INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

CALIBER COLLISION PAINT AND AUTO BODY REPAIR SHOP PROJECT

MENIFEE, RIVERSIDE COUNTY, CALIFORNIA

LSA

February 2025

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MITIGATED NEGATIVE DECLARATION

CALIBER COLLISION PAINT AND AUTO BODY REPAIR SHOP PROJECT

MENIFEE, RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

City of Menifee
Community Development Department
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Menifee, California 92586

Prepared by:

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LSA Project No. 20231078.02

LSA

February 2025

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LIST OF ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
ADA	Americans with Disabilities Act
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
Bcf	billion cubic feet
BERD	Built Environment Resources Directory
bgs	below ground surface
BMP	best management practice
CAFE	Corporate Average Fuel Economy
Cal/OSHA	California Occupational Safety and Health Administration
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
California Register	California Register of Historical Resources
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CEQA	California Environmental Quality Act
CH_4	methane

City	City of Menifee
CO	carbon monoxide
CO_2	carbon dioxide
Construction General Permit	General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity
CPTED	Crime Prevention through Environmental Design
CRA	Cultural Resources Assessment
CREC	controlled recognized environmental conditions
dBA	A-weighted decibels
DIF	Development Impact Fee
DIR	California Department of Industrial Relations
EDC-SG	Economic Development Corridor – Southern Gateway
EIC	Eastern Information Center
EIR	Environmental Impact Report
EMWD	Eastern Municipal Water District
EO	Executive Order
EOP	Riverside County Operational Area Emergency Operations Plan
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	California Department of Conservation Farmland Mapping and Monitoring Program
FWQMP	Final Water Quality Management Plan
GHG	greenhouse gas
GIS	geographic information system

GWh	gigawatt-hours
HREC	historical recognized environmental conditions
HVAC	heating, ventilation, and air conditioning
I-215	Interstate 215
in/sec	inches per second
IS/MND	Initial Study/Mitigated Negative Declaration
kBTU	thousand British thermal units
kWh	kilowatt-hours
lbs./day	pounds per day
LID	Low Impact Development
L_{max}	maximum instantaneous noise level
LOS	level of service
LRA	Local Responsibility Area
LST	localized significance threshold
MLD	Most Likely Descendant
mpg	miles per gallon
MRZ	Mineral Resource Zones
MS4	Municipal Separate Storm Sewer System
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MT CO_2e	metric tons of carbon dioxide equivalent
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
ND	Negative Declaration
NEPSSA	Narrow Endemic Plant Species Survey Area

NFIP	National Flood Insurance Program
NHTSA	National Highway Traffic Safety Administration
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
PM_{10}	particulate matter equal to or less than 10 microns in diameter
$PM_{2.5}$	particulate matter equal to or less than 2.5 microns in diameter
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
Project	Caliber Collision Paint and Auto Body Repair Shop
RCFD	Riverside County Fire Department
RCP	SCAG Regional Comprehensive Plan
REC	recognized environmental condition
RMS	root-mean-square
RTA	Riverside Transit Agency
RTP/SCS	SCAG Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
RWRF	Regional Wastewater Reclamation Facility
SAFE	Safe Affordable Fuel-Efficient
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison

SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SMARA	Surface Mining and Reclamation Act of 1975
SO_X	oxides of sulfur
SRA	Source Receptor Area
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
VdB	vibration velocity decibels
VEC	vapor encroachment condition
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VMT Guidelines	City of Menifee Traffic Impact Analysis Guidelines for Vehicle Miles Traveled
VOC	volatile organic compound
WRCOG	Western Riverside Council of Governments
WQMP	Water Quality Management Plan

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1.0 ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:**

   Caliber Collision Paint and Auto Body Repair Shop (Project)

2. **Lead Agency Name and Address:**

   City of Menifee
   Community Development Department
   29844 Haun Road
   Menifee, CA 92586

3. **Contact Person and Phone Number:**

   Jessica Williams, Assistant Planner
   (951) 672-6777
   jwilliams@cityofmenifee.us

4. **Project Location:**

   The 2.39-acre Project site is on the west side of Zeiders Road, north of Keller Road, south of Scott Road, and east of Howard Way in Menifee, Riverside County, California (Assessor's Parcel Number 384-130-028). **Figure 1: Project Location and Vicinity** shows the regional and local location of the Project site.

5. **Project Sponsor's (Applicant) Name and Address:**

   Steve Vettel, On-Point Commercial, LLC.
   2510 Palisades Drive
   Corona, CA 92882

6. **General Plan Land Use Designation:**

   Economic Development Corridor (EDC)

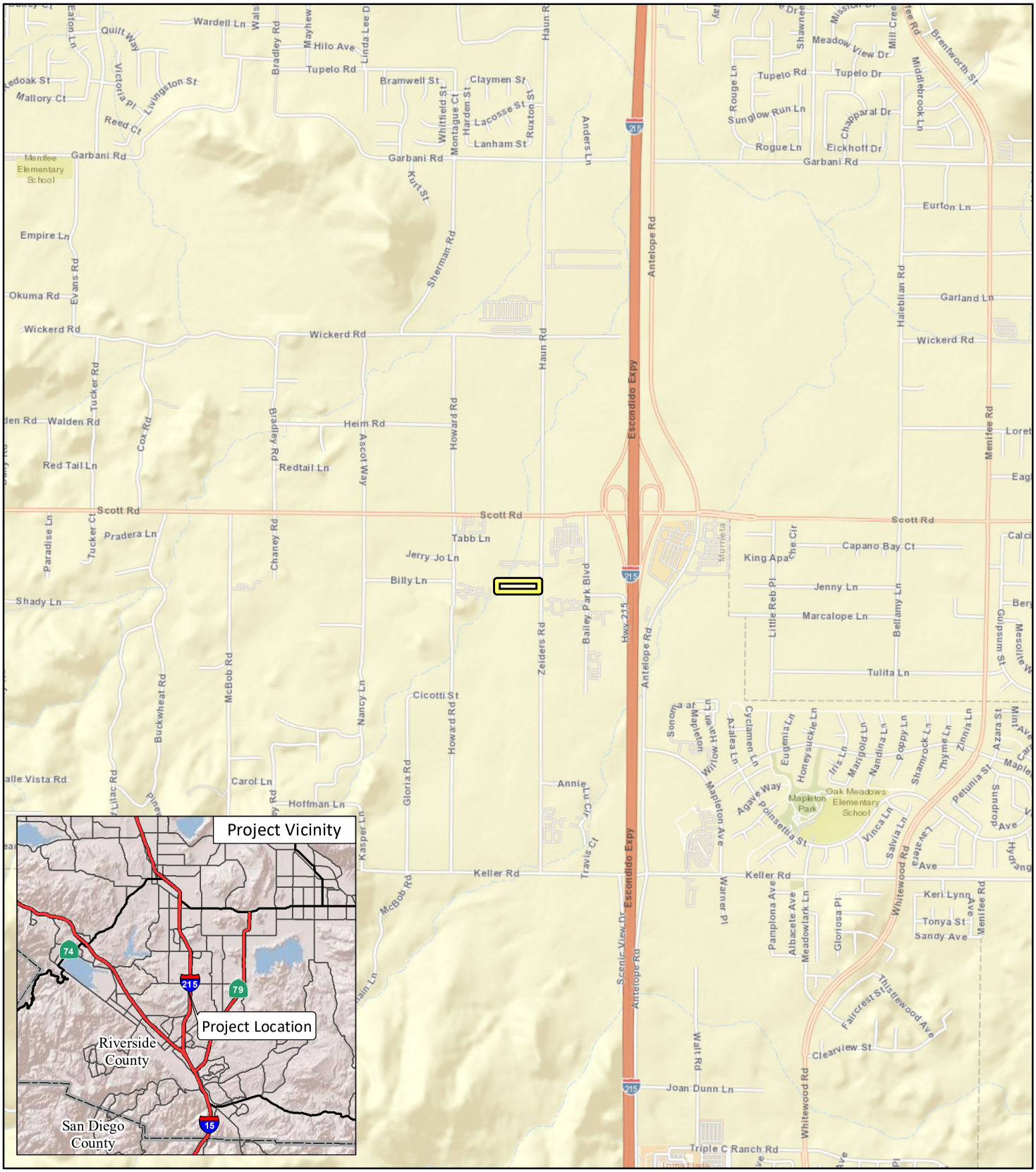
7. **Zoning:**

   Economic Development Corridor-Southern Gateway (EDC-SG)

8. **Description of Project:**

   The proposed Project would develop a one-story, 18,717-square-foot building to house a paint and auto body repair shop with six bays and a paint booth. The Project would also include a parking lot with 100 parking spaces, including 5 Americans with Disabilities Act handicap spaces, all within a 2.39-acre site (Assessor's Parcel Number 384-130-028). The site is currently vacant and the City of Menifee's (City) General Plan Land Use designation and Zoning Classification is *Economic Development Corridor – Southern Gateway* (EDC-SG). The EDC-SG zone allows development of an auto body repair and paint shop with a Conditional Use Permit. The Project is consistent with the surrounding commercial and industrial land uses. The Project also proposes a conceptual landscape plan that includes 36,155 square feet of landscape area.

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LEGEND

Project Location

FIGURE 1

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SOURCE: Bing (2021)

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Caliber Collision Auto Body Shop

Project Location and Vicinity

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The Project site is west of Interstate 215 near the southwest corner of Scott Road and Zeiders Road bounded by commercial activity to the north and west, a vacant lot to the east (on the other side of Zeiders Road) and a residence to the south (see **Figure 2: Site Plan**). **Appendix A** contains the civil plans, as well as the site plan.

9. Surrounding Land Uses and Setting:

The northern boundary of the site is the A.B.R.V. Storage (boats and recreational vehicle storage) with a zoning designation of EDC-SG; beyond the storage use to the north is undeveloped land with an informal storage of shipping containers, cars, and boats also zoned EDC-SG. A vacant parcel borders the Project site to the east, adjacent to Zeiders Road. Farther east is another vehicle storage site and a sprinkler supply store (Imperial Sprinkler Supply). All areas east of the Project site are zoned EDC-SG. The southern boundary of the site is developed and has two structures on the site. West of the Project site is another vehicle storage site, also zoned EDC-SG.

10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

Riverside County Flood Control and Water Conservation District, and the Santa Ana Regional Water Quality Control Board.

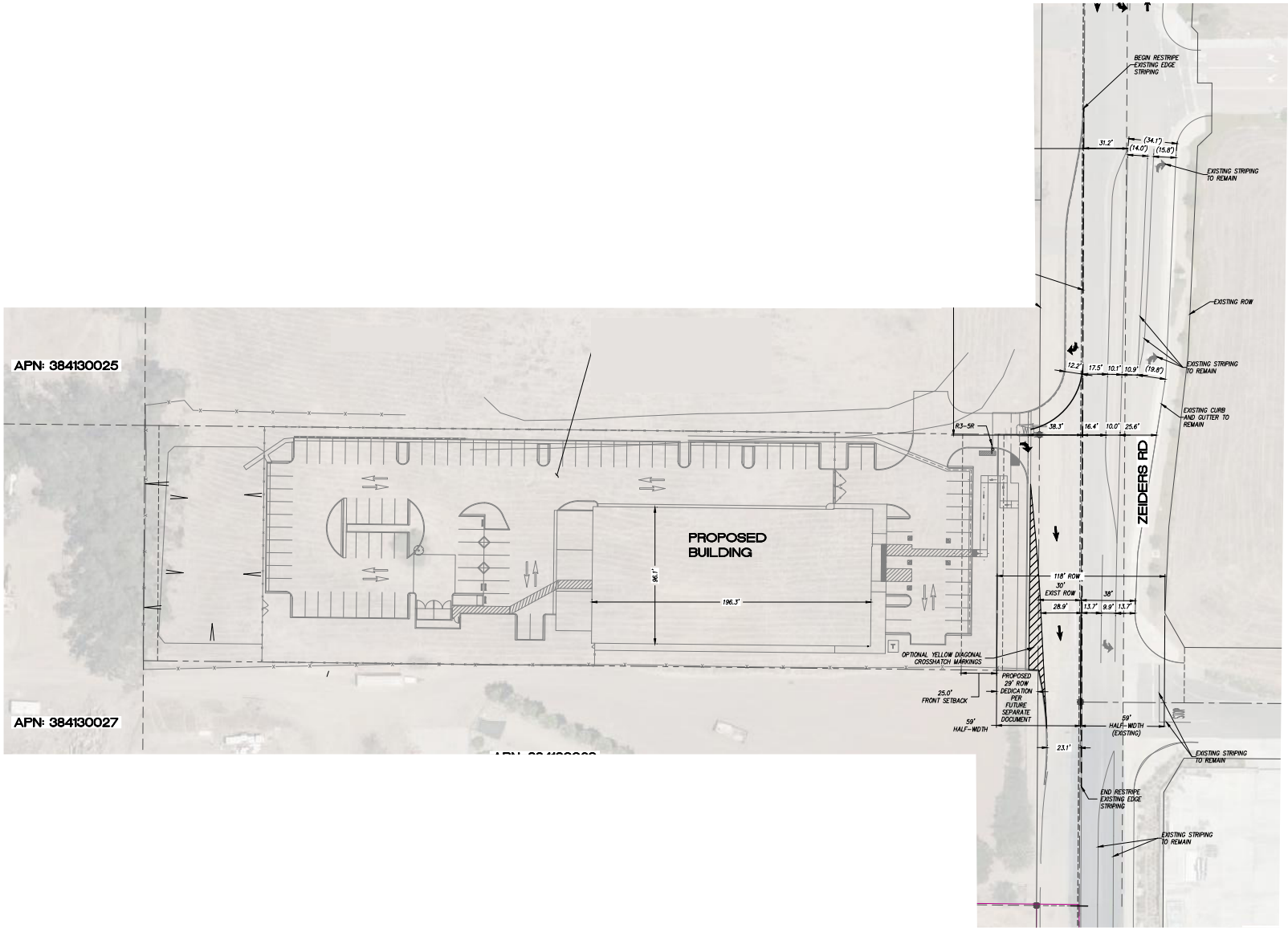
11. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resource Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Pursuant to Assembly Bill (AB) 52 (specifically Public Resources Code 21080.3.1), Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects. Pursuant to provisions of AB 52, the City contacted the following Native American tribes on August 5, 2020.

- Pechanga Band of Luiseño Indians
- Rincon Band of Luiseño Indians
- Soboba Band of Luiseño Indians
- Agua Caliente Band of Cahuilla Indians

Please see Section 5.18, Tribal Cultural Resources, of this Initial Study/Mitigated Negative Declaration for a detailed discussion and determination of impacts to tribal cultural resources.

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FIGURE 2

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SOURCE: Latitude 33 Engineering

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Caliber Collision Paint and Auto Body Repair Shop

Site Plan

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2.0 INTRODUCTION AND PURPOSE

2.1 INTRODUCTION

Chapter 2 of this Initial Study/Mitigated Negative Declaration (IS/MND) describes the purpose, environmental authorization, the intended uses of the IS/MND, documents incorporated by reference, and the process and procedures governing the preparation of the environmental document. Pursuant to Section 15367 of the State of California *Guidelines for Implementation of the California Environmental Quality Act* (*State CEQA Guidelines*), the City of Menifee (City) is the Lead Agency under the California Environmental Quality Act (CEQA). The City has primary responsibility for compliance with CEQA and consideration of the proposed Project.

This document is organized as follows:

- Chapter 1.0, Environmental Checklist Form, provides information about the Project pursuant to Appendix G of the *State CEQA Guidelines*.
- Chapter 2.0, Introduction and Purpose, provides a discussion of the IS/MND's purpose, focus, and legal requirements.
- Chapter 3.0, Project Elements, provides a detailed description of the proposed Project.
- Chapter 4.0, Environmental Factors Potentially Affected, provides a list of environmental topics potentially affected by Project implementation pursuant to the *State CEQA Guidelines*.
- Chapter 5.0, CEQA Environmental Checklist, includes a checklist and accompanying analyses of the Project's effect on the environment. For each environmental issue, the analysis identifies the Project's level of environmental impact.
- Chapter 6.0, List of Preparers, lists the contributors during the preparation of the IS/MND.
- Chapter 7.0, References, lists the references cited throughout the document.
- The appendices include the technical material prepared to support the IS/MND's analysis.

2.2 PURPOSE

CEQA requires that the Project be reviewed to determine the environmental effects that would result if the Project were approved and implemented. The City is the Lead Agency and has the responsibility for preparing and adopting the associated environmental document prior to consideration of the approval of the proposed Project. The City has the authority to make decisions regarding discretionary actions relating to implementation of the proposed Project.

This IS/MND has been prepared in accordance with the relevant provisions of CEQA (California Public Resources Code [PRC] Section 21000 et seq.), the *State CEQA Guidelines,*[1] and the rules, regulations, and procedures for implementing CEQA, as adopted by the City. The IS/MND's objective is to inform City decision-makers, representatives of other affected/responsible agencies, the public, and interested parties of the Project's potential environmental consequences.

As established in *State CEQA Guidelines* Section 15063(c), the purposes of an IS are to:

- Provide the Lead Agency (City of Menifee) with information to use as the basis for deciding whether to prepare a Negative Declaration (ND), Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR);
- Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the Project to qualify for an ND or MND;
- Assist in the preparation of an EIR, if one is required;
- Facilitate environmental assessment early in the design of a project;
- Provide a factual basis for finding in an ND or MND that a project would not have a significant effect on the environment.
- Eliminate unnecessary EIRs; and
- Determine whether a previously prepared EIR could be used to evaluate the environmental effects of the Project.

2.3 INTENDED USE OF THIS INITIAL STUDY

The City formally initiated the environmental process for the proposed Project with the preparation of this IS/MND. As identified in the following analyses, Project impacts related to various environmental issues either would not occur, are less than significant (when measured against established significance thresholds) or have been rendered less than significant through implementation of mitigation measures.

State CEQA Guidelines Section 15150 permits the incorporation by reference of all or portions of other documents that are generally available to the public. The IS/MND has been prepared using information from City planning and environmental documents, technical studies specifically prepared for the Project, and other publicly available data. The documents used in preparation of the IS/MND are identified in Chapter 7.0 and are hereby incorporated by reference.

[1] California Code of Regulations, Title 14, Chapter 3, Sections 15000 through 15387.

2.4 PUBLIC REVIEW OF THE INITIAL STUDY

The IS and a Notice of Intent to adopt an MND will be distributed to responsible and trustee agencies, other affected agencies, and other parties for a 30-day public review period. Written comments regarding this IS/MND should be addressed to:

Jessica Williams, Assistant Planner
City of Menifee
Community Development Department
29844 Haun Road
Menifee, CA 92586
(951) 672-6777
jwilliams@cityofmenifee.us

After the 30-day public review period, consideration of comments raised during the public review period will be considered and addressed prior to adoption of the MND by the City.

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3.0 PROJECT ELEMENTS

3.1 PROJECT LOCATION

The 2.39-acre project site is on the west side of Zeiders Road, north of Keller Road, south of Scott Road, and east of Howard Way in Menifee, Riverside County, California (Assessor's Parcel Number 384-130-028). The site is depicted within Section 32, Township 5 South, Range 3 West, as detailed on the United States Geological Survey 7.5-minute series *Romoland, California* quadrangle map.

3.2 ENVIRONMENTAL SETTING

The Project site is undeveloped and is west of Interstate 215 (I-215) near the southwest corner of Scott Road and Zeiders Road. The site is vacant and bounded by commercial activity to the north and west, with a vacant lot to the east (on the other side of Zeiders Road) and a residence to the south. The Project site is relatively flat and level. The Project site is disturbed from annual weed abatement for fire suppression and weed control. Accordingly, vegetation in the survey area consists of nonnative grassland. Dominant species include paniculate tarplant (*Deinandra paniculate*), redstem filaree (*Erodium cicutarium*), ripgut brome (*Bromus diandrus),* and common fiddleneck (*Amsinckia intermedia*), shortpod mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), stinknet (*Oncosiphon pilulifer*), foxtail barley (*Hordeum murinum*), foxtail brome (*Bromus madritensis*), and rattail sixweeks grass (*Festuca myuros*). There is an existing tree identified in the east-center portion of the Project site. Additionally, an existing fence surrounds the perimeter of the parcel, along with an existing dirt road in the northeast portion of the site. East of the Project site, Zeiders Road is urbanized and built-up with existing sidewalk, telephone lines, curb/gutter, streetlights, curb ramps, sewer manhole, and asphalt concrete berm.

The City of Menifee General Plan land use designation and the Zoning Designation for the Project site is Economic Development Corridor – Southern Gateway (EDC-SG). EDC-SG uses allow for business park-style development consisting of light industrial and office uses, with commercial use opportunities. The objective is to allow development while preserving the rural character of the Southern Gateway area. The EDC-SG zone allows development of an auto body repair and paint shop with a Conditional Use Permit, and the Project is consistent with the surrounding commercial and industrial land uses. The surrounding areas bounding the Project site are in an urban setting, zoned EDC-SG and adjacent to I-215. The nearest sensitive receptor to the Project site is a single-family residence to the south.

Table 3.1: Surrounding Land Uses and Setting summarizes the existing surrounding land uses, General Plan land use designations, and zoning designations.

The northern boundary of the site is A.B.R.V. Storage (boats and recreational vehicle storage) with a zoning designation of EDC-SG; beyond the storage use to the north is undeveloped land with an informal storage of shipping containers, cars, and boats also zoned EDC-SG. A vacant parcel borders the Project site to the east adjacent to Zeiders Road. Farther east is another vehicle storage and a sprinkler supply store (Imperial Sprinkler Supply). All areas east of the Project site are zoned EDC-SG. The southern boundary of the site is developed and has two structures on the site. West of the Project site is another vehicle storage, also zoned EDC-SG.

Table 3.1: Surrounding Land Uses and Setting

Direction	Existing Use Occupying Parcel	General Plan Land Use Designation	Zoning Designation
Project Site	Undeveloped	Economic Development Corridor (EDC), maximum 24 dwelling units per acre and 1.0 floor-area ratio	Economic Development Corridor – Southern Gateway (EDC-SG)
North	Vehicle storage (A.B.R.V. Storage)	EDC	EDC-SG
East	Zeiders Road, beyond which is undeveloped land	EDC	EDC-SG
South	Developed (two structures, single-family residential)	EDC	EDC-SG
West	Automotive parking area and storage yard	EDC	EDC-SG

Sources: *General Plan Land Use Map.* (City of Menifee, 2021a); *Zoning Map* (City of Menifee, 2021b).

According to the City's General Plan, the EDC is intended to identify areas where a mixture of commercial, residential, industrial, entertainment, educational, recreational, civic, and office uses are planned. The EDC intends to provide more nonresidential uses, while using residential uses as a supporting role, as such uses shall be integrated vertically/horizontally with the other uses mentioned above. Furthermore, the EDC intends to develop areas near I-215 with mixed use developments by providing a standard of a maximum of 24 dwelling units per acre.

3.3 PROJECT DESCRIPTION

The Project includes development of the one-story, approximately 18,717-square-foot Caliber Collision Paint and Auto Body Repair shop building with six bays on 2.39 gross acres. The Project would include 42,689 square feet of paved surface, and approximately 36,155 square feet of landscaping. Drainage and stormwater runoff would be retained from the current condition and would flow to the northwest direction off the Project site into the proposed biofiltration basin. See **Figure 2: Site Plan. Appendix A** contains the civil plans.

3.3.1 Construction

Construction activities include removal of existing on-site fencing and vegetation, excavation, grading, paving, construction of the one-story, 18,717-square-foot Caliber Collision Paint and Auto Body Repair shop building with six bays. Construction would also include parking areas and the installation of lighting, landscaping, and utility connections. During grading, on-site soils would be excavated and recompacted in accordance with the 2022 California Building Code to accommodate the proposed building and parking areas.

Construction parking and staging would be on site. Construction hours would conform to City standards and be limited to 6:30 a.m. to 7:00 p.m. Monday through Saturday in accordance with City Municipal Code Section 8.01.010. During Project construction, it is possible there would be temporary lane closures and/or detours necessary along Zeiders Road. Project construction is anticipated to commence in early 2025 and be completed in the summer of 2025, resulting in a total construction duration of approximately 6 months.

3.3.2 Facility and Site Design

The Project would construct a one-story, 18,717-square-foot building to house the Caliber Collision Paint and Auto body Repair shop with six bays, on 2.39 acres of land. The total proposed building area would be approximately 18,717 square feet, total proposed paved area would be approximately 42,689 square feet, and the proposed landscape area would be 36,155 square feet.

The Project would include landscaped areas in accordance with Chapter 9.195 (Landscape Standards) and Section 9.195.050 of the City's Municipal Code. Approximately 35 percent (36,155 square feet) of the Project site would be landscaped. Design elements of the proposed Project include landscaped setbacks and trees along the site frontage with shrubs throughout the parking lot area. Off-site landscape improvements of 1,378 square feet would also be included. Trees provided within the landscape plans include 17 large evergreen trees, 36 trees in the parking lot, 11 medium accent trees, 17 large deciduous trees, and 4 street trees. Other vegetation includes medium shrubs, succulents, vines, grass, and groundcover for the retention basin. The Project perimeter would include a 5-foot-high, tubular steel fence wall along the southern, western, and northern boundaries of the site, while the entry would include curbing, a paved driveway entrance, landscaping, and parking in front of the building.

The Project includes a 6-foot street dedication along the site's frontage with Zeiders Road. This portion of right-of-way would include light poles installed throughout the on-site drive aisles and along the sidewalk along the site's frontage. All lighting on the Project site will comply with Chapter 6.01 (Dark Sky; Light Pollution) and Chapter 9.205 (Lighting Standards) of the City's Municipal Code, which require light shielding, functional and aesthetic design, and compatibility with surrounding uses.

3.3.3 Circulation and Access

The only public right-of-way abutting the Project site is along Zeiders Road along the eastern site frontage. However, the site is surrounded by fencing on the north, south, and west borders of the site. Vehicle or pedestrian access is not provided in the existing condition, as there are no driveways or sidewalks along the Project site's frontage with Zeiders Road but along the east street frontage of Zeiders Road.

Access to the Project site would be off Zeiders Road, near its intersection with Scott Road and I-215. The proposed Project would connect to Zeiders Road via a 24-foot entrance/exit driveway that would be shared with the parcel directly north of the Project site. The entrance would connect to the proposed building via a vehicle gate that would be equipped with Opticom (a traffic control system to allow the right-of-way for emergency vehicles). Additionally, the Project would include features for fire protection services such as a fire riser room, a backflow preventer, and a hydrant service line.

The proposed Project would provide 100 parking spaces, including Americans with Disabilities Act (ADA) compliant handicap spaces and bike enclosures to accommodate bicycle parking. An ADA handicap ramp would also be included in the proposed Project (eastside of site) to ensure access for all pedestrians.

3.3.4 Fire Service

The Riverside County Fire Department (RCFD) provides fire protection, fire prevention, and emergency services to the Project site through a contract with the City. Menifee is served by four RCFD fire stations within its jurisdiction. Menifee Fire Station 68, located at 26020 Wickerd Road, 1.8 miles northwest of the site, is the nearest fire station. RCFD Station 68 in Menifee provides fire protection and emergency response services to the Menifee community. In addition to responding to fires, Station 68 also responds to medical emergencies, motor vehicle accidents, rescue calls, and incidents involving hazardous materials. The average travel time between Fire Station 68 and the Project site is 4 minutes. The Project site is in a suburban, light-industrial setting already served by the RCFD.

3.3.5 Drainage

The majority of the Project site consists of pervious surface area. Currently, stormwater generally sheet flows in a northwesterly direction, leaving the site through a natural drainage channel on the adjacent property to the west. This drainage continues north and connects to a series of man-made drainage channels and culverts, that eventually outlet to Canyon Lake, the San Jacinto River, and Lake Elsinore. The proposed Project is expected to maintain the existing drainage pattern. Upon development of the site, storm water runoff from the eastern and northern portions of the site would be directed towards a concrete ditch along the northern boundary of the property, which would drain into the proposed biofiltration basin at the west of the property. Runoff from the roof of the proposed building would be conveyed through roof drains that connect underground to a proposed storm drain pipe at the southern boundary of the Project site, which would outlet at the proposed biofiltration basin at the west of the property. This storm drain also captures runoff from the decomposed granite pathway along the southern boundary of the proposed building. Inlet capacity will be determined during final engineering and design. Storm water runoff from the western parking lot would sheet flow to a gutter and would be directed to the proposed biofiltration basin at the west of the property through curb cuts.

3.3.6 Infrastructure

Utility infrastructure including water, sewer, natural gas, electricity, and telephone/cable are already established adjacent to the Project site along Zeiders Road. The Eastern Municipal Water District (EMWD) would provide potable water and sewer service to the Project site, Southern California Gas Company would provide natural gas to the Project site, Southern California Edison would provide electricity to the Project site, and Frontier Communications would serve the Project site for telephone and cable needs. On-site infrastructure in the form of water and sewer lines and laterals would be installed as part of the proposed Project to establish connections to existing EMWD utility lines. Natural gas lines and laterals and electrical infrastructure would also be developed as part of the Project and connect to existing off-site infrastructure along Zeiders Road. Utility infrastructure does not exist on the Project site, so relocation of such infrastructure would not be required.

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (x) would be potentially affected by this Project, involving at least one impact that is a "**Potentially Significant Impact**" as indicated by the checklist on the following pages.

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

The environmental factors checked below (x) would be potentially affected by this Project, involving at least one impact that is a "**Less than Significant with Mitigation Incorporated**" as indicated by the checklist on the following pages.

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

The environmental factors checked below (x) would be potentially affected by this Project, involving at least one impact that is a "**Less than Significant**" as indicated by the checklist on the following pages.

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

The environmental factors checked below (x) would have "**No Impact**" by this project as indicated by the checklist on the following pages.

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

4.1 DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Signature	Date
Printed Name	For Jessica Williams, Assistant Planner

4.2 EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the Project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on Project-specific factors as well as general standards (e.g., the Project will not expose sensitive receptors to pollutants, based on a Project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as Project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. *State CEQA Guidelines* §15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the Project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance.

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5.0 CEQA ENVIRONMENTAL CHECKLIST

5.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the Project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒
c. In non-urbanized 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 a 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?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

5.1.1 Impact Analysis

a. Would the Project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. Scenic vistas are generally defined as publicly accessible viewpoints that provide expansive or panoramic views of scenic resources. The City's General Plan indicates that the City's scenic features include gently sloping alluvial fans, rugged mountains and steep slopes, mountain peaks and ridges, rounded hills with boulder outcrops, and farmland and open space. Scenic vistas provide views of these features from public spaces. Many of the scenic vistas are outside of Menifee and include the San Jacinto Mountains to the northeast and east, the San Bernardino Mountains to the northeast, the San Gabriel Mountains to the northwest, and the Santa Ana Mountains to the west and southwest.

The Project site has a relatively flat topography, and there are no City of Menifee (City) designated scenic vistas on the Project site. From the Project site, partially obstructed views of the San Bernardino Mountains and the San Gabriel Mountains are available as one looks north and northwest, respectively. Partially obstructed views of the Santa Ana Mountains are available to the southwest from the Project site, and views of small hills with boulder outcrops are available from the Project site. Although these scenic vistas are partially visible from the Project site, open and direct views are mostly obstructed by intervening topography, trees, and residential/commercial development within Menifee.

The Project site is zoned Economic Development Corridor-Southern Gateway (EDC-SG) which has a development standard to limit building height at 40 feet above grade.[1]

The Project includes a commercial building that would be up to 26 feet above grade, depending on the architectural type (Appendix A details the site plan). The height of the building that would be developed on site would comply with the height limitations (no greater than 40 feet tall) as set forth by the zoning designation of the site by the City and would be commensurate with the building heights of the surrounding commercial uses. People employed in this commercial development and patrons are subject to already obstructed views of scenic vistas when looking through the Project site due to the intervening topography, trees, and urbanized and built-out nature of the area. Implementation of the proposed Project would not substantially affect the availability of existing views of the San Jacinto Mountains, the San Bernardino Mountains, the San Gabriel Mountains, or the Santa Ana Mountains. The proposed Project would therefore not have a substantial effect on a scenic vista, and impacts would be **less than significant**. Mitigation is not required.

b. Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

No Impact. The California Department of Transportation (Caltrans) Scenic Highway Program designates a portion of State Route (SR-) 74 approximately 26 miles to the northeast of the Project site. Additionally, a portion of SR-74 (between SR-243 and Interstate 15 [I-15]) and I-15 located respectively 10 miles north and 5 miles southwest of the Project site are eligible State Scenic Highways.[2] Although these scenic highways are in the vicinity of the Project site, they are not near enough for the Project to affect scenic resources within these scenic highways. **No impact** would occur and no mitigation is required.

c. In non-urbanized areas, would the Project 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 a 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?

Less than Significant Impact. As of 2020, the United States Census Bureau estimated the City's population to be 102,527 persons and the City's land area to be 46.47 square miles.[3] The Project is in an area with at least 1,000 persons per square mile and therefore meets the definition of "Urbanized Area" under Section 15387 of the *State CEQA Guidelines*.

During construction, the presence of construction vehicles and equipment could temporarily degrade the visual quality of the Project site by removal of vegetation, heavy equipment use, and the presence of other visible general construction activity. The presence of construction equipment and vehicles would be temporary and would cease once construction is complete. Due to the

1 City of Menifee Development Code. Chapter 9.165, Residential Zones Development Standards.
2 California Department of Transportation (Caltrans). 2019. *List of Eligible and Officially Designated State Scenic Highways.* August.
3 United States Census Bureau. n.d. *QuickFacts, Menifee City, California.* Website: https://www.census.gov/quickfacts/menifeecitycalifornia (accessed September 2024).

temporary nature of construction activities, impacts to visual character of the site and its surroundings would be **less than significant** during construction.

The proposed Project would be designed and constructed in conformance with the requirements of Chapter 9.130 (Residential Zones), Section 9.130.040, Chapter 9.195 (Landscape Standards), and Section 9.195.050 of the City Municipal Code, which establishes development standards to ensure a high-quality development compatible with the surrounding community, the General Plan land use designation, and zoning district in which the Project is located.

The proposed Project would be subject to the City's Design Review process, which provides for the review of the physical improvements to the site, including the overall scale of the buildings, setbacks, massing, design, and landscape. Since the proposed Project would be consistent with the development standards set forth by the City's Zoning Ordinance, the proposed Project would not conflict with applicable zoning or other regulations governing scenic quality. Impacts would be **less than significant** and mitigation is not required.

d. Would the Project create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?

Less Than Significant Impact. Light-sensitive uses near the Project site include EDC-SG commercial uses to the north, east, and west, and there are no sources of light and glare on the Project site. Although there are pockets of vacant land north, and east of the site, the existing residential structures and commercial uses surrounding the site have proper measures in place to prevent significant light or glare. Sources of light and glare in the Project area include street lighting and vehicle lighting along the adjacent roadway (Zeiders Road), which is lit by streetlights and well-traveled by vehicles. There are also light sources adjacent to the east coming from I-215. Light sources adjacent to the north, east, west, and south also emanate from commercial and residential uses.

Development of the Project site would introduce new sources of light into the Project area. Light poles would be installed at the parking area and along on-site pedestrian pathways. Lighting would conform to the City's requirements for street lighting and Design Guidelines of the Development Code. For instance, public streetlights along Zeiders Road and common area would be paired with sensors for automatic nighttime lighting, include shielding devices to maintain the dark sky-friendly effect and direct or reflect light downward.

All lighting on the Project site would comply with Chapter 6.01 (Dark Sky; Light Pollution) and Chapter 9.205 (Lighting Standards) of the City Municipal Code, which require light shielding, functional and aesthetic design, and compatibility with surrounding uses. Furthermore, the lighting plan for the proposed Project is required to comply with the Menifee General Plan Community Design Elements goals and policies that encourage attractive lighting, landscaping, and signage elements that limit light spillage and leakage onto neighboring parcels or directed into the night sky. The proposed Project is subject to the City's Design Review process, which provides for the review of the physical improvements to the site and lighting plans. The Design Review of the proposed Project ensures compatibility and compliance with City requirements for lighting.

The Menifee General Plan goals and Municipal Code includes lighting requirements for development, to ensure light pollution into the sky from future development is minimized, allowing for continued operation of Mt. Palomar Observatory. The Mt. Palomar Observatory is at 35899 Canfield Road, Palomar Mountain, approximately 27 miles southeast of the Project site. When operational, the observatory requires dark nighttime sky with minimal amount of lighting glare generated by development to operate. Without lighting requirements set forth by each jurisdiction around the Mt. Palomar Observatory, increased light pollution from existing and new development would degrade the dark sky needed to operate the observatory. The proposed Project, in complying with the Menifee General Plan goals and Municipal Code pertaining to lighting requirements for development, would ensure its cumulative contribution of light pollution into the sky is minimized, allowing for continued operation of Mt. Palomar Observatory.

New development in Menifee could result in glare based on the types of façades and windows used in design. The City's Design Review process includes consideration of material composition and colors to reduce potential for substantial glare from the proposed development, which does not include building façades or reflective windows that are expected to generate or contribute to existing glare within the Project area and City.

Compliance with Menifee General Plan goals, Chapter 6.01 (Dark Sky; Light Pollution) and Chapter 9.205 (Lighting Standards) of the City Municipal Code, and review of the Project design during Design Review would ensure the proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be **less than significant**, and mitigation is not required.

5.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

5.2.1 Impact Analysis

a. Would the Project 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?

No Impact. The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP)[1] designates the Project site as "Other Land". Other Land is defined as vacant and or nonagricultural land surrounded by urban development. In addition, the Project site is surrounded by land designated as "Urban and Built-Up." The Project site is not currently occupied by agricultural production, as it would conflict with the purpose and scope of existing General Plan and Zoning

[1] California Department of Conservation. 2016. *California Important Farmland Finder.* Website: https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed September 2024).

District in this part of Menifee. Neither the site nor adjacent properties are designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, **no impact** to farmland with these designations would occur and no mitigation is required.

b. Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project site is zoned Economic Development Corridor – Southern Gateway (EDC) and is not zoned for agricultural use. The Project site is not under a Williamson Act contract, as there are no active Williamson Act contracts within Menifee.[1] Implementation of the proposed Project would therefore not conflict with existing zoning for agricultural use or conflict with a Williamson Act contract. **No impact** would occur and no mitigation is required.

c. Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. The Project site is zoned as EDC and is not zoned as forest land, timberland, or timberland production. Additionally, none of the surrounding land uses are zoned forest land, timberland, or Timberland Production. Therefore, there is no potential for the Project to conflict with existing zoning for forest land or land zoned for Timberland Production. **No impact** would occur and no mitigation is required.

d. Would the Project result in the loss of forest land or conversion of forestland to non-forest use?

No Impact. The Project site and adjacent land are not occupied by forest resources. Implementation of the proposed Project would not result in the loss or conversion of forest land to non-forest land. **No impact** would occur to forest land and no mitigation is required.

e. Would the Project 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?

No Impact. No farmland or forest land exists on site or on adjacent land. Development of the proposed Project would take place specifically on Assessor's Parcel No. 384-130-028, with some minor improvements to City right-of-way along Zeiders Road (e.g., curb, gutter, sidewalk). Therefore, implementation of the proposed Project would not involve other changes in the existing environment that could result in the conversion of farmland to non-agricultural use, or conversion of forest land to non-forest use. **No impact** would occur and no mitigation is required.

[1] City of Menifee. 2013. *General Plan Draft Environmental Impact Report. State Clearinghouse #2012071033.* Chapter 5 Environmental Analysis. Page 5.2-5. September.

5.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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) adversely affecting a substantial number of people?	☐	☐	☒	☐

The discussion and analysis presented in this section is from the *Air Quality, Greenhouse Gas Emissions, and Energy Analysis* prepared by LSA Associates, Inc. for the proposed Project in December, 2024 (**Appendix B**).

5.3.1 Impact Analysis

a. Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the Project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The proposed Project site is 2.39 acres and includes the construction of a one-story, 18,717-square-foot building to house the Caliber Collision Paint and Auto Body Repair shop with six bays and associated site improvements. Therefore, the proposed Project is not considered a project of statewide, regional, or area-wide significance (e.g., large-scale projects such as airports, electrical generating facilities, petroleum and gas refineries, residential development of more than 500 dwelling units, shopping center or business establishment employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space) as defined in the California Code of Regulations (Title 14, Division 6, Chapter 3, Article 13, §15206(b)). Because the proposed Project would not be defined as a regionally significant Project under CEQA, it does not meet the Southern California Association of Governments (SCAG) Intergovernmental Review criteria.

The City's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP). Pursuant to the methodology provided in the SCAQMD *CEQA Air Quality Handbook*,[1] consistency with the Basin 2022 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. The consistency review is presented as follows:

1. The project would result in short-term construction and long-term operational pollutant emissions that are less than the CEQA significance emissions thresholds established by SCAQMD, as demonstrated below; therefore, the project would not result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standards violation.

2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, as a commercial project, the proposed project is not defined as significant. In addition, the proposed project would not require a change to the General Plan land use designation or the current zoning and would be consistent with the City's General Plan and Zoning Ordinance.

The Project site currently has a General Plan Land Use designation of EDC-SG, and the Project would not require a General Plan Amendment because the Project's proposed uses would be consistent with the applicable General Plan Land Use designation. Accordingly, the Project and its associated emissions have been anticipated in the growth projections of the City's General Plan, SCAG's RCP, and SCAQMD's AQMP. Additionally, the proposed Project as a commercial use does not meet SCAQMD's criteria to be defined as a significant Project.

The proposed Project would not increase the frequency or severity of an air quality standard violation or cause a new violation and is consistent with the growth assumptions in the AQMP. Therefore, the Project is not anticipated to exceed the AQMP emissions assumptions for the site or conflict with or obstruct implementation of the AQMP. Impacts would be **less than significant** and mitigation is not required.

b. Would the Project 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?

Less Than Significant Impact. According to the SCAQMD's *CEQA Air Quality Handbook*, any project in the Basin with daily emissions that exceed any of the following thresholds generally is considered as having individually and cumulatively significant air quality impacts.

[1] South Coast Air Quality Management District (SCAQMD). 1993. CEQA Air Quality Handbook. April. Website: www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed October 2024).

- 55 pounds per day (lbs./day) of volatile organic compounds (VOC) (75 pounds per day [lbs./day] during construction)
- 55 lbs./day of oxides of nitrogen (NO_X) (100 lbs./day during construction)
- 550 lbs./day of carbon monoxide (CO) (550 lbs./day during construction)
- 150 lbs./day of particulate matter with a diameter of 10 microns or smaller (PM_{10}) (150 lbs./day during construction)
- 55 lbs./day of particulate matter with a diameter of 2.5 microns or smaller ($PM_{2.5}$) (55 lbs./day during construction)
- 150 lbs./day of SO_X (oxides of sulfur) (150 lbs./day during construction)

The Basin is currently designated nonattainment for the federal and State standards for 8-hour O_3 and PM_{10}. The Basin is also in nonattainment for the State standard for 1-hour O_3. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of an ambient air quality standard. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, SCAQMD 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. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential Project-level air quality impacts associated with construction and operation of the proposed Project.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, building construction, paving, and other activities. Emissions from construction equipment are also anticipated and would include CO, $NO`_X$, VOCs, directly emitted $PM_{2.5}$ or PM_{10}, and TACs (e.g., DPM).

Construction emissions can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors. Project construction activities would include site preparation, grading, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed Project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction

site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. SCAQMD has established Rule 403: Fugitive Dust, which would require the applicant to implement measures that would reduce the amount of particulate matter generated during the construction period. The Rule 403 measures that were incorporated in this analysis include:[1]

- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).

- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.

- Reduce traffic speeds on all unpaved roads to 15 mph or less.

If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

The California Emissions Estimator Model (CalEEMod) is designed to model construction emissions for land development projects and allows for the input of project-specific information, such as the number of equipment, hours of operations, duration of construction activities, and selection of emission control measures. Construction would require heavy equipment during mass grading, utility installations, building construction and paving. Grading would include importing 9,200 cubic yards and exporting 4,700 cubic yards of soil from a construction and landscaping material yard located immediately north of the Project site. It was assumed that architectural coatings would be applied as part of the building construction and paving processes. Construction is planned to start in early 2025 and be complete in approximately 6 months. Other than the construction dates, CalEEMod defaults were used in the analysis.

The anticipated peak daily construction emissions shown in Table 5.3.1 indicate the construction emissions from the proposed Project would not exceed the corresponding SCAQMD daily emission thresholds for criteria pollutants. Therefore, construction air quality impacts would be **less than significant.**

[1] SCAQMD. 2005. Rule 403. Fugitive Dust. Website: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf (accessed October 2024).

Table 5.3.1: Short-Term Regional Construction Emissions

Emissions Phase	Regional Pollutant Emissions (lbs/day)							
	VOCs	NO_X	CO	SO_X	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Site Preparation	3	32	31	<1	5	1	3	1
Grading	2	39	24	<1	7	1	2	1
Building Construction	1	11	14	<1	<1	<1	<1	<1
Architectural Coating	1	1	1	<1	<1	<1	<1	<1
Paving	1	7	10	<1	<1	<1	<1	<1
Peak Daily	**3**	**39**	**31**	**<1**	**8**		**4**	
SCAQMD Threshold	**75**	**100**	**550**	**150**	**150**		**55**	
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: Air Quality, Greenhouse Gas Emissions, and Energy Analysis Memorandum. (LSA, 2024).
Note: It was assumed that architectural coatings would be applied during the building construction and paving processes. PM_{10} and $PM_{2.5}$ fugitive emissions include required dust control measures per SCAQMD Rule 403. The maximum emissions of summer and winter modeling results were used to evaluate the operational emission impacts. CalEEMod output sheets are provided in Attachment B. Some values may not appear to add correctly due to rounding

CalEEMod = California Emissions Estimator Model
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

Operational Air Quality Impacts. Long-term air pollutant emissions associated with operation of the proposed Project include emissions from area, energy, and mobile sources. Area-source emissions include the combustion of natural gas for building heating, water heating, and sprayer operation; architectural coatings; consumer products; and landscaping. Energy-source emissions result from activities in buildings that use electricity; it was assumed there would be at most two electric air compressors and welders. Additionally, two natural gas-fired paint booths are planned to be utilized as part of the proposed Project operational activities. Long-term operational emissions associated with the proposed Project were calculated using CalEEMod.

CalEEMod version 2022.1 was used to characterize the proposed Project's operational emissions using default parameters, except with regard to the Corporate Average Fuel Economy (CAFE) standard. This analysis assumes the Project would comply with the current 2019 Title 24 standards and also assumes application of the Safe Affordable Fuel-Efficient (SAFE) rule, which increases the stringency of CAFE and carbon dioxide (CO_2) emissions standards by 1.5 percent each year through model year 2026.[1] CalEEMod defaults were used for all other operational parameters.

Mobile source emissions are associated with Project-related vehicle trip generation. The *Caliber Collision Paint and Auto Body Repair Shop Project Traffic Analysis Memorandum* prepared for the Project estimates the Project will have 20 full-time employees and approximately 13 to 15

[1] The *SAFE Rule* emission factor adjustments were implemented for the operational buildout year of 2024 for Light Duty Autos and Light Duty Trucks.

customers on a typical weekday.[1] The CalEEMod default vehicle fleet mix was used for this analysis.

The use of coatings and solvents in the spray booths would result in emissions of VOCs, total organic gas (TOG), and TACs. The spray booths will be subject to SCAQMD permitting and emissions control technology requirements, with the SCAQMD as the enforcing agency ensuring compliance with applicable requirements. It was assumed that the spray booths would comply with SCAQMD Rule 481[2] governing spray coating operations. The emissions from the additional natural gas used by the spray booths were estimated by doubling the CalEEMod default Title 24 natural gas rates.

Table 5.3.2 provides the existing emission estimates and the proposed Project's estimated operational emissions. As shown in Table 5-2, criteria pollutant emissions from operational activities associated with the proposed Project would be below the SCAQMD thresholds. Therefore, Project-related regional operational emissions would be **less than significant.**

Table 5.3.2: Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	1	<1	1	0	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	<1	1	5	<1	1	<1
Total Project Emissions	**1**	**1**	**6**	**<1**	**1**	**<1**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Air Quality, Greenhouse Gas Emissions, and Energy Analysis Memorandum. (LSA, 2024).
The maximum emissions of summer and winter modeling results were used to evaluate the operational emission impacts.
CalEEMod output sheets are provided in Attachment B. Some values may not appear to add correctly due to rounding.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

The cumulative impacts analysis is based on projections in the regional AQMP. As detailed in response to Checklist Question 5.3.1(a), the proposed Project is consistent with the General Plan Land Use Designation and zoning for the site, and its associated emissions have been anticipated in the growth projections of the City's General Plan, SCAG's RCP, and SCAQMD's AQMP. Additionally, the proposed Project as a commercial use does not meet SCAQMD's criteria to be defined as a significant project. Therefore, the Project would not conflict with or obstruct implementation of the regional AQMP.

1 LSA Associates, Inc. (LSA). 2024. Caliber Collision Paint and Auto Body Repair Shop Project Traffic Analysis Memorandum. October.

2 SCAQMD. 2002. Rule 481. Website: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-481.pdf (accessed November 2024).

Due to the nonattainment status of the Basin, the primary air pollutants of concern would be NO_X and VOCs, which are ozone precursors, and PM_{10} and $PM_{2.5}$. As detailed in Table 5.3.2, long-term emissions were calculated for VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ expected to be generated through operation of the Project and indicate Project-related emissions would not exceed the established SCAQMD daily emission thresholds for any criteria pollutants. Without any exceedance in air quality emissions thresholds, the proposed Project would not result in a cumulatively considerable contribution to significant air quality impacts. Cumulative air quality impacts would be **less than significant.** Mitigation is not required.

c. Would the Project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The SCAQMD published its *Final Localized Significance Threshold Methodology* in July 2008, recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.[1] This guidance was used to analyze potential localized air quality impacts associated with construction and operation of the proposed Project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emission source, the ambient air quality in the Source Receptor Area (SRA), and the distance to the Project. Only NO_x, CO, PM_{10}, and $PM_{2.5}$ are included. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality.

LSTs are based on the ambient concentrations of each pollutant within the Project's SRA and the distance to the nearest sensitive receptor. For the proposed Project, the appropriate SRA for the LST is the Perris Valley area (SRA 24). The SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter source-receptor distances. The nearest sensitive receptors include single-family residence located approximately 70 feet south of the Project site boundary and approximately 250 feet from the centroid of the operational emissions. In cases where receptors may be closer than 82 feet (25 meters), SCAQMD LST guidance specifies that the minimum distance of 25 meters should be used for purposes of the LST assessment.[2] The Project site is 2.39 acres, Table 5.3.3 lists the emissions thresholds that apply during Project construction and operation.

Table 5.3.3: SCAQMD Localized Significance Thresholds

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction (2.39 acres, 70-foot distance)	183	973	8	5
Operations (2.39 acres, 250-foot distance)	247	1,905	8	3

Source: *Final Localized Significance Threshold Methodology* (SCAQMD 2008).
Based on the Perris Valley area (SRA 24), 70-foot sensitive receptor distance from construction emissions and 250 feet distance from operational emissions.
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SRA = Source Receptor Area

1 SCAQMD. 2008a. *Final Localized Significance Threshold Methodology.* July. Website: www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf (accessed October 2024).

2 SCAQMD. n.d. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf (accessed July 2024).

Construction and Operational Localized Significance Thresholds. The LST screening table lookup methodology was created for projects up to 5 acres in size. Although the Project site is 2.39 acres, SCAQMD LST surveys indicate the typical maximum daily disturbed area for a site of this size would be 4 acres, and the LSTs applied to this analysis reflect this maximum acreage of disturbance for the site on any given day.[1]

Stationary and mobile sources would emit on-site operational emissions. On-site vehicle emissions are the largest source of emissions, and on-site travel for the proposed Project would be restricted to the on-site roadways. Therefore, the 5-acre LSTs at a 70-foot distance (derived by interpolation) are used for the operational LST analysis.

Table 5.3.4 shows that the on-site emissions of the pollutants on the peak day of construction will result in concentrations of pollutants at the nearest residences that are all below the SCAQMD thresholds of significance.

Table 5.3.4: Project Localized Construction and Operational Emissions

Source	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction Emissions				
On-Site Emissions	32	30	6	4
Localized Significance Threshold	183	973	8	5
Significant?	**No**	**No**	**No**	**No**
Operational Emissions				
On-Site Emissions	<1	1	<1	<1
Localized Significance Threshold	247	1,905	8	3
Significant?	**No**	**No**	**No**	**No**

Source: Air Quality, Greenhouse Gas Emissions, and Energy Analysis Memorandum. (LSA, 2024).
Note: Based on the Perris Valley area (SRA 24), a 2.39-acre disturbed area, 70-foot sensitive receptor distance from construction emissions and 250-foot distance from operational emissions.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area

Table 5.3.4 also shows the calculated emissions for the proposed operational activities compared with the appropriate LSTs. By design, the localized impacts analysis only includes on-site sources; however, the CalEEMod output does not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table 5.3.4 include all on-site Project-related stationary sources and 5 percent of the Project-related mobile sources, which is a conservative estimate of the amount of Project-related new vehicle traffic that will occur on site.

As detailed in Table 5.3.4, the emission levels indicate that the Project would not exceed SCAQMD LSTs during Project construction or operation. The Project's peak operational on-site

[1] SCAQMD. n.d. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf (accessed July 2024).

NO_X emissions would be less than 1 pound per day. Due to the small size of the proposed Project in relation to the overall Basin, the level of emissions is not sufficiently high to use a regional modeling program to correlate health effects on a Basin-wide level. On a regional scale, the quantity of emissions from the Project would be incrementally minor. Because the SCAQMD has not identified any other methods to quantify health impacts from small projects, and due to the size of the Project, it is speculative to assign any specific health effects to small Project-related emissions. However, based on this localized analysis, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations.

Long-Term Microscale (CO Hot Spot) Analysis. Vehicular trips associated with the proposed Project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed Project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed Project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, thereby affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of Project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate Project vicinity are not available. Ambient CO levels monitored at the Lake Elsinore Monitoring Station at 506 West Flint Street (the closest station to the Project site monitoring CO), approximately 9 miles northwest of the Project site, showed a highest recorded 1-hour concentration of 1.3 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 0.8 ppm (the State standard is 9 ppm) from 2021 to 2023. The highest CO concentrations would normally be during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

The proposed Project is expected to generate 85 average daily trips, with 25 trips in the a.m. peak hour and 25 trips in the p.m. peak hour.[1] Therefore, given the extremely low level of CO concentrations in the Project area and the lack of traffic impacts at any intersections, Project-related vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the Project would not result in any Project-related impacts on CO concentrations.

[1] LSA. 2024. *Table A: Project Trip Generation.* October.

Table 5.3.4 identifies the on-site construction and operational emissions of NO_X, CO, PM_{10}, and $PM_{2.5}$, respectively, at the Project site and demonstrate that all concentrations of pollutants would be below the SCAQMD thresholds of significance for construction and operation of the Project. Therefore, both short-term (i.e., construction) and long-term (i.e., operational) LST air quality impacts would be **less than significant** and the Project would not expose sensitive receptors to substantial pollutant concentrations. Mitigation is not required.

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

Less Than Significant Impact. Heavy-duty equipment in the Project area during construction would emit odors that are primarily from the equipment exhaust. However, the construction-produced odors would cease after construction is completed. No other sources of objectionable odors have been identified for construction of the proposed Project, and no mitigation measures are required.

SCAQMD Rule 402,[1] regarding nuisances, states:

> *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.*

Land uses that are associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project would be an auto body shop that would include activities with the potential to release VOCs that would result in odors. However, the Project would include the required VOC emissions control devices (e.g., SCAQMD Rule 481-compliant paint booth control enclosures) such that no sources of objectionable odors have been identified for the proposed Project. Therefore, the impacts associated with odors would be **less than significant** and no mitigation measures are required.

[1] SCAQMD. 1976. Rule 402. Website: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf (accessed November 2024).

5.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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?	☐	☒	☐	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
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?	☐	☐	☒	☐

The analysis in this section is based in part on the following reports:

- LSA Associates, Inc., Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Biological Resources Assessment (August 2022, updated October 2024) (Appendix C1).
- LSA Associates, Inc., Burrowing Owl Survey Memorandum for the Caliber Collision Paint and Auto Body Repair Shop Project in the City of Menifee, San Bernadino County, California (August 2022) (Appendix C2).
- LSA Associates, Inc., Focused MSHCP Plant Species 2022 Survey for the Caliber Collision Paint and Auto Body Repair Shop Project in Menifee, Riverside County, California (September 2022) (Appendix C3).

5.4.1 Impact Analysis

a. Would the Project 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?

Less Than Significant Impact with Mitigation Incorporated. Biological resources on the Project site were evaluated in the *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Biology Report (Biological Resources Assessment)* (Appendix C1) to ensure the proposed Project is consistent with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and to analyze potential impacts to candidate, sensitive, and special-status species and associated habitat.

The MSHCP provides for the assembly of a Conservation Area consisting of Core Areas and Linkages for the conservation of covered species. The Conservation Area is to be assembled from portions of the MSHCP Criteria Area, which consist of quarter-section (i.e., approximately 160-acre) Criteria Cells, each with specific criteria for the species conservation within that cell.

The Project site is not within the MSHCP Criteria Area; therefore, no cell or criteria analysis is required.

Threatened and Endangered Species. The United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) may list species as threatened or endangered under the federal and California Endangered Species acts. The USFWS can designate critical habitat that identifies specific areas, either occupied or unoccupied, that are essential to the conservation of a listed species. Critical habitat areas may require special management considerations or protections. The USFWS and the CDFW have issued permits for the take of most threatened and endangered species within the MSHCP area. The MSHCP covers impacts to these species. However, if a project has the involvement of a federal agency, that agency is required to address impacts to listed species and critical habitat by consulting with the USFWS. The USFWS has indicated in the permit issued for the MSHCP that, in such cases, the consultation will be expedited and no restrictions will be imposed on the Project beyond those specified in the MSHCP.

No critical habitat occurs on the Project site. Six federal and/or State-listed species have been reported within 3 miles of the Project site, according to California Natural Diversity Database records: the spreading navarretia (*Navarretia fossalis;* federally threatened [FT]), Riverside fairy shrimp (*Streptocephalus woottoni*; federally endangered [FE]), Quino checkerspot butterfly (*Euphydryas editha quino*; FE), California Orcutt grass (*Orcuttia californica*; FE and State endangered [SE]), coastal California gnatcatcher (*Polioptila californica californica*; FT), and Stephens Kangaroo Rat (*Dipodomys stephensi*; FE). Table 5.4.1 describes the habitat requirements for all six species, along with an assessment of habitat and the likelihood of the species occurring on the site.

Table 5.4.1: Threatened and Endangered Species

Species	Status	MSHCP Habitat	Blooming Period/Activity Period	Occurrence Probability
Plants				
Navarretia fossalis **Spreading navarretia**	US: FT CA: 1B.1 MSHCP: S	An annual herb. Occurs in vernal pools, playas, shallow freshwater marshes, and similar sites at 15 to 820 meters (50 to 2,700 feet) in elevation. In California, known only from Los Angeles, San Luis Obispo, Riverside, and San Diego counties. Also occurs in Mexico.	Blooms April through June	**Not Expected.** Suitable habitat not present within Project site.
Orcuttia californica **California Orcutt grass**	US: FE CA: SE/1B.1 MSHCP: S	An annual grasslike herb. Occurs in vernal pools from 15 to 660 meters (50 to 2,200 feet) in elevation. In California, known from Los Angeles, Ventura, Riverside, and San Diego counties. Also occurs in Mexico.	Blooms April through August	**Not Expected.** Suitable habitat not present within Project site.
Invertebrates				
Euphydryas editha quino **Quino checkerspot butterfly**	US: FE CA: SA MSHCP: C	Occurs in meadows or openings within coastal sage scrub or chaparral below about 5,000 feet where food plants (*Plantago erecta* and/or *Orthocarpus purpurascens*) are present. Historically known from Santa Monica Mountains to northwest Baja California; currently known only from southwestern Riverside County, southern San Diego County, and northern Baja California	January through late April	**Not Expected.** Suitable habitat and required food plants are not present within the Project site.
Streptocephalus woottoni **Riverside fairy shrimp**	US: FE CA: SA MSHCP: S	Warm-water vernal pools (i.e., large, deep pools that retain water into the warm season) with low to moderate dissolved solids, in annual grassland areas interspersed through chaparral or coastal sage scrub vegetation. Suitable habitat includes some artificially created or enhanced pools, such as some stock ponds, that have vernal pool-like hydrology and vegetation. Known from areas within about 50 miles of the coast from Ventura County south to San Diego County and Baja California.	Seasonally following rains; typically January through April	**Not Expected.** Suitable habitat not present within Project site.
Birds				
Polioptila californica californica **Coastal California gnatcatcher**	US: FT CA: SSC MSHCP: C	Inhabits coastal sage scrub in low-lying foothills and valleys up to about 500 meters (1,640 feet) in elevation in cismontane southwestern California and Baja California.	Year-round	**Not Expected.** Suitable habitat not present within the Project site.
Mammals				
Dipodomys stephensi **Stephens' kangaroo rat**	US: FE CA: ST MSHCP: C	Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50%. Most commonly associated with *Artemisia tridentata, Eriogonum fasciculatum,* and *Erodium.* Requires well-drained soils with	Year-round, nocturnal	**High.** The Project site is within the SKR HCP. Numerous species accounts have been recorded within 1 mile

Table 5.4.1: Threatened and Endangered Species

Species	Status	MSHCP Habitat	Blooming Period/Activity Period	Occurrence Probability
		compaction characteristics suitable for burrow construction (neither sandy nor too hard). Not found in soils that are highly rocky or sandy, less than 20 inches deep, or heavily alkaline or clay, or in areas exceeding 25% slope. Occurs only in western Riverside County, northern San Diego County, and extreme southern San Bernardino County, below 915 meters (3,000 feet) in elevation. In northwestern Riverside County, known only from east of Interstate 15. Reaches its northwest limit in south Norco, southeast Riverside, and in the Reche Canyon area of Riverside and extreme southern San Bernardino Counties.		of the Project site (CNDDB).

US: Federal Classifications
FT = Listed as threatened
FE = Listed as endangered.

CA: State Classifications
SA = Special Animal. Refers to any other animal monitored by the Natural Diversity Data Base, regardless of its legal or rarity status.
SSC = Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.
ST = Listed as threatened

CNPS Designations
1B.1 = Rare threatened, or endangered in California and elsewhere

Western Riverside County MSHCP Status
S = Species is covered and adequately conserved under the MSHCP, but surveys are required within indicated habitats and/or survey areas.

amsl = above mean sea level
CA = California
CNDDB = California Natural Diversity Database
ft = foot/feet
MSHCP = Multiple Species Habitat Conservation Plan
SKR HCP = Stephen's Kangaroo Rat Habitat Conservation Plan
US = United States

The Project site is within the MSHCP area and within the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area. Because the Project site is within the SKR HCP, focused surveys for SKR may be required, and a fee associated with the SKR HCP will be required. The Project site is not subject to any other adopted HCP.

No Narrow Endemic Plant Species Survey Area (NEPSSA) 3 species were observed during the focused plant survey in 2022. Therefore, NEPSSA 3 species are considered absent from the site and are not expected to be affected by Project activities. No other sensitive plant species were observed.

Other Special-Status Species. Other special-status species may occur on the Project site. The CDFW, the USFWS, local agencies, and special interest groups, such as the California Native

Plant Society[1], maintain lists of species they consider to need monitoring. Legal protection for special-status species varies widely.

The special-status species listed in Table 5.4.2 may be expected to occur in the general Project vicinity (within 3 miles) but are not covered under the MSHCP. None of the species listed in Table 5.4.2 have been reported in the Project site, and none were observed during the site visit.

Table 5.4.3 lists one special-status species that has been reported within 3 miles of the Project site. Crotch's bumble bee (*Bombus crotchii*) has a low probability to occur, because few individuals of its preferred nectar species are present within the Project site.

In addition, species that will eventually have full coverage under the MSHCP were investigated, and one has been reported within 3 miles of the Project site. None of the MSHCP Table 9-3 species were observed during the site visit. Given habitat suitability and occurrences of this species within multiple locations reported within 3 miles of the Project site, Parry's spineflower (*Chorizanthe parryi* var. *parryi*) has a low potential of being present, as described in Appendix C1, Table A. Suitable habitat is present for Parry's spineflower; therefore, a special-status plant survey was required and conducted during the appropriate blooming period (April through June) due to the plant's California Rare Plant Rank (CRPR) of 1B.1. Plants with a CRPR of 1B.1 are rare, threatened, or endangered in California and elsewhere; seriously threatened in California.

The biological resources assessment survey indicates the Project site is moderately disturbed and no longer supports native habitats. No sensitive species were observed on the Project site during the field survey, and none of the listed species that have been documented in the Project vicinity (within approximately 3 miles) are expected to occur on site.[2] Additionally, the survey indicates the Project site does not contain any sensitive habitats, including any USFWS designated Critical Habitat for any federally listed species, and development of the site would not result in any loss or adverse modification of Critical Habitat.[3]

The Project site is within the MSHCP burrowing owl survey area. Burrowing owl is found in open, dry grasslands, agricultural and rangelands, and desert habitats often associated with burrowing animals. It can also inhabit grass, forb, and shrub stages of pinyon and ponderosa pine habitats. It nests in abandoned burrows of ground squirrels or other animals, in pipes, under piles of rock or debris, and in other similar features. LSA conducted a burrowing owl habitat suitability assessment between March 2022 and August 2022 in accordance with MSHCP protocol.[4] No evidence of burrowing owl was identified on the Project site, but the site does contain habitat suitable to support this species. Although burrowing owl was considered absent, there is potential for this species to occupy the site prior to development of the Project, and mitigation is required to ensure impacts to burrowing owl do not become significant. **Mitigation Measure BIO-1** has been identified to address potential impacts to burrowing owls.

1 California Native Plant Society. 2022. Inventory of Rare and Endangered Plants of California. Website: http://www.rareplants.cnps.org (accessed March 2022).
2 LSA Associates, Inc. 2024. *Biological Resources Assessment and MSHCP Consistency Analysis.* November.
3 Ibid.
4 Ibid.

Table 5.4.2: Special-Status Species Potentially Occurring in the Project Vicinity (Not Covered by MSHCP)

Species	Status	Habitat and Distribution	Blooming Period/ Activity Period	Occurrence Probability
Plants				
Abronia villosa var. *aurita* **Chaparral sand-verbena**	US: – CA: 1B.1	Annual or perennial herb. Occurs in sandy areas (generally flats and benches along washes) in chaparral and coastal sage scrub, and improbably in desert dunes or other sandy areas, below 1,600 meters (5,300 feet) elevation. In California, reported from Riverside, San Diego, Imperial, Los Angeles, and Ventura counties. Believed extirpated from Orange County. Also reported from Arizona and Mexico (Baja California). Plants reported from desert communities are likely misidentified.	Blooms mostly March through August	**Not Expected.** Suitable habitat is not present within the Project site.
Almutaster pauciflorus **Alkali marsh aster**	US: – CA: 2B.2	Perennial herb. Occurs in alkaline soils in meadows and seeps from Inyo, Kern, Riverside, and San Bernardino counties. Elevations from 60 to 765 meters (195 to 2,510 feet).	Blooms June through October	**Not Expected.** Suitable habitat is not present within the Project site.
Brodiaea santarosae **Santa Rosa Basalt brodiaea**	US: – CA: 1B.2	Perennial herb. Occurs in Santa Rosa basalt in grassland at 580 to 1,045 meters (1,900 to 3,430 feet) elevation. Known only from Riverside and San Diego counties, California.	Blooms May through June	**Not Expected.** Suitable habitat not present within Project site.
Juncus luciensis **Santa Lucia dwarf rush**	US: – CA: 1B.2	Annual grasslike herb. Occurs in vernal pools, ephemeral drainages, and meadows and seeps within lower montane coniferous forest, chaparral, and Great Basin scrub habitats. Elevations from 280 to 2,035 meters (920 to 6,675 feet).	Blooms April through July.	**Not Expected.** Suitable habitat is not present within the Project site.
Pseudognaphalium leucocephalum **White rabbit-tobacco**	US: – CA: 2B.2	Perennial herb. Occurs within Sand and gravel soils at the edges of washes or mouths of steep canyons at 0 to 2,100 meters (0 to 7,000 feet) elevation. In California, known from Los Angeles, Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, and Ventura counties. Also occurs in Arizona, New Mexico, Texas, and Mexico.	Blooms usually August through November	**Not Expected.** Suitable habitat is not present within the Project site.
Scutellaria bolanderi ssp. *austromontana* **Southern mountains skullcap**	US: – CA: 1B.2	Perennial herb. Occurs in mesic areas in gravelly soils of stream banks or in oak or pine woodland (rarely chaparral) at 425 to 2,000 meters (1,400 to 6,600 feet) in elevation. Known from Riverside and San Diego counties. Believed extirpated from San Bernardino County and perhaps Los Angeles County.	Blooms June through August	**Not Expected.** Suitable habitat is not present within the Project site.

Table 5.4.2: Special-Status Species Potentially Occurring in the Project Vicinity (Not Covered by MSHCP)

Species	Status	Habitat and Distribution	Blooming Period/ Activity Period	Occurrence Probability
Symphyotrichum defoliatum **San Bernardino aster**	US: – CA: 1B.2	Perennial herb. Vernally wet sites (such as ditches, streams, and springs) in many plant communities below 2,040 m (6,700 ft) amsl. In California, known from Ventura, Kern, San Bernardino, Los Angeles, Orange, Riverside, and San Diego counties. May also occur in San Luis Obispo County. In the western Riverside County area, this species is scarce, and documented only from Temescal and San Timoteo Canyons (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	Blooms July through November	**Not Expected.** Suitable habitat is not present within the Project site.
Bryophytes				
Sphaerocarpos drewei **Bottle liverwort**	US: – CA: 1B.1	Found within soil openings in chaparral and coastal sage scrub in Riverside and San Diego Counties. Elevation from 90 to 600 meters (300 to 2,000 feet).	Ephemeral	**Not Expected.** Suitable habitat not present within Project site.
Invertebrates				
Socalchemmis icenoglei **Icenogle's socalchemmis spider**	US: – CA: SA	Known only from the type locality in the Winchester area of western Riverside County.	Secretive year-round	**Not Expected.** Suitable habitat is not present within the Project site. Additionally, nearest documented occurrence was recorded 6.2 miles northeast of the Project site.
Reptiles				
Thamnophis hammondii **Two-striped garter snake**	US: – CA: SSC	Highly aquatic. Only in or near permanent sources of water. Streams with rocky beds supporting willows or other riparian vegetation. From Monterey County to northwest Baja California.	Diurnal Year-round	**Not Expected.** Suitable habitat not present within Project site.
Mammals				
Eumops perotis californicus **Western mastiff bat**	US: – CA: SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in vertical cliff faces, high buildings, and tunnels, and travels widely when foraging.	Year-round; nocturnal	**Low.** Not expected to roost within the Project site; however, suitable foraging opportunities exist within the Project site.
Chaetodipus californicus femoralis **Dulzura pocket mouse**	US: – CA: SSC	Found in a variety of habitats including coastal sage scrub, chaparral and grassland in northern Baja California, San Diego and extreme southwestern and western Riverside counties. Limit of range to northwest (at interface with *C. c. dispar*) unclear.	Year-round	**Not Expected.** Although grasslands do occur within the Project site, this species was last documented 5.2 miles northeast of the Project site in 1993.

Table 5.4.2: Special-Status Species Potentially Occurring in the Project Vicinity (Not Covered by MSHCP)

Species	Status	Habitat and Distribution	Blooming Period/ Activity Period	Occurrence Probability
Onychomys torridus ramona **Southern grasshopper mouse**	US: – CA: SSC	Believed to inhabit sandy or gravelly valley floor habitats with friable soils in open and semi-open scrub, including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs, preferring low to moderate shrub cover. More susceptible to small- and large-scale habitat loss and fragmentation than most other rodents, due to its low fecundity, low population density, and large home range size. Arid portions of southwestern California and northwestern Baja California.	Nocturnal, active year-round	**Not Expected.** Although grasslands do occur within the Project site, this species was last documented 5.3 miles northeast of the Project site in 1932.

US: Federal Classifications
FE = Listed as endangered.

CA: State Classifications
SA = Special Animal. Refers to any other animal monitored by the Natural Diversity Data Base, regardless of its legal or rarity status.
SSC = Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.

CNPS Designations
1B.1 = Rare threatened, or endangered in California and elsewhere
1B.2 = Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California
2B.2 = Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California
3 = Plants about which we need more information
amsl = above mean sea level
CA = California
ft = foot/feet
m = meter(s)
MSHCP = Multiple Species Habitat Conservation Plan
US = United States

Table 5.4.3: Special-Status Species Recorded within 3.0 Mi of the Project Site (Not Covered by MSHCP)

Species	Status	Habitat and Distribution	Blooming Period/Activity Period	Occurrence Probability
Invertebrates				
Bombus crotchii **Crotch bumble bee**	US: – CA: SA	Nectars on Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum in coastal California east to the Sierra-Cascade crest and south into Mexico.	Spring and summer	**Low.** Eriogonum, a genus that *B. crotchii* forages on, is present in limited quantity within the Project site.

CA: State Classifications
SA = Special Animal. Refers to any other animal monitored by the Natural Diversity Data Base, regardless of its legal or rarity status.

CNPS Designations
4 = Plants of limited distribution; not very threatened in California
amsl = above mean sea level
CA = California
ft = foot/feet
m = meter(s)
US = United States

MM BIO-1 Within 30 days prior the commencement of ground disturbance activities, a pre-construction burrowing owl survey shall be conducted by a qualified biologist. The results of the single one-day survey shall be submitted to the City for review prior to commencement of any ground disturbance activities on the Project site. If burrowing owl are not detected during the pre-construction survey, no further mitigation is required.

If burrowing owl are detected during the pre-construction survey or during construction activities at the Project site, a burrowing owl protection and relocation plan shall be prepared by a qualified biologist and submitted to the California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS) for review and approval. The Applicant shall submit evidence to the City that required and applicable provisions of the burrowing owl protection and relocation program have been satisfied prior to the start of any on-site ground disturbance activity.

As stated previously, the Project site is moderately disturbed and is dominated by non-native grasslands and ruderal areas. Accordingly, the NEPSSA yielded no evidence of any Narrow Endemic Plant Species identified by the MSHCP with potential to occur on the Project site. The entire site has been moderately disturbed, and the habitat conditions required by these species are no longer present within the site.[1]

Implementation of the proposed Project would not have a substantial direct or indirect adverse effect, 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 CDFW or USFWS. Due to the mobile nature of burrowing owls, there is a potential this species may occupy the site prior to ground disturbance. Implementation of **Mitigation Measure BIO-1** would reduce impacts to candidate, sensitive, or special-status species to **less than significant with mitigation incorporated.**

b. Would the Project 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?

Less Than Significant Impact. The Biological Resources Assessment indicates the Project site is moderately disturbed and does not contain any wetlands. No Critical Habitat occurs with or near the Project site.

The MSHCP, Section 6.1.2, requires the assessment of impacts to riparian habitats, riverine areas, and vernal pools, including focused surveys for sensitive riparian species when suitable habitat is present. The biological resources assessment survey indicates the Project site does not contain any natural or man-made features that support any aquatic resources, stream-dependent wildlife

[1] LSA Associates, Inc. 2022. *Biological Resources Assessment and MSHCP Consistency Analysis.* September.

resources, or riparian habitats, riverine areas, and/or vernal pools.[1] Therefore, focused surveys for plant and animal species associated with riparian habitat are not required.

Implementation of the proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans (i.e., MSHCP), policies, regulations, or by the CDFW or the USFWS. Impacts would be **less than significant**, and mitigation is not required.

c. Would the Project 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?

No Impact. The Project-specific Biological Resources Assessment (Appendix C1) revealed no evidence of wetland or non-wetland waters of the United States or waters of the State on the Project site. Also, as stated previously, the Biological Resources Assessment survey indicates the Project site does not contain any natural or man-made features that support any aquatic resources, stream-dependent wildlife resources, or riparian habitats, riverine areas, and/or vernal pools. No impacts would occur and no mitigation would be required.

Aquatic Resources Permits and Certification (404 Permit, 401 Certification, 1602 Agreement)

The proposed Project would not result in changes to existing drainage patterns on site. Stormwater runoff would not discharge into and waters of the United States and would not impact riparian habitat or streambeds. Because the Project would not discharge into waters of the United States, would not impact riparian habitat, and would not impact a streambed, permits from the USACE, RWQCB, and CDFW would not be required.

d. Would the Project 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?

Less Than Significant Impact. Wildlife movement includes seasonal migration along corridors, as well as daily movements for foraging. Migration corridors may include areas of unobstructed movement of deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and areas between roosting and feeding areas for birds.

The Project site is bordered by existing paved roads and development on two of the four adjoining properties that restrict wildlife movement in the Project vicinity. The majority of wildlife movement within the Project site is anticipated to be limited to wildlife present on site or within the nonnative grasslands to the south of the Project site, beyond the existing single-family residence. The Project would not substantially limit wildlife movement, impacts would be less than significant, and no mitigation is required.

[1] LSA Associates, Inc. 2022. *Biological Resources Assessment and MSHCP Consistency Analysis.* September.

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

Less Than Significant. The Riverside County General Plan, City of Menifee General Plan, and development ordinances may include regulations or policies governing biological resources. For example, policies may include tree preservation, locally designated species survey areas, local species of interest, and significant ecological areas.

In the existing condition, the Project site contains one tree in the center of the Project site. City of Menifee Ordinance No. 2015-167, Section 9.86.110, Tree Preservation Regulations, describes a nuisance tree as any tree that, "due to its overall growth, location or root expansion, may negatively impact sewers, power lines, gas lines, waterlines, paved walkways, roadways, curbs, or other public improvements." Because this tree is along parking area curbing under the buildout condition, removal of the tree would be consistent with the City's tree preservation ordinance. The bank of trees along the west boundary of the property would be retained at buildout.

The Project would not conflict with local policies or ordinances applicable to biological resources. Impacts would be **less than significant** and no mitigation is required.

f. Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

Less Than Significant. The MSHCP provides for the assembly of a Conservation Area consisting of Core Areas and Linkages for the conservation of covered species. The Conservation Area is to be assembled from portions of the MSHCP Criteria Area, which consist of quarter-section (i.e., approximately 160 acre) Criteria Cells, each with specific criteria for the species conservation within that cell.

The Project site is not within the MSHCP Criteria Area; therefore, no cell or criteria analysis is required. No impact would occur, and no mitigation is required. The Project Site is within Stephens' Kangaroo Rat HCP and the species has been recorded within 1 mile of the Project site. Payment of applicable fees would be required. Impacts would be **less than significant** and no mitigation is required.

5.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

The information and analysis in this section is based on the *Cultural Resources Assessment* (CRA) (Appendix D) prepared for the Project by LSA in April 2022.

5.5.1 Impact Analysis

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

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

and

c. Would the Project disturb any humans remains, including those interred outside of formal cemeteries?

Less Than Significant with Mitigation Incorporated. Section 15064.5(b) of the *State CEQA Guidelines* states that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." The site is undeveloped and vacant and was subject to cultural resources records searches, additional research, and a field survey as part of the CRA (Appendix D). LSA conducted the research at the Eastern Information Center (EIC) at the University of California, Riverside. The EIC houses the pertinent archaeological site and survey information necessary to determine whether cultural resources are recorded within the study area boundaries and which specific areas have been previously surveyed. The research included a review of all recorded historic and precontact archaeological sites within 1 mile of the Project and a review of known cultural resource survey and excavation reports. In addition, LSA examined the California State Historic Property Data File, which includes the National Register of Historic Places, California Historical Landmarks, and California Points of Historical Interest, various local historic registers, and historic maps. Additionally, LSA archaeologists reviewed online historic period maps and aerial photographs and the Built Environment Resources Directory (BERD) and conducted field surveys.

Data from the EIC indicate there have been 56 cultural resource studies previously conducted within 0.5 mile of the proposed Project, none of which included any portion of the Project site. Although no

resources were previously documented within the Project area, 34 have been recorded within 0.5 mile, including precontact and historic period sites and isolates (Table A of Appendix D). The nearest precontact resource (33-028615) is approximately 870 meters (approximately 0.5 mile) north of the Project area. The CRA also determined that no buildings or structures were on the Project site during the historic period. None of the built environment resources are listed in the BERD. The field survey revealed that the Project area is on the eastern edge of an ephemeral drainage and has been moderately disturbed by earthmoving and vegetation-abatement discing. Wood/metal debris and landscape dumping obscure the northwestern portion of the site, and surface visibility was poor overall (approximately 20 percent) with pervasive obstruction by xeric vegetation. Modern refuse was noted throughout the Project area. Soils are coarse, decomposed, granite-rich loam with some alluvial silt. No cultural resources were identified within the Project area.

In accordance with State law, the Project would be required to comply with Title 14, California Code of Regulations Section *15064.5 and* PRC Section *21083.2 California Environmental Quality Act-Archeological Resources,* which enable the City to require the Project Applicant to make reasonable effort to preserve or mitigate impacts to any affected significant or unique archaeological resources. Penal Code Section *622 Destruction of Sites,* establishes as a misdemeanor the willful injury, disfiguration, defacement, or destruction of any object or thing of archaeological or historical interest or value, whether situated on private or public lands. California *Administrative Code Title 14, Section 4307* states that no person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value. Furthermore, California Code of Regulations Section 1427 recognizes that California's archaeological resources need to be preserved and that every person not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archaeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor.

Despite the negative record search and survey results along with moderate disturbance, due to the density of precontact resources in the vicinity (34), proximity to a water source, and poor ground visibility there is some potential for subsurface resources within the Project area. Nevertheless, the proposed Project must comply with all applicable regulations protecting cultural resources and would be conditioned through **Mitigation Measures CUL-1** through **CUL-5** during Project execution.

Mitigation Measure CUL-1

Archeologist Retained. Prior to issuance of a grading permit the project applicant shall retain a Riverside County qualified archaeologist to monitor all ground disturbing activities in an effort to identify any unknown archaeological resources.

The Project Archaeologist and the Tribal monitor(s) shall manage and oversee monitoring for all initial ground disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, structure demolition and etc. The Project Archaeologist and the Tribal monitor(s), shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and

potential recovery of cultural resources in coordination with any required special interest or tribal monitors.

The developer/permit holder shall submit a fully executed copy of the contract to the Community Development Department to ensure compliance with this condition of approval. Upon verification, the Community Development Department shall clear this condition.

In addition, the Project Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the City, shall develop a Cultural Resources Management Plan (CRMP) in consultation pursuant to the definition in AB52 to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting tribe is defined as a tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB52 consultation process, and has completed AB 52 consultation with the City as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. Details in the Plan shall include:

Project grading and development scheduling;

The Project archeologist and the Consulting Tribes(s) shall attend the pre-grading meeting with the City, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Consulting Tribe(s) shall make themselves available to provide the training on an as-needed basis;

The protocols and stipulations that the contractor, City, Consulting Tribe(s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources' evaluation.

Mitigation Measure CUL-2 **Human Remains.** If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Mitigation Measure CUL-3 **Non-Disclosure of Location Reburials.** It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r)., parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

Mitigation Measure CUL-4 **Inadvertent Archeological Find.** If during ground disturbance activities, unique cultural resources are discovered that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to project approval, the following procedures shall be followed. Unique cultural resources are defined, for this condition only, as being multiple artifacts in close association with each other, but may include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Native American Tribe(s).

i. All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the developer, the archaeologist, the tribal representative(s) and the Community Development Director to discuss the significance of the find.

ii. At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s) and the archaeologist, a decision shall be made, with the concurrence of the Community Development Director, as to the appropriate mitigation

(documentation, recovery, avoidance, etc.) for the cultural resources.

iii. Grading of further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the buffer area and will be monitored by additional Tribal monitors if needed.

iv. Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Management Plan and Monitoring Agreements entered into with the appropriate tribes. This may include avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or re-burial on the Project property so they are not subject to further disturbance in perpetuity as identified in Non-Disclosure of Reburial Condition.

Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources and cultural resources. If the landowner and the Tribe(s) cannot agree on the significance or the mitigation for the archaeological or cultural resources, these issues will be presented to the City Community Development Director for decision. The City Community Development Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources, recommendations of the project archeologist and shall take into account the cultural and religious principles and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the City Community Development Director shall be appealable to the City Planning Commission and/or City Council."

Mitigation Measure CUL-5 **Cultural Resources Disposition.** In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:

a. One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the City of Menifee Community Development Department:

i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place where they

were found with no development affecting the integrity of the resources.

ii. Reburial of the resources on the Project property. The measures for reburial shall include, at least, the following: Measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed, with an exception that sacred items, burial goods and Native American human remains are excluded. Any reburial process shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV report. The Phase IV Report shall be filed with the City under a confidential cover and not subject to Public Records Request.

iii. If preservation in place or reburial is not feasible then the resources shall be curated in a culturally appropriate manner at a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological materials have been received and that all fees have been paid, shall be provided by the landowner to the City. There shall be no destructive or invasive testing on sacred items, burial goods and Native American human remains. Results concerning finds of any inadvertent discoveries shall be included in the Phase IV monitoring report.

With implementation of **Mitigation Measures CUL-1** through **CUL-5**, the proposed Project's known impacts to cultural/historic resources and or human remains would be less than significant. Additionally, Section 5.18 of this IS/MND addresses impacts specific to Native American tribal cultural resources. As appropriate, **Mitigation Measures (MM) TCR-1** through **TCR-5**, developed through consultation with consulting Native American tribes, would apply equally to any inadvertent discovery of precontact or historic aged archaeological material during ground-disturbance

activities. Therefore, impacts to cultural resources pursuant to Section 15064.5 would be **less than significant with mitigation incorporated.**

5.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

The discussion and analysis presented in this section is from the *Air Quality, Greenhouse Gas Emissions, and Energy Analysis* LSA prepared for the proposed Project in December, 2024 (**Appendix B**).

5.6.1 Impact Analysis

a. Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation?

and

b. Would the Project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. Electricity uses were estimated for the Project using default energy intensities by land use type in California Emissions Estimator Model (CalEEMod). In addition to the typical electrical uses, two electric air compressors and welders were included as "Operational Off-Road Equipment". The default natural gas consumption rate was doubled to represent the gas used by the two natural gas-fired paint booths.

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse impact related to energy if the Project would:

- Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Construction. The anticipated construction schedule assumes that the proposed Project would be built over approximately 6 months. Construction would require energy for the manufacture and transportation of building materials, preparation of the site for grading activities, utility installation, paving, and building construction and architectural coating. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. However, energy usage on the Project site during construction would be temporary.

The CalEEMod output for energy consumption incorporates Project compliance with South Coast Air Quality Management District (SCAQMD) Rule 431.2, Title 13-Section 2449 of the California Code of Regulations (CCR), and California Department of Resources Recycling and Recovery Sustainable (Green) Building Program regulations, which include implementation of standard control measures for equipment emissions and materials recycling. Adherence to these regulations, including the implementation of Best Available Control Measures, is a standard requirement for any construction or ground disturbance activity occurring within the South Coast Air Basin.

Compliance with SCAQMD Rule 431.2, Title 13-Section 2449 of the CCR, and the CALGreen Program is required as a matter of regulatory policy, as codified in (**Standard Condition of Approval E-1**).

Standard Condition: No mitigation is required; however, the following Standard Condition of Approval is a regulatory requirement implemented as a routine action conditioned by the City to ensure impacts related to energy demand during construction remain less than significant.

Standard Condition E-1 Prior to issuance of grading and building permits, the City of Menifee shall verify that the Project Applicant and his/her contractor(s) submit plans to the City indicating incorporation of Best Available Control Measures during construction of the Project. Best Available Control Measures include, but are not limited to, requirements that the Project Applicant utilize only low-sulfur fuel having a sulfur content of 15 parts per million by weight or less; ensure off-road vehicles (i.e., self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on road) limit vehicle idling to five minutes or less; register and label vehicles in accordance with the California Air Resources Board (CARB) Diesel Off-Road Online Reporting System; restrict the inclusion of older vehicles into fleets; and retire, replace, or repower older engines or install Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). Additionally, the construction contractor must recycle/reuse at least 65 percent of the construction material (including, but not limited to, proposed aggregate base, soil, mulch, vegetation, concrete, lumber, metal, and cardboard) and use “Green Building Materials,” such as those materials that are rapidly renewable or resource efficient, and recycled and manufactured in an environmentally friendly way, for at least 10 percent of the Project, in accordance with CALGreen regulations. This condition shall be implemented to the satisfaction of the City of Menifee Community Development Director or designee, and/or Building Official, or designee.

Through compliance with SCAQMD Rule 431.2, Title 13-Section 2449 of the CCR, and the CALGreen Program as a matter of regulatory policy (**Standard Condition of Approval E-1**),

construction of the Project would demand only the energy required and would not result in wasteful, inefficient, or unnecessary energy consumption.

In addition, construction activities are not anticipated to result in an inefficient use of energy because gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the proposed Project. Energy usage on the Project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be **less than significant**, and no mitigation would be required.

Operation. During Project operation, energy use would include both direct and indirect sources of emissions. Direct sources of emissions would include on-site natural gas usage for heating and spray booths and indirect sources would include electricity generated by off-site power plants. Natural gas use in CalEEMod is measured in units of a thousand British thermal units (kBTU) per year; however, this analysis converts the results to natural gas in units of therms. Electricity use in CalEEMod is measured in kilowatt-hours (kWh) per year.

CalEEMod divides building electricity and natural gas use into uses that are subject to Title 24 standards and those that are not. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24, such as space heating, space cooling, water heating, and ventilation. Non-Title 24 uses include all other end uses (e.g., appliances, electronics, and other miscellaneous plug-in uses). Because some lighting is not considered as part of the building envelope energy budget, CalEEMod considers lighting as a separate electricity use category. In addition to the typical electrical uses, it was assumed there would be two electric air compressors and welders.

For natural gas, uses are likewise categorized as Title 24 or Non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include appliances. Two natural gas-fired paint booths are planned.

Table 5.6.1 shows the estimated potential increased electricity, natural gas, gasoline, and diesel demand associated with the proposed Project. The electricity and natural gas rates are directly from the CalEEMod analysis results, while the gasoline and diesel rates are based on the Project VMT from the CalEEMod analysis in conjunction with United States Department of Transportation fuel efficiency data.[1]

As shown in Table 5.6.1, the estimated potential increased electricity demand associated with the proposed Project is 244,199 kWh per year. In 2022, total electricity consumption in the Southern California Edison service area in 2022 was 85,870 gigawatt-hours (GWh) or 85,870,000,000 kWh. Of this total, Riverside County consumed 17,780.6 GWh or 17,780,600,000 kWh.[2] Therefore, electricity demand associated

[1] United States Department of Transportation (USDOT). 2021. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Website: www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed October 2024).

[2] CEC. 2022b. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed October 2024).

Table 5.6.1: Estimated Annual Energy Use of the Proposed Project

Land Use	Electricity Use (kWh per year)	Natural Gas Use (kBTU per year)	Gasoline Consumption (gallons per year)	Diesel Consumption (gallons per year)
Auto Shop	244,199	1,126,638	21,133	12,697

Source: *Air Quality, Greenhouse Gas Emissions, and Energy Analysis.* Table I. (LSA Associates, Inc., December 2024).
kBTU = thousand British thermal units
kWh = kilowatt-hours

with the proposed Project would be 0.0014 percent of Riverside County's total electricity demand.

The State of California provides a minimum standard for building design and construction standards through Title 24 of the CCR, known as the California Building Code (CBC). The CBC is updated every 3 years, and the current 2022 CBC went into effect in January 2023. The California Building Standards Commission adopted Part 11 of the Title 24 Building Energy Efficiency Standards (CALGreen) in 2010 as part of the State's efforts to reduce GHG emissions and energy consumption from residential and nonresidential buildings. CALGreen covers the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. The City of Menifee has adopted both the CBC and CALGreen Code pertaining to energy conservation standards pursuant respectively to Chapter 8.04 and Chapter 8.06 of the City Municipal Code (Ordinance No. 2019-285). Accordingly, the Project would comply with the current CALGreen Code requirements and Title 24 efficiency standards**,** which would further improve energy efficiency during operation.

Also shown in Table 5.6.1, the estimated potential increased natural gas demand associated with the proposed Project is 1,126,638 kBTU per year or 1,126 therms. In 2022, total natural gas consumption in the Southern California Gas Company service area was 5,026 million therms, while Riverside County consumed 431,052,392 therms.[1] Therefore, natural gas demand associated with the proposed Project would be approximately 0.3 percent of Riverside County's total natural gas demand.

