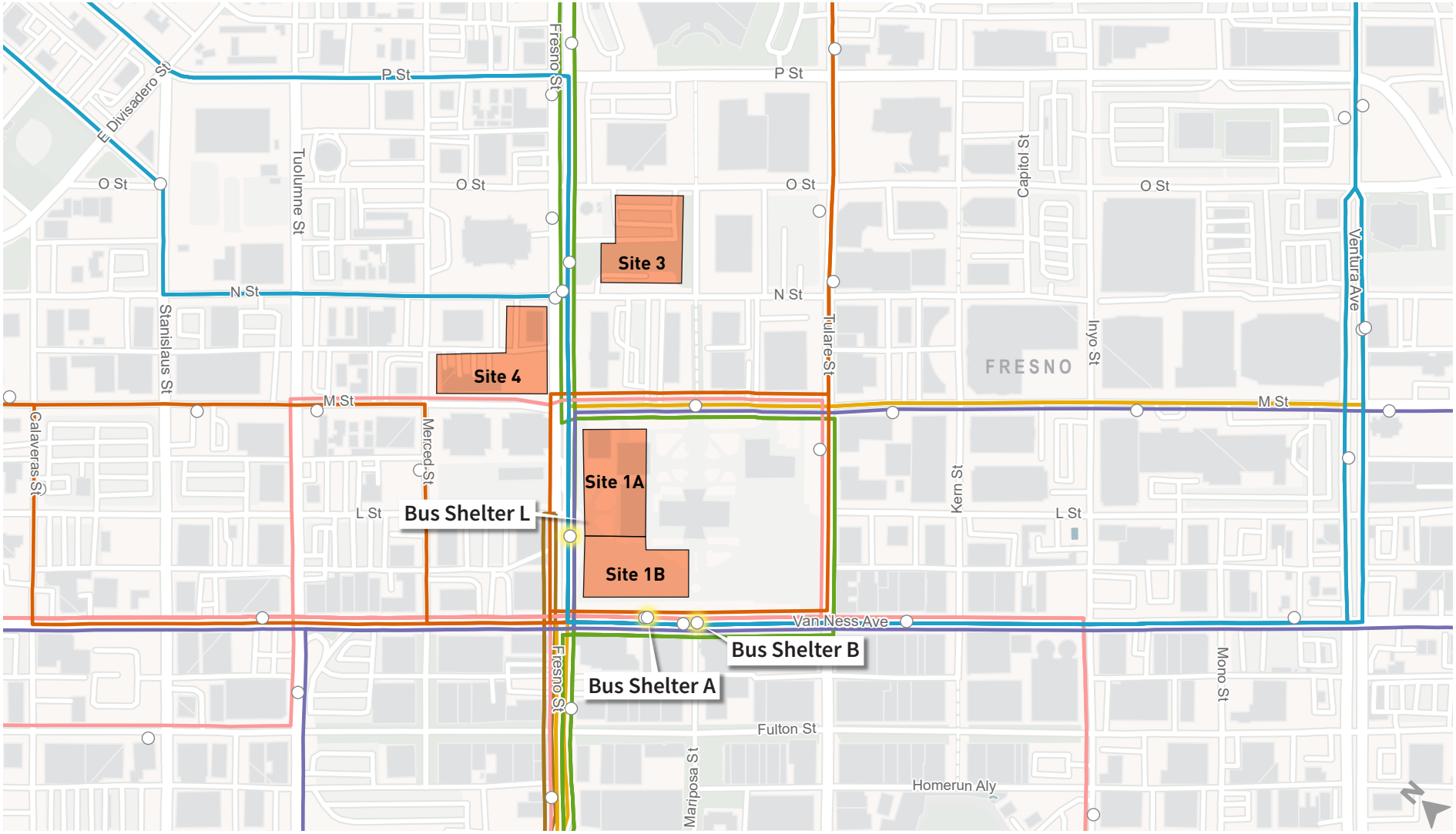


Figure 4

Existing Transit Routes



Figure 5

Public Parking Lots and Garages

FEHR & PEERS

343 East Main Street | Suite 608
Stockton, CA 95202
www.fehrandpeers.com

Appendix L FHWA Roadway Construction Noise Model

Report date: 12/10/2025
Case Description: JCC Fresno Courthouse - Demolition

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Residential Along Tulare Street	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	750	0
Dozer	No	40		81.7	750	0
Tractor	No	40	84		750	0
Front End Loader	No	40		79.1	750	0
Backhoe	No	40		77.6	750	0
Haul Truck	No	40		76.5	750	0
Haul Truck	No	40		76.5	750	0