Furthermore, the proposed Project would result in energy usage associated with gasoline and diesel to fuel Project-related trips. The average fuel economy for light-duty vehicles (automobiles, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.8 mpg in 2022.[2] The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.5 mpg in 2026.[3]

1 CEC. 2022c. Gas Consumption by County. Website: ecdms.energy.ca.gov/gasbycounty.aspx (accessed October 2024).
2 USDOT. 2022. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Website: www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed October 2024).
3 CEC. 2015. Medium and Heavy-Duty Truck Prices and Fuel Economy 2013–2026. Website: efiling.energy.ca.gov/getdocument.aspx?tn=206180 (accessed October 2024).

Using the EPA gasoline fuel economy estimates for 2019, the California diesel fuel economy estimates for 2021, and the traffic data from the Project traffic analyses, the proposed Project would result in the annual consumption of 21,133 gallons of gasoline and 12,697 gallons of diesel fuel. In 2019, vehicles in California consumed approximately 15.6 billion gallons of gasoline and 3.8 billion gallons of diesel fuel.[1] Therefore, gasoline and diesel demand generated by vehicle trips associated with the proposed Project would be a minimal fraction of gasoline and diesel fuel consumption in California and, by extension, in Riverside County.[2]

In addition, automobiles associated with trips to and from the Project site would be subject to fuel economy and efficiency standards, which are applicable throughout the State. As such, the fuel efficiency of vehicles associated with Project operations would increase throughout the life of the proposed Project. Therefore, implementation of the proposed Project would not result in a substantial increase in transportation-related energy uses.

As stated in Table 5.6.1, implementation of the proposed Project would increase the Project-related annual fuel demand by 21,133 gallons of gasoline and 12,697 gallons of diesel. However, progressive improvements to heavy-duty trucks (e.g., more efficient engines and improvements to aerodynamic features) and new automobiles purchased and operated by residents driving to and from the Project site would be subject to fuel economy and efficiency standards applied throughout the State. As such, the fuel efficiency of vehicles associated with Project operation would increase throughout the life of the Project as fuel efficiency of vehicles continues to improve to meet the State's 2030 GHG emission reduction goals pursuant to Senate Bill 32 and beyond. In addition, purchase and use of electric passenger vehicles is expected to increase, thus reducing the number and use of fossil fuel-dependent vehicles on the road as the price and efficiency of electric passenger vehicles improve and the State continues to invest in and develop infrastructure to generate electricity from renewable energy resources such as solar, wind, geothermal, and hydroelectric sources. The long-term operation of the Project would see a decrease in fuel consumption per mile due to continuous improvements to vehicles and transportation infrastructure, which would demand less energy consumption through the life of the Project.

The CEC recently adopted the 2023 Integrated Energy Policy Report.[3] The 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2023 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate

1 CEC. 2022d. California Gasoline Data, Facts, and Statistics. Website: www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics (accessed October 2024).

2 CEC. 2021b. California Gasoline Data, Facts, and Statistics. Website: www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics (accessed October 2024).

3 CEC. 2023. *2023 Integrated Energy Policy Report*. Website: www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2023-integrated-energy-policy-report (accessed October 2024).

adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecasts, and the California Energy Demand Forecast.

As indicated above, energy usage on the Project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed Project would be relatively small in comparison to the State's available energy sources, and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the Project's total impacts to regional energy supplies would be minor, the proposed Project would not conflict with California's energy conservation plans as described in the CEC's *2023 Integrated Energy Policy Report*.[1] In addition, the proposed Project would comply with Title 24 and CALGreen standards and would be consistent with the City's Development Code requirements.[2]

Increasingly stringent electricity, natural gas, and fuel efficiency standards combined with compliance with the CBC and CALGreen Code as part of Chapter 8.04 and Chapter 8.06 of the City Municipal Code (Ordinance No. 2019-285) would ensure operation of the Project would demand only the energy required. As described above, the proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment uses, and transportation. Impacts would be less than significant, and no mitigation measures would be necessary.

Therefore, the proposed Project would not conflict with or obstruct California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report. Therefore, the proposed Project would not lead to new or substantially more severe energy impacts. As such, potential impacts related to conflict with or obstruction of a State or local plan for renewable energy or energy efficiency would be **less than significant**, and no mitigation is required.

1 CEC. 2023. *2023 Integrated Energy Policy Report*. Website: www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2023-integrated-energy-policy-report (accessed October 2024).

2 City of Menifee. 2019. City of Menifee Municipal/Development Code and Design Guide. Website: www.cityofmenifee.us/494/MunicipalDevelopment-Code-and-Design-Gui (accessed November 2024).

5.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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 off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

The analysis and discussion presented in this section is based, in part, on the *Geotechnical Investigation for the Proposed Caliber Collision Development* (Geotechnical Study) prepared by Intertek Professional Service Industries (PSI) dated October 4, 2021.

5.7.1 Impact Analysis

a. Would the Project 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.

Less Than Significant Impact. The Project site is not within an Earthquake Fault Zone as defined by the State of California in the Alquist-Priolo Earthquake Fault Zone Act of 1972 or as defined by the

City's Local Hazard Mitigation Plan.[1] Additionally, based on the 2010 California Geological Survey Fault Activity Map, the closest known active faults are the Elsinore fault, which is 5.2 miles southwest of the site, and the San Jacinto Fault, which is 14.7 miles northeast of the site. The potentially active Murrieta Hot Springs fault is 5.1 miles south of the site.

Thus, there is no evidence of any faults or faulting activity on the Project site. The risk of ground rupture due to fault displacement beneath the site is low. Impacts would be **less than significant**. Mitigation is not required.

ii. Strong seismic ground shaking?

Less Than Significant Impact. The Project site is in Menifee in the Inland Empire of Southern California. Menifee is between two of the most significant seismic faults in the Southern California area. The Project site is in the Southern California region. This region has remained an active tectonic region with documented historic earthquakes. The seismicity within California can be attributed to faulting due to regional tectonic movement. This includes the San Andreas Fault and other sub-parallel strike-slip faults, as well as normal and thrust faulting within the State. The Project area of the subject site is considered seismically active. Seismic hazards within the site can be attributed to potential ground shaking resulting from earthquake events along nearby or more distant faulting. Due to the presence of active and inferred faults in proximity, the Project site is expected to experience occasionally moderate to severe ground shaking, as well as some background shaking from other seismically active areas of the Southern California region.

The extent of ground-shaking associated with an earthquake is dependent upon the size of the earthquake and the geologic material of the underlying area. Construction and development of the Project would be required to comply with applicable provisions of the current California Building Code (CBC). Pursuant to State law, the proposed Project would be designed to resist seismic impacts in accordance with current CBC requirements, which address general geologic, seismic (including ground shaking), and soil constraints for new buildings.

Chapter 8.04 (Building Code) and Chapter 8.26 (Grading Regulations) of the City Municipal Code incorporate design and construction standards of the applicable CBC. Prior to the issuance of a grading permit, the Project Applicant would be required to submit detailed grading plans and a site-specific geotechnical study of the Project prepared in conformance the current CBC and applicable Menifee standards.

Standard Conditions: The following Standard Conditions of Approval (Chapter 8.04 and Chapter 8.26 of the City Municipal Code and CBC) are regulatory requirements implemented as a routine action by the City to reduce the risk of loss, injury, or death from seismic activity.

Standard Condition G-1 Prior to issuance of grading and/or building permits, the Project Applicant would provide evidence to the City for review and approval

[1] City of Menifee. 2021. 2021 LHMP Fault Map. *2021 Local Hazard Mitigation Plan*. Website. https://www.cityofmenifee.us/DocumentCenter/View/14009/Fault_Map_2021_LHMP?bidId= (accessed October 18, 2021).

that proposed structures, features, and facilities have been designed and will be constructed in conformance with applicable provisions of the most current edition of the California Building Code in effect at the time of development application submittal.

The City may require additional studies and/or engineering protocols to meet its requirements prior to issuance of grading and/or building permits. This condition shall be implemented to the satisfaction of the City Community Development Director or designee.

Additionally, the Project Applicant shall provide evidence to the City that the recommendations cited in the Project-specific Geotechnical Report (Appendix E) and any additional studies/protocols are incorporated into Project plans and/or implemented as deemed appropriate by the City. Geotechnical recommendations may include, but are not limited to, removal of existing vegetation, structural foundations, floor slabs, utilities, and any other surface and subsurface improvements that would not remain in place for use with the new development. Remedial earthwork, over-excavation, and ground improvement shall take place to depths specified in the geotechnical report to provide a sufficient layer of engineered fill or densified soil beneath the structural footings/foundations, as well as proper surface drainage devices and erosion control. Retaining wall parameters shall be in accordance with the geotechnical investigations to protect against lateral spreading and landslides. Construction of concrete structures in contact with subgrade soils determined to be corrosive shall include measures to protect concrete, steel, and other metals. Verification testing must be performed upon completion of ground improvements to confirm that the compressible soils have been sufficiently densified. The structural engineer must determine the ultimate thickness and reinforcement of the building floor slabs based on the imposed slab loading. This condition shall be implemented to the satisfaction of the Director of Building and Safety or designee.

The City would review and approve plans to confirm that siting, design, and construction of all structures are in accordance with the regulations established in the CBC, City Building and Grading Codes, and professional engineering standards appropriate for the seismic zone in which such construction would take place. Because the proposed Project is required to comply with CBC regulations that protect habitable structures from seismic hazards and would implement recommendations from the Geotechnical Study as codified in **Standard Condition G-1**, impacts involving strong seismic ground shaking would be **less than significant**. Mitigation is not required.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction is most likely to occur in deposits of water-saturated alluvium or similar deposits of artificial fill. Engineering research of soil liquefaction potential indicates that generally three basic factors must exist concurrently for liquefaction to occur:

- A source of ground shaking, such as an earthquake, capable of generating soil mass distortions;
- A relatively loose silty and/or sandy soil; and
- A relative shallow groundwater table (within approximately 50 feet below ground surface) or completely saturated soil conditions that will allow positive pore pressure generation.

The geotechnical report determined, based on the County of Riverside's geographic information system (GIS) data and the City's General Plan, that the site area is mapped as not being within a liquefaction zone. Based on the soil conditions encountered at the site (generally dense to very dense soils) during the geotechnical field survey, liquefaction and lateral spreading are not design concerns at this site. Additionally, the Menifee General Plan also shows that this site is not within a liquefaction zone.

Pursuant to Chapter 8.26 (Grading Regulations) of the City's Municipal Code, the Project Applicant would be required to prepare and submit detailed grading plans for the site prior to the issuance of grading permits. Implementation of **Standard Condition G-1** (compliance with the current edition of the CBC and recommendations in the Project-specific Geotechnical Investigations (Appendix E) would ensure residential development under the proposed Project would be protected from seismic-related ground failure, including liquefaction. Impacts would be **less than significant,** and mitigation is not required.

iv. Landslides?

Less than Significant Impact. A landslide generally occurs on relatively steep slopes and/or on slopes underlain by weak materials. Factors that contribute to slope failure include slope height and steepness, shear strength and orientation of weak layers in the underlying geologic units, and pore water pressures. The Project site is flat, with no potential for landslides. Any retaining walls proposed on site shall be designed and constructed pursuant to the recommendations of the Project-specific Geotechnical Investigations to protect against lateral spreading and landslides (**Standard Condition G-1**). Additionally, any retaining walls greater than 6 feet tall shall be designed for seismic lateral earth pressures pursuant to applicable provisions of the current CBC. Accordingly, the flat-lying topography of the Project site ensures the likelihood of landslides or lateral spreading is **less than significant**. Mitigation is not required.

b. Would the Project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The Project site's geology is occupied by alluvial deposits (Qa); typically consisting of sand and gravel of valley areas, with possible clay soils at the surface. A United States Department of Agriculture (USDA) soils survey of the site reports Las Posas loam (LaD2) on

the east end of the site generally consists of clay loam over bedrock at approximately 4.5 feet below the ground surface (bgs) and Wyman loam (WyC2) on the west end of the site (clay loam). The Wyman loam is reported to have a high corrosion potential for steel construction.

Grading and earthmoving during Project construction has the potential to result in erosion and loss of topsoil. Exposed soils could be caught in storm water runoff and transported off the Project site. However, this impact would be reduced through compliance with water quality control measures pursuant to Chapter 8.26 (Grading Regulations) of the City Municipal Code, which require preparation of a Storm Water Pollution Prevention Plan (SWPPP) to be implemented during construction and Water Quality Management Plan (WQMP) to be implemented during operation (refer to Section 5.10 of this IS/MND, Hydrology and Water Quality). Although designed primarily to protect storm water quality, the SWPPP and WQMP would incorporate best management practices (BMPs) to minimize erosion. Additionally, development on the Project site would convert a majority of existing earthen and permeable surfaces to paved surfaces, which would generally reduce the potential for soil erosion from the site.

Compliance with storm water regulations include minimizing storm water contact with potential pollutants by providing covers and secondary containment for construction materials, designating areas away from storm drain systems for storing equipment and materials, and implementing good housekeeping practices at the construction site. Prior to the issuance of grading permits, the Project Applicant would be required to prepare and submit site-specific, detailed grading plans to the City in accordance with Chapter 8.26 (Grading Regulations) of the City Municipal Code.

The SWPPP and WQMP would identify BMP measures to treat and/or limit the entry of contaminants into the storm drain system. The WQMP is required to be incorporated by reference or attached to a project's SWPPP as the Post-Construction Management Plan. Compliance with the BMPs contained in the SWPPP and the WQMP would ensure that impacts related to soil erosion would remain **less than significant**. Mitigation is not required.

c. Would the Project 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 off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. The Project site is flat and surrounded by urban development. There is no evidence of landslides and/or slope instabilities on the site. On September 20, 2021, as part of the Geotechnical Study, the subsurface conditions were explored by drilling eight soil borings (B1-B8) in the proposed building pad area and parking lot areas to maximum depths of approximately 21.5 feet below ground surface (bgs). The boring locations are shown on Figure 2 of Appendix E. Drilling was performed using a hollow-stem auger method. The subsurface soils encountered generally consisted of very dense sand with silt to the maximum depth explored, approximately 21.5 feet bgs. Based on the County of Riverside GIS database, the Geotechnical Report determined that the site area is mapped as not being within a liquefaction zone. Based on the soil conditions encountered at the site (generally dense to very dense soils), it was also determined that liquefaction and lateral spreading are not design concerns at this site. The Menifee General Plan

Safety Element (Exhibit S-3) [1] also shows that this site is not within a liquefaction or landslide zone. Therefore, impacts are considered to be **less than significant**. Mitigation is not required.

d. Would the Project 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?

Less Than Significant Impact. Expansive soils generally have a substantial amount of clay particles, which can give up water (shrink) or absorb water (swell). The change in the volume exerts stress on buildings and other loads placed on these soils. The amount and types of clay present in the soil influence the extent or range of the shrink/swell. The occurrence of clayey soils is often associated with geologic units having marginal stability. Expansive soils can be widely dispersed, and they can occur along hillside areas as well as low-lying alluvial basins. Soils on the Project site have a very low to medium expansion potential. However, as determined in the Geotechnical Report, the existing near-surface clay soil encountered in the top 2 to 4.5 feet at boring location B5 has a Medium shrink-swell potential based on the Atterberg Limits testing performed. Pursuant to **Standard Condition G-1**, this type of clay would be removed and replaced by engineered fill. Following site grading, testing of site soils would be performed by the Project geotechnical consultant to confirm the basis of these recommendations. Depending upon the distribution of soil types and expansion/swell characteristics, differing design recommendations may be developed to better suit the types of conditions present at the site.

With such design features and geotechnical recommendations in place, implementation of the proposed Project would not create substantial direct or indirect risks to life or property due to expansive soils. Impacts would be **less than significant**, and mitigation is not required.

e. Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Project would connect to the existing municipal wastewater collection system along Zeiders Road. The Project would not use septic systems or alternative wastewater disposal systems, so there would be **no impact** relative to septic system or alternative wastewater disposal systems. Mitigation is not required.

f. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact with Mitigation Incorporated. According to the City of Menifee General Plan EIR, the Project site is within a low sensitivity area for paleontological resources.[2] As

1 City of Menifee and Earth Consultants International. 2012. Menifee General Plan, Exhibit S-3. Liquefaction and Landslides. Website: https://www.cityofmenifee.us/DocumentCenter/View/1030/S-3_LiquefactionandLandslides_HD0913?bidId= (accessed September 13, 2022).

2 City of Menifee. 2013. *City of Menifee General Plan Draft Environmental Impact Report. State Clearinghouse #2012071033.* Section 5. Environmental Analysis Cultural Resources. Figure 5.5-1, Paleontological Resources Sensitivity and Page 5.5-12. September. Website: https://www.cityofmenifee.us/DocumentCenter/View/1105/Ch-05-05-CUL?bidId= (accessed September 13, 2022)

excavation for construction gets underway, it is possible that unanticipated paleontological resources might be encountered at depths greater than 10 feet below grade.[1] In accordance with State law, the proposed Project would be required to comply with Section 5097.5 of the PRC *and* California *Administrative Code, Title 14, Section 4307,* which state that no person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value. Penal Code *Section 622.5* establishes as a misdemeanor the willful injury, disfiguration, defacement, or destruction of any object or thing of paleontological interest or value, whether situated on private or public lands.

To mitigate the potential to uncover undiscovered paleontological resources on the Project site, **Mitigation Measures GEO-1** is prescribed in accordance with Mitigation Measure 5-2 of the City of Menifee General Plan Draft EIR.[2]

Mitigation Measure GEO-1 As a portion of the Project site is located on land with a high sensitivity to paleontological resources, the Project Applicant shall retain a qualified paleontologist to monitor ground-disturbing activity during Project construction. Should any potentially significant fossil resources be discovered, no further grading shall occur around the discovery until the Community Development Director is satisfied that adequate provisions are in place to protect such discovered resources. Unanticipated discoveries shall be evaluated for significance by the retained qualified paleontologist. If significance criteria are met, then the Project applicant shall be required to perform data recovery, professional identification, radiocarbon dating, and other applicable special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers to the City of Menifee Community Development Director.

Implementation of **Mitigation Measure GEO-1** would reduce impacts to paleontological resources to **less than significant with mitigation incorporated**.

1 City of Menifee. 2013. *City of Menifee General Plan Draft Environmental Impact Report. State Clearinghouse #2012071033.* Section 5. Environmental Analysis Cultural Resources. Page 5.5-16.

2 City of Menifee. 2013. *City of Menifee General Plan Draft Environmental Impact Report. State Clearinghouse #2012071033.* Section 5. Environmental Analysis Cultural Resources. Figure 5.5-1, Paleontological Resources Sensitivity, and Page 5.5-18. September. Website: https://www.cityofmenifee.us/DocumentCenter/View/1105/Ch-05-05-CUL?bidId= (accessed September 13, 2022) .

5.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The discussion and analysis presented in this section is from the *Air Quality, Greenhouse Gas Emissions, and Energy Analysis* LSA Associates, inc. prepared for the proposed Project in December 2024 (**Appendix B**).

5.8.1 Impact Analysis

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

Less Than Significant Impact. Construction activities associated with the proposed Project would produce combustion emissions from various sources. Construction would emit GHGs through the operation of construction equipment and from worker and builder supply vendor vehicles for the duration of the approximately 6-month construction period. The combustion of fossil-based fuels creates GHGs such as CO_2, methane (CH_4) and N_2O. Furthermore, the fueling of heavy equipment emits CH_4. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Table 5.8.1 shows the construction emissions, which have been calculated using CalEEMod (the same methodology as described above for the criteria pollutant emissions), are shown in Table 5.7. Results indicate that Project construction would generate approximately 220 metric tons of carbon dioxide equivalent (MT CO_2e). The SCAQMD does not provide a separate GHG significance threshold for construction emissions; rather, its guidance specifies that construction emissions should be amortized over 30 years (a typical project lifetime), added to the project operational emissions, and that total should be compared to the GHG significance threshold.

As shown in Table 5.8.1, the amortized construction emissions would be approximately 7 MT CO_2e per year.

Long-term operation of the proposed Project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Mobile-source emissions of GHGs would include Project-generated vehicle trips. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas for heating, and other minor sources. Increases in stationary-source emissions

Table 5.8.1: Construction Greenhouse Gas Emissions

Construction Phase	Greenhouse Gas Emissions (metric tons annually)			
	CO_2	CH_4	N_2O	Total Emissions (CO_2e)
Site Preparation	8	<1	0	8
Grading	63	<1	<1	66
Building Construction	133	<1	<1	134
Architectural Coating	6	<1	<1	6
Paving	7	<1	<1	7
Total Construction Emissions for Entire Construction Process				**220 MT CO_2e**
Total Construction Emissions Amortized over 30 years				**7 MT CO_2e**

Source: *Air Quality, Greenhouse Gas Emissions, and Energy Analysis.* Table G. (LSA Associates, Inc., December 2024).
Note: Column totals may not add due to rounding from the model results.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT = metric tons
N_2O = nitrous oxide

would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed uses.

Table 5.8.2 shows the GHG emissions associated with the level of development envisioned by the proposed Project at opening. Area sources include architectural coatings, consumer products, and landscaping. Energy sources include natural gas consumption for space heating and spray booths.

Table 5.8.2: Project Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (metric tons/year)			
	CO_2	CH_4	N_2O	CO_2e
Construction Emissions Amortized over 30 Years				**7**
Operational Emissions				
Area Sources	<1	<1	<1	<1
Energy Sources	147	<1	<1	148
Mobile Sources	207	<1	<1	210
Waste Sources	6	<1	0	23
Water Usage	<1	<1	<1	<1
Refrigerant Sources	—	—	—	649
Total Project Emissions	**228**	**0**	**0**	**1,030**
SCAQMD GHG Threshold	**—**	**—**	**—**	**3,000**
Significant Emissions?	**—**	**—**	**—**	**No**

Source: *Air Quality, Greenhouse Gas Emissions, and Energy Analysis.* Table H. (LSA Associates, Inc., December 2024).
CH_4 = methane
GHG = greenhouse gas
CO_2 = carbon dioxide
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent
SCAQMD = South Coast Air Quality Management District

As shown in Table 5.8.2, the Project would result in emissions of 1,030 MT CO_2e per year. This emission level is less than the SCAQMD Tier 3 threshold of 3,000 MT CO_2e per year; therefore, Project-level and cumulative GHG emissions would be less than significant.

The landscape watering system would be automatic and connected to a weather sensor and rain shut-off device. Water distribution devices would consist of a combination of low-flow sprinkler/rotor heads on slopes and low precipitation rate drip tubing in other planter areas. The landscaping would consist of native and drought-tolerant plant material. These measures would ensure that the design of the planting and irrigation will comply with the State of California's Water Efficient Landscape Ordinance. It is expected that the Project would use up to 300 gallons of water per day.

Additionally, a project's incremental contribution to a cumulative GHG effect would not be cumulatively considerable if the project would comply with the requirements in a previously adopted plan or mitigation program. In June 2014, the City adopted the Western Riverside Council of Governments (WRCOG) Climate Action Plan (CAP), which qualifies as a plan for the reduction of GHG emissions pursuant to the *State CEQA Guidelines*. The WRCOG CAP identifies local GHG reduction measures by sector and the GHG reduction potential associated with each measure. The proposed Project incorporates certain measures as design features. Table 5.8.3 details the Project design features that are necessary to ensure consistency with applicable local reduction measures of the WRCOG CAP. With implementation of these Project design features, the Project would be consistent with the WRCOG CAP.[1]

As the proposed Project would comply with the City adopted WRCOG CAP, any GHG impacts would be **less than significant**, and no mitigation is necessary.

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

Less Than Significant Impact. Applicable plans adopted for the purpose of reducing GHG emissions include the CARB's 2022 Scoping Plan[2] and SCAG's Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).[3] The following presents a consistency analysis with these plans for the proposed Project.

> ***2022 Scoping Plan.*** The following discussion evaluates the proposed Project according to the goals of the 2022 Scoping Plan, Executive Order (EO) B-30-15, Senate Bill (SB) 32, AB 197, and AB 1279. EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption

1 Western Riverside Council of Governments. 2014. WRCOG Climate Action Plan. June. Website: wrcog.us/DocumentCenter/View/9987/Climate-Action-Plan-Toolkit (accessed October 2024).

2 CARB. 2022. *2022 Scoping Plan Update*. May 10. Website: ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed October 2024).

3 SCAG. 2024. *Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*. Website: scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf (accessed October 2024).

Table 5.8.3: Western Riverside Council of Governments Climate Action Plan Consistency Analysis

Measures by Sector	WRCOG CAP Consistency Analysis
State and Regional Measures	
Energy	
Measure SR-2: 2022 California Building Energy Efficiency Standards (Title 24, Part 6). Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).	**Consistent.** The proposed Project would comply with the requirements of the 2024 California Building Energy Efficiency Standards (Title 24, Part 6), including measures to incorporate energy-efficient building design features detailed in Subchapter 3 (Nonresidential Mandatory Requirements), Section 120.7 (Mandatory Insulation Requirements), and Section 120.8 (Nonresidential Building Commissioning).
Measure SR-4: HERO Commercial Program. A public-private partnership administered by WRCOG, offering financing to business owners in the subregion for the installation of energy efficient, renewable energy, and water conservation improvements.	**Consistent.** The proposed Project would work with WRCOG to determine any Project features that are eligible and to add any new features, as appropriate.
Measure SR-5: Utility Programs. Southern California Edison (SCE) and Southern California Gas Company (SoCalGas) each offer rebate programs to reduce energy consumption.	**Consistent.** The proposed Project would work with SCE and SoCalGas to determine any project features that are eligible and to add any new features, as appropriate.
Water	
Measure SR-14: Water Conservation and Efficiency. Reduce per capita water use by 20% by 2020. SB X7-7 is part of a California legislative package passed in 2009 that requires urban retail water suppliers to reduce per-capita water use by 10% from a baseline level by 2015, and to reduce per capita water use by 20% by 2020. Green accountability performance (GAP) Goal 16 directly aligns with SB X7-7. In Southern California, energy costs and GHG emissions associated with the transport, treatment, and delivery of water from outlying regions are high. Therefore, the region has extra incentive to reduce water consumption. While this is considered a state measure, it is up to the local water retailers, jurisdictions, and water users to meet these targets.	**Consistent.** The proposed Project would install water-efficient irrigation systems and devices and drought-tolerant landscaping.
Solid Waste	
Measure SR-13: Construction and Demolition Waste Diversion. Meet mandatory requirement to divert 50% of C&D waste from landfills by 2020 and exceed requirement by diverting 90% of C&D waste from landfills by 2035.	**Consistent.** The proposed Project would comply with California Green Building Standards Code requirements. At least 50 percent of all nonhazardous construction waste generated by the proposed Project (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) will be recycled and/or salvaged.
Transportation	
Measure SR-6: Pavley and Low Carbon Fuel Standard (LCFS). CARB identified this measure as a "Discrete Early Action Measure." This measure would reduce the carbon intensity of California's transportation fuels by at least 10% by 2020.	**Consistent.** The proposed Project does not involve the manufacture, sale, or purchase of vehicles. However, vehicles that operate within and access the Project site will comply with Pavley and the Low Carbon Fuel Standard. Passenger cars and medium- and heavy-duty trucks and trailers making deliveries will be subject to aerodynamic and hybridization requirements as established by the CARB; no feature of the Project will

Table 5.8.3: Western Riverside Council of Governments Climate Action Plan Consistency Analysis

Measures by Sector	WRCOG CAP Consistency Analysis
	interfere with implementation of these requirements and programs.
Local Reduction Measures	
Energy	
Measure E-1: Energy Action Plans: Improve municipal and community-wide energy efficiency and reduce energy consumption through the adoption of local Energy Action Plans (EAP).	**Consistent.** Building energy efficiency elements will include, at a minimum, 2024 Title 24 Energy Code standards. The installation and use of on-site renewable energy systems shall be investigated to reduce demand on existing energy grid infrastructure and to support the City of Menifee energy efficiency goals. Buildings will be designed to maximize daylight access for interior occupied spaces. Top lighting and side lighting strategies shall be combined to optimize daylight access for building occupants. Daylighting strategies to be investigated for feasibility include, but are not limited to, exterior/interior light shelves, skylights and monitors, clerestory windows, tubular skylights, and light wells. Nonessential exterior lighting will be turned off by automatic controllers from 11:00 p.m. until the following morning at dawn. Lighting shall be ramped up to full power (based on zones) when motion is detected in the vicinity.
Measure E-3, Shade Trees: Strategically plant trees at new nonresidential developments to reduce the urban heat island effect.	**Consistent.** As established by the landscape plan and/or determined by the owner/tenants, shade trees would be provided on site. Shade trees in new landscape designs would be provided to reduce heat island impacts (when shading paved/developed surfaces) and to support the City of Menifee goals.
Transportation	
Measure T-3, End of Trip Facilities: Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters. **Measure T-4, Promotional Transportation Demand Management:** Encourage transportation demand management strategies. **Measure T-5: Transit Service Expansion;** Collaborate with local and regional transit providers to increase transit service provided in the subregion. **Measure T-6: Transit Frequency Expansion**; Collaborate with local and regional transit providers to provide more frequent transit in the subregion. **Measure T-7, Traffic Signal Coordination:** Incorporate technology to synchronize and coordinate traffic signals along local arterials.	**Consistent.** Project development will be within already-urbanized parts of Menifee, utilizing existing facilities and infrastructure to promote pedestrian, bicycle, and transit-oriented mobility. The Riverside Transit Agency currently provides bus service to the Project site; the Perris Station Transit Center – Sun City – Quail Valley – Menifee – Murrieta - Temecula route runs along Scott Road near the Project site and connects to other bus routes in Menifee and the surrounding communities. This bus route supports the City's General Plan objectives and policies related to alternative modes of transportation. Because the Project site is located in close proximity to an existing bus route, the proposed Project would be accessible to existing transit systems.

Table 5.8.3: Western Riverside Council of Governments Climate Action Plan Consistency Analysis

Measures by Sector	WRCOG CAP Consistency Analysis
Measure T-8, Density: Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities. **Measure T-10: Design/Site Planning**: Design neighborhoods and sites to reduce VMT.	

Source: *Subregional Climate Action Plan* (Western Riverside Council of Governments, 2014).
CAP = Climate Action Plan
CARB = California Air Resources Board
City = City of Menifee
WRCOG = Western Riverside Council of Governments

of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emission data that are collected by CARB was posted in December 2016.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target while laying out a path to achieving 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.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil-fuel combustion vehicles.

Energy efficiency measures are intended to maximize energy efficiency building and appliance standards; pursue additional efficiency efforts, including new technologies and new policy and implementation mechanisms; and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The proposed Project would be required to comply with the latest Title 24 standards of the CCR, established by the CEC, regarding energy conservation and green building standards. Therefore, the proposed Project would not conflict with applicable energy measures or with the goals of the 2022 Scoping Plan, EO B-30-15, SB 32, AB 197, and AB 1279.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The proposed Project would not be a substantial source of water-source emissions. Therefore, the proposed Project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed Project. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025. As identified above, approximately 85 daily trips are anticipated due to implementation of the proposed Project. Therefore, the proposed Project would not conflict with the identified transportation and motor vehicle measures.

Statewide strategies to reduce GHG emissions include the low-carbon fuel standards and changes in the corporate average fuel economy standards (e.g., Pavley I and Pavley II, and the California Advanced Clean Cars program). Although measures in the Scoping Plan apply to State agencies and not to the proposed Project, the Project's GHG emissions would be reduced through compliance with statewide measures that have been adopted since Assembly Bill 32 and Senate Bill 32 were adopted. Therefore, the proposed Project would be consistent with the CARB Scoping Plan.

2024–2050 RTP/SCS. Menifee is a member city of SCAG. SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high-quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emissions reduction targets.

As demonstrated in the Consistency with Applicable Air Quality Plans section of the Air Quality, Greenhouse Gas Emissions, and Energy Analysis Memorandum (Appendix B), the proposed Project does not meet the criteria identified in *State CEQA Guidelines* Section 15205.b.2 for projects of statewide, regional, or areawide significance. In addition, the proposed Project would not require a change to the General Plan land use designation or the current zoning, and would be consistent with the City's General Plan and Zoning Ordinance. As such, the proposed Project would not interfere with SCAG's ability to achieve the region's GHG reduction target of 19 percent below 2005 per-capita emissions levels by 2035. Furthermore, the proposed Project is not regionally significant per *State CEQA Guidelines* Section 15206, and as such, it would not conflict with the SCAG RTP/SCS targets since those targets were established and are applicable on a regional level. Furthermore, there are only 85 daily vehicle trips expected to be associated with implementation of the proposed Project. Therefore, implementation of the proposed Project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS.

As demonstrated through the above analysis, the proposed Project would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed

Project would not conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

Table 5.8.4 addresses consistency with the City General Plan's relevant GHG policies and shows the Project would be consistent with the applicable strategies and policies in the City General Plan.

As detailed in Table 5.8.4, the Project would be consistent with GHG reduction goals and policies in the City of Menifee General Plan. In addition, the Project would be consistent with Title 24 energy reduction measures.

Overall, the proposed Project would not conflict with an adopted plan, policy, or regulation pertaining to GHGs. Impacts would be **less than significant**, and mitigation is not required.

Table 5.8.4: Menifee General Plan GHG Policy Consistency Analysis

Menifee General Plan GHG Policy	Project Consistency
Pavley I. California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA.	**Not Applicable:** This is a statewide measure that cannot be implemented by a project applicant or lead agency. However, the standards would be applicable to the light-duty vehicles that would access the Project site during construction and operation of the Project. Implementation of this Project would not impede or hinder the State's ability to implement this measure.
OSC-9.5: Comply with the mandatory requirements of Title 24 Part 11 of the California Building Standards Code (CALGreen) and Title 24 Part 6 Building and Energy Efficiency Standards.	**Consistent:** CALGreen covers the following five categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) indoor environmental quality. The City has adopted both the CBC and CALGreen Code pertaining to energy conservation standards pursuant respectively to Chapter 8.04 and Chapter 8.06 of the City Municipal Code (Ordinance No. 2019-285). Accordingly, the Project must comply with the current 2022 CALGreen Code requirements and Title 24 efficiency standards as a matter of policy.
OSC-10.1: Align the City's local GHG reduction targets to be consistent with the statewide GHG reduction target of AB 32.	**Consistent:** This goal is programmatic and designed for implementation by the City. Development of the site in accordance with the existing zoning (Economic Development Corridor – Southern Gateway) would provide a logical and seamless transition between residential uses to the west and commercial/industrial uses to reduce emissions from VMT. A scaled threshold consistent with State goals detailed in SB 32, Executive Order B-30-14, and Executive Order S-3-05 to reduce GHG emissions by 40 percent below 1990 level by 2030 and 80 percent below 1990 levels by 2050, respectively, was developed to evaluate a project's operational contribution to GHG emissions.. For the purposes of this analysis, the proposed Project was determined not to exceed this screening threshold.

Table 5.8.4: Menifee General Plan GHG Policy Consistency Analysis

Menifee General Plan GHG Policy	Project Consistency
OSC-10.2: Align the City's long-term GHG reduction goal consistent with the statewide GHG reduction goal of Executive Order S-03-05.	**Consistent:** This goal is programmatic and designed for implementation by the City. Development of the site in accordance with the existing zoning (Economic Development Corridor – Southern Gateway) would provide a logical and seamless transition between residential uses to the west and commercial/industrial uses to reduce emissions from VMT. A scaled threshold consistent with State goals detailed in SB 32, Executive Order B-30-14, and Executive Roader S-3-05 to reduce GHG emissions by 40 percent below 1990 level by 2030 and 80 percent below 1990 levels by 2050, respectively, was developed to evaluate a project's operational contribution to GHG emissions. For the purposes of this analysis, the proposed Project was determined not to exceed this screening threshold.
OSC-10.3: Participate in regional greenhouse gas emission reduction initiatives.	**Consistent:** This goal is programmatic and designed for implementation by the City. The Project is designed to comply with sustainability policies administered by the City of Menifee through compliance with current Title 24 and CALGreen requirements. Additionally, the Project is consistent with the GHG reduction strategies prescribed in SCAG's Connect SoCal 2024–2050 RTP/SCS.
OSC-10.4: Consider impacts to climate change as a factor in evaluation of policies, strategies, and projects.	**Consistent:** This goal is programmatic and designed for implementation by the City. The Project is evaluated for significant impacts to climate change, and based on the analysis results in Table 5.8.2, GHG emissions generated by the Project are not considered to cumulatively contribute to statewide GHG emissions, and impacts would be less than significant.
LCFS. Low-Carbon Fuel Standard (LCFS) for transportation fuels sold within the State. Executive Order S-1-07 sets a declining standard for GHG emissions measured in CO_2e per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The LCFS applies to refiners, blenders, producers, and importers of transportation fuels and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the fuel cycle using the most economically feasible methods.	**Not Applicable:** This is a statewide measure that cannot be implemented by a project applicant or lead agency. However, the standards would be applicable to the light-duty vehicles that would access the Project site during construction and operation of the Project. Implementation of this Project would not impede or hinder the State's ability to implement this measure.
C-1.1: Require roadways to comply with federal, State, and local design and safety standards; meet the needs of multiple types of users (families, commuters, recreational beginners, exercise experts) and meet ADA standards and guidelines; be compatible with streetscape and surrounding land uses; and be maintained in accordance with best practices.	**Consistent:** The proposed Project would be required to design, construct, and maintain structures, roadways, and facilities in accordance with applicable standards governing vehicular access. Construction activities that may temporarily restrict vehicular traffic would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures.

Table 5.8.4: Menifee General Plan GHG Policy Consistency Analysis

Menifee General Plan GHG Policy	Project Consistency
C-1.5: Minimize idling times and vehicle miles traveled to conserve resources, protect air quality, and limit greenhouse gas emissions.	**Consistent:** The Project is located in a low VMT-generating area/Traffic Analysis Zone (TAZ). As per the *City of Menifee Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* (VMT Guidelines) adopted on June 3, 2020, residential, office and mixed-use projects located in a low VMT-generating area/TAZ and consistent with the City's General Plan land use are presumed to have a less than significant impact on VMT.
C-2.1: Require on- and off-street pathways to comply with federal, State, and local design and safety standards. meet the needs of multiple types of users (families, commuters, recreational beginners, exercise experts) and meet ADA standards and guidelines; be compatible with streetscape and surrounding land uses; and be maintained in accordance with best practices.	**Consistent:** The proposed Project would be required to design, construct, and maintain structures, roadways, and facilities in accordance with applicable standards governing vehicular access. Construction activities that may temporarily restrict vehicular traffic would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures.
33% RPS: Executive Order S-14-08 was signed in November 2008, which expands the State's renewable energy standard to 33 percent renewable power by 2020. In 2011, the State Legislature adopted this higher standard in SBX1-2. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.	**Not Applicable:** This is a statewide measure that cannot be implemented by a project applicant or lead agency. Southern California Edison is required to increase its percentage of power supply from renewable sources to 33 percent by 2020 pursuant to various regulations. The Project would connect to Menifee's power grid and would comply with this regulation as the local utility increases use of renewable energy sources.

Source: *General Plan Draft Environmental Impact Report.* Appendix C: City of Menifee General Plan Goals and Polices. (City of Menifee, September 2013).
AB = Assembly Bill
ADA = Americans with Disabilities Act
CALGreen = California Green Building Standards Code
CBC = California Building Code
City = City of Menifee
EPA = Environmental Protection Agency
GHG = greenhouse gas
MT CO_2e/yr/SP = metric tons of carbon dioxide equivalent per year per service population
RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy
SB = Senate Bill
SCAG = Southern California Association of Governments
VMT = vehicle miles traveled

5.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

The following analysis is based in part on the 2021 *Phase I Environmental Site Assessment* (ESA) prepared by Intertek PSI. (Appendix F).

5.9.1 Impact Analysis

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

Less Than Significant Impact. The Project site is undeveloped with a stream channel crossing the northwest portion of the property. According to the Phase I Environmental Site Assessment, no respective listing was identified in the City directories for the Project site. Construction of the Project has the potential to create a hazard to the public or environment through the routine transport, use, and disposal of construction-related hazardous materials such as fuels, oils, solvents, and other materials. These materials are typical materials that are delivered to construction sites. However, due to the limited quantities of these materials to be used by the proposed Project, they are not considered hazardous to the public at large.

The temporary transport, use, or disposal of fuels, lubricants, paints, and other hazardous materials related to construction would not pose a significant hazard to the public or environment unless the materials were accidently spilled or released into the environment. The transport, use, and storage of hazardous materials during construction will be regulated by the Riverside County Fire Department and the California Occupational Safety and Health Administration. Additionally, the United States Department of Transportation Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials by truck and rail on State highways and rail lines, as described in Title 49 of the Code of Federal Regulations and implemented by Title 13 of the California Code of Regulations (CCR).

Commercial operations and maintenance on the Project site would require relatively small amounts of hazardous materials, such as chemicals associated with heating and cooling systems, fuel for landscape equipment, solvents (including auto body chemicals and paint), cleaning products, pesticides/fertilizers, and other similar chemicals. These materials are substantially similar to household chemicals and solvents already in wide use throughout Menifee and in the vicinity of the site.

As is the case during construction, the transport, use, and storage of hazardous materials during Project occupation would be regulated by the Riverside County Fire Department and the California Occupational Safety and Health Administration. Additionally, transport of hazardous materials by truck and rail on State highways and rail lines will be regulated by the United States Department of Transportation Office of Hazardous Materials Safety as described above.

Worker health and safety is regulated at the federal level by the United States Department of Labor, Occupational Safety and Health Administration. The federal Occupational Safety and Health Act of 1970 authorizes states to establish their own safety and health programs with OSHA approval. Worker health and safety protections in California are regulated by the California Department of Industrial Relations (DIR). The DIR includes the Division of Occupational Safety and Health, which acts to protect workers from safety hazards through its California Occupational Safety and Health Administration (Cal/OSHA) program and provides consultant assistance to employers. California standards for workers dealing with hazardous materials are contained in CCR Title 8 and include practices for all industries (General Industrial Safety Orders), and specific practices for construction and other industries. Workers at hazardous waste sites (or workers who may be exposed to hazardous wastes that might be encountered during excavation of contaminated soils) must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response regulations.[1]

Cal/OSHA enforcement units conduct on-site evaluations and issue notices of violation to enforce necessary improvements to health and safety practices. The routine transport, use, and disposal of hazardous materials at the Project site during construction and operation would be performed in accordance with the requirements of CCR Title 8, which would minimize potential health hazards for construction workers, landscapers, maintenance personnel, and residents. As such, impacts would be **less than significant**, and mitigation is not required.

[1] California Code of Regulations, Title 8 5192.

b. Would the Project 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?

Less Than Significant Impact. The Project-specific Phase I ESA did not identify any hazardous materials or recognized environmental conditions (RECs) on the Project site, including historical recognized environmental conditions[1] (HRECs), vapor encroachment conditions[2] (VECs), controlled recognized environmental conditions[3] (CRECs), and de minimis conditions[4]. Any hazardous materials used during construction and operation of the Project would be regulated by the Riverside County Fire Department and the California Occupational Safety and Health Administration to ensure impacts from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction and operation remain **less than significant**. Mitigation is not required.

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

Less than Significant Impact. The closest school to the Project site is Oak Meadows Elementary School (28600 Poinsettia Street, Murrieta), located approximately 1 mile east of the Project site. As detailed in response to Checklist Question 5.09(a), the transport, use, and storage of hazardous materials during construction, operation, and occupation of the proposed commercial building would be regulated by the Riverside County Fire Department and the California Occupational Safety and Health Administration. The United States Department of Transportation Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials by truck and rail on State highways and rail lines.

Some common hazardous materials (e.g., fuels, lubricants, paints, pesticides, household products) would be used at the Project site during construction and operational activities. As detailed in response to Checklist Questions 5.09(a) and 5.09(b), the Project site does not include any activities or materials that constitute a REC that could represent a significant risk to public health or safety from construction and operation of the site, if transported, used, and disposed of in accordance with applicable local, State, and federal regulations.

1 HRECs = A past, regularly reported, 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 residential use criteria established by a regulatory authority, without subjecting the property to any required controls.

2 VECs = The presence or likely presence of "chemical of concern" vapors in the subsurface of the Target Property caused by the release of vapors from contaminated soil or groundwater or both either on or near the Target Property as identified by the Tier 1or Tier 2 procedures

3 CRECs = A recognized environmental condition that involves a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to required controls

4 De minimis conditions are conditions related to a release that generally do 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

Compliance with all applicable federal, State, and local laws for construction and operation of the proposed Project would ensure impacts from the emission or handling of hazardous materials within 0.25 mile of an existing or proposed school would remain **less than significant.** Mitigation is not required.

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

No Impact. The provisions of California Government Code Section 65962.5 require the State Water Resources Control Board, the Department of Toxic Substances Control, the California Department of Health Services, and the California Department of Resources Recycling and Recovery to submit information to Cal/EPA pertaining to sites that were associated with solid waste disposal, hazardous waste disposal, and or hazardous materials releases. The compilation of hazardous materials release sites that meet criteria specified in Government Code Section 65962.5 is known as the Cortese List.

The Project site is not on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5[1] and therefore is not subject to the Hazardous Waste Sites Exception (Section 15300.2(e)). The Project would have **no impact** related to development on a hazardous materials release site included on the Cortese List. Mitigation is not required.

e. Would the Project be located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

No Impact. Perris Valley Airport (2091 Goetz Road in Perris) is 9 miles north of the Project site and March Air Reserve Base is 16 miles north of the Project site. The Project site is not within land use compatibility zones or noise contours for either the Perris Valley Airport or March Air Reserve Base. Additionally, the Project site is not within an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, which would result in a safety hazard or excessive noise for people residing or working in the Project area. **No impact** would occur, and no mitigation is required.

f. Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The City of Menifee follows the Riverside County Operational Area Emergency Operations Plan (EOP) that was adopted in 2019 and the County of Riverside Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan, which was adopted in 2023. The EOP defines the roles of county agencies in emergency preparedness, emergency response, and hazard mitigation. The Riverside County Fire Department Office of Emergency Services is the responsible agency for planning and managing emergency responses in Riverside County and in Menifee. In addition, the

[1] California Department of Toxic Substances Control. 2022. *Hazardous Waste and Substances Site List (Cortese List)*.

City's *2022 Local Hazard Mitigation Plan* lists a series of mitigation projects to be implemented as part of the City's mitigation efforts to reduce incidents such as flooding and traffic hazards.

Regional access to the proposed Project site is from I-215, 0.3 mile northeast of Scott Road. In the event of an emergency, the patrons and employees occupying the Project site (once operational) would be able to evacuate the site via the primary driveway onto Zeiders Road, just south of the intersection with Scott Road.

The Project access and circulation design would be subject to review and approval by the Riverside County Fire Department, the City's Police Department, the City Traffic Engineer, and the Public Works Department during the City's precise plan review process. The County of Riverside Fire Marshal may impose additional conditions of Project approval to ensure protection of life and property, including, but not limited to additional fire hydrants, increased turnaround ability, increased sprinkler density and coverage, and additional means of access/egress. Impacts related to emergency access would remain **less than significant.** Mitigation is not required.

g. Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. The Project site is surrounded by urban development and is not within a Very High Fire Hazard Severity Zone (VHFHSZ) in the Local Responsibility Area (LRA),[1] so the risk of a wildfire event affecting the site is low. The Project would be required to comply with applicable provisions of the 2022 California Building Code and California Fire Code, as well as Menifee Municipal Code Chapter 8.20 (Fire Code) and the following fire-related Goals and Policies identified in the Menifee General Plan:

- **Goal S-4: Fire Hazards –** A community that has effective fire mitigation and response measures in place, and as a result is minimally impacted by wildland and structure fires.
    - **Policy S-4.1:** Require fire-resistant building construction materials, the use of vegetation control methods, and other construction and fire prevention features to reduce the hazard of wildland fire.
    - **Policy S-4.2:** Ensure, to the maximum extent possible, that fire services, such as firefighting equipment and personnel, infrastructure, and response times, are adequate for all sections of the City.
    - **Policy S-4.3:** Use technology to identify flood-prone areas and to notify residents and motorists of impending flood hazards and evacuation procedures.
    - **Policy S-4.4:** Review development proposals for impacts to fire facilities and compatibility with fire areas or mitigate.

[1] CAL FIRE. n.d. *Fire and Resource Assessment Program (FRAP).* Website: https://egis.fire.ca.gov/FHSZ/ (accessed September, 2024).

CAL FIRE's Fire and Resource Assessment Program of the California Department of Forestry and Fire Protection designates the Project site as in the LRA and not within a VHFHSZ.[1] The nearest State Responsibility Areas are 0.65 mile northeast of the site (Moderate Fire Hazard Severity Zone) and 0.9 mile southwest of the site (VHFHSZ), while the nearest area designated as a VHFHSZ in an LRA is approximately 0.5 mile northeast of the site.[2]

Prior to final plan check approval, the City of Menifee in coordination with the Riverside County Fire Department will review the Project site plan to ensure adequate design features such as ignition-resistant construction, emergency evacuation, and access for first responders are implemented to reduce exposure of people and structures to wildfires. Through compliance with fire codes and General Plan Goals and Policies, the proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Impacts would be **less than significant,** and mitigation is not required.

1 CAL FIRE. n.d. *Fire and Resource Assessment Program (FRAP).* Website: https://egis.fire.ca.gov/FHSZ/ (accessed September 2024).

2 Ibid.

5.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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 that would:				
i. Result in substantial erosion or siltation on or off site?	☐	☐	☒	☐
ii. Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?	☐	☐	☒	☐
iii. Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to Project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

The discussion and analysis in this section is based on the *Project Specific Water Quality Management Plan,* prepared by Latitude 33 Planning & Engineering, October 27, 2021 (Appendix G2) and the Geotechnical Report (Appendix E).

5.10.1 Impact Analysis

a. Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact. The California State Water Resources Control Board and nine Regional Water Quality Control Boards regulate the quality of surface water and groundwater bodies throughout California. For Menifee, including the Project site, the Santa Ana Regional Water Quality Control Board (RWQCB) is responsible for implementation of the Water Quality Control Plan.

Runoff water quality is regulated by the National Pollutant Discharge Elimination System (NPDES) Program (established through the federal Clean Water Act). The NPDES program's objective is to control and reduce pollutant discharges to surface waterbodies. Compliance with NPDES permits is mandated by State and federal statutes and regulations. Locally, the NPDES program is administered by the RWQCB and any construction activities, including grading, that would result in the

disturbance of one acre or more of land would require compliance with the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity (Construction General Permit). The proposed Project would result in the disturbance of 2.39 acres and therefore would be required to comply with the Construction General Permit.

The City adopted Chapter 15.01 (Storm Water/Urban Runoff) of the Municipal Code requiring preparation and adoption of a Project-specific Water Quality Management Plan (WQMP). The WQMP identifies best management practices (BMPs) to be implemented to ensure that water quality of receiving waters is not degraded due to Project implementation. Projects in Menifee are required to prepare and submit to the City for review a Preliminary WQMP for land use permit approvals. A Final WQMP must be submitted to the City for review and approval prior to the issuance of grading/building permits.

The proposed Project site consists of gently sloping terrain with natural gradients of less than 5 percent. The Project site is undeveloped and consists of pervious surface area. Currently, stormwater generally sheet flows in a northwesterly direction. The proposed Project would maintain the existing drainage pattern. Upon development of the site, all on-site stormwater would be captured on site in accordance with Santa Ana Regional Water Quality Control Board Order Number R8-2010-0033, NPDES Permit No. CAS618033, also known as the Municipal Separate Storm Sewer System or MS4 permit. Impervious surfaces would drain to adjacent landscaping, where feasible, for impervious area dispersion, while the majority of runoff from the site would drain to a proposed bioretention basin located at the northwestern corner of the site. Runoff from the east and north portions of Project site, including paved and landscaped areas, would be directed to a concrete ditch along the north boundary of the property. This concrete ditch would enter a storm drain and convey runoff to the proposed biofiltration basin to the west. The runoff from the roof of the building would be conveyed through roof drains connected underground to a proposed storm drain pie along the south boundary of the property, continuing west and emptying to the biofiltration basin for treatment and detention. This storm drain line would also receive runoff from the decomposed granite pathway along the south edge of the Project building through three catch basin inlets. Inlet capacity of catch basins are not currently calculated and would be calculated in final engineering. Runoff from the west parking area would sheet flow to the west and enter a gutter along the west edge of the parking area and would be directed to the proposed biofiltration basin via curb cuts with rip-rap outlets. Curb cut and rip-rap sizing have not currently been calculated and would be determined in final engineering. With these design features and overall drainage patterns of the Project site retained, impacts would be less than significant, and no mitigation would be required.

Standard Conditions: The following Standard Conditions of Approval (compliance with Chapter 15.01 [Storm Water/Urban Runoff] and City MS4 Permit) are regulatory requirements implemented as a routine action by the City to ensure compliance with RWQCB water quality standards.

Standard Condition H-1 Prior to construction, the Project Applicant shall prepare and implement a Final Storm Water Pollution Prevention Plan (SWPPP), meeting Construction General Permit requirements (Santa Ana Regional Water Quality Control Board Order Number R8-2010-0033, National Pollutant Discharge Elimination System Permit No. CAS618033, as amended) and designed to reduce potential adverse

impacts to surface water quality through the Project construction period. The Final SWPPP shall be submitted to the City of Menifee Engineering/Public Works Department for review and approval prior to the issuance of any permits for ground-disturbing activity.

The Final SWPPP shall be prepared by a qualified SWPPP Developer in accordance with the requirements of the Construction General Permit. Requirements include Best Management Practices (BMPs) for erosion and sediment control, site management/housekeeping/ waste management, management of non-storm water discharges, run-on and runoff controls, and BMP inspection/ maintenance/repair activities. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association *Stormwater Best Management Handbook-Construction*.

The Final SWPPP shall include a construction site monitoring program that identifies requirements for dry weather visual observations of pollutants at all discharge locations and, as appropriate (depending on the Risk Level), sampling of the site effluent and receiving waters. A Qualified SWPPP Practitioner shall be responsible for implementing the BMPs at the site and performing all required monitoring and inspection/maintenance/ repair activities.

Standard Condition H-2

The Project Applicant shall comply with the Santa Ana Regional Water Quality Control Board Storm Water permit requirements, including the Chapter 15.01 (Storm Water/Urban Runoff) of the Menifee Municipal Code. The Project Applicant shall prepare and implement a Final Water Quality Management Plan (FWQMP) for the Project. The FWQMP shall be submitted to the City of Menifee Engineering/Public Works Department for review and approval prior to issuance of any permits for ground disturbing activities. The FWQMP would act as the overall program document designed to provide measures to mitigate potential water quality impacts associated with the operation of the proposed Project. At a minimum, the FWQMP for the Project shall include:

- An inventory and accounting of existing and proposed impervious areas.
- Low Impact Development (LID) design details incorporated into the Project. Specific LID design may include, but is not limited to using pervious pavements and green roofs, dispersing runoff to landscaped areas, and/or routing runoff to the storm water detention/retention chamber system that would be developed on site as part of the Project design.

- Measures to address potential storm water contaminants. These may include measures to cover or control potential sources of storm water pollutants at the Project site.
- A Final Storm Water Facility Operation and Maintenance Plan for the Project site, which shall include periodic inspection and maintenance of the storm water drainage system. Persons responsible for performing and funding the requirements of this plan shall be identified. This plan must be finalized prior to issuance of building permits for the Project.

Implementation of **Standard Conditions H-1** and **H-2** pursuant to Chapter 15.01 [Storm Water/Urban Runoff] and the City's MS4 Permit would ensure the proposed Project does not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater capacity. Impacts would be **less than significant**, and mitigation is not required.

b. Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The Eastern Municipal Water District (EMWD) supplies water to the Menifee. The *2020 Urban Water Management Plan* indicates that the EMWD uses local and imported water to supply potable and non-potable water within its jurisdictional boundary.[1] EMWD produces potable groundwater from two management plan areas within the San Jacinto Groundwater Basin, including the West San Jacinto Groundwater Basin Management Plan area and the Hemet/San Jacinto Groundwater Management Plan area.

The EMWD imports approximately half of its water supply from the Metropolitan Water District, which projects it would have adequate supply to meet demand of all of its member agencies through the year 2045 under Average Year, Single-Dry Year, and Multiple-Dry Year conditions.[2] Through a combination of locally-sourced groundwater in conjunction with imported water from the Metropolitan Water District, the EMWD anticipates to have sufficient water supplies to meet demand through the year 2045 under Average Year, Single-Dry Year, and Multiple-Dry Year conditions.[3] The EMWD models each scenario based on the land use and zoning designations of each local jurisdiction it serves. As such, the proposed Project within Menifee is already accounted for in the water (groundwater) supply and demand scenarios determined by EMWD. Furthermore, the EMWD does not currently identify "threats to its groundwater supply that cannot be mitigated by treatment or blending, and EMWD does not anticipate a significant loss of supply due to water quality issues."[4]

1 Eastern Municipal Water District. 2021. *2020 Urban Water Management Plan.* Page E-2. July 1.
2 Ibid.
3 Ibid.
4 Ibid.

The Project site is in EMWD's San Jacinto Valley Hydraulic Unit; however, the site is not underlain by a percolation basin or other area used for intentional recharge of groundwater basins.[1] Although development of the Project would increase the impervious surface area of the site, the proposed Project would be subject to **Standard Condition H-2,** which requires development and implementation of a FWQMP to identify BMPs to retain the site's minimum design capture volume and hydromodification volume. Stormwater would be captured on the site such that post-development stormwater runoff volume or time of concentration would not exceed pre-development stormwater runoff. The Project has been designed to maximize groundwater infiltration with design features such as roof downspouts draining into pervious and landscaped areas, and maintenance of existing surface flows across the Project site into the proposed on-site biofiltration basin to facilitate groundwater recharge. Periodic maintenance of any required basins and landscaped areas during Project occupancy and operation would be in accordance with the schedule outlined in the FWQMP.

Through compliance with **Standard Condition H-2**, the proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that it impedes sustainable groundwater management of the basin. Impacts would be **less than significant**, and mitigation is not required.

c. Would the Project 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 that would: (i) Result in substantial erosion or siltation on or off site; (ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site; (iii) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or (iv) Impede or redirect flood flows?

(**i–iv) Less Than Significant Impact.** The Project site is undeveloped and is not occupied by a stream or river. Runoff from the eastern and northern portions of Project site, including paved and landscaped areas, would be directed to a concrete ditch along the northern boundary of the property. This concrete ditch would enter a storm drain and convey runoff to the proposed biofiltration basin to the west. The runoff from the roof of the building would be conveyed through roof drains connected underground to a proposed storm drain pipe along the south boundary of the property, continuing west and emptying into the biofiltration basin for treatment and detention. This storm drain line would also receive runoff from the decomposed granite pathway along the southern edge of the Project building through three catch basin inlets. Inlet capacity of catch basins are not currently calculated and would be calculated in final engineering. Runoff from the west parking area would sheet flow to the west and enter a gutter along the west edge of the parking area and would be directed to the proposed biofiltration basin via curb cuts with rip-rap outlets. Curb cut and rip-rap sizing have not currently been calculated and would be determined in final engineering.

[1] City of Menifee. 2013. *City of Menifee General Plan Draft Environmental Impact Report.* State Clearinghouse #2012071033. Page 5.9-19. September.

According to the most recent Flood Insurance Rate Map (FIRM),[1] the Project site is within Flood Zone X (Other Areas).[2] A small portion of the northwest corner of the Project site is within a Riverside County Flood Hazard zone.

Standard Conditions: These federal and State regulations serve to reduce the risk to life and damage to property from development within flood-prone areas. The following Standard Conditions (compliance with the National Flood Insurance Program [NFIP] Reform Act, NFIP Section 60.3(d), and California Civil Code Section 1103) are regulatory requirements implemented as a routine action by the City in accordance with Sections 8000–9651 of the California Water Code to address any potential for the Project to impede or redirect flood flows and ensure floodplain management pursuant to federal and State law.

Standard Condition H-3 Prior to issuance of grading and building permits, the Project Applicant must show proof that Project plans incorporate on-site drainage, anchoring methods to prevent floating structures, elevation of buildings above flood levels, and flood proofing, which requires buildings to be inspected and certified by a professional engineer, surveyor or building inspector in accordance with National Flood Insurance Program Section 60.3. Verification of compliance with National Flood Insurance Program Section 60.3 is required prior to issuance of occupancy permits. This condition shall be implemented to the satisfaction of the City of Menifee Building and Safety Department.

Standard Condition H-4 Prior to issuance of grading and building permits, the Project Applicant would provide evidence to the City that the grading and building plans show the lowest floor (including basement) shall be built above a predetermined base flood elevation (BFE) for Flood Zone AE. Prior to grading plan approval, the Project Applicant shall obtain a Conditional Letter of Map Revision based on Fill (CLOMR-F) from the Federal Emergency Management Agency (FEMA). Prior to issuance of the first building permit, the Project Applicant shall obtain a Letter of Map Revision based on Fill (LOMR-F) from FEMA. In accordance with California Civil Code Section 1103, notification must occur to those potentially affected of the risk involved in locating within a flood hazard or dam inundation area. This condition shall be implemented to the satisfaction of the City of Menifee Building and Safety Department.

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1 Federal Emergency Management Agency. 2014. *National Flood Insurance Program, Flood Insurance Rate Map, Riverside County, California and Incorporated Areas.* August 18.

2 Flood Zone X (other flood areas) correspond to areas between the limits of the 0.2 percent annual chance (500-year) flood and areas of 1 percent annual chance (100-year) flood. No base flood elevations or depths have been determined.

Compliance with construction- and operation-phase stormwater requirements, as set forth in **Standard Condition H-1** and **Standard Condition H-2**, would ensure post-development stormwater runoff volume would not exceed the existing, pre-developed condition. Therefore, the Project would not result in substantial erosion or siltation on or off site, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Through compliance with the NFIP Reform Act, NFIP Section 60.3(d), and California Civil Code Section 1103, as specified in **Standard Condition H-3** and **Standard Condition H-4**, Project impacts from construction of structures which could impede or redirect flood flows would be **less than significant**. Mitigation is not required.

d. In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to Project inundation?

Less Than Significant Impact. The City's General Plan EIR indicates parts of Menifee are within existing inundation areas for up to three dams at Diamond Valley Lake and for Lake Perris Dam.[1,2] The Project site is not within any of these dam inundation areas. Each of these dams has been engineered to withstand earthquakes of 7.5 magnitude along the San Jacinto fault and 8.0 magnitude along the San Andreas fault, and the Metropolitan Water District continuously monitors these dams and their foundations for deformation, which would reduce impacts from dam failure to less than significant through buildout of the General Plan.[3]

According to the most recent FIRM,[4] the Project site is within Flood Zone X (Other Areas).[5] A small portion of the northwest corner of the Project site is within a Riverside County Flood Hazard zone. The Project would be developed in compliance with **Standard Condition H-1** through **Standard Condition H-4** to ensure flood hazards are reduced through incorporation of on-site drainage, anchoring methods to prevent floating structures, elevating buildings above flood levels, and flood proofing, which requires buildings to be inspected and certified by a professional engineer, surveyor, or building inspector. The proposed Project will be conditioned to meet these requirements, including compliance with State Civil Code Section 1103 requiring notification to those potentially affected of the risk involved in locating within a flood hazard or dam inundation area. These requirements will be confirmed through the City's plan review process.

Inundation of the proposed Project site by a tsunami is highly unlikely, as the Project site is approximately 29 miles northeast of the Pacific Ocean. As documented in the geotechnical report, with the elevation of the site and distance to the ocean, the Project site is not within a

1 City of Menifee. 2021. *2021 Local Hazard Mitigation Plan*. Map 5: Flood Hazard. Website: https://www.cityofmenifee.us/DocumentCenter/View/12397/Local-Hazard-Mitigation-Plan-LHMP?bidId=.

2 City of Menifee. 2013. *City of Menifee General Plan Draft Environmental Impact Report, SCH #2012071033.* Page 5.9-23. September.

3 *Ibid. Pages 5.9-23 and 5.9-24.*

4 Federal Emergency Management Agency. 2014. *National Flood Insurance Program, Flood Insurance Rate Map, Riverside County, California and Incorporated Areas.* August 18.

5 Flood Zone X (other flood areas) correspond to areas between the limits of the 0.2 percent annual chance (500-year) flood and areas of 1 percent annual chance (100-year) flood. No base flood elevations or depths have been determined.

tsunami-prone area. The site is not near any large bodies of water. Therefore, seiches and tsunamis are not a design concern of the proposed Project.

The risk of Project inundation is low as a result of Metropolitan Water District's continuous monitoring and maintenance of the three dams at Diamond Valley Lake and Lake Perris Dam.[1] Through compliance with **Standard Condition H-1** through **Standard Condition H-4** for the reduction of flood hazards, impacts associated with flood hazards, tsunami, or seiches, or release of pollutants due to project inundation would be **less than significant**. Mitigation is not required.

e. Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The proposed Project would not substantially contribute to groundwater depletion, nor would it interfere with groundwater recharge. The Project does not propose direct additions or withdrawals of groundwater. Furthermore, construction proposed by the Project would not involve construction at depths that would impair or alter the direction or rate of groundwater flow.

In accordance with **Standard Condition H-2,** BMPs would be designed and implemented to ensure post-development stormwater runoff volume or time of concentration does not exceed pre-development stormwater runoff in accordance with the NPDES MS4 Permit; therefore, the Project would not inhibit the percolation of surface water into the groundwater table. Implementation of the NPDES permit in accordance with **Standard Condition H-1** and **Standard Condition H-2** ensures that the State's mandatory standards for maintenance of clean water and the federal minimums are met. BMPs detailed in an SWPPP pursuant to **Standard Condition H-1** ensure water quality impacts would be less than significant during construction. LID BMPs specified in the WQMP pursuant to **Standard Condition H-2** ensures the site's design capture volume would be directed to a detention basin to facilitate infiltration into the water table. Since the Project would not inhibit groundwater recharge potential, and both the EMWD and the Metropolitan Water District determined the Project has adequate water supply to meet demand through the year 2045 under Average Year, Single-Dry Year, and Multiple-Dry Year conditions,[2] the Project would not conflict with any applicable water quality control plan or sustainable groundwater management plan. Impacts would be **less than significant**, and mitigation is not required.

[1] City of Menifee. 2013. *The City of Menifee General Plan Draft Environmental Impact Report, SCH #2012071033.* Pages 5.9-23 and 5.9-24. September.

[2] Eastern Municipal Water District. *2020 Urban Water Management Plan.* Page 7-2, Page 7-7, Page 7-8, and Page 7-9.

5.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒

5.11.1 Impact Analysis

a. Would the Project physically divide an established community?

No Impact. The physical division of an established community typically refers to the construction of a physical feature (such as an interstate or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying area. For instance, the construction of an interstate highway or railroad track through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside the community.

The Project site is bounded to the east by Zeiders Road, beyond which is additional commercial/ industrial development. **Table 3.1: Surrounding Land Uses and Setting** summarizes the existing surrounding land uses, General Plan land use designations, and zoning designations. Uses to the north, south, and west include vacant lots, commercial uses and storages.

The Project does not include the installation of infrastructure or roadways that would divide an existing community or separate existing residential uses from other residential or commercial uses. Development of commercial on the site would contribute to the existing Economic Development Corridor (EDC) pattern of the General Plan. **No impact** related to the division of established community would result from development of the proposed Project. Mitigation is not required.

b. Would the Project 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?

No Impact. The City of Menifee General Plan land use designation for the Project site is EDC. The intent of the EDC designation is to provide areas with a mixture of uses near major corridors along Interstate 215 (I-215) that include commercial uses. The EDC is also intended to provide neighborhood-oriented commercial uses that support residential development such as that proposed by the Project adjacent to the corridor. Since the proposed Project would develop a commercial use on an existing vacant lot near I-215, the Project would not conflict with the City's General Plan. Additionally, **Table 3.1: Surrounding Land Uses and Setting** indicates the Project would be compatible with uses on the surrounding sites.

The Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **No Impact** would occur, and no mitigation is required.

5.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☒	☐
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?	☐	☐	☐	☒

5.12.1 Impact Analysis

a. Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

Less Than Significant Impact. The Surface Mining and Reclamation Act (SMARA) of 1975 established classification of lands that have the potential to generate mineral resources. SMARA's classification system for such lands was established as four Mineral Resource Zones (MRZs) as follows:

- **MRZ-1:** These are areas where the available geologic information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits.
- **MRZ-2:** These are areas where the available geologic information indicates that there are significant mineral deposits or that there is a likelihood of significant mineral deposits. However, the significance of the deposit is undetermined.
- **MRZ-3:** These are areas where the available geologic information indicates that mineral deposits are inferred to exist; however, the significance of the deposit is undetermined.
- **MRZ-4:** These are areas where there is not enough information available to determine the presence or absence of mineral deposits.

The proposed Project site is located on land designated as an MRZ-3.[1] No known mineral extraction has occurred historically or is currently conducted on the site or immediate vicinity. Mineral resource extraction is not a use compatible with the existing on-site and surrounding land uses, nor is the site sufficient in size or location to support productive or cost-effective mineral extraction. Implementation of the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State. **Less than significant impacts** would occur, and no mitigation is required.

[1] City of Menifee. 2013. *City of Menifee General Plan Draft Environmental Impact Report.* State Clearinghouse #2012071033. Figure 5.11-1. September. Website: https://www.cityofmenifee.us/DocumentCenter/View/1111/Ch-05-11-MIN?bidId= (accessed July 2022).

b. Would the Project 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?

According to the City's General Plan Environmental Impact Report, the Project site and vicinity are not on land where known mineral resources or mining sites exist or are likely to exist, and significant mineral resources are unlikely to be designated in Menifee through build-out of the General Plan.[1] Mineral resource extraction would conflict with the intent of the City General Plan, which does not identify the site as an area for mineral resource recovery as the site is designated as an Economic Development Corridor land use. Implementation of the proposed Project would not 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. **No impact** would occur, and no mitigation is required.

[1] City of Menifee. *City of Menifee General Plan Draft Environmental Impact Report.* State Clearinghouse #2012071033. Figure 5.11-1 and Page 5.11-5. September 2013.

5.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project result in:				
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?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
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 2 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?	☐	☐	☐	☒

The information and analysis in this section is based, in part, on the *Caliber Collision Auto Body Shop Project Noise and Vibration Impact Analysis* LSA Associates, Inc. prepared in November, 2024 (Appendix H).

5.13.1 Impact Analysis

a. Would the Project result in 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?

Less Than Significant Impact. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, libraries, and parks are most sensitive to noise intrusion and therefore have more stringent noise exposure targets than commercial or industrial uses that are not subject to impacts such as sleep disturbance. Sensitive land uses generally should not be subjected to noise levels that would be considered intrusive in character. Therefore, the location, hours of operation, type of use, and extent of development warrant close analysis in an effort to ensure that sensitive receptors are not substantially affected by noise. Impacts to noise are evaluated under the short-term (construction) and long-term (operations) scenarios.

Short-Term Noise Impacts (Construction). Two types of short-term noise impacts would occur during Project construction. The first type would be from construction crew commutes and the transport of construction equipment and materials to the Project site and would incrementally raise noise levels on roadways leading to the site. The pieces of construction equipment for construction activities that would move on site, would remain for the duration of each construction phase, and would not add to the daily traffic volume in the Project vicinity. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 84 A-weighted decibels [dBA]), the effect on longer-term (hourly or daily) ambient noise levels

would be small because the number of hourly/daily construction-related vehicle trips would be small compared to the existing hourly/daily traffic volume on Zeiders Road and Scott Road. The grading phase would generate the most trips out of all of the construction phases, at 610 trips per day based on the CalEEMod (Version 2022.1) results in the *Air Quality, Greenhouse Gas Emissions, and Energy Analysis for the Caliber Collision Paint and Auto Body Repair Project* (LSA 2024a). Roadways that would be used to access the Project site are Zeiders Road and Scott Road. Based on Table 5.13.1, Zeiders Road and Scott Road have existing daily traffic volumes of 7,455 and 32,441, respectively, near the Project site. Based on the maximum daily trips generated by construction-related traffic, construction-related traffic would increase noise by up to 0.3 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, no short-term construction-related impacts associated with worker commutes and transport of construction equipment and material to the Project site would occur, and no noise reduction measures would be required.

Table 5.13.1: Existing (2024) Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Zeiders Road Between Scott Road and Project Driveway	7,455	< 50	74	157	66.2
Scott Road Between Haun Road/Zeiders Road and I-215 Southbound Ramps	32,441	94	196	418	71.5
Scott Road Between I-215 Southbound Ramps and I-215 Northbound Ramps	37,535	103	216	461	72

Source: *Caliber Collision Auto Body Shop Project Noise and Vibration Impact Analysis*. Table J. (LSA, November 2024).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibel
ft = foot/feet
I-215 = Interstate 215

The second type of short-term noise impact is related noise generated from construction activities. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. The Project anticipates site preparation and grading, building construction, paving, and architectural coating phases of construction. These various sequential phases change the character of the noise generated on a project site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 5.13.2 lists the maximum instantaneous noise level (L_{max}) recommended for noise impact assessments for typical construction equipment included in the Federal Highway Administration (*FHWA) Highway Construction Noise Handbook* (2006), based on a distance of 50 feet between the equipment and a noise receptor.

Typical noise levels range up to 88 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation and grading phase tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes

Table 5.13.2: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor[1] (%)	Maximum Noise Level (L_{max}) at 50 ft[2]
Backhoe	40	80
Compactor (ground)	20	80
Compressor	40	80
Crane	16	85
Dozer	40	85
Dump Truck	40	84
Excavator	40	85
Flatbed Truck	40	84
Forklift	20	85
Front-End Loader	40	80
Grader	40	85
Impact Pile Driver	20	95
Jackhammer	20	85
Pavement Scarifier	20	85
Paver	50	85
Pickup Truck	40	55
Pneumatic Tools	50	85
Pump	50	77
Rock Drill	20	85
Roller	20	85
Scraper	40	85
Tractor	40	84
Welder	40	73

Source: *FHWA Highway Construction Noise Handbook.* Table 9.1 (FHWA 2006).
Note: The noise levels reported in this table are rounded to the nearest whole number.
[1] The usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.
[2] Maximum noise levels were developed based on Specification 721.560 from the CA/T program to be consistent with the City of Boston, Massachusetts, Noise Code for the "Big Dig" project.
CA/T = Central Artery/Tunnel
FHWA = Federal Highway Administration
ft = foot/feet
L_{max} = maximum instantaneous noise level

excavating machinery such as backfillers, bulldozers, draglines, and front-end loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders.

Project construction is expected to require the use of graders, bulldozers, and water trucks/pickup trucks. Noise associated with the use of each type of construction equipment for the site preparation and grading phase is estimated to be between 55 dBA L_{max} and 85 dBA L_{max} at a distance of 50 feet from the active construction area. As shown in Table 5.13.2, the maximum noise level generated by each grader is assumed to be approximately 85 dBA L_{max} at 50 feet. Each bulldozer would generate approximately 85 dBA L_{max} at 50 feet. The maximum noise level generated by water trucks/pickup trucks is approximately 55 dBA L_{max} at 50 feet from these vehicles. Each doubling of the sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 88 dBA L_{max} at a distance of 50 feet from the active construction area. Based on a

usage factor of 40 percent, the worst-case combined noise level during this phase of construction would be 84 dBA L_{eq} at a distance of 50 feet from the active construction area.

The closest residential property line is approximately 80 ft from the center of the Project site and may be subject to noise levels of 84.4 dBA L_{eq}. Measured ambient noise levels in the Project vicinity range between 50.5 and 72.5 dBA L_{eq} based on the short-term and long-term noise level measurements shown in Tables 5.13.3 and 5.13.4. Although the noise generated by Project construction activities would be higher than the ambient noise levels and may result in a temporary increase in the ambient noise levels, construction noise would stop once Project construction is completed. Compliance with the allowable construction hours pursuant to Section 8.01.010 of the City's Municipal Code and best construction practices listed below would minimize construction noise.

- The construction contractor shall limit construction activities to between the hours of 6:30 a.m. and 7:00 p.m. on Monday through Saturday. No construction shall be permitted outside these hours, on Sunday, or on nationally recognized holidays unless approval is obtained from the City Building Official or City Engineer.

- During all Project site excavation and grading, the Project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.

- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and most noise-sensitive receptors nearest the Project site during all Project construction.

- The construction contractor shall place all stationary construction equipment so that the emitted noise is directed away from the sensitive receptors nearest the Project site.

Short-term (20-minute) noise level measurements were conducted on May 25, 2022, using a Larson Davis Model 824 Type 1 sound level meter. Table 5.13.3 shows the results of the short-term noise level measurements along with a description of the measurement location and noise sources that occurred during the measurement. As shown in Table 5.13.3, the measured average noise levels in the Project vicinity ranged from 54.2 to 55.9 dBA L_{eq}, and the measured maximum noise levels ranged from 62.6 to 71.2 dBA L_{max}.

The long-term (24-hour) noise level measurements were conducted from May 25 to May 26, 2022, using Larson Davis Spark dosimeters. As shown in Table 5.13.3, the daytime noise levels ranged from 57.9 to 72.5 dBA L_{eq} at monitoring location LT-1 and from 50.5 to 66.8 dBA L_{eq} at monitoring location LT-2. The daytime maximum instantaneous noise level ranged from 70.8 to 87.3 dBA at LT-1 and from 63.5 to 82.7 dBA at LT-2. The calculated daily noise levels were 63.1 dBA CNEL at LT-1 and 67.8 dBA CNEL at LT-2.

Table 5.13.3: Short-Term Ambient Noise Level Measurements

Monitor No.	Location	Date	Start Time	Noise Level (dBA)			Noise Sources
				L_{eq}	L_{max}	L_{min}	
ST-1	Located in the front yard of 33255 Zeiders Road, Menifee, CA 92584. At the southeast corner of the property, approximately 30 ft from the front yard's fountain and 20 ft from the southern fence.	5/25/22	10:52 a.m.	54.2	62.6	47.6	Traffic on Zeiders Road. Faint truck loading/ unloading noise from the southeast of the residential property.
ST-2	Western edge of Project site near group of trees. Approximately 100 ft south from the construction and landscaping material yard.	5/25/22	11:25 a.m.	55.9	71.2	50.4	Active cutting noise on site at the northwest corner of the Project site. Truck loading/unloading noise coming from the northwest corner of the Project site.

Source: Noise and Vibration Impact Analysis Memorandum (LSA, 2024).
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum instantaneous noise level

Table 5.13.4: Long-Term Ambient Noise Monitoring Results

Monitoring No.	Location	Noise Level (dBA)			Noise Sources
		L_{eq}	L_{max}	CNEL	
LT-1	Located in the parking lot in front of 27701 Scott Road next to a light pole closest to Zeiders Road, southwest corner of the plaza.	57.9–72.2	70.8–87.3	67.8	Traffic on Zeiders Road and faint traffic on Interstate 215. Some parking lot activity.
LT-2	Located on the property at 33255 Zeiders Road along the southern fenced gate, where the trailer storage and residential property meet.	50.5–66.8	63.5–82.7	63.1	Activity from the construction and landscaping material yard, including noise from workers talking.

Source: Noise and Vibration Impact Analysis Memorandum (LSA, 2024).
Note: The long-term (24-hour) noise level measurements were conducted from May 25 to May 26, 2022.
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous sound level

Therefore, noise impacts associated with construction activities would be **less than significant**. No noise reduction measures are required.

Long-Term Noise Impacts. The guidelines included in the *FHWA Highway Traffic Noise Prediction Model* (FHWA 1977) (FHWA RD-77-108) were used to evaluate traffic-related noise conditions along roadway segments in the Project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values. The existing (2024) ADT volumes were derived from the Project trip generation information contained in the *Caliber Collision Paint and Auto Body Repair Shop Project Traffic Analysis Memorandum* (LSA 2024b) and traffic counts. The standard vehicle mix for Southern

California roadways was used for traffic on these roadway segments. Table 5.13.5 shows the existing (2024) traffic noise levels without and with the Project along roadways in the Project vicinity. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn.

As shown in Table 5.13.5, the Project-related traffic noise would not increase noise levels. Therefore, traffic noise impacts resulting from Project-related traffic on off-site sensitive receptors would be **less than significant**. No noise reduction measures are required.

Operations of the proposed paint and auto body repair shop would generate stationary noise sources that would include heating, ventilation, and air conditioning (HVAC) equipment, pneumatic tools, air compressor, parking activities, and trucks delivering parts supplies and vehicles along with truck unloading activities. Stationary noise sources associated with the Project would potentially affect the existing off-site sensitive land uses. The following provides a detailed noise analysis and discussion of each stationary noise source.

The Project would include a rooftop HVAC unit for the office portion of the Project. The HVAC equipment could operate 24 hours per day. Each HVAC unit would generate a noise level of 44.4 dBA at 50 ft. Section 9.215.060(B)(10) of the City's Development Code (City of Menifee 2019) exempts sound emanating from heating and air conditioning equipment in proper repair. Therefore, noise impacts associated with the on-site HVAC equipment would be **less than significant**. No noise reduction measures are required.

The Project would include service bays within the proposed building to repair vehicles. Noise generated from repair and service activities would include noise generated by a torque gun, vehicle lift, and compressor similar to a typical auto mechanic garage, which would occur during the planned hours of operation from 7:30 a.m. to 5:30 p.m. Monday through Friday and 8:00 a.m. to 12:00 p.m. on Saturday. Noise generated by the torque gun, vehicle lift, and compressor are 73.8 dBA L_{eq}, 60.8 dBA L_{eq}, and 71.0 dBA L_{eq}, respectively, at a distance of 50 ft based on noise level measurements conducted by LSA. The combined noise level from the torque gun, vehicle lift, and compressor operating together at the same time at a worst-case scenario is 75.7 dBA L_{eq} at 50 ft.

The proposed auto body shop building with the overhead doors open on the north and west sides would shield noise generated from auto body shop activities occurring within the building and would provide a minimum noise reduction of 5 dBA and 20 dBA for the residences to the north and south, respectively. The residential property lines are approximately 235 ft north and 35 ft south,

Table 5.13.5: Existing (2024) Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Baseline Conditions
Zeiders Road between Scott Road and Project Driveway	7,455	< 50	74	157	66.2	7,540	< 50	74	159	66.2	0.0
Scott Road between Haun Road/Zeiders Road and I-215 Southbound Ramps	32,441	94	196	418	71.5	32,522	94	196	419	71.5	0.0
Scott Road between I-215 Southbound Ramps and I-215 Northbound Ramps	37,535	103	216	461	72.0	37,578	103	216	461	72.0	0.0

Source: Noise and Vibration Impact Analysis Memorandum (LSA, 2024).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibel
ft = foot/feet
I-215 = Interstate 215

The Project would include surface parking on the north, east, and west sides of the proposed building. Noise generated from parking lot activities would include noise generated by vehicles traveling at slow speeds, engine start-up noise, car door slams, car horns, car alarms, and tire squeals. These activities would occur during the planned hours of operation from 7:30 a.m. to 5:30 p.m. Monday through Friday and 8:00 a.m. to 12:00 p.m. on Saturday. Representative parking activities would generate 60 to 70 dBA L_{max} at 50 ft. It is estimated that parking activities would generate the maximum noise level for a cumulative period of 5 minutes in any hour and parking activities would generate a noise level of 49.2 to 59.2 dBA L_{eq} at 50 ft. The residential property lines are approximately 235 ft north and 95 ft south, respectively, from the center of the parking area.

Trucks delivering parts supplies and vehicles in need of repair along with truck unloading activities for the Project would take place on either the north or west sides of the auto body shop building. These activities would take place during the planned hours of operation from 7:30 a.m. to 5:30 p.m. Monday through Friday and 8:00 a.m. to 12:00 p.m. on Saturday. Noise levels generated from these activities include truck $_{movement}$, backup alarms, air brakes, idling, and unloading activities. These activities would result in a maximum noise similar to noise readings from truck delivery and truck unloading activities for other projects, which would generate a noise level of 75 dBA L_{max} at 50 ft. Although a typical truck unloading process takes an average of 15 to 20 minutes, this maximum noise level occurs in a much shorter period of time (less than 5 minutes). Also, it is estimated that there would be a maximum of five delivery trucks and truck unloading activities per hour, which would result in a cumulative period of 25 minutes in any hour. Based on the assumptions activities above, truck delivery and truck unloading activities would generate a noise level of 61.2 dBA L_{eq} at 50 ft. The residential property lines are approximately 195 ft north and 40 ft south, respectively, from truck delivery and truck unloading activities.

Stationary Noise Impacts. Table 5.13.6 shows the individual and combined stationary noise from the operations of the proposed auto body shop, which include noise generated from auto body shop activities (torque gun, vehicle lift, and compressor), parking, and trucks delivering parts supplies and vehicles along with truck unloading activities. As shown in Table 5.13.6, the combined stationary noise generated from the proposed Project would be 58.2 dBA L_{eq} and 64.8 dBA L_{eq} at the residential property lines to the north and south, respectively. These noise levels would not exceed the City's daytime exterior 10-minute noise standard of 65 dBA L_{eq}.

In addition, interior noise levels at the closest residences were calculated based on windows and doors open, which would have an exterior-to-interior noise reduction of 12 dBA (EPA 1978). Table 5.13.6 shows that interior noise levels from the Project's combined stationary noise at the closest residence to the north and south would be 46.2 dBA L_{eq} and 52.8 dBA L_{eq}, respectively. These noise levels would not exceed the City's daytime interior 10-minute noise standard of 55 dBA L_{eq}. Also, the City's nighttime exterior and interior noise standards would not be exceeded because the proposed Project would not operate during nighttime hours. Therefore, noise impacts associated with Project operations would be **less than significant**. No noise reduction measures are required.

Table 5.13.6: Stationary Noise Levels

Land Use	Direction	Activity	Reference Noise Level at 50 ft (dBA L_{max})	Reference Noise Level at 50 ft (dBA L_{eq})	Distance (ft)	Distance Attenuation (dBA)	Shielding (dBA)	Exterior Noise Level (dBA L_{max})	Exterior Noise Level (dBA L_{eq})	Combined Exterior Noise Level (dBA L_{eq})	Combined Interior Noise Level[2] (dBA L_{eq})
Residential	North	Auto body Repair	--	75.7	235	13.4	5[3]	--	57.3	58.2	46.2
		Parking Activity	70	59.2	235	13.4	0	56.6	45.8		
		Truck[1]	75	61.2	195	11.8	0	63.2	49.4		
Residential	South	Auto body Repair	--	75.7	35	-3.1	20[4]	--	58.8	64.8	52.8
		Parking Activity	70	59.2	95	5.6	0	64.4	53.6		
		Truck[1]	75	61.2	40	-1.9	0	76.9	63.1		

Source: Noise and Vibration Impact Analysis Memorandum (LSA, 2024).

[1] Trucks delivering parts supplies and vehicles along with truck unloading activities.

[2] The interior noise level was calculated based on an exterior-to-interior noise level reduction of 12 dBA with windows and doors open based on the United States Environmental Protection Agency (EPA) Protective Noise Levels: Condensed Version of EPA Levels Document (1978), with a combination of exterior walls, doors, and windows, and standard construction for Southern California (warm climate).

[3] The proposed auto body shop building with the overhead doors open on the north and west side would shield noise generated from auto body shop activities occurring within the building and would provide a minimum noise reduction of 5 dBA.

[4] The proposed auto body shop building with the overhead doors open on the north and west side would shield noise generated from auto body shop activities occurring within the building and would provide a minimum noise reduction of 20 dBA.

dBA = A-weighted decibel

ft = feet/foot

L_{eq} = equivalent continuous sound level

In summary, the proposed Project would not result in the 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. Through compliance with the City's Municipal Code and Development Code pertaining to noise, no substantial temporary or permanent increase in ambient noise levels in the Project vicinity in excess of applicable standards would occur. With no impacts resulting from short-term and long-term ambient noise, impacts would be **less than significant,** and mitigation is not required.

b. Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Outdoors, the motion may be discernible, but without the effects associated with the shaking of a building, there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as the motion of building surfaces, the rattling of items sitting on shelves or hanging on walls, or a low-frequency rumbling noise. The rumbling noise is caused by the vibration of walls, floors, and ceilings that radiate sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 vibration velocity decibels (VdB) or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet from the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 feet (see the Federal Transit Administration [FTA] *Transit Noise and Vibration Impact Assessment Manual* [2018]). When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, both construction of a project and freight train operations on railroad tracks could result in ground-borne vibration that may be perceptible and annoying.

Ground-borne noise is not likely to be a problem because noise arriving via the normal airborne path will usually be greater than ground-borne noise. Ground-borne vibration has the potential to disturb people and damage buildings. Although it is very rare for train-induced ground-borne vibration to cause cosmetic building damage, it is not uncommon for heavy-duty construction processes (e.g., blasting and pile driving) to cause vibration of sufficient amplitudes to damage nearby buildings.[66] Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). The RMS velocity is best for characterizing human response to building vibration, and PPV is used to characterize potential for damage. Decibel

[66] Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*.

notation acts to compress the range of numbers required to describe vibration. Vibration velocity level in decibels is defined as the following:

$$L_v = 20 \log_{10} [V/V_{ref}]$$

where L_v is the VdB, V is the RMS velocity amplitude, and V_{ref} is the reference velocity amplitude, or 1×10^{-6} inches/second (in/sec) used in the United States.

Short-Term Vibration Impacts (Construction). Although vibration levels generated from short-term construction are exempt based on Section 9.215.070 of the City's Development Code (City of Menifee 2019), vibration levels generated from short-term construction were evaluated for the level of human annoyance and potential for building damage. This construction vibration impact analysis discusses the level of human annoyance using vibration levels in VdB and assesses the potential for building damage using vibration levels in PPV (in/sec). Vibration levels calculated in RMS velocity are best for characterizing human response to building vibration, whereas vibration levels in PPV are best for characterizing damage potential. The FTA guidelines indicate that a vibration level up to 0.5 PPV (in/sec) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster) and would not result in any construction vibration damage (FTA 2018). For a non-engineered timber and masonry building, the construction vibration damage criterion is 0.2 PPV (in/sec). For a fragile building, the construction vibration damage criterion is 0.12 PPV (in/sec).

Table 5.13.7 shows the reference vibration levels at a distance of 25 ft for each type of standard construction equipment from the *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018). Outdoor site preparation and grading for the Project are expected to require the use of a large bulldozer and loaded trucks, which would generate ground-borne vibration levels of up to 87 VdB (0.089 PPV [in/sec]) and 86 VdB (0.076 PPV [in/sec]), respectively, when measured at 25 ft.

Table 5.13.7: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	PPV (in/sec)	L_V (VdB)[1]
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer[2]	**0.089**	**87**
Caisson Drilling	0.089	87
Loaded Trucks[2]	**0.076**	**86**
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Sources: *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2018).
[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.
[2] Equipment shown in **bold** is expected to be used on site.
µin/sec = micro-inches per second
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

The greatest vibration levels are anticipated during the site preparation and grading phase. All other phases are expected to result in lower vibration levels. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the Project boundary (assuming the construction equipment would be used at or near the Project boundary), because vibration impacts normally occur within the buildings.

The formulas for vibration transmission are provided below:

$$L_vdB\ (D) = L_vdB\ (25\ ft) - 30\ Log\ (D/25)$$

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

Table 5.13.8 lists the projected vibration levels, from various construction equipment expected to be used on the Project site in the active construction area, to the closest building structures in the Project vicinity. As shown in Table 5.13.8, the closest residential, industrial, and commercial building structures are approximately 175 ft, 580 ft, and 700 ft from the center of the Project, respectively, and would experience a vibration level of up to 74 VdB, 56 VdB, and 51 VdB, respectively. These vibration levels would not result in community annoyance because vibration levels would not exceed the FTA's community annoyance threshold of 78 VdB for daytime residences and 84 VdB for uses not as sensitive to vibration. Other building structures that surround the Project site would experience lower vibration levels because they are farther away.

Table 5.13.8: Potential Construction Vibration Annoyance

Land Use	Direction	Equipment/Activity	Reference Vibration Level (VdB) at 25 ft	Distance (ft)[1]	Vibration Level (VdB)
Residence	North	Large bulldozers	87	330	60
		Loaded trucks	86	330	59
Commercial	Northeast	Large bulldozers	87	700	51
		Loaded trucks	86	700	50
Industrial	Southeast	Large bulldozers	87	580	56
		Loaded trucks	86	580	55
Residence	South	Large bulldozers	87	175	74
		Loaded trucks	86	175	73

Source: Noise and Vibration Impact Analysis Memorandum (LSA, 2024).
Note: The FTA community annoyance thresholds are 78 VdB for daytime residences and 84 VdB for uses not as sensitive to vibration.
[1] Distance from the center of the Project site to the building structure.
ft = foot/feet VdB = vibration velocity decibels
FTA = Federal Transit Administration

Similarly, Table 5.13.9 lists the projected vibration levels from various construction equipment expected to be used on the Project site at the Project construction boundary to the closest building structures in the Project vicinity. As shown in Table 5.13.9, the closest residential, industrial, and commercial building structures are approximately 70 ft, 260 ft, and 400 ft from the Project construction boundary, respectively, and would experience a vibration level of up to 0.019 PPV (in/sec), 0.003 PPV (in/sec), and 0.001 PPV (in/sec), respectively. These vibration levels would not have the potential to result in building damage because the closest residential, industrial, and commercial building structures would be constructed equivalent to or better than non-engineered timber and masonry, and vibration levels would not exceed the FTA

Table 5.13.9: Potential Construction Vibration Damage

Land Use	Direction	Equipment/Activity	Reference Vibration Level at 25 ft	Distance to Structure (ft)[1]	Vibration Level
			PPV (in/sec)		PPV (in/sec)
Residence	North	Large bulldozers	0.089	195	0.004
		Loaded trucks	0.076	195	0.003
Commercial	Northeast	Large bulldozers	0.089	400	0.001
		Loaded trucks	0.076	400	0.001
Industrial	Southeast	Large bulldozers	0.089	260	0.003
		Loaded trucks	0.076	260	0.002
Residence	South	Large bulldozers	0.089	70	0.019
		Loaded trucks	0.076	70	0.016

Source: Noise and Vibration Impact Analysis Memorandum (LSA, 2024).
Note: The FTA-recommended building damage threshold is 0.20 PPV (in/sec) at the receiving nonengineered timber and masonry building.
[1] Distance from the Project construction boundary to the building structure.
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inches per second
PPV = peak particle velocity

vibration damage threshold of 0.2 PPV (in/sec). Other building structures that surround the Project site would experience lower vibration levels because they are farther away. Therefore, construction vibration impacts would be **less than significant**, and no vibration reduction measures are required.

Long-Term Vibration Impacts (Operations). The Project would not generate vibration. In addition, vibration levels generated from Project-related traffic on the adjacent roadways (Zeiders Road and Scott Road) are exempt based on Section 9.215.070 of the City's Development Code. Therefore, vibration impacts from Project-related operations would be **less than significant**, and no vibration reduction measures are required.

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 2 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?

No Impact. French Valley Airport is a public airport that is 4.7 miles southeast of the Project site. Also, Perris Valley Airport is a private airport that is 8.5 miles northwest of the Project site. The airport noise contours for both the French Valley Airport and the Perris Valley Airport in the *Riverside County Airport Land Use Compatibility Plan* (RCALUC 2004) show that the Project site is outside the 55 dBA CNEL noise contour. Although there are no private airstrips within 2 miles of the Project site, Loma Linda University Center – Murrieta has a heliport 1.6 miles southeast of the Project site. The usage of this heliport would be infrequent as it supports emergency responses and would not influence the noise environment at the Project site. Therefore, the Project would not expose people working in the Project area to excessive noise levels and this topic is not further discussed. **No impact** would occur, and no mitigation is required.

5.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

5.14.1 Impact Analysis

a. Would the Project 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)?

Less Than Significant Impact. The proposed Project is a commercial development consisting of the construction of a one-story, 18,717-square-foot building to house the Caliber Collision Paint and Auto Body Repair shop with six bays on 2.39 acres of land. Since the proposed Project is not proposing residential uses, there would be no new generation of residents in Menifee. The proposed Project would be consistent with the Economic Development Corridor standards. As such, implementation of the proposed Project is consistent with planned growth within Menifee, and the proposed Project would not directly or indirectly induce growth in the city. Impacts would be **less than significant,** and mitigation is not required.

b. Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project site is vacant (undeveloped). Housing does not exist on the site, so implementation of the proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **No impact** would occur, and no mitigation is required.

5.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

5.15.1 Impact Analysis

a. Would the Project 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? (ii) Police protection? (iii) Schools? (iv) Parks? (v) Other public facilities?

i. Fire Protection.

The Riverside County Fire Department (RCFD) provides fire protection, fire prevention, and emergency services to the Project site through a contract with the City of Menifee. The City of Menifee is served by four RCFD fire stations within its jurisdiction. The Menifee Fire Station 68, located at 26020 Wickerd Road, approximately 1.8 miles northwest of the site, is the nearest fire station to the Project site. RCFD Station 68 - Menifee, provides fire protection and emergency response services to the Menifee community. The RCFD's mission is to prevent the loss of life and property. In addition to responding to fires, RCFD Station 68 - Menifee also responds to medical emergencies, motor vehicle accidents, rescue calls, and incidents involving hazardous materials. Average travel time between Fire Station 68 and the Project site is 4 minutes. The Project site is in a suburban setting already served by the RCFD. The proposed Project would not develop a use that would adversely affect travel time between the nearest fire station and the Project site, nor would the Project require increased fire protection services.

As the City of Menifee contracts with the County of Riverside for firefighting services, the County of Riverside sets service thresholds for each fire station within the RCFD service area. The County determines the need for new fire stations through the following thresholds:

- One fire station is able to serve 2,000 residential units.
- One fire station is able to serve 3,500,000 square feet of commercial usage.
- One fire station is able to serve 3,500,000 square feet of industrial usage (which includes light industrial, heavy industrial, and business park).

Based on these thresholds, it is estimated that the four existing RCFD stations within Menifee are capable of serving the site, as the proposed Project does not include residential development. Additionally, Project design features incorporated into the structural design and layout of the proposed development would keep service demand increases to a minimum. For example, the Project must coordinate with the RCFD during the development review process to identify and mitigate any fire hazards and ensure adequate emergency water flow, fire-resistant design and materials, early warning systems and evacuation routes, restricted red curb areas and emergency vehicle access entries from Zeiders Road. To further offset incremental impacts to existing and future RCFD service, the Project Applicant would be required to pay Development Impact Fees (DIFs) to the RCFD for fire service as a condition of project approval. The DIFs paid to the RCFD would increase the capital funding available to develop new fire stations as needed to facilitate adequate service by the RCFD. The proposed Project would also be designed in compliance with the current California Fire Code as adopted by the City of Menifee through Municipal Code Chapter 8.20. The California Fire Code provides guidelines on fire hydrant size and outlet locations, building sprinkler system requirements, fire water flow requirements, building fire load occupancy requirements, vegetative clearance requirements around buildings, fire resistant construction materials, and adequate circulation clearance for fire apparatus.

Prior to approval of final building permits, the City of Menifee and RCFD representatives would review the Project plans to ensure that development on the site would comply with the California Fire Code and Municipal Code Chapter 8.20. With payment of the DIFs and development of the proposed Project in compliance with the applicable regulations, the Project would not preclude existing fire stations from meeting the increased incremental demand for fire protection services in addition to RCFD's existing service capacity.

Any future construction of new or expansion of existing fire protection facilities would be subject to Project-level environmental review and site-specific mitigation as appropriate to ensure significant environmental impacts are avoided or mitigated at the time such development actions are proposed to or by the City. The proposed Project, therefore, would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance standards. Impacts would be **less than significant,** and mitigation is not required.

ii. Police Protection

Prior to July 2020, the Riverside County Sheriff's Department provided police protection to Menifee. As of July 2020, the City of Menifee established the Menifee Police Department, consisting of a

patrol division, SWAT division, traffic division, and K9 division. The Menifee Police Department operates out of a facility at 29714 Haun Road (approximately 3.5 miles north of the Project site).

The proposed Project could increase law enforcement calls for service to the site, as it would be developed on vacant land. The proposed Project would implement Crime Prevention through Environmental Design (CPTED) techniques that would discourage and or reduce crime from occurring on site. Such CPTED techniques would include, but not be limited to, surface drive aisle lighting, building façade lighting, low-lying landscaping designed to minimize opportunities for concealment, continued maintenance activities on the site, deadbolts/locks on building exterior doors, and perimeter retaining walls.

An incremental increase in law enforcement calls to the Project site could occur; however, such calls would be consistent or lesser than the types of calls the Menifee Police Department responds to at similar residential developments in Menifee, since the Project proposed a commercial development.

As detailed in response to Checklist Question 5.14(a), implementation of the proposed Project is consistent with planned growth within Menifee and would not induce substantial population growth in the City or region. Therefore, the Project's increase in demand of new or expanded police services would be negligible. Additionally, through the execution of mutual aid agreements maintained with neighboring jurisdictions, the City would have additional police services to provide assistance during major emergencies.

Pursuant to Chapter 8.02 (Development Impact Fees) of the Menifee Municipal Code, the Project applicant would pay fees to be used for capital improvements to the Menifee Police Department when required. The City monitors police staffing levels as part of the annual budgeting process to ensure that adequate police protection can continue even after new development projects are approved and constructed. Therefore, projections made by the Menifee Police Department and the City ensure that adequate police protection would be maintained as development of the Project occurs.

Any future construction of new or expansion of existing police protection facilities would be subject to project-level environmental review and site-specific mitigation as appropriate in order to ensure significant environmental impacts are avoided or mitigated at the time such development actions are proposed to or by the City. Since the Project is proposed in accordance with the planned development of the site per the City General Plan and would result in a no increase in City population, the Project would not degrade the Menifee Police Department's performance to the point that a new facility or expansion of an existing facility, the construction of which could cause significant environmental impacts, would be needed. Impacts would be **less than significant**, and mitigation is not required.

iii. Schools

The Project site proposes a commercial development and does not provide any residential uses that would increase Menifee's population.

The closest school to the Project site is Oak Meadows Elementary School, 0.6 mile east of the city boundary in Murrieta at 28600 Poinsettia Street.

California Government Code (Section 65995[b]) establishes the base amount of allowable developer fees imposed by school districts. Per California Government Code, "The payment or satisfaction of a fee, charge, or other requirement levied or imposed … are hereby deemed to be full and complete mitigation of the impacts … on the provision of adequate school facilities." The Project would be required to pay these development fees in accordance with Government Code 65995 and Education Code 17620. As such, payment of school impact fees by the Project applicant would be considered adequate mitigation pertaining to potential impacts to schools. The proposed Project, therefore, would not result in substantial adverse physical impacts associated with the provision of new or physically altered education facilities, new for new or physically altered education facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance standards. Impacts would be **less than significant,** and mitigation is not required.

iv. Parks.

See Section 5.16, Recreation, for analysis on parks. Impacts were found to be less than significant.

v. Other Public Facilities.

Development of the proposed Project would not substantially increase demand for other public services, including libraries, community centers, and public healthcare facilities, since the Project proposes commercial development and not residential.

As is the case for fire, police, school, and park facilities, the Project would be required to pay development fees used to fund capital costs associated with constructing new public facility structures and purchasing equipment for new public facilities, including libraries, community centers, and public healthcare facilities. Any future construction of new or expansion of existing park facilities would be subject to project-level environmental review and site-specific mitigation as appropriate in order to ensure significant environmental impacts are avoided or mitigated at the time such development actions are proposed to or by the City.

As detailed in Section 5.14, the Project would not induce substantial population growth in Menifee or the region, as the Project is consistent with the planned development of the site. Any increase in land use or development intensity would be negligible, and no potential cumulative overburdening of other public facilities requiring new or physically altered facilities is expected to occur. Impacts would be **less than significant,** and mitigation is not required.

5.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

5.16.1 Impact Analysis

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?

or

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?

Less Than Significant Impact. The proposed Project is a commercial development consisting of the construction of a one-story, 18,717-square-foot building to house the Caliber Collision Paint and Auto Body Repair shop with six bays, on 2.39 acres of land. Since the proposed Project is not proposing residential uses, there would be no new generation of residents in the city that would result in the construction or expansion of recreational facilities. The proposed Project would be consistent with the Economic Development Corridor standards. The Project is consistent with the planned growth of Menifee and the region and therefore would not generate a substantial increase in population within the city. However, the Project may generate employees who may increase the use of parks/recreation facilities. Accordingly, the increased use of parks and other recreational facilities would be negligible. Additionally, the Quimby Act authorizes cities to require developers to set aside conservation easements, and or have developers pay development impact fees for park improvements. The City issued a new memorandum regarding application development impact fees for new residential and commercial/industrial projects on July 21, 2024.[67] These development fees are purposed to defray all or a portion of the cost of public facilities related to the development projects.

No substantial physical deterioration of neighborhood or regional parks would occur or be accelerated. Impacts are **less than significant,** and mitigation is not required.

[67] City of Menifee. 2024. Development Impact Fees. https://www.cityofmenifee.us/DocumentCenter/View/20704/Development-Fee-Memo---July-1-2024-to-June-30-2025 (accessed September 9, 2024).

5.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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* §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?	☐	☐	☒	☐

The discussion and analysis below are based on the *Caliber Collision Paint and Auto Body Repair Shop Project Traffic Analysis Memorandum* (*Traffic Analysis Memorandum)* (Appendix I) that LSA Associates, Inc. prepared on October 16, 2024.

5.17.1 Impact Analysis

a. Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact. This section discusses potential impacts to the circulation system, transit system, bicycle system, and pedestrian facilities in Menifee.

State CEQA Guidelines Section 15064.3 "describes specific considerations for evaluating a project's transportation impacts" and provides that, except for roadway capacity projects, "a project's effect on automobile delay shall not constitute a significant environmental impact." (*State CEQA Guidelines*, Section 15064.3(a).) *State CEQA Guidelines* Section 15064.3 further specifies that "vehicle miles traveled is the most appropriate measure of transportation impacts." The Traffic Analysis Memorandum included a level of service traffic study and a vehicle miles traveled (VMT) analysis to analyze trip generation of the proposed Project.

The City of Menifee Engineering Department *LOS Traffic Study Guidelines* (TS Guidelines) dated October 2020, states that a LOS study may not be required if the Project is estimated to generate less than 50 peak hour trips.

Trip generation for the Project was developed using the statement of operations included in the Conceptual Site, Grading, Drainage, Circulation and Utility Plan, developed by Latitude 33, dated May 2024. The statement of operations summarizes the estimated number of employees and customers per day. The Project would have 20 full-time employees and approximately 13 to 15 customers on a typical weekday. Additionally, the Project's operational hours would be from 7:30 a.m. to 5:30 p.m. Monday through Friday and possibly 8:00 a.m. to 12:00 p.m. on Saturdays.

Based on the Project's statement of operation, the Project is anticipated to have 20 full-time employees. Therefore, it could be estimated that the Project would generate 40 daily employee trips (inbound and outbound combined). Based on the operational hours, these trips could be estimated as peak-hour trips, with 20 inbound trips occurring during a.m. peak hour, and 20 outbound trips occurring during the p.m. peak hour. Additionally, the Project is anticipated to have 13 to 15 customers per day and could be estimated that the Project would generate 45 daily customer trips (inbound and outbound combined) for the 15 customers per day. Of these 45 trips, approximately 5 customer trips may occur during the a.m. peak hour and 5 customer trips may occur during the p.m. peak hour. Since the anticipated number of peak-hour trips generated by the proposed Project is lower than the 50-trip threshold established by the City's Traffic Study Guidelines, a LOS study is not required for the Project as it would be consistent with the City of Menifee Engineering Department LOS Traffic Study Guidelines.

According to the City's Traffic Study Guidelines, a significant impact occurs when a project conflicts with adopted plans, policies, or programs regarding active transportation or public transit facilities, or otherwise decreases the performance or safety of such facilities.

Currently, there are no existing bikeways along Scott Road and Zeiders Road in the Project vicinity. Based on City's General Plan Circulation Element, adopted in 2013, future Class II on-street bicycle lanes will be added along both directions of Scott Road and future Class I off-road trail will be added along Haun Road and Zeiders Road within the Project vicinity. The Project will not affect any proposed bicycle facilities within the study area. As such, the Project would not decrease the performance or safety of proposed bicycle facilities.

According to the City's General Plan Circulation Element, the existence of sidewalks provides more transportation choices for non-work trips, which can replace some automobile trips, reducing growth in congestion and air pollution. Within the Project vicinity, currently there are paved sidewalks on the north side of Scott Road and the east side of Zeiders Road. The Project would add sidewalks along the Project frontage on the west side of Zeiders Road. As such, the Project would help eliminate existing sidewalk gaps and would increase the performance or safety of the existing pedestrian facilities.

The nearest bus stops from the Project site are 0.75 mile away, located at the southwest and southeast corners of the intersection of Antelope Road/Heritage Market Place. Riverside Transit Agency (RTA) bus Route 61 serves these bus stops. RTA bus Route 61 connects Menifee to communities in adjacent jurisdictions such as Perris, Sun City, Murrieta, and Temecula. At present, there are no proposed service changes in RTA's transit network. As such, the Project would not decrease the performance or safety of any existing or proposed public transit facilities.

As summarized above, the Project does not conflict with existing or proposed bicycle, pedestrian, and public transit facilities, nor does it conflict with the City's Traffic Study Guidelines regarding LOS. Therefore, it can be considered to conform to all adopted policies, plans, or programs concerning these facilities Impacts would be **less than significant.**

b. Would the Project conflict or be inconsistent with CEQA Guidelines *§15064.3, subdivision (b)?*

Less Than Significant Impact. *State CEQA Guidelines* Section 15064.3, subdivision (b) establishes VMT criteria in lieu of LOS for analyzing transportation impacts and was signed into law as Senate Bill 743 in 2013.

The *City of Menifee Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* (*VMT Guidelines*) was adopted on June 3, 2020, and updated January 2022.[68] The *VMT Guidelines* include the Project screening criteria, VMT analysis methodologies, and VMT metrics and thresholds for projects under the City's jurisdiction. Per the *VMT Guidelines*, commercial projects in a low VMT generating area/Traffic Analysis Zone and consistent with the City's General Plan land use are presumed to have a less than significant impact and can be screened out from further VMT analysis. Based on the *VMT Guidelines*, the Western Riverside Council of Governments VMT Screening tool should be used for identifying whether a project is in a low VMT generating area. The screening tool and the numeric threshold included in the *VMT Guidelines* were developed using the Riverside County Transportation analysis Model and the *VMT Guidelines* indicate daily total VMT per service population should be used as the VMT metric for evaluation.

With the implementation of the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on VMT. The analysis was conducted pursuant to the *VMT Guidelines*, updated January 2022.

Pursuant to the City's VMT analysis guidelines Project Screening "Step 3: Project Type Screening", projects generating fewer than 110 daily vehicle trips could be presumed to have a less than significant impact on VMT. As shown in Table 5.17.1, the Project is anticipated to generate 85 daily trips, which is lower than the City's daily trip threshold of 110 daily vehicle trips. Therefore, based on the City's *VMT Guidelines*, the Project could be screened out from a detailed VMT analysis based on the project type screening and is anticipated to have a less than significant VMT impact.

Table 5.17.1: Project Trip Generation

Land Uses Proposed Collision Center	**A.M Peak Hour**			**P.M Peak Hour**			**Daily Trips**
Units: 18.60 TSF	**In**	**Out**	**Total**	**In**	**Out**	**Total**	
Employee Trip Generation	20	0	20	0	20	20	40
Customer Trip Generation	3	2	5	2	3	5	45
Total Trip Generation	***23***	***2***	***25***	***2***	***23***	***25***	***85***

Source: *Caliber Collision Auto Body Shop Project Traffic Analysis Memorandum* (LSA, 2024).
Note: The trip generation was developed based on the statement of operations from the conceptual site plan.
TSF =thousand square-feet

Additionally, the existing nearby Caliber Collision facilities are in Hemet, Lake Elsinore, and Murrieta. It is anticipated that customers in the vicinity of the Project location would use the proposed Project

[68] City of Menifee. 2020c. *City of Menifee Traffic Impact Analysis Guidelines for Vehicle Miles Traveled.* June 3.

instead of traveling to these existing facilities. As such, the Project would help reduce the total regional VMT. Impacts are considered to be **less than significant.** No mitigation is required.

c. Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The design of the proposed Project does not include any geometric design features or incompatible uses that could substantially increase circulation/traffic hazards. The proposed Project would include a commercial development consisting of the construction of a one-story, 18,717-square-foot building to house the Caliber Collision Paint and Auto Body Repair shop with six bays on 2.39 acres of land on the east side of Zeiders Road.

Development of the site as proposed would facilitate walkable access to commercial, institutional, and potential employment centers along the Economic Development Corridor-Southern Gateway (ECD-SG), which features recently improved pedestrian facilities at major intersections.

The proposed Project would be required to design, construct, and maintain structures, roadways, and facilities in accordance with applicable standards governing vehicular access. Construction activities that may temporarily restrict vehicular traffic would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Development of the Project site includes build-out of the ultimate right-of-way of Zeiders Road along the site frontage, which would provide sidewalk facilities for pedestrians and additional road width for vehicles and bicycles to operate. Accordingly, substantial increases in hazards due to design features or incompatible uses would not occur, and impacts would be **less than significant.** Mitigation is not required.

d. Would the Project result in inadequate emergency access?

Less Than Significant Impact. The proposed Project is required to design, construct, and maintain structures, roadways, and facilities in accordance with applicable standards governing vehicular access, resulting in the provision of adequate vehicular access that would provide for adequate emergency access and evacuation. Construction activities that may temporarily restrict vehicular traffic are required to include adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Access to the commercial building would be provided via internal drive aisles constructed pursuant to the 2019 California Fire Code Section 503 (Fire Apparatus Access Roads). Additionally, Section 503.1.1 (Buildings and Facilities) and Section 503.2.1 (Dimensions) of the current California Fire Code would all be followed in development of the proposed Project to ensure that emergency vehicles and first responders have sufficient access throughout the Project site and that adequate infrastructure, such as fire hydrants, and emergency evacuation procedures are incorporated into the Project design.

The Project access and circulation design would be subject to review and approval by the Riverside County Fire Department, the City Police Department, the City Traffic Engineer, and the Public Works Department during the City's precise plan review process. The Fire Marshal may impose additional requirements to ensure protection of life and property, including, but not limited to additional fire hydrants, increased turnaround ability, increased sprinkler density and coverage, and additional

means of access/egress. Impacts related to emergency access would remain **less than significant.** Mitigation is not required.

5.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, 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, 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 Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

5.18.1 Impact Analysis

a. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, 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, 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

Less Than Significant with Mitigation Incorporated. Assembly Bill [AB] 52, Chapter 532, Statutes of 2014, requires that Lead Agencies evaluate Project's potential to impact "tribal cultural resources." Such resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register of Historical Resources (California Register) or included in a local register of historical resources." AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a "tribal cultural resource."

Per AB 52 (specifically PRC 21080.3.1), Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects. Pursuant to provisions of AB 52, the City contacted the following Native American tribes on April 26, 2022:

- Pechanga Band of Luiseño Indians
- Rincon Band of Luiseño Indians
- Soboba Band of Luiseño Indians
- Agua Caliente Band of Cahuilla Indians

Of these tribes, the Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians requested consultation with the City of Menifee pursuant to Public Resources Code 21080.3.1. **Mitigation Measures TCR-1** through **TCR-5** and **Mitigation Measures CUL-1** through **CUL-5,** previously referenced in Section 5.5 of this IS/MND (Cultural Resources), apply to potential impacts to tribal cultural resources. These measures were developed and agreed to during City and tribal consultation and will be applied to the proposed Project.

Mitigation Measure TCR-1 **Native American Monitoring (Pechanga).** Tribal monitor(s) shall be required on-site during all ground-disturbing activities, including grading, stockpiling of materials, engineered fill, rock crushing, etc. The land divider/permit holder shall retain a qualified tribal monitor(s) from the Pechanga Band of Luiseno Indians. Prior to issuance of a grading permit, the developer shall submit a copy of a signed contract between the above-mentioned Tribe and the land divider/permit holder for the monitoring of the project to the Community Development Department and to the Engineering Department. The Tribal Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground-disturbance activities to allow recovery of cultural resources, in coordination with the Project Archaeologist.

Mitigation Measure TCR-2 **Native American Monitoring (Soboba).** Tribal monitor(s) shall be required on-site during all ground-disturbing activities, including grading, stockpiling of materials, engineered fill, rock crushing, etc. The land divider/permit holder shall retain a qualified tribal monitor(s) from the Soboba Band of Luiseno Indians. Prior to issuance of a grading permit, the developer shall submit a copy of a signed contract between the above-mentioned Tribe and the land divider/permit holder for the monitoring of the project to the Community Development Department and to the Engineering Department. The Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground-disturbance activities to allow recovery of cultural resources, in coordination with the Project Archaeologist.

Mitigation Measure TCR-3 **Cultural Resources Disposition.** In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:

b. One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the City of Menifee Community Development Department:

i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources.

ii. Reburial of the resources on the Project property. The measures for reburial shall include, at least, the following: Measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed, with an exception that sacred items, burial goods and Native American human remains are excluded. Any reburial process shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV report. The Phase IV Report shall be filed with the City under a confidential cover and not subject to Public Records Request.

If preservation in place or reburial is not feasible then the resources shall be curated in a culturally appropriate manner at a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological materials have been received and that all fees have been paid, shall be provided by the landowner to the City. There shall be no destructive or invasive testing on sacred items, burial goods and Native American human remains. Results concerning finds of any inadvertent discoveries shall be included in the Phase IV monitoring report.

Mitigation Measure TCR-4 **Human Remains.** If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from

disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Mitigation Measure TCR-5 **Non-Disclosure of Location Reburials.** It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r)., parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

With implementation of **MM TCR-1** through **TCR-5** and **MM CUL-1** through **CUL-5,** impacts to tribal cultural resources would be **less than significant**.

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 Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant with Mitigation Incorporated. CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) is listed in, or determined eligible for listing in, the California Register; (2) is listed in a local register of historical resources as defined in PRC Section 5020.1(k); (3) is identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) is determined to be a historical resource by a project's Lead Agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5[a]).

A resource may be listed as a historical resource in the California Register if it meets any of the following National Register of Historic Places criteria as defined in PRC Section 5024.1(C):

a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

b. Is associated with the lives of persons important in our past.

c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possess high artistic values.

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

A "substantial adverse change" to a historical resource, according to PRC Section 5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

A cultural resources record search, additional research, and a field survey were conducted for the proposed Project as part of the Cultural Resources Assessment (Appendix D). Data from the Eastern Information Center indicate there have been 56 cultural resource studies previously conducted within 0.5 mile of the proposed Project site, none of which included any portion of the Project area. Although no resources were previously documented within the Project area, 34 have been recorded within 0.5 mile, including prehistoric and historic period sites and isolates. The nearest prehistoric resource (33-028615) is approximately 870 meters (approximately 0.5 mile) north of the Project area. **Mitigation Measure TCR-4** would be implemented in the event human remains are discovered during Project construction and they are identified as potential Native American remains. With the implementation of **Mitigation Measure TCR-1** through **TCR-5** and **Mitigation Measure CUL-1** through **CUL-5,** impacts to tribal cultural resources determined significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1 with Native American input would be reduced to **less than significant** levels.

5.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

5.19.1 Impact Analysis

a. Would the Project 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?

Less Than Significant Impact. The Project site plans prepared by the applicant indicate that the Eastern Municipal Water District (EMWD) provides water and sewer service to the Project site, The Southern California Gas Company provides natural gas to the Project site, Southern California Edison provides electricity to the site, and Frontier Communications provides telephone, wi-fi/internet and cable service to the site.

Water. The EMWD provides potable and non-potable water to the City of Menifee and the Project site. A water line is runs along Zeiders Road near the site. The proposed Project would connect to the existing water infrastructure to provide both potable and non-potable water to the site. Water distribution lines would be installed through the Project site. The necessary on-site water distribution installation is included as a design feature of the Project that is analyzed within the footprint of the site and buildout of Zeiders Road along the site frontage and therefore would not result in any physical environmental effects beyond what is analyzed in this environmental document.

The EMWD would serve the Project site upon review of Project plans and compliance with all applicable regulations. Implementation of the proposed Project would not require or result in

the relocation or construction of new water infrastructure that would cause significant environmental effects. Impacts would be **less than significant**, and mitigation is not required.

Wastewater. The EMWD collects wastewater in Menifee, treats flows at the Sun City Regional Wastewater Reclamation Facility (RWRF), and conveys them to the Perris RWRF for treatment. The Sun City RWRF intakes 2.4 million gallons/day of wastewater, has a capacity of 3 million gallons/day, and will be ultimately developed to intake 15 to 21 million gallons/day.[69] The Perris Valley RWRF intakes 15.5 million gallons per day, has a capacity of 22 million gallons per day, and will be ultimately developed to treat 100 million gallons of wastewater per day.[70] An existing sewer line runs along Zeiders Road and would serve the Project site.

According to the Menifee General Plan Environmental Impact Report (EIR), commercial uses generate approximately 300 gallons of wastewater per capita per day.[71] The amount of wastewater generated daily by the proposed Project would equate to 0.0005 percent[72] of the current surplus treatment capacity of the Sun City RWRF and 0.00004 percent[73] of the current surplus treatment capacity of the Perris Valley RWRF. Based on the existing daily treatment capacity surplus and the inflow of both plants, the Project would be adequately served by wastewater conveyance and disposal.

As part of the Project's conditions of approval, the Applicant would be required to provide sewer-loading calculations to the City to ensure the existing infrastructure in Zeiders Road is correctly sized to continue to provide adequate service to the Project site. Any required improvements to the existing infrastructure would be within City right-of-way or on properties that have already been developed as a condition of Project approval, so no additional physical impacts to the environment are expected. Impacts would be **less than significant,** and mitigation is not required.

Stormwater. The proposed Project is expected to maintain the existing drainage pattern. Upon development of the site, as discussed in Section 5.10 Hydrology and Water Quality of this IS/MND, drainage of stormwater on site would be conveyed to the west of the Project site to the proposed biofiltration basin.

The City requires all stormwater facilities of the proposed Project to interconnect with existing municipal stormwater conveyance facilities. The precise interconnection locations are determined at the precise plan stage, but they are expected to be either on site or within the Zeiders Road right-of-way in areas already disturbed and developed with infrastructure. The City

69 Eastern Municipal Water District. n.d.-a. *Sun City Regional Water Reclamation Facility*. Website: https://content.emwd.org/sites/default/files/migrate-documents/suncityrwrffactsheet.pdf (accessed 9/9/2024).

70 Eastern Municipal Water District. n.d.-b. *Perris Valley Regional Water Reclamation Facility*. https://content.emwd.org/sites/default/files/migrate-documents/pvrwrffactsheet.pdf (accessed 9/9/2024).

71 City of Menifee. 2013. *The City of Menifee General Plan Draft Environmental Impact Report, SCH #2012071033.* September.

72 300 gallons per day/600,000 gallon current Sun City RWRF surplus treatment capacity per day = 0.0005 percent of current surplus treatment capacity.

73 300 gallons per day/8,200,000 gallon current Perris Valley RWRF surplus treatment capacity per day = 0.00004 percent of current surplus treatment capacity.

requires all line size modifications or interconnections to be designed in accordance with applicable provisions of the City Municipal Code and to the satisfaction of the City Engineer.

The necessary on-site and off-site storm water facilities are included as design features of the Project and are analyzed within the footprint of the site and buildout of Zeiders Road width along the site frontage. Furthermore, compliance with construction- and operation-phase stormwater requirements, as set forth in **Standard Condition H-1** and **Standard Condition H-2**, would ensure post-development storm water runoff volume would not exceed the existing, pre-developed condition. Therefore, the Project would not result in the need to upgrade stormwater drainage facilities not already analyzed in this IS/MND. Implementation of the proposed Project would not require or result in the relocation or construction of new off-site stormwater infrastructure that would cause significant environmental effects. Impacts would be **less than significant,** and mitigation is not required.

Electricity, Natural Gas, and Telecommunications. The proposed Project would tie into existing electrical, natural gas, and telecommunications infrastructure that exists along Zeiders Road adjacent to the site. Such connections may require trenching within the Zeiders Road right-of-way; however, construction to connect to existing electrical, natural gas, and telecommunications infrastructure would take place in previously disturbed areas and within the analytical footprint of the proposed Project. No overhead power poles/circuits exist on the Project site. Implementation of the proposed Project would not require the relocation or construction of new electrical/natural gas/telecommunications infrastructure off site that would cause significant environmental effects. Impacts would be **less than significant,** and mitigation is not required.

b. Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. The EMWD supplies water to Menifee. The *2020 Urban Water Management Plan* indicates that the EMWD uses local and imported water to supply potable and non-potable water within its jurisdictional boundary.[74] EMWD produces potable groundwater from two management plan areas within the San Jacinto Groundwater Basin, including the West San Jacinto Groundwater Basin Management Plan area and the Hemet/San Jacinto Groundwater Management Plan area.

The EMWD imports approximately half of its water supply from the Metropolitan Water District, which projects it would have adequate supply to meet demand of all of its member agencies through 2045 under Average Year, Single-Dry Year, and Multiple-Dry Year conditions.[75] Through a combination of locally sourced groundwater in conjunction with imported water from the Metropolitan Water District, the EMWD anticipates to have sufficient water supplies to meet demand through the year 2045 under Average Year, Single-Dry Year, and Multiple-Dry Year conditions.[76] The EMWD models each scenario based on the land use and zoning designations of

74 Eastern Municipal Water District. 2021. *2020 Urban Water Management Plan.* Page E-2. July 1.
75 Ibid. Page 7-2.
76 Ibid. Page 7-7, Page 7-8, and Page 7-9.

each local jurisdiction it serves. As such, the proposed Project within Menifee is already accounted for in the water (groundwater) supply and demand scenarios determined by EMWD. Furthermore, the EMWD does not currently identify "threats to its groundwater supply that cannot be mitigated by treatment or blending, and EMWD does not anticipate a significant loss of supply due to water quality issues."[77] Sufficient water supplies would be available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be **less than significant,** and mitigation is not required.

c. Would the Project 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?

Less Than Significant Impact. The two wastewater treatment plants serving the Project site have an existing combined treatment capacity of 25 million gallons per day and operate at 17.9 million gallons of wastewater intake per day (a combined 7.1 million gallon per day treatment surplus capacity). The proposed Project is estimated to generate approximately 300 gallons of wastewater per day that would be conveyed to and treated by Sun City and/or Perris Valley RWRFs. As such, the wastewater treatment provider (EMWD) that serves the Project site would have adequate capacity to serve the Project's demand in addition to the provider's existing commitments. Impacts would be **less than significant,** and mitigation is not required.

d. Would the Project 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?

Less Than Significant Impact. Solid waste generated in Menifee and at the Project site would be disposed at either Badlands Sanitary Landfill or El Sobrante Landfill. The Badlands Sanitary Landfill at 31125 Ironwood Avenue in Moreno Valley, operates Monday through Saturday from 6:00 a.m. to 4:30 p.m. and accepts the following types of waste: agricultural, asbestos, ash, construction/ demolition, contaminated soil, dead animals, green materials, industrial waste, inert waste, liquid waste, metals, mixed municipal, sludge (bio solids), tires, and wood waste.

In November 2022, Riverside County circulated a Notice of Determination to adopt an Initial Study/ Mitigated Negative Declaration for the Badlands Landfill Integrated Project, a project to revise the landfill's Solid Waste Facility Permit to expand operations and capacity. The revised permit would increase the permitted disturbance area of the landfill from 278 acres to 811 acres, which includes expanding the disposal footprint from 150 acres to 396 acres, thereby providing an additional 50 years of needed landfill capacity. The permit would increase the maximum permitted daily tonnage by 500 tons per day, from 4,500 tons per day to 5,000 tons per day. The maximum design capacity of the landfill will increase from 34.4 million cubic yards to 86 million tons (cubic yards not stated), resulting in a new closure date of 2073.[78]

[77] Ibid. Page 7-4.

[78] Riverside County Department of Waste Services. 2022. *Badlands Landfill Integrated Project Notice of Determination*. Website: https://ceqanet.opr.ca.gov/2019049142/4 .

The El Sobrante Landfill, 10910 Dawson Canyon Road in Corona, accepts tires, mixed municipal solid waste, contaminated soil, and construction/demolition waste. As of 2022, the landfill reported 121,812,354 tons of remaining capacity, equating to approximately 35 years of site life remaining and an estimated closure date of 2057. The El Sobrante Landfill has a daily disposal capacity of up to 10,000 tons. [79]

Construction activities on the Project site would generate solid waste, of which at least 65 percent of non-hazardous material would be diverted to a material recycling facility. The Menifee General Plan EIR indicates that commercial units in Menifee generate 240.5 pounds of solid waste per day each.[80] Based on these generation factors, the proposed Project would generate 0.12 tons of solid waste per day (361.35 tons annually) once operational.[81] The 0.12 ton of solid waste per day is below the maximum permitted daily tonnage accepted by the Badlands Landfill and El Sobrante landfill; as such, existing landfills would adequately serve the Project site.

Per the California Green Building Code (CALGreen), a minimum of 65 percent of debris would be diverted to a material recycling facility, thus reducing the input of solid waste to Badlands Landfill and El Sobrante Landfill. The Project would not 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. Impacts would be **less than significant,** and mitigation is not required.

e. Would the Project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. Solid waste generated during Project operation would be managed pursuant to the California Integrated Waste Management Act of 1989 (Assembly Bill 939), which requires each city's or county's source reduction and recycling element to include an implementation schedule demonstrating at least 50 percent diversion of solid waste from landfill disposal or transformation on and after January 1, 2000. In addition, Construction waste would be subject to Part 11 of the Title 24 Building Energy Efficiency Standards (CALGreen), which requires a minimum of 65 percent of construction waste be diverted from landfills for reuse and/or recycling. Project compliance with the CALGreen Program is required as a matter of regulatory policy. The proposed Project must comply with the City's waste disposal requirements as well as the California Green Building Code and, as such, would not conflict with any federal, State, or local regulations related to solid waste. Impacts would be **less than significant,** and mitigation is not required.

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79 Riverside County Waste Resources*. 2022 El Sobrante Landfill Annual Report*. https://rcwaste.org/sites/g/files/aldnop376/files/2023-09/Final%202022%20Annual%20Reports.pdf .

80 City of Menifee. 2013. *The City of Menifee General Plan Draft Environmental Impact Report, SCH #2012071033.* Chapter 5 Environmental Analysis Utilities and Service Systems, Table 5.17-4, Page 5.17-13. September.

81 18.5 units × 0.013 x 1000= 240 pounds per day (0.12 ton per day)
0.12 ton per day x 365 days = 43.8 tons annually

5.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones, would the Project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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 Fire and Resource Assessment Program of the California Department of Forestry and Fire Protection (CAL FIRE) designates the Project in the Local Responsibility Area (LRA) and not within a Very High Fire Hazard Severity Zone (VHFHSZ).[82] The nearest State Responsibility Area is approximately 1.5 miles east of the Project site, while the nearest LRA is approximately 2.5 miles southwest of the site.[83]

5.20.1 Impact Analysis

a. Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant. Refer to Section 5.9(f) regarding Project compliance with emergency response plans or emergency evacuation plans. The Project site is surrounded by urban development and is not within or near a State Responsibility Area or within a VHFHSZ in an LRA.[84] Additionally, the Project access and circulation design would be subject to review and approval by the Riverside County Fire Department and the City Police Department, the City Traffic Engineer, and Public Works Department during the City's precise plan review process to be consistent with the Riverside County Operational Area Emergency Operations Plan and the City's 2022 Local Hazard Mitigation Plan. Therefore, impacts would be **less than significant**, and no mitigation is required.

82 CAL FIRE. n.d. Fire and Resource Assessment Program (FRAP). Website: https://egis.fire.ca.gov/FHSZ/ (accessed September, 2024).
83 Ibid.
84 Ibid.

b. Would the Project, 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?

Less Than Significant. Factors that contribute to slope failure include slope height and steepness, shear strength and orientation of weak layers in the underlying geologic units, and pore water pressures. The Project site is flat with no potential for landslides. Any retaining walls proposed on site would be designed and constructed pursuant to the recommendations of the Project-specific Geotechnical Investigations to protect against lateral spreading and landslides (Standard Condition G-1). Accordingly, the flat-lying topography of the Project site ensures the likelihood of landslides or lateral spreading**.** There is no evidence of landslides and/or slope instabilities on the site. Since the Project site is surrounded by commercial and light industrial development and is not within or near a State Responsibility Area or within a VHFHSZ in an LRA,[85] impacts would **be less than significant**, and no mitigation is required.

c. Would the Project 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?

Less Than Significant. Construction of the proposed Project would not involve installation of new infrastructure beyond connections to existing infrastructure on site or along Zeiders Road. Construction of the proposed Project would not result in an increased fire risk on the Project site or to the immediate vicinity. Operation and maintenance of the proposed Project would not increase fire risk on site or in the immediate vicinity. Removal of existing vegetation, to be replaced by impervious surfaces and maintained landscaping, would serve to reduce potential wildfire risk on site. Since the Project site is largely surrounded by commercial and industrial development and is not within or near a State Resource Ara or within a VHFHSZ in an LRA,[86] impacts would be **less than significant**, and no mitigation is required.

d. Would the Project 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?

Less Than Significant. There is no evidence of landslides and/or slope instabilities on the site as determined in Section 5.7 of this IS/MND. Additionally, compliance with construction- and operation-phase stormwater requirements, as set forth in **Standard Condition H-1** and **Standard Condition H-2** in Section 5.10 of this IS/MND, would ensure post-development stormwater runoff volume would not exceed the existing, pre-developed condition. Therefore, the Project would not result in substantial erosion or siltation on or off site, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems**.**

85 CAL FIRE. n.d. Fire and Resource Assessment Program (FRAP). Website: https://egis.fire.ca.gov/FHSZ/ (accessed October 20, 2021).

86 Ibid.

Since the Project site is surrounded by urban development and is not within or near an SRA or within a VHFHSZ in an LRA,[87] impacts would **be less than significant**, and no mitigation is required.

[87] CAL FIRE. n.d. Fire and Resource Assessment Program (FRAP). Website: https://egis.fire.ca.gov/FHSZ/ (accessed October 20, 2021).

5.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c. Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

5.21.1 Impact Analysis

a. Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant with Mitigation Incorporated. Implementation of **Mitigation Measures CUL-1** through **CUL-5, Mitigation Measures TCR-1** through **TCR-5,** and **Mitigation Measure GEO-1** would ensure that potential impacts to historic, archaeological, tribal, and paleontological sources that could be uncovered during construction activities would be reduced to a less than significant level. Implementation of **Mitigation Measures BIO-1** would ensure that potential impacts to burrowing owls are reduced to a less than significant level. Therefore, with the incorporation of mitigation measures and standard conditions of approval, development of the proposed Project would not (1) degrade the quality of the environment; (2) substantially reduce the habitat of a fish or wildlife species; (3) cause a fish or wildlife species population to drop below self-sustaining levels; (4) threaten to eliminate a plant or animal community; (5) reduce the number or restrict the range of a rare or endangered plant or animal; or (6) eliminate important examples of the major periods of California history. This impact would be **less than significant with mitigation incorporated**.

b. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant with Mitigation Incorporated. As presented in the discussion of environmental checklist Sections 5.1 through 5.20, the Project would have no impact, a less than significant impact, or a less than significant impact after mitigation with respect to all environmental issues.

The proposed Project includes the construction of a one-story, 18,717-square-foot building to house the Caliber Collision Paint and Auto Body Repair shop with six bays, as shown on Figure 2. The planned hours of operation would be from 7:30 a.m. to 5:30 p.m., Monday through Friday, and from 8:00 a.m. to 12:00 p.m. on Saturdays. The Project is expected to have 20 full-time employees and approximately 13 to 15 customers on a typical weekday.

The Project also includes construction of a parking lot with 100 parking spaces (including parking that is compliant with the Americans with Disabilities Act) and a conceptual landscape plan that includes 0.83 acre of landscape area within the 2.39-acre site. The site's General Plan Land Use designation and Zoning Classification is Economic Development Corridor–Southern Gateway (EDC-SG). The EDC-SG zone allows development of an auto body repair and paint shop with a Conditional Use Permit. The Project is consistent with the land use designation of the Project site.

Project construction would include grading, paving, and construction of the facility building and parking areas. Grading would include importing 7,400 cubic yards, with an estimated fill volume of 9,200 cubic yards, and an estimated cut volume of 1,800 cubic yards of soil from the construction and landscaping material yard, which is immediately north of the Project site. Project construction is expected to start in January 2025 and be completed by August 2025.

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to air quality. The nearest sensitive receptors to the Project site include single-family residential homes to the south of the Project site along Zeiders Road. The closest residence is approximately 70 feet from the Project site boundary.

The proposed Project is consistent with growth projections of the General Plan and goals and policies of the Southern California Association of Governments' 2020 Regional Transportation Plan/ Sustainable Communities Strategy, which is updated every 4 years and is currently in the process of being updated. Accordingly, the Project is designed to integrate within the City's and region's existing and proposed infrastructure framework, and cumulative overburdening of community infrastructure and service capacity is not expected to occur. Impacts specified throughout this IS/MND are considered Project-specific in nature due to the limited scope of direct physical impacts to the environment. Consequently, the Project, along with other cumulative projects, would result in a **less than significant** cumulative impact with respect to all environmental issues.

c. Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. In general, impacts to human beings are associated with air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, and noise. The South Coast Air Basin is currently designated as a non-attainment area for ozone, particulate matter equal to or less than 10 microns in diameter (PM_{10}), and particulate matter equal to or less than 2.5 microns in diameter ($PM_{2.5}$). Implementation of the proposed Project would not contribute significant amounts of air pollutant emissions on either a short-term or long-term basis. Adherence to South Coast Air Quality Management District dust control measures would further reduce short-term construction air quality impacts, and no Project-specific mitigation is required.

Chapter 8.04 (Building Code) and Chapter 8.26 (Grading Regulations) of the City Municipal Code incorporate design and construction standards of the applicable California Building Code (CBC). Prior to the issuance of a grading permit, the Project Applicant would be required to submit detailed grading plans and a site-specific geotechnical investigation of the Project prepared in conformance the current CBC and applicable Menifee standards and as codified in **Standard Condition G-1**. These regulations and conditions require implementation of the recommendations cited in the Project-specific Geotechnical Investigation pursuant to the City Municipal Code.

The Project-specific Phase I ESA (Appendix F) did not identify any hazardous materials or recognized environmental conditions on the Project site. Any hazardous materials used during construction and operation of the Project would be regulated by the Riverside County Fire Department and the California Occupational Safety and Health Administration. Additionally, the routine transport, use, and disposal of hazardous materials at the Project site during construction and operation would be performed in accordance with the requirements of California Code of Regulations Title 8, which would minimize potential health hazards for construction workers, landscapers, maintenance personnel, and residents.

Compliance with construction- and operation-phase stormwater requirements, as set forth in **Standard Condition H-1** and **Standard Condition H-2**, would ensure post-development stormwater runoff volume would not exceed the existing, pre-developed condition. Therefore, the Project would not result in substantial erosion or siltation on or off site, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Through compliance with the National Flood Insurance Program (NFIP) Reform Act, NFIP Section 60.3(d), and California Civil Code Section 1103, as specified in **Standard Condition H-3** and **Standard Condition H-4**, Project impacts from construction of structures which could impede or redirect flood flows would be **less than significant**.

With the best construction practices identified in Section 5.13, incorporated as conditions of Project approval pursuant to the City's codes, the Project would not result in generation of a substantial temporary increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local General Plan or noise ordinance. With implementation of these standard conditions, potential impacts on human beings would remain **less than significant**. Mitigation is not required.

6.0 LIST OF PREPARERS

6.1 LSA

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Amanda Durgen, Principal Environmental Planner

Jaelyn Law, Assistant Environmental Planner

Amy Fischer, Principal Noise/Air Quality/Greenhouse Gas Specialist

Jason Lui, Associate Noise Specialist

Ronald Brugger, Senior Air Quality Analyst

Riordan Goodwin, Senior Cultural Resources Manager

Stanley Spencer, Ph.D., Senior Biologist

Jeremy Rosenthal, Senior Biologist

Meredith Canterbury, Associate/GIS Discipline Lead

Matthew Phillips, Associate/Senior Graphics Designer

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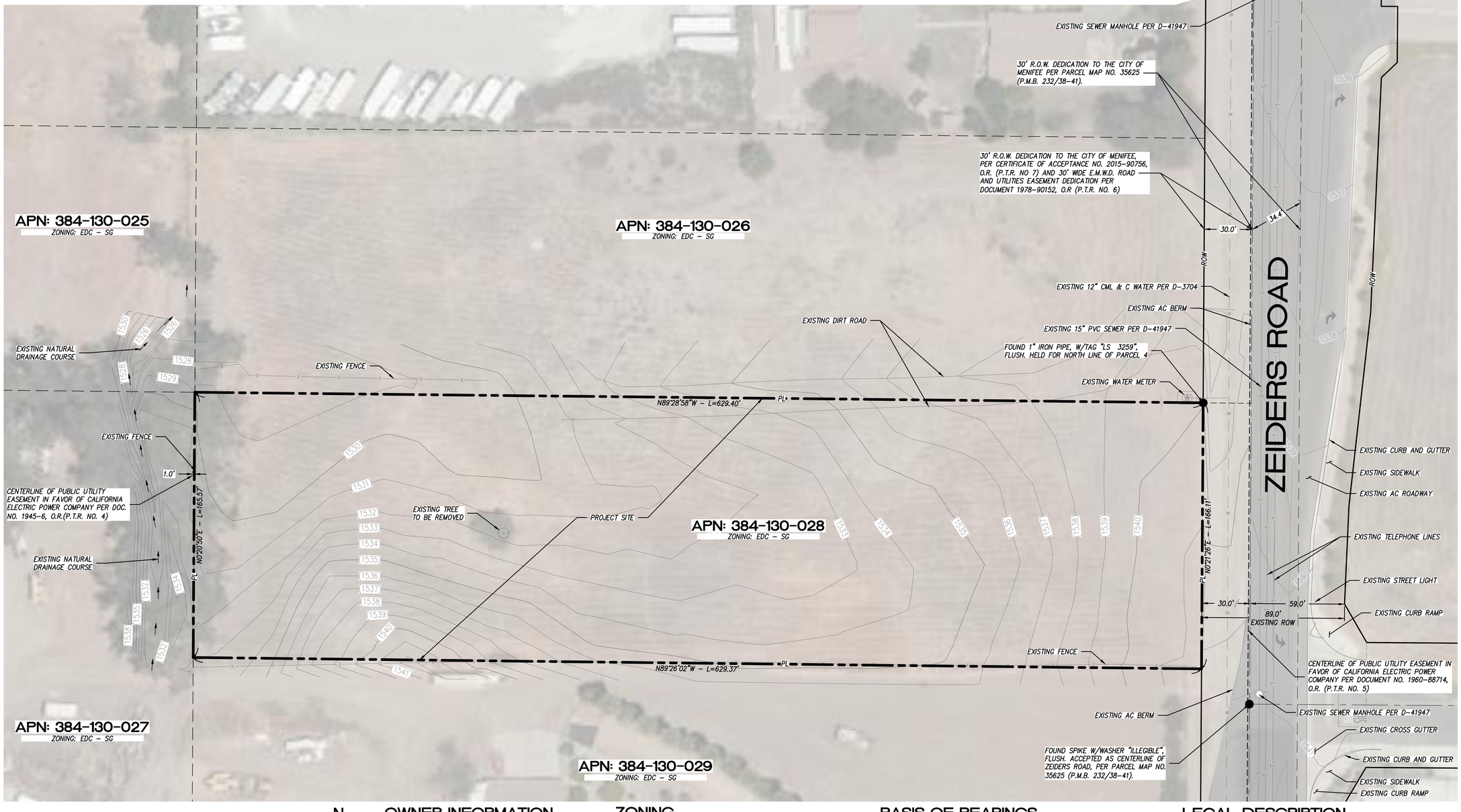
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APPENDIX A

PROJECT PLAN SET

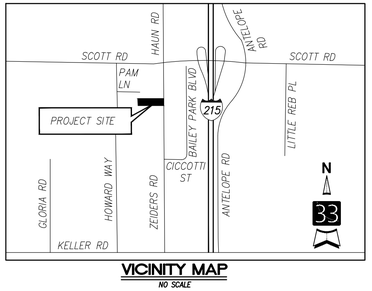
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MAJOR CONDITIONAL USE PERMIT - EXISTING CONDITIONS PLAN



0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

N



VICINITY MAP
NO SCALE

OWNER INFORMATION

ON-POINT COMMERCIAL, LLC., STEVE VETTEL
2510 PALISADES DRIVE, CORONA, CA 92882
CELL: 714-240-0410
SVETTEL@ON-POINTLLC.COM

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LEGEND

PROPERTY LINE
RIGHT-OF-WAY — R/W
AC PAVEMENT
EX TELECOM — T
EX 12" WATER LINE — W
EX 15" SEWER LINE — S
EX WATER METER

ZONING

NOTE: THE ZONING INFORMATION SHOWN HEREON IS PREPARED BY THE PLANNING & ZONING MENIFEE CITY COUNCIL.

DATE: FINAL - 12/18/19

ORDINANCE NUMBER: 2019-290

EXISTING LAND USE AND ZONING

1. DATE OF EXISTING ORDINANCE: APRIL 01, 2021
2. EXISTING ZONING DESIGNATION: "EDC-SG" ECONOMIC DEVELOPEMENT CORRIDOR - SOUTHERN GATEWAY.
3. ADJACENT ZONING DESIGNATION AND OR USES IF APPLICABLE: SURROUNDED BY "EDC-SG"
4. EXISTING LAND USE: EMPTY LOT.

IS THE EXISTING USE IN CONFORMANCE? YES, AS A PERMITTED USE. (SEE THE MENIFEE CITY COUNCIL PLAN FOR CODE REFERENCE)

BUILDING SET-BACK LINES
BUILDING SETBACKS:

A. FRONT: 25 FEET ZEIDERS ROAD
B. INTERIOR SIDES: NONE EXCEPT THAT ALL PORTIONS OF THE PROPERTY WHICH ABUT AN EXISTING OR PROPOSED RESIDENTIAL USE SHALL HAVE A MINIMUM 10' WIDE LANDSCAPE BUFFER.
C. REAR: 10 FEET

BASIS OF BEARINGS

BASIS OF BEARINGS: THE BASIS OF BEARINGS FOR THIS SURVEY IS THE NORTH AMERICAN DATUM OF 1983 (NAD83), CALIFORNIA COORDINATE SYSTEM 1983 (CCS83), ZONE 6 (0406) 2010.0 EPOCH. THIS IS DETERMINED BY A LINE BETWEEN N.G.S. C.O.R.S. DG9734 P474 FALLBROOK_CS2004 CORS ARP AND N.G.S. C.O.R.S . DH7093 MLFP_SCGN_CS1998 CORS ARP PER THE N.G.S. SURVEY CONTROL DATASHEET .

DG9734-DH7093 = S4° 18' 20" E.

*NOTE PROJECT COORDINATES ARE EXPRESSED IN GRID VALUES. TO OBTAIN GROUND VALUES, DIVIDE THE GRID DISTANCE (GRID) BY THE COMBINED SCALE FACTOR (CSF). CSF DERIVED AT LATITUDE 33 PROJECT CONTROL POINT NO. 49999: CP NO. 49999 CSF= 0.99989970

BENCHMARK

BASIS OF ELEVATION/BENCHMARK: THE BASIS OF ELEVATION FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THIS IS DETERMINED LOCALLY ON A COUNTY OF RIVERSIDE SURVEY BENCHMARK, A BRASS DISK STAMPED RIV. CO. B.M. 600 20 68 ON TOP OF A CONCRETE POST AT THE NORTHEAST OF A PUMP HOUSE 2 FEET WEST OF A MARKER POST.

ELEVATION: 1520.00 FEET
DATUM: NAVD88

FEMA

FEMA ZONE DESIGNATION: X
FIRM PANEL NO. 06065C2070H
FIRM EFFECTIVE DATE: 08/18/2014
BASE FLOOD ELEVATION (BFE): -

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF MENIFEE, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 4 OF PARCEL MAP 7105, AS SHOWN BY PARCEL MAP ON FILE IN BOOK 22, PAGES 89 AND 90 OF PARCEL MAPS, RIVERSIDE COUNTY RECORDS.

EXCEPTING THAT PORTION DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID PARCEL 4, THENCE WESTERLY, ALONG THE SOUTH LINE OF SAID PARCEL 4 TO THE SOUTHWEST CORNER, THEREOF; THENCE NORTHERLY, ALONG THE WESTERLY LINE OF SAID PARCEL 4, A DISTANCE OF 165.18 FEET; THENCE SOUTH 89°56'31" EAST, A DISTANCE OF 629.37 FEET TO A POINT ON THE EAST LINE OF SAID PARCEL, DISTANT THEREON NORTHERLY 165.16 FEET FROM THE POINT OF BEGINNING; THENCE SOUTHERLY, ALONG SAID EAST LINE TO THE POINT OF BEGINNING.

ASSESSOR'S PARCEL NUMBER

384-130-028

SURVEY SOURCES

THE LINEWORK SHOWN HEREIN IS BASED ON FIELD SURVEY WORK PERFORMED IN SEPTEMBER 2021.

SHEET INDEX

SHEET 1: EXISTING CONDITIONS PLAN
SHEET 2: CONCEPTUAL SITE, GRADING, DRAINAGE, CIRCULATION, AND UTILITY PLAN
SHEET 3: FIRE APPARATUS ACCESS EXHIBIT
SHEET 4: CONCEPTUAL SIGNAGE AND STRIPING PLAN

latitude 33
PLANNING & ENGINEERING
10731 Treena Street, San Diego, CA 92131
Tel 858.751.0633

DATE	REVISION	BY
03/13/2024	1ST CUP SUBMITTAL	

EXISTING CONDITIONS PLAN

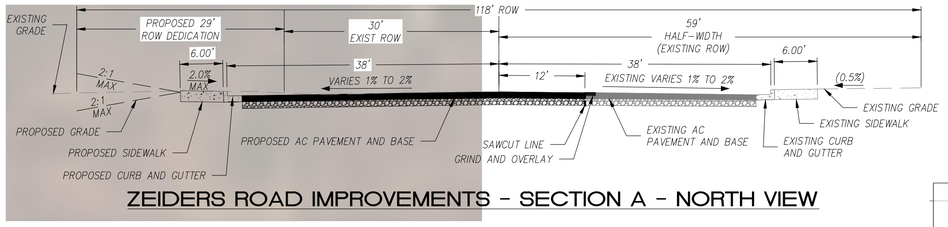
CALIBER COLLISION
ZEIDERS RD,
MENIFEE CA 92584

L33 PROJECT NUMBER (PN): 1937.0
OTHER PN: N/A
DESIGNED BY: DATE: 05.06.2024
DRAWN BY: AK DATE: 05.06.2024
CHECKED BY: ER/SD DATE: 05.06.2024

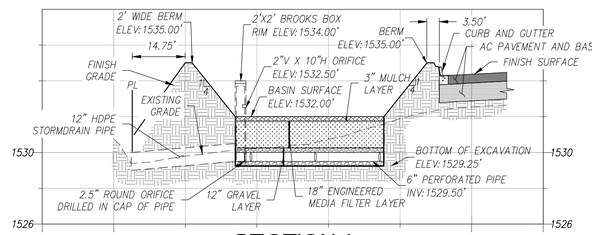
SHEET 1 OF 4

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CONCEPTUAL SITE, GRADING, DRAINAGE, CIRCULATION, AND UTILITY PLAN

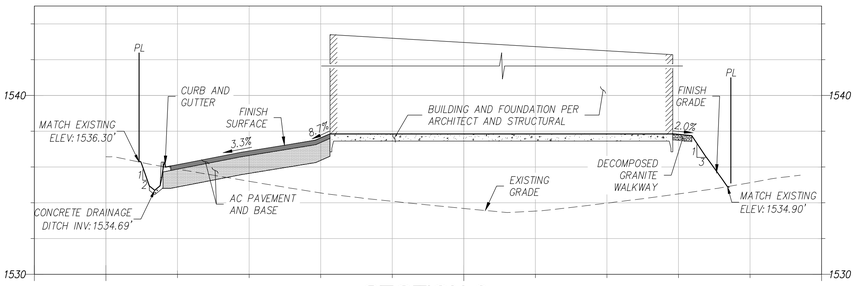


ZEIDERS ROAD IMPROVEMENTS - SECTION A - NORTH VIEW



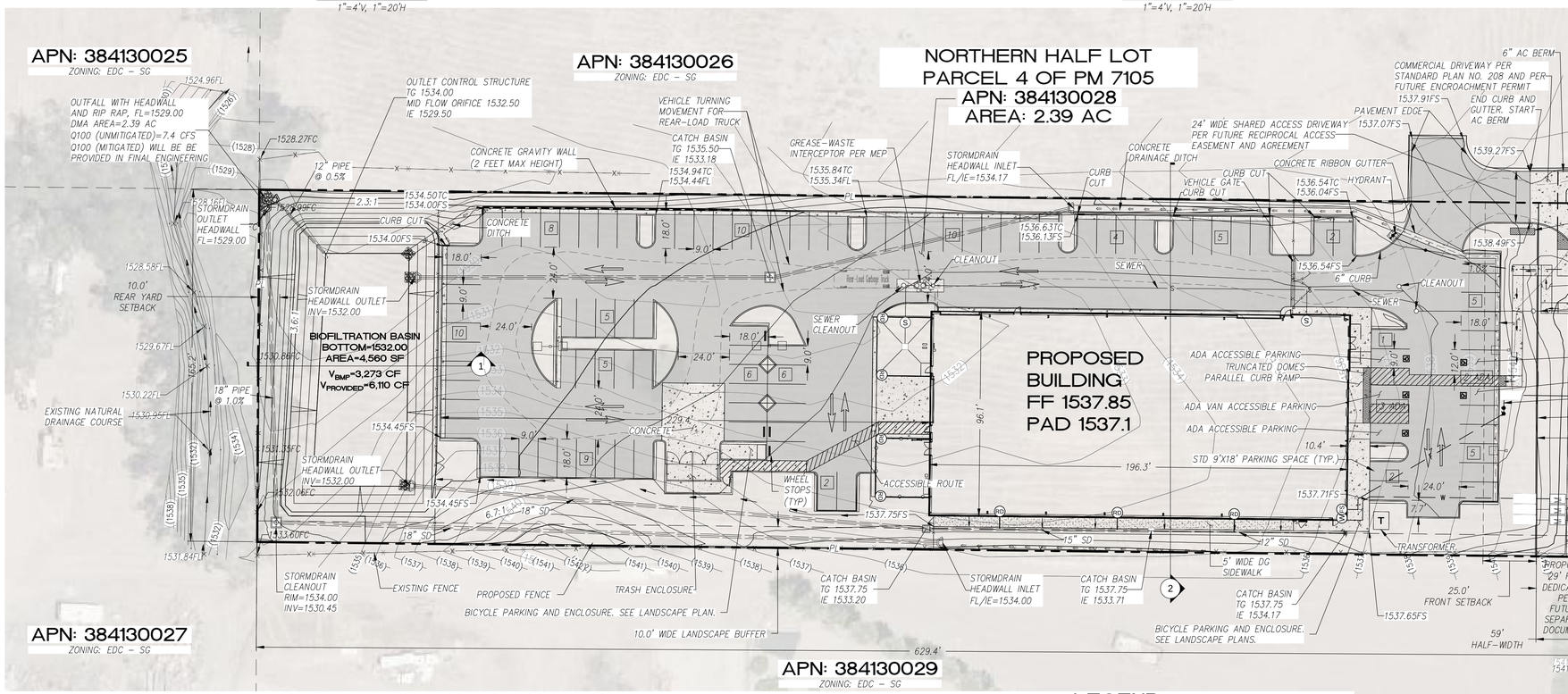
SECTION 1

1"=4'V, 1"=20'H



SECTION 2

1"=4'V, 1"=20'H



PARKING CALCULATIONS

STANDARD:
1 SPACE PER 150 SQ. FT GROSS FLOOR AREA (NOT INCLUDING FOR SERVICE BAYS) & 4 SPACES PER SERVICE BAY (CMDC TABLE 9.215.040-1)

TOTAL BUILDING AREA = 18,717 SF
6-SERVICE BAYS = 7,392 SF

18,717-7,392=11,325 SF -> 11,325/150 =75.5 SPACES

76+24 = 100 SPACES REQUIRED
100 PROVIDED (INCLUDES ADA STALLS)

ADA:
5 REQUIRED (CBC 11B-208)

5 PROVIDED:
2 VAN ACCESSIBLE
3 STANDARD ADA

BICYCLE:
1 PER 25 PARKING SPACES REQUIRED (CMDC 9.215.040-5)
101 / 25 = 4.04 REQ
8 PROVIDED IN 2X ENCLOSURES

UTILITY PURVEYORS

WATER & SEWER: EASTERN MUNICIPAL WATER DISTRICT
TELECOMMUNICATIONS: FRONTIER COMMUNICATIONS
ELECTRICAL & GAS: SOUTHERN CALIFORNIA EDISON
MUNICIPAL SOLID WASTE & RECYCLING: WASTE MANAGEMENT

PROJECT DESCRIPTION

THE PROPOSED PROJECT IS AN AUTO BODY REPAIR AND PAINT SHOP TO BE CONSTRUCTED ON THE SITE. THE PROJECT WILL CONSIST OF AN 18,717 SQUARE FOOT BUILDING, AND WILL REQUIRE PARKING FOR CUSTOMERS AND EMPLOYEES, SERVICE BAYS FOR THE PAINT AND BODY SHOP WORK, AND VEHICLE STORAGE.
MAXIMUM BUILDING HEIGHT = 26 FEET

ZONING

EXISTING: ECONOMIC DEVELOPMENT CORRIDOR - SOUTHERN GATEWAY (EDC-SG)
PROPOSED: ECONOMIC DEVELOPMENT CORRIDOR - SOUTHERN GATEWAY (EDC-SG)

INTENDED USE

AUTO BODY REPAIR AND PAINT SHOP

GENERAL NOTES

1. THE PARCEL AREA EXPRESSED HEREON ARE DERIVED FROM THE REQUEST FOR PROPOSAL AND ARE NOT BASED ON BOUNDARY RESEARCH OR VERIFICATION.
2. TOPOGRAPHY SHOWN IS PRELIMINARY. OBTAINED FROM GOOGLE EARTH PRO AND ADJUSTED TO NAVD88.
3. NO INFILTRATION CONDITION ASSUMED. PER USDA WEB SOIL SURVEY, PROPERTY LIES IN TYPE C & D SOILS. NO SIGNIFICANT INFILTRATION CAPACITY IS EXPECTED, IF ANY.

UTILITY NOTES

DRY UTILITIES (GAS, ELECTRICAL, LIGHTING, TELECOMM) PER OTHERS AND NOT DEPICTED ON THESE PLANS.

0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

N

33

STATEMENT OF OPERATIONS

AUTO BODY REPAIR AND PAINT SERVICE
MONDAY THROUGH FRIDAY: 7:30AM - 5:30PM
SATURDAY: POSSIBLE HOURS 8AM - 12PM
20 FULL TIME EMPLOYEES
NUMBER OF CUSTOMERS PER DAY: 13 - 15

EARTHWORK QUANTITY RAW

ESTIMATED CUT VOLUME=1,800 CY
ESTIMATED FILL VOLUME=9,200 CY
NET VOLUME=7,400 CY IMPORT

LEGEND

PROPERTY LINE
SETBACKS
RIGHT-OF-WAY R/W
AC PAVEMENT
PCC PAVEMENT/SIDEWALK
DG SURFACING
EX TELECOM T
EX 12" WATER LINE W
EX 15" SEWER LINE S
6" FIRE LINE F
2" WATER LATERAL W
4" SEWER LATERAL S
STORMDRAIN
FIRE HYDRANT
WATER METER
BACKFLOW PREVENTER

AREAS

TOTAL AREA: 2.39 ACRES
TOTAL PROPOSED BUILDING AREA: 0.43 ACRES
TOTAL PROPOSED PAVED AREA: 0.98 ACRES
TOTAL PROPOSED LANDSCAPE AREA: 0.83 ACRES

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CONCEPTUAL SITE, GRADING, DRAINAGE, CIRCULATION, AND UTILITY PLAN

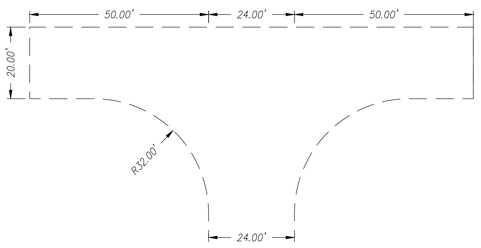
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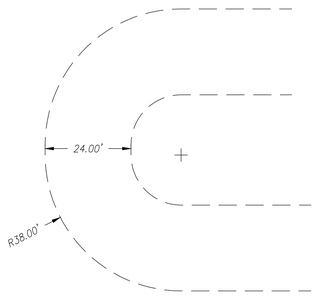
SHEET
2 OF 4

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FIRE APPARATUS ACCESS EXHIBIT



FIRE ACCESS TURNAROUND 1
NTS



FIRE ACCESS TURN TEMPLATE 2
NTS

APN: 384130026

NORTHERN HALF LOT
PARCEL 4 OF PM 7105
APN: 384130028
AREA 2.39 AC

APN: 384130025

APN: 384130027

APN: 384130029

PROPOSED BUILDING

ZEIDERS RD

24' MINIMUM FIRE ROAD ACCESS WIDTH FOR BUILDING UNDER 30'

FIRE ACCESS TURNAROUND, SEE DETAIL 1 THIS SHEET

RECIPROCAL ACCESS AGREEMENT REQUIRED

HYDRANT

VEHICLE GATE EQUIPPED WITH OPTICOM PER FIRE DEPARTMENT

HYDRANT SERVICE LINE

FIRE DEPARTMENT CONNECTION

BACKFLOW PREVENTER

FIRE SERVICE WITH FDC AND PIV

5' MINIMUM WIDE WALKWAY AND KNOX BOX WITH KEY AT GATE

150 LINEAL FEET OF HOSE PULL AT ALL SIDES OF PROPOSED BUILDING (TYP)

150 LINEAL FEET OF HOSE PULL AT ALL SIDES OF PROPOSED BUILDING (TYP)

5' MINIMUM WIDE WALKWAY AND KNOX BOX WITH KEY

FIRE RISER ROOM

STOP

0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

N

LEGEND

- PROPERTY LINE
- SETBACKS
- RIGHT-OF-WAY — R/W
- EX PAVEMENT
- EX TELECOM — T
- EX 12" WATER LINE — W
- EX 15" SEWER LINE — S
- 6" FIRE LINE — F
- 4" WATER LATERAL — W
- 4" SEWER LATERAL — S
- FIRE HYDRANT (6"x4"x2½"x2½" ottts)
- WATER METER
- BACKFLOW PREVENTER
- FIRE HOSE PULL LENGTH (150')
- FIRE HYDRANT COVERAGE (300' RADIUS)
- FIRE ACCESS LANE

FIRE ACCESS NOTES

RIVERSIDE COUNTY FIRE DEPARTMENT – FIRE PREVENTION STANDARD

1. ROADS SHALL BE DESIGNED, CONSTRUCTED AND MAINTAINED TO SUPPORT THE IMPOSED LOAD OF RIVERSIDE COUNTY FIRE DEPARTMENT FIRE APPARATUS WITH A TOTAL MINIMUM WEIGHT OF 80,000 POUNDS OVER 2 AXLES. THE SURFACE SHALL BE DESIGNED, CONSTRUCTED AND MAINTAINED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES. TURF BLOCK IS NOT ALLOWED.
2. FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 24 FEET, EXCLUSIVE OF SHOULDERS, EXCEPT FOR APPROVED SECURITY GATES IN ACCORDANCE WITH SECTION 503.6, AND AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13 FEET 6 INCHES.
3. THE GRADE OF THE ACCESS ROAD SHALL NOT EXCEED 14% AND CROSSSLOPE SHALL NOT BE GREATER THAN 2.5% AS PER RIVERSIDE COUNTY ORDINANCE.
4. ACCESS ROADS WILL HAVE A TURNING RADIUS CAPABLE OF ACCOMMODATING FIRE APPARATUS.

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Tel 858.751.0633

BY	DATE	REVISION
	03/13/2024	1ST CUP SUBMITTAL

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FIRE APPARATUS ACCESS EXHIBIT

CALIBER COLLISION
ZEIDERS RD,
MENIFEE CA 92584

L33 PROJECT NUMBER (PN): 1937.0
OTHER PN: N/A
DESIGNED BY: DATE: 05.06.2024
DRAWN BY: AK DATE: 05.06.2024
CHECKED BY: ER/SD DATE: 05.06.2024

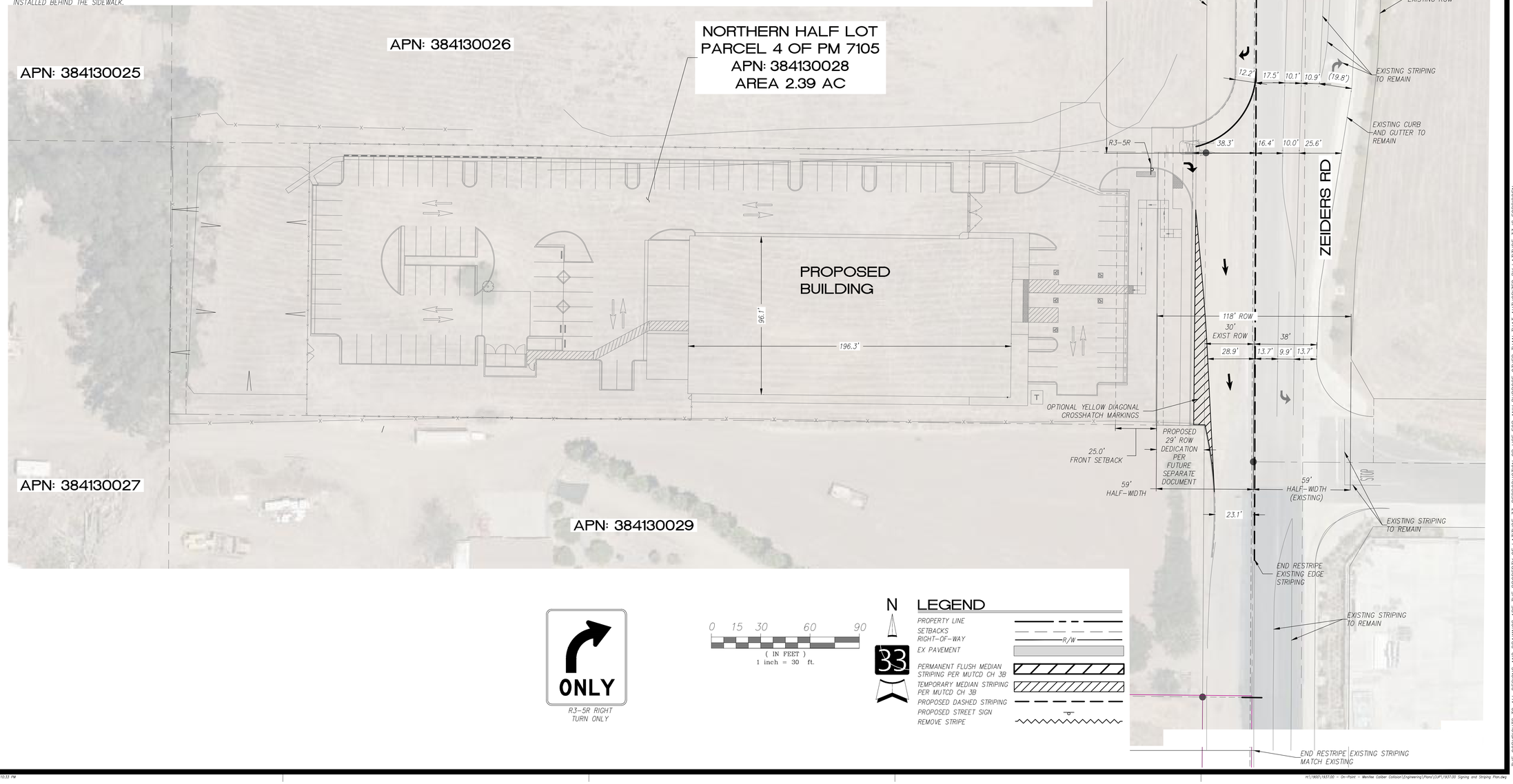
SHEET
3 OF 4

SIGNING AND STRIPING NOTES

1. TRAFFIC STRIPES, PAVEMENT MARKINGS, AND SIGNS SHALL BE REFLECTORIZED AND IN STANDARD SIZES. STRIPING AND MARKING DETAILS SHALL MATCH CALTRANS STANDARD PLANS. STENCILS FOR PAVEMENT MARKING SHALL MATCH CALTRANS STANDARD PLANS.
2. REMOVE CONFLICTING STRIPES, PAVEMENT MARKINGS, AND RAISED PAVEMENT MARKERS IN ACCORDANCE WITH THE PLANS AND AS APPROVED BY THE MENIFEE CITY ENGINEER. WORD OR SYMBOL PAVEMENT MARKINGS SHALL BE REMOVED BY WET SANDBLASTING OR GRINDING A RECTANGULAR AREA OBLITERATING THE WHOLE MARKING.
3. ALL CROSSWALKS SHALL HAVE 10 FEET SPACING IN BETWEEN THE 12 INCH WHITE OR YELLOW STRIPES.
4. ALL DOUBLE YELLOW STRIPES SHALL HAVE A 3 INCH PAINTED BLACK LINE SEPARATING THE YELLOW STRIPES.
5. ALL STRIPING, PAVEMENT MARKINGS, AND PAVEMENT LEGENDS SHALL BE THERMOPLASTIC. THERMOPLASTIC SHALL CONSIST OF 3M REFLECTIVE ELEMENTS SERIES 50 (OR APPROVED EQUAL) AND SHALL ALLOW FOR BOTH WET AND DRY REFLECTIVITY. THERMOPLASTIC STRIPING SHALL BE APPLIED PER MANUFACTURER'S RECOMMENDATIONS.
6. APPLY PAVEMENT MARKINGS INCLUDING CROSSWALKS, LIMIT LINES, TURN ARROW LEGENDS, AND STOP BARS USING THERMOPLASTIC MATERIAL.
7. IF PAINTED STRIPING IS ALLOWED PER PLANS, PAINTED TRAFFIC STRIPES AND PAVEMENT MARKINGS SHALL BE APPLIED IN TWO COATS AND SHALL BE LEAD-FREE WATER-BORN PAINT. THE SECOND COAT OF PAINT SHALL BE APPLIED WITHIN 7 TO 14 DAYS AFTER THE FIRST COAT.
8. PROVIDE RAISED PAVEMENT MARKERS (RPMS) WITHIN SEVEN WORKING DAYS OF ROADWAY STRIPING OR AFTER THE SECOND COAT OF PAINT HAS BEEN APPLIED. EXISTING RPMS WITHIN THE PROJECT AREA SHALL BE REPLACED IN KIND OR REMOVED IN ACCORDANCE WITH THE PLANS, OR AS APPROVED BY THE MENIFEE CITY ENGINEER.
9. PROVIDE BLUE RETROREFLECTIVE RAISED PAVEMENT MARKERS (RPMS) ON PRIVATE STREETS, PUBLIC STREETS, AND DRIVEWAYS TO INDICATE LOCATION OF FIRE HYDRANTS. PLACEMENT OF MARKERS SHALL COMPLY WITH CITY OF MENIFEE STANDARD PLAN 705 AND THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE FIGURE 3B-102(CA). OBTAIN APPROVAL OF MARKER PLACEMENT BY THE RIVERSIDE COUNTY FIRE DEPARTMENT PRIOR TO INSTALLATION.
10. SQUARE PERFORATED STEEL TUBE POSTS WITH TWO PIECE ANCHOR AND SLEEVE, "TELESPAR", PER CITY OF MENIFEE STANDARD PLAN 817 SHALL BE USED FOR ALL TRAFFIC CONTROL AND INFORMATIONAL SIGNS WITHIN THE ROAD RIGHT-OF-WAY.
11. THE BOTTOM OF THE TRAFFIC SIGN SHALL BE A MINIMUM OF 7 FEET ABOVE THE FINISHED SURFACE.
12. SIGNS LARGER THAN 48 INCHES OR LOCATIONS WHERE SIDEWALKS ARE LESS THAN 5 FEET WIDE, SIGN POSTS SHALL BE INSTALLED BEHIND THE SIDEWALK.

SIGNING AND STRIPING NOTES (CONTINUED)

13. THE EXACT LOCATION OF SIGNS SHALL BE APPROVED IN THE FIELD BY THE MENIFEE CITY ENGINEER.
14. REMOVE SIGNS AND/OR RELOCATE IN ACCORDANCE WITH THE PLANS AND AS APPROVED BY THE MENIFEE CITY ENGINEER. THE DEVELOPER/CONTRACTOR SHALL DELIVER REMOVED SIGNS TO A DESIGNATED MENIFEE CITY YARD OR A LOCATION AS APPROVED BY THE MENIFEE CITY ENGINEER.
15. LAYOUT (CAT-TRACK) THE PROPOSED STRIPING AND MARKINGS IN ACCORDANCE WITH THE PLANS WITHIN THREE WORKING DAYS OF FINAL PAVING. CONTACT CITY OF MENIFEE ENGINEERING DEPARTMENT AT (951) 672-6777 TO OBTAIN APPROVAL OF LAYOUT PRIOR TO ACTUAL INSTALLATION.
16. CONTRACTOR SHALL MAINTAIN TEMPORARY TRAFFIC STRIPING TABS UNTIL PERMANENT STRIPING IS INSTALLED. TEMPORARY TRAFFIC TABS SHALL NOT REMAIN ON THE PAVEMENT FOR MORE THAN 10 DAYS.
17. COORDINATE ALL SIGNING AND STRIPING WORKS THROUGH THE CITY ENGINEER PRIOR TO OPENING NEW ROADWAYS AND EXISTING ROADWAYS TO NEW SIGNING AND STRIPING.
18. ALL ARTERIAL STREETS SHALL BE POSTED WITH NO PARKING ENTIRE BLOCK SIGNS AND WHERE APPLICABLE, R26(S)(CA) SIGNS. LOCATION OF SIGNS SHALL BE APPROVED BY THE CITY OF MENIFEE PUBLIC WORKS DEPARTMENT.
19. EVERY ATTEMPT SHOULD BE MADE TO INSTALL STREET SIGNS ON STREET LIGHT STANDARDS AS APPROVED BY THE CITY OF MENIFEE. SIGNS INSTALLED ON MARBELITE STREET LIGHT STANDARDS SHALL BE IN ACCORDANCE WITH CITY OF MENIFEE STANDARD 1202.
20. SIGNS SHALL BE IN STANDARD SIZES, UNLESS NOTED OTHERWISE. ALL SIGN FACE REFLECTIVE SHEETING SHALL BE HIGH INTENSITY GRADE WITH PROTECTIVE OVERLAY FILM.
21. STREET NAME SIGN SHALL CONFORM TO CITY OF MENIFEE STANDARD PLAN NO. 815 AND 816.



R3-5R RIGHT
TURN ONLY

0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

N

33

LEGEND

- PROPERTY LINE
- SETBACKS
- RIGHT-OF-WAY (R/W)
- EX PAVEMENT
- PERMANENT FLUSH MEDIAN STRIPING PER MUTCD CH 3B
- TEMPORARY MEDIAN STRIPING PER MUTCD CH 3B
- PROPOSED DASHED STRIPING
- PROPOSED STREET SIGN
- REMOVE STRIPE

latitude 33
PLANNING & ENGINEERING
10731 Treena Street, San Diego, CA 92131
Tel 858.751.0633

DATE	REVISION	BY
03/13/2024	1ST CUP SUBMITTAL	

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CONCEPTUAL SIGNING AND STRIPING EXHIBIT

CALIBER COLLISION
ZEIDERS RD,
MENIFEE CA 92584

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OTHER PN: N/A
DESIGNED BY: DATE: 05.06.2024
DRAWN BY: AK DATE: 05.06.2024
CHECKED BY: ER/SD DATE: 05.06.2024

FOR REFERENCE ONLY

4 OF 4

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APPENDIX B

AIR QUALITY, GREENHOUSE GAS, AND ENERGY ANALYSIS MEMORANDUM

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CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: December 24, 2024

TO: Jessica Williams, Assistant Planner
City of Menifee Community Development Department

FROM: Ronald Brugger, Senior Air Quality Specialist

SUBJECT: Air Quality, Greenhouse Gas Emissions, and Energy Analysis for the Caliber Collision Paint and Auto Body Repair Project in Menifee, Riverside County, California (LSA Project No. 20231078.02)

INTRODUCTION

This Air Quality and Greenhouse Gas Emissions Analysis has been prepared to evaluate the impacts associated with the construction and operation of the proposed Caliber Collision Paint and Auto Body Repair Project (project). The analysis includes modeling of air pollutant and greenhouse gas (GHG) emissions using the latest version of the California Emissions Estimator Model version 2022.1 (CalEEMod) and follows the South Coast Air Quality Management District's (SCAQMD) 1993 *CEQA Air Quality Handbook* guidelines.[1] The results of the modeling have been compared to SCAQMD emissions thresholds. (References cited are included as footnotes.)

PROJECT LOCATION AND DESCRIPTION

The 2.39 -acre (gross) project site is located along the west side of Zeiders Road, south of Scott Road, and east of Howard Way in Menifee, Riverside County, California, as shown on Figure 1 (all figures are included as Attachment A).

The proposed project would include the construction of a one-story, 18,865-square-foot (sq ft) building to house the Caliber Collision Paint and Auto Body Repair shop with six bays and two natural gas-fired paint booths, as shown on Figure 2. It was assumed there would be at most two electric air compressors and welders. The planned hours of operation would be from 7:30 a.m. to 5:30 p.m., Monday through Friday, and from 8:00 a.m. to 12:00 p.m. on Saturday. The project is expected to have 20 full-time employees and approximately 13 to 15 customers on a typical weekday.

The project would also include construction of a parking lot with 103 parking spaces (including parking that is compliant with the Americans with Disabilities Act [ADA]) and a conceptual landscape plan

[1] South Coast Air Quality Management District (SCAQMD). 1993. CEQA Air Quality Handbook (1993). April. Website: www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed October 2024).

consisting of native and drought tolerant plant material that includes 0.3 acre of landscape area within the 2.39-acre site. The landscape watering system would be automatic and connected to a weather sensor and rain shut-off device.

The site's General Plan Land Use designation and Zoning Classification is Economic Development Corridor–Southern Gateway (EDC-SG). The EDC-SG zone allows development of an auto body repair and paint shop with a Conditional Use Permit. The project would be consistent with the land use designation of the project site.

Project construction would include grading, paving, and construction of the facility building and parking areas. Grading would include importing 9,200 cubic yards and exporting 4,700 cubic yards of soil from a construction and landscaping material yard located immediately north of the project site. Project construction is expected to start in early 2025 and be completed in approximately 6 months.

SENSITIVE RECEPTORS IN THE PROJECT AREA

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to air quality. The nearest sensitive receptors in proximity to the project site include single-family residential homes to the south of the project site along Zeiders Road. The closest residence is approximately 70 feet from the project site boundary. Table A summarizes these sensitive receptors.

Table A: Summary of Analysis Distances by Impact Category

Activity	Nearest Sensitive Receptor	Points of Analysis	Distance (feet)
Construction[1]	Single-family homes to the south and north of the project site	Perimeter of construction activities to centroid of nearest sensitive receptor building	70 ft to the south and 390 ft to the north
Operations	Single-family homes to the south and north of the project site	Emissions sources on site generalized at the centroid of the project site to centroid of nearest sensitive receptor building	250 ft to the south and 980 ft to the north

Source: Compiled by LSA (October 2024).

[1] Distance for construction air quality impact potential includes the assumption that heavy construction equipment would operate adjacent to the proposed project boundary, which is 70 feet from the nearest off-site residential structure.

ft = foot/feet

ENVIRONMENTAL SETTING

Air Quality Background

Air quality is primarily a function of local climate, local sources of air pollution, and regional pollution transport. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and, for photochemical pollutants, sunshine.

A region's topographic features have a direct correlation with air pollution flow and therefore are used to determine the boundary of air basins. The proposed project site is in Riverside County and is within the jurisdiction of SCAQMD, which regulates air quality in the South Coast Air Basin (Basin).

The Basin comprises approximately 10,000 square miles (sq mi) and covers all of Orange County and the urban parts of Los Angeles, Riverside, and San Bernardino counties. The Basin is on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east, forming the inland perimeter.

Both State and federal governments have established health-based ambient air quality standards for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O_3 and NO_2, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO_2, and Pb are considered local pollutants that tend to accumulate in the air locally.

Air quality monitoring stations are located throughout the nation and are maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the United States Environmental Protection Agency (USEPA) to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Ambient Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment (e.g., marginal, moderate, serious, severe, and extreme) are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and to comply with the NAAQS. As shown in Table B, the Basin is designated as nonattainment by the federal standards for O_3 and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and nonattainment by the State standards for O_3, particulate matter less than 10 microns in diameter (PM_{10}), and $PM_{2.5}$.

O_3 levels, as measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by SCAQMD and other regional, State, and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the Basin still exceeds the State standard for 1-hour and 8-hour O_3 levels. The USEPA lowered the 1997 0.80 part per million (ppm) national 8-hour O_3 standard to 0.75 ppm in 2008 and then to 0.70 ppm on October 1, 2015. The Basin is classified as nonattainment for the 1-hour and 8-hour O_3 standards at the State level and as extreme nonattainment for the 8-hour O_3 standard at the federal level.

National and State standards have also been established for $PM_{2.5}$ over 24-hour and yearly averaging periods. $PM_{2.5}$, because of the small size of individual particles, can be especially harmful to human health. $PM_{2.5}$ is emitted by common combustion sources such as cars, trucks, buses, and power plants, in addition to ground-disturbing activities. On December 17, 2006, the USEPA strengthened

Table B: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Nonattainment	N/A
O_3 8-hour	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Unclassified/Attainment (1-hour) Attainment/Maintenance (Annual)
SO_2	Attainment	Unclassified/Attainment
Lead	Attainment[1]	Unclassified/Attainment[1]
All Others	Attainment/Unclassified	Attainment/Unclassified

Source 1: *State and Federal Area Designations*, Website: www.arb.ca.gov/desig/desig.htm (CARB October 2024).
Source 2: Nonattainment Areas for Criteria Pollutants (Green Book), Website: www.epa.gov/green-book (USEPA October 2024).

[1] Only the Los Angeles County portion of the South Coast Air Basin is in nonattainment for lead.

CARB = California Air Resources Board
CO = carbon monoxide
N/A = not applicable
NO_2 = nitrogen dioxide
O_3 = ozone
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SO_2 = sulfur dioxide
USEPA = United States Environmental Protection Agency

the 24-hour $PM_{2.5}$ NAAQS from 65 micrograms per cubic meter (µg/m^3) to 35 µg/m^3, and the Basin was subsequently designated "moderate" nonattainment for 2006 24-hour $PM_{2.5}$ NAAQS on December 14, 2009. On February 7, 2024, the USEPA strengthened the NAAQS for $PM_{2.5}$ by revising the primary (health-based) annual standard from 12.0 µg/m^3 to 9.0 µg/m^3; however, a new attainment designation has not been issued. The Basin is also considered a nonattainment area for the $PM_{2.5}$ standard at the State level. During the 2021–2023 time period, the Pechanga Monitoring Station recorded no exceedances of the State and federal 24-hour $PM_{2.5}$ standards.

The Basin is classified as a PM_{10} nonattainment area at the State level. During the 2021–2023 time period, the Lake Elsinore Monitoring Station recorded 12 exceedances of the State 24-hour PM_{10} standard. All areas of the Basin have continued to remain below the federal CO standards (35 ppm 1-hour and 9 ppm 8-hour) since 2003. The USEPA redesignated the Basin to attainment of the federal CO standards, effective June 11, 2017. The Basin is also well below the State CO standards (20 ppm 1-hour CO and 9 ppm 8-hour CO).

Toxic Air Contaminant Background

The public's exposure to toxic air contaminants (TACs) is a significant environmental health issue in the State of California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. California Health and Safety Code Section 39655 defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to Subsection (b) of United States Code [USC] Title 42, Section 7412, is a TAC. Under State law, the California Environmental Protection Agency (CalEPA), acting through the California Air Resources Board (CARB),

is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (the Tanner Air Toxics Act), AB 2588 (the Air Toxics "Hot Spot" Information and Assessment Act of 1987), and Senate Bill (SB) 25 (the Children's Environmental Health Protection Act). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once TACs are identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

Air toxics from stationary sources are also regulated in California under AB 2588 (the Air Toxics "Hot Spot" Information and Assessment Act of 1987). Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the designated air quality management district or air pollution control district. High-priority facilities are required to perform a Health Risk Assessment (HRA) and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

To date, CARB has designated nearly 200 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (DPM).