Results

	Calculated (dBA)	
Equipment	Lmax	Leq
Concrete Saw	66.1	59.1
Dozer	58.1	54.2
Tractor	60.5	56.5
Front End Loader	55.6	51.6
Backhoe	54	50.1
Haul Truck	53	49
Haul Truck	53	49
Total	**68.4**	**62.8**

Report date: 12/10/2025
Case Description: JCC Fresno Courthouse - Site Preparation

		---- Receptor #1 ----		
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residential Along Tulare Street	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		750	0
Scraper	No	40		83.6	750	0
Tractor	No	40	84		750	0

		Results Calculated (dBA)	
Equipment		Lmax	Leq
Grader		61.5	57.5
Scraper		60.1	56.1
Tractor		60.5	56.5
	Total	**65.5**	**61.5**

Report date: 12/10/2025
Case Description: JCC Fresno Courthouse - Grading

		Baselines (dBA)			---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night	
Residential Along Tulare Street	Residential	60	55	50	

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		750	0
Dozer	No	40		81.7	750	0
Tractor	No	40	84		750	0
Front End Loader	No	40		79.1	750	0
Haul Truck	No	40		76.5	750	0
Haul Truck	No	40		76.5	750	0
Haul Truck	No	40		76.5	750	0
Haul Truck	No	40		76.5	750	0

Results

	Calculated (dBA)	
Equipment	Lmax	Leq
Grader	61.5	57.5
Dozer	58.1	54.2
Tractor	60.5	56.5
Front End Loader	55.6	51.6
Haul Truck	53	49
Haul Truck	53	49
Haul Truck	53	49
Haul Truck	53	49
Total	**66.4**	**62.4**

Report date: 12/10/2025
Case Description: JCC Fresno Courthouse - Building Construction

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Residential Along Tulare Street	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	750	0
Forklift (Gradall)	No	40		83.4	750	0
Forklift (Gradall)	No	40		83.4	750	0
Generator	No	50		80.6	750	0
Tractor	No	40	84		750	0
Welder / Torch	No	40		74	750	0
Welder / Torch	No	40		74	750	0
Welder / Torch	No	40		74	750	0

Results

	Calculated (dBA)	
Equipment	Lmax	Leq
Crane	57	49.1
Forklift (Gradall)	59.9	55.9
Forklift (Gradall)	59.9	55.9
Generator	57.1	54.1
Tractor	60.5	56.5
Welder / Torch	50.5	46.5
Welder / Torch	50.5	46.5
Welder / Torch	50.5	46.5
Total	**66.5**	**62.3**

Report date: 12/10/2025
Case Description: JCC Fresno Courthouse - Paving

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Residential Along Tulare Street	Residential	60	55	

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	750	0
Paver	No	50		77.2	750	0
Concrete Mixer Truck	No	40		78.8	750	0
Tractor	No	40	84		750	0
Roller	No	20		80	750	0
Roller	No	20		80	750	0

Results

	Calculated (dBA)	
Equipment	Lmax	Leq
Paver	53.7	50.7
Paver	53.7	50.7
Concrete Mixer Truck	55.3	51.3
Tractor	60.5	56.5
Roller	56.5	49.5
Roller	56.5	49.5
Total	**64.5**	**60**

Report date: 12/10/2025
Case Description: JCC Fresno Courthouse - Architectural Coating

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Residential Along Tulare Street	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Compressor (air)	No	40		77.7	750	0

Results

	Calculated (dBA)	
Equipment	Lmax	Leq
Compressor (air)	54.1	50.2
Total	**54.1**	**50.2**