Air Quality Monitoring Results

Air quality monitoring stations are located throughout the nation and are maintained by the local air pollution control district and State air quality regulating agencies. The SCAQMD, together with the CARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring stations closest to the project area are the Lake Elsinore West Flint Street station located approximately 9 miles northwest of the project site at 506 West Flint Street, Lake Elsinore, Riverside County, California; the Pechanga station located approximately 14 miles southeast of the project site at 12705 Pechanga Road, Temecula, Riverside County, California; and the Riverside Rubidoux station located approximately 28 miles north of the project site at 5888 Mission Boulevard, Rubidoux, Riverside County, California.

Pollutant monitoring results for years 2021 to 2023 at the nearby ambient air quality monitoring stations, shown in Table C, indicate that air quality in the area has generally been moderate.

Energy

Electricity

Electricity is a manmade resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and

refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).

Table C: Ambient Air Quality Monitored in the Project Vicinity

Pollutant	Standard	2021	2022	2023
Carbon Monoxide (CO) [1]				
Maximum 1-hr concentration (ppm)		0.9	0.9	1.3
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8-hr concentration (ppm)		0.8	0.6	0.7
Number of days exceeded:	State: ≥ 9.0 ppm	0	0	0
	Federal: ≥ 9.0 ppm	0	0	0
Ozone (O_3)[1]				
Maximum 1-hr concentration (ppm)		0.118	0.121	0.120
Number of days exceeded:	State: > 0.09 ppm	18	17	10
Maximum 8-hr concentration (ppm)		0.097	0.091	0.103
Number of days exceeded:	State: > 0.070 ppm	45	37	35
	Federal: > 0.070 ppm	44	37	31
Coarse Particulates (PM_{10})[1]				
Maximum 24-hr concentration (µg/m³)		89.0	91.8	187.0
Number of days exceeded:	State: > 50 µg/m³	4	1	7
	Federal: > 150 µg/m³	0	0	1
Annual arithmetic average concentration (µg/m³)		41.7	35.4	34.0
Exceeded for the year:	State: > 20 µg/m³	Yes	Yes	Yes
	Federal: > 50 µg/m³	No	No	No
Fine Particulates ($PM_{2.5}$)[3]				
Maximum 24-hr concentration (µg/m³)		16.5	13.2	11.6
Number of days exceeded:	Federal: > 35 µg/m³	0	0	0
Annual arithmetic average concentration (µg/m³)		7.0	5.9	6.6
Exceeded for the year:	State: > 12 µg/m³	No	No	No
	Federal: > 15 µg/m³	No	No	No
Nitrogen Dioxide (NO_2)[1]				
Maximum 1-hr concentration (ppm)		0.0437	0.0372	0.0412
Number of days exceeded:	State: > 0.18 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.007	0.007	0.007
Exceeded for the year:	State: > 0.030 ppm	No	No	No
	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2)[2]				
Maximum 24-hr concentration (ppm)		0.0027	0.0012	0.0023
Number of days exceeded:	State: > 0.04 ppm	ND	ND	ND
	Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.00043	0.00034	0.00043
Exceeded for the year:	Federal: > 0.030 ppm	No	No	No

Source 1: 2021–2023 Air Quality Data, Website: www.epa.gov/outdoor-air-quality-data/monitor-values-report (United States Environmental Protection Agency 2024).

Source 2: iADAM: Air Quality Data Statistics, Website: www.arb.ca.gov/adam/index.html (California Air Resources Board 2024).

[1] Data taken from the Lake Elsinore West Flint Street station located at 506 West Flint Street, Lake Elsinore, Riverside County, California.

[2] Data take from the Riverside Rubidoux station located at 5888 Mission Boulevard, Rubidoux, Riverside County, California.

[3] Data take from the Pechanga station located at 12705 Pechanga Road, Temecula, Riverside County, California.

µg/m³ = micrograms per cubic meter
hr = hour
ND = no data available
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
ppm = parts per million
SJVAPCD = San Joaquin Valley Air Pollution Control District

According to the most recent data available, in 2022, California's electricity was generated primarily by natural gas (47.5 percent), renewable sources (52.2 percent), large hydroelectric (7.2 percent), nuclear (8.7 percent), coal (<1.0 percent), and other unspecified sources.[2] Total electric generation in California in 2022 was 287,220 gigawatt-hours (GWh), up 3.4 percent from the 2021 total generation of 277,764 GWh.[3]

The project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000 sq mi area of Central, Coastal, and Southern California.[4] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2022 was 85,870 GWh (31,603 GWh for the residential sector and 54,267 GWh for the non-residential sector). Total electricity consumption in Riverside County in 2022 was 17,780.6 GWh (17,780,573,271 kilowatt-hours [kWh]).[5]

Natural Gas

Natural gas is a non-renewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[6]

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million customers in a 24,000 sq mi service area throughout Central and Southern California, from Visalia to the Mexican border.[7] According to the CEC, total natural gas consumption in the SoCalGas service area in 2022 was 5,026 million therms

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2 California Energy Commission (CEC). 2022a. *2022 Total System Electric Generation*. Website: www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation (accessed October 2024).

3 CEC. 2021a. *2021 Total System Electric Generation*. Website: www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation (accessed October 2024).

4 Southern California Edison (SCE). 2020. About Us. Website: www.sce.com/about-us/who-we-are (accessed July 2024).

5 CEC. 2020a. Electricity Consumption by County and Entity. Websites: www.ecdms.energy.ca.gov/elecbycounty.aspx and www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed July 2024).

6 CEC. 2021c. Supply and Demand of Natural Gas in California. Website: www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed October 2024).

7 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: www.socalgas.com/about-us/company-profile (accessed July 2024).

(2,230 million therms for the residential sector). Total natural gas consumption in Riverside County in 2022 was 431 million therms (431,052,392 therms).[8]

Fuel

Petroleum is also a non-renewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil, gasoline, and diesel.

The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles [SUVs]) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.8 mpg in 2022.[9] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. This act, which originally mandated a national fuel economy standard of 35 mpg by year 2020,[10] applies to cars and light trucks of Model Years 2011 through 2020. In March 2020, the USEPA and National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks, further detailed below.

Gasoline is the most-used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and SUVs. According to the most recent data available, in 2022, total gasoline consumption in California was 316,425 thousand barrels or 1,597.6 trillion British Thermal Units (BTU).[11] Of the total gasoline consumption, 299,304 thousand barrels or 1,511.2 trillion BTU were consumed for transportation.[12] Based on fuel consumption obtained from CARB's California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 713.9 million gallons of gasoline and approximately 301.2 million gallons of diesel will be consumed from vehicle trips in Riverside County in 2024.

Greenhouse Gas Emissions

GHGs are present in the atmosphere naturally, are released by natural sources, or form from secondary reactions taking place in the atmosphere. Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. Although manmade GHGs include naturally occurring

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8 CEC. 2020b. Gas Consumption by County and Entity. Website: www.ecdms.energy.ca.gov/gasbycounty.aspx and www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed July 2024).

9 United States Department of Transportation (USDOT). n.d. "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed January 2024).

10 United States Department of Energy. 2007. "Energy Independence & Security Act of 2007." Website: www.afdc.energy.gov/laws/eisa (accessed October 2024).

11 United States Energy Information Administration (EIA). 2022. California State Profile and Energy Estimates, Data. Website: www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed July 2024).

12 Ibid.

GHGs such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), some gases like hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and sulfur hexafluoride (SF_6) are completely new to the atmosphere.

Certain gases (e.g., water vapor) are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation and the length of time that the gas remains in the atmosphere (atmospheric lifetime). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of CO_2 equivalents (CO_2e).

REGULATORY SETTING

This section provides regulatory background information for air quality, GHG, and energy.

Air Quality

Applicable federal, State, regional, and local air quality regulations are discussed below.

Federal Regulations

The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and set deadlines for their attainment. The CAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required for areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

State Regulations

In 1988, the CCAA required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for CO, O_3, SO_2, and NO_2 by the earliest practical date. The CCAA provides districts with the authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and areawide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in districtwide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

CARB is the State's clean air agency. CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Regional Regulations

South Coast Air Quality Management District. SCAQMD has jurisdiction over most air quality matters in the Basin. This area includes all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin and is tasked with implementing certain programs and regulations required by the CAA and the CCAA. The SCAQMD prepares plans to attain CAAQS and NAAQS. SCAQMD is directly responsible for reducing emissions from stationary (area and point) sources. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures though educational programs or fines, when necessary.

The proposed project could be subject to the following SCAQMD rules and regulations:[13]

- **South Coast Air Quality Management District Rule 403 Measures:**
    - Water active sites at least two times daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).
    - All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).
    - Traffic speeds on all unpaved roads shall be reduced to 15 miles per hour (mph) or less.
- **South Coast Air Quality Management District Rule 481:** SCAQMD Rule 481 governs operation of a spray booth. It requires that the spray equipment operate in a control enclosure and that paints are applied with high volume low pressure (HVLP), electrostatic, and/or airless spray equipment. This rule would not apply if less than 3 gallons per day or 66 gallons per month were sprayed.
- **South Coast Air Quality Management District Rule 1113:** SCAQMD Rule 1113 governs the sale, use, and manufacture of architectural coating and limits the volatile organic compound (VOC) content in paints and paint solvents. This rule regulates the VOC content of paints available during construction and operation of the proposed project. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

[13] SCAQMD. 2024. South Coast AQMD Rule Book. Website: www.aqmd.gov/home/rules-compliance/rules (accessed October 2024).

SCAQMD has a Rule 1132 *Further Control of VOC Emissions from High-Emitting Spray Booth Facilities*; however, this rule would not apply to this project as the spray booth would not produce more than 40,000 pounds of VOC per year specified in the rule.

The SCAQMD is responsible for demonstrating regional compliance with ambient air quality standards but has limited indirect involvement in reducing emissions from fugitive, mobile, and natural sources. To that end, the SCAQMD works cooperatively with the CARB, the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and other federal and State government agencies. The SCAQMD has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs) to meet CAAQS and NAAQS. SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. Every 3 years, SCAQMD prepares a new AQMP, updating the previous plan and 20-year horizon.

The Final 2022 AQMP is the currently adopted AQMP. Key elements of the Final 2022 AQMP include the following:[14]

- Identifying co-benefits from other planning efforts (e.g., climate, energy, and transportation)
- A strategy with fair-share emission reductions at the federal, State, and local levels
- Investment in strategies and technologies meeting multiple air quality objectives
- Seeking new partnerships and significant funding for incentives to accelerate deployment of zero-emission and near-zero emission technologies
- Enhanced socioeconomic assessment, including an expanded environmental justice analysis
- Attainment of the 24-hour $PM_{2.5}$ standard in 2019 with no additional measures
- Attainment of the annual $PM_{2.5}$ standard by 2025 with implementation of a portion of the O_3 strategy
- Attainment of the 1-hour O_3 standard by 2022 with no reliance on "black box" future technology (CAA Section 182(e)(5) measures)

The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low NO_X technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard.

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14 SCAQMD. 2022. *Final 2022 Air Quality Management Plan*. February. Website: www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final2022aqmp.pdf (accessed October 2024).

Southern California Association of Governments

SCAG is a council of governments for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With regard to air quality planning, SCAG prepares the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the AQMP and are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. The RTP, RTIP, and AQMP are based on projections originating within local jurisdictions.

SCAG adopted the Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal 2024)[15] on April 4, 2024. Connect SoCal 2024 is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding and takes into account operations and maintenance costs, to ensure reliability, longevity, and cost effectiveness. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in Connect SoCal 2024, would reach the GHG emissions reduction target set by CARB, including the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels).

Local Regulations

City of Menifee General Plan. The City of Menifee (City) addresses air quality in the General Plan.[16] The General Plan goals and policies aim to improve air quality by meeting or exceeding all State and federal standards. The following policies from the General Plan are applicable to the proposed project:

- **Goal OSC-9: Air Quality.** Reduced impacts to air quality at the local level by minimizing pollution and particulate matter.

- **Policy OCS-9.1:** Meet state and federal clean air standards by minimizing particulate matter emissions from construction activities.

- **Policy OCS-9.3:** Comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source.

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15 Southern California Association of Governments (SCAG). 2024. *Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments.* Website: scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf?1712261565 (accessed April 2024).

16 City of Menifee. 2013. *City of Menifee General Plan*. September. Website: www.cityofmenifee.us/221/General-Plan (accessed October 2024).

City of Menifee Municipal Code. The City adopted the Development Code (Title 9: Planning and Zoning of the Menifee Municipal Code) on December 18th, 2019, which became effective January 17, 2020.[17] This Development Code establishes standards for development that are designed to reduce air quality impacts, greenhouse gas emissions, and energy usage from future development within the City.

Energy

Federal and State agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation (USDOT), the United States Department of Energy, and the USEPA are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. On the State level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy.

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies and serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

The CEC is the State's primary energy policy and planning agency. The CEC forecasts future energy needs, promotes energy efficiency, supports energy research, develops renewable energy resources, and plans for/directs State response to energy emergencies. The applicable federal, State, regional, and local regulatory framework is discussed below.

Federal Regulations

Energy Policy Act of 2005. The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under this act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Corporate Average Fuel Economy Standards. On March 31, 2022, the NHTSA finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year

[17] City of Menifee. 2019. City of Menifee Municipal/Development Code and Design Guide. Website: www.cityofmenifee.us/494/MunicipalDevelopment-Code-and-Design-Gui (accessed November 2024).

2026. The final standards are estimated to save about 234 billion gallons of gasoline between model years 2030 to 2050.

State Regulations

Assembly Bill 1575, Warren-Alquist Act. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) or larger; develop energy technologies and renewable energy resources; plan for and direct State responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code (PRC) Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require Environmental Impact Reports (EIRs) to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

Senate Bill 1389, Energy: Planning and Forecasting. In 2002, the State Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles (ZEVs) and their infrastructure needs and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted report includes the *2023 Integrated Energy Policy Report*.[18] The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

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18 CEC. 2023. *2023 Integrated Energy Policy Report*. Website: www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2023-integrated-energy-policy-report (accessed October 2024).

Renewable Portfolio Standard. SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the State's electricity come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[19]

Title 24, California Building Code. Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CEC first adopted the Building Energy Efficiency Standards for Residential and Non-residential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The CBC is updated every 3 years, with the most recent update consisting of the 2022 CBC that became effective January 1, 2023. The efficiency standards apply to both new construction and rehabilitation of both residential and non-residential buildings and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in CCR Title 24.

California Green Building Standards Code (CALGreen Code). In 2010, the California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis, with the most recent update consisting of the 2022 CALGreen Code standards that became effective January 1, 2023. The CALGreen Code established mandatory measures for residential and non-residential building construction and encouraged sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce GHG emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and non-residential buildings subject to the standard.

California Energy Efficiency Strategic Plan. On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals, known as the "Big Bold Energy Efficiency Strategies," that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

[19] California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard Program. Website: cpuc.ca.gov/rps (accessed October 2024).

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

Regional Regulations

There are no regional regulations that apply to the proposed project.

Local Regulations

City of Menifee General Plan. The City of Menifee addresses energy in the City's General Plan.[20] The General Plan contains policies that work to conserve energy resources through the use of available technology and conservation practices. The following goal and policies are applicable to the proposed project:

- **Goal OSC-4:** Efficient and environmentally appropriate use and management of energy and mineral resources to ensure their availability for future generations.

- **Policy OCS-4.1:** Apply energy efficiency and conservation practices in land use, transportation demand management, and subdivision and building design.

- **Policy OCS-4.2:** Evaluate public and private efforts to develop and operate alternative systems of energy production, including solar, wind, and fuel cell.

- **Policy OCS-4.3:** Advocate for cost-effective and reliable production and delivery of electrical power to residents and businesses throughout the community.

Greenhouse Gas Emissions

This section describes regulations related to global climate change at the federal, State, and local levels.

Federal Regulations

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO_2 emissions under the CAA.

Although there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change, including the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the CAA, finding that seven GHGs (CO_2, CH_4, N_2O, HFCs,

[20] City of Menifee. 2013. *City of Menifee General Plan*. September. Website: www.cityofmenifee.us/221/General-Plan (accessed October 2024).

NF_3, PFCs, and SF_6) constitute a threat to public health and welfare and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

State Regulations

CARB is the lead agency for implementing climate change regulations in the State. Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. This effort set a GHG emission reduction target to reduce GHG emissions to 1990 levels by 2020. CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of CO_2e. The emissions target of 427 MMT CO_2e requires the reduction of 169 MMT CO_2e from the State's projected business-as-usual 2020 emissions of 596 MMT CO_2e. AB 32 requires CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. CARB approved the Scoping Plan on December 11, 2008. It contains the main strategies that California will implement to achieve the reduction of approximately 169 MMT CO_2e, or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10 percent, from the 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reduction of 31.7 MMT CO_2e)
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e)
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e)
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e)

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020 and sets the groundwork to reach long-term goals set forth in Executive Orders (EOs) S-3-05 and B-16-2012. The First Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation,

and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[21] to reflect the 2030 target that was set by EO B-30-15 and codified by SB 32.

The 2022 Scoping Plan[22] was approved in December 2022 and assesses progress toward the statutory 2030 target while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update 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.

Senate Bill 375 (2008). Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB-approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). CARB may update the targets every 4 years and must update them every 8 years. MPOs, in turn, must demonstrate how their plans, policies, and transportation investments meet the targets set by CARB through Sustainable Community Strategies (SCSs). The SCSs are included with the RTP, a report required by State law. However, if an MPO finds that its SCS will not meet the GHG reduction targets, it may prepare an Alternative Planning Strategy. The Alternative Planning Strategy identifies the impediments to achieving the targets.

Executive Order B-30-15 (2015). Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target and, therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent.
- Increase energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission (CPUC) for the private utilities and by the California Energy Commission (CEC) for

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21 CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

22 CARB. 2022. *2022 Scoping Plan Update*. May 10. Website: ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed October 2024).

municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other nonrenewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016, the Legislature passed, and the Governor signed, SB 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change analysis of the emission trajectory that would stabilize atmospheric GHG concentrations at 450 ppm CO_2e and reduce the likelihood of catastrophic impacts from climate change.

AB 197, the companion bill to SB 32, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

Senate Bill 100. On September 10, 2018, Governor Brown signed SB 100, which raises California's renewable portfolio standard requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. 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 B-55-18. EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant State agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning that not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions should be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Assembly Bill 1279.AB 1279 was signed in September 2022 and codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter. This bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels by 2045 and directs CARB to work with relevant State agencies to achieve these goals.

Title 24, Building Efficiencies Standards, and the California Green Building Standards Code. In November 2008, the CBSC established the CALGreen Code (California Code of Regulations Title 24,

Part 11), which sets performance standards for residential and nonresidential development to reduce environmental impacts and to encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. CALGreen is updated every 3 years and was most recently updated in 2022 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2023.

Low Carbon Fuel Standard

In January 2007, EO S-01-07 established a Low Carbon Fuel Standard (LCFS). This executive order calls for a statewide goal to be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020, and that an LCFS for transportation fuels be established for California. The LCFS applies to all refiners, blenders, producers, or importers ("Providers") of transportation fuels in California, including fuels used by off-road construction equipment. In June 2007, CARB adopted the LCFS under AB 32 pursuant to Health and Safety Code Section 38560.5, and, in April 2009, CARB approved the new rules and carbon intensity reference values with new regulatory requirements taking effect in January 2011. The standards require providers of transportation fuels to report on the mix of fuels they provide and demonstrate they meet the LCFS intensity standards annually. This is accomplished by ensuring that the number of "credits" earned by providing fuels with a lower carbon intensity than the established baseline (or obtained from another party) is equal to or greater than the "deficits" earned from selling higher intensity fuels. In response to certain court rulings, CARB re-adopted the LCFS regulation in September 2015, and the LCFS went into effect on January 1, 2016. In 2018, CARB approved amendments to the regulation to readjust carbon intensity benchmarks to meet California's 2030 GHG reductions targets under SB 32. These amendments include opportunities to promote ZEV adoption, carbon capture and sequestration, and advanced technologies for decarbonization of the transportation sector.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of ZEVs, into a single package of regulatory standards for vehicle model years 2017 through 2025. The new regulations strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's ZEVs regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the State. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 40 percent fewer GHGs and 75 percent fewer smog-forming emissions than 2012 model year vehicles.

Regional Regulations

Southern California Association of Governments. The SCAG is a regional council consisting of the following six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In

total, the SCAG region encompasses 191 cities and over 38,000 sq mi within Southern California. SCAG is the MPO serving the region under federal law and serves as the Joint Powers Authority, the Regional Transportation Planning Agency, and the Council of Governments under State law. As the Regional Transportation Planning Agency, SCAG prepares long-range transportation plans for the Southern California region, including the RTP/SCS and the 2008 Regional Comprehensive Plan (RCP).

On April 4, 2024, SCAG adopted *Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy* (2024–2050 RTP/SCS).[23] In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at 8 percent below 2005 per-capita emission levels by 2020 and 19 percent below 2005 per capita emission levels by 2035. The RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emission reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high-quality transit areas and livable corridors and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles.[24] However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

South Coast Air Quality Management District. In 2008, the SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAQMD. The Working Group developed several different options that are contained in the SCAQMD 2008 draft guidance document titled *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* [25] that could be applied by lead agencies. On September 28, 2010, SCAQMD Working Group Meeting No. 15 provided further guidance, including a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. SCAQMD has not presented a finalized version of these thresholds to the governing board.

SCAQMD identifies the emissions level for which a project would not be expected to substantially conflict with any State legislation adopted to reduce statewide GHG emissions. As such, the utilization of a service population represents the rates of emissions needed to achieve a fair share of the State's mandated emissions reductions. Overall, SCAQMD identifies a GHG efficiency level that, when applied statewide or to a defined geographic area, would meet the 2020 and post-2020 emission targets as required by AB 32 and SB 32. If projects are able to achieve targeted rates of emissions per the service population, the State would be able to accommodate expected population growth and achieve economic development objectives while also abiding by AB 32's emissions

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23 SCAG. 2024. *Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*. Website: scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf (accessed October 2024).

24 Ibid.

25 SCAQMD. 2008b. *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*. Website: www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf (accessed October 2024).

target and future post-2020 targets. The SCAQMD has established a flowchart for evaluating GHG significance and indicates that when a project is exempt from CEQA, no further analysis is required.

The Western Riverside Council of Governments Subregional Climate Action Plan June 2014. The Western Riverside Council of Governments (WRCOG) completed a Subregional Climate Action Plan (CAP) in June 2014. Twelve cities in Western Riverside County, including Menifee, joined efforts to develop this Subregional CAP, which sets forth a subregional emissions reduction target, emissions reduction measures, and action steps to assist each community to demonstrate consistency with California's Global Warming Solutions Act of 2006 (AB 32). The following measures are applicable to the project:

- **Measure SR-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6).** Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).

- **Measure SR-4: HERO Commercial Program.** A public-private partnership administered by WRCOG, offering financing to business owners in the subregion for the installation of energy efficient, renewable energy, and water conservation improvements.

- **Measure SR-5: Utility Programs**. Southern California Edison (SCE) and Southern California Gas Company (SCG) each offer rebate programs to reduce energy consumption.

- **Measure SR-6: Pavley and Low Carbon Fuel Standard (LCFS).** CARB identified this measure as a "Discrete Early Action Measure." This measure would reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.

- **Measure SR-10: Telecommuting.** Telecommuting would reduce GHG emissions associated with vehicles no longer on the road.

- **Measure SR-11: Goods Movement.** Efficient movement of goods through inland Southern California.

- **Measure SR-13: Construction and Demolition Waste Diversion.** Meet mandatory requirement to divert 50 percent of C&D waste from landfills by 2020 and exceed requirement by diverting 90 percent of C&D waste from landfills by 2035.

- **Measure SR-14: Water Conservation and Efficiency.** Reduce per capita water use by 20 percent by 2020. SB X7-7 is part of a California legislative package passed in 2009 that requires urban retail water suppliers to reduce per-capita water use by 10 percent from a baseline level by 2015, and to reduce per capita water use by 20 percent by 2020. Green accountability performance (GAP) Goal 16 directly aligns with SB X7-7. In Southern California, energy costs and GHG emissions associated with the transport, treatment, and delivery of water from outlying regions are high. Therefore, the region has extra incentive to reduce water consumption. While

this is considered a state measure, it is up to the local water retailers, jurisdictions, and water users to meet these targets.

- **Measure E-1: Energy Action Plans:** Improve municipal and community-wide energy efficiency and reduce energy consumption through the adoption of local Energy Action Plans (EAP).
- **Measure E-3, Shade Trees:** Strategically plant trees at new nonresidential developments to reduce the urban heat island effect.
- **Measure T-3, End of Trip Facilities:** Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters.
- **Measure T-4, Promotional Transportation Demand Management:** Encourage transportation demand management strategies.
- **Measure T-5: Transit Service Expansion;** Collaborate with local and regional transit providers to increase transit service provided in the subregion.
- **Measure T-6: Transit Frequency Expansion;** Collaborate with local and regional transit providers to provide more frequent transit in the subregion.
- **Measure T-7, Traffic Signal Coordination:** Incorporate technology to synchronize and coordinate traffic signals along local arterials.
- **Measure T-8, Density:** Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.
- **Measure T-10: Design/Site Planning:** Design neighborhoods and sites to reduce VMT.

Local Regulations

City of Menifee General Plan. The City of Menifee addresses GHGs in the General Plan.[26] The General Plan includes goals and policies that work to reduce emissions of greenhouse gases that contribute to global climate change in accord with federal and State law. The following goal and policies from the General Plan are related to GHGs and are applicable to the proposed project:

- **Policy OCS-9.5:** Comply with the mandatory requirements of Title 24 Part 1 of the California Building Standards Code (CALGreen) and Title 24 Part 6 Building and Energy Efficiency Standards.

[26] City of Menifee. 2013. *City of Menifee General Plan*. September. Website: www.cityofmenifee.us/221/General-Plan (accessed October 2024).

- **Goal OSC-10: Environmentally Aware Community:** An environmentally aware community that is responsive to changing climate conditions and actively seeks to reduce local greenhouse gas emissions.

- **Policy OCS-10.3:** Participate in regional greenhouse gas emission reduction initiatives.

METHODOLOGY

Construction Emissions

Construction activities can generate a substantial amount of air pollution. Construction activities are considered temporary; however, short-term impacts can contribute to exceedances of air quality standards. Construction activities include site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil disturbance and fuel combustion from mobile heavy-duty, diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips.

The CalEEMod computer program was used to calculate emissions from on-site construction equipment and emissions from worker and vehicle trips to the site. This analysis assumes that construction of the proposed project would begin in 2025 and occur over a period of 6 months. These assumptions were included in the CalEEMod inputs. This analysis also assumes that the proposed project would comply with SCAQMD Rule 403 measures.[27] Site preparation, grading, and building activities would involve the use of standard earthmoving equipment such as large excavators, cranes, and other related equipment. In addition, the proposed project would result in an import of 4,700 cubic yards of soil and an export of 9,200 cubic yards of soil from a construction and landscaping material yard located immediately north of the project site. All other construction details are not yet known; therefore, default assumptions (e.g., construction equipment, construction worker and truck trips, and fleet activities) from CalEEMod were used.

Operational Emissions

This air quality analysis includes estimating emissions associated with long-term operation of the project. Indirect emissions of criteria pollutants with regional impacts would be emitted by project-generated vehicle trips. In addition, localized air quality impacts (i.e., higher CO concentrations or "hot-spots") near intersections or roadway segments in the project vicinity would also potentially occur due to project-generated vehicle trips.

Consistent with SCAQMD guidance for estimating emissions associated with land use development projects, the CalEEMod computer program was used to calculate the long-term operational emissions associated with the project. As previously discussed in the Project Location and Description section, the proposed project would construct a one-story, 18,865 sq ft building to house the Caliber Collision Paint and Auto Body Repair shop and associated improvements. Therefore, the proposed project analysis was conducted using the land use codes *Automotive Care Center and Parking Lot.* Trip generation rates used in CalEEMod for the project were based on the

[27] SCAQMD. 2005. Rule 403. Website: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf (accessed October 2024).

project's trip generation analysis, which identifies that the project would generate approximately 85 average daily trips.[28] When project-specific data were not available, default assumptions from CalEEMod were used to estimate project emissions.

Energy

The analysis focuses on the four sources of energy that are relevant to the proposed project: electricity, natural gas, the equipment fuel necessary for project construction, and vehicle fuel necessary for project operations. For the purposes of this analysis, the amounts of electricity, construction fuel, and fuel use from operations are quantified and compared to that consumed in Riverside County. The electricity of the proposed project is analyzed on an annual basis. Electricity uses were estimated for the project using default energy intensities by land use type in CalEEMod. In addition to the typical electrical uses, two electric air compressors and welders were included as "Operational Off-Road Equipment." The default natural gas consumption rate was doubled to represent the gas used by the two natural gas-fired paint booths.

Greenhouse Gas Emissions

GHG emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term GHG emissions associated with project-related vehicular trips. Recognizing that the field of global climate change analysis is rapidly evolving, the approaches advocated most recently indicate that, for determining a project's contribution to GHG emissions, lead agencies should calculate or estimate emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, construction activities, and any other significant source of emissions within the project area. The CalEEMod results were used to quantify GHG emissions generated by the project.

THRESHOLDS OF SIGNIFICANCE

Air Quality

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would do any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under applicable NAAQS or CAAQS;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) affecting a substantial number of people.

[28] LSA. 2024. *Table A: Project Trip Generation.* October.

Certain air districts (e.g., SCAQMD) have created guidelines and requirements to conduct air quality analysis. The SCAQMD's current guidelines, the *CEQA Air Quality Handbook*[29] with associated updates, were followed in this assessment of air quality impacts for the proposed project.

Regional Emissions Thresholds

SCAQMD has established daily emission thresholds for construction and operation of proposed projects. The emission thresholds were established based on the attainment status of the air basins within the SCAQMD with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks. Table D lists the CEQA significance thresholds for construction and operational emissions established for the SCAQMD.

Table D: SCAQMD Emissions Thresholds

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOCs	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_X
Construction	75	100	550	150	55	150
Operations	55	55	550	150	55	150

Source: Air Quality Significance Thresholds, Website: www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf (SCAQMD 2019).

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compound

Projects in the SCAQMD with construction- or operations-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which the SCAQMD developed and which apply throughout the SCAQMD, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the project vicinity are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the SCAQMD, a project would be considered to have a significant CO impact if project emissions would result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 ppm
- California State 8-hour CO standard of 9 ppm

[29] SCAQMD. 1993. CEQA Air Quality Handbook (1993). April. Website: www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed October 2024).

Localized Impacts Analysis

The SCAQMD published its *Final Localized Significance Threshold Methodology* in July 2008, recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.[30] This guidance was used to analyze potential localized air quality impacts associated with construction and operation of the proposed project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emission source, the ambient air quality in the Source Receptor Area (SRA), and the distance to the project. Only NO_x, CO, PM_{10}, and $PM_{2.5}$ are included. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality.

LSTs are based on the ambient concentrations of each pollutant within the project's SRA and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is the Perris Valley area (SRA 24). The SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter source-receptor distances. The nearest sensitive receptors include single-family residence located approximately 70 feet south of the project site boundary and approximately 250 feet from the centroid of the operational emissions. In cases where receptors may be closer than 82 feet (25 meters), SCAQMD LST guidance specifies that the minimum distance of 25 meters should be used for purposes of the LST assessment.[31] The project site is 2.39 acres, Table E lists the emissions thresholds that apply during project construction and operation.

Table E: SCAQMD Localized Significance Thresholds

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction (2.39 acres, 70-foot distance)	183	973	8	5
Operations (2.39 acres, 250-foot distance)	247	1,905	8	3

Source: *Final Localized Significance Threshold Methodology* (SCAQMD 2008).
Based on the Perris Valley area (SRA 24), 70-foot sensitive receptor distance from construction emissions and 250 feet distance from operational emissions.
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District

Energy

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse impact related to energy if the project would:

30 SCAQMD. 2008a. *Final Localized Significance Threshold Methodology.* July. Website: www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf (accessed October 2024).

31 SCAQMD. n.d. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf (accessed July 2024).

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

- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Greenhouse Gas Thresholds

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse greenhouse gas emission impact if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting modified in September 2010 (Meeting No. 15)[32], SCAQMD proposed to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency:

- **Tier 1—Exemptions:** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2—Consistency with a Locally Adopted GHG Reduction Plan:** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

- **Tier 3—Numerical Screening Threshold:** If GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. SCAQMD, under Option 1, is proposing a "bright-line" screening-level threshold of 3,000 metric tons (MT) of CO_2e (or MT CO_2e) per year (or MT CO_2e/year) for all land use types or, under Option 2, the following land use-specific thresholds: 1,400 MT CO_2e for commercial projects; 3,500 MT CO_2e for residential projects; or 3,000 MT CO_2e for mixed-use projects. This bright-line threshold is based on a review of the Office of Planning and Research (OPR) database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds

[32] SCAQMD. 2010. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15. September 28. Website: www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf (accessed August 2024).

identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal and therefore less than cumulatively considerable impact on GHG emissions.

- **Tier 4—Performance Standards:** If emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. The SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold. The current recommended approach is per-capita efficiency targets. The SCAQMD is not recommending use of a percentage emissions reduction target. Instead, the SCAQMD proposes proposed a 2035 efficiency target of 3.0 MT CO_2e per year per service population for project-level analyses and 4.1 MT CO_2e per year per service population for plan-level projects (e.g., program-level projects such as General Plans).

The applicable tier for this project is Tier 3, which states that if GHG emissions are less than 3,000 MT of CO_2e per year, project-level and cumulative GHG emissions would be less than significant.

As described above, the City adopted the Subregional WRCOG CAP. The consistency of the project with the goals of this CAP fulfills the CEQA goal of fully informing local-agency decision-makers of the environmental impact of the project under consideration at a stage early enough to ensure that GHG emissions are addressed. Therefore, an analysis would first evaluate the proposed project against the SCAQMD threshold of 3,000 MT CO_2e per year. If the proposed project would exceed the 3,000 MT CO_2e per year threshold, then the 2035 efficiency target of 3.0 MT CO_2e per year per service population would be used to evaluate impacts. The project is also evaluated for compliance with the 2022 Scoping Plan[33] and the SCAG 2024–2050 RTP/SCS.[34]

IMPACT ANALYSIS

This section identifies potential air quality and GHG impacts associated with implementation of the proposed project.

Air Quality Impacts

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from project-related vehicular trips and due to energy consumption (e.g., electricity and natural gas usage) by the proposed land uses.

Consistency with Applicable Air Quality Plans

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are

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33 CARB. 2022. *2022 Scoping Plan Update*. May 10. Website: ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed October 2024).

34 SCAG. 2024. *Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*. Website: scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf (accessed October 2024).

addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The proposed project would construct a paint and auto body repair shop with associated site improvements. The proposed project is not considered a project of statewide, regional, or areawide significance (e.g., large-scale projects such as airports, electrical generating facilities, petroleum and gas refineries, residential development of more than 500 dwelling units, or shopping centers or business establishments employing more than 1,000 persons or encompassing more than 500,000 sq ft of floor space) as defined in the California Code of Regulations (Title 14, Division 6, Chapter 3, Article 13, Section 15206(b)). Because the proposed project would not be defined as a regionally significant project under CEQA, it does not meet the SCAG Intergovernmental Review criteria.

The City's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD Air Quality Management Plan (AQMP). Pursuant to the methodology provided in the SCAQMD *CEQA Air Quality Handbook*,[35] consistency with the Basin 2022 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. The consistency review is presented as follows:

1. The project would result in short-term construction and long-term operational pollutant emissions that are less than the CEQA significance emissions thresholds established by SCAQMD, as demonstrated below; therefore, the project would not result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standards violation.

2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, as a commercial project, the proposed project is not defined as significant. In addition, the proposed project would not require a change to the General Plan land use designation or the current zoning and would be consistent with the City's General Plan and Zoning Ordinance.

Based on the consistency analysis presented above, the proposed project would be consistent with the regional AQMP.

Criteria Pollutant Analysis

The Basin is currently designated nonattainment for the federal and State standards for 8-hour O_3 and PM_{10}. The Basin is also nonattainment for the State standard for 1-hour O_3. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future

[35] SCAQMD. 1993. CEQA Air Quality Handbook (1993). April. Website: www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed October 2024).

development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of an ambient air quality standard. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, SCAQMD 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. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, building construction, paving, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_X, VOCs, directly emitted $PM_{2.5}$ or PM_{10}, and TACs (e.g., DPM).

Construction emissions can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors. Project construction activities would include site preparation, grading, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. SCAQMD has established Rule 403: Fugitive Dust, which would require the applicant to implement measures that would reduce the amount of particulate matter generated during the construction period. The Rule 403 measures that were incorporated in this analysis include:[36]

[36] SCAQMD. 2005. Rule 403. Fugitive Dust. Website: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf (accessed October 2024).

- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).

- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.

- Reduce traffic speeds on all unpaved roads to 15 mph or less.

If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

CalEEMod is designed to model construction emissions for land development projects and allows for the input of project-specific information, such as the number of equipment, hours of operations, duration of construction activities, and selection of emission control measures. Construction would require heavy equipment during mass grading, utility installations, building construction and paving. Grading would include importing 9,200 cubic yards and exporting 4,700 cubic yards of soil from a construction and landscaping material yard located immediately north of the project site. It was assumed that architectural coatings would be applied as part of the building construction and paving processes. Construction is planned to start in early 2025 and be complete in approximately 6 months. Other than the construction dates, CalEEMod defaults were used in the analysis.

Construction emissions were estimated for the project using CalEEMod and are summarized in Table F. CalEEMod output sheets are included in Attachment B.

Table F: Short-Term Regional Construction Emissions

Emissions Phase	Regional Pollutant Emissions (lbs/day)							
	VOCs	NO_X	CO	SO_X	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Site Preparation	3	32	31	<1	5	1	3	1
Grading	2	39	24	<1	7	1	2	1
Building Construction	1	11	14	<1	<1	<1	<1	<1
Architectural Coating	1	1	1	<1	<1	<1	<1	<1
Paving	1	7	10	<1	<1	<1	<1	<1
Peak Daily	**3**	**39**	**31**	**<1**	**8**		**4**	
SCAQMD Threshold	**75**	**100**	**550**	**150**	**150**		**55**	
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: Compiled by LSA (October 2024).
Note: It was assumed that architectural coatings would be applied during the building construction and paving processes. PM_{10} and $PM_{2.5}$ fugitive emissions include required dust control measures per SCAQMD Rule 403. The maximum emissions of summer and winter modeling results were used to evaluate the operational emission impacts. CalEEMod output sheets are provided in Attachment B. Some values may not appear to add correctly due to rounding
CalEEMod = California Emissions Estimator Model
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

The anticipated peak daily construction emissions shown in Table F indicate the construction emissions from the proposed project would not exceed the corresponding SCAQMD daily emission thresholds for criteria pollutants. Therefore, construction air quality impacts would be less than significant.

Operational Air Quality Impacts. Long-term air pollutant emissions associated with operation of the proposed project include emissions from area, energy, and mobile sources. Area-source emissions include the combustion of natural gas for building heating, water heating, and sprayer operation; architectural coatings; consumer products; and landscaping. Energy-source emissions result from activities in buildings that use electricity; it was assumed there would be at most two electric air compressors and welders. Additionally, two natural gas-fired paint booths are planned to be utilized as part of the proposed project operational activities. Long-term operational emissions associated with the proposed project were calculated using CalEEMod.

Mobile source emissions are associated with project-related vehicle trip generation. The *Caliber Collision Paint and Auto Body Repair Shop Project Traffic Analysis Memorandum* prepared for the project estimates the project will have 20 full-time employees and approximately 13 to 15 customers on a typical weekday.[37] The CalEEMod default vehicle fleet mix was used for this analysis.

The use of coatings and solvents in the spray booths would result in emissions of VOCs, total organic gas (TOG), and TACs. The spray booths will be subject to SCAQMD permitting and emissions control technology requirements, with the SCAQMD as the enforcing agency ensuring compliance with applicable requirements. It was assumed that the spray booths would comply with SCAQMD Rule 481[38] governing spray coating operations. The emissions from the additional natural gas used by the spray booths were estimated by doubling the CalEEMod default Title 24 natural gas rates.

Table G provides the estimated existing emission estimates and the proposed project's estimated operational emissions. CalEEMod output sheets are provided in Attachment B.

As shown in Table G, criteria pollutant emissions from operational activities associated with the proposed project would be below the SCAQMD thresholds. Therefore, project-related regional operational emissions would be less than significant.

Long-Term Microscale (CO Hot Spot) Analysis. Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with

37 LSA Associates, Inc. (LSA). 2024. Caliber Collision Paint and Auto Body Repair Shop Project Traffic Analysis Memorandum. October.

38 SCAQMD. 2002. Rule 481. Website: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-481.pdf (accessed November 2024).

Table G: Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	1	<1	1	0	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	<1	1	5	<1	1	<1
Total Project Emissions	**1**	**1**	**6**	**<1**	**1**	**<1**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (October 2024).
The maximum emissions of summer and winter modeling results were used to evaluate the operational emission impacts. CalEEMod output sheets are provided in Attachment B. Some values may not appear to add correctly due to rounding.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, thereby affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Lake Elsinore Monitoring Station located at 506 West Flint Street (the closest station to the project site monitoring CO) showed a highest recorded 1-hour concentration of 1.3 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 0.8 ppm (the State standard is 9 ppm) from 2021 to 2023. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

The proposed project is expected to generate 85 average daily trips, with 25 trips occurring in the a.m. peak hour and 25 trips occurring in the p.m. peak hour.[39] Therefore, given the extremely low level of CO concentrations in the project area and the lack of traffic impacts at any intersections, project-related vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the project would not result in any project-related impacts on CO concentrations.

[39] EPD, Solutions. 2024. *Table 1: Project Trip Generation.* June.

Localized Impact Analysis

Table H shows that the on-site emissions of the pollutants on the peak day of construction will result in concentrations of pollutants at the nearest residences that are all below the SCAQMD thresholds of significance.

Table H: Project Localized Construction and Operational Emissions

Source	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction Emissions				
On-Site Emissions	32	30	6	4
Localized Significance Threshold	183	973	8	5
Significant?	**No**	**No**	**No**	**No**
Operational Emissions				
On-Site Emissions	<1	1	<1	<1
Localized Significance Threshold	247	1,905	8	3
Significant?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (October 2024).
Note: Based on the Perris Valley area (SRA 24), a 2.39-acre disturbed area, 70-foot sensitive receptor distance from construction emissions and 250-foot distance from operational emissions.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area

Table H also shows the calculated emissions for the proposed operational activities compared with the appropriate LSTs. By design, the localized impacts analysis only includes on-site sources; however, the CalEEMod output does not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table H include all on-site project-related stationary sources and 5 percent of the project-related mobile sources, which is a conservative estimate of the amount of project-related new vehicle traffic that will occur on site.

As detailed in Table H, the emission levels indicate that the project would not exceed SCAQMD LSTs during project construction or operation. The project's peak operational on-site NO_X emissions would be less than 1 pound per day. Due to the small size of the proposed project in relation to the overall Basin, the level of emissions is not sufficiently high to use a regional modeling program to correlate health effects on a Basin-wide level. On a regional scale, the quantity of emissions from the project is incrementally minor. Because the SCAQMD has not identified any other methods to quantify health impacts from small projects, and due to the size of the project, it is speculative to assign any specific health effects to small project-related emissions. However, based on this localized analysis, the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Odors

Heavy-duty equipment in the project area during construction would emit odors that are primarily from the equipment exhaust. However, the construction-produced odors would cease to occur after individual construction is completed. No other sources of objectionable odors have been identified for construction of the proposed project, and no mitigation measures are required.

SCAQMD Rule 402,[40] regarding nuisances, states:

> *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.*

Land uses that are associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project would be an auto body shop that would include activities with the potential to release VOCs that would result in odors. However, the project would include the required VOC emissions control devices (e.g., SCAQMD Rule 481-compliant paint booth control enclosures) such that no sources of objectionable odors have been identified for the proposed project. Therefore, the impacts associated with odors would be less than significant and no mitigation measures are required.

Naturally Occurring Asbestos

The proposed project site is in Riverside County, which is among the counties found to have serpentine and ultramafic rock in their soils.[41] However, according to the California Geological Survey, no such rock has been identified in the project vicinity. Therefore, the potential risk for naturally occurring asbestos during project construction is small and less than significant.

Energy Impacts

The following describes the potential impacts regarding energy resources that could result from implementation of the proposed project.

Construction Energy Use

The anticipated construction schedule assumes that the proposed project would be built over approximately 6 months. The proposed project would require site preparation, grading, building construction, paving, and architectural coating during construction.

Construction of the proposed project would require energy for the manufacture and transportation of building materials and for preparation of the site for grading activities and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities.

Construction activities are not anticipated to result in an inefficient use of energy because gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the proposed project. Energy usage on the project site during

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40 SCAQMD. 1976. Rule 402. Website: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf (accessed November 2024).

41 California Geological Survey. n.d. *Naturally-Occurring Asbestos in California.* Website: www.conservation.ca.gov/cgs/minerals/mineral-hazards/asbestos (accessed October 2024).

construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant, and no mitigation would be required.

Operational Energy Use

Energy use includes both direct and indirect sources of emissions. Direct sources of emissions include on-site natural gas usage for heating and spray booths and indirect sources include electricity generated by off-site power plants. Natural gas use in CalEEMod is measured in units of a thousand British thermal units (kBTU) per year; however, this analysis converts the results to natural gas in units of therms. Electricity use in CalEEMod is measured in kilowatt-hours (kWh) per year.

CalEEMod divides building electricity and natural gas use into uses that are subject to Title 24 standards and those that are not. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24, such as space heating, space cooling, water heating, and ventilation. Non-Title 24 uses include all other end uses (e.g., appliances, electronics, and other miscellaneous plug-in uses). Because some lighting is not considered as part of the building envelope energy budget, CalEEMod considers lighting as a separate electricity use category. In addition to the typical electrical uses, it was assumed there would be two electric air compressors and welders.

For natural gas, uses are likewise categorized as Title 24 or Non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include appliances. Two natural gas-fired paint booths are planned.

Table I shows the estimated potential increased electricity, natural gas, gasoline, and diesel demand associated with the proposed project. The electricity and natural gas rates are directly from the CalEEMod analysis results, while the gasoline and diesel rates are based on the project VMT from the CalEEMod analysis in conjunction with USDOT fuel efficiency data. [42]

Table I: Estimated Annual Energy Use of the Proposed Project

Land Use	Electricity Use (kWh/yr)	Natural Gas Use (kBTU/yr)	Gasoline (gpy)	Diesel (gpy)
Auto Shop	244,199	1,126,638	21,133	12,697

Source: Compiled by LSA (October 2024).
gpy = gallons per year
kBTU/yr = thousand British thermal units per year
kWh/yr = kilowatt-hours per year

As shown in Table I, the estimated potential increased electricity demand associated with the proposed project is 244,199 kWh per year. In 2022, total electricity consumption in the SCE service area in 2022 was 85,870 (GWh) or 85,870,000,000 kWh. Of this total, Riverside County consumed

[42] USDOT. 2021. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Website: www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed October 2024).

17,780.6 GWh or 17,780,600,000 kWh.[43] Therefore, electricity demand associated with the proposed project would be approximately 0.0014 percent of Riverside County's total electricity demand.

Also shown in Table I, the estimated potential increased natural gas demand associated with the proposed project is 1,126,638 kBTU per year or 1,126 therms. In 2022, total natural gas consumption in the SoCalGas service area was 5,026 million therms, while Riverside County consumed approximately 431,052,392 therms.[44] Therefore, natural gas demand associated with the proposed project would be approximately 0.3 percent of Riverside County's total natural gas demand.

Furthermore, the proposed project would result in energy usage associated with gasoline and diesel to fuel project-related trips. The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 mpg in 1980 to 22.8 mpg in 2022.[45] The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.5 mpg in 2026.[46]

Using the EPA gasoline fuel economy estimates for 2019, the California diesel fuel economy estimates for 2021, and the traffic data from the project traffic analyses, the proposed project would result in the annual consumption of approximately 21,133 gallons of gasoline and 12,697 gallons of diesel fuel. In 2019, vehicles in California consumed approximately 15.6 billion gallons of gasoline and 3.8 billion gallons of diesel fuel.[47] Therefore, gasoline and diesel demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California and, by extension, in Riverside County.[48]

In addition, automobiles associated with trips to and from the project site would be subject to fuel economy and efficiency standards, which are applicable throughout the State. As such, the fuel efficiency of vehicles associated with project operations would increase throughout the life of the proposed project. Therefore, implementation of the proposed project would not result in a substantial increase in transportation-related energy uses.

As described above, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy

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43 CEC. 2022b. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed October 2024).

44 CEC. 2022c. Gas Consumption by County. Website: ecdms.energy.ca.gov/gasbycounty.aspx (accessed October 2024).

45 USDOT. 2022. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Website: www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed October 2024).

46 CEC. 2015. Medium and Heavy-Duty Truck Prices and Fuel Economy 2013–2026. Website: efiling.energy.ca.gov/getdocument.aspx?tn=206180 (accessed October 2024).

47 CEC. 2022d. California Gasoline Data, Facts, and Statistics. Website: www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics (accessed October 2024).

48 CEC. 2021b. California Gasoline Data, Facts, and Statistics. Website: www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics (accessed October 2024).

efficiency measures into building design, equipment uses, and transportation. Impacts would be less than significant, and no mitigation measures would be necessary.

Therefore, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report. Therefore, the proposed project would not lead to new or substantially more severe energy impacts. As such, potential impacts related to conflict with or obstruction of a State or local plan for renewable energy or energy efficiency would be less than significant, and no mitigation is required.

Conflict with or Obstruction of a State or Local Plan for Renewable Energy or Energy Efficiency

The CEC recently adopted the 2023 Integrated Energy Policy Report.[49] The 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2023 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecasts, and the California Energy Demand Forecast.

As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources, and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impacts to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC's *2023 Integrated Energy Policy Report*.[50] In addition, the proposed project would comply with Title 24 and CALGreen standards and be consistent with the City's Development Code requirements.[51] Thus, as shown above, the proposed project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and not result in any irreversible or irretrievable commitments of energy. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be less than significant, and no mitigation measures would be necessary.

Greenhouse Gas Emission Impacts

The following sections describe the proposed project's construction- and operation-related GHG impacts and consistency with applicable GHG reduction plans.

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49 CEC. 2023. *2023 Integrated Energy Policy Report*. Website: www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2023-integrated-energy-policy-report (accessed October 2024).

50 Ibid.

51 City of Menifee. 2019. City of Menifee Municipal/Development Code and Design Guide. Website: www.cityofmenifee.us/494/MunicipalDevelopment-Code-and-Design-Gui (accessed November 2024).

Construction Greenhouse Gas Emissions

Construction activities associated with the proposed project would produce combustion emissions from various sources. Construction would emit GHGs through the operation of construction equipment and from worker and builder supply vendor vehicles for the duration of the approximately 6-month construction period. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, the fueling of heavy equipment emits CH_4. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The construction emissions, which have been calculated using CalEEMod (the same methodology as described above for the criteria pollutant emissions), are shown in Table J. Results indicate that project construction would generate approximately 220 MT CO_2e. The SCAQMD does not provide a separate GHG significance threshold for construction emissions, rather their guidance specifies that construction emissions should be amortized over 30 years (a typical project lifetime), added to the project operational emissions, and that total should be compared to the GHG significance threshold.

Table J: Construction GHG Emissions

Construction Phase	Total Emissions per Phase (MT)			Total Emissions per Phase (MT CO_2e)
	CO_2	CH_4	N_2O	
Site Preparation	8	<1	0	8
Grading	63	<1	<1	66
Building Construction	133	<1	<1	134
Architectural Coating	6	<1	<1	6
Paving	7	<1	<1	7
Total Emissions for the Entire Construction Process				**220 MT CO_2e**
Total Construction Emissions Amortized over 30 Years				**7 MT CO_2e**

Source: Compiled by LSA (October 2024).
CH_4 = methane
CO_2 = carbon dioxide
MT = metric tons
MT CO_2e = metric tons of carbon dioxide equivalent
N_2O = nitrous oxide

As shown in Table J, the amortized construction emissions would be approximately 7 MT CO_2e per year. See the CalEEMod output in Attachment B for details.

Operational Greenhouse Gas Emissions

Long-term operation of the proposed project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Mobile-source emissions of GHGs would include project-generated vehicle trips. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas for heating, and other minor sources. Increases in stationary-source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed uses.

Table K shows the GHG emissions associated with the level of development envisioned by the proposed project at opening. Area sources include architectural coatings, consumer products, and landscaping. Energy sources include natural gas consumption for space heating and spray booths.

Table K: Estimated Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (MT/yr)			
	CO_2	CH_4	N_2O	CO_2e
Construction Emissions Amortized over 30 Years				**7**
Operational Emissions				
Area Sources	<1	<1	<1	<1
Energy Sources	147	<1	<1	148
Mobile Sources	207	<1	<1	210
Waste Sources	6	<1	0	23
Water Usage	<1	<1	<1	<1
Refrigerant Sources	—	—	—	649
Total Project Emissions	**228**	**0**	**0**	**1,030**
SCAQMD GHG Threshold	**—**	**—**	**—**	**3,000**
Significant Emissions?	**—**	**—**	**—**	**No**

Source: Compiled by LSA (October 2024).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
MT/yr = metric tons per year
N_2O = nitrous oxide
SCAQMD = South Coast Air Quality Management District

As shown in Table K, the project would result in emissions of 1,030 MT CO_2e per year. This emissions level is less than the SCAQMD Tier 3 threshold of 3,000 MT CO_2e per year; therefore, project-level and cumulative GHG emissions would be less than significant. Attachment B includes the CalEEMod outputs.

The landscape watering system would be automatic and connected to a weather sensor and rain shut-off device. Water distribution devices would consist of a combination of low flow sprinkler/rotor heads on slopes and low precipitation rate drip tubing in other planter areas. The landscaping would consist of native and drought tolerant plant material. These measures would ensure that the design of the planting and irrigation will comply with the State of California's Water Efficient Landscape Ordinance. It is expected that the project would use up to 300 gallons of water per day.

Additionally, a project's incremental contribution to a cumulative GHG effect would not be cumulatively considerable if the project would comply with the requirements in a previously adopted plan or mitigation program. In June 2014, the City adopted the WRCOG CAP, which qualifies as a plan for the reduction of GHG emissions pursuant to the *State CEQA Guidelines*. The WRCOG CAP identifies local GHG reduction measures by sector and the GHG reduction potential associated with each measure. The proposed project incorporates certain measures as design features. Table L details the project design features that are necessary to ensure consistency with

Table L: Western Riverside Council of Governments Climate Action Plan Consistency Analysis

Measures by Sector	WRCOG CAP Consistency Analysis
State and Regional Measures	
Energy	
Measure SR-2: 2022 California Building Energy Efficiency Standards (Title 24, Part 6). Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).	**Consistent.** The proposed project would comply with the requirements of the 2024 California Building Energy Efficiency Standards (Title 24, Part 6), including measures to incorporate energy-efficient building design features detailed in Subchapter 3 (Nonresidential Mandatory Requirements), Section 120.7 (Mandatory Insulation Requirements), and Section 120.8 (Nonresidential Building Commissioning).
Measure SR-4: HERO Commercial Program. A public-private partnership administered by WRCOG, offering financing to business owners in the subregion for the installation of energy efficient, renewable energy, and water conservation improvements.	**Consistent.** The proposed project would work with WRCOG to determine any project features that are eligible and to add any new features, as appropriate.
Measure SR-5: Utility Programs. Southern California Edison (SCE) and Southern California Gas Company (SCG) each offer rebate programs to reduce energy consumption.	**Consistent.** The proposed project would work with SCE and SoCalGas to determine any project features that are eligible and to add any new features, as appropriate.
Water	
Measure SR-14: Water Conservation and Efficiency. Reduce per capita water use by 20% by 2020. SB X7-7 is part of a California legislative package passed in 2009 that requires urban retail water suppliers to reduce per-capita water use by 10% from a baseline level by 2015, and to reduce per capita water use by 20% by 2020. Green accountability performance (GAP) Goal 16 directly aligns with SB X7-7. In Southern California, energy costs and GHG emissions associated with the transport, treatment, and delivery of water from outlying regions are high. Therefore, the region has extra incentive to reduce water consumption. While this is considered a state measure, it is up to the local water retailers, jurisdictions, and water users to meet these targets.	**Consistent.** The proposed project would install water-efficient irrigation systems and devices and drought-tolerant landscaping.
Solid Waste	
Measure SR-13: Construction and Demolition Waste Diversion. Meet mandatory requirement to divert 50% of C&D waste from landfills by 2020 and exceed requirement by diverting 90% of C&D waste from landfills by 2035.	**Consistent.** The proposed project would comply with California Green Building Standards Code requirements. At least 50 percent of all nonhazardous construction waste generated by the proposed project (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) will be recycled and/or salvaged.
Transportation	
Measure SR-6: Pavley and Low Carbon Fuel Standard (LCFS). CARB identified this measure as a "Discrete Early Action Measure." This measure would reduce the carbon intensity of California's transportation fuels by at least 10% by 2020.	**Consistent.** The proposed project does not involve the manufacture, sale, or purchase of vehicles. However, vehicles that operate within and access the project site will comply with Pavley and the Low Carbon Fuel Standard. Passenger cars and medium- and heavy-duty trucks and trailers making deliveries will be subject to aerodynamic and hybridization requirements as established by the CARB; no feature of the project will

Table L: Western Riverside Council of Governments Climate Action Plan Consistency Analysis

Measures by Sector	WRCOG CAP Consistency Analysis
	interfere with implementation of these requirements and programs.
Local Reduction Measures	
Energy	
Measure E-1: Energy Action Plans: Improve municipal and community-wide energy efficiency and reduce energy consumption through the adoption of local Energy Action Plans (EAP).	**Consistent.** Building energy efficiency elements will include, at a minimum, 2024 Title 24 Energy Code standards. The installation and use of on-site renewable energy systems shall be investigated to reduce demand on existing energy grid infrastructure and to support the City of Menifee energy efficiency goals. Buildings will be designed to maximize daylight access for interior occupied spaces. Top lighting and side lighting strategies shall be combined to optimize daylight access for building occupants. Daylighting strategies to be investigated for feasibility include, but are not limited to, exterior/interior light shelves, skylights and monitors, clerestory windows, tubular skylights, and light wells. Nonessential exterior lighting will be turned off by automatic controllers from 11:00 p.m. until the following morning at dawn. Lighting shall be ramped up to full power (based on zones) when motion is detected in the vicinity.
Measure E-3, Shade Trees: Strategically plant trees at new nonresidential developments to reduce the urban heat island effect.	**Consistent.** As established by the landscape plan and/or determined by the owner/tenants, shade trees would be provided on site. Shade trees in new landscape designs would be provided to reduce heat island impacts (when shading paved/developed surfaces) and to support the City of Menifee goals.
Transportation	
Measure T-3, End of Trip Facilities: Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters. **Measure T-4, Promotional Transportation Demand Management:** Encourage transportation demand management strategies. **Measure T-5: Transit Service Expansion;** Collaborate with local and regional transit providers to increase transit service provided in the subregion. **Measure T-6: Transit Frequency Expansion**; Collaborate with local and regional transit providers to provide more frequent transit in the subregion. **Measure T-7, Traffic Signal Coordination:** Incorporate technology to synchronize and coordinate traffic signals along local arterials.	**Consistent.** Project development will be within already-urbanized parts of Menifee, utilizing existing facilities and infrastructure to promote pedestrian, bicycle, and transit-oriented mobility. The Riverside Transit Agency currently provides bus service to the project site; the Perris Station Transit Center – Sun City – Quail Valley – Menifee – Murrieta - Temecula route runs along Scott Road near the project site and connects to other bus routes in Menifee and the surrounding communities. This bus route supports the City's General Plan objectives and policies related to alternative modes of transportation. Because the project site is located in close proximity to an existing bus route, the proposed project would be accessible to existing transit systems.

Table L: Western Riverside Council of Governments Climate Action Plan Consistency Analysis

Measures by Sector	WRCOG CAP Consistency Analysis
Measure T-8, Density: Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities. **Measure T-10: Design/Site Planning**: Design neighborhoods and sites to reduce VMT.	

Source: *Subregional Climate Action Plan* (Western Riverside Council of Governments 2014).
CAP = Climate Action Plan
CARB = California Air Resources Board
WRCOG = Western Riverside Council of Governments

applicable local reduction measures of the WRCOG CAP. With implementation of these project design features, the project would be consistent with the WRCOG CAP.[52]

Consistency with Greenhouse Gas Reduction Plans

The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan[53] and SCAG's 2024–2050 RTP/SCS.[54]

2022 Scoping Plan. The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan, EO B-30-15, SB 32, AB 197, and AB 1279. EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target while laying out a path to achieving 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

52 Western Regional Council of Governments. 2014. WRCOG Climate Action Plan. June. Website: wrcog.us/DocumentCenter/View/9987/Climate-Action-Plan-Toolkit (accessed October 2024).

53 CARB. 2022. *2022 Scoping Plan Update*. May 10. Website: ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed October 2024).

54 SCAG. 2024. *Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*. Website: scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf (accessed October 2024).

climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil-fuel-combustion vehicles.

Energy efficiency measures are intended to maximize energy efficiency building and appliance standards; pursue additional efficiency efforts, including new technologies and new policy and implementation mechanisms; and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The proposed project would be required to comply with the latest Title 24 standards of the CCR, established by the CEC, regarding energy conservation and green building standards. Therefore, the proposed project would not conflict with applicable energy measures or with the goals of the 2022 Scoping Plan, EO B-30-15, SB 32, AB 197, and AB 1279.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The proposed project would not be a substantial source of water-source emissions. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025. As identified above, approximately 85 daily trips are anticipated due to implementation of the proposed project. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

2024–2050 RTP/SCS. SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high-quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emissions reduction targets.

As demonstrated in the Consistency with Applicable Air Quality Plans section, the proposed project does not meet the criteria identified in *State CEQA Guidelines* Section 15205.b.2 (Projects of Statewide, Regional, or Areawide Significance) for projects of statewide, regional, or areawide significance. In addition, the proposed project would not require a change to the General Plan land use designation or the current zoning, and would be consistent with the City's General Plan and Zoning Ordinance. As such, the proposed project would not interfere with SCAG's ability to achieve the region's GHG reduction target of 19 percent below 2005 per-capita emissions levels by 2035. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206, and as such, it would not conflict with the SCAG RTP/SCS targets since those targets were established and are applicable on a regional level. Furthermore, there are only 85 daily vehicle trips expected to be associated with implementation of the proposed project. Therefore, implementation of the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS.

As demonstrated through the above analysis, the proposed project would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

STANDARD CONDITIONS

Construction

The project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with the best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. [55] In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors (SCAQMD Rule 403). As shown in Table F, implementation of Rule 403 measures results in dust emissions below SCAQMD thresholds.

The applicable Rule 403 measures are as follows:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).

- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).

[55] SCAQMD. 2005. Rule 403. Website: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf (accessed October 2024).

- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.

- Pave construction access roads at least 100 feet (30 meters) onto the site from the main road.

- Reduce traffic speeds on all unpaved roads to 15 mph or less.

The applicable California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program Measures are:[56]

- Recycle/reuse at least 50 percent of the construction material (including, but not limited to, soil, mulch, vegetation, concrete, lumber, metal, and cardboard).

- Use "green building materials" such as those materials that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way, for at least 10 percent of the project, as specified on the CalRecycle website.

Operations

The proposed project is required to comply with the CALGreen Code and Title 24 of the California Code of Regulations established by the California Energy Commission regarding energy conservation and green building standards.

CUMULATIVE IMPACTS

The project would temporarily contribute criteria pollutants to the area during project construction. A number of individual projects in the area may be under construction simultaneously with the proposed project. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction could result in substantial short-term increases in air pollutants. However, each project would be required to comply with SCAQMD's standard construction measures. The proposed project's short-term construction emissions would not exceed the significance thresholds. Therefore, it would not have a significant short-term cumulative air quality impact.

Similarly, the project's long-term operational emissions would not exceed SCAQMD's criteria pollutant thresholds. Again, all projects would be required to comply with SCAQMD's operational emissions thresholds, which are designed to accomplish regional emissions goals. Therefore, the proposed project would not have a significant long-term cumulative air quality impact.

Lastly, the project would produce GHG emissions at a level less than the SCAQMD Tier 3 threshold. The proposed project's design would be consistent with the City's General Plan, thus ensuring project consistency with all the City and State policies and goals. Therefore, the proposed project

[56] California Department of Resources Recycling and Recovery (CalRecycle). 2019. CalRecycle Homepage. Website: www.calrecycle.ca.gov (accessed October 2024).

would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the GHG emissions. Given this consistency, it is concluded that the proposed project's impact to the climate from GHG emissions would not be cumulatively considerable.

CONCLUSION

Based on the analysis presented above, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed SCAQMD thresholds of significance. Compliance with SCAQMD Rule 403: Fugitive Dust[57] would further reduce construction dust impacts. The project would not result in objectionable odors affecting a substantial number of people. The proposed project would also not result in a potential significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. GHG emissions released during construction and operation of the project would not lead to new or substantially more severe significant impacts associated with operational GHG emissions beyond those identified in the City's General Plan EIR. The proposed project would also be generally consistent with the WRCOG CAP, the 2022 Scoping Plan, and the SCAG RTP/SCS.

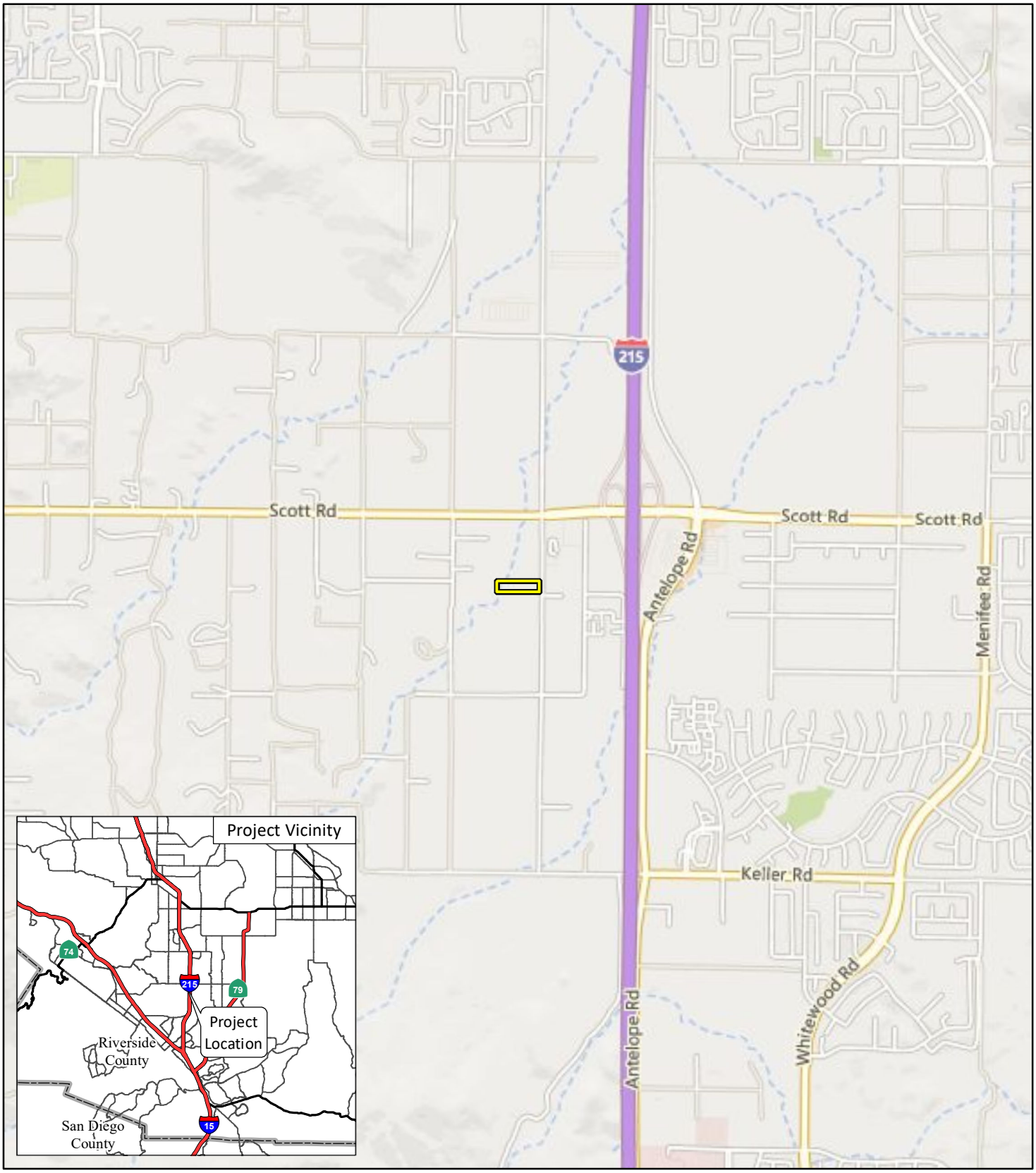
Attachments: A: Figures
B: CalEEMod Output Files
C: Fuel Usage Worksheet

[57] SCAQMD. 2005. Rule 403. Website: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf (accessed October 2024).

ATTACHMENT A

FIGURES

Figure 1: Project Location and Vicinity
Figure 2: Site Plan



LSA

LEGEND

Project Location

FIGURE 1

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0 1000 2000

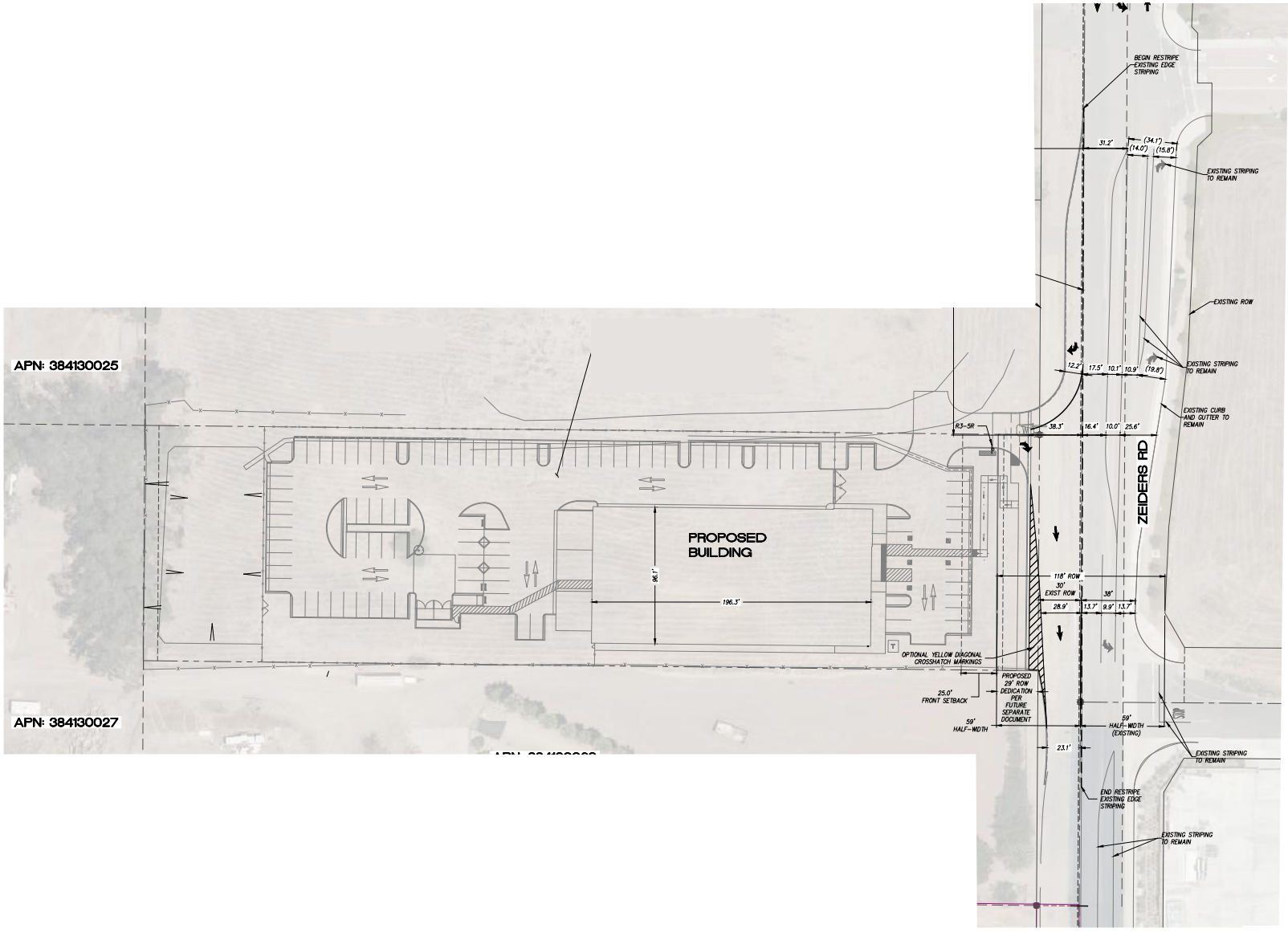
FEET

SOURCE: Bing (2021)

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Caliber Collision Auto Body Shop

Project Location and Vicinity



LSA

FIGURE 2

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SOURCE: Latitude 33 Engineering

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Caliber Collision Paint and Auto Body Repair Shop

Site Plan

ATTACHMENT B

CALEEMOD OUTPUT FILES

Caliber Collision - Menifee Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Caliber Collision - Menifee
Construction Start Date	2/4/2025
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	18.6
Location	33.638574831702286, -117.17663614750838
County	Riverside-South Coast
City	Menifee
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5536
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.28

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
Automobile Care Center	18.9	1000sqft	2.39	18,900	13,068	0.00	—	—

Parking Lot	1.66	Acre	1.66	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.37	11.5	14.8	0.03	0.46	0.26	0.58	0.42	0.06	0.45	—	2,728	2,728	0.11	0.04	1.04	2,743
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.38	39.5	31.2	0.16	1.37	7.31	8.42	1.26	2.68	3.94	—	23,126	23,126	0.50	3.17	1.12	24,085
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.76	4.62	5.43	0.01	0.18	0.21	0.39	0.17	0.07	0.24	—	1,310	1,310	0.05	0.07	0.41	1,331
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14	0.84	0.99	< 0.005	0.03	0.04	0.07	0.03	0.01	0.04	—	217	217	0.01	0.01	0.07	220
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.2. 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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.37	11.5	14.8	0.03	0.46	0.26	0.58	0.42	0.06	0.45	—	2,728	2,728	0.11	0.04	1.04	2,743
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.38	39.5	31.2	0.16	1.37	7.31	8.42	1.26	2.68	3.94	—	23,126	23,126	0.50	3.17	1.12	24,085
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.76	4.62	5.43	0.01	0.18	0.21	0.39	0.17	0.07	0.24	—	1,310	1,310	0.05	0.07	0.41	1,331
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.14	0.84	0.99	< 0.005	0.03	0.04	0.07	0.03	0.01	0.04	—	217	217	0.01	0.01	0.07	220

2.4. 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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.01	0.85	6.12	0.01	0.03	1.11	1.14	0.03	0.28	0.31	39.0	2,285	2,324	4.02	0.06	3,923	6,366

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.85	0.88	4.38	0.01	0.03	1.11	1.14	0.03	0.28	0.31	39.0	2,200	2,239	4.02	0.06	3,918	6,277
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.94	0.90	5.10	0.01	0.03	1.09	1.13	0.03	0.28	0.31	39.0	2,144	2,183	4.01	0.06	3,921	6,223
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.17	0.16	0.93	< 0.005	0.01	0.20	0.21	0.01	0.05	0.06	6.46	355	361	0.66	0.01	649	1,030
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.5. 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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.42	0.54	5.04	0.01	0.01	1.11	1.12	0.01	0.28	0.29	—	1,319	1,319	0.04	0.05	5.02	1,342
Area	0.57	0.01	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.38	3.38	< 0.005	< 0.005	—	3.39
Energy	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	961	961	0.07	0.01	—	964

Water	—	—	—	—	—	—	—	—	—	—	0.13	0.88	1.01	0.01	< 0.005	—	1.46
Waste	—	—	—	—	—	—	—	—	—	—	38.9	0.00	38.9	3.89	0.00	—	136
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,918	3,918
Off-Road	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.01	0.85	6.12	0.01	0.03	1.11	1.14	0.03	0.28	0.31	39.0	2,285	2,324	4.02	0.06	3,923	6,366
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.40	0.58	4.12	0.01	0.01	1.11	1.12	0.01	0.28	0.29	—	1,238	1,238	0.05	0.06	0.13	1,256
Area	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	961	961	0.07	0.01	—	964
Water	—	—	—	—	—	—	—	—	—	—	0.13	0.88	1.01	0.01	< 0.005	—	1.46
Waste	—	—	—	—	—	—	—	—	—	—	38.9	0.00	38.9	3.89	0.00	—	136
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,918	3,918
Off-Road	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.85	0.88	4.38	0.01	0.03	1.11	1.14	0.03	0.28	0.31	39.0	2,200	2,239	4.02	0.06	3,918	6,277
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.39	0.59	4.29	0.01	0.01	1.09	1.10	0.01	0.28	0.29	—	1,250	1,250	0.05	0.06	2.17	1,270
Area	0.53	< 0.005	0.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.32	2.32	< 0.005	< 0.005	—	2.32
Energy	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	891	891	0.06	< 0.005	—	894
Water	—	—	—	—	—	—	—	—	—	—	0.13	0.88	1.01	0.01	< 0.005	—	1.46
Waste	—	—	—	—	—	—	—	—	—	—	38.9	0.00	38.9	3.89	0.00	—	136
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,918	3,918
Off-Road	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.94	0.90	5.10	0.01	0.03	1.09	1.13	0.03	0.28	0.31	39.0	2,144	2,183	4.01	0.06	3,921	6,223
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.11	0.78	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	—	207	207	0.01	0.01	0.36	210
Area	0.10	< 0.005	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.38	0.38	< 0.005	< 0.005	—	0.38

Energy	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	147	147	0.01	< 0.005	—	148
Water	—	—	—	—	—	—	—	—	—	—	0.02	0.15	0.17	< 0.005	< 0.005	—	0.24
Waste	—	—	—	—	—	—	—	—	—	—	6.44	0.00	6.44	0.64	0.00	—	22.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	649	649
Off-Road	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.17	0.16	0.93	< 0.005	0.01	0.20	0.21	0.01	0.05	0.06	6.46	355	361	0.66	0.01	649	1,030

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.5	43.5	< 0.005	< 0.005	—	43.7

Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.21	7.21	< 0.005	< 0.005	—	7.23
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	1.02	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	227	227	0.01	0.01	0.02	230
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	1.87	1.87	—	0.90	0.90	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.6	48.6	< 0.005	< 0.005	—	48.8
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.08
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	0.01	0.01	0.02	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.30	23.1	5.50	0.13	0.38	5.24	5.63	0.38	1.47	1.85	—	19,973	19,973	0.37	3.14	1.10	20,919
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.24	3.24	< 0.005	< 0.005	0.01	3.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.38	0.09	< 0.005	0.01	0.09	0.09	0.01	0.02	0.03	—	328	328	0.01	0.05	0.30	344
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.3	54.3	< 0.005	0.01	0.05	57.0

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	3.26	4.07	0.01	0.13	—	0.13	0.12	—	0.12	—	749	749	0.03	0.01	—	751
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.60	0.74	< 0.005	0.02	—	0.02	0.02	—	0.02	—	124	124	0.01	< 0.005	—	124
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.47	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	85.2	85.2	< 0.005	< 0.005	0.31	86.5
Vendor	< 0.005	0.10	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.8	94.8	< 0.005	0.01	0.27	99.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.35	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	78.4	78.4	< 0.005	< 0.005	0.01	79.4
Vendor	< 0.005	0.11	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.8	94.8	< 0.005	0.01	0.01	99.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.8	24.8	< 0.005	< 0.005	0.04	25.1
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.6	29.6	< 0.005	< 0.005	0.04	31.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.10	4.10	< 0.005	< 0.005	0.01	4.16
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.90	4.90	< 0.005	< 0.005	0.01	5.13
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	37.0	37.0	< 0.005	< 0.005	—	37.1
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.13	6.13	< 0.005	< 0.005	—	6.15
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	1.54	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	282	282	0.01	0.01	1.04	286
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.19	7.19	< 0.005	< 0.005	0.01	7.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.19	1.19	< 0.005	< 0.005	< 0.005	1.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.22	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.9	32.9	< 0.005	< 0.005	—	33.0
Architectural Coatings	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.45	5.45	< 0.005	< 0.005	—	5.47
Architectural Coatings	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.0	17.0	< 0.005	< 0.005	0.06	17.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.7	15.7	< 0.005	< 0.005	< 0.005	15.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.65	0.65	< 0.005	< 0.005	< 0.005	0.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.42	0.54	5.04	0.01	0.01	1.11	1.12	0.01	0.28	0.29	—	1,319	1,319	0.04	0.05	5.02	1,342
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.42	0.54	5.04	0.01	0.01	1.11	1.12	0.01	0.28	0.29	—	1,319	1,319	0.04	0.05	5.02	1,342
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.40	0.58	4.12	0.01	0.01	1.11	1.12	0.01	0.28	0.29	—	1,238	1,238	0.05	0.06	0.13	1,256
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.40	0.58	4.12	0.01	0.01	1.11	1.12	0.01	0.28	0.29	—	1,238	1,238	0.05	0.06	0.13	1,256
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.07	0.11	0.78	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	—	207	207	0.01	0.01	0.36	210
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.07	0.11	0.78	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	—	207	207	0.01	0.01	0.36	210

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	264	264	0.02	< 0.005	—	265
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	92.3	92.3	0.01	< 0.005	—	92.7
undefined	—	—	—	—	—	—	—	—	—	—	—	244	244	0.02	< 0.005	—	245
Total	—	—	—	—	—	—	—	—	—	—	—	600	600	0.04	< 0.005	—	602
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	264	264	0.02	< 0.005	—	265
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	92.3	92.3	0.01	< 0.005	—	92.7
undefined	—	—	—	—	—	—	—	—	—	—	—	244	244	0.02	< 0.005	—	245
Total	—	—	—	—	—	—	—	—	—	—	—	600	600	0.04	< 0.005	—	602
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	43.6	43.6	< 0.005	< 0.005	—	43.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	15.3	15.3	< 0.005	< 0.005	—	15.3
undefined	—	—	—	—	—	—	—	—	—	—	—	28.8	28.8	< 0.005	< 0.005	—	28.9
Total	—	—	—	—	—	—	—	—	—	—	—	87.7	87.7	0.01	< 0.005	—	88.0

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	361	361	0.03	< 0.005	—	362
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	361	361	0.03	< 0.005	—	362
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	361	361	0.03	< 0.005	—	362
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	361	361	0.03	< 0.005	—	362
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	59.8	59.8	0.01	< 0.005	—	59.9
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	59.8	59.8	0.01	< 0.005	—	59.9

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	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	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.13	0.01	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.38	3.38	< 0.005	< 0.005	—	3.39
Total	0.57	0.01	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.38	3.38	< 0.005	< 0.005	—	3.39
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.02	< 0.005	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.38	0.38	< 0.005	< 0.005	—	0.38
Total	0.10	< 0.005	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.38	0.38	< 0.005	< 0.005	—	0.38

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	0.13	0.88	1.01	0.01	< 0.005	—	1.46
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.13	0.88	1.01	0.01	< 0.005	—	1.46
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	0.13	0.88	1.01	0.01	< 0.005	—	1.46
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.13	0.88	1.01	0.01	< 0.005	—	1.46
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	0.02	0.15	0.17	< 0.005	< 0.005	—	0.24

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.02	0.15	0.17	< 0.005	< 0.005	—	0.24

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	38.9	0.00	38.9	3.89	0.00	—	136
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	38.9	0.00	38.9	3.89	0.00	—	136
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	38.9	0.00	38.9	3.89	0.00	—	136
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	38.9	0.00	38.9	3.89	0.00	—	136
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	6.44	0.00	6.44	0.64	0.00	—	22.5

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	6.44	0.00	6.44	0.64	0.00	—	22.5

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,918	3,918
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,918	3,918
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,918	3,918
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,918	3,918
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	649	649
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	649	649

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Air Compressors	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Welders	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Air Compressors	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Welders	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Air Compressors	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Welders	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

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	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	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	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	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	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Site Preparation	Site Preparation	2/5/2025	2/7/2025	5.00	3.00	—
Grading	Grading	2/8/2025	2/17/2025	5.00	6.00	—
Building Construction	Building Construction	2/18/2025	7/25/2025	5.00	114	—
Paving	Paving	7/26/2025	8/8/2025	5.00	10.0	—
Architectural Coating	Architectural Coating	3/22/2025	7/25/2025	5.00	90.0	—

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
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20

Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	290	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	6.05	18.5	LDA,LDT1,LDT2

Building Construction	Vendor	3.10	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.21	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

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	0.00	0.00	28,350	9,450	4,339

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	4.50	0.00	—
Grading	9,200	4,700	6.00	0.00	—
Paving	0.00	0.00	0.00	0.00	1.66

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Automobile Care Center	0.00	0%
Parking Lot	1.66	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	532	0.03	< 0.005

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
Automobile Care Center	85.1	85.1	85.1	31,043	1,564	1,564	1,564	570,723

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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	0.00	28,350	9,450	4,339

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

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)
Automobile Care Center	180,855	532	0.0330	0.0040	1,126,638
Parking Lot	63,343	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Automobile Care Center	70,200	23,400
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Automobile Care Center	72.2	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Automobile Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Air Compressors	Electric	Average	2.00	8.00	37.0	0.48
Welders	Electric	Average	2.00	8.00	46.0	0.45

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

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	27.6	annual days of extreme heat
Extreme Precipitation	2.85	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.86	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	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	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	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
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	80.0

AQ-PM	45.6
AQ-DPM	37.6
Drinking Water	71.7
Lead Risk Housing	21.2
Pesticides	53.0
Toxic Releases	14.5
Traffic	78.4
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	50.1
Impaired Water Bodies	0.00
Solid Waste	35.7
Sensitive Population	—
Asthma	42.6
Cardio-vascular	93.2
Low Birth Weights	14.2
Socioeconomic Factor Indicators	—
Education	40.1
Housing	23.4
Linguistic	1.81
Poverty	34.0
Unemployment	59.4

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	54.26664956
Employed	19.64583601
Median HI	50.78916977
Education	—
Bachelor's or higher	38.73989478
High school enrollment	100
Preschool enrollment	43.68022584
Transportation	—
Auto Access	76.73553189
Active commuting	4.49121006
Social	—
2-parent households	67.88143205
Voting	54.67727448
Neighborhood	—
Alcohol availability	92.14679841
Park access	14.78249711
Retail density	8.161170281
Supermarket access	11.13820095
Tree canopy	6.146541768
Housing	—
Homeownership	90.85076351
Housing habitability	68.00975234
Low-inc homeowner severe housing cost burden	23.40562043
Low-inc renter severe housing cost burden	33.82522777
Uncrowded housing	75.52932119
Health Outcomes	—
Insured adults	75.63197742
Arthritis	11.1

Asthma ER Admissions	66.8
High Blood Pressure	20.6
Cancer (excluding skin)	18.5
Asthma	37.3
Coronary Heart Disease	13.8
Chronic Obstructive Pulmonary Disease	17.9
Diagnosed Diabetes	51.3
Life Expectancy at Birth	48.3
Cognitively Disabled	76.7
Physically Disabled	21.7
Heart Attack ER Admissions	8.3
Mental Health Not Good	43.4
Chronic Kidney Disease	45.1
Obesity	32.0
Pedestrian Injuries	48.4
Physical Health Not Good	40.7
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	26.9
Current Smoker	33.5
No Leisure Time for Physical Activity	49.0
Climate Change Exposures	—
Wildfire Risk	91.5
SLR Inundation Area	0.0
Children	64.0
Elderly	37.4
English Speaking	92.0
Foreign-born	6.3

Outdoor Workers	15.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	90.5
Traffic Density	71.2
Traffic Access	23.0
Other Indices	—
Hardship	47.6
Other Decision Support	—
2016 Voting	58.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	38.0
Healthy Places Index Score for Project Location (b)	46.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
Land Use	Site is 2.39 acres, building is 18,865 sf, paved area is 1.66 acres, landscaped area is 0.3 acres.
Construction: Construction Phases	No demolition needed. Schedule based on an early 2025 start and about 6 month duration. Assumed that architectural coatings applied during the building construction process.
Construction: Architectural Coatings	Assumed all coatings comply with SCAQMD Rule 1113.
Operations: Vehicle Data	Traffic analysis shows 40 worker and 45 customer trips per day.
Operations: Architectural Coatings	Assumed all coatings comply with SCAQMD Rule 1113.
Operations: Energy Use	Doubled the Title-24 Natural Gas rate to account for 2 natural gas fired paint booths.
Operations: Water and Waste Water	Project plans account for 300 gallons per day or 93,600 gallons per year. Assume 75% indoor and 25% outdoor (landscaping).

ATTACHMENT C

FUEL USAGE WORKSHEET

Fuel Consumption Worksheet

	Annual VMT from CalEEMod modeling	Gasoline-Fueled Percentage	Diesel-Fueled Percentage	Gasoline mpg	Gasoline Consumption	Diesel mpg	Diesel Consumption
Project	570,723	82.2%	17.8%	22.2	21,133	8.0	12,697

	Fleet Mix from CalEEMod modeling												
Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Auto Care	0.5348	0.05602	0.17264	0.14101	0.0266	0.00731	0.011327	0.01869	0.00062	0.00032	0.02406	0.0011	0.00547
Gasoline-powered:	98%	95%	75%	50%	50%	10%	5%	5%	75%	75%	100%	75%	65%
Diesel-powered:	2%	5%	25%	50%	50%	90%	95%	95%	25%	25%	0%	25%	35%

APPENDIX C1

BIOLOGICAL RESOURCES ASSESSMENT

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WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS AND BIOLOGY REPORT

CALIBER COLLISION PAINT AND AUTO BODY REPAIR SHOP PROJECT

MENIFEE, RIVERSIDE COUNTY, CALIFORNIA

MSHCP PERMITTEE:

CITY OF MENIFEE

Prepared for:

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LSA Project Nos. CIM2201 and 20231078.02

LSA

September 2022
Updated October 2024

EXECUTIVE SUMMARY

The City of Menifee (City) retained LSA to conduct a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis and general biological study of the approximately 2.33-acre Caliber Collision Paint and Auto Body Repair Shop Project (project) in Menifee, Riverside County, within Assessor's Parcel Number 384-130-028. Specifically, the project site is north of Keller Road, south of Scott Road, east of Howard Way, and west of Zeiders Road. LSA conducted the study to address compliance with the MSHCP and the California Environmental Quality Act (CEQA) and for the identification of potential jurisdictional waters. Additionally, LSA was retained by the City to update the original report as the previous applicant withdrew their application and a significant period of time had lapsed by the time a new applicant picked up the project. Results of the MSHCP consistency analysis and general biological study are summarized below.

No aquatic resources subject to the jurisdiction of the United States Army Corps of Engineers (USACE) were found within the project site. No riparian habitat was found within the project site.

The project site is not within an MSHCP designated Criteria Area.

The site does not contain riverine/riparian areas as defined in the MSHCP. The site does not contain fairy shrimp habitat or potential vernal pools; therefore, focused surveys will not be required for sensitive riparian bird species or fairy shrimp species associated with vernal pools.

The project site is within the MSHCP survey area for burrowing owl (*Athene cunicularia*; BUOW); therefore, focused burrowing owl breeding season (March 1 through August 31) surveys were conducted during the 2022 survey and reporting efforts. No BUOW or BUOW sign were observed during the surveys. Because suitable burrows are present within the project site, a preconstruction survey for BUOW will be required within 30 days prior to any ground-disturbing activities.

Section 6.1.3 of the MSHCP requires focused surveys for specified sensitive plant species if the project is within a Narrow Endemic Plant Species Survey Area (NEPSSA) and suitable habitat is present. The project is within NEPSSA 3, which required a focused survey within suitable habitat for the following plant species: Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). During the 2022 surveys, the results of the survey were negative for the target species. These surveys were not repeated during the 2024 survey and reporting efforts.

The project site is not within an MSHCP designated survey area for any other species and does not contain Delhi series soils. Therefore, no surveys for other species will be required.

The project will not be subject to MSHCP Urban/Wildlands interface requirements because the site is not within or adjacent to an identified Conservation Area.

The project is within the Stephens' Kangaroo Rat Habitat Conservation Plan area, and payment of the appropriate fees will be required.

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LIST OF ABBREVIATIONS AND ACRONYMS

APN	Assessor's Parcel Number
BUOW	burrowing owl
CASSA	Criteria Area Species Survey Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
City	City of Menifee
County	County of Riverside
CRPR	California Rare Plant Rank
DBESP	Determination of Biologically Equivalent or Superior Preservation
FACU	Facultative Upland
FE	federally endangered
FT	federally threatened
HCP	Habitat Conservation Plan
LBVI	least Bell's vireo
MSHCP	Multiple Species Habitat Conservation Plan
NEPSSA	Narrow Endemic Plant Species Survey Area
NL	Not Listed
NRCS	National Resources Conservation Service
NWI	National Wetland Inventory
project	Caliber Collision Paint and Auto Body Repair Shop Project
SE	State endangered
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan

SWFL	southwestern willow flycatcher
UPL	Upland
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
WOTUS	waters of the United States
YBCU	yellow-billed cuckoo

INTRODUCTION

The City of Menifee (City) retained LSA to conduct a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis and general biological study of the approximately 2.33-acre Caliber Collision Paint and Auto Body Repair Shop Project (project) in Menifee, Riverside County, within Assessor's Parcel Number (APN) 384-130-028. Specifically, the project site is north of Keller Road, south of Scott Road, east of Howard Way and west of Zeiders Road (Figure 1; all figures are provided in Appendix A). LSA conducted the study to address compliance with the MSHCP and California Environmental Quality Act (CEQA) and to identify potential jurisdictional waters. The study included a site visit on March 25, 2022, by LSA biologist Jeremy Rosenthal. An additional survey was conducted on September 24, 2024, by Mr. Rosenthal.

Project Area

The project area consists of APN 384-130-028 and is approximately 2.33 acres. The project proposes to develop the entire parcel.

Project Description

The proposed project includes the construction of a one-story, 18,865-square-foot building to house the Caliber Collision Paint and Auto Body Repair shop with six bays, on 2.33 acres. The project also includes construction of a parking lot with 103 parking spaces (including Americans with Disabilities Act-compliant parking) within the 2.33-acre site. The project is consistent with the surrounding commercial and industrial land uses. The project also proposes a conceptual landscape plan that includes 34,931 square feet of landscape area (Figure 2).

General Setting

The project site consists of undeveloped land and a gravel-paved area on the northern portion of the project site within APN 384-130-028 located north of Keller Road, south of Scott Road, east of Howard Way, and west of Zeiders Road (Figure 1). The project site is bounded by undeveloped land and a commercial storage yard to the north, Zeiders Road followed by undeveloped land to the east, a single-family residence and commercial operations to the south, and a commercial storage yard to the west. The project location is depicted on the United States Geological Survey (USGS) *Romoland, California* topographic quadrangle map in Section 22 of Township 6 South, Range 3 West, San Bernardino Baseline and Meridian (USGS 2018; Figure 1). The site elevation ranges from 1,530 to 1,545 feet above mean sea level. Mapped soils on the project site consist of Las Posas loam, 2 to 8 percent slope (LaC); Las Posas loam, 8 to 15 percent slopes, eroded (LAD2); and Wyman loam, 2 to 8 percent slopes, eroded (WyC2) (National Resources Conservation Service [NRCS 2019]) (Figure 3). Soil observed throughout the site appears to be consistent with these designations.

RESERVE ASSEMBLY ANALYSIS

Cell and Criteria Analysis

The MSHCP provides for the assembly of a Conservation Area consisting of Core Areas and Linkages for the conservation of covered species. The Conservation Area is to be assembled from portions of the MSHCP Criteria Area, which consist of quarter-section (i.e., approximately 160 acre) Criteria Cells, each with specific criteria for the species conservation within that cell.

The project site is not within the MSHCP Criteria Area; therefore, no cell or criteria analysis is required.

Public/Quasi-Public Lands Analysis

The project site is not within or adjacent to public/quasi-public lands; therefore, no additional public/quasi-public lands analysis is required.

VEGETATION

The project site is moderately disturbed due to discing. Based on historical aerial imagery, the project site has never been developed. Apart from regular discing, the project site has been relatively undisturbed through the present.

As a result of regular discing, the vegetation on the project site consists of nonnative grasslands and ruderal areas, which are described in detail below (Figure 4). A complete list of plant species observed on the site is included in Appendix B. Figure 4 shows vegetation communities/land cover and photograph locations, and site photographs are provided in Figure 5.

Dominant species documented in the 2022 and 2024 surveys and reporting efforts within the nonnative grassland areas included redstem stork's bill (*Erodium cicutarium*), ripgut brome (*Bromus diandrus*), red brome (*Bromus rubens*), mouse barley (*Hordeum murinum*), and rigid fiddleneck (*Amsinckia retrorsa*). These species were consistent during the 2024 survey and reporting effort.

Dominant species within the ruderal areas include curly dock (*Rumex crispus*), black mustard (*Brassica nigra*), shortpod mustard (*Hirschfeldia incana*), and Russian thistle (*Salsola tragus*).

Dominant species within the eucalyptus grove area located on the western portion of the project site include Tasmanian blue gum (*Eucalyptus globulus*).

Areas mapped as "developed" in Figure 4 consist of gravel-paved driveways that do not allow for the establishment of vegetation. Gravel-paved areas were present on the northern portion of the site.

PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (MSHCP SECTION 6.1.2)

Section 6.1.2 of the MSHCP requires assessment of impacts to riparian habitats, riverine areas, and vernal pools, including focused surveys for sensitive riparian bird and fairy shrimp species when suitable habitat is present. The intent of the assessment requirement is to provide for the protection of resources used by MSHCP covered species, as well as existing and future downstream conservation areas. Riverine/riparian areas and vernal pools are defined in Section 6.1.2 of the MSHCP as follows:

> **Riparian/Riverine Areas** are lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.
>
> **Vernal pools** are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.
>
> **Fairy Shrimp.** For Riverside, vernal pool, and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist.
>
> With the exception of wetlands created for the purpose of providing wetland habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

Riparian/Riverine Areas

Methods

The project site was assessed for riparian/riverine areas at the time of the March 25, 2022, and September 24, 2024, site visits. The assessments included identification and mapping of plant communities on the site as well as any drainage features. The assessment also included a review of seasonally appropriate aerial photographs from Google Earth. (The photos covered the following dates: September 1996, May 2002, December 2003, October 2005, December 2005, January 2006, August 2006, June 2009, November 2009, March 2011, June 2012, January 2013, March 2013, November 2013, April 2014, February 2016, October 2016, February 2018, August 2018, December 2018, August 2019, August 2021, February 2022, January 2023, May 2023, and March 2024.)

It should be noted that a riverine feature was identified using the United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) Mapper. Additionally, this riverine feature is a blue line feature mapped on USGS Topographic Maps; however, based on the March 25, 2022, site visit in conjunction with the aforementioned reviewed aerial photographs, this NWI and USGS mapped feature was rerouted to the west of the project site as early as 2005. The project site appears to have undergone heavy discing on a frequent basis subsequent to the rerouting of the blue-line feature.

During the September 24, 2024, field survey, an erosional rill had formed in the location of the blue-line feature since the 2022 field survey; however, it was concluded that this feature does not meet the California Department of Fish and Wildlife's (CDFW) definitions of lakes, rivers or streams, and does not meet the USACE definition of Waters of the United States (WOTUS). For a full discussion, please see the Potential Jurisdictional Waters and Streambeds Section.

Existing Conditions and Results

There are no drainage features or riparian vegetation on the project site; therefore, there are no areas that would meet the MSHCP definition of riparian/riverine areas.

Vernal Pools

Methods

The project site was assessed for the presence of potential vernal pools at the time of the March 25, 2022, and September 24, 2024, site visits. The assessments included a search for depressions that may provide sufficient ponding of water to sustain hydrophytic vegetation and create hydric soil conditions during the growing season. The assessments also included a review of seasonally appropriate aerial photographs from Google Earth.

Existing Conditions and Results

No vernal pools were observed on the site. Low-lying areas that occur on site did not show signs of ponding or surface water and lacked hydrophytic vegetation. The soil mapped and observed on the site are loams, which are unlikely to support ponding sufficient for vernal pool formation. No areas containing surface water were observed on historical aerial imagery.

Fairy Shrimp

Methods

The project site was assessed for fairy shrimp habitat at the same time and using the same methods as the assessment for vernal pools. The MSHCP calls for habitat assessments for three sensitive species of fairy shrimp: Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*), Riverside fairy shrimp (*Streptocephalus woottoni*), and vernal pool fairy shrimp (*Branchinecta lynchi*). The Santa Rosa Plateau fairy shrimp occurs only on the Santa Rosa Plateau of extreme southwestern Riverside County. A fourth sensitive species of Southern California, the San Diego fairy shrimp (*Branchinecta sandiegonensis*), is found primarily in coastal areas of Orange and San Diego counties. It has been found as far inland as the Wildomar area of southwest Riverside County but is not expected in the project area. These sensitive fairy shrimp species inhabit vernal pools as well as stock ponds, large road ruts, or other similar habitats that pond water long enough to allow growth and reproduction. To provide fairy shrimp habitat, a feature must regularly pond water for at least 18 days for vernal pool fairy shrimp (Eriksen and Belk 1999) and two months for Riverside fairy shrimp (USFWS 2012).

Existing Conditions and Results

As noted above, there are no vernal pools or low-lying areas that may function as vernal pools or depressions that hold water long enough to eliminate upland vegetation on the project site. No inundation on the site was seen in seasonally appropriate aerial photographs, and the loam soils are porous and unsuitable for ponding of sufficient duration to provide habitat suitable for shrimp habitat. Given these factors, the site does not have habitat suitable for sensitive fairy shrimp species, and no surveys are required.

Riparian Birds

Methods

Habitat suitability for riparian birds, including the least Bell's vireo (LBVI; *Vireo bellii pusillus*), southwestern willow flycatcher (SWFL; *Empidonax traillii extimus*), and yellow-billed cuckoo (YBCU; *Coccyzus americanus*), was assessed in conjunction with the assessment for riverine/riparian areas.

Existing Conditions and Results

Riparian/riverine and/or any habitat suitable for riparian bird habitat is absent from the project site. Therefore, no surveys for riparian birds will be required.

PROTECTION OF NARROW ENDEMIC PLANT SPECIES (MSHCP SECTION 6.1.3)

Section 6.1.3 of the MSHCP requires focused surveys for specified sensitive plant species if the project is within a Narrow Endemic Plant Species Survey Area (NEPSSA) and suitable habitat is present. The project is within NEPSSA 3, which indicates the need for a focused survey within suitable habitat for the following plant species:

- Munz's onion (*Allium munzii*)
- San Diego ambrosia (*Ambrosia pumila*)
- Many-stemmed dudleya (*Dudleya multicaulis*)

- Spreading navarretia (*Navarretia fossalis*)
- California Orcutt grass (*Orcuttia californica*)
- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*)

The results of the survey were negative for the target species. The NEPSSA survey report is attached in Appendix C.

ADDITIONAL SURVEY NEEDS AND PROCEDURES (MSHCP SECTION 6.3.2)

MSHCP Section 6.3.2 requires surveys for additional plants, amphibians, small mammals, and the BUOW for projects located within mapped survey areas.

Criteria Area Plant Species

The project is not within a mapped survey area for Criteria Area Species Survey Area (CASSA) plant species; therefore, no surveys for Criteria Area plant species are required.

Amphibians

The project is not within a mapped survey area for amphibian species.

Burrowing Owl

The project site is located within the MSHCP BUOW survey area. BUOW is found in open, dry grasslands, agricultural and rangelands, and desert habitats often associated with burrowing animals. It can also inhabit grass, forb, and shrub stages of pinyon and ponderosa pine habitats. It nests in abandoned burrows of ground squirrels or other animals, in pipes, under piles of rock or debris, and in other similar features.

Methods

Habitat suitability for BUOW was assessed during the March 25, 2022, site visit and again during the September 24, 2024, site visit. The assessment included an evaluation of soil texture; vegetative cover; topography; and the presence of mammal burrows, rock piles, or other areas suitable for nest construction.

Existing Conditions and Results

The site has low vegetative cover, is mostly devoid of trees, and contains suitable substrate for ground squirrel burrows. Because suitable burrows for BUOW were identified (≥ 4 inches), these conditions indicate suitable habitat for BUOW.

Because suitable habitat is present, a focused BUOW survey was conducted as required during the breeding season (the survey window is March 1 through August 31) in accordance with County of Riverside (County) survey instructions (County of Riverside 2006). Survey visits were a week or more apart and spaced so that they were not all at the beginning or end of the survey season, when owls may not be present. Surveys were conducted on March 25, May 10, June 30, and August 17, 2022. No BUOW or BUOW sign were observed during the surveys. The BUOW survey report is attached in Appendix D.

Because suitable burrows were identified, a preconstruction survey for BUOW will also be required within 30 days prior to any ground-disturbing activities.

Impacts and Mitigation

If BUOW is found during the preconstruction survey, the project proponent will need to inform the CDFW and USFWS and prepare a Burrowing Owl Protection and Relocation Plan for approval by these agencies prior to initiating ground disturbance.

If BUOW is detected during the focused survey, a Determination of Biologically Equivalent or Superior Preservation (DBESP) will be required under the MSHCP to document avoidance or justify unavoidable impacts to this species and to describe and commit to the implementation of an appropriate mitigation strategy to be approved by the wildlife resource agencies.

Mammals

The project is not within a mapped survey area for mammals.

INFORMATION ON OTHER SPECIES

Delhi Sands Flower-Loving Fly

The MSHCP requires surveys for the Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) in most areas of mapped Delhi series soils where suitable habitat exists (MSHCP Section 9).

The project site is not within an area of mapped Delhi soils, and (as noted in Section 2.0, above) the soil mapped and observed throughout the site is loam, which is inconsistent with Delhi soils; therefore, no survey or additional analysis is required for this species.

Species Not Adequately Conserved

Some species that will eventually have full coverage under the MSHCP are not considered adequately conserved until the requirements indicated in Table 9-3 of MSHCP Section 9 are met.

Methods

A literature review was conducted to investigate the potential occurrence of special-status species on the project site or in the vicinity. Database records for a 3-mile radius of the project site were searched on March 24 and September 13, 2022, and again on September 19, 2024, using RareFind 5 (CDFW 2024).

Existing Results

One of the species listed in MSHCP Table 9-3, which lists species that have not met the MSHCP definition of a covered species, has been reported within 3 miles of the project site. None of the MSHCP Table 9-3 species were observed during the site visit. Given habitat suitability and occurrences of this species within multiple locations reported within 3 miles of the project site, Parry's spineflower (*Chorizanthe parryi* var. *parryi*) has a low potential of being present, as described below in Table A.

Table A: Multiple Species Habitat Conservation Plan Species Not Adequately Conserved

Species	Status	MSHCP Habitat	Blooming Period/ Activity Period	Occurrence Probability
Chorizanthe parryi var. *parryi* **Parry's spineflower**	US: – CA: 1B.1 MSHCP: P	Annual herb. Found in sandy or rocky soils in chaparral, coastal scrub, oak woodlands, and grassland at 40 to 1,705 meters (100 to 5,600 feet above mean sea level) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties.	Blooms April through June	**Low.** Suitable grasslands occur on site. This species was observed within 0.79 mile to the south and southwest of the project site in 2008 and 2006, respectively.

Source: CNDDB (2024).
CA: State Classifications
1B.1 = Rare, threatened, or endangered in California and elsewhere; seriously threatened in California
Western Riverside County MSHCP Status
P = Species is covered and will be adequately conserved when MSHCP specified requirements are met.
CA = California
CNDDB = California Natural Diversity Database
MSHCP = Multiple Species Habitat Conservation Plan
US = United States

Suitable habitat is present for Parry's spineflower; therefore, a special-status plant survey was required and conducted during the appropriate blooming period (April through June) due to the plant's California Rare Plant Rank (CRPR) of 1B.1. Plants with a CRPR of 1B.1 are rare, threatened, or endangered in California and elsewhere; seriously threatened in California. The results of the survey were negative for the target species, and the focused plant survey report will be provided under a separate cover.

GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (MSHCP SECTION 6.1.4)

To preserve the integrity of areas described as existing or future MSHCP Conservation Areas, the guidelines contained in MSHCP Section 6.1.4 (Urban Wildlands Interface Guidelines) are to be implemented for projects adjacent to either existing conservation or land described for conservation in the MSHCP Criteria Area.

The project site is not adjacent to conserved lands or lands in a Criteria Area described for conservation. Therefore, the Urban Wildlands Interface Guidelines do not apply to this project.

POTENTIAL JURISDICTIONAL WATERS AND STREAMBEDS

No drainage features, ponded areas, or riparian habitat potentially subject to jurisdiction by the CDFW or USACE were found within the project site during the March 25, 2022, site visit.

During the September 2024 field survey, a small erosional rill was identified. This erosional rill is located where the riverine feature was identified in the USFWS NWI map, which was previously discussed in the Riparian/Riverine Areas section. However, this feature was approximately 2 feet wide and no more than 50 feet in length, with no apparent connectivity to the northern adjoining property or western adjoining property. Further, based on a historic aerial photograph taken on December 12, 2020, this feature appears to have been mechanically created, which was then disced, as evident in aerial photographs in 2005, 2006, 2009, 2013, 2016, 2018, and 2019 (Google Earth). This erosion rill was mechanically created a second time as seen in a February 2022 aerial photograph (Google Earth). No riparian vegetation was present within this erosional rill. Vegetation present consisted of common sunflower (*Helianthus annuus;* Facultative Upland [FACU[1]]), black mustard (*Brassica nigra*; Not Listed [NL[2]]), prickly lettuce (*Lactuca serriola*; FACU), and red brome (*Bromus rubens*; Upland [UPL]). There were no defined bed-and-banks within this erosion rill and no ordinary high water marks were visible as the majority it was overgrown with the aforementioned vegetation. Based on the microtopographic and vegetative observations previously described, this feature is not a river, stream, or lake, which are defined by the CDFW by the presence of a channel bed and banks and at least periodic or intermittent flow of water. Additionally, this erosional rill is included in the list of excluded features as defined in the *Sackett v. Environmental Protection Agency* decision definition of WOTUS; "swales and erosional features (e.g., gullies, small washes) characterized by low-volume, infrequent, or short-duration flow" (2022).

The findings and conclusions presented in this report, including the location and extent of wetlands and other waters subject to regulatory jurisdiction, represent the professional opinion of LSA. These findings and conclusions should be considered preliminary until verified by USACE and the CDFW.

NESTING BIRDS

During the bird breeding season (typically February 1 through August 31), electrical distribution poles and large trees on or adjacent to the project site may be used by hawks, ravens, or other large birds for nesting. Trees, shrubs, and other vegetation may provide nest sites for smaller birds, and BUOW may nest in ground squirrel burrows, pipes, or similar features. Most birds and their active nests are protected from "take" (meaning destruction, pursuit, possession, etc.) under the Migratory Bird Treaty Act and/or Sections 3503 through 3801 of the California Fish and Game Code. Activities that cause destruction of active nests, or that cause nest abandonment and subsequent death of eggs or young, may constitute violations of one or both of these laws.

If vegetation is to be removed during the nesting season (February 1 through August 31), a preconstruction nesting bird survey shall be conducted, and avoidance measures shall be taken to ensure that no take of birds or their nests will occur.

1 Facultative upland species usually occur in non-wetlands (estimated probability 69 to 99 percent).

2 Species not currently rated are considered obligate upland (UPL), which almost always occur in non-wetlands (estimated probability greater than 99 percent).

CEQA COMPLIANCE

Adopted Habitat Conservation Plans

Section 10(a)(2)(A) of the 1973 federal Endangered Species Act requires the preparation of a Habitat Conservation Plan (HCP) for incidental take of threatened or endangered species when there is no federal agency involvement in a project. Continuing land development may cause incidental take of listed species; therefore, HCPs have been prepared for areas within western Riverside County. The MSHCP and the Stephens' Kangaroo Rat HCP (SKR HCP) are the principal habitat conservation plans in western Riverside County. The USFWS regional office maintains a current list of habitat conservation plans for the Southern California region.

The project site is within the MSHCP area and within the SKR HCP fee area. Because the project site is within the SKR HCP, focused surveys for Stephens' kangaroo rat (*Dipodomys stephensi*; SKR) may be required, and a fee associated with the SKR HCP will be required. The project site is not subject to any other adopted HCP.

Threatened and Endangered Species

The USFWS and the CDFW may list species as threatened or endangered under the federal Endangered Species Act and California Endangered Species Act. The USFWS can designate critical habitat that identifies specific areas, either occupied or unoccupied, that are essential to the conservation of a listed species. Critical habitat areas may require special management considerations or protections. The USFWS and the CDFW have issued permits for the take of most threatened and endangered species within the MSHCP area. The MSHCP covers impacts to these species. However, if a project has the involvement of a federal agency, that agency is required to address impacts to listed species and critical habitat by consulting with the USFWS. The USFWS has indicated in the permit issued for the MSHCP that, in such cases, the consultation will be expedited, and no restrictions will be imposed on the project beyond those specified in the MSHCP.

No critical habitat occurs on the project site. Five federal and/or State-listed species have been reported within 3 miles of the project site according to California Natural Diversity Database records: the spreading navarretia (federally threatened [FT]), Riverside fairy shrimp (federally endangered [FE]), Quino checkerspot butterfly (*Euphydryas editha quino*; FE), California Orcutt grass (FE and State endangered [SE]), coastal California gnatcatcher (*Polioptila californica californica*; FT), and SKR (FE). Table B describes the habitat requirements for all six species, along with an assessment of habitat and the likelihood of the species occurring on the site.

The project site is within the MSHCP area and within the SKR HCP fee area. Because the project site is within the SKR HCP, focused surveys for SKR may be required, and a fee associated with the SKR HCP will be required. The project site is not subject to any other adopted HCP.

Table B: Threatened and Endangered Species

Species	Status	MSHCP Habitat	Blooming Period/ Activity Period	Occurrence Probability
Plants				
Navarretia fossalis **Spreading navarretia**	US: FT CA: 1B.1 MSHCP: S	An annual herb. Occurs in vernal pools, playas, shallow freshwater marshes, and similar sites at 15 to 820 meters (50 to 2,700 feet) elevation. In California, known only from Los Angeles, San Luis Obispo, Riverside, and San Diego Counties. Also occurs in Mexico.	Blooms April through June	**Not Expected.** Suitable habitat not present within project site.
Orcuttia californica **California Orcutt grass**	US: FE CA: SE/1B.1 MSHCP: S	An annual grasslike herb. Occurs in vernal pools from 15 to 660 meters (50 to 2,200 feet) elevation. In California, known from Los Angeles, Ventura, Riverside, and San Diego Counties. Also occurs in Mexico.	Blooms April through August	**Not Expected.** Suitable habitat not present within project site.
Invertebrates				
Euphydryas editha quino **Quino checkerspot butterfly**	US: FE CA: SA MSHCP: C	Occurs in meadows or openings within coastal sage scrub or chaparral below about 5,000 feet where food plants (*Plantago erecta* and/or *Orthocarpus purpurascens*) are present. Historically known from Santa Monica Mountains to northwest Baja California; currently known only from southwestern Riverside County, southern San Diego County, and northern Baja California.	January through late April	**Not Expected.** Suitable habitat and required food plants not present within project site.
Streptocephalus woottoni **Riverside fairy shrimp**	US: FE CA: SA MSHCP: S	Warm-water vernal pools (i.e., large, deep pools that retain water into the warm season) with low to moderate dissolved solids, in annual grassland areas interspersed through chaparral or coastal sage scrub vegetation. Suitable habitat includes some artificially created or enhanced pools, such as some stock ponds, that have vernal pool like hydrology and vegetation. Known from areas within about 50 miles of the coast from Ventura County south to San Diego County and Baja California.	Seasonally following rains; typically January through April	**Not Expected.** Suitable habitat not present within project site.
Birds				
Polioptila californica californica **Coastal California gnatcatcher**	US: FT CA: SSC MSHCP: C	Inhabits coastal sage scrub in low-lying foothills and valleys up to about 500 meters (1,640 feet) elevation in cismontane southwestern California and Baja California.	Year-round	**Not Expected.** Suitable habitat not present within project site.

Table B: Threatened and Endangered Species

Species	Status	MSHCP Habitat	Blooming Period/ Activity Period	Occurrence Probability
Mammals				
Dipodomys stephensi **Stephens' kangaroo rat**	US: FT CA: ST MSHCP: C	Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50%. Most commonly associated with *Artemisia tridentata, Eriogonum fasciculatum,* and *Erodium.* Requires well-drained soils with compaction characteristics suitable for burrow construction (neither sandy nor too hard). Not found in soils that are highly rocky or sandy, less than 20 inches deep, or heavily alkaline or clay, or in areas exceeding 25% slope. Occurs only in western Riverside County, northern San Diego County, and extreme southern San Bernardino County, below 915 meters (3,000 feet) elevation. In northwestern Riverside County, known only from east of Interstate 15. Reaches its northwest limit in south Norco, southeast Riverside, and in the Reche Canyon area of Riverside and extreme southern San Bernardino Counties.	Year-round, nocturnal	**High.** The project site is within the SKR HCP. Numerous species accounts have been recorded within 1.0 mile of the project site.

Sources: CNDDB (2024) and CNPS (2024).
US: Federal Classifications
FT = Listed as threatened.
FE = Listed as endangered.

CA: State Classifications
SA = Special Animal. Refers to any other animal monitored by the CNDDB, regardless of its legal or rarity status.
SSC = Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.
ST = Listed as threatened.

CNPS Designations
1B.1 = Rare, threatened, or endangered in California and elsewhere.

Western Riverside County MSHCP Status
S = Species is covered and adequately conserved under the MSHCP, but surveys are required within indicated habitats and/or survey areas.
C = Species is covered and adequately conserved under the MSHCP.

amsl = above mean sea level
CA = California
CNDDB = California Natural Diversity Database
CNPS = California Native Plant Society
HCP = Habitat Conservation Plan
MSHCP = Multiple Species Habitat Conservation Plan
SKR = Stephens' kangaroo rat
US = United States

Other Special-Status Species

Other special-status species may occur on the project site. The CDFW; the USFWS; local agencies; and special interest groups, such as the California Native Plant Society (CNPS), maintain lists of species they consider to need monitoring. Legal protection for special-status species varies widely.

The special-status species listed in Table C may be expected to occur in the general project vicinity but are not covered under the MSHCP. None of the species listed in Table C have been reported from the project site, and none were observed during the site visit. The special-status species listed in Table D was reported within 3 miles of the project site. Crotch bumble bee (*Bombus crotchii*) has a low probability to occur because a few individuals of its preferred nectar species, California buckwheat (*Eriogonum fasciculatum*), are present within the project site.

Table C: Special-Status Species Potentially Occurring in the Project Vicinity (Not Covered by Multiple Species Habitat Conservation Plan)

Species	Status	Habitat and Distribution	Blooming Period/Activity Period	Occurrence Probability
Bryophytes				
Sphaerocarpos drewei **Bottle liverwort**	US: – CA: 1B.1	Found within soil openings in chaparral and coastal sage scrub in Riverside and San Diego Counties. Elevation from 90 to 600 meters (300 to 2,000 feet).	Ephemeral	**Not Expected.** Suitable habitat not present within project site.
Plants				
Abronia villosa var. *aurita* **Chaparral sand-verbena**	US: – CA: 1B.1	Annual or perennial herb. Occurs in sandy areas (generally flats and benches along washes) in chaparral and coastal sage scrub, and improbably in desert dunes or other sandy areas, below 1,600 meters (5,300 feet) elevation. In California, reported from Riverside, San Diego, Imperial, Los Angeles, and Ventura Counties. Believed extirpated from Orange County. Also reported from Arizona and Mexico (Baja California). Plants reported from desert communities are likely misidentified.	Blooms mostly March through August	**Not Expected.** Suitable habitat not present within project site.
Almutaster pauciflorus **Alkali marsh aster**	US: – CA: 2B.2	Perennial herb. Occurs in alkaline soils in meadows and seeps from Inyo, Kern, Riverside, and San Bernardino counties. Elevations from 60 to 765 meters (195 to 2,510 feet).	Blooms June through October	**Not Expected.** Suitable habitat not present within project site.
Brodiaea santarosae **Santa Rosa Basalt brodiaea**	US: – CA: 1B.2	Perennial herb. Occurs in Santa Rosa basalt in grassland at 580 to 1,045 meters (1,900 to 3,430 feet) elevation. Known only from Riverside and San Diego Counties, California.	Blooms May through June	**Not Expected.** Suitable habitat not present within project site
Pseudognaphalium leucocephalum **White rabbit-tobacco**	US: – CA: 2B.2	Perennial herb. Occurs within Sand and gravel soils at the edges of washes or mouths of steep canyons at 0 to 2,100 meters (0 to 7,000 feet) elevation. In California, known from Los Angeles, Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, and Ventura Counties. Also occurs in Arizona, New Mexico, Texas, and Mexico.	Blooms usually August through November	**Not Expected.** Suitable habitat not present within project site.

Table C: Special-Status Species Potentially Occurring in the Project Vicinity (Not Covered by Multiple Species Habitat Conservation Plan)

Species	Status	Habitat and Distribution	Blooming Period/Activity Period	Occurrence Probability
Scutellaria bolanderi ssp. *austromontana* **Southern mountains skullcap**	US: – CA: 1B.2	Perennial herb. Occurs in mesic areas in gravelly soils of stream banks or in oak or pine woodland (rarely chaparral) at 425 to 2,000 meters (1,400 to 6,600 feet) elevation. Known from Riverside and San Diego Counties. Believed extirpated from San Bernardino County and perhaps Los Angeles County.	Blooms June through August	**Not Expected.** Suitable habitat not present within project site.
Symphyotrichum defoliatum **San Bernardino aster**	US: – CA: 1B.2	Perennial herb. Occurs in vernally wet sites (such as ditches, streams, and springs) in many plant communities below 2,040 meters (6,700 feet) elevation. In California, known from Ventura, Kern, San Bernardino, Los Angeles, Orange, Riverside, and San Diego Counties. May also occur in San Luis Obispo County. In the western Riverside County area, this species is scarce and documented only from Temescal and San Timoteo Canyons (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	Blooms July through November	**Not Expected.** Suitable habitat not present within project site.
Juncus luciensis **Santa Lucia dwarf rush**	US- CA: 1B.2	Annual grasslike herb. Occurs in vernal pools, ephemeral drainages, and meadows and seeps within lower montane coniferous forest, chaparral, and Great Basin scrub habitats. Elevations from 280 to 2,035 meters (920 to 6,675 feet).	Blooms April through July	**Not Expected.** Suitable habitat not present within project site.
Invertebrates				
Socalchemmis icenoglei **Icenogle's socalchemmis spider**	US: – CA: SA	Known only from the type locality in the Winchester area of western Riverside County. Occurs in coastal scrub.	Secretive year-round	**Not Expected.** Suitable habitat not present within project site. Additionally, nearest documented occurrence was recorded approximately 6.2 miles northeast of the project site.
Reptiles				
Thamnophis hammondii **Two-striped garter snake**	US: – CA: SSC	Highly aquatic. Only in or near permanent sources of water. Streams with rocky beds supporting willows or other riparian vegetation. From Monterey County to northwest Baja California.	Diurnal Year-round	**Not Expected.** Suitable habitat not present within project site.

Table C: Special-Status Species Potentially Occurring in the Project Vicinity (Not Covered by Multiple Species Habitat Conservation Plan)

Species	Status	Habitat and Distribution	Blooming Period/Activity Period	Occurrence Probability
Mammals				
Eumops perotis californicus **Western mastiff bat**	US: – CA: SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in vertical cliff faces, high buildings, and tunnels, and travels widely when foraging.	Year-round; nocturnal	**Low.** Not expected to roost within the project site; however, suitable foraging opportunities exist within the project site.
Chaetodipus californicus femoralis **Dulzura pocket mouse**	US: – CA: SSC	Found in a variety of habitats including coastal sage scrub, chaparral and grassland in northern Baja California, San Diego and extreme southwestern and western Riverside Counties. Limit of range to northwest (at interface with *C.c. dispar*) unclear.	Year-round	**Not Expected.** Although grasslands do occur within the project site, this species was last documented approximately 5.2 miles northeast of the project site in 1993.
Onychomys torridus ramona **Southern grasshopper mouse**	US: – CA: SSC	Believed to inhabit sandy or gravelly valley floor habitats with friable soils in open and semi-open scrub, including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs, preferring low to moderate shrub cover. More susceptible to small- and large-scale habitat loss and fragmentation than most other rodents, due to its low fecundity, low population density, and large home range size. Arid portions of southwestern California and northwestern Baja California.	Nocturnal, active year-round	**Not Expected.** Although grasslands do occur within the project site, this species was last documented approximately 5.3 miles northeast of the project site in 1932.

Sources: CNDDB (2024) and CNPS (2024).

CA: State Classifications
SA = Special Animal. Refers to any other animal monitored by the CNDDB, regardless of its legal or rarity status.
SSC = Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.

CNPS Designations
1B.1 = Rare threatened, or endangered in California and elsewhere
1B.2 = Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California
2B.2 = Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California

CA = California
CNPS = California Native Plant Society
US = United States

Table D: Special-Status Species Recorded within 3.0 Miles of the Project Site (Not Covered by Multiple Species Habitat Conservation Plan)

Species	Status	Habitat and Distribution	Blooming Period/Activity Period	Occurrence Probability
Invertebrates				
Bombus crotchii **Crotch bumble bee**	US: – CA: CE	Nectars on Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum in coastal California east to the Sierra-Cascade crest and south into Mexico.	Spring and summer	**Low.** Eriogonum, a genus that *B. crotchii* forages on, is present in limited quantity within the project site.

Source: CNDDB (2024).

CA: State Classifications
CE = Candidate Endangered Species

CA = California
CNDDB = California Natural Diversity Database
US = United States

Wildlife Movement, Corridors, and Nursery Sites

Wildlife movement includes seasonal migration along corridors, as well as daily movements for foraging. Migration corridors may include areas of unobstructed movement of deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and areas between roosting and feeding areas for birds.

The project site is bordered by existing paved roads and development on three of the four adjoining properties that restrict wildlife movement in the project vicinity. The majority of wildlife movement within the project site is anticipated to be limited to wildlife present on site or within the nonnative grasslands to the south of the project site, beyond the existing single-family residence. The project would not substantially limit wildlife movement.

Natural Communities of Interest

Riparian habitats, oak woodlands, and vernal pools are among the natural communities of interest to the CDFW.

Plant communities and land covers present on site are limited to nonnative grasslands and developed areas. None of these plant communities or land covers are riparian habitats, oak woodlands, or vernal pools or are considered natural communities of interest. Therefore, impacts to natural communities of interest will not occur on site.

Wetlands

Wetlands areas are not present on site. Additional focused surveys are not required.

Local Policies and Ordinances Protecting Biological Resources

The Riverside County General Plan and development ordinances may include regulations or policies governing biological resources. For example, policies may include tree preservation, locally designated species survey areas, local species of interest, and significant ecological areas.

The City of Menifee's Park Design, Landscaping, and Tree Preservation ordinance (Ordinance Number 2015-167), Section 9.18.120 states that "Heritage tree removal will require replacement with the largest nursery-grown tree(s) available as determined by the Community Development Department or Planning Commission. Heritage tree relocation to another location on the site is the preferred alternative to replacement subject to a written report by a landscape architect or ISA certified arborist on the feasibility of transplanting a heritage tree." Heritage trees are those with certain characteristics (i.e., age, size, species, location, historical influence, aesthetic quality, or ecological value) that receive special attention and preservation efforts.

The project will not be in conflict with local policies or ordinances applicable to biological resources.

Indirect Effects

Indirect impacts to surrounding areas as a result of the project may include, but are not limited to, increased dust, noise, lighting, traffic, and storm water runoff. Because of the small scale of the project and its location within a landscape that is already highly disturbed or developed, substantial indirect impacts to sensitive biological resources are not anticipated.

Cumulative Effects

Project construction will contribute to the incremental loss of nonnative grassland in the region, including potential habitat for some special-status species. Cumulative impacts potentially include habitat fragmentation, increased edge effects, reduced habitat quality, and increased wildlife mortality. The MSHCP provides a comprehensive approach to the regional conservation of these habitats and, as a regional plan, serves to provide mitigation for cumulative impacts to covered species. Project compliance and consistency with the MSHCP ensure that any cumulative impacts to covered species are effectively mitigated. Special-status species that are not covered by the MSHCP also benefit from the surveys, conservation, and other measures of the MSHCP because they occupy many of the same habitats.

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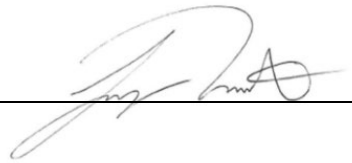
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CERTIFICATION STATEMENT

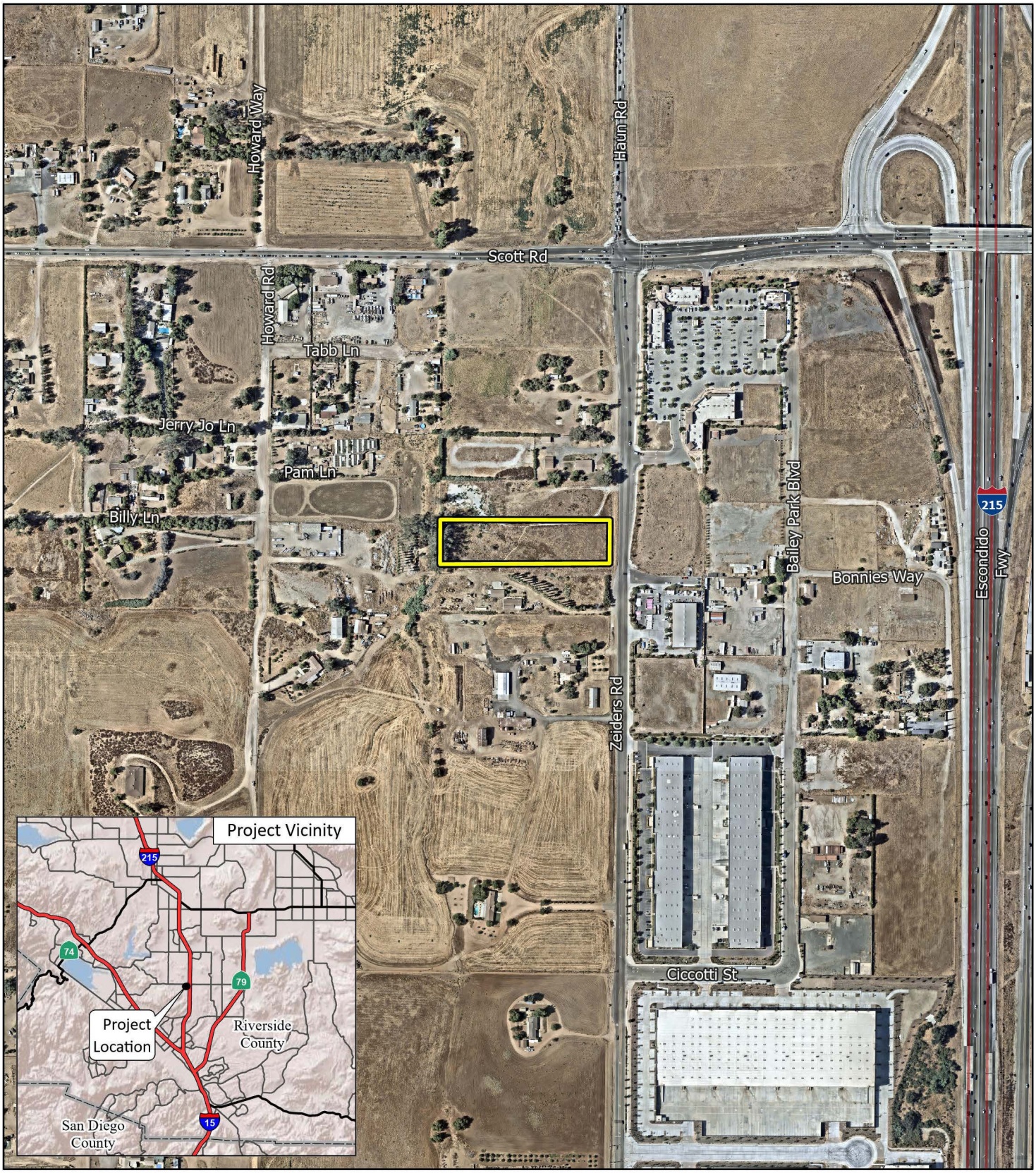
I hereby certify that the statements furnished in this report present the data and information required for this biological evaluation and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: October 31, 2024 Signature: 

APPENDIX A

FIGURES 1–5

Figure 1: Project Location and Vicinity
Figure 2: Project Area
Figure 3: Soils
Figure 4: Vegetation and Photo Locations
Figure 5: Representative Site Photos



Project Location

FIGURE 1

N

0 250 500
FEET

SOURCE: Nearmap (8/15/2024)

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Caliber Collision Paint and Auto Body Repair Shop Project

Project Location and Vicinity



LSA

Project Location

FIGURE 2

N

0 100 200
FEET

SOURCE: Nearmap (8/15/2024)

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Caliber Collision Paint and Auto Body Repair Shop Project

Project Area



LSA

LEGEND

Project Location

Soils

(LaC) Las Posas loam, 2 to 8 percent slopes

(LaD2) Las Posas loam, 8 to 15 percent slopes, eroded

(WyC2) Wyman loam, 2 to 8 percent slopes, eroded

0 50 100

FEET

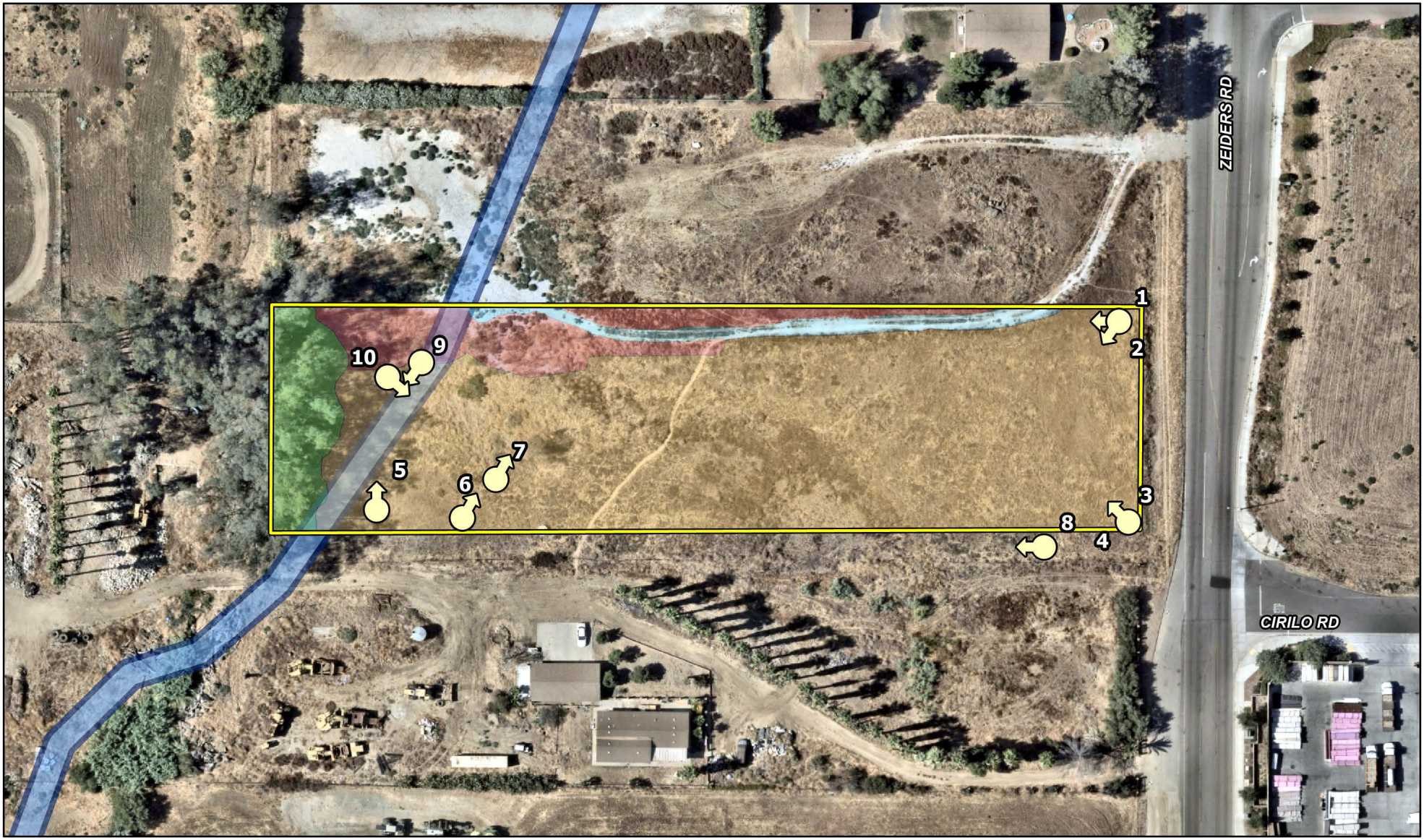
SOURCE: Nearmap (8/15/2024), NRCS (2022)

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FIGURE 3

Caliber Collision Paint and Auto Body Repair Shop Project

Soils



LSA

Project Location

Photo Locations

National Wetlands Inventory

Riverine

Vegetation

Developed (0.10 acres)

Eucalyptus Grove (0.16 acres)

Non-native Grassland (1.80 acres)

Ruderal (0.27 acres)

0 50 100

FEET

SOURCE: Nearmap (8/15/2024)

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FIGURE 4

Caliber Collision Paint and Auto Body Repair Shop Project

Vegetation and Photo Locations



Photo 1: View of the project site looking southwest from the northeastern site boundary. Photo date March 25, 2022.



Photo 2: View of the project site looking southwest from the northeastern site boundary. Photo date September 24, 2024.

LSA

FIGURE 5

Caliber Collision Paint
and Auto Body Repair Shop Project

Representative Site Photos



Photo 3: View of the project site looking northwest from the southeastern site boundary. Photo date March 25, 2022.



Photo 4: View of the project site looking northwest from the southeastern site boundary. Photo date September 24, 2024.

LSA

FIGURE 5

Caliber Collision Paint
and Auto Body Repair Shop Project

Representative Site Photos



Photo 5: View of the project site looking north from the western site boundary. Photo date March 25, 2022.



Photo 6: View of the project site looking northeast near the western site boundary. Photo date September 24, 2024.

LSA

FIGURE 5

Caliber Collision Paint
and Auto Body Repair Shop Project

Representative Site Photos



Photo 7: View of the project site looking northeast from the central portion of the site. Photo date March 25, 2022.



Photo 8: View of the project site looking west from the southern-central portion of the site. Photo date September 24, 2024.

LSA

FIGURE 5

Caliber Collision Paint
and Auto Body Repair Shop Project

Representative Site Photos

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Photo 9: View of the erosional rill located on the northwestern portion of the site. Photo date September 24, 2024.



Photo 10: View of the erosional rill located on the northwestern portion of the site. Photo date September 24, 2024.

LSA

FIGURE 5

Caliber Collision Paint
and Auto Body Repair Shop Project

Representative Site Photos

APPENDIX B

PLANT AND ANIMAL SPECIES OBSERVED

LSA biologists observed the following species during the 2022 and 2024 site visits in the specified study area.

* Introduced species that are not native to California

EUDICOTS

Adoxaceae	**Muskroot Family**
Sambucus mexicana	blue elderberry
Anacardiaceae	**Sumac Family**
*Schinus molle**	Peruvian peppertree
Asteraceae	**Sunflower Family**
*Anthemis cotula**	mayweed
Artemisia californica	California sagebrush
*Centaurea melitensis**	maltese star-thistle
Corethrogyne filaginifolia var. *filaginifolia*	cudweed sandaster
Deinandra paniculata	San Diego tarweed
Erigeron canadensis	common horseweed
Helianthus annuus	common sunflower
Matricaria discoidea	disc mayweed
*Lactuca serriola**	prickly lettuce
*Oncosiphon pilulifer**	stinknet
*Soncus asper**	prickly sow thistle
*Sonchus oleraceus**	common sow thistle
*Verbesina encelioides**	golden crownbeard
Boraginaceae	**Borage Family**
Amsinckia retrorsa	rigid fiddleneck
Heliotropium curassavicum	salt heliotrope
Plagioborthrys acanthocarpus	adobe allocarya
Brassicaceae	**Mustard Family**
*Brassica nigra**	black mustard
*Hirschfeldia incana**	shortpod mustard
*Sisymbrium irio**	London rocket
Chenopodiaceae	**Saltbush Family**
*Salsola tragus**	Russian thistle

Euphorbiaceae	**Spurge Family**
Croton setigerus	dove weed
Euphorbia albomarginata	whitemargin sandmat
*Euphorbia maculata**	spotted spurge
Fabaceae	**Legume Family**
Acmispon micranthus	fishhook lotus
*Melilotus albus**	white sweetclover
*Melilotus indicus**	yellow sweetclover
Geraniaceae	**Geranium Family**
*Erodium cicutarium**	redstem stork's bill
Lamiaceae	**Mint family**
*Marrubium vulgare**	horehound
Trichostema lanceolatum	vinegarweed
Malvaceae	**Mallow Family**
*Malva leprosa**	alkali mallow
*Malva parviflora**	cheeseweed mallow
Myrtaceae	**Myrtle Family**
*Eucalyptus globulus**	Tasmanian blue gum
Oleaceae	**Olive Family**
*Olea europaea**	olive
Polygonaceae	**Buckwheat Family**
Eriogonum fasciculatum	California buckwheat
*Rumex crispus**	curly dock
Solanaceae	**Nightshade family**
Datura wrightii	jimsonweed
*Nicotiana glauca**	tree tobacco

MONOCOTS

Poaceae	**Grass Family**
*Avena fatua**	wild oat
*Bromus diandrus**	ripgut brome
*Bromus hordeaceus**	soft chess
*Bromus rubens**	red brome
*Cynodon dactylon**	Bermuda grass
*Festuca myorus**	annual fescue
*Festuca perennis**	ryegrass
*Hordeum murinum**	mouse barley

BIRDS

Accipitridae
Accipiter cooperii
Buteo jamaicensis

Hawks, Kites, Eagles, and Allies
Cooper's hawk
red-tailed hawk

Charadriidae
Charadrius *vociferus*

Plovers and Lapwings
killdeer

Cardinalidae
Piranga *ludoviciana*

Cardinals and Allies
western tanager

Columbidae
*Columba livia**
*Streptopelia decaocto**
Zenaida macroura

Pigeons and Doves
rock pigeon
Eurasian collared-dove
mourning dove

Falconidae
Falco *sparverius*

Caracaras and Falcons
American kestrel

Icteridae
Agelaius phoeniceus
Euphagus cyanocephalus
Icterus *cucullatus*

Blackbirds
red-winged blackbird
Brewer's blackbird
hooded oriole

Picidae
Dryobates nuttallii
Melanerpes formicivorus

Woodpeckers
Nuttall's woodpecker
acorn woodpecker

Tyrannidae
Tyrannus vociferans

Tyrant Flycatchers
Cassin's kingbird

Corvidae
Aphelocoma californica
Colaptes auratus
Corvus brachyrhynchos
Corvus corax

Crows and Jays
California scrub-jay
northern flicker
American crow
common raven

Aegithalidae
Psaltriparus minimus

Long-Tailed Tits and Bushtits
bushtit

Sturnidae
Sturnus *vulgaris**

Starlings
European starling

Trochilidiae
Calypte anna
Selasphorus sasin

Hummingbirds
Anna's hummingbird
Allen's hummingbird

Troglodytidae
Thryomanes *bewickii*

Wrens
Bewick's wren

Turdidae	**Thrushes**
Sialia mexicana	western bluebird
Catharus guttatus	hermit thrush
Mimidae	**Mockingbirds and Thrashers**
Mimus polyglottos	northern mockingbird
Passeridae	**Old World Sparrows**
*Passer domesticus**	house sparrow
Fringillidae	**Finches**
Haemorhous mexicanus	house finch
Spinus psaltria	lesser goldfinch
Passerellidae	**New World Sparrows**
Chondestes grammacus	lark sparrow
Melozone crissalis	California towhee
Melospiza melodia	song sparrow
Passerculus sandwichensis	Savannah sparrow
Zonotrichia leucophrys	white-crowned sparrow
Parulidae	**Wood Warblers**
Geothlypis trichas	common yellowthroat
Setophaga coronata	yellow-rumped warbler

REPTILES

Colubridae	**Colubrid Snakes**
Pituophis catenifer	gophersnake

MAMMALS

Sciuridae	**Squirrels, Chipmunks, and Marmots**
Otospermophilus beecheyi	California ground squirrel
Leporidae	**Rabbits and Hares**
Sylvilagus audubonii	desert cottontail

APPENDIX C

NEPSSA SURVEY REPORT

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

September 16, 2022

Brett Hamilton, AICP, Senior Planner
City of Menifee
Community Development Department-Planning Division
29844 Haun Road
Menifee, CA 92586

Subject: Focused MSHCP Plant Species 2022 Survey for the Caliber Collision Paint and Autobody Repair Shop Project in Menifee, Riverside County, California (LSA Project No CIM2201)

Dear Mr. Hamilton:

This report documents the results of a 2022 focused survey for Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) plant species for the Caliber Collision Paint and Auto Body Repair Shop Project (project). The approximately 2.3-acre project, consisting of Assessor's Parcel Number 384-130-028, is at the northwest corner of Zeiders Road and Cirilo Road in Menifee, Riverside County, (Figures 1 and 2, attached).

Section 6.1.3 of the MSHCP requires focused surveys for specified sensitive plant species if the project is within a Narrow Endemic Plant Species Survey Area (NEPSSA) and suitable habitat is present. The project is within NEPSSA 3, which indicates the need for a focused survey within suitable habitat for the following plant species:

- Munz's onion (*Allium munzii*)
- San Diego ambrosia (*Ambrosia pumila*)
- Many-stemmed dudleya (*Dudleya multicaulis*)
- spreading navarretia (*Navarretia fossalis*)
- California Orcutt grass (*Orcuttia californica*)
- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*)

The results of the survey were negative for the target species.

BACKGROUND

The survey area consists of the entire approximately 2.3-acre project site. Vegetation in the survey area, consisting of nonnative grassland, is disturbed due to regular discing. Dominant species include paniculate tarplant (*Deinandra paniculate*), redstem filaree (*Erodium cicutarium*), ripgut brome (*Bromus diandrus),* and common fiddleneck (*Amsinckia intermedia*), shortpod mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), stinknet (*Oncosiphon pilulifer*), foxtail barley (*Hordeum murinum*), foxtail brome (*Bromus madritensis*), and rattail sixweeks grass (*Festuca myuros*).

Precipitation values for the 2021–2022 wet season and normal season precipitation values were taken from the WeatherCurrents.com website (http://weathercurrents.com/perris/). Total 2021–2022 wet

season precipitation in the general project area was 5.2 inches, compared to an average season value of 8.8 inches.

METHODS

Focused NEPSSA surveys were conducted by LSA botanist Stan Spencer, PhD, and timed to coincide with the blooming periods of target species. An early season survey was conducted on May 10, 2022, from 8:55 to 11:10 a.m. A late season survey was conducted on June 22 from 6:45 to 9:00 a.m. The surveys were conducted by walking approximately 50-foot-wide transects throughout the project site. The surveys were floristic in nature, and all plant species observed during the surveys were noted.

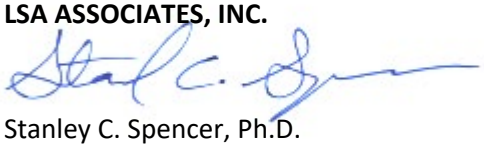
RESULTS

No NEPSSA 3 species were observed during the focused plant survey. Therefore, NEPSSA 3 species are considered absent from the site and are not expected to be affected by project activities. No other sensitive plant species were observed. A complete list of plant species observed on the site is included in attached Table A.

If you have any questions concerning the report, I can be contacted at (951) 232-4124 or stan.spencer@LSA.net.

Sincerely,

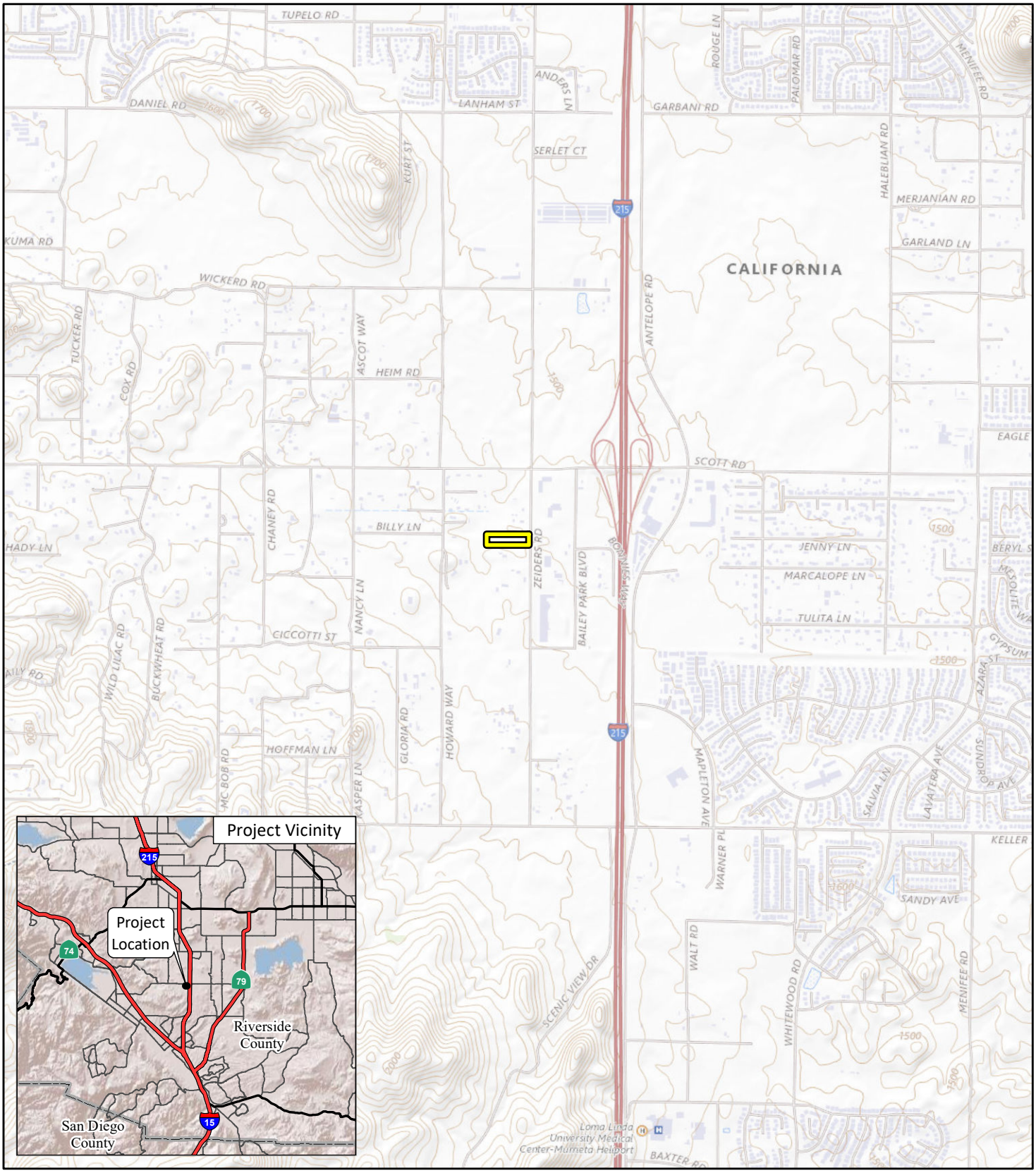
LSA ASSOCIATES, INC.



Stanley C. Spencer, Ph.D.
Senior Biologist/Botanist

Attachments: Figure 1: Project Location and Vicinity
Figure 2: Project Area
Table A: Vascular Plant Species Observed

cc: Melody Aimar, MSHCP Biological Monitoring Program



LSA

LEGEND

Project Location

FIGURE 1

N

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FEET

SOURCE: USGS The National Map (2018)

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Caliber Collision Auto Body Shop

Project Location and Vicinity



LSA

LEGEND

Project Location

FIGURE 2

0 100 200

FEET

SOURCE: Google Imagery (2022)

Caliber Collision Auto Body Shop

Project Area

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Table A: Vascular Plant Species Observed

Scientific Name	Common Name
Eudicot Flowering Plants	
Adoxaceae	**Muskroot family**
Sambucus mexicana	Blue elderberry
Anacardiaceae	**Sumac family**
*Schinus molle**	Peruvian peppertree
Asteraceae	**Sunflower family**
*Anthemis cotula**	Mayweed
Artemisia californica	California sagebrush
*Centaurea melitensis**	Maltese star-thistle
Corethrogyne filaginifolia	Common sandaster
Deinandra paniculata	Paniculate tarplant
Erigeron canadensis	Canadian horseweed
Helianthus annuus	Common sunflower
*Lactuca serriola**	Prickly lettuce
Matricaria discoidea	Disc mayweed
*Oncosiphon pilulifer**	Stinknet
*Sonchus asper**	Prickly sow thistle
*Sonchus oleraceus**	Common sow thistle
*Verbesina encelioides**	Golden crownbeard
Boraginaceae	**Borage family**
Amsinckia retrorsa	Rigid fiddleneck
Heliotropium curassavicum	Salt heliotrope
Plagiobothrys acanthocarpus	Adobe allocarya
Brassicaceae	**Mustard family**
*Brassica nigra**	Black mustard
*Hirschfeldia incana**	Shortpod mustard
*Sisymbrium irio**	London rocket
Chenopodiaceae	**Saltbush family**
*Salsola tragus**	Russian thistle
Euphorbiaceae	**Spurge family**
Croton setigerus	Dove weed
Euphorbia albomarginata	Whitemargin sandmat
*Euphorbia maculata**	Spotted spurge
Fabaceae	**Pea family**
Acmispon micranthus	Fishhook lotus
*Melilotus albus**	White sweetclover
*Melilotus indicus**	Annual yellow sweetclover
Geraniaceae	**Geranium family**
*Erodium cicutarium**	Redstem stork's bill
Lamiaceae	**Mint family**
*Marrubium vulgare**	Horehound
Trichostema lanceolatum	Vinegar weed
Malvaceae	**Mallow family**
*Malva parviflora**	Cheeseweed mallow
Malvella leprosa	Alkali mallow
Myrtaceae	**Myrtle family**
Eucalyptus sp.*	Eucalyptus

Table A: Vascular Plant Species Observed

Scientific Name	Common Name
Oleaceae	**Olive family**
*Olea europaea**	Olive
Polygonaceae	**Buckwheat family**
Eriogonum fasciculatum	California buckwheat
*Rumex crispus**	Curly dock
Solanaceae	**Nightshade family**
Datura wrightii	Sacred thorn-apple
*Nicotiana glauca**	Tree tobacco
Poaceae	**Grass family**
*Avena fatua**	Wild oat
*Bromus diandrus**	Ripgut brome
*Bromus hordeaceus**	Soft chess
*Bromus rubens**	Red brome
*Cynodon dactylon**	Bermuda grass
*Festuca myuros**	Annual fescue
*Festuca perennis**	Ryegrass
*Hordeum murinum**	Mouse barley

*= non-native

APPENDIX D

BUOW SURVEY REPORT

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

September 29, 2022

Mr. Brett Hamilton, AICP, Senior Planner
City of Menifee
Community Development Department-Planning Division
29844 Haun Road
Menifee, California 92586
bhamilton@cityofmenifee.us

Subject: Results of a Burrowing Owl Survey for the Caliber Collision Paint and Auto Body Repair Shop Project in the City of Menifee, Riverside County, California (LSA Project No CIM2201).

Dear Mr. Hamilton:

This report documents the results of a burrowing owl (*Athene cunicularia*) survey for the Caliber Collision Paint and Auto Body Repair Shop Project (project). The 2.33-acre project is located north of Keller Road, south of Scott Road, east of Howard Way, and west of Zeiders Road in the City of Menifee (City), Riverside County, California, within Assessor's Parcel Number 384-130-028 (see Figure 1; all figures attached).

The survey results were negative for the detection of burrowing owl since no owls, or their sign were observed during the 2022 survey efforts. However, several ground squirrel burrows were observed on site and have the potential to house burrowing owl.

BACKGROUND

Burrowing owls are found in open, dry grasslands; agricultural and range lands; desert habitats; and grass, forb, and shrub stages of pinyon and ponderosa pine habitats. They nest in abandoned burrows of ground squirrels or other animals, in pipes, rock and debris piles, and in other similar features.

Burrowing owls, their nests, and eggs are protected from "take" under the Migratory Bird Treaty Act and Sections 3503, 3503.5, and 3800 of the California Fish and Game Code. Activities that cause destruction of active nests, or that cause nest abandonment and subsequent death of eggs or young, may constitute violations of these laws.

Burrowing owl is a species of special concern as determined by the California Department of Fish and Wildlife (CDFW) and is a covered species under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). In addition, the MSHCP has established survey areas for burrowing owl where focused surveys are required if suitable habitat is determined to be present.

SURVEY AREA

The area surveyed with transects (Figure 2) is 2.33 acres and includes the entire project site, which is potentially suitable for burrowing owl. The entire project site is within the MSHCP burrowing owl survey area. The topography of this area is a mix of moderately disturbed, low-lying vegetation and slopes southeast to northwest, providing a suitable habitat for burrowing owl.

Vegetation within the project site is moderately disturbed due to regular discing. Based on aerial imagery, the site has never been developed, and non-native grasslands dominate the site. The project site is bounded by undeveloped land and a commercial storage yard to the north, Zeiders Road and undeveloped land to the east, a single-family residence and commercial operations to the south, and a commercial storage yard to the west. The site elevation ranges from 1,530 to 1,545 feet (ft) above mean sea level (amsl).

Vegetation and land cover present on site consist of non-native grasslands, ruderal vegetation, and a developed gravel driveway (Figure 2). One native tree, a blue elderberry (*Sambucus nigra* ssp. *Caerulea),* was observed on the central portion of the site. Dominant species within non-native grasslands include ripgut brome (*Bromus diandrus),* paniculate tarplant (*Deinandra paniculate*), redstem filaree (*Erodium cicutarium*), and common Fiddleneck (*Amsinckia intermedia*). Dominant species within ruderal areas are limited to non-native species and include shortpod mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), stinknet (*Oncosiphon pilulifer*), foxtail barley (*Hordeum murinum*), foxtail brome (*Bromus madritensis*), rattail sixweeks grass (*Festuca myuros*), and redstem filaree. There are no other plant communities on the site. Areas mapped as "developed" in Figure 2 consist of gravel driveways that prohibit the growth of vegetation; these areas are located on the northern part of the site. Figure 3 shows representative photographs of the on-site conditions.

The area surrounding the project site consists of a mix of developed and undeveloped lands with Interstate 15 (I-15) passing approximately 0.25 mile from the eastern boundary of the project site. Surrounding developed areas consist primarily of residential and commercial uses.

METHODS

The surveys were conducted by LSA biologist Jeremy Rosenthal according to the *County of Riverside Guidelines for Burrowing Owl Surveys* (revised March 29, 2006). A total of four surveys were conducted on March 25, May 10, June 30, and August 17, 2022. The surveys were conducted by walking transects approximately 30 meters apart throughout areas of suitable habitat to look for burrowing owls, potential burrows (burrows greater than 11 centimeters [cm] in diameter and 150 cm deep), and burrowing owl sign. Burrowing owl sign consists of feathers, pellets, whitewash, and prey remnants). Burrows with burrowing owl sign present and/or burrowing owls were recorded using a handheld global positioning system (GPS) unit and mapped onto an aerial photograph. Privately owned parcels located outside of the project site were surveyed using binoculars from public rights-of-way and advantageous viewpoints as well as through aerial imagery. Potential habitat within 500 ft and visible from the site was surveyed using binoculars.

Table A provides dates, times, and weather conditions of site visits. Surveys were conducted during weather conducive to observing owls outside their burrows and to detecting burrowing owl sign. No rain had occurred within five days prior to each of the site visits.

Table A: Focused Survey Dates, Times, and Weather Conditions

Survey	Personnel	Date (2022)	Time (24-Hour) (start/finish)	Temp. (°F) (start/finish)	Wind (mph)	Sky
Burrow Survey, Burrowing Owl Survey 1	Jeremy Rosenthal	March 25	0645/0715	64/65	<12	0% cloud cover
Burrowing Owl Survey 2	Jeremy Rosenthal	May 10	0600/0700	47/48	<2	10% cloud cover
Burrowing Owl Survey 3	Jeremy Rosenthal	June 30	0600/0700	66/67	<2	10% cloud cover
Burrowing Owl Survey 4	Jeremy Rosenthal	August 17	0630/0730	74/75	<1	0% cloud cover

Source: Compiled by LSA (2022).
°F = degrees Fahrenheit
mph = miles per hour

RESULTS

No burrowing owls or burrowing owl sign were found to be present within the survey area (including the 500 ft buffer). Four burrows suitable for burrowing owl were observed within the survey area but showed no sign of burrowing owl use. Suitable habitat is present throughout the project site and portions of the 500 ft buffer consisting of ruderal and non-native grassland as both vegetation communities contain low-growing plant species. Areas mapped as developed lacked suitable habitat since they consist of a gravel driveway maintained vegetation free since 2021. These developed areas preclude the construction of any burrows and vegetation growth.

Areas within 500 ft of the project site generally lack suitable habitat for burrowing owl as over half of the surrounding land consists of developed land cover for residences and/or commercial businesses. The remaining undeveloped land to the north, south-west, south-east, and east is considered suitable habitat for burrowing owl, consisting primarily of similar ruderal and non-native grassland vegetation. However, based on historic aerial imagery, vegetation within those areas appears to be regularly disced/mowed since at least 2003. No burrowing owls, their sign, or suitable burrows were observed within the 500 ft buffer.

Wildlife species detected during the survey included mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), lesser goldfinch (*Spinus psaltria*), lark sparrow (*Chondestes grammacus*), white-crowned sparrow (*Zonotrichia leucophrys*), killdeer (*Charadrius vociferus*), California scrub-jay (*Aphelocoma californica)*¸ Bewick's wren (*Thryomanes bewickii)*, song sparrow (*Melospiza melodia*), California towhee (*Melozone crissalis*), Nuttall's woodpecker (*Picoides nuttalii*), northern flicker (*Colaptes auratus*), American kestrel (*Falco sparverius*), Cassin's kingbird (*Tyrannus vociferans*), hooded oriole (*Icterus cucullatus*), red-winged blackbird (*Agelaius phoeniceus*), common yellowthroat (*Geothlypis trichas*), western tanager

(*Piranga ludoviciana*), house finch (*Haemorhous mexicanus)*, Eurasian collared dove (*Streptopelia decaocto*), European starling (*Sturnus vulgaris*), rock pigeon (*Columba livia*), chicken (*Gallus gallus domesticus),* checkered white (*Pontia protodice)*, California ground squirrel (*Spermophilus beecheyi*), and Audubon's cottontail (*Sylvilagus audubonii*).

DISCUSSION

Four suitable burrows were observed within the project site; however, they lacked sign of burrowing owl use during the focused burrowing owl surveys. The project site contains suitable habitat in the form of non-native grassland and ruderal areas. Since portions of the project site are suitable for burrowing owl and burrowing owl could occupy these areas prior to construction, a preconstruction burrowing owl survey will be required within 30 days prior to ground disturbance, consistent with the *County of Riverside Guidelines for Burrowing Owl Surveys* (revised March 29, 2006). If burrowing owl is found during the preconstruction survey, the project proponent will need to inform the CDFW and U.S. Fish and Wildlife Service (USFWS) and prepare a Burrowing Owl Protection and Relocation Plan for approval by these agencies prior to initiating ground disturbance.

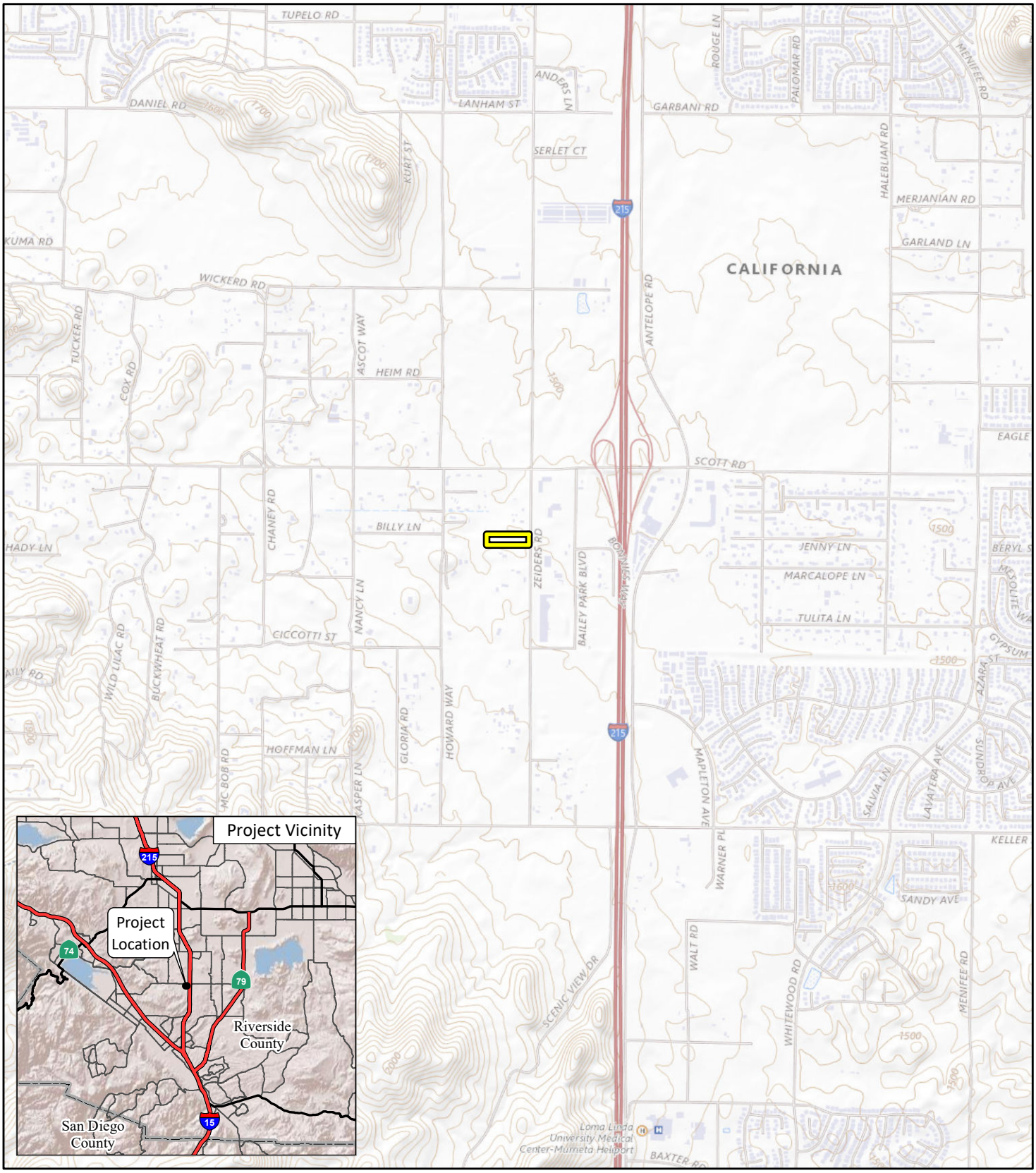
If you have any questions concerning the report, I can be contacted at (626) 257-0215 or ryan.villanueva@lsa.net.

Sincerely,

LSA ASSOCIATES, INC.

Ryan Villanueva
Senior Biologist

Attachments: Figure 1: Project Location and Vicinity
Figure 2: Survey Results
Figure 3: Site Photographs



LSA

LEGEND

Project Location

FIGURE 1

N

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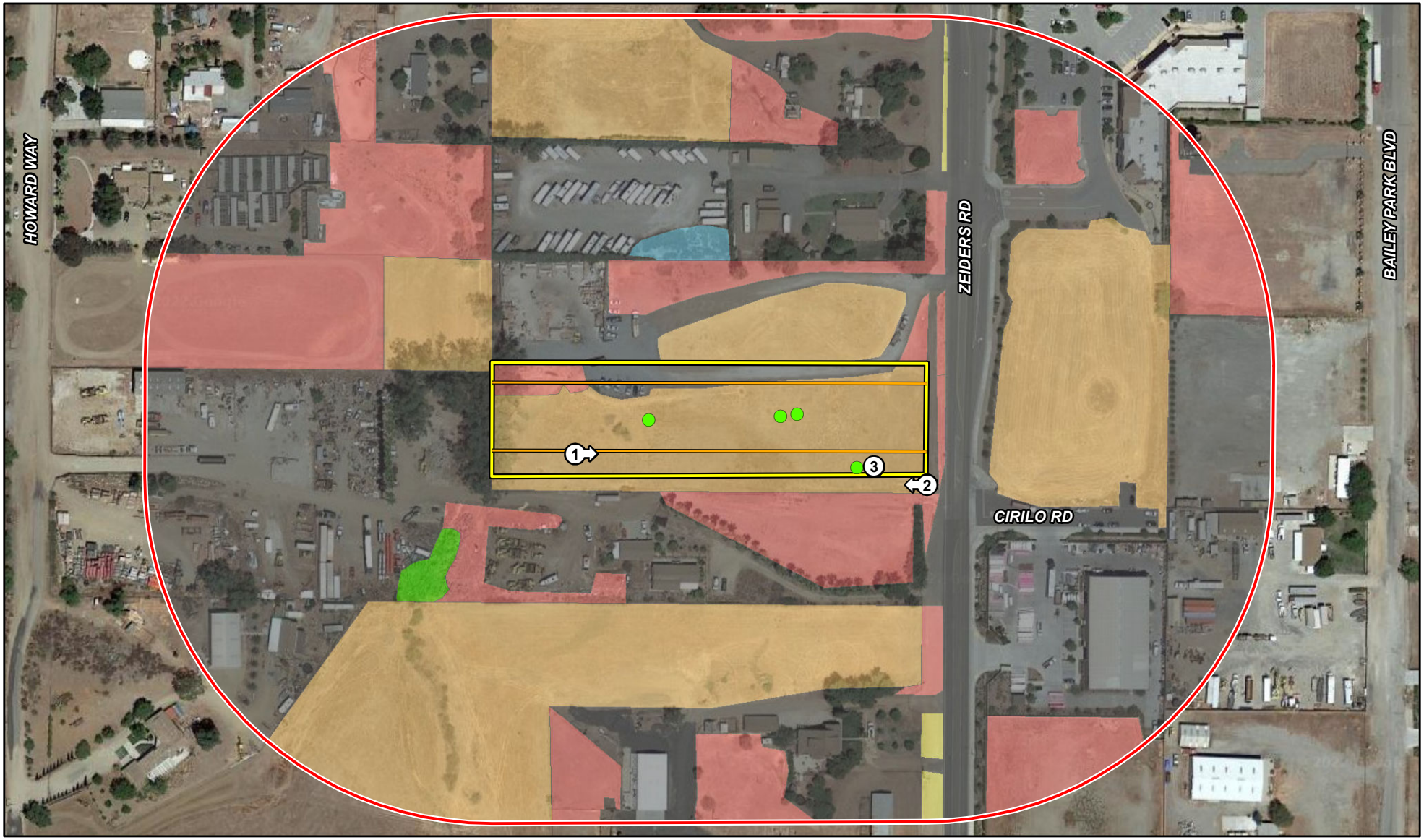
FEET

SOURCE: USGS The National Map (2018)

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Caliber Collision Paint and Auto Body Repair Shop Project

Project Location and Vicinity



LSA

LEGEND

- Survey Area – 500-foot Buffer
- Project Location
- Transects (30-meter)
- Potential Burrowing Owl Burrow (no sign)
- Photo Locations

Vegetation

- Bare Ground
- Arundo Patches
- Coastal Sage Scrub
- Ruderal
- Non-native Grassland
- Developed

0 100 200
FEET

SOURCE: Google Imagery (2022)

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FIGURE 2

Caliber Collision Paint and Auto Body Repair Shop Project

Survey Results



Photo 1: View of the project site facing east. Taken on August 17, 2022.



Photo 2: View of the project site facing west. Taken on March 25, 2022.

LSA

FIGURE 3

Caliber Collision Paint and Auto Body Repair Shop Project

Site Photographs



Photo 3: California ground squirrel burrow. Taken on May 10, 2020.

APPENDIX C2

BURROWING OWL SURVEY REPORT

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CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

September 29, 2022

Mr. Brett Hamilton, AICP, Senior Planner
City of Menifee
Community Development Department-Planning Division
29844 Haun Road
Menifee, California 92586
bhamilton@cityofmenifee.us

Subject: Results of a Burrowing Owl Survey for the Caliber Collision Paint and Auto Body Repair Shop Project in the City of Menifee, Riverside County, California (LSA Project No CIM2201).

Dear Mr. Hamilton:

This report documents the results of a burrowing owl (*Athene cunicularia*) survey for the Caliber Collision Paint and Auto Body Repair Shop Project (project). The 2.33-acre project is located north of Keller Road, south of Scott Road, east of Howard Way, and west of Zeiders Road in the City of Menifee (City), Riverside County, California, within Assessor's Parcel Number 384-130-028 (see Figure 1; all figures attached).

The survey results were negative for the detection of burrowing owl since no owls, or their sign were observed during the 2022 survey efforts. However, several ground squirrel burrows were observed on site and have the potential to house burrowing owl.

BACKGROUND

Burrowing owls are found in open, dry grasslands; agricultural and range lands; desert habitats; and grass, forb, and shrub stages of pinyon and ponderosa pine habitats. They nest in abandoned burrows of ground squirrels or other animals, in pipes, rock and debris piles, and in other similar features.

Burrowing owls, their nests, and eggs are protected from "take" under the Migratory Bird Treaty Act and Sections 3503, 3503.5, and 3800 of the California Fish and Game Code. Activities that cause destruction of active nests, or that cause nest abandonment and subsequent death of eggs or young, may constitute violations of these laws.

Burrowing owl is a species of special concern as determined by the California Department of Fish and Wildlife (CDFW) and is a covered species under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). In addition, the MSHCP has established survey areas for burrowing owl where focused surveys are required if suitable habitat is determined to be present.

SURVEY AREA

The area surveyed with transects (Figure 2) is 2.33 acres and includes the entire project site, which is potentially suitable for burrowing owl. The entire project site is within the MSHCP burrowing owl survey area. The topography of this area is a mix of moderately disturbed, low-lying vegetation and slopes southeast to northwest, providing a suitable habitat for burrowing owl.

Vegetation within the project site is moderately disturbed due to regular discing. Based on aerial imagery, the site has never been developed, and non-native grasslands dominate the site. The project site is bounded by undeveloped land and a commercial storage yard to the north, Zeiders Road and undeveloped land to the east, a single-family residence and commercial operations to the south, and a commercial storage yard to the west. The site elevation ranges from 1,530 to 1,545 feet (ft) above mean sea level (amsl).

Vegetation and land cover present on site consist of non-native grasslands, ruderal vegetation, and a developed gravel driveway (Figure 2). One native tree, a blue elderberry (*Sambucus nigra* ssp. *Caerulea),* was observed on the central portion of the site. Dominant species within non-native grasslands include ripgut brome (*Bromus diandrus),* paniculate tarplant (*Deinandra paniculate*), redstem filaree (*Erodium cicutarium*), and common Fiddleneck (*Amsinckia intermedia*). Dominant species within ruderal areas are limited to non-native species and include shortpod mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), stinknet (*Oncosiphon pilulifer*), foxtail barley (*Hordeum murinum*), foxtail brome (*Bromus madritensis*), rattail sixweeks grass (*Festuca myuros*), and redstem filaree. There are no other plant communities on the site. Areas mapped as "developed" in Figure 2 consist of gravel driveways that prohibit the growth of vegetation; these areas are located on the northern part of the site. Figure 3 shows representative photographs of the on-site conditions.

The area surrounding the project site consists of a mix of developed and undeveloped lands with Interstate 15 (I-15) passing approximately 0.25 mile from the eastern boundary of the project site. Surrounding developed areas consist primarily of residential and commercial uses.

METHODS

The surveys were conducted by LSA biologist Jeremy Rosenthal according to the *County of Riverside Guidelines for Burrowing Owl Surveys* (revised March 29, 2006). A total of four surveys were conducted on March 25, May 10, June 30, and August 17, 2022. The surveys were conducted by walking transects approximately 30 meters apart throughout areas of suitable habitat to look for burrowing owls, potential burrows (burrows greater than 11 centimeters [cm] in diameter and 150 cm deep), and burrowing owl sign. Burrowing owl sign consists of feathers, pellets, whitewash, and prey remnants). Burrows with burrowing owl sign present and/or burrowing owls were recorded using a handheld global positioning system (GPS) unit and mapped onto an aerial photograph. Privately owned parcels located outside of the project site were surveyed using binoculars from public rights-of-way and advantageous viewpoints as well as through aerial imagery. Potential habitat within 500 ft and visible from the site was surveyed using binoculars.

Table A provides dates, times, and weather conditions of site visits. Surveys were conducted during weather conducive to observing owls outside their burrows and to detecting burrowing owl sign. No rain had occurred within five days prior to each of the site visits.

Table A: Focused Survey Dates, Times, and Weather Conditions

Survey	Personnel	Date (2022)	Time (24-Hour) (start/finish)	Temp. (°F) (start/finish)	Wind (mph)	Sky
Burrow Survey, Burrowing Owl Survey 1	Jeremy Rosenthal	March 25	0645/0715	64/65	<12	0% cloud cover
Burrowing Owl Survey 2	Jeremy Rosenthal	May 10	0600/0700	47/48	<2	10% cloud cover
Burrowing Owl Survey 3	Jeremy Rosenthal	June 30	0600/0700	66/67	<2	10% cloud cover
Burrowing Owl Survey 4	Jeremy Rosenthal	August 17	0630/0730	74/75	<1	0% cloud cover

Source: Compiled by LSA (2022).
°F = degrees Fahrenheit
mph = miles per hour

RESULTS

No burrowing owls or burrowing owl sign were found to be present within the survey area (including the 500 ft buffer). Four burrows suitable for burrowing owl were observed within the survey area but showed no sign of burrowing owl use. Suitable habitat is present throughout the project site and portions of the 500 ft buffer consisting of ruderal and non-native grassland as both vegetation communities contain low-growing plant species. Areas mapped as developed lacked suitable habitat since they consist of a gravel driveway maintained vegetation free since 2021. These developed areas preclude the construction of any burrows and vegetation growth.

Areas within 500 ft of the project site generally lack suitable habitat for burrowing owl as over half of the surrounding land consists of developed land cover for residences and/or commercial businesses. The remaining undeveloped land to the north, south-west, south-east, and east is considered suitable habitat for burrowing owl, consisting primarily of similar ruderal and non-native grassland vegetation. However, based on historic aerial imagery, vegetation within those areas appears to be regularly disced/mowed since at least 2003. No burrowing owls, their sign, or suitable burrows were observed within the 500 ft buffer.

Wildlife species detected during the survey included mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), lesser goldfinch (*Spinus psaltria*), lark sparrow (*Chondestes grammacus*), white-crowned sparrow (*Zonotrichia leucophrys*), killdeer (*Charadrius vociferus*), California scrub-jay (*Aphelocoma californica)*¸ Bewick's wren (*Thryomanes bewickii)*, song sparrow (*Melospiza melodia*), California towhee (*Melozone crissalis*), Nuttall's woodpecker (*Picoides nuttalii*), northern flicker (*Colaptes auratus*), American kestrel (*Falco sparverius*), Cassin's kingbird (*Tyrannus vociferans*), hooded oriole (*Icterus cucullatus*), red-winged blackbird (*Agelaius phoeniceus*), common yellowthroat (*Geothlypis trichas*), western tanager

(*Piranga ludoviciana*), house finch (*Haemorhous mexicanus)*, Eurasian collared dove (*Streptopelia decaocto*), European starling (*Sturnus vulgaris*), rock pigeon (*Columba livia*), chicken (*Gallus gallus domesticus),* checkered white (*Pontia protodice)*, California ground squirrel (*Spermophilus beecheyi*), and Audubon's cottontail (*Sylvilagus audubonii*).

DISCUSSION

Four suitable burrows were observed within the project site; however, they lacked sign of burrowing owl use during the focused burrowing owl surveys. The project site contains suitable habitat in the form of non-native grassland and ruderal areas. Since portions of the project site are suitable for burrowing owl and burrowing owl could occupy these areas prior to construction, a preconstruction burrowing owl survey will be required within 30 days prior to ground disturbance, consistent with the *County of Riverside Guidelines for Burrowing Owl Surveys* (revised March 29, 2006). If burrowing owl is found during the preconstruction survey, the project proponent will need to inform the CDFW and U.S. Fish and Wildlife Service (USFWS) and prepare a Burrowing Owl Protection and Relocation Plan for approval by these agencies prior to initiating ground disturbance.

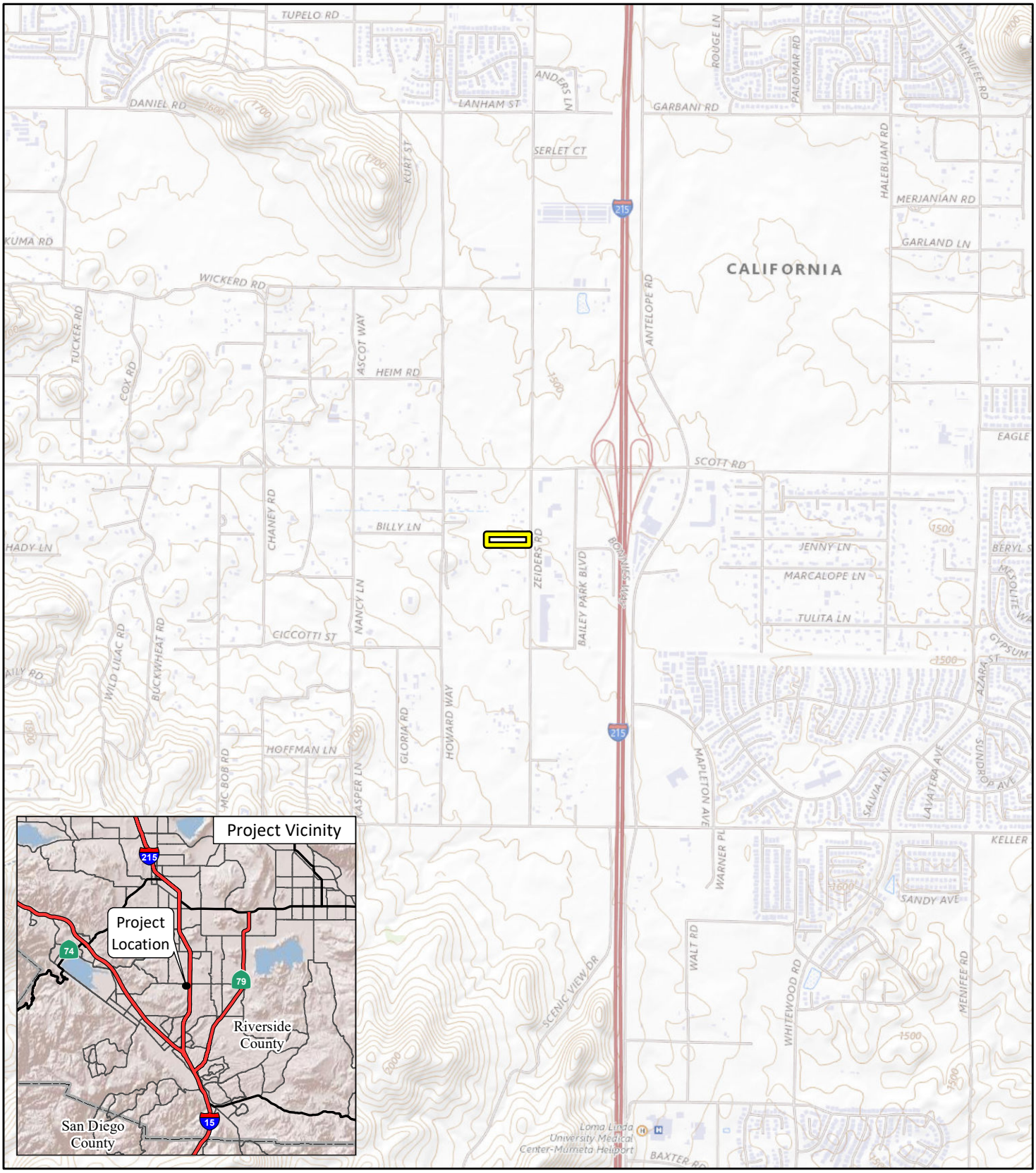
If you have any questions concerning the report, I can be contacted at (626) 257-0215 or ryan.villanueva@lsa.net.

Sincerely,

LSA ASSOCIATES, INC.

Ryan Villanueva
Senior Biologist

Attachments: Figure 1: Project Location and Vicinity
Figure 2: Survey Results
Figure 3: Site Photographs



LSA

LEGEND

Project Location

FIGURE 1

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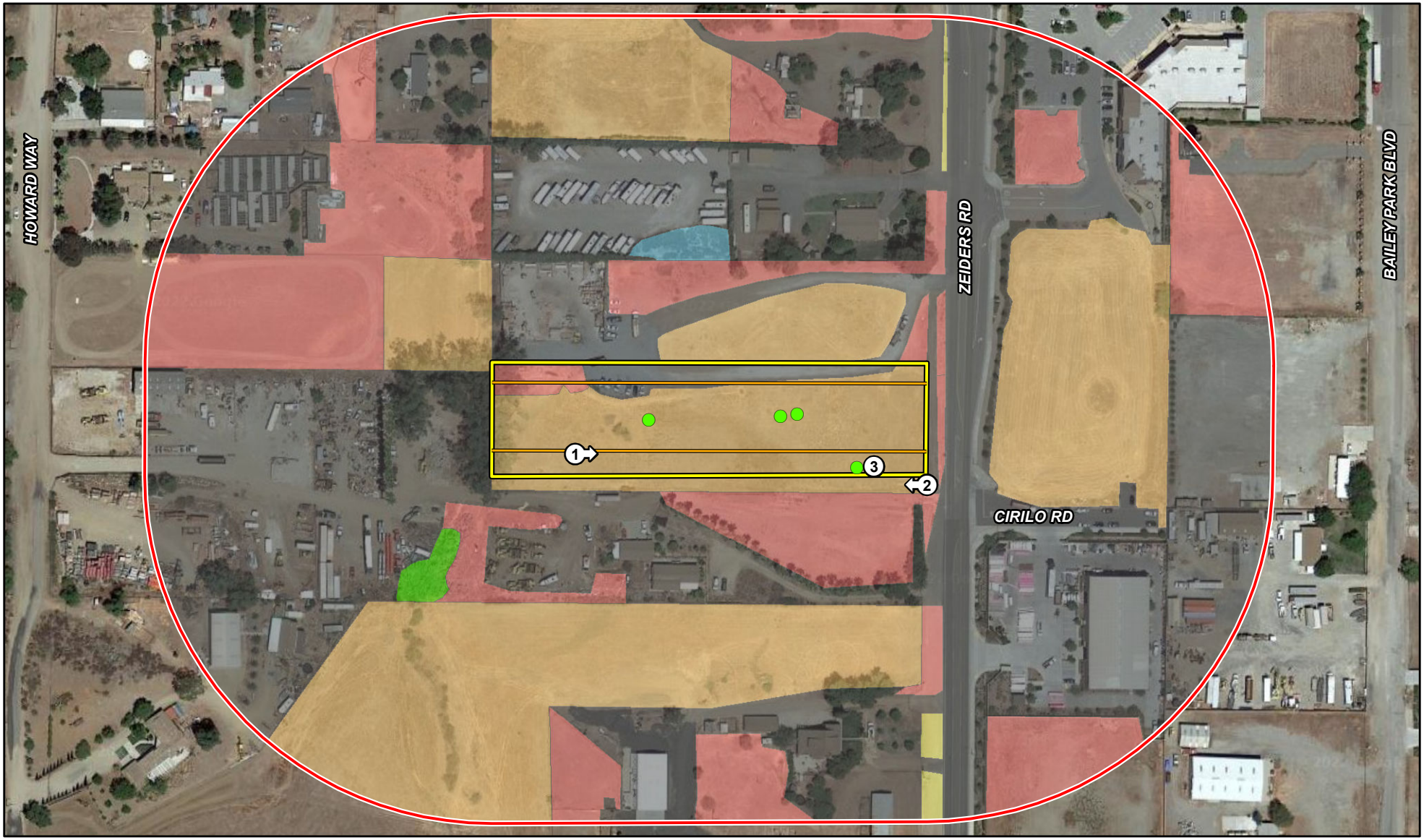
FEET

SOURCE: USGS The National Map (2018)

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Caliber Collision Paint and Auto Body Repair Shop Project

Project Location and Vicinity



LSA

LEGEND

- Survey Area – 500-foot Buffer
- Project Location
- Transects (30-meter)
- Potential Burrowing Owl Burrow (no sign)
- Photo Locations

Vegetation

- Bare Ground
- Arundo Patches
- Coastal Sage Scrub
- Ruderal
- Non-native Grassland
- Developed

0 100 200
FEET

SOURCE: Google Imagery (2022)

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FIGURE 2

Caliber Collision Paint and Auto Body Repair Shop Project

Survey Results



Photo 1: View of the project site facing east. Taken on August 17, 2022.



Photo 2: View of the project site facing west. Taken on March 25, 2022.

LSA

FIGURE 3

Caliber Collision Paint and Auto Body Repair Shop Project

Site Photographs



Photo 3: California ground squirrel burrow. Taken on May 10, 2020.

APPENDIX C3

FOCUSED MSHCP PLANT SPECIES 2022 SURVEY

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CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

September 16, 2022

Brett Hamilton, AICP, Senior Planner
City of Menifee
Community Development Department-Planning Division
29844 Haun Road
Menifee, CA 92586

Subject: Focused MSHCP Plant Species 2022 Survey for the Caliber Collision Paint and Autobody Repair Shop Project in Menifee, Riverside County, California (LSA Project No CIM2201)

Dear Mr. Hamilton:

This report documents the results of a 2022 focused survey for Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) plant species for the Caliber Collision Paint and Autobody Repair Shop Project (project). The approximately 2.3-acre project, consisting of Assessor's Parcel Number 384-130-028, is at the northwest corner of Zeiders Road and Cirilo Road in Menifee, Riverside County, (Figures 1 and 2, attached).

Section 6.1.3 of the MSHCP requires focused surveys for specified sensitive plant species if the project is within a Narrow Endemic Plant Species Survey Area (NEPSSA) and suitable habitat is present. The project is within NEPSSA 3, which indicates the need for a focused survey within suitable habitat for the following plant species:

- Munz's onion (*Allium munzii*)
- San Diego ambrosia (*Ambrosia pumila*)
- Many-stemmed dudleya (*Dudleya multicaulis*)
- spreading navarretia (*Navarretia fossalis*)
- California Orcutt grass (*Orcuttia californica*)
- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*)

The results of the survey were negative for the target species.

BACKGROUND

The survey area consists of the entire approximately 2.3-acre project site. Vegetation in the survey area, consisting of nonnative grassland, is disturbed due to regular discing. Dominant species include paniculate tarplant (*Deinandra paniculate*), redstem filaree (*Erodium cicutarium*), ripgut brome (*Bromus diandrus),* and common fiddleneck (*Amsinckia intermedia*), shortpod mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), stinknet (*Oncosiphon pilulifer*), foxtail barley (*Hordeum murinum*), foxtail brome (*Bromus madritensis*), and rattail sixweeks grass (*Festuca myuros*).

Precipitation values for the 2021–2022 wet season and normal season precipitation values were taken from the WeatherCurrents.com website (http://weathercurrents.com/perris/). Total 2021–2022 wet

season precipitation in the general project area was 5.2 inches, compared to an average season value of 8.8 inches.

METHODS

Focused NEPSSA surveys were conducted by LSA botanist Stan Spencer, PhD, and timed to coincide with the blooming periods of target species. An early season survey was conducted on May 10, 2022, from 8:55 to 11:10 a.m. A late season survey was conducted on June 22 from 6:45 to 9:00 a.m. The surveys were conducted by walking approximately 50-foot-wide transects throughout the project site. The surveys were floristic in nature, and all plant species observed during the surveys were noted.

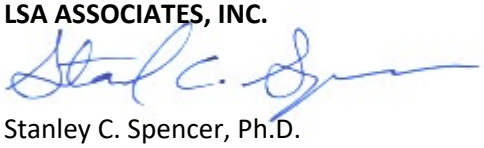
RESULTS

No NEPSSA 3 species were observed during the focused plant survey. Therefore, NEPSSA 3 species are considered absent from the site and are not expected to be affected by project activities. No other sensitive plant species were observed. A complete list of plant species observed on the site is included in attached Table A.

If you have any questions concerning the report, I can be contacted at (951) 232-4124 or stan.spencer@LSA.net.

Sincerely,

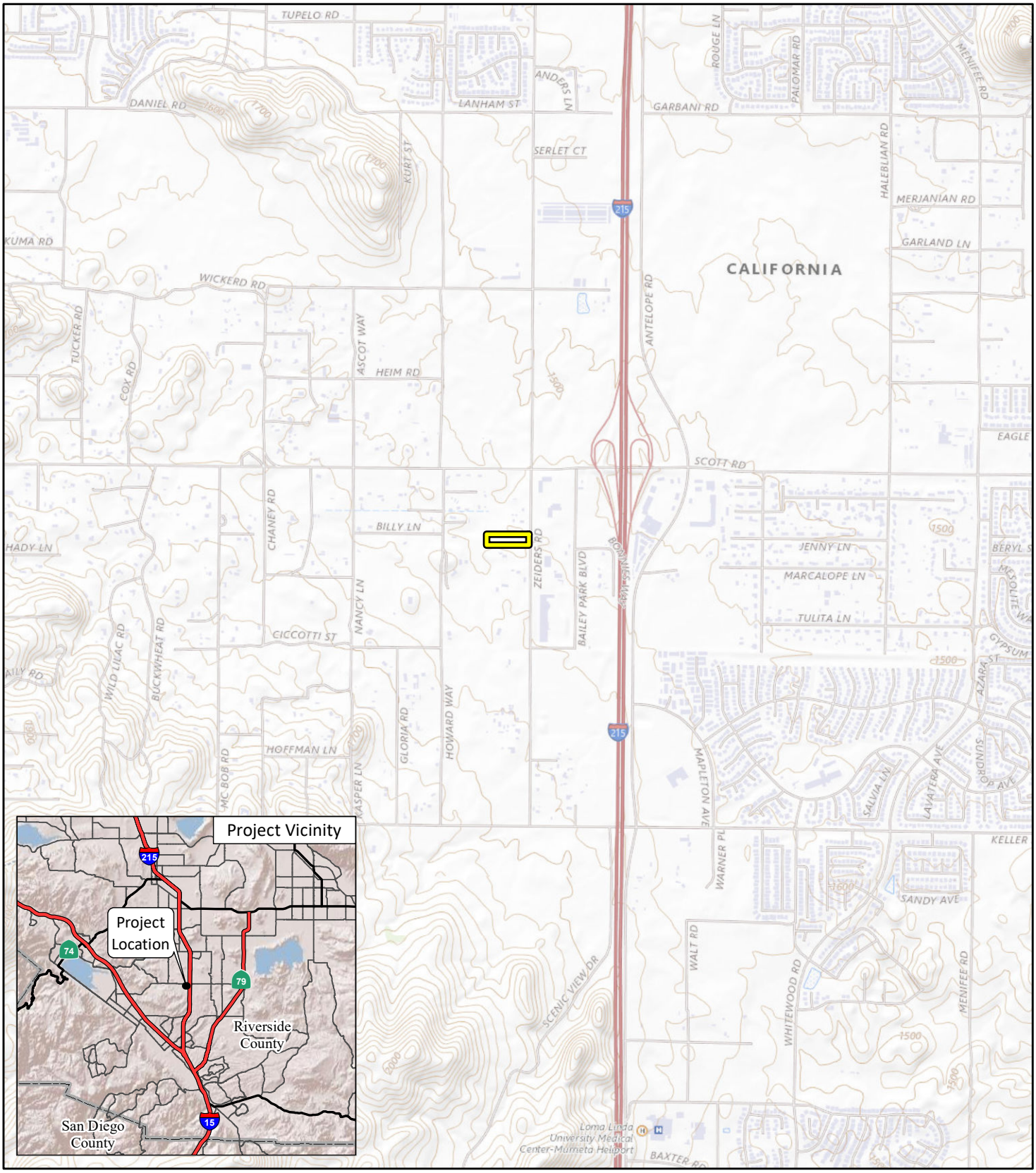
LSA ASSOCIATES, INC.



Stanley C. Spencer, Ph.D.
Senior Biologist/Botanist

Attachments: Figure 1: Project Location and Vicinity
Figure 2: Project Area
Table A: Vascular Plant Species Observed

cc: Melody Aimar, MSHCP Biological Monitoring Program



LSA

LEGEND

Project Location

FIGURE 1

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FEET

SOURCE: USGS The National Map (2018)

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Caliber Collision Autobody Shop

Project Location and Vicinity



LSA

LEGEND

Project Location

FIGURE 2

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FEET

SOURCE: Google Imagery (2022)

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Caliber Collision Autobody Shop

Project Area

Table A: Vascular Plant Species Observed

Scientific Name	Common Name
Eudicot Flowering Plants	
Adoxaceae	**Muskroot family**
Sambucus mexicana	Blue elderberry
Anacardiaceae	**Sumac family**
*Schinus molle**	Peruvian peppertree
Asteraceae	**Sunflower family**
*Anthemis cotula**	Mayweed
Artemisia californica	California sagebrush
*Centaurea melitensis**	Maltese star-thistle
Corethrogyne filaginifolia	Common sandaster
Deinandra paniculata	Paniculate tarplant
Erigeron canadensis	Canadian horseweed
Helianthus annuus	Common sunflower
*Lactuca serriola**	Prickly lettuce
Matricaria discoidea	Disc mayweed
*Oncosiphon pilulifer**	Stinknet
*Sonchus asper**	Prickly sow thistle
*Sonchus oleraceus**	Common sow thistle
*Verbesina encelioides**	Golden crownbeard
Boraginaceae	**Borage family**
Amsinckia retrorsa	Rigid fiddleneck
Heliotropium curassavicum	Salt heliotrope
Plagiobothrys acanthocarpus	Adobe allocarya
Brassicaceae	**Mustard family**
*Brassica nigra**	Black mustard
*Hirschfeldia incana**	Shortpod mustard
*Sisymbrium irio**	London rocket
Chenopodiaceae	**Saltbush family**
*Salsola tragus**	Russian thistle
Euphorbiaceae	**Spurge family**
Croton setigerus	Dove weed
Euphorbia albomarginata	Whitemargin sandmat
*Euphorbia maculata**	Spotted spurge
Fabaceae	**Pea family**
Acmispon micranthus	Fishhook lotus
*Melilotus albus**	White sweetclover
*Melilotus indicus**	Annual yellow sweetclover
Geraniaceae	**Geranium family**
*Erodium cicutarium**	Redstem stork's bill
Lamiaceae	**Mint family**
*Marrubium vulgare**	Horehound
Trichostema lanceolatum	Vinegar weed
Malvaceae	**Mallow family**
*Malva parviflora**	Cheeseweed mallow
Malvella leprosa	Alkali mallow
Myrtaceae	**Myrtle family**
Eucalyptus sp.*	Eucalyptus

Table A: Vascular Plant Species Observed

Scientific Name	Common Name
Oleaceae	**Olive family**
*Olea europaea**	Olive
Polygonaceae	**Buckwheat family**
Eriogonum fasciculatum	California buckwheat
*Rumex crispus**	Curly dock
Solanaceae	**Nightshade family**
Datura wrightii	Sacred thorn-apple
*Nicotiana glauca**	Tree tobacco
Poaceae	**Grass family**
*Avena fatua**	Wild oat
*Bromus diandrus**	Ripgut brome
*Bromus hordeaceus**	Soft chess
*Bromus rubens**	Red brome
*Cynodon dactylon**	Bermuda grass
*Festuca myuros**	Annual fescue
*Festuca perennis**	Ryegrass
*Hordeum murinum**	Mouse barley

*= non-native

APPENDIX D

CULTURAL RESOURCES ASSESSMENT

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CULTURAL RESOURCES ASSESSMENT

CALIBER COLLISION AUTOBODY SHOP PROJECT

APN 384-130-028

CITY OF MENIFEE

RIVERSIDE COUNTY, CALIFORNIA

LSA

September 2022

CULTURAL RESOURCES ASSESSMENT

CALIBER COLLISION AUTOBODY SHOP PROJECT

APN 384-130-028

CITY OF MENIFEE

RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

Desiree McGriff
Associate Planner
City of Menifee
29844 Haun Road
Menifee, California 92586

Prepared by:

Riordan Goodwin, RA
LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, California 92507

With Contributions by:
The Soboba Band of Luiseno Indians
Cultural Resource Department
P.O. Box 487
San Jacinto, CA 92581

LSA Project No. CIM2201

National Archaeological Database Information:
Type of Study: Reconnaissance Survey
Sites Recorded: None
USGS 7.5' Quadrangle: *Romoland, California*
Acreage: 2.89
Keywords: Negative results, monitoring recommended

LSA

September 2022

MANAGEMENT SUMMARY

LSA was retained by the City of Menifee to conduct a cultural resources assessment for the proposed Caliber Collision Autobody Shop Project in the City of Menifee, Riverside County, California. This cultural resources assessment was completed pursuant to the California Environmental Quality Act (CEQA).

A cultural resources records search, additional research, and a field survey were conducted for the project area. No resources were previously recorded within the project area or identified by the survey. Despite the negative records search and survey results along with moderate disturbance, due to the density of prehistoric resources in the vicinity (24), proximity to a water source, and poor ground visibility there is some potential for subsurface resources within the project area. Therefore, archaeological monitoring of all earthmoving activities in undisturbed soil is recommended.

In the event previously undocumented archaeological resources are identified during earthmoving activities, further work in the area should be halted until the nature and significance of the find can be assessed by the consulting tribes and a Registered Professional Archaeologist.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site.

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APPENDIX

A: RECORDS SEARCH BIBLIOGRAPHY

INTRODUCTION

LSA was retained by the City of Menifee to conduct a cultural resources assessment for the proposed Caliber Collision Autobody shop Project in the City of Menifee, Riverside County, California. This cultural resources assessment was completed pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Chapter 2.6, Section 21083.2, and California Code of Regulations Title 14, Chapter 3, Article 5, Section 15064.5. The research and field surveys were conducted to determine whether the proposed project would adversely affect any resources considered historical resources pursuant to CEQA.

PROJECT LOCATION AND DESCRIPTION

The project area is west of Interstate 215 near the southwest corner of Scott Road and Zeiders Road bounded by commercial activity to the north and west, a vacant lot to the east (on the other side of Zeiders Road), and a residence to the south. The project is depicted on the United States Geological Survey (USGS) *Romoland, California* topographic quadrangle map in Township 5 South, Range 3 West in Section 32, San Bernardino Baseline and Meridian (USGS 1979). See Figure 1. The project area is located on Assessor's Parcel Number (APN) 384-130-028, totaling 2.89 currently undeveloped acres. The proposed development is an autobody repair shop with associated parking.

NATURAL SETTING

Climate and Watershed

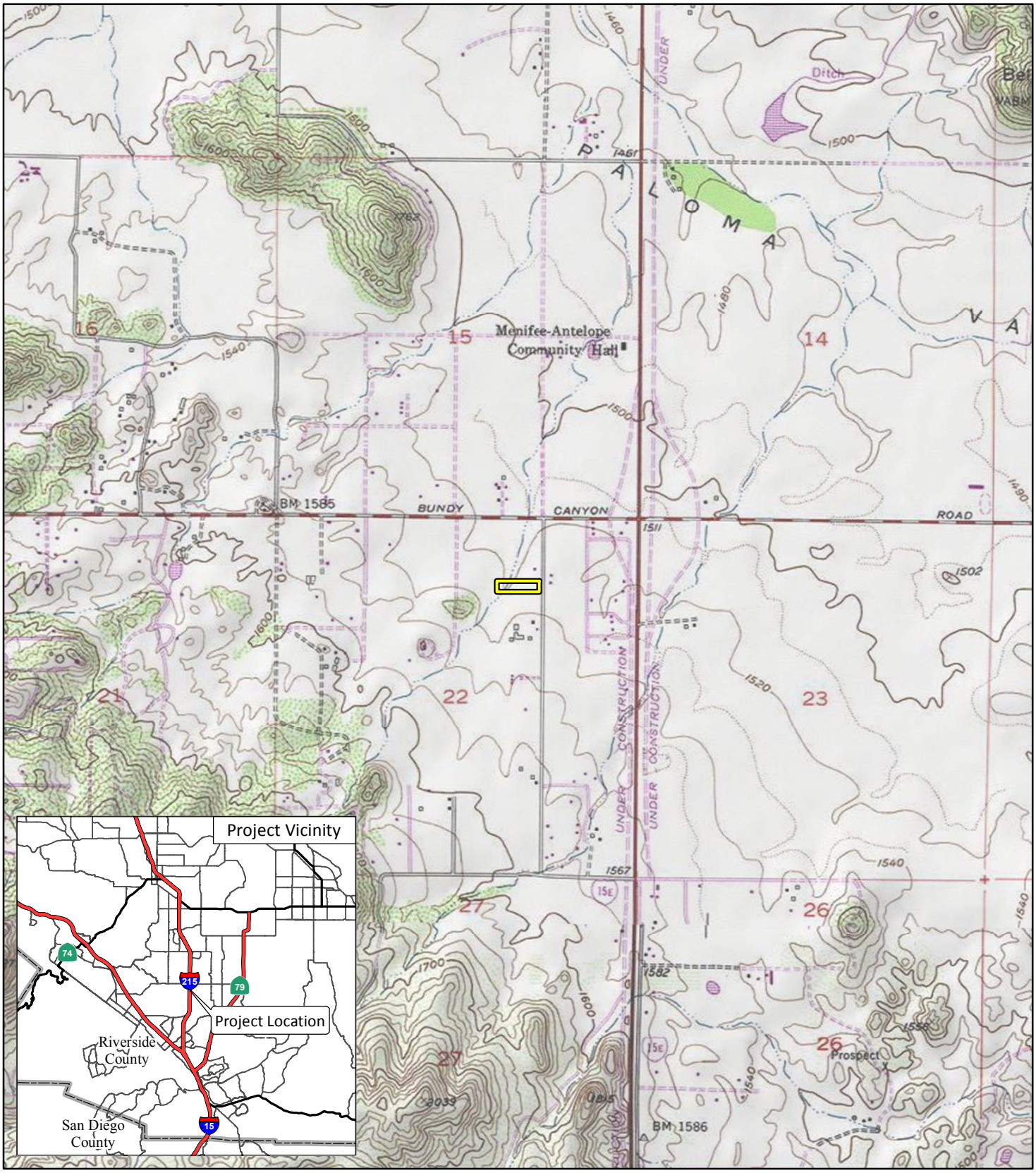
The project region is characterized by a temperate climate, with dry, hot summers and moderate winters. Rainfall ranges from 12 to 16 inches annually (Beck and Haase 1974). Precipitation usually occurs in the form of winter rain, with warm monsoonal showers in summer. An ephemeral drainage transects the site and nearest natural reliable source of water is Salt Creek (now channelized), which drains west approximately 500 feet west of the project.

Biology

At an average elevation of 1,540 feet, the project is within the Lower Sonoran Life Zone of California (Schoenherr 1992), which ranges from below sea level to 3,500 feet. Cheese weed mallow, eucalyptus, mustard, Russian thistle, star thistle, tree tobacco, foxtail brome (among other species), and xeric grasses were noted on the property. Extensive fauna are known locally, including many endemic species of reptiles, birds, and insects. Common animals of this region include rodents, rabbits, coyotes, raptors, and vultures.

Geology

The project area is located at the northern end of the Peninsular Ranges Geomorphic Province, a 900-mile-long northwest-southeast trending structural block that extends from the Transverse Ranges to the tip of Baja California and includes the Los Angeles Basin (California Geological Survey 2002; Norris and Webb 1976). The province is approximately 225 miles wide, extending from the



LSA

LEGEND

Project Location

FIGURE 1

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FEET

Caliber Collision Autobody Shop

Project Location and Vicinity

SOURCE: USGS 7.5' Quad - *Romoland* (1979), *Murrieta*(1979), CA

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Colorado Desert in the east, across the continental shelf to the Southern Channel Islands (Santa Barbara, San Nicolas, Santa Catalina, and San Clemente) in the west (Sharp 1976). This region is characterized by a series of mountain ranges separated by northwest-trending valleys subparallel to faults branching from the San Andreas Fault. The geology of this province is similar to that of the Sierra Nevada, with granitic rock intruding into the older metamorphic rocks. It contains extensive pre-Cretaceous (older than 145 million years ago [Ma]) igneous and metamorphic rocks covered by limited exposures of post-Cretaceous (younger than 66 Ma) sedimentary deposits (Norris and Webb 1976). Within this province, the project is located on the Perris Block, a fault-bounded structural block that extends from the southern foot of the San Gabriel and San Bernardino Mountains southeast to the vicinity of Bachelor Mountain and Polly Butte (Morton and Miller 2006; Kenney 1999). It is bounded on the northeast by the San Jacinto Fault and on the southwest by the Elsinore Fault Zone (Morton and Miller 2006).

CULTURAL SETTING

Prehistory

Chronologies of prehistoric cultural change in Southern California area have been attempted numerous times, and several are reviewed in Moratto (2004). No single description is universally accepted as the various chronologies are based primarily on material developments identified by researchers familiar with sites in a particular region and variation exists essentially due to the differences in those items found at the sites. Small differences occur over time and space, which combine to form patterns that are variously interpreted.

Currently, two primary regional culture chronology syntheses are commonly referenced in the archaeological literature. The first, Wallace (1955), describes four cultural horizons or time periods: Horizon I – Early Man (9000–6000 BC), Horizon II – Milling Stone Assemblages (6000–3000 BC), Horizon III – Intermediate Cultures (3000 BC–AD 500), and Horizon IV – Late Prehistoric Cultures (AD 500–historic contact). This chronology was refined (Wallace 1978) using absolute chronological dates obtained after 1955.

The second cultural chronology (Warren 1968) is based broadly on Southern California prehistoric cultures and was also revised (Warren 1984; Warren and Crabtree 1986). Warren's (1984) chronology includes five periods in prehistory: Lake Mojave (7000–5000 BC), Pinto (5000–2000 BC), Gypsum (2000 BC–AD 500), Saratoga Springs (AD 500–1200), and Protohistoric (AD 1200–historic contact). Changes in settlement pattern and subsistence focus are viewed as cultural adaptations to a changing environment, which begins with gradual environmental warming in the late Pleistocene, continues with the desiccation of the desert lakes, followed by a brief return to pluvial conditions, and concludes with a general warming and drying trend, with periodic reversals that continue to the present (Warren and Crabtree 1986).

Ethnography

The project area is situated within the traditional boundaries of the Luiseño (Bean and Shipek 1978). Prior to the Spanish occupation of California, the territory of the Luiseño encompasses approximately 2,000 square miles, including all of Western Riverside County and northwestern San

Diego County. These territorial boundaries were somewhat fluid and changed through time. They encompassed an extremely diverse environment that included coastal beaches, lagoons and marshes, inland river valleys and foothills, and mountain groves of oaks and evergreens (Bean and Shipek 1978). The Luiseño were first encountered by the Spanish missionaries in the late 18th century.

The first written accounts of the Luiseño are attributed to the mission fathers. Later documentation was authored by Sparkman (1908), Kroeber (1976), White (1963), Oxendine (1983), and others. Many of these accounts written by non-native have been challenged by the Luiseño Tribes, as being fictional, romanticized and an inaccurate portrayal of Luiseño Culture. (Soboba Cultural Resource Department 2022)

History

In California, the historic era is generally divided into three periods: the Spanish Period (1769 to 1821), the Mexican Period (1821 to 1848), and the American Period (1848 to present). Early exploration of the Riverside County area was slow until Lieutenant Pedro Fages, then the military governor of San Diego, crossed through the San Jacinto Valley in 1772.

Riverside County

The Southern Pacific Railroad completed its line from Los Angeles through the San Gorgonio Pass in 1876. The trains were eventually used to transport settlers into the area, creating a period of agricultural and land development, ultimately resulting in the establishment of Riverside County in 1893. Transportation, agriculture, and the control of water have continued to be central themes in the settlement, development, and growth of Riverside County (Robinson 1979).

Menifee

The community had its beginnings around 1880 when Luther Menifee Wilson struck gold, opened a mine, and named it the Menifee Quartz Lode (Menifee 2017). In 1885, William Newport came to the Menifee Valley and established large-scale agriculture on 2,000 acres (Menifee 2013). A post office was established two years later, approximately a mile northeast of the mine, at the intersection of Newport and Bradley Roads (Menifee 2017). It would intermittently serve the community until it was closed at the beginning of the 20th century (Salley 1977). The Santa Fe Railroad completed its San Jacinto Branch line from Perris to Hemet in 1888 and, although it passed some four miles to the north of the post office, a local siding was built by the late 1890s to serve the community, fostering the development of Menifee's agriculture (USGS 1901; Menifee 2017). By 1890, a blacksmith shop and a new school had been constructed near the post office.

After the establishment of two more local gold mines during the first half of the 1890s (the Lucky Boy and Mammoth Mines), the southwest portion of what is now the City of Menifee became a small gold mining district named after Wilson's earliest mine (the Menifee District) (Kupferman 1961; Gudde 1975). Despite the gradual decline of the mining district in the early decades of the 20th century, the local agricultural economy continued to grow and, by mid-1910s, there were approximately 20,000 acres of grain under cultivation (McGroarty 1914). All of the district's mines had closed for good by the mid-1930s, but the community endured and prospered in the ensuing

decades (Gudde 1975). Modern development of Menifee began in the early 1960s with the planned community of Sun City, which is centrally located in the City (Menifee 2013). The town continued to grow in the late 1980s with the addition of a master-planned community. Menifee was incorporated in 2008 (Menifee 2017).

METHODS

Records Search

On April 1, 2022, a cultural resources records search was conducted for the current project area at the Eastern Information Center (EIC) at the University of California, Riverside. The EIC houses the pertinent archaeological site and survey information necessary to determine whether cultural resources are recorded within the study area boundaries and which specific areas have been previously surveyed. The research included a review of all recorded historic and prehistoric archaeological sites within one mile of the project, as well as a review of known cultural resource survey and excavation reports. In addition, LSA examined the California State Historic Property Data File (HPD), which includes the National Register of Historic Places (National Register), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI), various local historic registers, and historic maps. See Appendix A.

Additional Research

In March 2022, LSA Archaeologist Riordan Goodwin reviewed online historic period maps and aerial photographs and the Built Environment Resources Directory (BERD).

Sacred Lands File Search

At the direction of the City, LSA requested a Sacred Lands File (SLF) search from the Native American Heritage Commission (NAHC) on March 7, 2022.

Field Survey

On March 11, 2022, the project area was surveyed by Mr. Goodwin, who walked transects spaced by 10 meters, with particular attention given to surfaces and areas with exposed soil.

RESULTS

Records Search

Data from the EIC indicate there have been 56 cultural resource studies previously conducted within one-half mile of the proposed project, none of which included any portion of the project area. Although no resources were previously documented within the project area, 34 have been recorded within one-half mile, including prehistoric and historic period sites and isolates (Table A). The nearest prehistoric resource (33-028615) is approximately 870 meters north of the project area.

Table A: Cultural Resources within One Mile of the Project

Primary #	Trinomial	Site Description	Status Code
33-000635	CA-RIV-000635	Bedrock milling feature	—
33-000645	CA-RIV-000645	Prehistoric habitation site	—
33-001072	CA-RIV-001072	Bedrock milling with rock art	—
33-001309	CA-RIV-001309	Bedrock milling with artifact scatter	—
33-002151	CA-RIV-002151	Bedrock milling feature	—
33-002152	CA-RIV-002152	Bedrock milling feature	—
33-002153	CA-RIV-002153	Prehistoric artifact scatter	—
33-002154	CA-RIV-002154	Bedrock milling feature	—
33-003335	CA-RIV-003335	Prehistoric artifact scatter	—
33-003336	CA-RIV-003336	Bedrock milling, artifact scatter	—
33-003339	CA-RIV-003339	Prehistoric artifact scatter	—
33-007714	—	27115 Scott Road; TK Ranch - historic period building complex c. 1920	—
33-007716	—	33281 Zeiders Road; historic period building complex c. 1927	—
33-007717	—	33300 Antelope Road (formerly old Highway 395); historic period building complex c. 1890s–1930s	—
33-011242	—	Historic period foundations, refuse	—
33-011245	—	Bedrock milling feature	—
33-011246	—	Bedrock milling feature	—
33-011253	—	Isolated prehistoric artifacts	—
33-014990	CA-RIV-007964	Bedrock milling features	—
33-014991	CA-RIV-007965	Bedrock milling features	—
33-015462	CA-RIV-8150	Bedrock milling feature	—
33-015463	—	Isolated prehistoric artifact	—
33-015668	—	Water conveyance feature	—
33-015987	CA-RIV-8290	Bedrock milling feature	—
33-016712	—	27984 Scott Road, Charlie Baily Farmstead; historic period building complex c. 1905	—
33-017108	—	32930 Cox Road, Shook House; historic period building complex c. 1950	—
33-017109	—	26993 Bradley Road/26993 Wickerd Road	—
33-017182	—	26753 Scott Road; historic period building c. 1946	—
33-017575	CA-RIV-9111	Bedrock milling feature	—
33-027009	—	Power transmission line - SCE Menifee 12kV #1	—
33-024602	—	Isolated prehistoric artifact	—
33-024731	CA-RIV-012243	Bedrock milling, artifact scatter	—
33-024732	CA-RIV-012244	Prehistoric artifact scatter	—
33-028615	—	Bedrock milling features	—

Source: Compiled by LSA (2022).

Sacred Lands File Search

The NAHC responded on April 19, 2022 with positive results for the SLF search which were forwarded to the City the same day.

Additional Research

Review of online historic period maps and aerial photographs indicated no buildings or structures were on the project parcel during the historic period (USGS various; HistoricAerials.com 2022). None of the built environment resources are listed in the BERD.

Field Survey

The field survey revealed that the project area is on the eastern edge of an ephemeral drainage and has been moderately disturbed by earthmoving and vegetation-abatement disking. Wood/metal debris and landscape dumping obscure the northwest portion of the site, and surface visibility was poor overall (approximately 20 percent) with pervasive obstruction by xeric vegetation. Modern refuse was noted throughout the project area. Soils are coarse decomposed granite-rich loam with some alluvial silt. No cultural resources were identified within the project area.

RECOMMENDATIONS

A cultural resources records search, additional research, and a field survey were conducted for the project area. No resources were previously recorded within the project area or identified by the survey. Despite the negative records search and survey results along with moderate disturbance, due to the density of prehistoric resources in the vicinity (24), proximity to a water source, and poor ground visibility there is some potential for subsurface resources within the project area. Therefore, archaeological monitoring of all earthmoving activities in undisturbed soil is recommended.

In the event previously undocumented archaeological resources are identified during earthmoving activities, further work in the area should be halted until the nature and significance of the find can be assessed by the consulting tribes and a Registered Professional Archaeologist.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the NAHC, which will determine and notify an MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site.

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APPENDIX A

RECORDS SEARCH BIBLIOGRAPHY

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-00229	NADB-R - 1080286; Submitter - 265; Voided - MF-0216	1977	Ken Daly	Archaeological Assessment of a Portion of the SE 1/4 of Section 15, T6S, R3W, Romoland Quadrangle, Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-00296	NADB-R - 1080351; Other - UCRARU #334; Voided - MF-0268	1978	James Baldwin	Environmental Impact Evaluation: Archaeological Assessment of Tentative Parcel Map 11966, Near Rancho California, Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-00306	NADB-R - 1080361; Submitter - 327; Voided - MF-0278	1978	Donna Belligio	Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcel Map 11995, South of Scott Road, Menifee Area of Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-00307	NADB-R - 1080362; Submitter - 327; Voided - MF-0279	1978	Donna Belligio	Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcel Map 11994, South of Scott Road, Menifee Area of Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-00308	NADB-R - 1080363; Submitter - 331; Voided - MF-0280	1978	Donna Belligio	Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcel Map 12179, South of South Road, Menifee Area of Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-00393	NADB-R - 1080440; Submitter - 343; Voided - MF-0343	1978	Thomas Holcomb	Environmental Impact Evaluation: Archaeological Assessment of a Portion of Land Near Temecula, Riverside County, California (Tentative Parcel Map 11660)	Archaeological Research Unit, U.C. Riverside	33-001309
RI-00394	NADB-R - 1080441; Submitter - 343; Voided - MF-0343	1978	Rene Giansanti	Results of Test Excavations and Surface Collection of Archaeological Materials at CA-Riv-1309, Near Temecula, Riverside County, California (TPM 11660)	Archaeological Research Unit, U.C. Riverside	33-001309
RI-00477	NADB-R - 1080519; Submitter - 327; Voided - MF-0414	1978	Donna Belligio	Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcel Map 12076, South of Scott Road, Menifee Area of Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-00512	NADB-R - 1080551; Submitter - 354; Voided - MF-0444	1978	Stan Wilmoth	Environmental Impact Evaluation: Archaeological Assessment of Tentative Parcel Map 11380, Temecula Area of Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-00554	NADB-R - 1080592; Voided - MF-0482	1979	Larry L. Bowles and Jean A. Salpas	An Archaeological Assessment of Parcel 13,240	Archaeological Consultant	33-001702

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-00627	NADB-R - 1080678; Submitter - 485; Voided - MF-0556	1979	Renee Giansanti	Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcels 15142, 15203, 15096, and Tentative Tract 14851, Paloma Valley Area of Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-00867	NADB-R - 1080922; Submitter - 508; Voided - MF-0785	1980	Renee Giansanti	Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcel 14979, Paloma Valley Area of Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-01213	NADB-R - 1081370; Submitter - 622; Voided - MF-1202	1981	Richard C. Jenkins	Environmental Impact Evaluation: An Archaeological Assessment of Tentative Tract 13057, Paloma Valley, Riverside County, California	Archaeological Research Unit, U.C. Riverside	33-002152, 33-002153, 33-002154, 33-002155, 33-002156
RI-01328	NADB-R - 1081501; Submitter - 655; Voided - MF-1328	1981	Ken Kroesen	An Archaeological Assessment ofParcels 1 and 2 of Parcel Map 13522, South of Sun City in Riverside County, California	Archaeological Research Unit, U.C. Riverside	33-000636
RI-01400	NADB-R - 1081642; Voided - MF-1464	1982	SALPAS, JEAN A.	AN ARCHAEOLOGICAL ASSESSMENT OF 23.34 ACRES OF LAND NEAR SUN CITY	AUTHOR(S)	
RI-01503	NADB-R - 1081767; Voided - MF-1578	1982	DEL CHARIO, KATHLEEN and MARIE COTTRELL	ARCHAEOLOGICAL ASSESSMENT OF TENTATIVE PARCEL 17674, NEAR SUN CITY, RIVERSIDE COUNTY, CALIFORNIA	ARCHAEOLOGICAL RESOURCE MANAGMENT CORPORATION	
RI-01844	NADB-R - 1082224; Voided - MF-2011	1987	FREEMAN, TREVOR A. and DAVID VAN HORN	Archaeological Survey Report: The Rose Hills Property, Paloma Valley, Riverside County, California	ARCHAEOLOGICAL ASSOCIATES, LTD.	33-000645, 33-003335, 33-003336, 33-003339
RI-02525	NADB-R - 1083012; Voided - MF-2749	1989	KELLER, JEAN S.	AN ARCHAEOLOGICAL ASSESSMENT OF TENTATIVE PARCEL MAP NO. 24538, RIVERSIDE COUNTY, CALIFORNIA.	AUTHOR(S)	
RI-03189	NADB-R - 1083751; Other - 89-90; Voided - MF-3408	1990	PEAK AND ASSOCIATES and Brian F. Mooney Associates	CULTURAL RESOURCES ASSESSMENT OF AT&T'S PROPOSED SAN BERNARDINO TO SAN DIEGO FIBER OPTIC CABLE, SAN BERNARDINO, RIVERSIDE AND SAN DIEGO COUNTIES, CALIFORNIA	PEAK AND ASSOCIATES & BRIAN F. MOONEY ASSOCIATES	
RI-03365	NADB-R - 1083998; Voided - MF-3604	1991	DROVER, CHRISTOPHER E.	ENVIRONMENTAL IMPACT EVALUATION: A CULTURAL RESOURCES ASSESSMENT OF THE 385 ACRE MURRIETA HIGHLANDS -- KELLER CORRIDOR PROJECT	AUTHOR	33-001558, 33-001559

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-04126	NADB-R - 1085315; Voided - MF-4602	1998	MASON, ROGER, PHILIPPE LAPIN, and WAYNE H. BONNER	CULTURAL RESOURCES RECORDS SEARCH AND SURVEY REPORT FOR A PACIFIC BELL MOBILE SERVICES TELECOMMUNICATIONS FACILITY: CM 123-03 NEAR SUN CITY, RIVERSIDE COUNTY, CALIFORNIA	CHAMBERS GROUP, INC.	
RI-04404	NADB-R - 1085736; Voided - MF-4913	2000	JONES AND STOKES ASSOCIATES, INC.	FINAL CULTURAL RESOURCES INVENTORY REPORT FOR THE WILLIAMS COMMUNICATIONS, INC., FIBER OPTIC CABLE SYSTEM INSTALLATION PROJECT, RIVERSIDE TO SAN DIEGO, CALIFORNIA VOL I-IV.	JONES AND STOKES ASSOCIATES, INC.	33-000816, 33-000817, 33-000862, 33-001845, 33-002970, 33-003081, 33-003839, 33-004202, 33-004624, 33-004744, 33-004768, 33-007587, 33-007601, 33-008105, 33-008172, 33-009772, 33-009773, 33-009774, 33-009775, 33-009776
RI-04808	NADB-R - 1086170; Submitter - Technical Report 02-35	2003	LERCH, MICHAEL K.	NEGATIVE HISTORIC PROPERTY SURVEY REPORT FOR THE SCOTT ROAD WIDENING PROJECT, RIVERSIDE COUNTY, CALIFORNIA	STATISTICAL RESEARCH, INC., Redlands, CA	33-012297
RI-04905	NADB-R - 1086267; Submitter - WHC-03-R197	2003	IRISH, LESLIE NAY, KRISTIE R. BLEVINS, ANNA M. HOOVER, and HUGH M. WAGNER	A PHASE I ARCHAEOLOGICAL AND PALEONTOLOGICAL SURVEY REPORT FOR MENIFEE ASSEMBLAGES, TT#31194, APNS 360-300-002 TO -006, -009, AND 360-350-001, MENIFEE, COUNTY OF RIVERSIDE, CALIFORNIA	L&L ENVIRONMENTAL, INC.	
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RI-05059	NADB-R - 1086421; Submitter - 02.597	2001	MCKENNA ET AL.	RESULTS OF A PALEONTOLOGICAL MONITORING PROGRAM AT THE MURRIETA HIGHLANDS PROJECT AREA IN THE PALOMA VALLEY OF RIVERSIDE COUNTY, CALIFORNIA	MCKENNA ET AL.	
RI-05133	NADB-R - 1086496	2003	SRIRO, ADAM	CULTURAL RESOURCE SURVEY OF 14 WORK STATIONS FOR THE SOUTHERN CALIFORNIA EDISON DETERIORATED POLE REPLACEMENT PROGRAM (2003), RIVERSIDE COUNTY, CALIFORNIA	MOONEY/ HAYES ASSOCIATES	

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RI-05271	NADB-R - 1086634; Submitter - 03-4	2003	ROBINSON, MARK	CULTURAL RESROUCES SURVEY AND ASSESSMENT OF APPROXIMATELY 2.0 ACRES: ZEIDERS ROAD PROJECT (APN 359-100-001) NEAR MURRIETA, RIVERSIDE COUNTY, CA	GREAT LAKES RESEARCH	
RI-05626	NADB-R - 1086989	2003	WHITE, ROBERT S. and LAURA S. WHITE	A CULTURAL RESOURCES ASSESSMENT OF A 5.34 ACRE PARCEL LOCATED AT 33381 HIGHWAY 215, MENIFEE, RIVERSIDE COUNTY, CA	ARCHAEOLOGICAL ASSOCIATES	
RI-05630	NADB-R - 1086993	2004	WHITE, ROBERT S. and LAURA S. WHITE	A CULTURAL RESOURCES ASSESSMENT OF A 7.93-ACRE PARCEL AS SHOWN ON TPM 3200 LOCATED AT 26560 MEADOW ROAD, MENIFEE, RIVERSIDE COUNTY	ARCHAEOLOGICAL ASSOCIATES	
RI-06561	NADB-R - 1087928; Submitter - CONTRACT #1733	2005	TANG, BAI, MICHAEL HOGAN, and JOSH SMALLWOOD	HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT, SIGNAL LIGHT AND ROAD IMPROVEMENTS AT THE INTERSECTION OF SCOTT AND ANTELOPE ROADS, CITY OF MURRIETA, RIVERSIDE COUTNTY, CA	CRM TECH	
RI-06642	NADB-R - 1088009; Submitter - JOB #CA-8596D	2006	Carla Allred	Letter Report: Proposed Cellular Tower Project(s) in Riverside County, California, Site Number(s)/Name(s): CA-8596D/ Lynx, TCNS#12278	EarthTouch, Inc.	
RI-07286		2007	Bai Tom Tang and Michael Hogan	Historical/Archaeological Resources Survey Report Assessor's Parcel No. 360-640-004	CRM TECH	33-015987
RI-07510	Submitter - Job No. 05-07-06-1288	2007	McKenna, Jeanette A.	A Phase I Cultural Resources Investigation of the Proposed Wal-Mart Site in the Community of Menifee, Riverside County, California	McKenna et. al.	33-000635
RI-07512		2007	Keller, Jean A.	A Phase I Cultural Resources Assessment of Plot Plan 22279 +_ 50.95 Acres of Land Near Menifee, Riverside County, California, USGS Romoland, California Quadrangle, 7.5' Series	Cultural Resources Consultant, Encinitas, CA	
RI-07626		2008	Clowery-Moreno, Sara and Brian F. Smith	A Phase I Archaeological Assessment for the Shops at Scott Project, Riverside County, California, APNs 384-180-001, 384-180-006, and 384-180-010	Brian F. Smith and Associates	
RI-07631		2004	Meier, K. Harley and Brian F. Smith	A Cultural Resources Survey of the Heritage Marketplace Project	Brian F. Smith and Associates	

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-07820	Other - 33-16712	2007	Keller, Jean A.	A Phase II Historical Resources Investigation of Site 33-16712 Located Within the Boundaries of the Junction at Menifee Valley, Plot Plan 22279, Menifee Valley, Riverside County, California	N/A	33-016712
RI-07852		2007	Smith Francesca G. and Caprice D. (Kip) Harper	Built-Environment Historic Resources Technical Memorandum for Bundy Canyon-Scott Road Improvement Project	PARSONS	33-007706, 33-016712, 33-017106, 33-017107, 33-017108, 33-017109, 33-017182
RI-07907	Other - 25300002	2004	Dice, Michael and Marnie Vianna	An Archaeological and Paleontological Resource Evaluation of The Menifee Town Center Project near Scott and Haleblian Roads, County of Riverside, California	Michael Brandman Associates	33-012888, 33-012889
RI-07926	Submitter - CRM TECH Contract No. 2272	2008	Bodmer, Clarence, Daniel Ballester, and Laura H. Shaker	Phase I Archaeological Assessment: Assessor's Parcel No. 384-180-027, Plot Plan No. 23363, near the City of Murrieta, Riverside County, California	CRM TECH	
RI-08195		2009	Jean A. Keller	Phase I Cultural Resources Assessment of Tentative Parcel Map 34901. 5.04 Acres in the City of Menifee, Riverside County, California	Cultural Resouces Consultant, Encinitas, CA	33-017575
RI-08364		2010	Michelle Campbell, Rebecca McCorkle Apple, Christopher L. Shaver, and Cheryl Bowden-Renna	Archaeological Survey Report for the Interstate 215/Scott Road Interchange Improvement Project near Murrieta, Riverside County, California.	Dokken Engineering and EDAW, Inc.	33-007717
RI-08509	Other - IO# 313107, SAP# TD458829; Other - SCE Purchase Order Number: 4500179336	2010	Linda Honey	Archaeological Survey Report for Southern California Edison's Pole Replacement Project: Menifee, Riverside County, California	Chambers Group, Inc.	
RI-08785		2012	James J. Schmidt	Letter Report: 77-TD569291; WO 6088-4800, 0-4826, 0-4804, and E-4830: Equinox 12 kV, Roadrunner 12 kV, Menifee 12 kV and Flats 12 kV Deteriorate Pole Replacement Projects	Compass Rose Archaeological, Inc.	33-000392, 33-001070, 33-002075, 33-002076, 33-008876, 33-008877, 33-008878, 33-013245, 33-013246, 33-013247, 33-013248, 33-013871, 33-014370, 33-014990, 33-014991, 33-015442, 33-015444, 33-015449, 33-015662, 33-021009
RI-09132		2013	Leslie Irish and Barbara Loren-Webb	Phase 1 Cultural Resources Assessment Update: Golden Meadows, City of Menifee, CA and Phase II Testing	L&L Environmental	33-023814

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-09211		2013	Heather R. Puckett	Cultural Resources Summary for the Proposed Verizon Wireless, Inc., Property at the Bellany Site, 33177 Bailey Park Boulevasrd, Menifee, Riverside County	Tetra Tech	
RI-09353		2003	Leslie Nay Irish, Kristie R. Blevins, Anna M. Hoover, and Hugh M. Wagner	A Phase I Archaeological and Paleontological Survey Report for Menifee Assemblages, TT#31194, APNS 360-300-002 to -006, -009, and 360-350-001 Menifee County of Riverside, California. Final WHC-03-R197	L & L Environmental	
RI-09447		2015	Kassie Sugimoto and Andrew Garrison	Phase 1 Cultural Resources/Archaeological Study All Star Super Storage City of Menifee Project 2015-156 Assessor Parcel Number: 360-350-029	Scientific Resource Surveys, Inc.	
RI-09468		2016	Bai "Tom" Tang, Ben Kerridge, and Nina Gallardo	Historical/Archaeological Resources Survey Report: Rancho Bonito Project, City of Menifee, Riverside County, California	CRM TECH	
RI-09814		2015	Brian F. Smith	Results of Archaeological Monitoring at the Commerce Pointe Project (Project No. GP12-004), City of Menifee, California (Negative Archaeological Monitoring Report)	Brian F. Smith & Associates	
RI-09872	CRM TECH Contract No. 3028A	2016	Bai "Tom" Tang, Michael Hogan, Ben Kerridge, Nina Gallardo, and Salvadore Boites	Historical/ Archaeological Resources Survey Report Millcreek Promenade Project City of Menifee Riverside County, California	CRM TECH	
RI-10158		2017	Atkins	Murrieta Hills Specific Plan Amendment Phase II Test and Evalution	ATKINS	33-000645, 33-003335, 33-003336, 33-003339, 33-011236, 33-024644, 33-024650, 33-024730, 33-024731, 33-024732, 33-024733, 33-024865
RI-10377	Other - Project No. GP16-026P	2018	Brian F. Smith	Results of Archaeological Monitoring at the Commerce Pointe II Project (Project No. GP16-026P), City of Menifee, California (Negative Archaeological Monitoring Report)	Brian F. Smith and Associates, Inc.	
RI-10600		2006	Sean M. Thal	Historic Consultation for Nextel of California (Nextel) Wireless Telecommunications Service (WTS) Facility Project Lynx / CA-8596D, 33300 Antelope Road, Murrieta, Riverside County, California	Earth Touch, Inc	
RI-10757		2019	Kholood Abdo Hintzman	Cultural Resource Constraints Analysis for Assessor's Parcel Number 388-010-040, City of Murrieta. Riverside County, California	Applied EarthWorks	33-007717

APPENDIX E

GEOTECHNICAL INVESTIGATION REPORT

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GEOTECHNICAL INVESTIGATION

Proposed Caliber Collision Development
North of 33235 Zeiders Road
Menifee, California 92584

Prepared for

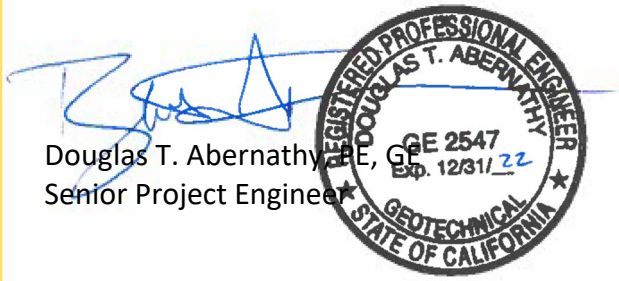
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PSI Project No. 0066-2170



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1 PROJECT INFORMATION

1.1 PROJECT AUTHORIZATION

Professional Service Industries, Inc. (PSI) has completed a Geotechnical Investigation for the proposed Caliber Collision Development in Menifee, California as referenced above. Our work was performed in general accordance with our proposal (0066-352332) dated August 30, 2021 and authorized by Jessi Fazio on August 30, 2021.

1.2 PROJECT DESCRIPTION AND SCOPE OF WORK

Currently the site consists of an approximately 2.37-acre parcel zoned for light industrial development. The site is located directly north of 33235 Zeiders Road in Menifee, California. The site is bordered by Zeiders Road to the east and by light industrial developments to the north, west, and south.

Based on the project description provided, the proposed construction will consist of a 1-story (17,000 to 18600 square foot) structure. The proposed building's structural system will consist of a steel framed roof, load bearing masonry wall building structure with a brick veneer. PSI understands that column loadings are on the order of 80 to 140 kips, and column foundations will be subjected to uplift forces. Uplift loads were not available at the time this proposal was prepared. Typical column spacing is anticipated to vary between 20 and 40 feet on center. Maximum continuous footing gravity loads are anticipated to be in the range of 2.5 to 3.5 kips per linear foot. Floor slab loading is to be designed to provide a uniform live load of 125 pounds per square foot (psf) and withstand a maximum concentrated load of 8 kips. Slab subgrade is to provide a reaction modulus of 150 psi in minimum with a 4-inch-thick granular sub-base. Interior concrete pit retaining walls with an estimated maximum retaining height of 3 feet are also anticipated.

The maximum allowable differential movements for soils supporting masonry walls shall be L/900. The maximum allowable differential movements for soils supporting interior slabs or interior isolated footings shall be L/500 (where L=40ft). The maximum allowable total settlement shall be 1 inch. In the case of expansive clays, the maximum potential heave shall be 1 inch.

Should any of the above information be inconsistent with your objectives, it is requested that you contact PSI immediately to allow us to make any necessary modifications to this proposal.

2 SITE AND SUBSURFACE CONDITIONS

2.1 TOPOGRAPHY

Based on a topographic map for the Murrieta Quadrangle, the site slopes to the west with elevations ranging between approximately EL 1530 and EL 1540 feet above mean sea level. Drainage flows to the west. We anticipate up to 10 feet of fill will be required to flatten the site with a retaining wall or slope descending toward the west.

2.2 GEOLOGY

Based on geologic mapping of the area by Dibblee and Minch (2008), the geology consists of alluvial deposits (Qa); typically consisting of sand and gravel of valley areas, with possible clay soils at the surface. A USDA soils survey of the site reports Las Posas loam (LaD2) on the east end of the site generally consist of clay loam over bedrock at approximately 4½ feet below the ground surface (bgs) and Wyman loam (WyC2) on the west end of the site (clay loam). The Wyman loam is reported to have a high corrosion potential for steel construction.

2.3 SUBSURFACE CONDITIONS

As indicated in the boring logs provided in Appendix A (with locations shown on Figure 2), the subsurface soils encountered generally consist of very dense sand with silt to the maximum depth explored, approximately 21½ feet bgs. An approximate 4½-foot layer of hard silty lean clay was encountered at the ground surface of boring location B5. Very dense silty sand and sand with silt was observed below this clay. Decomposed granite appeared to be encountered in many of the samples. Medium dense to dense sands; and stiff sandy silt were encountered at B-6 and B-7, respectively, to approximately 6½ feet bgs where these borings were terminated. The soil borings were backfilled with soil cuttings upon completion. Laboratory test results are also included in Appendix A.

The stratification presented on the boring logs is based on a visual examination of the recovered soil samples and the interpretation of field logs by a geotechnical professional. Included on the boring logs are the standard penetration resistances (SPT N-values and California Modified sampler blows) recorded in the individual borings at standard testing intervals to the boring termination depths.

The above subsurface description is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs, included in Appendix A, should be reviewed for specific information at individual boring locations. These records include soil descriptions, stratification, penetration resistance, locations of the samples and laboratory test data. The stratification shown on the boring logs represents the conditions only at the actual boring locations at the time of our exploration. Variations may occur and should be expected between boring locations. The stratification that represents the approximate boundary between subsurface materials and the actual transition may be gradual.

2.4 GROUNDWATER

Groundwater was encountered during our recent investigation at the site at a depth of approximately 19 to 19½ feet bgs in borings B3 and B4, respectively, on the southside of the site. Based on the California Department of Water Resource database, groundwater was measured 0.4 miles southeast of the site at a depth of approximately 21 feet below ground surface (bgs) in 1993 (Well #06S03W23E001S); however, this well was only measured one time. A 2007 report by Wayne Perry, Inc. for a Shell station located approximately 3 miles north of the proposed site reported finding groundwater at a depth of approximately 90 feet bgs.

We do not believe that groundwater will impact the proposed construction. It is possible, however, that transient, saturated ground conditions at shallower depths could develop at a later time due to periods of heavy precipitation, landscape watering, leaking water lines, or other unforeseen causes. Variations in groundwater levels should be expected seasonally, annually, and from location to location.

2.5 SEISMIC CONSIDERATIONS

2.5.1 Regional Seismicity

The project site is located in Southern California, which has undergone a complex multiphase structural history and remains an active tectonic region with documented historic earthquakes. Generally, the seismicity within California can be attributed to faulting due to regional tectonic movement. This includes the San Andreas Fault and other sub-parallel strike-slip faults, as well as normal and thrust faulting within the State. The area of the subject site is considered seismically active. Seismic hazards within the site can be attributed to potential ground shaking resulting from earthquake events along nearby or more distant faulting.

2.5.2 Faulting

According to the Alquist-Priolo Special Studies Zones Act of 1972 (revised 1994) faults have been classified as active faults which show apparent movement during the last 11,000 years (i.e., Holocene time). Based on the California Department of Conservation Fault Activity Map, the site is not located within an Alquist-Priolo fault zone area and no faults are known to traverse the site. Based on the 2010 CGS Fault Activity Map, the closest known active faults are the Elsinore fault which is located approximately 5.2 miles southwest of the site, and the San Jacinto Fault which is located approximately 14.7 miles northeast of the site. The potentially active Murrieta Hot Springs fault is located approximately 5.1 miles south of the site.

2.5.3 Liquefaction and Lateral Spreading

Based on the County of Riverside GIS database, the site area is mapped as not being within a liquefaction zone. Based on the soil conditions encountered at the site (generally dense to very dense soils), we do not believe that liquefaction and lateral spreading are design concerns at this site. The Menifee General Plan (3/12/14) also shows that this site is not within a liquefaction zone.

2.5.4 Tsunamis and Seiches

Based on the elevation of the site and distance to the ocean, the site is not located within a tsunami prone area. The site is not located near any large bodies of water; therefore, we do not consider seiches to be a design concern for the site.

2.5.5 Seismic Design Parameters

We have employed the 2019 California Building Code (CBC), the locally adopted version of the International Building Code, 2018 edition. As part of this code, the design of structures must consider dynamic forces resulting from seismic events. These forces are dependent upon the magnitude of the earthquake event as well as the properties of the soils that underlie the site.

As part of the procedure to evaluate seismic forces, the code requires the evaluation of the Seismic Site Class, which categorizes the site based upon the characteristics of the subsurface profile within the upper 100 feet of the ground surface. Our boring extended to a depth of 21½ feet bgs, but to define the Site Class for this project, we have interpreted the results of soil test borings drilled within the project site and estimated appropriate soil properties below the base of the borings to a depth of 100 feet as permitted by the code. The estimated soil properties were based upon the soils encountered at the site, data available in published geologic reports, and our experience with subsurface conditions in the general site area.

Based upon our evaluation, the subsurface conditions at the site are consistent with the characteristics of a **Site Class "C"** as defined in Chapter 20.3-1 of the ASCE 7-16. The associated probabilistic ground acceleration values and site coefficients for the general site area were obtained from the USGS geohazards web page (https://seismicmaps.org/) using ASCE 7-16 and are presented in the table below.

Table 1 - Ground Motion Values*

Period (sec)	Mapped MCE Spectral Response Acceleration (g)		Site Coefficients		Adjusted MCE_R Spectral Response Acceleration (g)		Design Spectral Response Acceleration (g)	
0.2	S_s	1.41	F_a	1.2	S_{Ms}	1.692	S_{Ds}	1.128
1.0	S_1	0.523	F_v	1.477	S_{M1}	0.773	S_{D1}	0.515

**2% Probability of Exceedance in 50 years* *Latitude* 33.6386°N
MCE_R = Maximum Considered Earthquake *Longitude* 117.1767°W

The Site Coefficients referring to ASCE 7-16 Section 11.4.8 require the structural engineer to apply appropriate calculations as needed. Design of structures should comply with the requirements of the governing justification's building codes and standard practices of the Structural Engineering Association of California.

3 CONCLUSIONS AND RECOMMENDATIONS

The following geotechnical related recommendations have been developed on the basis of the subsurface conditions encountered and PSI's understanding of the proposed development. The primary geotechnical consideration at this site is the existence of very dense materials encountered and silty clay encountered at the northwest corner of the proposed building. Should changes in the project criteria occur, a review must be made by PSI to determine if modifications to our recommendations will be required.

3.1 SITE PREPARATION

The site development area should be cleared of any site improvements, undocumented fill, cisterns, and other structures in conflict with the proposed construction and should extend at least 5 feet beyond the proposed building pad and 3 feet beyond the proposed pavement areas. We also recommend that the silty clay encountered at boring location B5 be removed and replaced with material having a very low to low expansion potential (silty sand, sandy silt). This silty clay soil should be removed from below proposed building areas to a depth of at least 5 feet below finish grade. In pavement areas, this silty clay should be removed to a depth of at least 2 feet below pavement sections. Following site clearing and removal of any existing unsuitable materials, excavation bottoms in site improvement areas intended for structures and pavements must be approved by the Geotechnical Engineer prior to fill placement. These exposed subgrades should be proof rolled with a heavy rubber-tired piece of construction equipment (15 tons or similar) in the presence of the Geotechnical Engineer's representative. Any soil that ruts or deflects more than 1 inch during proof rolling should be removed as recommended by the Geotechnical Engineer at the time of grading. Excavation bottoms should be firm and unyielding prior to placing fill above. Once approved, the soils exposed at the base of all excavations should be scarified to a depth of at least 12 inches, moisture conditioned and then compacted as described below prior to placing Engineered Fill above.

3.2 GENERAL GRADING

Grading may be proposed at the project site to establish design grades (we assume up to approximately 10 feet). The adequacy of site clearing operations should be verified by the Geotechnical Engineer's representative during construction as described above. Final grading should be designed to provide positive drainage away from all structures. Soil areas within 10 feet of proposed structures should slope at a minimum of 5 percent away from the structure, if possible. Roof leaders and downspouts should discharge onto paved surfaces sloping away from the structure. Such drainage should not be allowed to saturate soils below building foundations.

3.3 EXCAVATION CONSIDERATIONS

Excavations into onsite soils may be accomplished using conventional earth-moving equipment capable of working in very dense, granitic, sandy material. Open excavations exceeding four feet should be performed in accordance with OSHA regulations as stated in 29 CFR Part 1926. The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor should evaluate the soil exposed in the excavations as part of the required safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed limitations specified by local, state, and federal safety regulations. PSI is providing this information solely as a service to our client. PSI does not assume responsibility for construction site safety or the contractor's or other parties' compliance with local, state, and federal safety or other regulations.

Excavations extending below a 1H:1V plane extending down from any adjacent footings should be shored for safety. Existing foundations must not be undermined. All excavations should be inspected by a representative of the geotechnical engineer during construction to allow any modifications to be made due to variation in the soil types. Equipment and/or soil stockpiles must be maintained a distance away from excavations equal to the depth of the excavation. All work should be performed in accordance with Department of Labor Occupational Safety and Health Administration (OSHA) guidelines. Job site safety is the responsibility of the project contractor.

During wet weather, earthen berms or other methods should be used to prevent runoff water from entering the excavations. The bottom of the excavations should be sloped to a collection point. Collected water within the foundation and utility trench excavations should be discharged to a suitable location outside the construction limits.

3.4 UTILITY TRENCH CONSTRUCTION

Utility trenches may be backfilled with suitable onsite native soils or imported soil above the pipe zone. Trench backfill should be moisture conditioned to within 0 to 4 percent above the optimum moisture content, compacted in 6- to 8-inch lifts to a minimum of 90 percent of the maximum dry density as determined by the modified Proctor (ASTM D1557). The top 12-inches of soil subgrade below pavement areas should be compacted to 95 percent relative compaction. If rocks larger than 3 inches in maximum size are encountered, they should be removed from the backfill material prior to placement in the utility trenches. Pipe zone backfill requirements should be in conformance with the requirements of the local agencies having jurisdiction; but should consist of clean granular sand material having a sand equivalent equal to or above 30. Jetting or flooding of utility backfill is not recommended. If smaller compaction equipment such as jumping jacks or plate compactors are used, thinner lifts will be required to achieve compaction. Where utilities cross building perimeters, concrete or concrete slurry should be used for

backfill around the utility to prevent moisture from migrating along the utility trench and going beneath the building.

3.5 ENGINEERED FILL

Engineered Fill may include both onsite and import soil. In building areas, per ASTM D1557, such fill should not contain rock fragments greater than 3 inches in diameter or have greater than 30 percent retained on the ¾-inch Sieve and should not contain more than 3 percent (by weight) of organic matter or other unsuitable material. Onsite or imported Engineered Fill soils should have an expansion index (EI) that does not exceed 20 (very low). Based on our subsurface investigation, existing on-site soils (other than the silty clay) appear to be suitable for use as Engineered Fill. Proposed fill materials should be sampled and approved several days prior to grading to allow for testing in the laboratory per ASTM D1557. Import materials meeting the above requirements should be approved by the Geotechnical Engineer several days prior to importing to the site. Soils that are environmentally impacted should not be used as Engineered Fill onsite.

Engineered Fill should be compacted to at least 90 percent of the maximum dry density as determined by the modified Proctor (ASTM D1557). The moisture content of Engineered Fill should be maintained at approximately 0 to 4 percent of the material's optimum moisture content. If the Engineered Fill is too dry, water should be uniformly applied across the affected fill area. If the Engineered Fill is too wet, it must be dried. Engineered Fill should be thoroughly mixed by disking, or other approved methods, to obtain relatively uniform moisture content throughout the lift prior to compaction.

Engineered Fill should be placed in maximum lifts of 8 inches of loose material. Each lift of Engineered Fill should be tested for compaction and moisture content by a PSI soils technician, working under the direction of our Project Geotechnical Engineer, prior to placement of subsequent lifts. Compaction of the backfill should be verified with a sufficient number of density tests, as determined by the Geotechnical Engineer, to determine if adequate compaction is being achieved by the contractor. The properly compacted Engineered Fill should extend horizontally outward beyond the exterior perimeter of the proposed site improvement a distance equal to the height of fill or 5 feet, whichever is greater. If smaller compaction equipment such as jumping jacks or plate compactors are used, thinner lifts will be required to achieve compaction.

3.6 SHALLOW FOUNDATIONS

We understand the new structure will have a maximum column loads may vary from 80 to 140 kips. Wall loadings varying between 2.5 and 3.5 kip/ft are anticipated. In our opinion, the structural loads of the proposed development can be supported on conventional spread footing foundations constructed in accordance with the following design criteria.

Footings should be established at a minimum depth of 12 inches below the lowest adjacent finished grade. In addition, isolated column and continuous footings should have a minimum width of at least 18 inches. We recommend the use of a smooth-edged excavator to make the footing excavations. A geotechnical engineer should observe the footing excavation bottoms at the time of excavation and prior to placing reinforcing steel and concrete.

Based primarily on settlement considerations, footings established in accordance with these criteria can be designed on the basis of an allowable soil bearing pressure of 3,000 psf. This value applies to the total of dead load plus frequently and/or permanently applied live loads and can be increased by one third for the total of all loads; dead, live, and wind or seismic.

If unsuitable soils are encountered at footing excavation bottoms, the unsuitable material should be over excavated to firm subgrade material and replaced with Engineered Fill or granular structural fill. The total width of the over-excavation area beneath the design footing elevation should increase by 1 foot for each foot of over-excavation depth. The over-excavated areas should be backfilled with Engineered Fill or clean crushed rock and compacted to at least 90% of the maximum dry density and 0 to 4 percent above optimum moisture content as determined by ASTM D1557.

The total settlement of footings designed in accordance with the recommendations presented above is estimated to be about 1 inch. Differential settlements between adjacent foundation units should be less than half the total settlement over a horizontal distance of 40 feet.

Horizontal shear forces can be resisted partially or completely by frictional forces developed between the base of spread footings and the underlying soil. The total shearing resistance between the foundation footprint and the soil can be computed as the normal force, i.e., the sum of all vertical forces (dead load plus real live load), times the coefficient of friction equal to 0.35 (ultimate value). If additional lateral resistance is required, passive earth resistance against embedded footings or walls can be computed using a pressure based on an ultimate equivalent fluid with a unit weight of 400 pcf up to a maximum value of 4,000 psf. This design passive earth pressure assumes that Engineered Fill is used to backfill the footing excavations.

3.7 SLABS ON GRADE

We recommend the slab-on-grade be underlain by at least 4 in. of sand or rounded aggregate base to be used as a capillary break. In our opinion, a coefficient of subgrade reaction k of 150 pci can be assumed for concrete slab sections supported by compacted granular soils having an expansion index less than 20.

In addition, it may be appropriate to install a durable vapor-retarding membrane beneath the slab-on-grade to limit the risk of damp floors in areas that will have moisture-sensitive materials placed directly on the floor. The vapor-retarding membrane should be installed in accordance with the manufacturer's recommendations.

3.8 RETAINING WALLS

3.8.1 General Design Criteria

If retaining walls are proposed, cantilever earth retention structures, which are designed to yield at least 0.001H, where H is equal to the height of the earth retention structure to the base of its footing, may be designed using the active condition. Rigid earth retention structures (including but not limited to rigid walls) should be designed using the at-rest condition.

In addition to the design lateral forces due to retained earth, surcharges due to improvements, such as an adjacent building or traffic loading, should be considered in the design of the earth retention structures. Loads applied within a 1:1 (h:v) projection from the surcharge on the stem and footing of the earth retention structure should be considered in the design.

Final selection of the appropriate design parameters should be made by the designer of the earth retention structures.

3.8.2 Cantilevered Walls

The recommendations presented below are for cantilevered retaining walls. Active earth pressure may be used for retaining wall design, provided the top of the wall is not restrained from minor deflections.

An equivalent fluid pressure approach may be used to compute the horizontal pressure against the wall. Appropriate fluid unit weights are given below for specific slope gradients of the retained material. These do not include other superimposed loading conditions such as traffic, structures, or adverse geologic conditions.

Table 2 – Active Earth Pressure Recommendations

Surface Slope of Retained Materials (h:v)	Ultimate Equivalent Fluid Pressure (pcf) (Native/Select Backfill)*
Level	40
2:1	60

* The design pressures assume the backfill material has very low expansion index less than or equal to 20. Backfill zone includes area between back of the wall to a plane (1:1 h:v) up from bottom of the wall foundation (on the backside of the wall) to the (sloped) ground surface.

3.8.3 Restrained Retaining Walls

Retaining walls that will be restrained at the top that support level backfill or that have reentrant or male corners, should be designed for an equivalent at-rest fluid pressure of 60 and 80 pcf for level and sloping backfill conditions, respectively. If any vertical surcharge loads will be placed within 1:1 (horizontal:vertical) from the base of wall, PSI should be contacted to estimate additional lateral earth pressures that should be added to the at-rest earth pressures.

3.8.4 Retaining Wall Backfill and Drainage

Retaining walls should be provided with an adequate pipe and gravel back drain system to help prevent buildup of hydrostatic pressures. Weep-holes may be positioned at the base of the drainage system and above the exterior grades a minimum distance of 10 feet apart. Backdrains should consist of a minimum 4-inch diameter perforated collector pipe (Schedule 40, SDR 35, or approved equivalent) embedded in a minimum of one (1) cubic foot per linear foot of ¾- to 1-inch clean crushed rock or an approved equivalent, wrapped in filter fabric (Mirafi 140N or an approved equivalent). The drain system should be connected to a suitable outlet or weep-holes.

Retaining wall backfill should be placed in lifts no greater than eight (8) inches in thickness and compacted to a minimum of 90 percent relative compaction in accordance with ASTM Test Method D 1557 as Engineered Fill. The wall drainage should include a minimum two (2) feet wide section of ¾- to 1-inch clean crushed rock (or an approved equivalent). The rock should be placed immediately adjacent to the back of the wall and extend up from a back drain to within approximately 24 inches of the finish grade. The rock should be separated from the earth with filter fabric as described above. The upper 24 inches should consist of compacted on-site fine-grained material.

As an alternative to the drain rock and fabric, Miradrain 2000, or approved equal, may be used behind the retaining wall. The Miradrain 2000 should extend from the base of the wall to within 2 feet of the ground surface. The subdrain should be placed at the base of the wall in direct contact with the Miradrain 2000.

Waterproofing the back of the retaining walls should be considered to mitigate water staining, infiltration, and moisture migration through the wall. If a waterproofing system is used, it should be designed by a qualified waterproofing consultant.

3.8.5 Retaining Wall Foundations

Retaining walls may be supported by conventional shallow continuous (strip) footings bearing on firm native soil or Engineered Fill as described above for shallow foundations. Construction joints should be installed at all changes in bearing material (native/fill) and above or below foundation steps.

3.9 PAVEMENT DESIGN

In designing the proposed pavement areas, the following conditions were considered:

1. Subgrade support characteristics are typically represented by an R-Value for the design of flexible pavements in this region.
2. Vehicular traffic volumes, in terms of the number and frequency of vehicles and their range of axle loads should be considered.
3. Likely changes in vehicular use over the life of the pavement should also be considered. We have assumed that the pavement areas will not experience additional traffic.
4. Pavement life cycle was considered to be 20 years using Caltrans and Portland Cement Association Design Methods.

All site preparations and grading should be performed as discussed above in Section 3.1 and 0.

Since an evaluation of the characteristics of the actual soils present at pavement subgrade can only be provided at the completion of grading, the following pavement sections should be used for planning purposes only. Final pavement designs should be evaluated after R-value tests have been performed on the actual in-place subgrade materials exposed for use during construction.

It should be noted that additional earthwork and/or ground improvement efforts may be required during grading on the actual subgrade material encountered, in order to achieve the aforementioned design parameters and assumptions. These design thicknesses assume that a properly prepared subgrade has been achieved.

Based on the results of our field exploration and laboratory testing, we recommend the pavement designs presented in the table below. The pavement design criteria are based on the soil conditions present at the site, an R-value of 50 and the assumed Traffic Index indicated below based on the estimated traffic for the site. Final pavement designs should be based on R-value testing of the as-graded subgrade and actual traffic volumes.

Table 3 - Pavement Section Recommendations

Location	Traffic Index (TI)	Asphalt Thickness (inches)	+	Aggregate Base Thickness (inches)	Portland Cement Concrete Thickness (inches)	+	Aggregate Base Thickness (inches)
Standard Drive Aisles	5	3	+	4	5	+	4
Truck Drive Aisles	7	3	+	6½	5½	+	4

We recommend rigid pavements (Portland Cement Concrete, PCC) be constructed at all areas requiring heavy braking and turning such as intersections, entrances, docking bays, trash truck loading areas, etc. PCC pavement sections should incorporate appropriate steel reinforcement and crack control joints if needed and as designed by the project structural engineer. We recommend that sections be as nearly squared as possible and no more than 15-feet on a side. Contraction joints may be constructed by saw cutting to a depth of 30 percent of the slab thickness. Expansion/cold/construction joints may be used in lieu of contraction joints. Such joints should be properly sealed. A minimum 4,000 psi concrete mix is recommended having a water/cement ration of 0.5 or lower.

Subgrade soils should be proof-rolled and scarified to a depth of 12 inches, brought to moisture contents of 0 to 4 percent of optimum, then compacted to at least 95 percent of the laboratory standard. The laboratory standard should be ASTM D1557.

Aggregate base below pavement sections should be compacted to at least 95 percent of ASTM D1557 with moisture contents within ±2 percent of optimum. Aggregate base materials should be Caltrans Class II Base.

All materials should conform to and be placed in accordance with the latest revision of the Standard Specifications for Public Works Construction (Greenbook), the American Concrete Institute (ACI), the Portland Cement Association (PCA) and the requirements of the City Public Works.

3.10 SOIL EXPANSION

The expansion potential of the existing near-surface clays soil encountered in the top 2 to 4½ feet at boring location B5 is considered to be **Medium** based on the Atterberg Limits testing performed. This type of clays should be removed and replaced by engineered fill. Following site grading, testing of site soils should be performed by the project geotechnical consultant to confirm the basis of these recommendations. Depending upon the distribution of soil types and expansion/swell characteristics, differing design recommendations may be developed to better suit the types of conditions present at the site.

3.11 CORROSION

Laboratory testing of a selected soil sample indicates that the on-site clays encountered at B-5 have **Severe** levels of soluble sulfates such that they are characterized as having corrosion potential with respect to concrete. Concrete in contact with site clays may use Type V concrete having a minimum 28-day compressive strength of at least 4,500 psi. Soluble chloride levels suggest that the site soils also have a **negligible** potential for corrosion of steel (iron/ferrous materials) according to ACI 318 guidelines. Final

concrete mix design should be evaluated after sulfate and chloride tests have been performed on the actual in-place subgrade material used for finished pad grades.

It is possible that similar clays may be encountered during construction in localized areas away from the boring locations. In order to reduce potential design concerns from sulfate and expansion issues, PSI recommends that on-site clays be removed and replaced by engineered fill as suggested in Section 3.1 above.

3.12 CONSTRUCTION CONSIDERATIONS

During wet weather periods, increases in the moisture content of the soil can cause significant reduction in the soil strength and support capabilities. Furthermore, perched groundwater conditions can develop during periods of heavy rainfall as a result of less permeable layers impeding infiltration. In these instances, overlying subgrade soils may become unstable and require remedial measures. It will, therefore, be advantageous to perform earthwork and foundation construction activities during dry weather.

Groundwater was encountered during our explorations onsite. It should be noted that variations in the groundwater table may result from changes in precipitation, irrigation, and other factors that may not have been present at the time of our exploration. This sometimes occurs where relatively impermeable and/or cemented materials are overlain by fill soils. We recommend that a representative of PSI be present during grading operations to evaluate areas of seepage if encountered. Drainage devices for reduction of water accumulation can be recommended if these conditions occur.

Water should not be allowed to collect in foundation excavations or on prepared subgrades of the construction area either during or after construction. Undercut or excavated areas should be sloped toward one corner to facilitate removal of any collected rainwater, groundwater, or surface runoff. Positive site drainage should be provided to reduce infiltration of surface water around the perimeter of the building and beneath the floor slabs. The grades should be sloped away from the structure and surface drainage should be collected and discharged such that water is not permitted to infiltrate the subgrade areas below the structure.

3.13 PLAN REVIEW

Once final design plans and specifications are available, a review of grading and structural foundation plans by PSI is recommended prior to submittal as a means to check that our geotechnical recommendations have been properly interpreted and implemented. Reviewing agencies typically require our review and approval. Our review and approval are required prior to our signing and stamping of any plans. Associated drawing edits may be required. Review of plans, responses to review comments by others, and work beyond this report will require a change order.

3.14 OBSERVATION AND TESTING DURING CONSTRUCTION

It is recommended that PSI be retained to provide observation and testing services during site preparation, site grading, utility trench construction, foundation excavation, slab subgrade preparation, and construction of pavement areas. This is to observe compliance with the design concepts, specifications and recommendations, and to allow for possible changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.

4 GEOTECHNICAL RISK AND REPORT LIMITATIONS

The concept of risk is an important aspect of the geotechnical evaluation. The primary reason for this is that the analytical methods used to develop geotechnical recommendations do not comprise an exact science. The analytical tools which geotechnical engineers use are generally empirical and must be used in conjunction with engineering judgment and experience. Therefore, the solutions and recommendations presented in the geotechnical evaluation should not be considered risk-free and, more importantly, are not a guarantee that the interaction between the soils and the proposed structure will perform as planned. The engineering recommendations presented in the preceding sections constitute PSI's professional estimate of those measures that are necessary for the proposed structure to perform according to the proposed design based on the information generated and referenced during this evaluation, and PSI's experience in working with these conditions.

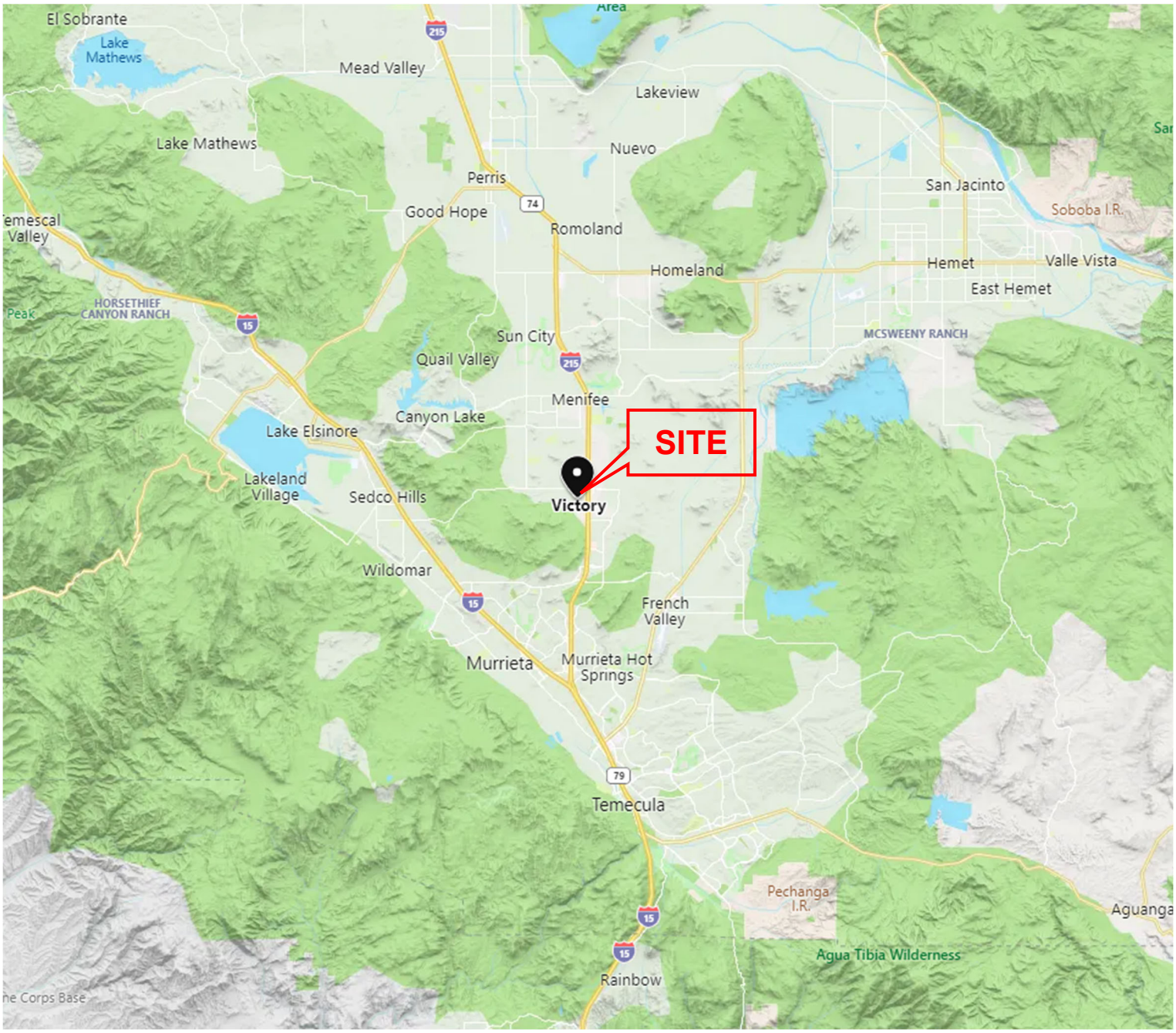
The recommendations submitted are based on the available subsurface information obtained by PSI, and information provided by **Victory Real Estate Development**. If there are any revisions to the plans for this project or if deviations from the subsurface conditions noted in this report are encountered during construction, PSI should be notified immediately to determine if changes in the foundation and/or other recommendations are required. If PSI is not retained to perform these functions, PSI cannot be responsible for the impact of those conditions on the performance of the project.

This report has been prepared for the exclusive use of **Victory Real Estate Development** and **Caliber Holdings, LLC** for the specific application as described herein.

5 REFERENCES

1. American Concrete Institute, "Building Code Requirements for Structural Concrete", ACI 318-11, 2017.
2. California Geologic Survey, "Fault Activity Map of California", https://maps.conservation.ca.gov/cgs/fam/App/
3. Caltrans, "Highway Design Manual", July 2020.
4. Dibblee, T.W. and Minch, J.A., "Geologic Map of the Murrieta 15 Minute Quadrangle, Riverside County, California", Dibblee Geological Foundation, DF-417, 2008.
5. Menifee General Plan, 3/12/14.
6. Portland Cement Association, "Thickness Design of Concrete Highway and Street Pavements".
7. Riverside County Mapping Portal, ArcGIS Hub.
8. Terzaghi, K. and Peck, R. B., "Soil Mechanics in Engineering Practice", 2nd edition.
9. USDA NRCS, "Custom Soil Resource Report for Western Riverside Area, California", 2021.
10. USGS Website https://seismicmaps.org/ , US Seismic Design Maps.

FIGURES



Reference – Bing Maps

intertek psi	DATE: 10/1/2021	**PROPOSED CALIBER COLLISION DEVELOPMENT** North of 33235 Zeiders Road Menifee, California 92584	PSI PROJECT NUMBER: 0066-2170	N
INTERTEK - PSI, INC. 11980 TELEGRAPH RD, UNIT 104 SANTA FE SPRINGS, CALIFORNIA	PREPARED BY: DTA	**SITE VICINITY MAP**	**FIGURE 1**	



Legend

B8 **Approximate Boring Location**

Reference Proposed Soil Boring Plan (Victory Developments, revised 07/09/21)

intertek psi	DATE: 10/1/2021	**PROPOSED CALIBER COLLISION DEVELOPMENT** North of 33235 Zeiders Road Menifee, California 92584	PSI PROJECT NUMBER: 0066-2170	N
INTERTEK - PSI, INC. 11980 TELEGRAPH RD, UNIT 104 SANTA FE SPRINGS, CALIFORNIA	PREPARED BY: DTA	**BORING LOCATION PLAN**	**FIGURE 2**	

APPENDIX A

FIELD EXPLORATIONS AND LABORATORY TESTING PROGRAM

FIELD EXPLORATION PROGRAM

On September 20, 2021, the subsurface conditions were explored by drilling eight (8) soil borings (B1-B8) in the proposed building pad area and parking lot areas to maximum depths of approximately 21½ feet below ground surface (bgs). The boring locations are shown on Figure 2. Drilling was performed by 2R Drilling of Chino, California using a hollow-stem auger method of drilling. The soil types encountered at the specific boring locations are presented on the attached Boring Logs.

During the boring sampling procedure, Standard Penetration Tests (SPT) were performed in accordance with ASTM D1586 and relatively undisturbed samples were obtained in general accordance with ASTM D3550. The SPT for soil borings is performed by driving a split-spoon sampler, with an outside diameter of 2 inches, into the undisturbed formation located at the bottom of the advanced borehole with repeated blows of a 140-pound hammer falling a vertical distance of 30 inches. The number of blows required to drive the sampler the last 12 inches of an 18-inch penetration depth is a measure of the soil consistency (blow count). For ASTM D3550 (California Modified Sampler) the split barrel sampler possesses a 3-inch O.D. and is driven in the same manner as the SPT. The field blow counts obtained from the California Modified sampler should be adjusted to obtain a rough correlation to SPT blow counts (SPT-N value). SPT blowcounts in gravel tend to over-estimate density. Samples were identified in the field, placed in sealed containers and transported to the laboratory for further classification and testing.

Field Classification

Soil samples were initially classified visually in the field. Consistency, color, relative moisture, degree of plasticity, and other distinguishing characteristics of the soil samples were noted. The terminology used in the soil classifications and other modifiers are depicted in the General Notes and Soil Classification Chart.

GENERAL NOTES

SAMPLE IDENTIFICATION

The Unified Soil Classification System (USCS), AASHTO 1988 and ASTM designations D2487 and D-2488 are used to identify the encountered materials unless otherwise noted. Coarse-grained soils are defined as having more than 50% of their dry weight retained on a #200 sieve (0.075mm); they are described as: boulders, cobbles, gravel or sand. Fine-grained soils have less than 50% of their dry weight retained on a #200 sieve; they are defined as silts or clay depending on their Atterberg Limit attributes. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size.

DRILLING AND SAMPLING SYMBOLS

SFA: Solid Flight Auger - typically 4" diameter flights, except where noted.
HSA: Hollow Stem Auger - typically 3¼" or 4¼ I.D. openings, except where noted.
M.R.: Mud Rotary - Uses a rotary head with Bentonite or Polymer Slurry
R.C.: Diamond Bit Core Sampler
H.A.: Hand Auger
P.A.: Power Auger - Handheld motorized auger

SPT: Standard Penetration Test sampler - 1 3/8" I.D., 2" O.D.
CMS: California Modified Sampler - 2 1/2" I.D., 3" O.D.
ST: Shelby Tube - 3" O.D.
RC: Rock Core
BS: Bulk Sample

SOIL PROPERTY SYMBOLS

N: Standard "N" penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2-inch O.D. Split-Spoon.
N_{60}: A "N" penetration value corrected to an equivalent 60% hammer energy transfer efficiency (ETR)
Q_u: Unconfined compressive strength, TSF
Q_p: Pocket penetrometer value, unconfined compressive strength, TSF
w%: Moisture/water content, %
LL: Liquid Limit, %
PL: Plastic Limit, %
PI: Plasticity Index = (LL-PL),%
DD: Dry unit weight, pcf
▼,▽,⧩ Apparent groundwater level at time noted

RELATIVE DENSITY OF COARSE-GRAINED SOILS

Relative Density	N - Blows/foot
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	50+

ANGULARITY OF COARSE-GRAINED PARTICLES

Description	Criteria
Angular:	Particles have sharp edges and relatively plane sides with unpolished surfaces
Subangular:	Particles are similar to angular description, but have rounded edges
Subrounded:	Particles have nearly plane sides, but have well-rounded corners and edges
Rounded:	Particles have smoothly curved sides and no edges

GRAIN-SIZE TERMINOLOGY

Component	Size Range
Boulders:	Over 300 mm (>12 in.)
Cobbles:	75 mm to 300 mm (3 in. to 12 in.)
Coarse-Grained Gravel:	19 mm to 75 mm (¾ in. to 3 in.)
Fine-Grained Gravel:	4.75 mm to 19 mm (No.4 to ¾ in.)
Coarse-Grained Sand:	2 mm to 4.75 mm (No.10 to No.4)
Medium-Grained Sand:	0.42 mm to 2 mm (No.40 to No.10)
Fine-Grained Sand:	0.075 mm to 0.42 mm (No. 200 to No.40)
Silt:	0.005 mm to 0.075 mm
Clay:	<0.005 mm

PARTICLE SHAPE

Description	Criteria
Flat:	Particles with width/thickness ratio > 3
Elongated:	Particles with length/width ratio > 3
Flat & Elongated:	Particles meet criteria for both flat and elongated

RELATIVE PROPORTIONS OF FINES

Descriptive Term	% Dry Weight
Trace:	< 5%
With:	5% to 12%
Modifier:	>12%

GENERAL NOTES

(Continued)

CONSISTENCY OF FINE-GRAINED SOILS

Q_U - TSF	N - Blows/foot	Consistency
0 - 0.25	0 - 2	Very Soft
0.25 - 0.50	2 - 4	Soft
0.50 - 1.00	4 - 8	Firm (Medium Stiff)
1.00 - 2.00	8 - 15	Stiff
2.00 - 4.00	15 - 30	Very Stiff
4.00 - 8.00	30 - 50	Hard

MOISTURE CONDITION DESCRIPTION

Description	Criteria
Dry:	Absence of moisture, dusty, dry to the touch
Moist:	Damp but no visible water
Wet:	Visible free water, usually soil is below water table

RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term	% Dry Weight
Trace:	< 15%
With:	15% to 30%
Modifier:	>30%

STRUCTURE DESCRIPTION

Description	Criteria
Stratified:	Alternating layers of varying material or color with layers at least ¼-inch (6 mm) thick
Laminated:	Alternating layers of varying material or color with layers less than ¼-inch (6 mm) thick
Fissured:	Breaks along definite planes of fracture with little resistance to fracturing
Slickensided:	Fracture planes appear polished or glossy, sometimes striated

Description	Criteria
Blocky:	Cohesive soil that can be broken down into small angular lumps which resist further breakdown
Lensed:	Inclusion of small pockets of different soils
Layer:	Inclusion greater than 3 inches thick (75 mm)
Seam:	Inclusion 1/8-inch to 3 inches (3 to 75 mm) thick extending through the sample
Parting:	Inclusion less than 1/8-inch (3 mm) thick

SCALE OF RELATIVE ROCK HARDNESS

Q_U - TSF	Consistency
2.5 - 10	Extremely Soft
10 - 50	Very Soft
50 - 250	Soft
250 - 525	Medium Hard
525 - 1,050	Moderately Hard
1,050 - 2,600	Hard
>2,600	Very Hard

ROCK BEDDING THICKNESSES

Description	Criteria
Very Thick Bedded	Greater than 3-foot (>1.0 m)
Thick Bedded	1-foot to 3-foot (0.3 m to 1.0 m)
Medium Bedded	4-inch to 1-foot (0.1 m to 0.3 m)
Thin Bedded	1¼-inch to 4-inch (30 mm to 100 mm)
Very Thin Bedded	½-inch to 1¼-inch (10 mm to 30 mm)
Thickly Laminated	1/8-inch to ½-inch (3 mm to 10 mm)
Thinly Laminated	1/8-inch or less "paper thin" (<3 mm)

ROCK VOIDS

Voids	Void Diameter
Pit	<6 mm (<0.25 in)
Vug	6 mm to 50 mm (0.25 in to 2 in)
Cavity	50 mm to 600 mm (2 in to 24 in)
Cave	>600 mm (>24 in)

GRAIN-SIZED TERMINOLOGY

(Typically Sedimentary Rock)

Component	Size Range
Very Coarse Grained	>4.76 mm
Coarse Grained	2.0 mm - 4.76 mm
Medium Grained	0.42 mm - 2.0 mm
Fine Grained	0.075 mm - 0.42 mm
Very Fine Grained	<0.075 mm

ROCK QUALITY DESCRIPTION

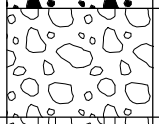
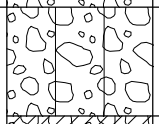
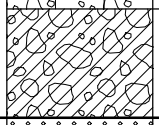
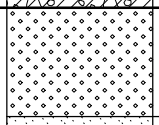
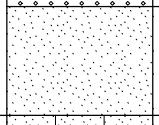
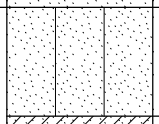
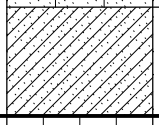
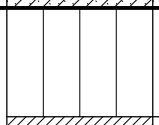
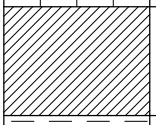
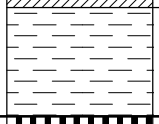
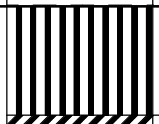
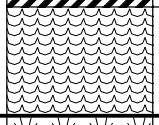
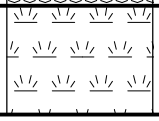
Rock Mass Description	RQD Value
Excellent	90 -100
Good	75 - 90
Fair	50 - 75
Poor	25 -50
Very Poor	Less than 25

DEGREE OF WEATHERING

Slightly Weathered:	Rock generally fresh, joints stained and discoloration extends into rock up to 25 mm (1 in), open joints may contain clay, core rings under hammer impact.
Weathered:	Rock mass is decomposed 50% or less, significant portions of the rock show discoloration and weathering effects, cores cannot be broken by hand or scraped by knife.
Highly Weathered:	Rock mass is more than 50% decomposed, complete discoloration of rock fabric, core may be extremely broken and gives clunk sound when struck by hammer, may be shaved with a knife.

SOIL CLASSIFICATION CHART

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

intertek psi

BORING B1

DATE STARTED:	9/20/21	**DRILL COMPANY:**	2R Drilling
DATE COMPLETED:	9/20/21	**DRILLER:** Nick	**LOGGED BY:** N. Barba
COMPLETION DEPTH	5.3 ft	**DRILL RIG:**	CME-75
BENCHMARK:	N/A	**DRILLING METHOD:**	8" Hollow Stem Auger
ELEVATION:	N/A	**SAMPLING METHOD:**	SS: CMS & SPT
LATITUDE:	33.63874°	**HAMMER TYPE:**	Automatic
LONGITUDE:	-117.17585°	**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	D. Abernathy

REMARKS:

Water: NONE

BORING LOCATION: Proposed Driveway Entrance

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0 25 50) STRENGTH, tsf ▲ Qu ✳ Qp (0 2.0 4.0)	Additional Remarks
	0					**Silty SAND with Gravel**, reddish-brown, very dense, moist.	SM				
						becomes brown. (Bedrock fragments)		30-50(3")	4	× >>◎	Sieve Analysis
	5					**Gravelly SAND**, brown, very dense, moist. (Decomposed Granite)	SP	50(3")	7	× >>◎	Rings Disturbed
						Boring terminated at 5-1/4 feet below ground surface. No groundwater encountered. Borehole backfilled with soil cuttings.					

intertek psi

Professional Service Industries, Inc.
11980 Telegraph Rd, Unit 104
Santa Fe Springs, CA 90670
Telephone: (714) 484-8600

PROJECT NO.: 00662170
PROJECT: Caliber Collision Development
LOCATION: North of 33235 Zeiders Road
Menifee, CA

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B2

DATE STARTED:	9/20/21	**DRILL COMPANY:**	2R Drilling
DATE COMPLETED:	9/20/21	**DRILLER:** Nick	**LOGGED BY:** N. Barba
COMPLETION DEPTH	20.3 ft	**DRILL RIG:**	CME-75
BENCHMARK:	N/A	**DRILLING METHOD:**	8" Hollow Stem Auger
ELEVATION:	N/A	**SAMPLING METHOD:**	SS: CMS & SPT
LATITUDE:	33.63868°	**HAMMER TYPE:**	Automatic
LONGITUDE:	-117.17599°	**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	D. Abernathy

REMARKS:

Water NONE

BORING LOCATION:
Northeast Corner of Proposed Building

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0 / 25 / 50) STRENGTH, tsf ▲ Qu ✳ Qp (0 / 2.0 / 4.0)	Additional Remarks
	0					**Well Graded SAND with Silt**, reddish-brown, little gravel, very dense, dry.	SW-SM	50(4")	2	× >>◎	Sieve Analysis Rings Disturbed
	5					becomes white-reddish, moist.		50(6")	2	× >>◎	
						SAND with Gravel, white-brown, very dense, moist.		30-50(4")	3	× >>◎	Rings Disturbed
	10							30-50(3.5")	3	× >>◎	
						becomes brown.	SP-SW	50(3.5")	3	× >>◎	DD = 114 pcf
	15							50(4.5")	2	× >>◎	
	20					**SAND with Silt**, dark brown, very dense, moist.	SP-SM	50(4")	7	× >>◎	DD = 118 pcf
						Boring terminated at 20-1/3 feet below ground surface. No groundwater encountered. Borehole backfilled with soil cuttings.					

intertek psi

Professional Service Industries, Inc.
11980 Telegraph Rd, Unit 104
Santa Fe Springs, CA 90670
Telephone: (714) 484-8600

PROJECT NO.: 00662170
PROJECT: Caliber Collision Development
LOCATION: North of 33235 Zeiders Road
Menifee, CA

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B3

DATE STARTED:	9/20/21	**DRILL COMPANY:**	2R Drilling
DATE COMPLETED:	9/20/21	**DRILLER:** Nick	**LOGGED BY:** N. Barba
COMPLETION DEPTH	20.9 ft	**DRILL RIG:**	CME-75
BENCHMARK:	N/A	**DRILLING METHOD:**	8" Hollow Stem Auger
ELEVATION:	N/A	**SAMPLING METHOD:**	SS: CMS & SPT
LATITUDE:	33.63842°	**HAMMER TYPE:**	Automatic
LONGITUDE:	-117.17597°	**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	D. Abernathy

REMARKS:

Water: While Drilling 19 feet

BORING LOCATION: Southeast Corner of Proposed Building

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ / STRENGTH, tsf	Additional Remarks
	0					**SAND with Silt**, grayish-brown, vey dense, moist.		50(5")	3	× Moisture ◪ PL ✚ LL (0 / 25 / 50); ▲ Qu ✳ Qp (0 / 2.0 / 4.0)	>>◎ DD = 108 pcf
	5					appearance of gravel.	SP-SM	36-50(5")	4	×	>>◎
						becomes dark gray.		50(6")	5	×	>>◎ DD = 106 pcf
	10					**Silty SAND**, dark gray, very dense, moist.	SM	17-50(6")	6	×	>>◎
						SAND with Silt, dark brown, very dense, moist.		50(6")	7	×	>>◎ DD = 119 pcf
	15					becomes white-brown.	SP-SM	50(6")	7	×	>>◎
	20					becomes dark brown.		32-50(4.5")	9	×	>>◎
						Boring terminated at 20-11/12 feet below ground surface. Groundwater encountered at 19 feet below ground surface. Borehole backfilled with soil cuttings.					

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Professional Service Industries, Inc.
11980 Telegraph Rd, Unit 104
Santa Fe Springs, CA 90670
Telephone: (714) 484-8600

PROJECT NO.: 00662170
PROJECT: Caliber Collision Development
LOCATION: North of 33235 Zeiders Road
Menifee, CA

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B4

DATE STARTED:	9/20/21	**DRILL COMPANY:**	2R Drilling
DATE COMPLETED:	9/20/21	**DRILLER:** Nick	**LOGGED BY:** N. Barba
COMPLETION DEPTH	21.0 ft	**DRILL RIG:**	CME-75
BENCHMARK:	N/A	**DRILLING METHOD:**	8" Hollow Stem Auger
ELEVATION:	N/A	**SAMPLING METHOD:**	SS: CMS & SPT
LATITUDE:	33.63842°	**HAMMER TYPE:**	Automatic
LONGITUDE:	-117.17662°	**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	D. Abernathy

REMARKS:

Water ▽ While Drilling 19.5 feet

BORING LOCATION:
Southwest Corner of Proposed Building

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0, 25, 50) STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					**Silty SAND**, light olive-brown, very dense, moist.	SM	15-33-50 N=83	12		Sieve Analysis
	5					becomes reddish-brown.		14-28-32 N=60	9		DD = 107 pcf
						SAND with Silt, reddish-brown, very dense, moist.	SP-SM	24-50(5.5)	11		DD = 113 pcf
	10					**Silty SAND**, reddish-brown, dense, moist.	SM	14-22-25 N=47	15		
						SAND with Silt, reddish-brown, very dense, occasional gravel, moist.		50(6")	11		DD = 105 pcf
	15					becomes dark grayish-brown. (Granitic structure)	SP-SM	14-40-50(3") N=90	11		
	20					**Silty SAND**, gray, very dense, wet.	SM	16-50(6")	13		
						Boring terminated at 21 feet below ground surface. Groundwater encountered at 19-1/2 feet below ground surface. Borehole backfilled with soil cuttings.					

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Santa Fe Springs, CA 90670
Telephone: (714) 484-8600

PROJECT NO.: 00662170
PROJECT: Caliber Collision Development
LOCATION: North of 33235 Zeiders Road
Menifee, CA

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B5

DATE STARTED:	9/20/21	**DRILL COMPANY:**	2R Drilling
DATE COMPLETED:	9/20/21	**DRILLER:** Nick	**LOGGED BY:** N. Barba
COMPLETION DEPTH	20.8 ft	**DRILL RIG:**	CME-75
BENCHMARK:	N/A	**DRILLING METHOD:**	8" Hollow Stem Auger
ELEVATION:	N/A	**SAMPLING METHOD:**	SS: CMS & SPT
LATITUDE:	33.63865°	**HAMMER TYPE:**	Automatic
LONGITUDE:	-117.17666°	**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	D. Abernathy

REMARKS:

Water: NONE

BORING LOCATION:
Northwest Corner of Proposed Building

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA (N in blows/ft ◎; × Moisture; ◪ PL; ✚ LL; 0–25–50) / STRENGTH, tsf (▲ Qu; ✳ Qp; 0–2.0–4.0)	Additional Remarks
	0					**Silty Lean CLAY**, dark brown, hard, moist.	CL	14-31-35 N=66	11		DD = 125 pcf; Corrosion Series; LL = 39; PL = 21
	5					**Silty SAND**, brown, dense to very dense, moist. (Granitic)	SM	6-14-31 N=45	9		
								40-50(3.5")	7		DD = 131 pcf
	10					**SAND with Silt**, grayish-brown, very dense, moist.		7-44-50(3")	5		
						becomes dark grayish-brown.		50(6")	6		DD = 133 pcf
	15					becomes grayish-brown.	SP-SM	31-50(3")	6		
	20					becomes brown.		20-50(4")	7		
						Boring terminated at 20-5/6 feet below ground surface. No groundwater encountered. Borehole backfilled with soil cuttings.					

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11980 Telegraph Rd, Unit 104
Santa Fe Springs, CA 90670
Telephone: (714) 484-8600

PROJECT NO.: 00662170
PROJECT: Caliber Collision Development
LOCATION: North of 33235 Zeiders Road
Menifee, CA

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B6

DATE STARTED:	9/20/21	**DRILL COMPANY:**	2R Drilling
DATE COMPLETED:	9/20/21	**DRILLER:** Nick	**LOGGED BY:** N. Barba
COMPLETION DEPTH	6.5 ft	**DRILL RIG:**	CME-75
BENCHMARK:	N/A	**DRILLING METHOD:**	8" Hollow Stem Auger
ELEVATION:	N/A	**SAMPLING METHOD:**	SS: CMS & SPT
LATITUDE:	33.6386°	**HAMMER TYPE:**	Automatic
LONGITUDE:	-117.17683°	**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	D. Abernathy

REMARKS:

Water: NONE

BORING LOCATION:
Northwest of Proposed Dumpster Enclosure

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA (N in blows/ft ◎; × Moisture; ◪ PL; ✚ LL; 0 25 50) (STRENGTH, tsf: ▲ Qu; ✳ Qp; 0 2.0 4.0)	Additional Remarks
	0					**Silty SAND**, brown, medium dense, moist.	SM	5-9-13 N=22	11		DD = 113 pcf
	5					**SAND with Silt**, grayish-brown, dense, moist. (Granitic)	SP-SM	10-17-18 N=35	7		
						Boring terminated at 6-1/2 feet below ground surface. No groundwater encountered. Borehole backfilled with soil cuttings.					

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11980 Telegraph Rd, Unit 104
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Telephone: (714) 484-8600

PROJECT NO.: 00662170
PROJECT: Caliber Collision Development
LOCATION: North of 33235 Zeiders Road
Menifee, CA

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B7

DATE STARTED:	9/20/21	**DRILL COMPANY:**	2R Drilling
DATE COMPLETED:	9/20/21	**DRILLER:** Nick	**LOGGED BY:** N. Barba
COMPLETION DEPTH	6.5 ft	**DRILL RIG:**	CME-75
BENCHMARK:	N/A	**DRILLING METHOD:**	8" Hollow Stem Auger
ELEVATION:	N/A	**SAMPLING METHOD:**	SS: CMS & SPT
LATITUDE:	33.63863°	**HAMMER TYPE:**	Automatic
LONGITUDE:	-117.17733°	**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	D. Abernathy

REMARKS:

Water NONE

BORING LOCATION:
End of Proposed Parking Roundabout

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0, 25, 50) STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					**Sandy SILT**, brown, stiff, moist.	ML	8-5-4 N=9	5		DD = 117 pcf
	5							3-5-8 N=13	8		
						Boring terminated at 6-1/2 feet below ground surface. No groundwater encountered. Borehole backfilled with soil cuttings.					

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PROJECT NO.: 00662170
PROJECT: Caliber Collision Development
LOCATION: North of 33235 Zeiders Road
Menifee, CA

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B8

DATE STARTED:	9/20/21	**DRILL COMPANY:**	2R Drilling
DATE COMPLETED:	9/20/21	**DRILLER:** Nick	**LOGGED BY:** N. Barba
COMPLETION DEPTH	5.5 ft	**DRILL RIG:**	CME-75
BENCHMARK:	N/A	**DRILLING METHOD:**	8" Hollow Stem Auger
ELEVATION:	N/A	**SAMPLING METHOD:**	SS: CMS & SPT
LATITUDE:	33.63862°	**HAMMER TYPE:**	Automatic
LONGITUDE:	-117.17754°	**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	D. Abernathy

REMARKS:

Water: NONE

BORING LOCATION: West End of Property

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ / STRENGTH, tsf	Additional Remarks
	0					**SAND with Silt**, grayish-brown, very dense, moist.	SP-SM	8-15-48 N=63	6	× Moisture; ◪ PL; ✚ LL; 0 25 50 / ▲ Qu; ✳ Qp; 0 2.0 4.0	>>◎
	5					**SAND**, brown, very dense, moist.	SP	50(6")	4	×	>>◎ Rings Disturbed
						Boring terminated at 5-1/2 feet below ground surface. No groundwater encountered. Borehole backfilled with soil cuttings.					

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Santa Fe Springs, CA 90670
Telephone: (714) 484-8600

PROJECT NO.: 00662170
PROJECT: Caliber Collision Development
LOCATION: North of 33235 Zeiders Road
Menifee, CA

The stratification lines represent approximate boundaries. The transition may be gradual.

LABORATORY TESTING PROGRAM AND PROCEDURES

The soil samples obtained during the field exploration were transported to soil laboratories and selected soil samples were tested to determine the material properties for evaluation. Laboratory testing on selected samples included moisture content (ASTM D2216), density (ASTM D2937), grain-size distribution (ASTM D1140), Atterberg limits (ASTM D4318), and corrosion testing [soluble sulfate, soluble chloride, and pH per Caltrans CTM 417, 422, and 643]. Laboratory testing was performed in general accordance with ASTM and Caltrans procedures. Unless otherwise informed, the soil samples will be discarded 60 days from the issuance of this report. Laboratory test results are provided below.

LABORATORY TEST RESULTS

Boring	Depth (ft.)	Test	Result
B1	1 – 2½	Sieve Analysis	See Plot
B2	1 – 2½	Sieve Analysis	See Plot
B4	1 – 2½	Sieve Analysis	See Plot
B5	1 – 2½	Atterberg Limits LL/PI Soluble Sulfate (ppm) Soluble Chloride (ppm) pH	39/19 2971 272 7.9

SOIL EXPANSION

The expansion potential of the existing near-surface site soil encountered at boring location B5 is believed to be **Medium** based on the Atterberg Limits testing performed. Following site grading, testing of site soils should be performed by the project geotechnical consultant to confirm the basis of these recommendations. Depending upon the distribution of soil types and expansion/swell characteristics, differing design recommendations may be developed to better suit the types of conditions present at the site.

CORROSION

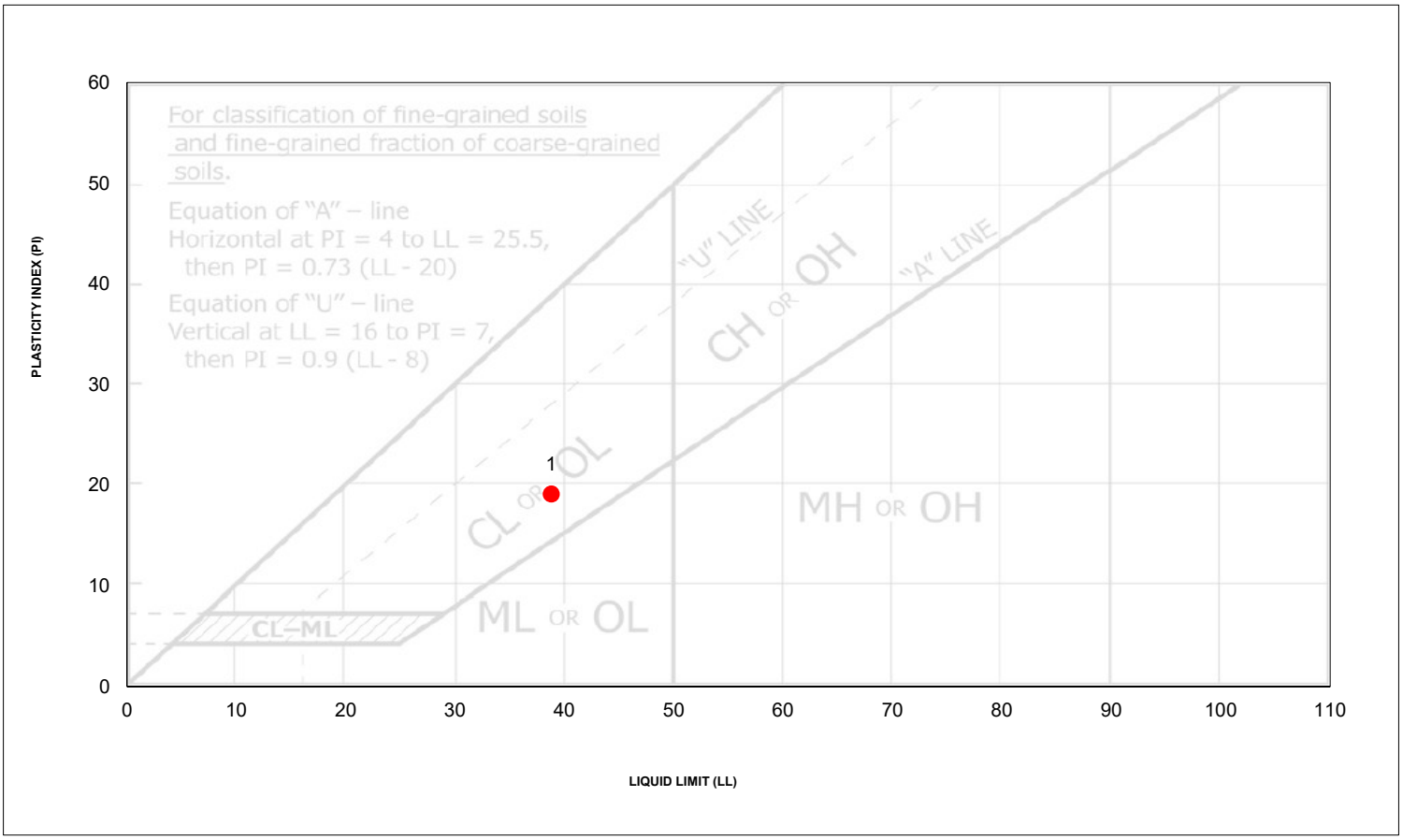
Soluble salt testing was performed by GeoLogic Associates of Anaheim, California to evaluate the corrosivity of the on-site soils and the potential for attack on concrete and subsurface utility pipes, specifically cast iron and ductile iron. The salts tested included soluble sulfate and chloride. Testing was performed using Caltrans Methods CTM-417, 422, and 643 and test results are provided above.

Laboratory testing of a selected soil sample indicates that the on-site soils have **Severe** levels of soluble sulfates such that they are characterized as having corrosion potential with respect to concrete. Concrete in contact with site soils may use Type V concrete having a minimum 28 day compressive strength of at least 4,500 psi. Soluble chloride levels suggest that the site soils also have a **negligible** potential for corrosion of steel (iron/ferrous materials) according to ACI 318 guidelines. Final concrete mix design should be evaluated after sulfate and chloride tests have been performed on the actual in-place subgrade material used for finished pad grades.

Atterberg Limits Summary

(ASTM D4318
ASTM D2116
ASTM D4829)

Project Name	**Victory RE Development (Caliber Holdings, LLC)**	**Project Number**	0066-2170
Address	North of 33235 Zeiders Road		
	Menifee, CA		



Symbol	Boring ID	Depth (ft)	In-Situ Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plastic Index (%)	Soil Type USCS	Expansion Index
1	B5	2.5	11.2	38.8	20.6	19.1	CL	
2								
3								
4								
5								
6								
7								
8								

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11980 Telegraph Road, Unit 104
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Phone: (714) 484-8600
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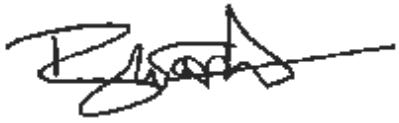
Report No: MAT:00662170-4-S3
Issue No: 1

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Material Test Report

Client: VICTORY DEVELOPMENT **CC:**
8201 PRESTON ROAD, STE # 700
DALLAS, TX 75225

Project: CC MENIFEE, CA-GEO
MENIFEE, CA



Approved Signatory: Douglas Abernathy (Senior Project Engineer)
Date of Issue: 9/30/2021

Sample Details

Sample ID: 00662170-4-S3 **Lift:**
Client Sample ID:
Date Sampled:
Sampled By: Mohammad Almuzaial
Specification: D6913-Soils
Supplier: On-Site Material
Source: On Site Borrow
Material: Silty SAND w/ Gravel (SM)
Sampling Method: Hollow Stem Auger - Automatic
Soil Description: SM
General Location: B1
Location: 1'-2.5'

Other Test Results

Description	Method	Result	Limits
Fm	ASTM D 6913	N/A	
Cu		N/A	
Cc		N/A	
CuS		2.82	
CcS		0.75	
D50S (mm)		0.202	
D50G (mm)		9.002	
Method		Method B	
Sample Obtained While		Oven-Dried	
Group Name		Silty SAND w/ Gravel (SM)	
Group Symbol		SM	
Composite Sieving Used		No	
Dispersion Method		No dispersant by hand	
Prior Testing		Moisture	

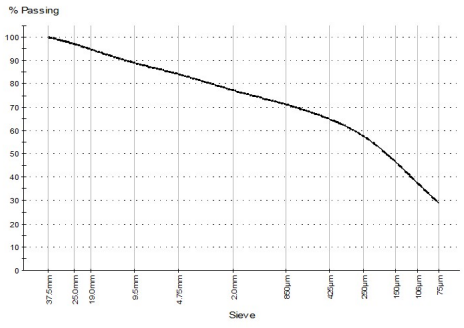
Particle Size Distribution

Method: ASTM D 6913

Date Tested: 9/30/2021
Tested By: Mohammad Almuzaial

Sieve Size	% Passing	Limits
1½in (37.5mm)	100.0	
1in (25.0mm)	97.2	
¾in (19.0mm)	94.8	
3/8in (9.5mm)	89.0	
No.4 (4.75mm)	84.2	
No.10 (2.0mm)	77.3	
No.20 (850µm)	71.1	
No.40 (425µm)	64.8	
No.60 (250µm)	57.6	
No.100 (150µm)	46.6	
No.140 (106µm)	37.5	
No.200 (75µm)	28.7	

Chart



Comments

N/A

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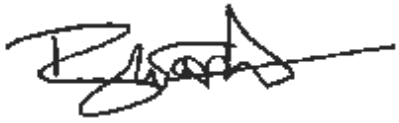
Report No: MAT:00662170-4-S1
Issue No: 1

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Material Test Report

Client: VICTORY DEVELOPMENT **CC:**
8201 PRESTON ROAD, STE # 700
DALLAS, TX 75225

Project: CC MENIFEE, CA-GEO
MENIFEE, CA



Approved Signatory: Douglas Abernathy (Senior Project Engineer)
Date of Issue: 9/30/2021

Sample Details

Sample ID: 00662170-4-S1 **Lift:**
Client Sample ID:
Date Sampled: 09/02/21
Sampled By: Mohammad Almuzaial
Specification: D6913-Soils
Supplier: On-Site Material
Source: On Site Borrow
Material: Well-graded SAND w/ Silt (SW-SM)
Sampling Method: Hollow Stem Auger - Automatic
Soil Description: SW-SM
General Location: B2
Location: 1'-2.5'

Other Test Results

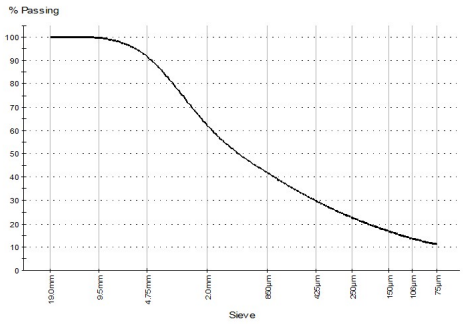
Description	Method	Result	Limits
Fm	ASTM D 6913	N/A	
Cu		28.30	
Cc		1.56	
CuS		5.98	
CcS		0.93	
D50S (mm)		0.626	
D50G (mm)		3.473	
Method		Method B	
Sample Obtained While		Oven-Dried	
Group Name		Well-graded SAND w/ Silt (SW-SM)	
Group Symbol		SW-SM	
Composite Sieving Used		No	
Dispersion Method		No dispersant by hand	
Prior Testing		Moisture	

Particle Size Distribution

Method: ASTM D 6913
Drying by: Oven
Date Tested: 9/30/2021
Tested By: Mohammad Almuzaial

Sieve Size	% Passing	Limits
¾in (19.0mm)	100.0	
3/8in (9.5mm)	99.7	
No.4 (4.75mm)	91.8	
No.10 (2.0mm)	62.2	
No.20 (850µm)	41.9	
No.40 (425µm)	29.9	
No.60 (250µm)	22.5	
No.100 (150µm)	16.8	
No.140 (106µm)	13.6	
No.200 (75µm)	11.1	

Chart



Comments

N/A

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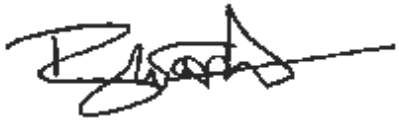
Report No: MAT:00662170-4-S2
Issue No: 1

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Material Test Report

Client: VICTORY DEVELOPMENT **CC:**
8201 PRESTON ROAD, STE # 700
DALLAS, TX 75225

Project: CC MENIFEE, CA-GEO
MENIFEE, CA



Approved Signatory: Douglas Abernathy (Senior Project Engineer)
Date of Issue: 9/30/2021

Sample Details

Sample ID: 00662170-4-S2 **Lift:**
Client Sample ID:
Date Sampled:
Sampled By: Mohammad Almuzaial
Specification: D6913-Soils
Supplier: On-Site Material
Source: On Site Borrow
Material: Silty SAND (SM)
Sampling Method: Hollow Stem Auger - Automatic
Soil Description: SM
General Location: B4
Location: 1'-2.5'

Other Test Results

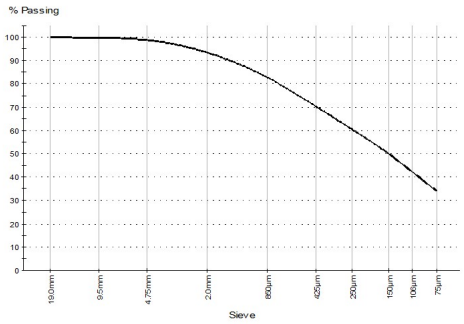
Description	Method	Result	Limits
Fm	ASTM D 6913	N/A	
Cu		N/A	
Cc		N/A	
CuS		4.22	
CcS		0.68	
D50S (mm)		0.299	
D50G (mm)		3.400	
Method		Method B	
Sample Obtained While		Oven-Dried	
Group Name		Silty SAND (SM)	
Group Symbol		SM	
Composite Sieving Used		No	
Dispersion Method		No dispersant by hand	
Prior Testing		Moisture	

Particle Size Distribution

Method: ASTM D 6913
Drying by: Oven
Date Tested: 9/30/2021
Tested By: Mohammad Almuzaial

Sieve Size	% Passing	Limits
¾in (19.0mm)	100.0	
3/8in (9.5mm)	99.7	
No.4 (4.75mm)	98.8	
No.10 (2.0mm)	93.4	
No.20 (850µm)	82.8	
No.40 (425µm)	70.4	
No.60 (250µm)	60.3	
No.100 (150µm)	50.1	
No.140 (106µm)	42.1	
No.200 (75µm)	34.0	

Chart



Comments

N/A

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SAMPLE NO.:	B-5																		
Depth:	2' - 5'																		
DIRECT SHEAR TEST (type)																			
Initial Moisture Content %																			
Dry Density (pcf)																			
Normal Stress (psf)																			
Peak Shear Stress (psf)																			
Ultimate Shear Stress (psf)																			
Cohesion (psf)																			
Internal Friction Angle (degrees)																			
EXPANSION TEST UBC STD 18-2																			
Initial Dry Density (pcf)																			
Initial Moisture Content %																			
Final Moisture Content %																			
Pressure (psf)																			
Expansion Index / Swell %																			
CORROSIVITY TEST																			
Resistivity (CTM643) (ohm-cm)																			
pH (CTM643)	7.9																		
CHEMICAL TESTS																			
Soluble Sulfate (CTM 417) (ppm)	2971																		
Chloride Content (CTM 422) (ppm)	272																		
Wash #200 Sieve (ASTM-1140) %																			
Sand Equivalent (ASTM D2419)																			

Geo-Logic ASSOCIATES

APPENDIX F

PHASE I ENVIRONMENTAL SITE ASSESSMENT

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CITY OF MENIFEE

MEMORANDUM

PUBLIC WORKS / ENGINEERING DEPARTMENT

DATE: **April 5, 2022**

TO: **Desiree Bowdan, Associate Planner, Community Development Department**

FROM: **Chet Robinson, Senior Engineer**

CC: **Chris Heron, Assistant Engineer**

SUBJECT: **RPT21-057 – Phase I ESA Report Review Comments, PC1**
Calliber Collision, PLN21-0348

The comments noted herein are for review of the following:

- Phase I Environmental Site Assessment, prepared by Intertek PSI, Project Number 05751921-1, dated September 22, 2021.

Our review was provided of the Phase I Environmental Site Assessment for the Caliber Collision project for conformance with the minimum criteria outlined in ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

We are pleased to report that we do not have any comments on the referenced report and recommend approval. See attached third party review letter by SCS Engineers.

Any questions can be directed to Chet Robinson at (951) 723-3879, or by email at crobinson@cityofmenifee.us.

APPROVED REPORT

Date: 3/22/2022

From: Luke Montague, SCS Engineers

Subject: Third Party Review of Phase I ESA Report

PM/TM # RPT21-057 - Caliber Collision

Entitlement # _____

Project Description Vacant Land West of Zeiders Road and South of Scott Road, Menifee CA

Report Type:

- O **Hydrology Study**
- O **Soils/Geotechnical Report**
- O **Traffic Study**
- O **WQMP**
- O **OESA**
  - **Other: Phase I ESA**
- O **Entitlement**
- O **Final Engineering**

March 22, 2022
Project Number: 01217205.00

Mr. Chet Robinson, PE, GE
City of Menifee
29714 Haun Road
Menifee, California 92586

Subject: **Third Party Report Review of Phase I Environmental Site Assessment (Review)**

Site: **RPT21-057 – Caliber Collision**
Assessor's Parcel Number 384-130-028, Vacant Land West of Zeiders Road and South of Scott Road, Menifee, California 92584

Dear Mr. Robinson:

Pursuant to your request and authorization, SCS Engineers (SCS) has reviewed[1] a City of Menifee (Client)-provided document in connection with the above-referenced Site. SCS performed the Review to assess whether the report and underlying work are generally consistent with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E 1527-13 (Standard) and our experience. The work described in this Review was performed by SCS in general accordance with the City of Menifee Professional Services Agreement, FY2021/2022 On-Call Engineering Services (Contract) between SCS and the Client, which is valid from July 2, 2021 through June 30, 2022.

Should you have any questions regarding this Review, please do not hesitate to call the undersigned at (858) 583-7749.

Sincerely,

Luke Montague, MESM, PG 8071
Vice President
SCS ENGINEERS

1 This Review was general in nature and not intended to address a detailed assessment of consistency with applicable regulatory standards.

1. BACKGROUND

Based on the Client's request and authorization, SCS has completed a Review of the following Client-provided report:

- *Phase I Environmental Site Assessment, Undeveloped Land, Menifee, California,* prepared by Professional Service Industries, Inc. (PSI) and dated September 22, 2021 for Victory Development and Caliber Holdings, LLC

The above-referenced Phase I Environmental Site Assessment report (Phase I ESA) indicates that the site is comprised of 1 parcel of vacant and undeveloped land comprising approximately 2.37 acres, located on the west side of Zeiders Road and south of Scott Road, and identified with Assessor's Parcel Number 384-130-028 in Menifee, California (Site). Historically, PSI reported that based on a review of historical records such as aerial photographs, the Site has been undeveloped land back to as early as 1938. PSI concluded overall that no recognized environmental conditions (RECs), controlled recognized environmental conditions, historical recognized environmental conditions, or vapor encroachment conditions were identified at the Site. PSI recommended "no further assessment for RECs in connection with the subject property at this time."

REVIEW OF BIOSOLIDS/SLUDGE MAPS

In order to assess whether the Site is recorded as a biosolids/sludge application property, SCS reviewed the map titled "Permitted Biosolids/Sludge Application Map," prepared by the City of Menifee and un-dated. Based upon a review of the map, the Site is not shown as an area where Composite Fields were present.

2. PHASE I ENVIRONMENTAL SITE ASSESSMENT REVIEW

2.1 PHASE I ESA REQUIREMENTS

The following table summarizes various requirements of the Standard and if they were addressed as part of the above-referenced Phase I ESA. Please note that the table below does not include all requirements of the Standard.

Requirement	Addressed
User Requirements	
Review of title and judicial records for environmental liens or activity use limitations	Yes
Specialized knowledge or experience of the user	Yes
Purchase price compared to property value	Yes
Commonly known or reasonably ascertainable information	Yes
Obvious indications that point to the presence of contamination	Yes
Site Reconnaissance	
Site building description	Yes
Site grounds description	Yes
Hazardous materials and petroleum product use and storage (type, quantity, storage conditions)	Yes
Hazardous waste generation (type, quantity, storage conditions)	Yes

Requirement	Addressed
Indications of releases	Yes
PCB-containing equipment	Yes
Fuel source for heating and cooling	Yes
Electricity and natural gas supplier	Yes
Potable water supplier	Yes
Sewer conveyance	Yes
Records Review	
Building department/ City clerk records review	Yes
Department of environmental health review	Yes
Other supplemental records sources requests	Yes
Interviews	
Interviews with current owner	Yes
Interview with current occupant	Yes
Interview with previous owners	Yes
Interview with previous occupants	Yes
Physical Setting	
Topographic map review	Yes
Geology	Yes
Depth and flow direction of groundwater	Yes
Off-Site Source Survey	
Regulatory database review	Yes
Discussion and conclusions for facilities identified on the regulatory database	Yes
Regulatory file review for off-Site sources	Yes
Historical Site and Site Vicinity Land Use Review	
Aerial photograph review	Yes*
Sanborn fire insurance map review	Yes
City directory review	Yes
Historical resources reviewed back to when the Site was undeveloped or to 1940	Yes
Discussion of gaps of unconfirmed historical Site land use	Yes
Discussion of historical Site and Site vicinity land use	Yes
Data Gaps	
Discussion of Data Gaps	Yes
Conclusions and Recommendations	
Conclusion consistent with Standard	Yes
Environmental professional signature	Yes
Report	
Within shelf-life	Yes
Reliance provided to The City of Menifee	No*

Notes:

* See Additional Discussion section below

2.2 PHASE I ESA REPORT ADDITIONAL DISCUSSION

SCS identified the following items in the Phase I ESA that are interpreted to either be either inconsistent with the Standard or our experience, or to warrant further discussion.

Discussion of Historical Site and Site Vicinity Land Use

PSI indicated that the Site was historically vacant and undeveloped land, and did not report on possible historical agricultural or dry farming activities.

However, based on a review of the historic aerial photographs provided in the Phase I ESA by SCS, it appears the Site was historically used for dry farming purposes and/or was cleared land from at least 1938 and possibly up until approximately 1976. Agricultural activity during a large portion of this timeframe often utilized organochlorine pesticides such as dichlorodiphenyltrichloroethane (DDT), dieldrin, toxaphene, and metal-based pesticides, such as arsenic, which were in wide general use for pest control.

However; if the Site was used for dry farming purposes, current regulatory guidance regarding dry farming indicates that this land use does not require agricultural sampling. According to the *Interim Guide for Sampling Agricultural Properties* issued by the Department of Toxic Substances Control (DTSC) and dated August 7, 2008, the DTSC states that land used for grazing or pasture does not require agricultural sampling, and that land used for dry-land farming does not need further investigation for pesticides or metals. Based on the lack of reported agricultural use of the Site in the Phase I ESA, the interpreted historical use of the Site for dry-land farming, and the current regulatory guidance regarding these types of land uses, there is a low likelihood of a recognized environmental condition at the Site relating to this possible historical Site land use.

Reliance

The Phase I ESA report was prepared by PSI for Victory Development and Caliber Holdings, LLC, the User of the Phase I ESA. No reliance of the Phase I ESA was provided to the City of Menifee.

SCS recommends that if the City of Menifee acts in a capacity as a relying party for the Site (i.e., as a lender extending credit to be secured by the Site, any purchaser, transferee or assignee, of a mortgage loan [or any portion thereof]), that the City of Menifee consider requesting a reliance letter from PSI as a relying party for the Phase I ESA for the Site.

3. RECOMMENDATIONS

Based on a review of the Phase I ESA report, SCS recommends that the City of Menifee approve the Phase I ESA report for the Site.

The below additional recommendation is provided at the discretion of the City of Menifee:

- SCS recommends that if the City of Menifee acts in a capacity as a relying party for the Site (i.e., as a lender extending credit to be secured by the Site, any purchaser, transferee or assignee, of a mortgage loan [or any portion thereof]), that the City of Menifee consider requesting a reliance letter from PSI as a relying party for the Phase I ESA report for the Site.

Phase I Environmental Site Assessment

Undeveloped Land
Menifee, California 92584



Prepared for:

Victory Development
8201 Preston Road
Dallas, Texas 75225

and

Caliber Holdings LLC
2941 Lake Vista Drive
Lewisville, Texas 75067

Prepared by:

Professional Service Industries, Inc.
11980 Telegraph Road, Suite 104
Santa Fe Springs, California 90670

September 22, 2021

PSI Project Number: 05751921-1

Eliza Sahakian
Geologist/Environmental Scientist

Patricia St. Peter, LPG
Senior Geologist / Principal Consultant

Phase I ESA Summary Table

Professional Service Industries, Inc. (PSI), an Intertek company, performed a Phase I ESA of the undeveloped property located in Menifee, California 92584. PSI performed the assessment to comply with the contract between Victory Development (the client) and PSI.

Our assessment did not include evaluation of BERs that are beyond the scope of ASTM E1527 (ASTM non-scope services, such as asbestos, mold, lead-based paint, radon, wetlands, etc.).

Report Section		No Issues Identified	REC	CREC	HREC	VEC	De-minimis	BER Issue	Notes
3.0	USER-PROVIDED INFORMATION	✔							
5.2	SUBJECT PROPERTY OBSERVATIONS	✔							
5.3	OFF-SITE OBSERVATIONS	✔							
6.0	HISTORICAL USES	✔							
7.0	ENVIRONMENTAL REGULATORY RECORDS REVIEW	✔							
8.0	VAPOR ENCROACHMENT SCREENING	✔							

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ENVIRONMENTAL DATABASE REPORT

SUPPLEMENTAL REGULATORY DOCUMENTATION

DATA GAP WORKSHEET

ADDITIONAL SUPPLEMENTAL DOCUMENTATION

PERSONNEL QUALIFICATIONS

LIST OF COMMONLY USED ACRONYMS AND ABBREVIATIONS

ACM	Asbestos-Containing Material
AHERA	Asbestos Hazard Emergency Response Act
AMSL	Above Mean Sea Level
APN	Assessor's Parcel Number (also referred to as a PIN)
AST	Above-Ground Storage Tank
ASTM	American Society for Testing and Materials
AUL	Activity & Use Limitation
BER	Business Environmental Risk
Bgs	Below the ground surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CADC	California Department of Conservation
CADWR	California Department of Water Resources
CAEPA	California Environmental Protection Agency
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation & Liability Information System (now called SEMS)
CESQG	Conditionally Exempt Small Quantity Generator of Hazardous Waste (now called VSQG)
CFR	Code of Federal Regulations
COC	Chemical(s) of Concern
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
EP	Environmental Professional
EPA	U.S. Environmental Protection Agency
ERIS	Environmental Risk Information Services, Inc.
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FOIA	Freedom of Information Act
HREC	Historical Recognized Environmental Condition

HUD	U.S. Department of Housing & Urban Development
HVAC	Heating, Ventilation & Air Conditioning System
LAST	Leaking Above-Ground Storage Tank
LBP	Lead-Based Paint
LLP	Landowner Liability Protection
LQG	Large Quantity Generator of Hazardous Waste
LUST/ LST	Leaking Underground Storage Tank
MCL	Maximum Concentration Level
mg/kg	Milligrams per Kilogram
mg/L	Micrograms per liter
mg/L	Milligrams per Liter
MSDS	Material Safety Data Sheet (now called Safety Data Sheet (SDS))
MTBE	Methyl Tert-Butyl Ether
ND	Not Detected
NFA	No Further Action (also called No Further Remediation (NFR))
NOV	Notice of Violation
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List (a.k.a. Superfund)
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OSHA	U.S. Occupational Safety & Health Administration
PAH	Polynuclear (Polycyclic) Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PCE	Perchloroethylene (also called Tetrachloroethylene)
pCi/L	Picocuries per Liter
PFAS	Per & Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid

ppb	Parts per Billion
ppm	Parts per Million
RBCA	Risk-Based Corrective Action
RCRA	Resource Conservation & Recovery Act
REC	Recognized Environmental Condition
RFI	Request for Information
SF	Square Feet
SQG	Small Quantity Generator of Hazardous Waste
SSURGO	Soil Survey Geographic Database
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish & Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
VEC	Vapor Encroachment Condition
VES	Vapore Encroachment Screening
VIC	Vapor Intrusion Condition
VOC	Volatile Organic Compound

CERTIFICATION

PSI, an Intertek company, has completed a Phase I ESA of the undeveloped property located in Menifee, California ("the subject property"). PSI performed the Phase I ESA in conformance with ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (the Practice). The assessment was completed at the request of Victory Development ("the client") in accordance with the scope of work outlined in PSI's Proposal Number 0575-352331, which was authorized by the client on August 30, 2021.

The conclusions developed herein represent our professional judgment based on information and data available to us at the time of the assessment, and observations made at the time of our site reconnaissance. In accordance with ASTM E1527-13 § 4.6, the report is valid for a period of 180 days from the time of issuance.

Site Assessor:

Eliza Sahakian
Geologist/Environmental Scientist

Reviewed by:

Patricia St. Peter, LPG
Senior Geologist / Principal Consultant

Environmental Professional Certification

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 312.10 of this part. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Environmental Professional:

Patricia St. Peter, LPG
Senior Geologist / Principal Consultant

1.0 EXECUTIVE SUMMARY

1.1 FINDINGS

A summary of findings is provided below. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made or actions taken based on this information.

1.1.1 SUBJECT PROPERTY DESCRIPTION AND CURRENT USE

The subject property consists of one vacant parcel approximately 2.37-acres, located on Zeiders Road, southwest of its intersection with Scott Road, in Menifee, California 92584. The subject property address is not listed. The property can also be identified as the Riverside County Assessor Parcel Number (APN): 384-130-028.

1.1.2 ADJOINING PROPERTY DESCRIPTION AND USE

The subject property is located within a primarily commercial and residential area in Menifee, California. No uses of concern were identified on the adjoining properties. Usage of the immediately surrounding properties is summarized in the table below.

Direction	Description of Adjoining Property Use
North	Undeveloped land followed by a commercial/Industrial structure that appeared to be vacant
East	Zeider Road followed by undeveloped land
South	Single family residential
West	Automotive parking area and storage yard

1.1.3 HISTORICAL USE OF SUBJECT PROPERTY AND SURROUNDING AREA

Historical information researched during this assessment allowed the uses of the subject property, adjoining and surrounding properties to be traced back to 1938, when the area appeared to be undeveloped and Zeiders Road appeared to be developed. The subject property and the north adjoining property appeared to be undeveloped as early as 1938 with a stream crossing the northwest. Further north and south, the property appeared to be developed circa 1985, while the property to the west appeared to be used as a parking area. The east adjoining property beyond Zeiders Road appeared to be developed with a structure to the north circa 1979. By 2012, the east adjoining property beyond Zeiders Road appeared to be vacant.

1.1.4 GOVERNMENTAL RECORDS REVIEW

PSI subcontracted with ERIS to provide a review of governmental database records for spill sites, tanks, hazardous waste handlers, and other facilities of potential concern within proximity to the subject property.

The subject property was not identified as a spill site or regulated facility on the regulatory databases that were searched. One or more off-site facility listings were identified in the database search within the appropriate AMSD and were evaluated by PSI during this assessment. None of the sites represent a REC in connection with the subject property.

1.1.5 SIGNIFICANT DATA GAPS

The ASTM E1527 Standard Practice defines a significant data gap as a lack of or inability to obtain information required by the practice that would limit our ability to draw conclusions with regard to RECs in connection with the subject property. Based on our experience, the information that we gathered and evaluated did not present significant data gaps that affected our ability to identify RECs in connection with the subject property.

1.2 CONCLUSIONS

PSI performed a Phase I ESA of the subject property in conformance with the scope and limitations of ASTM Practice E1527-13. Any exceptions to or deletions from this practice are described in Section 2.3 of this report. The following conclusions have been made with regard to evidence of RECs, HRECs, CRECs, VECs, and de minimis conditions in connection with the subject property, as defined in ASTM E1527-13.

1.2.1 RECOGNIZED ENVIRONMENTAL CONDITIONS

This assessment has revealed no evidence of RECs in connection with the subject property.

1.2.2 CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

This assessment has revealed no evidence of CRECs in connection with the subject property.

1.2.3 HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

This assessment has revealed no evidence of HRECs in connection with the subject property.

1.2.4 VAPOR ENCROACHMENT CONDITIONS

This assessment has revealed no VECs in connection with the subject property.

1.2.5 DE MINIMIS CONDITIONS

PSI did not identify evidence of de minimis conditions on the subject property.

1.3 RECOMMENDATIONS

PSI recommends no further assessment for RECs in connection with the subject property at this time.

2.0 PHASE I ESA SCOPE AND METHODOLOGY

2.1 PURPOSE OF SERVICES

PSI performed the Phase I ESA in conformance with ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (the Practice). The purpose of the Practice was to define good commercial practice for conducting a Phase I ESA and as such, the Practice is intended to permit the user to satisfy one of the requirements to qualify for the LLPs. The goal of the processes established by the Practice is to identify RECs in connection with the subject property.

Based on the information provided, PSI understands that your purpose for having the Phase I ESA performed is to satisfy one of the requirements to qualify for one of the LLPs.

2.2 PHASE I ESA METHODOLOGY

PSI performed a Phase I ESA of the subject property. The scope of our services and general methodology is presented below.

The information sources that PSI used, including published material, material obtained from commercial and other sources, is listed below and cited as it is presented in the report. The information or excerpts thereof is appended.

This assessment included the following components:

- Records review;
- Reconnaissance;
- Interviews;
- VES in accordance with ASTM E2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* [VES Standard Guide]; and
- Preparation of this report, including our evaluation.

2.3 LIMITATIONS, EXCEPTIONS, DEVIATIONS AND DATA GAP

PSI considers that limitations, exceptions, and deviations from the Practice manifest as a lack of or inability to obtain information required by the Practice. This represents the definition of the 'data gap' contained in the Practice. PSI listed the component objectives of the Practice on the appended Data Gap Worksheet and tracked the information obtained against the objectives. Therefore, the limitations, exceptions and deviations are identified in the Worksheet.

In general, when required information was incomplete, not provided, otherwise not obtained, or indicated a need for additional information, PSI attempted to use information from other sources to meet the Practices' performance objectives. When the data gaps affected the Environmental Professional's ability to identify RECs, PSI considered the data gap(s) to be significant. PSI identified significant data gaps (if any) on the Data Gap Worksheet and reported them in Section 1.1.5.

2.4 SIGNIFICANT ASSUMPTIONS

PSI made the following significant assumptions in developing our Phase I ESA findings and conclusions:

- Regulatory Agency Information - PSI considers all information provided by our environmental database subcontractor regarding the regulatory status of facilities to be complete, accurate and current.
- Other Regulatory Information - PSI considers all information obtained from regulatory or other governmental agencies to be complete, accurate and current.
- Title, Lien and AUL Information - PSI considers all information provided by real estate title record review firms regarding property use or ownership, encumbrances or other limitations, if provided, to be complete, accurate and current.
- Interviews - PSI considers all information provided through interviews to be accurate, complete, unbiased, current, and provided in good faith.
- Groundwater - PSI interpreted and inferred the direction of the shallow groundwater movement based on the information we obtained during this assessment and our experience. Actual groundwater flow may be locally influenced by many factors beyond the scope of this assessment. Subsurface investigation is typically necessary to determine site-specific groundwater flow direction.

3.0 USER-PROVIDED INFORMATION

PSI considers the client to be the 'User' of our assessment, defined in ASTM Practice E1527 as "the party seeking to use ASTM E1527 to complete a Phase I ESA of the property. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager. The User has specific obligations for completing a successful application of this practice...."

3.1 USER QUESTIONNAIRE

The EPA All Appropriate Inquiry Rule (40 CFR Part 312) and ASTM E1527 § 6 require the User to answer certain questions related to the subject property, in order to obtain certain LLPs from CERCLA liability. To facilitate this process, PSI provided the client with a User Questionnaire, which is appended if it has been returned. A summary of the required questions and client responses is provided below.

Question	Yes	No	Unknown	N/A	Client did not respond
Did a review of recorded land title records or other sources identify any environmental liens filed or recorded against the subject property under federal, tribal, state or local law?			✔		
Did a review of land title records or other sources identify any activity use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place on the subject property?			✔		
Do you have specialized knowledge or experience related to the subject property or nearby properties?		✔			
Does the purchase price being paid reasonably reflect the fair market value of the subject 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?				✔	

Question	Yes	No	Unknown	N/A	Client did not respond
Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of a releases or threatened releases? For example:					
Do you know of the past uses of the property?		✔			
Do you know of specific chemicals that are present or were once present at the property?		✔			
Do you know of spills or other chemical releases that have taken place at the property?		✔			
Do you know of any environmental cleanups that have taken place at the property?		✔			
Based on your knowledge and experience related to the subject property are there any obvious indicators that point to the presence or likely presence of contamination at the subject property?		✔			
Do you know of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property?		✔			
Do you know of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?		✔			

NOTES

The client returned PSI's questionnaire indicating 'UNKNOWN' to the questions: "Did a review of land title records (or judicial records where appropriate) identify any environmental cleanup liens filed or recorded against the subject property under federal, tribal, state or local law?" or "Did a review of land title records (or judicial records where appropriate) identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law?" This is a limitation that is evaluated on the appended Data Gap Worksheet. The completed questionnaire is appended.

3.2 TITLE RECORDS

Based on a review of the local tax assessor's records, the subject property is currently owned by Trucks Jeptha.

PSI was not provided with land title records by the client in order to obtain information about the past owners of the subject property and past uses and tenancies. However, given the availability of other historical resources, we do not consider this limitation to represent a significant data gap.

3.3 SUGGESTED INFORMATION

The client provided PSI with the following suggested information described by the Practice.

- The reason for performing the Phase I ESA.
- The type of property and type of property transaction.
- The complete and correct address of the subject property or other documentation identifying the location and extents of the subject property.
- The scope of services desired for the Phase I ESA, including any evaluation for BERs or other items that are beyond the scope of ASTM E1527.
- Identification of the parties who will rely upon the report.
- Identification of the key site contact and contact information.

3.4 HELPFUL DOCUMENTS AND PRIOR INVESTIGATIONS

The Practice requires that the environmental professional ask the subject property owner, the key site manager (if any is identified), and the User for certain helpful documents about the property and certain legal proceedings involving hazardous substances and the subject property. PSI mailed or e-mailed questions or performed interviews requesting this information.

The client did not provide prior environmental reports or other helpful documents within the performance period of this assessment.

4.0 PHYSICAL SETTING

PSI reviewed USGS topographic (topo) maps, information from the USDA and/or NRCS and/or other information regarding the physical setting of the subject property to assist with the interpretation of subsurface water movement near the subject property. Physical setting information is summarized in the table below.

Summary of Physical Setting Information

Physical Setting Attributes	Description	Source
Subject property elevation:	Approximately 1,526 feet AMSL.	Topo Map Murrieta, CA; Romoland, CA 7.5 minute Quadrangle, 2015
Topographic gradient:	The subject property and surrounding area slope downward gently to the north to northwest.	ERIS Physical Setting Report, Topo Map, Observations
Closest surface water:	Riverine, crossing the northwest portion of the subject property.	ERIS Physical Setting Report, Topo Map, Observations
Other resource or physical characteristics mapped on the subject property?	No.	ERIS Physical Setting Report, Topo Map, Observations
Is a flood hazard zone mapped on the subject property?	No. The subject property is located in Zone X-12, which is an area of minimal flood hazard.	ERIS Physical Setting Report
Predominant soil type(s) mapped on the subject property:	The predominent soil type is Las Posas loam. Las Posas is well drained Class D soil withhigh runoff potential when thoroughly wet. Additionally, water movement through the soil is restricted or very restricted.	ERIS Physical Setting Report
Estimated depth to first groundwater:	Occurs approximately at 21 feet bgs.	USGS National Water Information System Mapper (NWIS) well. Site Number: 333812117100801, Site Name: 006S003W23E001S
Anticipated regional groundwater flow direction:	The groundwater is expected to flow in the same direction as the local topography, which is north to northwest.	ERIS Physical Setting Report

Physical Setting Attributes	Description	Source
Oil and Gas Resources:	None mapped on or adjacent to the subject property.	ERIS Physical Setting Report
Mining Resources:	None mapped on or adjacent to the subject property.	ERIS Physical Setting Report

5.0 SITE RECONNAISSANCE

The location and approximate boundaries of the subject property are illustrated on the appended figures. The legal description of the subject property, if provided to PSI, is appended.

Mr. Jason McGee, Owner Representative of McGee Contracting Inc, granted PSI access to the subject property. Our assessor was unescorted during the site reconnaissance.

The ground reconnaissance consisted of observing the periphery of the subject property and viewing the subject property from accessible adjoining public access areas. Visual reconnaissance of adjoining properties was limited to areas and facilities that were readily observable from the subject property or from public access areas. PSI also systematically toured the interior portions of the subject property parcels to provide an overlapping field of view.

The peripheries of surface features and/or structures, where present on the subject property, were observed along with accessible interior common areas.

PSI photographed selected features. The captioned photographs collected during the site reconnaissance are appended.

5.1 SUBJECT PROPERTY DESCRIPTION AND CURRENT USES

General Subject Property Information	
Subject Property Address	West of Zeiders Road, Menifee, California 92584
Parcel Identification Number(s)	384-130-028
Parcel Size (acres)	2.37±
Subject Property Contact/Escort	Mr. Jason McGee / Unescorted
Date of Reconnaissance	September 2, 2021
Utilities	
Water	Eastern Municipal Water District
Wastewater/Sewer	Eastern Municipal Water District
Electricity	Southern California Edison
Natural Gas	Southern California Gas Company

The subject property consists of one vacant parcel approximately 2.37-acres, located on Zeiders Road, southwest of its intersection with Scott Road, in Menifee, California 92584. The subject property address is not listed. The property can also be identified as the Riverside County Assessor Parcel Number (APN): 384-130-028.

5.2 SUBJECT PROPERTY OBSERVATIONS

A summary of the subject property uses and conditions is tabulated below. Detailed information is discussed following the summary for any "yes" answers, along with an opinion about the significance of the observation.

Identified? (check if Yes)	Item Description
Equipment/Activities/Uses	
	Medical/Dental Offices - Biomedical Wastes
	Dry Cleaners/Laundromats
	Automotive/Equipment Repair
	Emergency Generators
	Elevators
	Hydraulic Lifts
	Photo Processing
	Grease Traps and Oil/Water Separators
	Wastewater Treatment Systems
	Septic or Sewage Tanks
	Air Compressors
	Transformers or Other Mechanical/Electrical Equipment That Could Contain PCBs
	Pipeline Markers
	Oil and Gas Wells
	Stormwater Retention/Detention Systems
	Quarries, Pits, Lakes, Ponds, or Lagoons
	Use, Storage, or Disposal of Hazardous Substances
	Use, Storage, or Disposal of Petroleum Products
	ASTs/USTs
	Drums or Other Bulk Chemical Containers
	Suspect Containers/Unidentified Contents
	Drains or Sumps

Identified? (check if Yes)	Item Description
	Drinking Water, Irrigation, or Monitoring Wells
	Agrochemical Use/Application
	Railroad Spur, Siding, or Right-of-Way
	Interior/Pavement Stains or Corrosion
	Stained Soil/Stressed Vegetation
	Chemical Odors
	Surface Water Sheen or Discoloration
	Exterior Pipe Discharges/Unknown Pipes/Effluent Discharges
	Pools of Liquid or Standing Water
	Solid Waste Dumping/Landfilling/Suspect Fill Material
	Construction Debris/Material Stockpiles
	Other Uses or Conditions of Concern

PSI did not observe any of the above uses or conditions in connection with the subject property at the time of the site reconnaissance.

5.3 OFF-SITE OBSERVATIONS

A summary of the adjoining property uses and conditions is tabulated below. Detailed information is discussed following the summary for any "yes" answers, along with an opinion about the significance of the observation.

Direction	Description of Adjoining Property Use
North	Undeveloped land followed by a commercial/Industrial structure that appeared to be vacant
East	Zeider Road followed by undeveloped land
South	Single family residential
West	Automotive parking area and storage yard

Identified? (check if Yes)	Item Description
	Equipment/Activities/Uses
	Medical/Dental Offices - Biomedical Wastes
	Dry Cleaners/Laundromats
	Automotive/Equipment Repair
	Emergency Generators
	Elevators
	Hydraulic Lifts
	Photo Processing
	Grease Traps and Oil/Water Separators
	Wastewater Treatment Systems
	Septic or Sewage Tanks
	Air Compressors
✔	Transformers or Other Mechanical/Electrical Equipment That Could Contain PCBs
	Pipeline Markers
	Oil and Gas Wells
	Stormwater Retention/Detention Systems
	Quarries, Pits, Lakes, Ponds, or Lagoons
	Use, Storage, or Disposal of Hazardous Substances
	Use, Storage, or Disposal of Petroleum Products
	ASTs/USTs
	Drums or Other Bulk Chemical Containers
✔	Suspect Containers/Unidentified Contents
✔	Drains or Sumps
	Drinking Water, Irrigation, or Monitoring Wells
	Agrochemical Use/Application
	Railroad Spur, Siding, or Right-of-Way
	Interior/Pavement Stains or Corrosion

Identified? (check if Yes)	Item Description
	Stained Soil/Stressed Vegetation
	Chemical Odors
	Surface Water Sheen or Discoloration
	Exterior Pipe Discharges/Unknown Pipes/Effluent Discharges
	Pools of Liquid or Standing Water
	Solid Waste Dumping/Landfilling/Suspect Fill Material
✔	Construction Debris/Material Stockpiles
	Other Uses or Conditions of Concern

5.3.1 TRANSFORMERS OR OTHER MECH./ELEC. EQUIPMENT THAT COULD CONTAIN PCBS

Four pad-mounted electrical transformers were observed along Zeiders Road to the east adjoining the subject property. PSI did not observe non-PCB labeling on the transformers at the time of the site reconnaissance. PSI believes the electrical equipment is the property and responsibility of Southern California Edison, the local electrical utility company, who would be responsible for cleanup related to the equipment that could not be attributed to tenant negligence. The identified electrical equipment appeared to be in good condition, with no apparent evidence of staining, leakage, or corrosion noted. Based on their observed condition and the local utility ownership, the observed transformers are not considered to be evidence of a REC in connection with the subject property.

5.3.2 SUSPECT CONTAINER/UNIDENTIFIED CONTENTS

PSI observed an unlabeled silo container on the south adjoining property. PSI was not able to determine what the contents were, if any, at the time of the site reconnaissance. PSI did not observe evidence of leaking or staining in connection with the container. This container is not considered to be evidence of a REC in connection with the subject property.

5.3.3 DRAINS OR SUMPS

PSI observed storm drains along Zeiders Road to the east adjoining the subject property. PSI did not observe evidence of unusual staining or improper disposal in connection with the observed storm drains, and the storm drains appeared to be in a generally good condition. The drains appear to flow into the Eastern Municipal Water District stormwater system. Based on this information, the observed storm drains are not considered to be evidence of a REC in connection with the subject property.

5.3.4 CONSTRUCTION DEBRIS/MATERIAL STOCKPILES

PSI observed stacked piles of wood and concrete on the western portion of the north adjoining property. The presence of these piles of wood and concrete is not considered to be evidence of a REC in connection with the subject property.

6.0 HISTORICAL USES

PSI utilized readily ascertainable historical data resources in order to research the history of the subject property and surrounding area. The intent of this review was to identify historical tenancies or uses of the subject property and surrounding area, which might be considered evidence of a REC. Generally, PSI reviewed the following readily ascertainable historical data resources, where they were available:

- Readily available historical topographic maps were reviewed to evaluate land development in the area over time. It should be noted that the scale of topographic maps in some cases does not allow for mapping of individual structures and developed areas may be shown by shading only.
- Selected historical aerial photographs were reviewed at 5-10 year intervals to obtain information concerning the development and history of the subject property and surroundings.
- PSI reviewed readily ascertainable historical city directories at 5-10 year intervals in order to obtain information on tenancies on the subject property and adjoining properties.
- PSI requested available historical fire insurance maps from ERIS. The Sanborn® Map Company and other regional providers historically mapped urban areas for use by insurance underwriters. In some cases, these maps provide useful information in evaluating previous tenancies and uses of the subject property and surrounding area. “Sanborn”, “Sanborn Map”, “Sanborn Map Company”, and “Sanborn Fire Insurance Maps” are recognized trademarks of the Sanborn Map Company, a subsidiary of Environmental Data Resources, Inc.

Copies of select historical documents are provided in the report appendix; however, it should be noted that some of the resources used by PSI may be copyrighted and PSI has summarized these resources herein, but we have not included copies of these resources in the appendix.

6.1 CURRENT AND PRIOR USE INTERVIEWS

PSI conducted or attempted to conduct interviews with persons who are knowledgeable of the current use and history of the subject property. The following individuals were interviewed.

Name	Title/Role	Date Interviewed	Summary
Ms. Jessi Fazio	Client, Senior Project Coordinator, Victory Development	August 30, 2021	Ms. Fazio provided site information and arranged site access for the subject property.
Mr. Jason McGee	Owner Representative, McGee Contracting Inc	August 30, 2021	Mr. McGee provided site access information and arranged site access for the subject property.

Name	Title/Role	Date Interviewed	Summary
Ms. Roxy Burns	City of Menifee	September 13, 2021	FOIA Request
Clerk	Riverside County Environmental Health	September 13, 2021	FOIA Request
RWQCB	GeoTracker Website	September 21, 2021	PSI reviewed the RWQCB GeoTracker website for information on the subject property.
DTSC	EnviroStor Website	September 21, 2021	PSI reviewed the EnviroStor website for information on the subject property.

No evidence of RECs was identified as a result of the interviews conducted during this assessment. Complete records of communication detailing information obtained and reviewed, have been appended to this report.

6.2 SUMMARY OF RESOURCES

PSI reviewed the following resources in order to evaluate the historic uses of the subject property, adjoining and/or surrounding area.

Source Type	Years Reviewed	Source
Topo Maps	1942, 1943, 1953, 1973, 1979, 2015	ERIS
Aerial Photographs	1938, 1953, 1962, 1967, 1976, 1979, 1985, 1994, 2002, 2004, 2005, 2006, 2009, 2010, 2012, 2014, 2018, 2020	ERIS
City Directories	1986, 1991, 1996, 2001, 2006-2007, 2012, 2016, 2020	ERIS
Fire Insurance Maps	Unmapped Property	ERIS

6.3 SUMMARY OF THE HISTORY OF THE SUBJECT PROPERTY, ADJOINING AND SURROUNDING PROPERTIES

A chronological summary of the history and use of the subject property, adjoining and surrounding properties is provided in the following tables.

6.3.1 SUBJECT PROPERTY

Year(s)	Interpreted Use/Observations
1938 to 2020	The subject property appeared to be undeveloped land with a stream channel crossing the northwest portion of the property. No respective listing was identified in the City Directories for the subject property.

No evidence of RECs was identified as a result of the historical review of the subject property that was conducted during this assessment.

6.3.2 IMMEDIATELY ADJOINING AND/OR SURROUNDING PROPERTIES

NORTH	
Year(s)	**Interpreted Use/Observations**
1938 to 1976	The adjoining property to the north appeared to be undeveloped land with a stream channel crossing the northwest of the property.
1977 to 1994	The adjoining property to the north appeared to be undeveloped land followed by a structure further north. City Directories indicate the following: 33255 Zeiders Road 1986: Moss Ira B 1991: XXXX
1996 to 2002	The adjoining property to the north appeared to be undeveloped land followed by multiple structures further north. City Directories indicate the following: 33255 Zeiders Road 1996: Flaa John 2001: Bauer Eugene, Flaa John
2004 to 2020	The adjoining property to the north appeared to be undeveloped land followed by the present day commercial/industrial structure and paved parking areas further north. City Directories indicate the following: 33255 Zeiders Road 2006-2007: Flaa John

EAST	
Year(s)	**Interpreted Use/Observations**
1938 to 1976	The adjoining property to the east appeared to be Zeiders Road followed by undeveloped land.
1979 to 2010	The adjoining property to the east appeared to be Zeiders Road followed by a structure to the northwest. City Directories indicate the following: 33250 Howard Way 1986, 1991, 1996: Clark W Jas
2012 to 2020	The adjoining property to the east appeared to be Zeiders Road followed by vacant land.

SOUTH	
Year(s)	**Interpreted Use/Observations**
1938 to 1985	The adjoining property to the south appeared to be undeveloped land.
1994 to 2020	The adjoining property to the south appeared to be developed with the present day structure. City Directories indicate the following: 33235 Zeiders Road 2001: Delgadillo Ray 2006-2007: XXXX

WEST	
Year(s)	**Interpreted Use/Observations**
1938 to 1976	The adjoining property to the west appeared to be a stream and undeveloped land.
1979	The adjoining property to the west appeared to be a stream and undeveloped land with a structure further west.
1985 to 2009	The adjoining property to the west appeared to be a stream and undeveloped land, a portion of which is used as a parking area, access roads, and a structure to the southwest. City Directories indicate the following: 33250 Howard Way 1986, 1991, 1996, 2001: Cruz Raymond, Cruz Zona 2006-2007: XXXX

WEST	
Year(s)	**Interpreted Use/Observations**
2010 to 2020	The adjoining property to the west appeared to be a stream and undeveloped used as a parking area with small structures to the west and southwest.

No evidence of RECs was identified as a result of the historical review of adjoining and surrounding properties that was conducted during this assessment.

7.0 ENVIRONMENTAL REGULATORY RECORDS REVIEW

7.1 DATABASE FINDINGS

PSI retained ERIS to provide environmental database information attributed to the subject property and its surroundings. ERIS obtains environmental databases published by local, state, tribal, and federal agencies and maps the information for electronic searches. ERIS's service includes reporting Standard Environmental Records Sources as listed in in the Practice.

The search, where applicable, was performed to AMSDs listed in ASTM E1527-13. The search radius required by ASTM varies by database.

ERIS also provides data for searches of other regulatory databases they believe may have useful information. The AMSDs for those databases are determined by ERIS.

Unplottable (orphan) sites (if any were listed) having insufficient address information to be mapped were evaluated for potential location within the applicable AMSD. Those that could be determined to be within the AMSD are discussed, as appropriate.

The distribution of listed sites with respect to the subject property is tabulated and mapped in ERIS's Database Report, which is appended. The reader is referred to the table, which can be found near the front of ERIS's report. The full names of the database abbreviations and acronyms used below and in ERIS's report can be found in the Database Descriptions appendix of that report.

7.1.1 SUBJECT PROPERTY

The subject property was listed on one or more regulatory databases, as summarized below.

7.1.2 ADJOINING PROPERTIES

ERIS identified a number of regulated facilities and/or spill sites within the search radius. However, none of these sites are adjacent to the subject property and PSI considered the remaining database listings unlikely to impact the subject property based upon factors including (but not limited to):

- The nature of the listing;
- The use of the facility;
- When the facility was listed and its current listed status;
- The developmental density of the setting;
- The potential for vapors to encroach from the property to the subject property;
- The distance between the listing and subject sites related to whether releases are likely to migrate based on local surface and subsurface drainage conditions; and/or
- The presence of intervening drainage divides; and/or inferred groundwater movement.

7.1.3 SURROUNDING PROPERTIES

ERIS identified a number of regulated facilities and/or spill sites within the search radius. However, PSI considered the remaining database listings unlikely to impact the subject property based upon factors including (but not limited to):

- The nature of the listing;
- The use of the facility;
- When the facility was listed and its current listed status;
- The developmental density of the setting;
- The potential for vapors to encroach from the property to the subject property;
- The distance between the listing and subject sites related to whether releases are likely to migrate based on local surface and subsurface drainage conditions; and/or
- The presence of intervening drainage divides; and/or inferred groundwater movement.

7.2 REGULATORY AGENCY INQUIRIES

PSI sought information about the subject property and/or surrounding area from the governmental agencies listed in the following sections. Information was requested by telephone, in person, via e-mail, through an RFI, or through a written FOIA or equivalent request, as appropriate.

7.2.1 CITY OF MENIFEE

PSI submitted a FOIA request to City of Menifee City Clerk. Ms. Roxy Burns indicated that the City does not have any records related to the subject property.

7.2.2 RIVERSIDE COUNTY ENVIRONMENTAL HEALTH

PSI submitted a FOIA request to the Riverside County Environmental Health Department. A response has not been received as of the date of this report. This is a limitation and evaluated on the appended Data Gap worksheet. When a response is received, it will be reviewed and if changes to the findings or conclusions of this report are warranted, an addendum will be issued.

7.2.3 REGULATORY AGENCY MAINTAINED WEBSITES

PSI reviewed the State of California GeoTracker and EnviroStor websites for records pertaining to underground storage tanks, hazardous material storage, spills, leaks, cleanups, violations, and releases at the subject property. No records for the subject property or adjoining property addresses were identified on the GeoTracker or EnviroStor databases.

8.0 VAPOR ENCROACHMENT SCREENING

8.1 METHODOLOGY

The ASTM E1527-13 process requires the Environmental Professional to evaluate the potential for vapor encroachment onto the subject property, and to determine if such vapor encroachment constitutes evidence of a REC in connection with the subject property. The Practice does not specifically state the methods that must be used to screen for potential vapor encroachment issues. PSI utilized the VES Standard Guide as a basis to conduct a VES for the subject property. PSI used the Tier I procedure from the VES Standard Guide during this assessment. Where Tier II information is readily available during the normal course of conducting the Phase I ESA, PSI has combined the Tier I and Tier II steps.

The VES process utilizes information regarding the potential presence of releases on or near the subject property that were collected as a normal part of the Phase I ESA process. If the User Questionnaire was returned, PSI also reviewed the answers to the vapor encroachment screening questions. No additional data was collected specifically for the purpose of the VES. In order to identify potential sites of concern within the VES AMSDs, PSI reviewed, as available and appropriate, governmental database records, regulatory agency files, topo maps, aerial photography, fire insurance maps, and other information.

The AMSDs were expanded or reduced in the up-gradient, down-gradient, or cross-gradient directions by the environmental professional based on experience in the local area and applying professional judgment to factors such as: where a well-defined regional groundwater flow direction is identified; or whether other geologic features such as low permeability soils or hydrogeologic boundaries (such as rivers or streams) exist which would tend to limit the potential for migration of groundwater or vapors in a particular direction.

If a VEC was identified, the environmental professional determined whether the VEC represented evidence of a REC in connection with the subject property within the context of the Phase I ESA Standard Practice. It should be noted that the identification of a VEC in connection with the subject property does not necessarily indicate that a potential for migration of vapors into existing or proposed structures on the subject property is likely.

8.2 VES RESULTS

PSI did not identify sites of concern within the VES search radii; therefore, PSI concludes that no VECs exist on the subject property.

8.3 VES LIMITATIONS

The VES process is not intended to be an exhaustive screening and cannot wholly eliminate uncertainty regarding the presence of VECs in connection with the subject property. In addition, to the limitations inherent in the ASTM Standard Guide, the screening is intended to reduce, but not eliminate uncertainty regarding whether or not a VEC exists in connection with the subject property.

9.0 WARRANTY AND RELIANCE

9.1 STANDARD OF CARE AND WARRANTIES

Our services were not intended to be technically exhaustive. There is a possibility that with the proper application of methodologies, conditions may exist on the property that could not be identified within the scope of the assessment(s) or that were not reasonably identifiable from the available information.

No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with the property. The ESA was intended to reduce, but not eliminate uncertainty regarding the potential for RECs in connection with a property.

Our report is based on commonly known and reasonably ascertainable information, including limited, ground-level visual inspection of the property except where otherwise explicitly indicated, in general conformance with ASTM E1527-13. Findings and conclusions derived from the methodologies described in the Practice contain all of the inherent limitations in the methodologies that are referred to in the Practice.

PSI has assumed that factual information provided to us by the Client, or obtained from governmental and historical research firm, the public domain, interviews, and other sources is accurate and unbiased. PSI assumes no liability for the accuracy of data provided to us by others.

PSI did not perform any exploratory probing or discovery, perform tests, operate any specific equipment, or take measurements or samples to perform the ESA scope. The ESA was not a building code, safety, regulatory or environmental compliance inspection. The ESA is not intended to reduce the risk of the presence of mold and physical deficiencies conducive to mold nor the risk that mold or physical deficiencies conducive to mold may pose to the buildings and building occupants.

The methodologies include reviewing information provided by other sources. PSI treats information obtained from the record reviews and interviews concerning the property as reliable and the ASTM protocol does not require PSI to independently verify the information. Therefore, PSI cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete.

PSI has performed the services in a manner consistent with that level of care and skill ordinarily exercised by other members of our profession currently practicing in the same locality and under similar conditions, within the limitations of ASTM E1527-13 standard, and the All Appropriate Inquiries Rule established by the U.S. Environmental Protection Agency (40 CFR Part 312). No other warranties are implied or expressed.

The observations and recommendations presented in this report are time dependent, and conditions will change. This report speaks only as of its date.

No other warranties are implied or expressed.

9.2 RELIANCE

Victory Development, PSI's client, may rely on this report. In addition, Caliber Holdings LLC may rely on this report on the condition that such reliance is subject to the limitations and conditions accepted by PSI's client in its contract with PSI.

9.3 THIRD PARTY RELIANCE

This report was prepared pursuant to a contract between PSI and its client. That contractual relationship included an exchange of information about the subject property that was unique and serves as the basis upon which this report was prepared. Because of the importance of these understandings, our assessment may not be sufficient for the intended purposes of another party.

Reliance or any use of this report by anyone other than those parties identified above for which it was prepared, except with express written permission, is prohibited and therefore not foreseeable to PSI. Any unauthorized reliance on or use of this report, including any of the information or conclusions contained herein, will be at the third party's risk. No warranties or representations expressed or implied in this report are made to any such third party.

Third party reliance letters may be issued:

- upon timely request;
- subject to the permission of our original client; and
- payment of the then-current fee for such letters.

All third parties relying on our report, by such reliance, agree that such reliance is limited by our proposal and/or General Conditions, as applicable.

FIGURES



Figure 1 - Topographic Map

Undeveloped Land

Menifee, California 92584

Project Number: 05751921-1



Figure 2 - Site Vicinity Map

Undeveloped Land

Menifee, California 92584

Project Number: 05751921-1

APPENDIX G1

DRAINAGE STUDY

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2021

DRAINAGE STUDY

CALIBER COLLISION
CITY OF MENIFEE

February 2022

PREPARED BY: latitude 33 PLANNING & ENGINEERING

PREPARED FOR: Victory Development

JOB NUMBER: 1799.00

DRAINAGE STUDY

Caliber Collision

COUNTY OF SAN DIEGO, CALIFORNIA

FEBRUARY 9, 2022

Prepared For:

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02/07/2022

Nick Psyhogios, P.E. — Date
R.C.E. 67697 — Expires: 06/30/2023

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DECLARATION OF RESPONSIBLE CHARGE

I, HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF SAN DIEGO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

02/07/2022

Nick Psyhogios R.C.E. 67697 DATE

REGISTERED CIVIL ENGINEER



INTRODUCTION

The purpose of this report is to evaluate the existing and the proposed drainage conditions associated with the proposed Auto Repair Shop on Zeiders Road, APN 384-130-028, in the City of Menifee, in the County of Riverside, California. This project was analyzed in conformance with the County of Riverside Hydrology Manual, dated April 1978.

PROJECT DESCRIPTION

EXISTING CONDITION

The project site consists of approximately 2.37 acres of undeveloped land. The site lies immediately west of Zeiders Road and approximately 1000 feet south of Scott Road (see Appendix A for Vicinity Map). It is bordered by existing, light industrial developments in the north and west, and a residential property in the south. The vegetation consists of mostly grass and one tree. Stormwater generally drains from the southeast corner towards the northwest corner of the property. Offsite run-on from the property to the south enters the site along the southern property line and continues northwest through the site. The tributary area of offsite run-on from the south was not calculated, however, in final engineering further investigation and analysis of offsite run-on will be performed. Runoff leaving the site enters a natural drainage channel on the adjacent property to the west which continues north and connects to a series of man-made drainage channels and culverts which outlet to Canyon Lake, which discharges to the San Jacinto River, which discharges to Lake Elsinore. The onsite soil is classified as 30% HSG C and 70% HSG D according to the USDA NRCS Soil Survey (see Appendix E for HSG Map). See Existing Condition Drainage Map in **Appendix A** for more information.

DEVELOPED CONDITION

The proposed project consists of an autobody repair shop and a parking lot. The project footprint includes approximately 50,000 square feet of parking lot, 51,000 square feet of landscaping, and an 18,500 square foot building. In the proposed condition, the overall drainage pattern is maintained with runoff flowing towards the northwest corner of the site. Runoff from the eastern and northern areas of proposed site including driveways, walkways, parking, and landscaped areas will be directed towards a concrete ditch along the northern edge of the property, which will enter a stormdrain and convey runoff towards the proposed biofiltration basin to the west. The runoff from the building roof will be captured with roof drains which connect underground to a proposed stormdrain pie along the southern property line which continues west and outlets to the biofiltration basin for treatment and detention. This stormdrain line also receives runoff from the DG pathway along the southern edge of the proposed building via three catch basin inlets. Inlet capacity of catch basins will be calculated in final engineering. Runoff from the western parking area will sheet flow to the west and enter a gutter along the western parking edge and will be directed to the basin via curb cuts with rip-rap outlets. Curb cut and rip-rap sizing will be provided in final engineering.

The proposed biofiltration basin will provide water quality treatment, hydro mitigation, and peak flow rate detention for the 100-year storm. The basin is sized to have over 11,000 cubic feet of above-ground storage volume which will provide adequate detention to keep proposed peak flow rates leaving the site to less than or equal to peak flow rates leaving the site in the pre-project condition. Stormwater will outlet from this basin via an outlet control structure and stormdrain pipe at the northwest corner of the property where it will enter the existing drainage channel on the adjacent property to the west and continue to flow north towards Canyon Lake, the San Jacinto River, and Lake Elsinore.

Off-site run-on from the property to the south will no longer be able to flow northwest through the property because of the proposed development. To manage this off-site run-on, a stormdrain culvert is proposed midway along the southern property line which will intercept the run-on flow and convey it west and then north where it will discharge at the northwest corner of the property into the natural drainage ditch that continues north. The proposed bypass stormdrain pipe will be sized in final engineering to have adequate capacity to convey the off-site run-on from the 100-year storm. See Proposed Condition Drainage Map in **Appendix A** for more information.

METHODOLOGY

The existing and proposed stormwater peak flow rates have been calculated in conformance with the County of Riverside guidelines utilizing the Rational Method to estimate the 100-year storm runoff values. The determination of the Rational Method parameters is explained below, and the values are summarized in Tables 4-10 in Appendix C.

Time of Concentration

Existing Conditions

Due to the size and existing condition of the project site, the entire site was determined to be the initial subarea (see Existing Conditions Drainage Map in Appendix B). The time of concentration for this area was found by plotting the length of the longest flow path and the slope on the chart found on Plate D-3 (see **Appendix D**).

Proposed Conditions

In the proposed condition, the site was divided into three subbasins; P10, P11, and P12. The initial subarea for subbasins P10 and P12 were determined to be the areas where water flows over a surface (pavement or roof) before entering the proposed stormdrain network (see Proposed Conditions Drainage Map in Appendix D for delineation). Subbasin P11 was determined to consist only of initial subarea. Subbasin P10 represents the eastern portion of the proposed site and comprises parking, walkways, drive aisles and landscaping. Runoff from

this area drains north across pavement and through shallow gutters before entering a stormdrain culvert inlet at node 10.20. This stormdrain continues west where it discharges to the stormwater detention BMP at node 10.30. Subbasin P11 represents the western portion of the site which comprises parking, drive aisles, landscaping, and some building roof. This area drains overland northwest across the parking lot and discharges via gutters and a drainage ditch to the detention BMP at node 11.20. The proposed drainage ditch is very short (less than 20') and so the travel time through this segment was omitted from the calculations. Subbasin P12 represents the building roof. This area drains from north to south and enters roof drains which tie into a proposed stormdrain along the south of the building which continues west and discharges west to the biofiltration basin. This discharge point is represented by node 12.30. The time of concentration for each initial subbasin was determined from the charts on Plate D-3. The travel time for flow segments downstream of the initial subarea which represented by pipe flow were determined by plotting the flow from the initial subarea, the pipe diameter, and the slope of the pipe on the chart on Plate D-8.1 (see Appendix D). Using this diameter, the flow of the pipe flowing full was found, and this was used to determine the velocity of the pipe flowing full. The time of concentration was found by dividing the length of the pipe by this velocity. The total time of concentrations for each flow path was determined by adding the time of concentration of the initial subareas and the downstream subarea.

Rainfall Intensity

The rainfall intensity was found using the time of concentration and the 100-year storm rainfall intensity values from the chart for Sun City located on Plate D-4.1, sheet 5 (see Appendix D).

Runoff Coefficient

The runoff coefficient for the existing, undeveloped condition was found using Plate D-5.7 (see Appendix D) and interpolating between the provided C values. For the proposed condition, HSG was assumed to be D and plate D-5.4 was used. The runoff coefficients were found using the rainfall intensity and the curve for the 65% impervious condition for P11 and 90% impervious-Commercial developed condition was used for the rest. The antecedent moisture condition (AMC) was assumed to be II.

Peak Flow Rate Analysis

A Point of Compliance (POC) was determined at the northwest corner of the property where runoff leaves the site in both the existing and proposed condition. This is labeled as POC 1 on the Existing and Proposed Drainage Maps in **Appendix A**. Peak flow rates at POC 1 were calculated using the Rational Method formula Q=CIA from the values obtained above for the existing and proposed condition. In the post-development condition, the peak flow rates and time of concentrations from the three subbasins were combined at the BMP using the

confluence equations calculation methods on plate D-1 of the County Hydrology Manual to achieve a singular peak flow rate and time of concentration.

Due to the increase in proposed impervious area, peak flow rates will increase in the post-development unmitigated condition, and so a Biofiltration Basin will be included in the design to provide peak flow rate attenuation. The BMP has been designed to satisfy the requirements for stormwater pollutant control and hydromodification in accordance with the Water Quality Management Plan guidance for the Santa Ana Region of Riverside County. See associated Water Quality Management Plan for more information. Storage volume in addition to the water quality volume will be included to achieve adequate storage to detain runoff in the 100-year storm. As proposed, the BMP has over 11,000 cubic feet of storage. Further calculations to confirm BMP sizing will be performed in final engineering.

In final engineering, Autodesk Storm and Sanitary Analysis (SSA) software will be used to create a model for BMP-mitigation. In the model, the proposed biofiltration basin will be represented by a storage node with an inflow equal to the proposed-unmitigated flow that was calculated using the Rational Method. An HMP orifice, mid-flow orifice and emergency spillway weir will connect to this node as outlets. The different outlet devices will provide outflow rates which will optimize detention as storm intensities vary. Since the runoff will leave the site after it leaves the basin, the peak flow rate from the model will be compared to the existing condition peak flow rate. The required detention volume of the biofiltration basin will be determined by using SSA to ensure that the peak flow rate from the basin is less than that of the existing leaving the site in the 100-year storm., and (in final engineering) **Appendix F** for Biofiltration Basin Sizing and Detention Analysis.

RESULTS AND CONCLUSION

The existing and proposed-unmitigated condition results are summarized in Tables 1, 2, and 3 below.

Table 1

Existing Runoff	
CA	1.97
I (in/hr)	2.89
Q (cfs)	**5.68**

Table 2

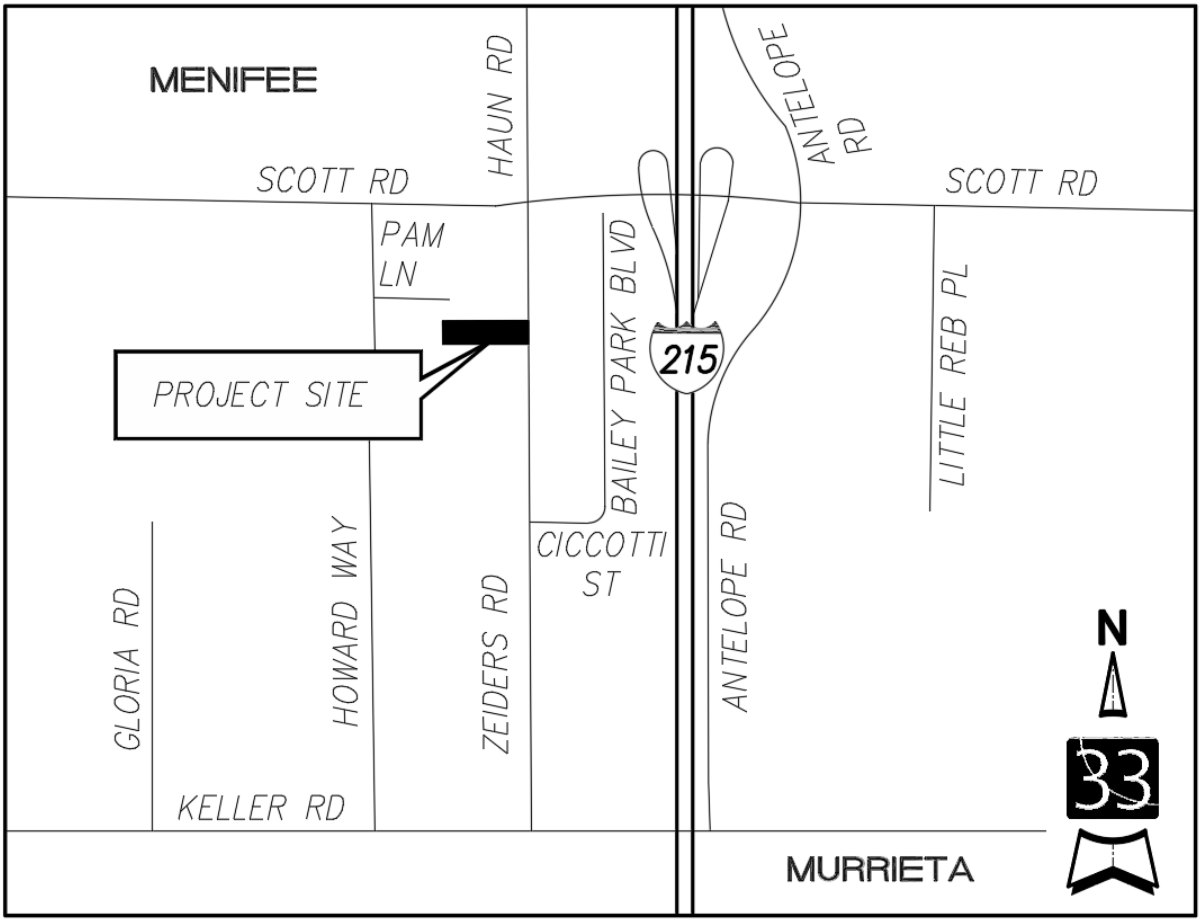
Proposed Runoff			
	CA	I (in/hr)	**Q (cfs)**
P10	0.51	3.69	**1.89**
P11	1.16	4.27	**4.94**
P12	0.42	4.25	**1.80**

Table 3

Overall Runoff Summary		
	Existing Condition	Proposed-Unmitigated Condition
Time of Concentration (min)	20.7	6.30
Contributing Area (acres)	2.40	2.37
Total 100-year Q (cfs)	5.68	8.16
*Proposed mitigated peak flow will be calculated in final engineering, but will be equal to or less than existing condition		

From existing to proposed-unmitigated conditions, the overall peak Q_{100} increased due to the increase in impervious areas on the site. However, the proposed biofiltration basin will be sized appropriately to mitigate the peak flow rates to be at or below the pre-development flow rates. An analysis for the detention provided by the biofiltration basin will be included in final engineering.

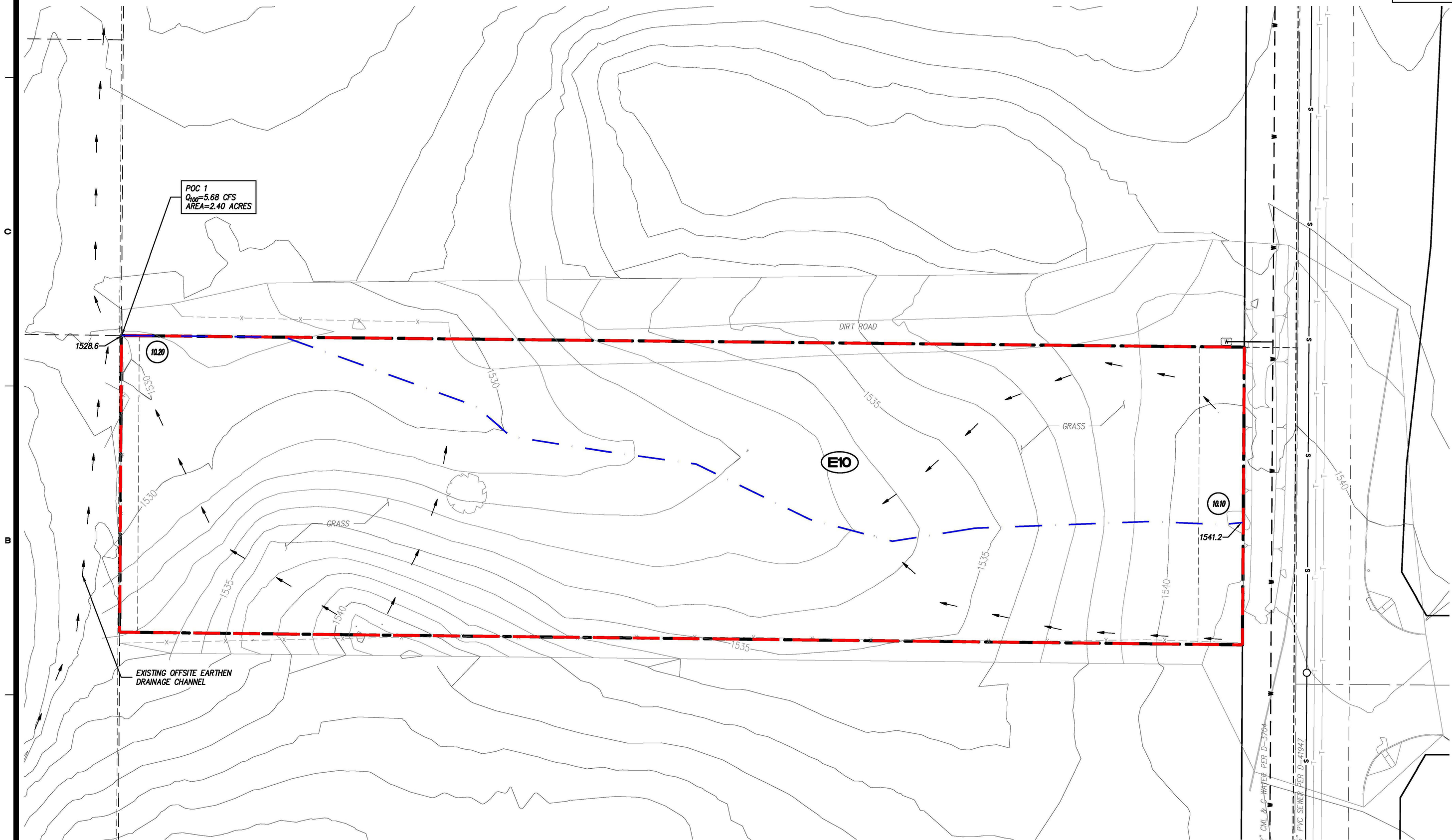
APPENDIX A – VICINITY MAP

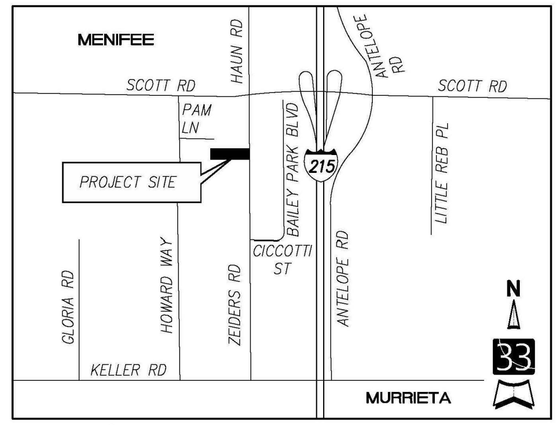


VICINITY MAP
NO SCALE

APPENDIX B – EXISTING AND PROPOSED DRAINAGE MAPS

EXISTING CONDITIONS





VICINITY MAP
NO SCALE

LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- MAJOR CONTOUR (365)
- MINOR CONTOUR
- K-RAIL
- FENCE
- TREES/SHRUBS
- MAJOR BASIN DIVIDE/ PROJECT LIMITS
- SUB-BASINS
- DRAINAGE PATTERNS
- FLOWLINE
- CONVEYANCE LINK
- SUB-BASIN ID (XXXX)
- NODE ID

N

0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

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Tel 858.751.0633

DATE	REVISION	BY
10.27.2021	CUP APPLICATION	MAM
02.11.2022	2ND CUP SUBMITTAL	MAM

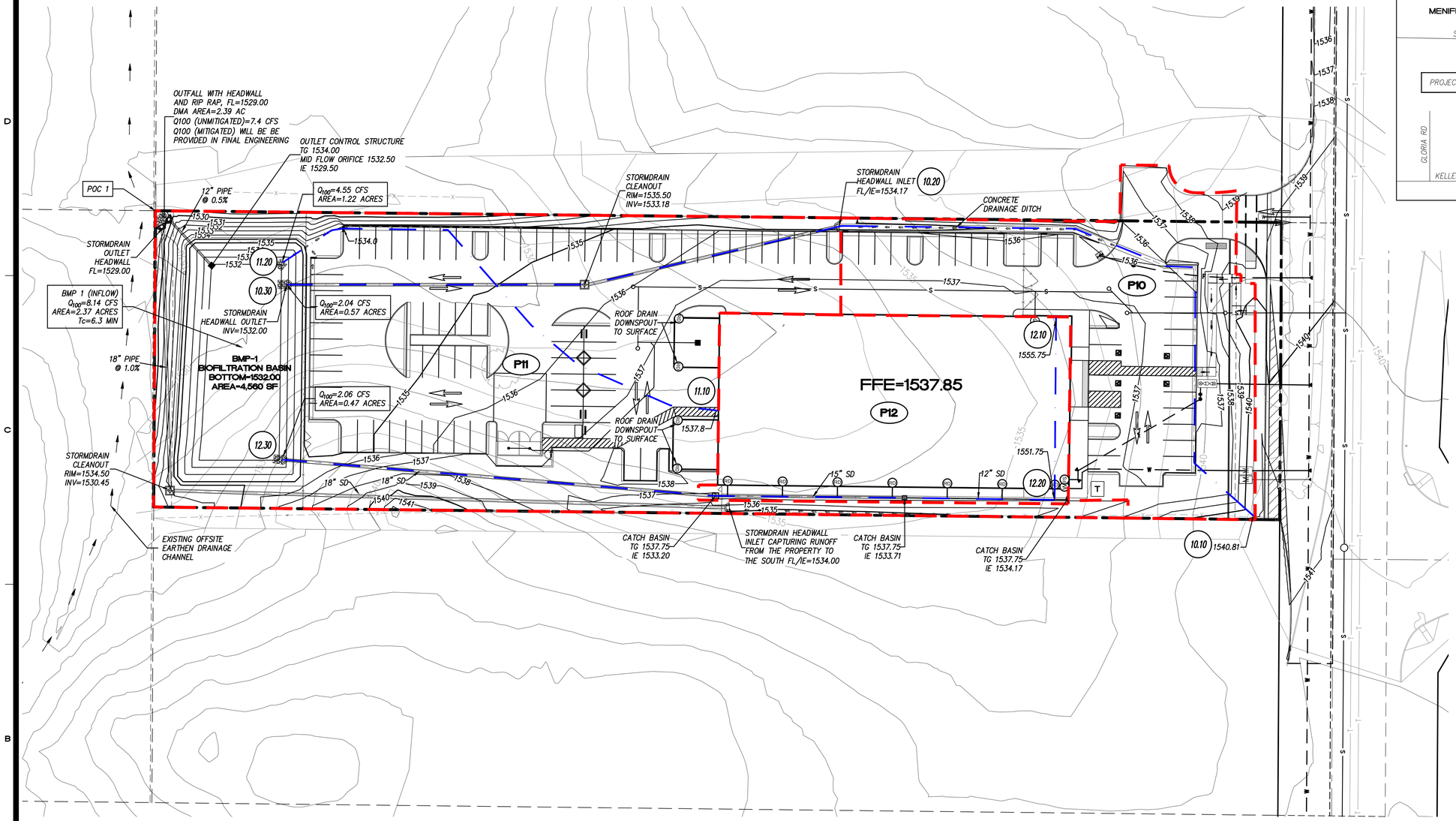
CALIBER COLLISION

33235-33185 ZEIDERS RD, MENIFEE, CA 92584

L33 PROJECT NUMBER (PN): 1799.00
OTHER PN: XXXX.XX
DESIGNED BY: MAM DATE: 10.27.2021
DRAWN BY: MAM DATE: 10.27.2021
CHECKED BY: SDD DATE: 10.27.2021

SHEET
1 OF 2

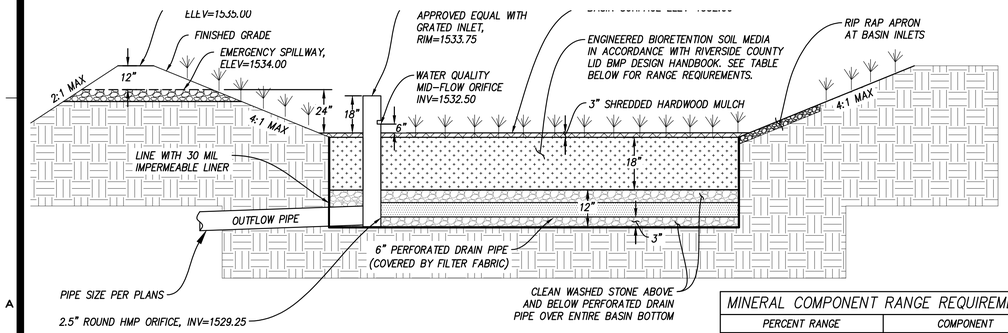
PROPOSED CONDITIONS



VICINITY MAP
NO SCALE

LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- MAJOR CONTOUR
- MINOR CONTOUR (365)
- K-RAIL
- FENCE
- TREES/SHRUBS
- SUB-BASINS
- DRAINAGE PATTERNS
- FLOWLINE
- CONVEYANCE LINK
- INITIAL SUB-BASIN ID (XXXX)
- NODE ID (XXXX)
- ELEVATION AT NODE XX.XX



MINERAL COMPONENT RANGE REQUIREMENTS	
PERCENT RANGE	COMPONENT
70–80	SAND
15–20	SILT
5–10	CLAY

NOTE: BIOFILTRATION BASIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH RIVERSIDE COUNTY LOW IMPACT DEVELOPMENT BMP DESIGN HANDBOOK AND PROJECT SPECIFIC WATER QUALITY MANAGEMENT PLAN FOR THE SANTA ANA WATERSHED REGION

BIOFILTRATION BASIN 1
NTS

SUBBASIN TABLE

SUBBASIN ID	AREA (AC)	CURVE NUMBER (C)	TC (MIN)	I (IN/HR)	Q100 (CFS)
P10	0.57	0.896	8.27	3.69	189
P11	1.32	0.875	6.3	4.27	4.94
P12	0.47	0.8970	6.39	4.25	1.80
SUM	2.37				

N

0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

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L33 PROJECT NUMBER (PN): 1799.00
OTHER PN: XXXX.XX
DESIGNED BY: MAM DATE: 10.27.2021
DRAWN BY: MAM DATE: 10.27.2021
CHECKED BY: SDD DATE: 10.27.2021

SHEET 2 OF 2

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APPENDIX C – RATIONAL METHOD PARAMETERS

Pre-Development Rational Method Parameters

Table 4	
Tc for Initial Subarea - E10 (Node 10.10 to 10.20)	
L (ft)	650
Upstream Elev (ft)	1541.2
Downstream Elev (ft)	1528.6
H (ft)	12.6
K	Undeveloped - Fair Cover
Tc from Plate D-3 (min)	**20.7**

Table 5	
Runoff Coefficient - E10	
Cover	Grass - 30% C, 70% D
RI	82.5
Intensity (in/hr)	2.89
C	0.82
Area (acres)	2.40

Table 6	
Rainfall Intesity for 100-year Storm for Sun City	
Tc (min)	20.7
Rainfall Intensity (in/hr)	2.89

Table 7	
Existing Runoff	
CA	1.97
I (in/hr)	2.89
Q (cfs)	**5.68**

Post-Development Rational Method Parameters

Table 8

Tc for Initial Subarea - P10 (Node 10.10 to 10.20)	
L (ft)	356
Upstream Elev (ft)	1540.81
Downstream Elev (ft)	1534.35
H (ft)	6.46
K	Commercial - Paved
Tc from Plate D-3 (min)	**7.25**
Tc for Remaining Flow Path (Node 10.20 to 10.30)	
Initial Q (cfs)	2.04
Slope (ft/ft)	0.0075
Length (ft)	315
D from Plate D-8.1 (in)	12
Q_{full} (cfs)	4.05
A_{full} (ft^2)	0.79
V_{full} (fps)	5.16
Tc (min)	**1.02**
Total Tc from Node 10.10 to 10.30	**8.27**

Table 9

Tc for Initial Subarea - P11 (Node 11.10 to 11.20)	
L (ft)	246
Upstream Elev (ft)	1537.8
Downstream Elev (ft)	1534
H (ft)	3.8
K	Commercial - Paved
Tc from Plate D-3 (min)	**6.3**

Table 10

Tc for Initial Subarea -P12 (Node 12.10 to 12.20)	
L (ft)	100
Upstream Elev (ft)	1555.75
Downstream Elev (ft)	1551.75
H (ft)	4
K	Commercial - Paved
Tc from Plate D-3 (min)	**5**
Tc for Remaining Flow Path (Node 12.20 to 12.30)	
Initial Q (cfs)	2.06
Slope (ft/ft)	0.0075
Length (ft)	430
D from Plate D-8.1 (in)	12
Q_{full} (cfs)	4.05
A_{full} (ft^2)	0.79
V_{full} (fps)	5.16
Tc (min)	**1.39**
Total Tc from Node 10.10 to 10.30	**6.39**

Table 11

Rainfall Intensity for 100-year Storm for Sun City (Plate D-4.1)		
	Tc (min)	Rainfall Intensity (in/hr)
Node 10.10 to 10.20	7.25	3.99
Node 10.10 to 10.30	8.27	3.69
Node 11.10 to 11.20	6.30	4.27
Node 12.10 to 12.20	5.00	4.85
Node 12.10 to 12.30	6.39	4.25

Table 12

Runoff Coefficient					
	Cover	RI	Intensity (in/hr)	C	Area (acres)
P10	90% Impervious	-	3.69	0.90	0.57
P11	65% Impervious	-	4.27	0.88	1.32
P12	90% Impervious	-	4.25	0.90	0.47

Table 13

Proposed Runoff			
	CA	I (in/hr)	**Q (cfs)**
P10	0.51	3.69	**1.89**
P11	1.16	4.27	**4.94**
P12	0.42	4.25	**1.80**

Table 14

Junction Analysis

Junction Calculation 1				
P10			P11	
Qa	1.89		Qb	4.94
Ta	8.27		Tb	6.30
Ia	3.69		Ib	4.27
Qp1=	**6.39**	<--- NEW Q		
Tp1=	**6.30**	<--- NEW Tc		

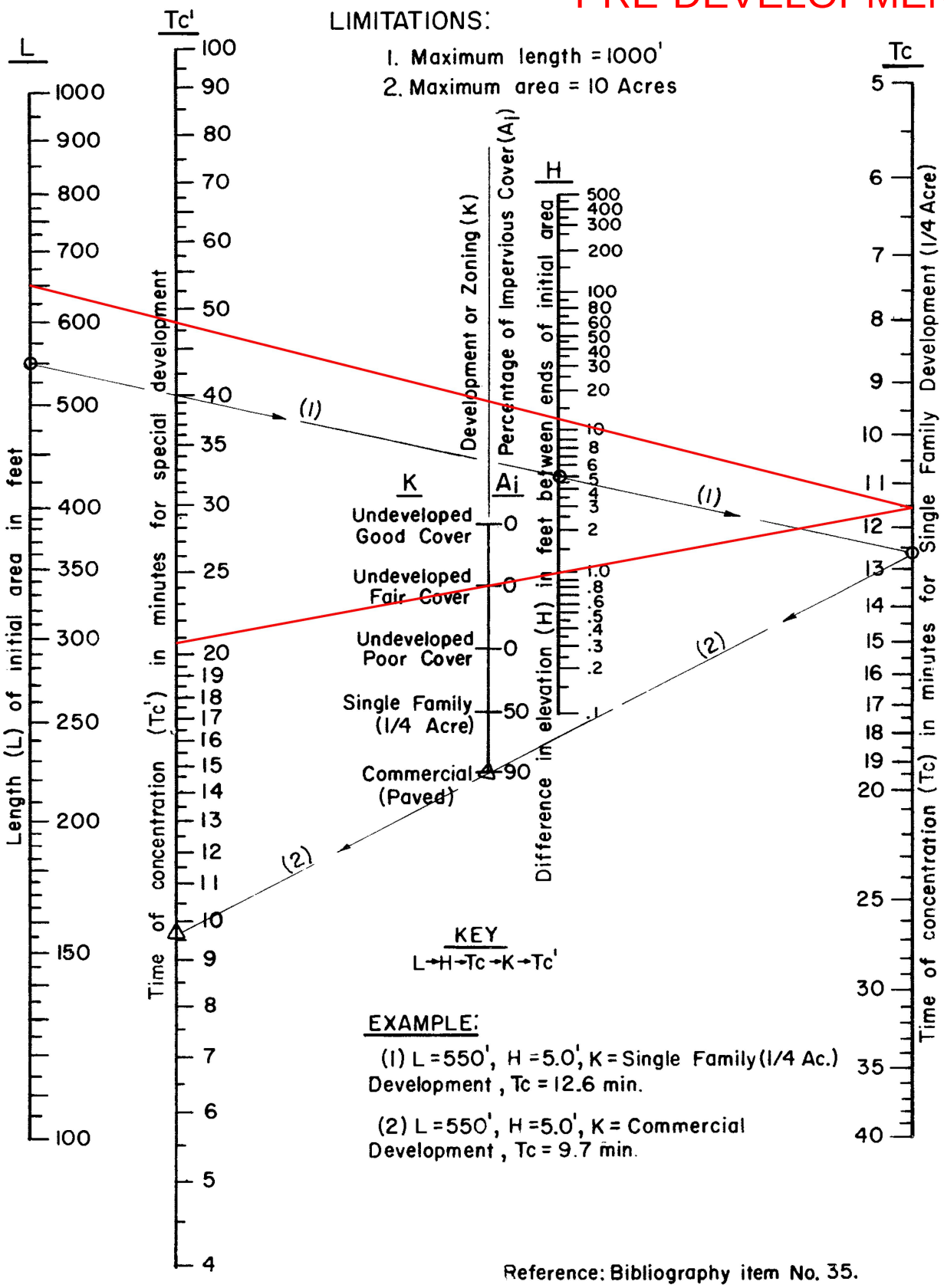
Junction Calculation 2				
P12			Above	
Qa	1.80		Qb	6.39
Ta	6.39		Tb	6.30
Ia	4.25		Ib	-
Qp2=	**8.16**	<--- NEW Q		
Tp2=	**6.30**	<--- NEW Tc		

Final Qpeak into BMP = Qp2

Final Tc into BMP = Tp2

APPENDIX D – COUNTY OF RIVERSIDE HYDROLOGY MANUAL REFERENCES

PRE-DEVELOPMENT



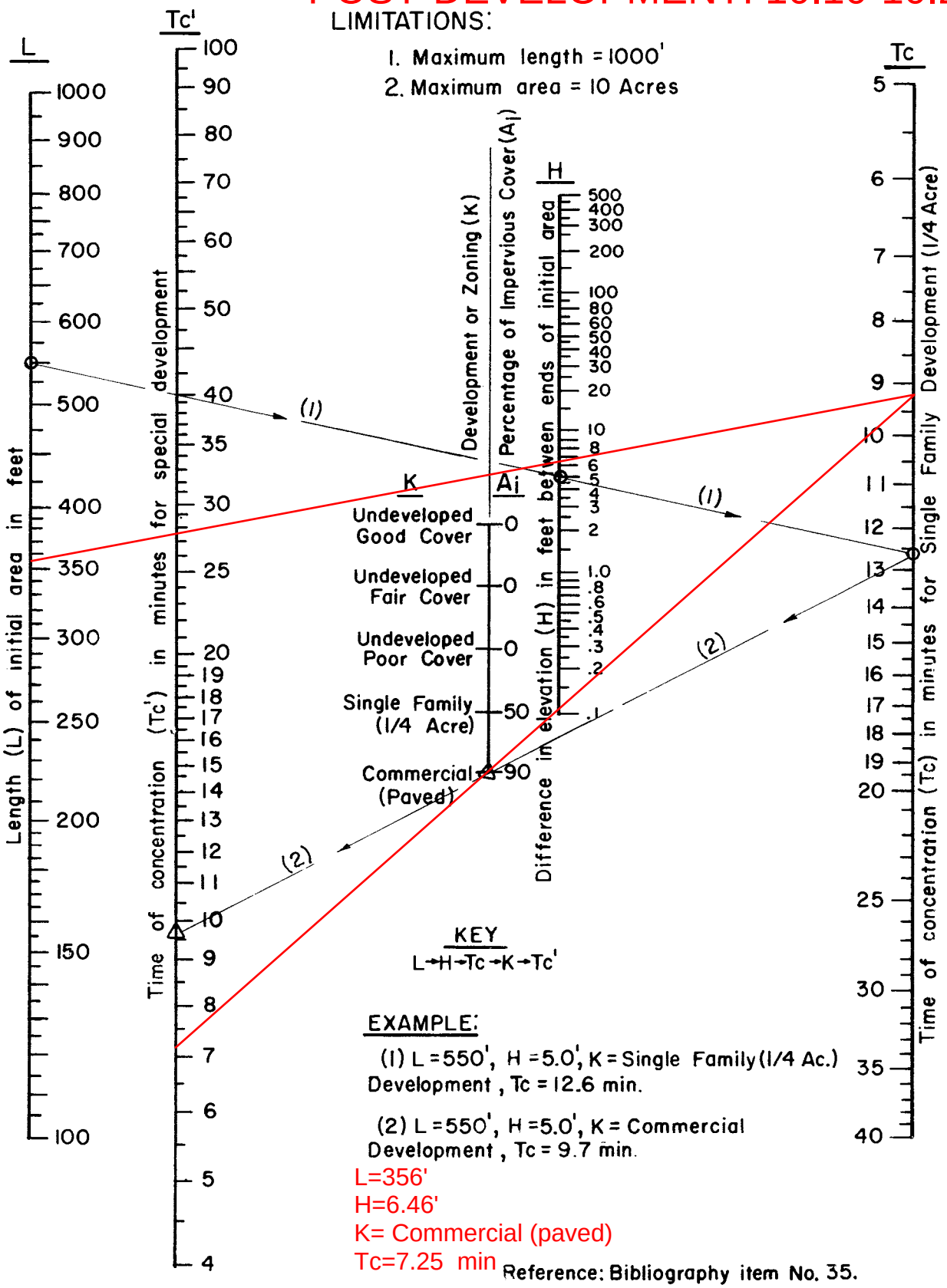
Reference: Bibliography item No. 35.

RCFC & WCD
HYDROLOGY MANUAL

TIME OF CONCENTRATION FOR INITIAL SUBAREA

PLATE D-3

POST-DEVELOPMENT: 10.10-10.20



Reference: Bibliography item No. 35.

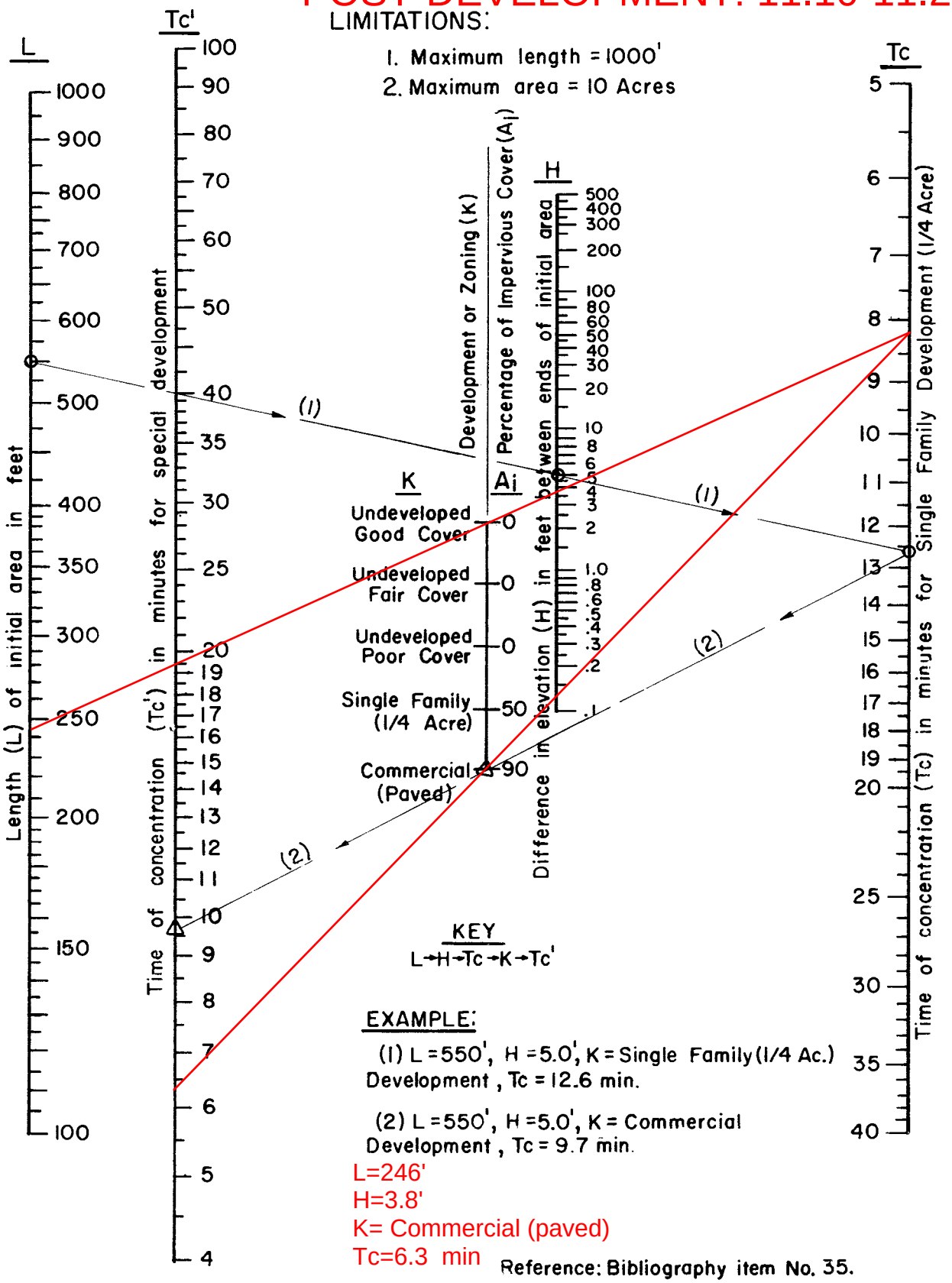
RCFC & WCD

HYDROLOGY MANUAL

TIME OF CONCENTRATION FOR INITIAL SUBAREA

PLATE D-3

POST-DEVELOPMENT: 11.10-11.20



Reference: Bibliography item No. 35.

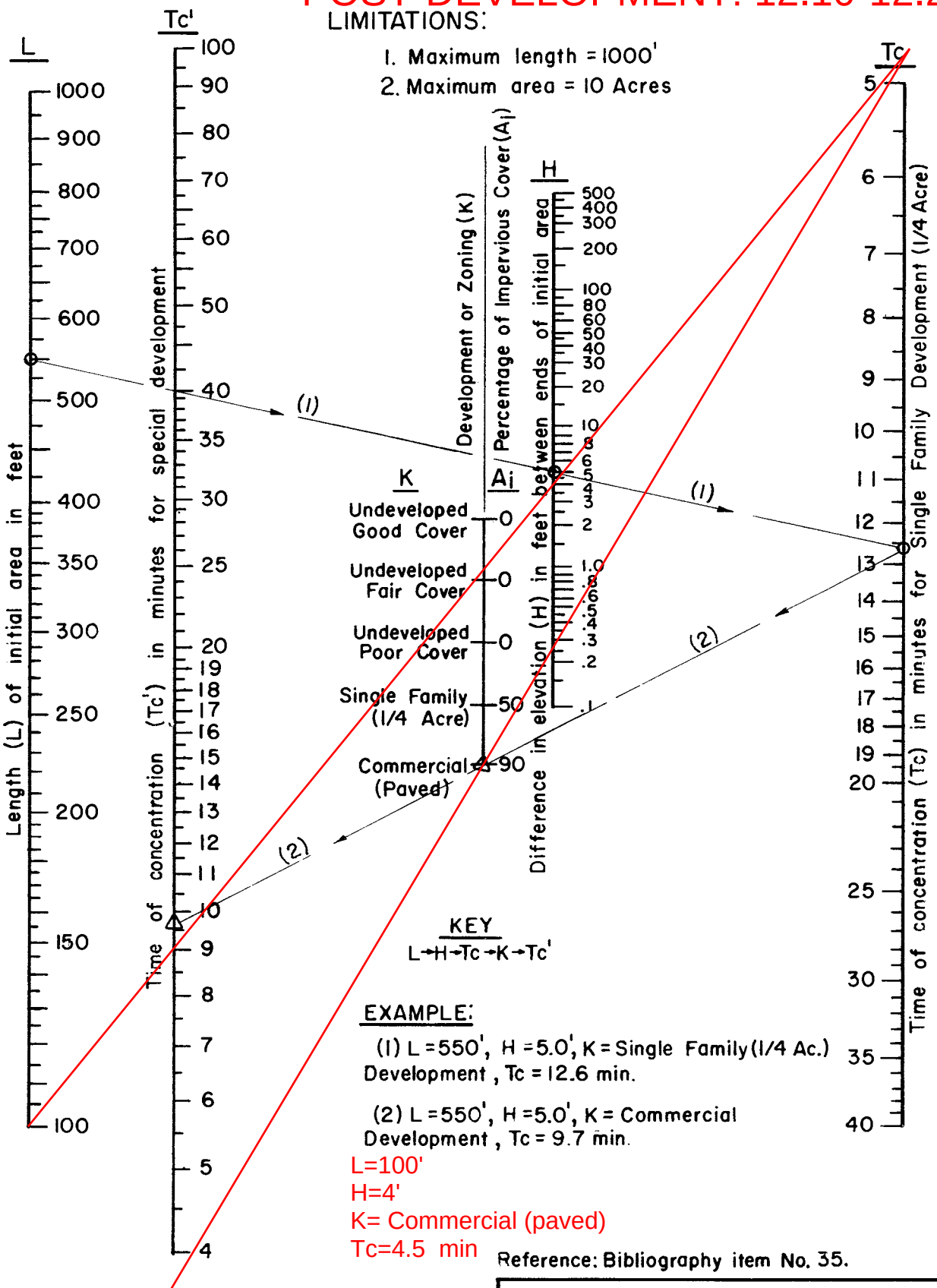
RCFC & WCD

HYDROLOGY MANUAL

TIME OF CONCENTRATION FOR INITIAL SUBAREA

PLATE D-3

POST-DEVELOPMENT: 12.10-12.20



Reference: Bibliography item No. 35.

RCFC & WCD

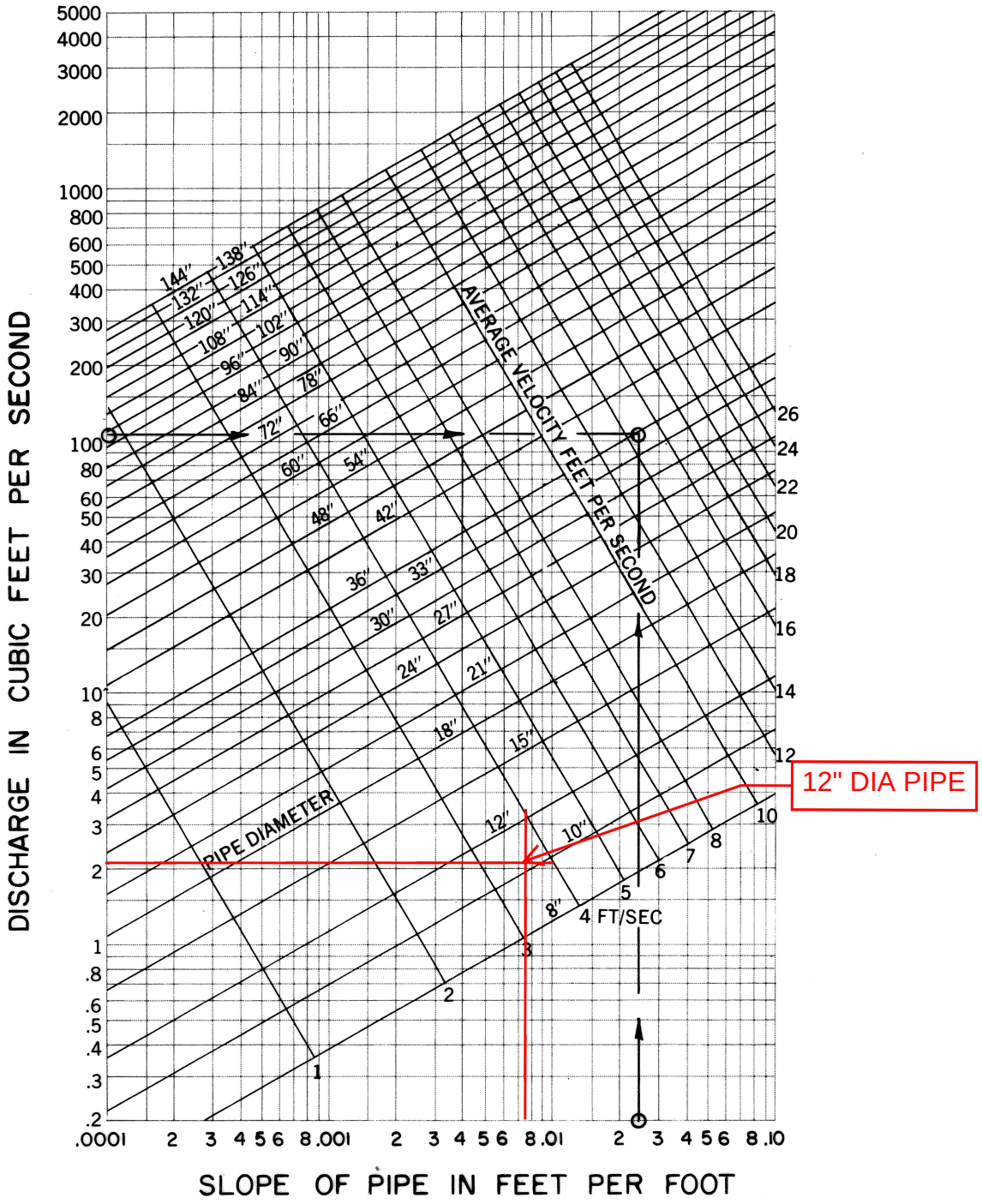
HYDROLOGY MANUAL

TIME OF CONCENTRATION FOR INITIAL SUBAREA

PLATE D-3

REQUIRED PIPE SIZE

BASED ON MANNING'S EQUATION n=0.013



EXAMPLE:

Given Q = 105 cfs and S = 2.5 % find required pipe size and velocity. From curves required Size = 36"ϕ and Velocity = 14.8 fps

Reference: Bibliography item No. 10.

RCFC & WCD

HYDROLOGY MANUAL

VELOCITY DISCHARGE CURVE
CIRCULAR CONCRETE PIPES FLOWING FULL

PLATE D-8.1

RUNOFF INDEX NUMBER TO FIND C VALUE

RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group A	B	C	D
NATURAL COVERS -					
Barren (Rockland, eroded and graded land)		78	86	91	93
Chaparrel, Broadleaf (Manzonita, ceanothus and scrub oak)	Poor	53	70	80	85
	Fair	40	63	75	81
	Good	31	57	71	78
Chaparrel, Narrowleaf (Chamise and redshank)	Poor	71	82	88	91
	Fair	55	72	81	86
Grass, Annual or Perennial	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Meadows or Cienegas (Areas with seasonally high water table, principal vegetation is sod forming grass)	Poor	63	77	85	88
	Fair	51	70	80	84
	Good	30	58	72	78
Open Brush (Soft wood shrubs - buckwheat, sage, etc.)	Poor	62	76	84	88
	Fair	46	66	77	83
	Good	41	63	75	81
Woodland (Coniferous or broadleaf trees predominate. Canopy density is at least 50 percent)	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	28	55	70	77
Woodland, Grass (Coniferous or broadleaf trees with canopy density from 20 to 50 percent)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
URBAN COVERS -					
Residential or Commercial Landscaping (Lawn, shrubs, etc.)	Good	32	56	69	75
Turf (Irrigated and mowed grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
AGRICULTURAL COVERS -					
Fallow (Land plowed but not tilled or seeded)		76	85	90	92

Weighted
RI=0.7*84+.3*79=82.5

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HYDROLOGY MANUAL

RUNOFF INDEX NUMBERS FOR PERVIOUS AREA

PLATE D-5.5 (1 of 2)

RUNOFF COEFFICIENT FOR RI=82

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HYDROLOGY MANUAL

RUNOFF COEFFICIENT CURVE DATA

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 76

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.49	.63	.70	.74	.77	.79	.80	.81	.83	.84
5.	.04	.51	.65	.71	.75	.78	.79	.81	.82	.83	.84
10.	.09	.53	.66	.72	.76	.78	.80	.81	.82	.84	.85
15.	.13	.55	.67	.73	.77	.79	.81	.82	.83	.84	.85
20.	.18	.57	.69	.74	.77	.80	.81	.82	.83	.84	.85
25.	.22	.59	.70	.75	.78	.80	.82	.83	.84	.85	.86
30.	.27	.61	.71	.76	.79	.81	.82	.83	.84	.85	.86
35.	.31	.63	.73	.77	.80	.82	.83	.84	.84	.85	.86
40.	.36	.65	.74	.78	.81	.82	.83	.84	.85	.86	.86
45.	.40	.67	.75	.79	.81	.83	.84	.85	.85	.86	.87
50.	.45	.69	.77	.80	.82	.84	.84	.85	.86	.87	.87
55.	.49	.71	.78	.81	.83	.84	.85	.86	.86	.87	.87
60.	.54	.74	.79	.82	.84	.85	.86	.86	.87	.87	.88
65.	.58	.76	.81	.83	.85	.85	.86	.87	.87	.88	.88
70.	.63	.78	.82	.84	.85	.86	.87	.87	.87	.88	.88
75.	.67	.80	.83	.85	.86	.87	.87	.88	.88	.88	.89
80.	.72	.82	.85	.86	.87	.87	.88	.88	.88	.89	.89
85.	.76	.84	.86	.87	.88	.88	.88	.89	.89	.89	.89
90.	.81	.86	.87	.88	.88	.89	.89	.89	.89	.89	.89
95.	.86	.88	.89	.89	.89	.89	.89	.90	.90	.90	.90
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 78

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.51	.65	.72	.76	.78	.80	.81	.82	.84	.85
5.	.04	.53	.67	.73	.76	.79	.80	.82	.83	.84	.85
10.	.09	.55	.68	.74	.77	.79	.81	.82	.83	.84	.85
15.	.13	.57	.69	.75	.78	.80	.81	.83	.83	.85	.85
20.	.18	.59	.70	.76	.79	.81	.82	.83	.84	.85	.86
25.	.22	.61	.72	.76	.79	.81	.82	.83	.84	.85	.86
30.	.27	.63	.73	.77	.80	.82	.83	.84	.85	.86	.86
35.	.31	.65	.74	.78	.81	.82	.83	.84	.85	.86	.87
40.	.36	.67	.75	.79	.81	.83	.84	.85	.85	.86	.87
45.	.40	.69	.76	.80	.82	.84	.84	.85	.86	.87	.87
50.	.45	.71	.78	.81	.83	.84	.85	.86	.86	.87	.87
55.	.49	.73	.79	.82	.84	.85	.85	.86	.87	.87	.88
60.	.54	.75	.80	.83	.84	.85	.86	.87	.87	.87	.88
65.	.58	.76	.81	.84	.85	.86	.86	.87	.87	.88	.88
70.	.63	.78	.83	.85	.86	.86	.87	.87	.88	.88	.88
75.	.67	.80	.84	.85	.86	.87	.87	.88	.88	.88	.89
80.	.72	.82	.85	.86	.87	.88	.88	.88	.88	.89	.89
85.	.76	.84	.86	.87	.88	.88	.88	.89	.89	.89	.89
90.	.81	.86	.88	.88	.89	.89	.89	.89	.89	.89	.89
95.	.86	.88	.89	.89	.89	.89	.89	.89	.90	.90	.90
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 80

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.54	.67	.74	.77	.79	.81	.82	.83	.84	.85
5.	.04	.56	.69	.74	.78	.80	.81	.83	.83	.85	.86
10.	.09	.58	.70	.75	.78	.80	.82	.83	.84	.85	.86
15.	.13	.59	.71	.76	.79	.81	.82	.83	.84	.85	.86
20.	.18	.61	.72	.77	.80	.82	.83	.84	.84	.86	.86
25.	.22	.63	.73	.78	.80	.82	.83	.84	.85	.86	.86
30.	.27	.65	.74	.79	.81	.83	.84	.85	.85	.86	.87
35.	.31	.67	.75	.79	.82	.83	.84	.85	.86	.86	.87
40.	.36	.68	.76	.80	.82	.84	.85	.85	.86	.87	.87
45.	.40	.70	.78	.81	.83	.84	.85	.86	.86	.87	.87
50.	.45	.72	.79	.82	.84	.85	.86	.86	.87	.87	.88
55.	.49	.74	.80	.83	.84	.85	.86	.86	.87	.87	.88
60.	.54	.76	.81	.83	.85	.86	.86	.87	.87	.88	.88
65.	.58	.77	.82	.84	.86	.86	.87	.87	.88	.88	.88
70.	.63	.79	.83	.85	.86	.87	.87	.88	.88	.88	.89
75.	.67	.81	.84	.86	.87	.87	.88	.88	.88	.89	.89
80.	.72	.83	.86	.87	.87	.88	.88	.88	.89	.89	.89
85.	.76	.85	.87	.88	.88	.88	.89	.89	.89	.89	.89
90.	.81	.86	.88	.88	.88	.89	.89	.89	.89	.89	.90
95.	.86	.88	.89	.89	.89	.89	.90	.90	.90	.90	.90
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 82

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.57	.70	.75	.79	.81	.82	.83	.84	.85	.86
5.	.04	.58	.71	.76	.79	.81	.82	.83	.84	.85	.86
10.	.09	.60	.72	.77	.80	.82	.83	.84	.84	.86	.86
15.	.13	.62	.73	.78	.80	.82	.83	.84	.85	.86	.86
20.	.18	.63	.74	.78	.81	.82	.84	.84	.85	.86	.87
25.	.22	.65	.75	.79	.81	.83	.84	.85	.85	.86	.87
30.	.27	.67	.76	.80	.82	.83	.84	.85	.86	.87	.87
35.	.31	.68	.77	.80	.83	.84	.85	.85	.86	.87	.87
40.	.36	.70	.78	.81	.83	.84	.85	.86	.86	.87	.87
45.	.40	.72	.79	.82	.84	.85	.86	.86	.87	.87	.88
50.	.45	.73	.80	.83	.84	.85	.86	.87	.87	.88	.88
55.	.49	.75	.81	.83	.85	.86	.86	.87	.87	.88	.88
60.	.54	.77	.82	.84	.85	.86	.87	.87	.88	.88	.88
65.	.58	.78	.83	.85	.86	.87	.87	.88	.88	.88	.89
70.	.63	.80	.84	.86	.87	.87	.88	.88	.88	.89	.89
75.	.67	.82	.85	.86	.87	.88	.88	.88	.88	.89	.89
80.	.72	.83	.86	.87	.88	.88	.88	.89	.89	.89	.89
85.	.76	.85	.87	.88	.88	.89	.89	.89	.89	.89	.89
90.	.81	.87	.88	.89	.89	.89	.89	.89	.89	.90	.90
95.	.86	.88	.89	.89	.89	.90	.90	.90	.90	.90	.90
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENT FOR RI=84

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HYDROLOGY MANUAL

RUNOFF COEFFICIENT CURVE DATA

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 84

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.60	.72	.77	.80	.82	.83	.84	.85	.86	.86
5.	.04	.61	.73	.78	.80	.82	.83	.84	.85	.86	.87
10.	.09	.63	.74	.78	.81	.83	.84	.85	.85	.86	.87
15.	.13	.64	.75	.79	.81	.83	.84	.85	.85	.86	.87
20.	.18	.66	.75	.80	.82	.83	.84	.85	.86	.87	.87
25.	.22	.67	.76	.80	.82	.84	.85	.85	.86	.87	.87
30.	.27	.69	.77	.81	.83	.84	.85	.86	.86	.87	.87
35.	.31	.70	.78	.82	.83	.85	.85	.86	.87	.87	.88
40.	.36	.72	.79	.82	.84	.85	.86	.86	.87	.87	.88
45.	.40	.73	.80	.83	.84	.85	.86	.87	.87	.88	.88
50.	.45	.75	.81	.83	.85	.86	.86	.87	.87	.88	.88
55.	.49	.76	.82	.84	.85	.86	.87	.87	.88	.88	.88
60.	.54	.78	.83	.85	.86	.87	.87	.88	.88	.88	.89
65.	.58	.79	.84	.85	.86	.87	.88	.88	.88	.88	.89
70.	.63	.81	.85	.86	.87	.88	.88	.88	.88	.89	.89
75.	.67	.82	.85	.87	.87	.88	.88	.88	.89	.89	.89
80.	.72	.84	.86	.87	.88	.88	.89	.89	.89	.89	.89
85.	.76	.85	.87	.88	.88	.89	.89	.89	.89	.89	.89
90.	.81	.87	.88	.89	.89	.89	.89	.89	.89	.90	.90
95.	.86	.88	.89	.89	.89	.90	.90	.90	.90	.90	.90
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 86

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.63	.74	.79	.81	.83	.84	.85	.85	.86	.87
5.	.04	.64	.75	.79	.82	.83	.84	.85	.86	.86	.87
10.	.09	.65	.76	.80	.82	.84	.85	.85	.86	.87	.87
15.	.13	.67	.76	.80	.83	.84	.85	.86	.86	.87	.87
20.	.18	.68	.77	.81	.83	.84	.85	.86	.86	.87	.87
25.	.22	.70	.78	.81	.83	.85	.85	.86	.87	.87	.88
30.	.27	.71	.79	.82	.84	.85	.86	.86	.87	.87	.88
35.	.31	.72	.80	.83	.84	.85	.86	.87	.87	.88	.88
40.	.36	.74	.80	.83	.85	.86	.86	.87	.87	.88	.88
45.	.40	.75	.81	.84	.85	.86	.87	.87	.87	.88	.88
50.	.45	.76	.82	.84	.86	.86	.87	.87	.88	.88	.88
55.	.49	.78	.83	.85	.86	.87	.87	.88	.88	.88	.89
60.	.54	.79	.84	.85	.86	.87	.88	.88	.88	.89	.89
65.	.58	.80	.84	.86	.87	.87	.88	.88	.88	.89	.89
70.	.63	.82	.85	.87	.87	.88	.88	.88	.89	.89	.89
75.	.67	.83	.86	.87	.88	.88	.88	.89	.89	.89	.89
80.	.72	.85	.87	.88	.88	.89	.89	.89	.89	.89	.89
85.	.76	.86	.88	.88	.89	.89	.89	.89	.89	.89	.90
90.	.81	.87	.88	.89	.89	.89	.89	.89	.90	.90	.90
95.	.86	.89	.89	.89	.90	.90	.90	.90	.90	.90	.90
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

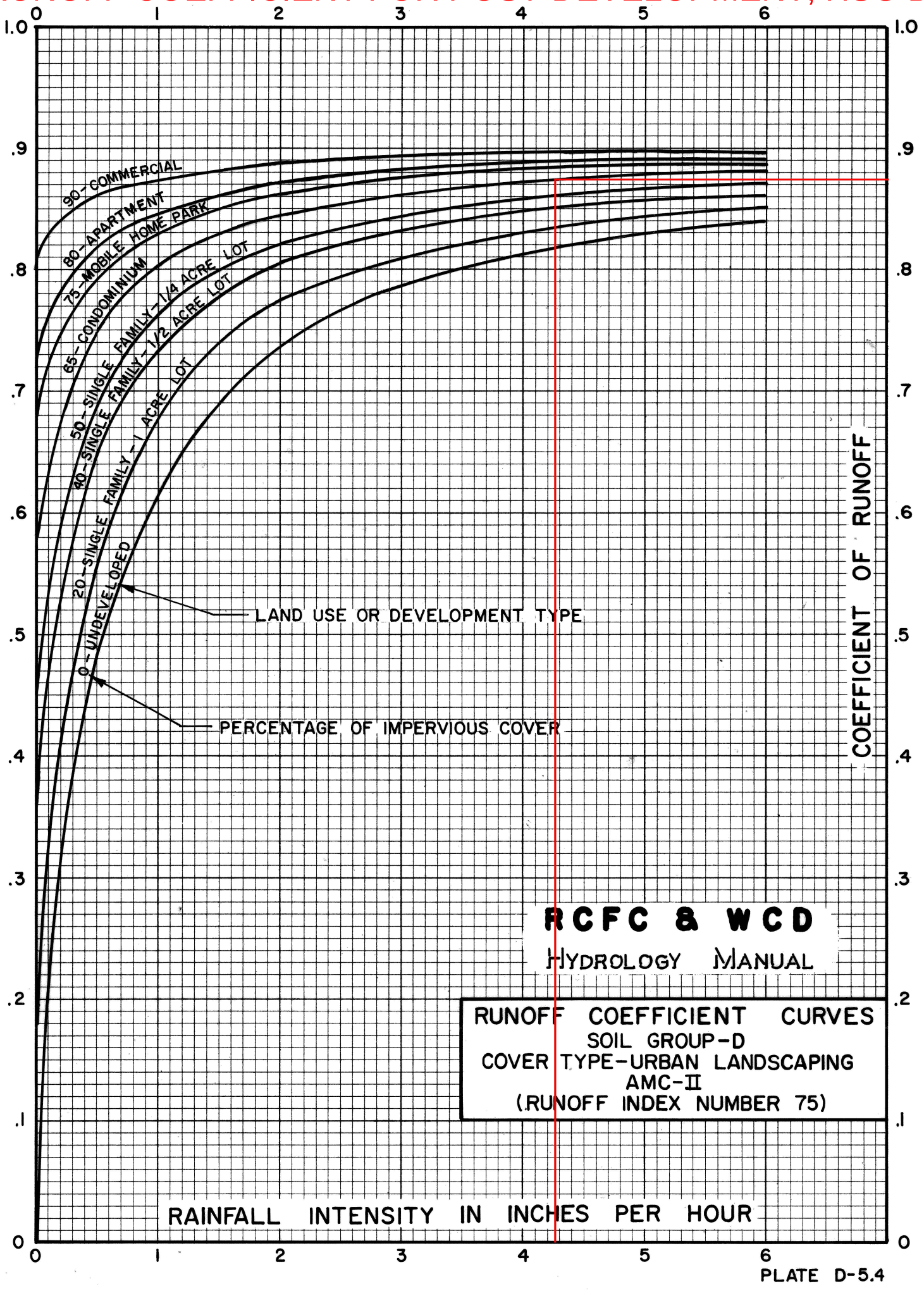
RUNOFF COEFFICIENTS FOR RI INDEX NO. = 88

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.66	.76	.80	.82	.84	.85	.86	.86	.87	.87
5.	.04	.67	.77	.81	.83	.84	.85	.86	.86	.87	.87
10.	.09	.68	.78	.81	.83	.85	.85	.86	.86	.87	.88
15.	.13	.70	.78	.82	.84	.85	.86	.86	.87	.87	.88
20.	.18	.71	.79	.82	.84	.85	.86	.86	.87	.87	.88
25.	.22	.72	.80	.83	.84	.85	.86	.87	.87	.88	.88
30.	.27	.73	.80	.83	.85	.86	.86	.87	.87	.88	.88
35.	.31	.74	.81	.84	.85	.86	.87	.87	.87	.88	.88
40.	.36	.76	.82	.84	.85	.86	.87	.87	.88	.88	.88
45.	.40	.77	.82	.85	.86	.87	.87	.88	.88	.88	.89
50.	.45	.78	.83	.85	.86	.87	.87	.88	.88	.88	.89
55.	.49	.79	.84	.86	.87	.87	.88	.88	.88	.89	.89
60.	.54	.80	.84	.86	.87	.88	.88	.88	.88	.89	.89
65.	.58	.82	.85	.87	.87	.88	.88	.88	.89	.89	.89
70.	.63	.83	.86	.87	.88	.88	.88	.89	.89	.89	.89
75.	.67	.84	.87	.88	.88	.88	.89	.89	.89	.89	.89
80.	.72	.84	.87	.88	.88	.89	.89	.89	.89	.89	.89
85.	.76	.85	.88	.88	.89	.89	.89	.89	.89	.89	.89
90.	.81	.88	.89	.89	.89	.89	.89	.90	.90	.90	.90
95.	.86	.89	.89	.90	.90	.90	.90	.90	.90	.90	.90
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 90

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.69	.78	.82	.84	.85	.86	.86	.87	.87	.88
5.	.04	.70	.79	.82	.84	.85	.86	.87	.87	.88	.88
10.	.09	.71	.80	.83	.84	.85	.86	.87	.87	.88	.88
15.	.13	.73	.80	.83	.85	.86	.86	.87	.87	.88	.88
20.	.18	.74	.81	.84	.85	.86	.87	.87	.87	.88	.88
25.	.22	.75	.81	.84	.85	.86	.87	.87	.88	.88	.88
30.	.27	.76	.82	.84	.86	.86	.87	.87	.88	.88	.88
35.	.31	.77	.82	.85	.86	.87	.87	.88	.88	.88	.89
40.	.36	.78	.83	.85	.86	.87	.87	.88	.88	.88	.89
45.	.40	.79	.84	.86	.87	.87	.88	.88	.88	.89	.89
50.	.45	.80	.84	.86	.87	.87	.88	.88	.88	.89	.89
55.	.49	.81	.85	.86	.87	.88	.88	.88	.89	.89	.89
60.	.54	.82	.85	.87	.88	.88	.88	.89	.89	.89	.89
65.	.58	.83	.86	.87	.88	.88	.89	.89	.89	.89	.89
70.	.63	.84	.87	.88	.88	.88	.89	.89	.89	.89	.89
75.	.67	.85	.87	.88	.88	.89	.89	.89	.89	.89	.89
80.	.72	.86	.88	.88	.89	.89	.89	.89	.89	.89	.90
85.	.76	.87	.88	.89	.89	.89	.89	.89	.90	.90	.90
90.	.81	.88	.89	.89	.89	.89	.90	.90	.90	.90	.90
95.	.86	.89	.89	.90	.90	.90	.90	.90	.90	.90	.90
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENT FOR POST-DEVELOPMENT, HSG D



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HYDROLOGY MANUAL

RUNOFF COEFFICIENT CURVES
SOIL GROUP-D
COVER TYPE-URBAN LANDSCAPING
AMC-II
(RUNOFF INDEX NUMBER 75)

PLATE D-5.4

RAINFALL INTENSITY FOR SUN CITY BASED ON TIME OF CONCENTRATION. PRE AND POST-DEVELOPMENT CONDITIONS

RCFC & WCD
HYDROLOGY MANUAL

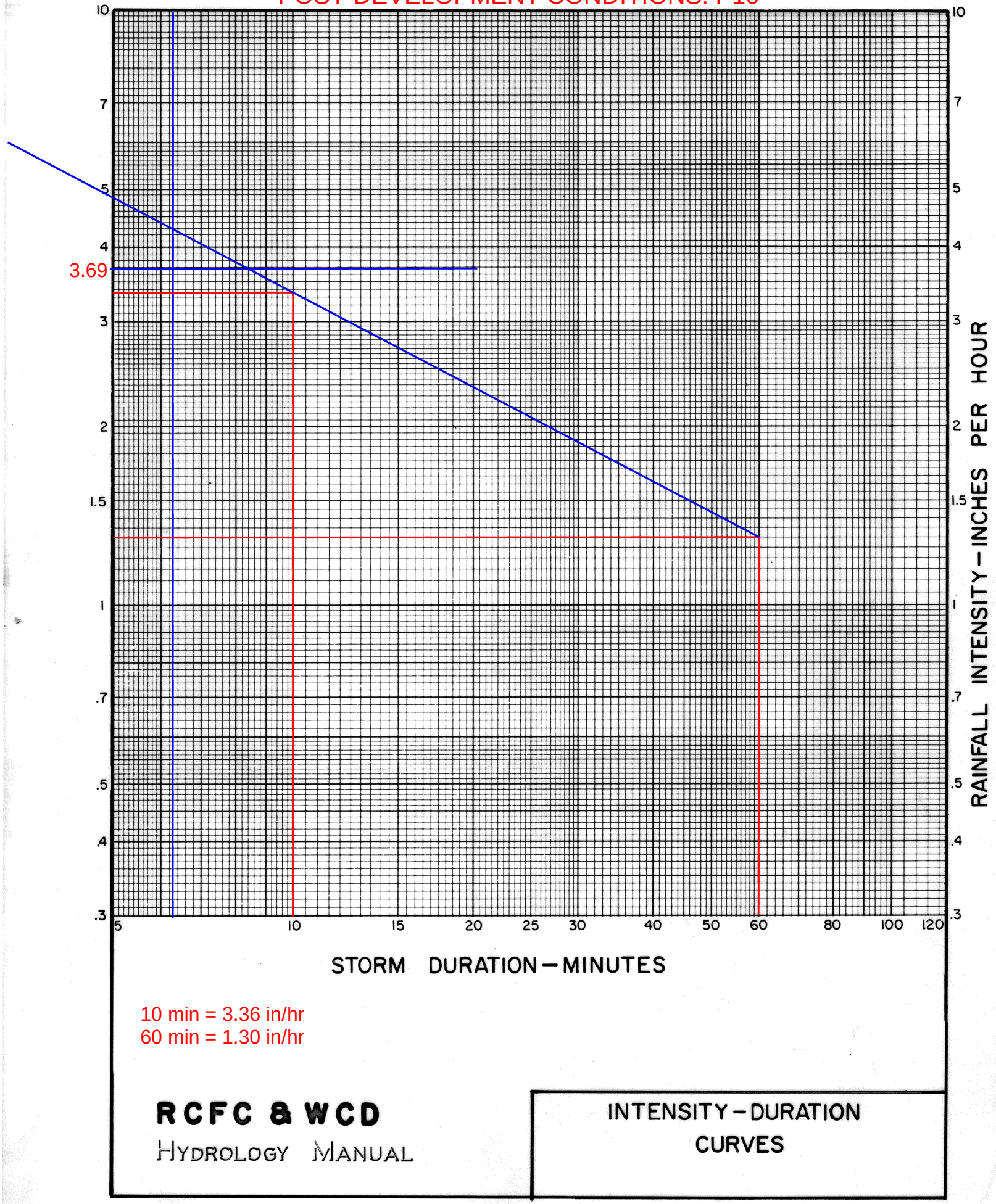
RAINFALL INTENSITY—INCHES PER HOUR

RIVERSIDE			RIVERSIDE (FOOTHILL AREAS)			RUBIDOUX			SAN JACINTO			SUN CITY		
DURATION MINUTES	FREQUENCY 10 YEAR	100 YEAR	DURATION MINUTES	FREQUENCY 10 YEAR	100 YEAR	DURATION MINUTES	FREQUENCY 10 YEAR	100 YEAR	DURATION MINUTES	FREQUENCY 10 YEAR	100 YEAR	DURATION MINUTES	FREQUENCY 10 YEAR	100 YEAR
5	2.75	3.92	5	3.14	4.71	5	3.18	4.71	5	2.81	4.16	5	3.25	4.85
6	2.48	3.55	6	2.84	4.26	6	2.87	4.26	6	2.56	3.79	6	2.95	4.40
7	2.28	3.26	7	2.61	3.91	7	2.64	3.91	7	2.37	3.51	7	2.72	4.06
8	2.12	3.03	8	2.42	3.63	8	2.45	3.63	8	2.22	3.29	8	2.53	3.78
9	1.99	2.84	9	2.27	3.41	9	2.30	3.41	9	2.09	3.10	9	2.38	3.55
10	1.88	2.68	10	2.14	3.21	10	2.17	3.21	10	1.98	2.94	10	2.25	3.36
11	1.78	2.54	11	2.03	3.05	11	2.06	3.05	11	1.89	2.80	11	2.14	3.19
12	1.70	2.42	12	1.94	2.91	12	1.96	2.91	12	1.81	2.68	12	2.04	3.05
13	1.62	2.32	13	1.86	2.78	13	1.88	2.78	13	1.74	2.58	13	1.96	2.92
14	1.56	2.23	14	1.78	2.67	14	1.80	2.67	14	1.68	2.48	14	1.88	2.81
15	1.50	2.14	15	1.71	2.57	15	1.74	2.57	15	1.62	2.40	15	1.81	2.71
16	1.45	2.07	16	1.66	2.48	16	1.68	2.48	16	1.57	2.32	16	1.75	2.62
17	1.40	2.00	17	1.60	2.40	17	1.62	2.40	17	1.52	2.25	17	1.70	2.54
18	1.36	1.94	18	1.55	2.33	18	1.57	2.33	18	1.48	2.19	18	1.65	2.46
19	1.32	1.88	19	1.51	2.26	19	1.52	2.26	19	1.44	2.13	19	1.60	2.39
20	1.28	1.83	20	1.46	2.20	20	1.48	2.20	20	1.40	2.08	20	1.56	2.33
22	1.22	1.74	22	1.39	2.08	22	1.41	2.08	22	1.34	1.98	22	1.48	2.21
24	1.16	1.66	24	1.32	1.99	24	1.34	1.99	24	1.28	1.90	24	1.41	2.11
26	1.11	1.58	26	1.27	1.90	26	1.28	1.90	26	1.23	1.82	26	1.36	2.03
28	1.06	1.52	28	1.22	1.82	28	1.23	1.82	28	1.19	1.76	28	1.30	1.95
30	1.02	1.46	30	1.17	1.76	30	1.19	1.76	30	1.15	1.70	30	1.26	1.88
32	.99	1.41	32	1.13	1.70	32	1.14	1.70	32	1.11	1.64	32	1.21	1.81
34	.96	1.37	34	1.09	1.64	34	1.11	1.64	34	1.08	1.59	34	1.18	1.76
36	.93	1.32	36	1.06	1.59	36	1.07	1.59	36	1.05	1.55	36	1.14	1.70
38	.90	1.29	38	1.03	1.54	38	1.04	1.54	38	1.02	1.51	38	1.11	1.66
40	.87	1.25	40	1.00	1.50	40	1.01	1.50	40	.99	1.47	40	1.08	1.61
45	.82	1.17	45	.94	1.41	45	.95	1.41	45	.94	1.39	45	1.01	1.51
50	.77	1.11	50	.88	1.33	50	.90	1.33	50	.89	1.31	50	.96	1.43
55	.73	1.05	55	.84	1.26	55	.85	1.26	55	.85	1.25	55	.91	1.36
60	.70	1.00	60	.80	1.20	60	.81	1.20	60	.81	1.20	60	.87	1.30
65	.67	.96	65	.77	1.15	65	.78	1.15	65	.78	1.15	65	.83	1.25
70	.64	.92	70	.73	1.10	70	.74	1.10	70	.75	1.11	70	.80	1.20
75	.62	.88	75	.71	1.06	75	.72	1.06	75	.72	1.07	75	.77	1.15
80	.60	.85	80	.68	1.02	80	.69	1.02	80	.70	1.04	80	.75	1.12
85	.58	.83	85	.66	.99	85	.67	.99	85	.68	1.01	85	.72	1.08
SLOPE = .550			SLOPE = .550			SLOPE = .550			SLOPE = .500			SLOPE = .530		

STANDARD INTENSITY-DURATION CURVES DATA

PLATE D-4.1(5 of 6)

RAINFALL INTENSITY
POST-DEVELOPMENT CONDITIONS: P10



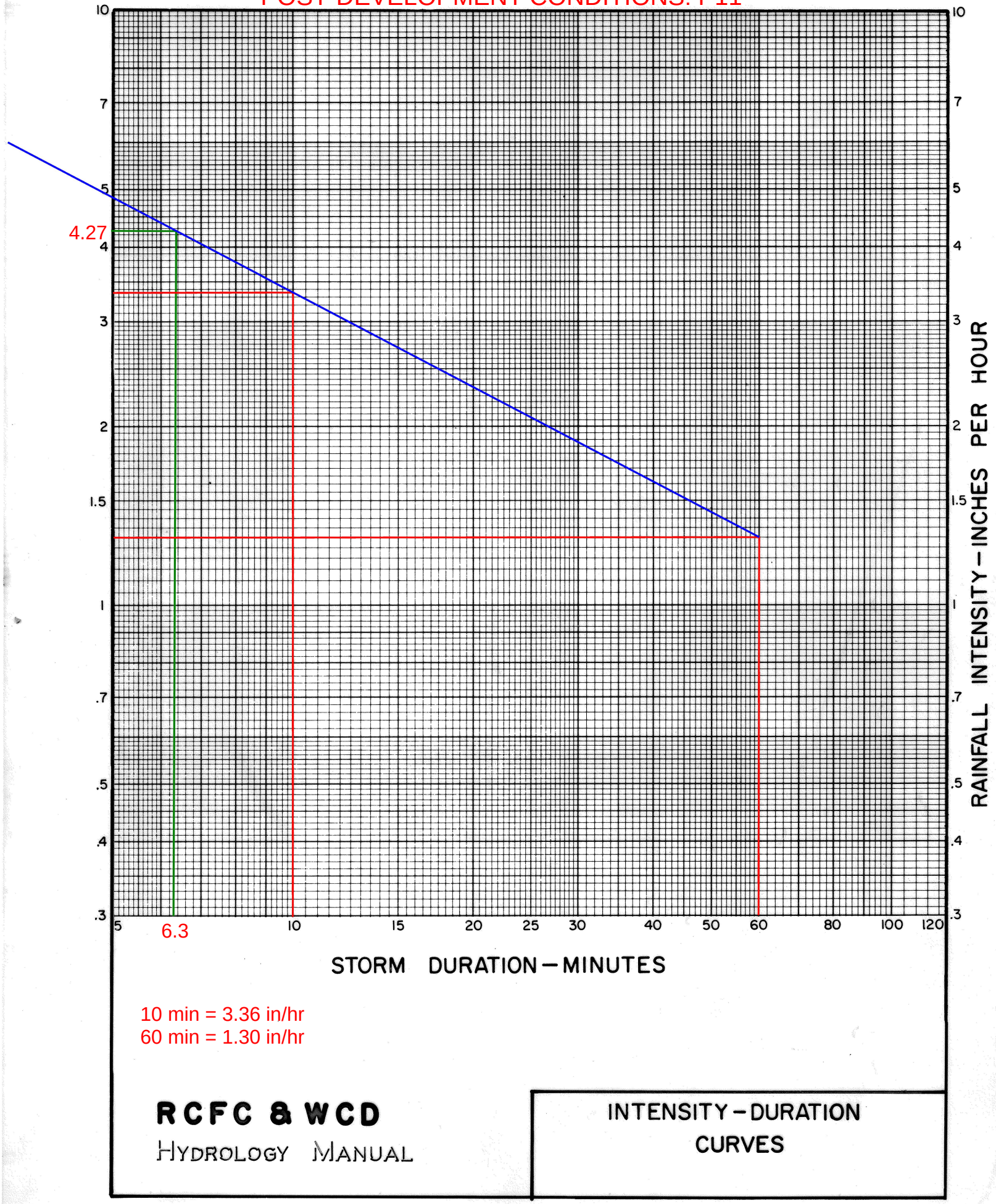
10 min = 3.36 in/hr
60 min = 1.30 in/hr

RCFC & WCD
HYDROLOGY MANUAL

INTENSITY – DURATION CURVES

PLATE D-4.2

RAINFALL INTENSITY
POST-DEVELOPMENT CONDITIONS: P11

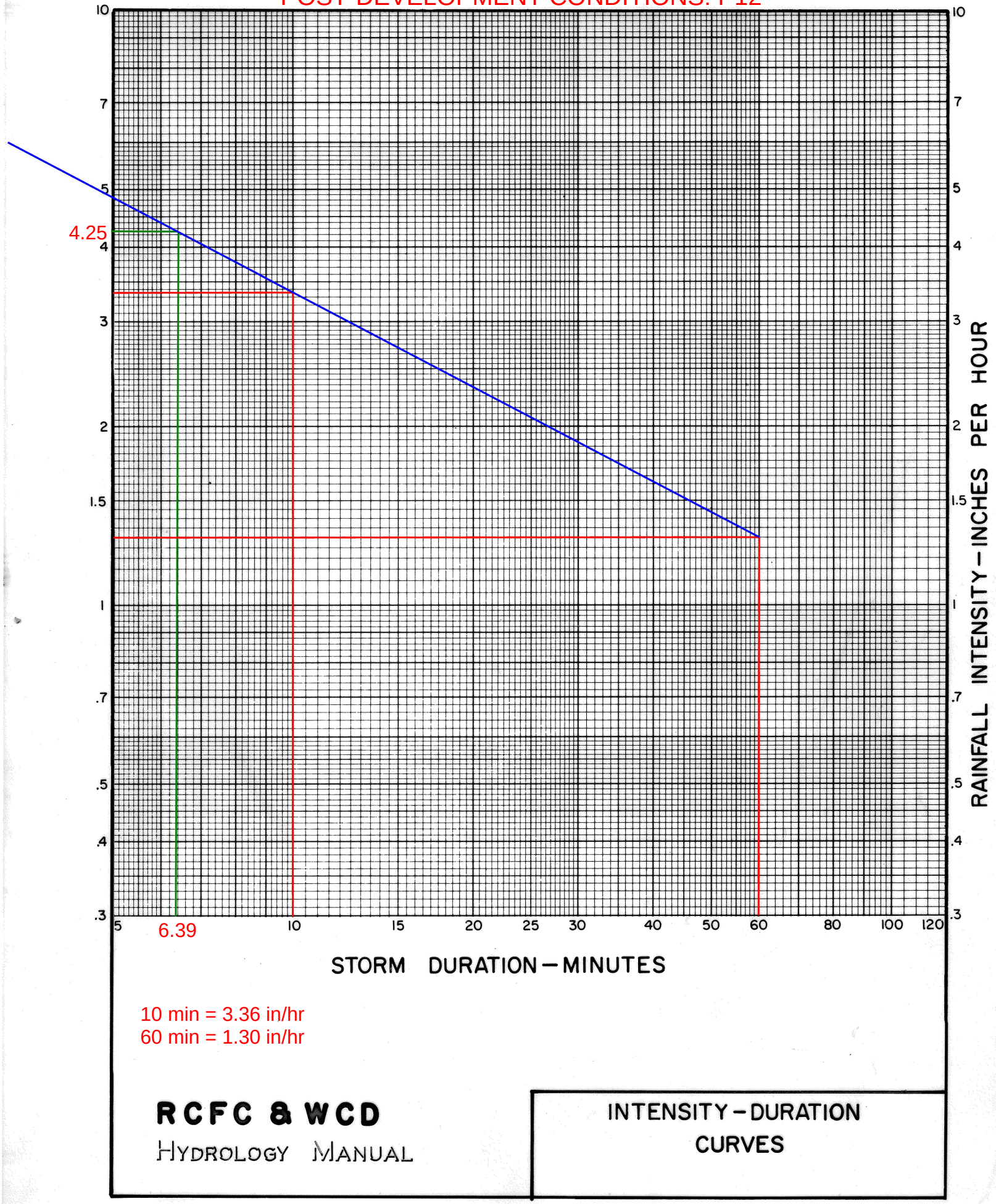


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HYDROLOGY MANUAL

INTENSITY – DURATION CURVES

PLATE D-4.2

RAINFALL INTENSITY
POST-DEVELOPMENT CONDITIONS: P12



RCFC & WCD

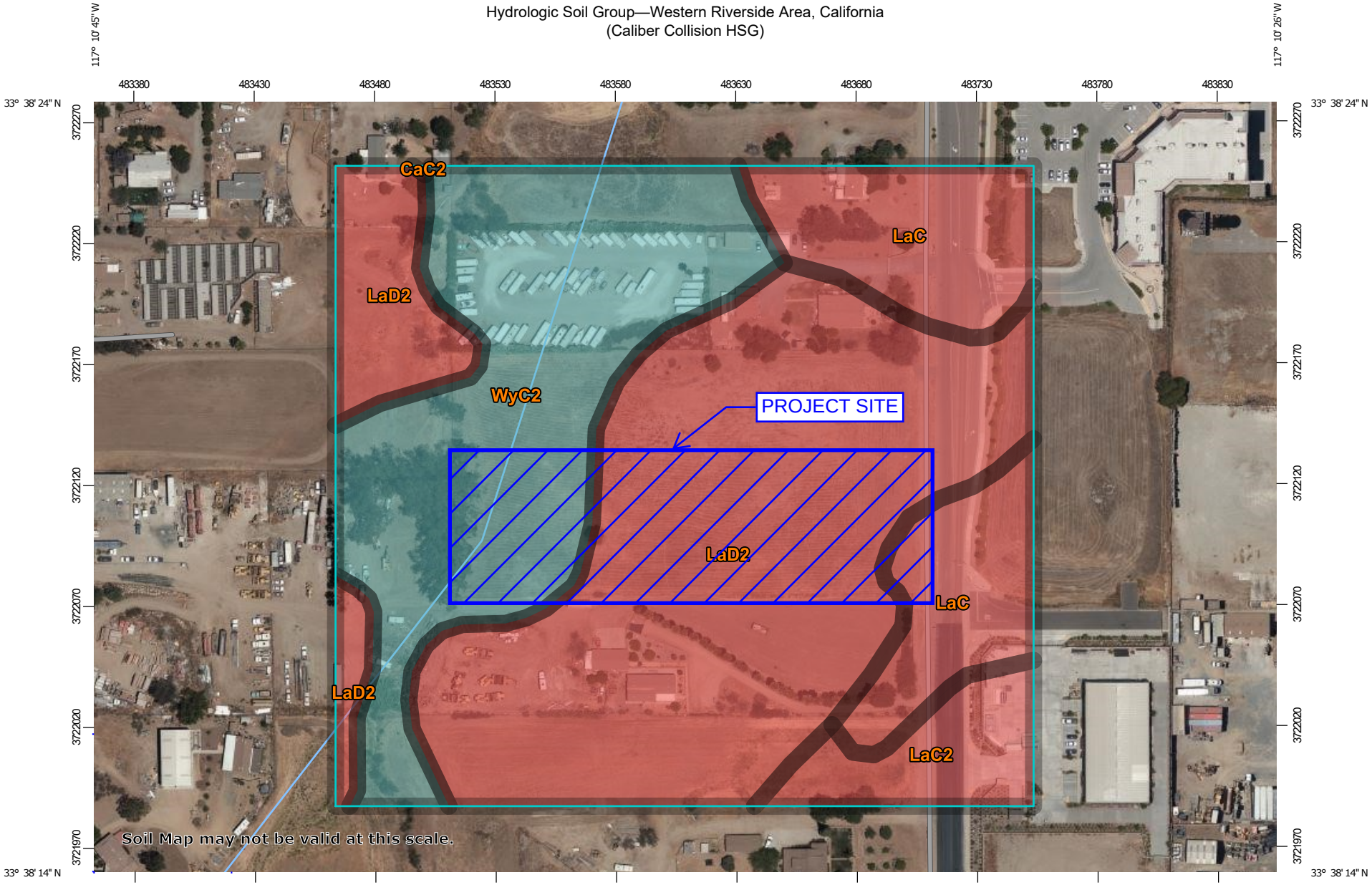
HYDROLOGY MANUAL

INTENSITY – DURATION CURVES

PLATE D-4.2

APPENDIX E – HYDROLOGIC SOIL GROUP MAP

Hydrologic Soil Group—Western Riverside Area, California
(Caliber Collision HSG)



Map Scale: 1:2,250 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 30 60 120 180

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Lines

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Points

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 14, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 15, 2018—Jun 25, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CaC2	Cajalco fine sandy loam, 2 to 8 percent slopes, eroded	C	0.0	0.0%
LaC	Las Posas loam, 2 to 8 percent slopes	D	3.0	15.5%
LaC2	Las Posas loam, 5 to 8 percent slopes, eroded	D	1.0	5.2%
LaD2	Las Posas loam, 8 to 15 percent slopes, eroded	D	9.6	50.4%
WyC2	Wyman loam, 2 to 8 percent slopes, eroded	C	5.5	28.9%
Totals for Area of Interest			**19.1**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX G2

PROJECT SPECIFIC WATER QUALITY MANAGEMENT PLAN

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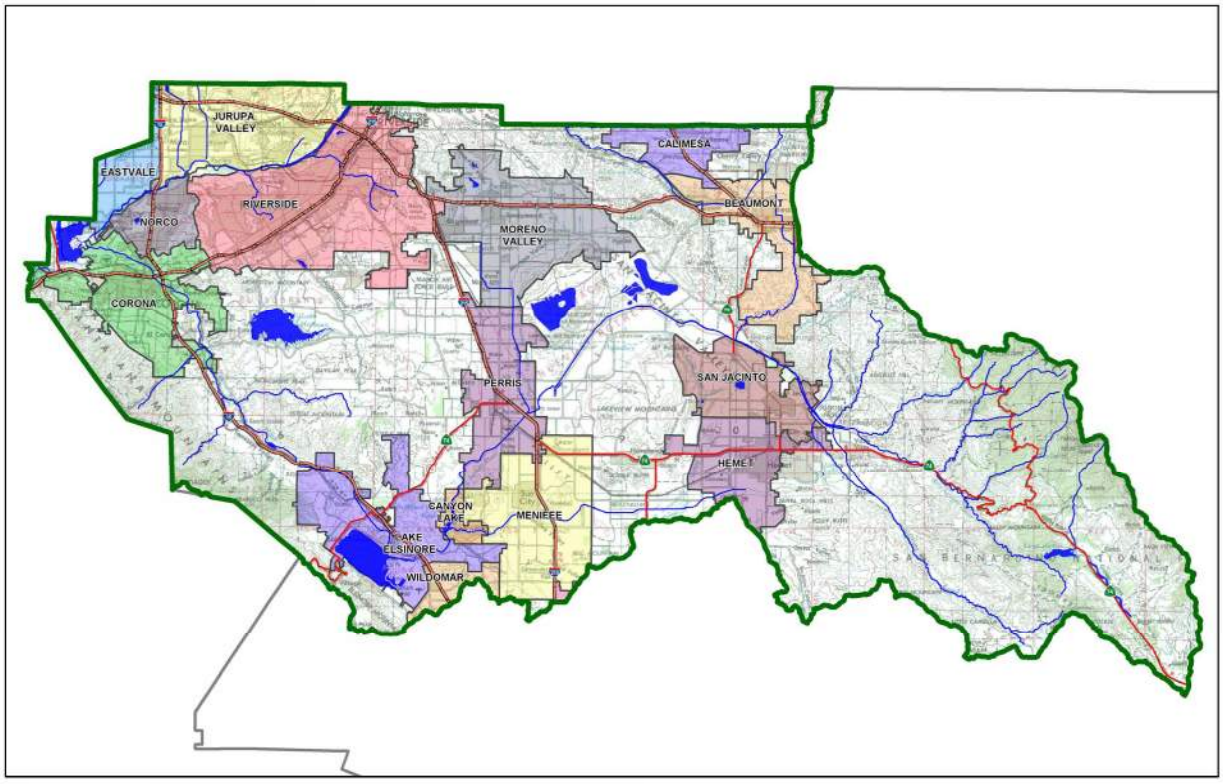
Project Specific Water Quality Management Plan

*A Template for Projects located within the **Santa Ana Watershed** Region of Riverside County*

Project Title: Caliber Collision

Development No: 33235-3318 Zeiders Road

Design Review/Case No: PR21-0293



Contact Information:

Prepared for:
Victory Development
8201 Preston Road, Suite 700
Dallas, TX 75225

Prepared by:
Latitude 33 Planning & Engineering
9968 Hibert Street, Second Floor
San Diego, CA 92131

☒ **Preliminary**
☐ **Final**

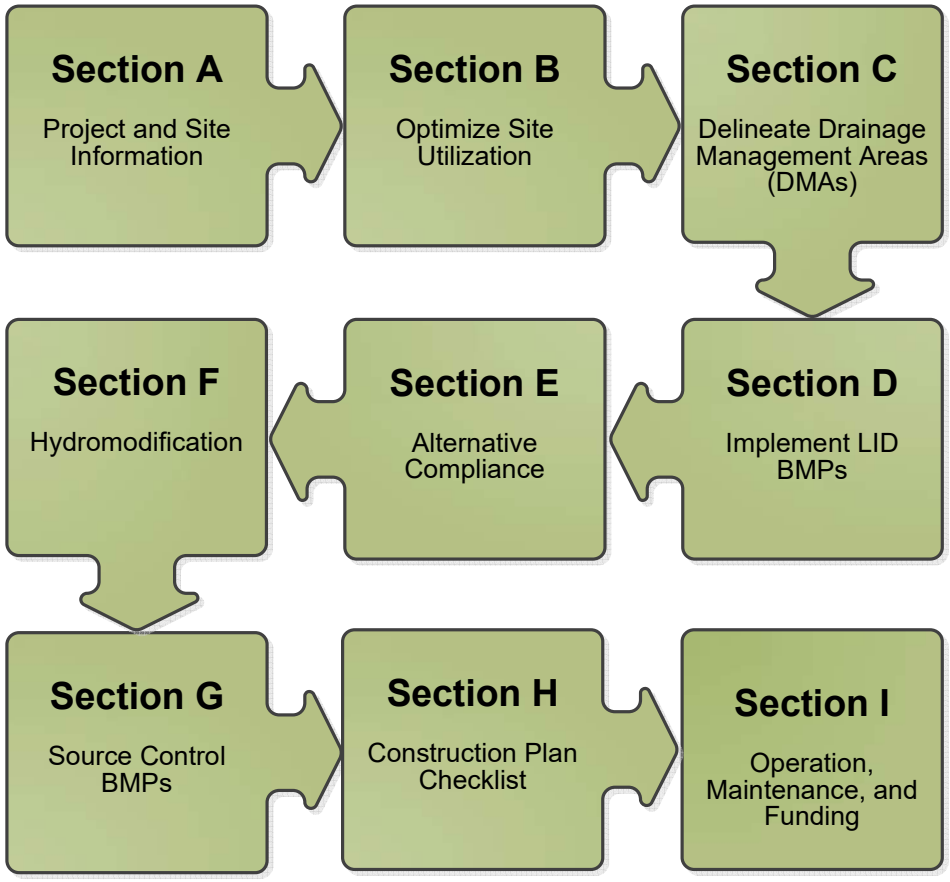
Original Date Prepared: October 27. 2021

Revision Date(s): February 11, 2022

Prepared for Compliance with
Regional Board Order No. **R8-2010-0033**
Template revised June 30, 2016

A Brief Introduction

This Project-Specific WQMP Template for the **Santa Ana Region** has been prepared to help guide you in documenting compliance for your project. Because this document has been designed to specifically document compliance, you will need to utilize the WQMP Guidance Document as your "how-to" manual to help guide you through this process. Both the Template and Guidance Document go hand-in-hand, and will help facilitate a well prepared Project-Specific WQMP. Below is a flowchart for the layout of this Template that will provide the steps required to document compliance.



OWNER'S CERTIFICATION

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for Victory Development by Latitude 33 Planning and Engineering for the Caliber Collision project.

This WQMP is intended to comply with the requirements of City of Menifee for Ordinance 2012-102 which includes the requirement for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under City of Menifee Water Quality Ordinance (Municipal Code Chapter 15.01).

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner's Signature	Date
Bronson Reed	Construction Manager
Owner's Printed Name	Owner's Title/Position

PREPARER'S CERTIFICATION

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. **R8-2010-0033** and any subsequent amendments thereto."

	02/11/2022
Preparer's Signature	Date
Nick Psyhogios	Principal Civil Engineer
Preparer's Printed Name	Preparer's Title/Position

Preparer's Licensure:



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Section A: Project and Site Information

PROJECT INFORMATION	
Type of Project:	Commercial/Industrial/Auto Repair
Planning Area:	33235-3318 Zeiders Road
Community Name:	Menifee
Development Name:	Insert Planning Area / Community Name/ Development Name, if known
PROJECT LOCATION	
Latitude & Longitude (DMS): 33°38'19.27"N 117°10'39.20"W	
Project Watershed and Sub-Watershed: Santa Ana River Watershed	
Gross Acres: 2.39	
APN(s): 384130028	
Map Book and Page No.: PM 7105	
PROJECT CHARACTERISTICS	
Proposed or Potential Land Use(s)	Auto Repair Shop
Proposed or Potential SIC Code(s)	7532
Area of Impervious Project Footprint (SF)	69,470
Total Area of proposed Impervious Surfaces within the Project Footprint (SF)/or Replacement	69,470
Does the project consist of offsite road improvements?	☒ Y ☐ N
Does the project propose to construct unpaved roads?	☐ Y ☒ N
Is the project part of a larger common plan of development (phased project)?	☐ Y ☒ N
EXISTING SITE CHARACTERISTICS	
Total area of existing Impervious Surfaces within the Project limits Footprint (SF)	0
Is the project located within any MSHCP Criteria Cell?	☐ Y ☒ N
If so, identify the Cell number:	N/A
Are there any natural hydrologic features on the project site?	☐ Y ☒ N
Is a Geotechnical Report attached?	☒ Y ☐ N
If no Geotech. Report, list the NRCS soils type(s) present on the site (A, B, C and/or D)	C
What is the Water Quality Design Storm Depth for the project?	d = 0.59 inches

The project site is located along Zieders Road, north of Keller Road and south of Scott Road, within the City of Menifee, California. The proposed project consists of an auto body repair and paint shop, approximately 18,717 square feet, with associated parking, walkways, and landscape areas. The building will include service bays for the paint and body shop work, as well as vehicle storage. In the pre-development conditions, runoff flows from the southeast corner towards the northwest corner of the property, where it enters a natural channel offsite. The existing soil is HSG C per the USDA NRCS Soil Survey, and therefore has very low infiltration rates throughout the site.

In the post-development condition, the east to west drainage pattern is maintained. Site runoff is directed towards proposed stormdrain inlets throughout the site via sheet flow and gutter flow. The runoff is conveyed through the proposed stormdrain system and discharged to a biofiltration basin located on the west side of the property. This basin is sized for water treatment and hydromodification, as well as designed to reduce the peak flow leaving the site to not exceed that of pre-development.

Portions of the site along both the southern edge and the western edge of the property are proposed landscape that will serve as self-treating landscape area. Runoff from this area flows directly offsite.

A.1 Maps and Site Plans

When completing your Project-Specific WQMP, include a map of the local vicinity and existing site. In addition, include all grading, drainage, landscape/plant palette and other pertinent construction plans in Appendix 2. At a **minimum**, your WQMP Site Plan should include the following:

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling
- BMP Locations (Lat/Long)

Use your discretion on whether or not you may need to create multiple sheets or can appropriately accommodate these features on one or two sheets. Keep in mind that the Co-Permittee plan reviewer must be able to easily analyze your project utilizing this template and its associated site plans and maps.

A.2 Identify Receiving Waters

Using Table A.1 below, list in order of upstream to downstream, the receiving waters that the project site is tributary to. Continue to fill each row with the Receiving Water's 303(d) listed impairments (if any), designated beneficial uses, and proximity, if any, to a RARE beneficial use. Include a map of the receiving waters in Appendix 1.

Table A.1 Identification of Receiving Waters

Receiving Waters	EPA Approved 303(d) List Impairments (based on 2012 Impairment Listing)	Designated Beneficial Uses	Proximity to RARE Beneficial Use
Salt Creek	Not listed as Impaired Water Body	REC1, REC2, WARM, WILD	~10 miles (Temescal Creek Reach 5)
Canyon Lake	Nutrients, Pathogens	AGR, GWR, MUN, REC1, REC2, WARM, WILD,	~5 miles (Temescal Creek Reach 5)
San Jacinto River – Lake Elsinore to Canyon Lake	Not listed as Impaired Water Body	AGR, GWR, MUN, REC1, REC2, WARM, WILD	~5.5 miles (Temescal Creek Reach 5)
Lake Elsinore	Nutrients (TMDL), Organic Enrichment/Low Dissolved Oxygen (TMDL), PCBs, Sediment Toxicity	REC1, REC2, WARM, WILD,	~3 miles (Temescal Creek Reach 5)

A.3 Additional Permits/Approvals required for the Project:

Table A.2 Other Applicable Permits

Agency	Permit Required	
State Department of Fish and Game, 1602 Streambed Alteration Agreement	☐ Y	☒ N
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Cert.	☐ Y	☒ N
US Army Corps of Engineers, CWA Section 404 Permit	☐ Y	☒ N
US Fish and Wildlife, Endangered Species Act Section 7 Biological Opinion	☐ Y	☒ N

Statewide Construction General Permit Coverage	☒ Y	☐ N
Statewide Industrial General Permit Coverage	☐ Y	☒ N
Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP)	☐ Y	☒ N
Other *(please list in the space below as required)*	☐ Y	☐ N

If yes is answered to any of the questions above, the Co-Permittee may require proof of approval/coverage from those agencies as applicable including documentation of any associated requirements that may affect this Project-Specific WQMP.

Section B: Optimize Site Utilization (LID Principles)

Review of the information collected in Section 'A' will aid in identifying the principal constraints on site design and selection of LID BMPs as well as opportunities to reduce imperviousness and incorporate LID Principles into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, utility locations or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention BMPs), and differences in elevation (which can provide hydraulic head). Prepare a brief narrative for each of the site optimization strategies described below. This narrative will help you as you proceed with your LID design and explain your design decisions to others.

The 2010 Santa Ana MS4 Permit further requires that LID Retention BMPs (Infiltration Only or Harvest and Use) be used unless it can be shown that those BMPs are infeasible. Therefore, it is important that your narrative identify and justify if there are any constraints that would prevent the use of those categories of LID BMPs. Similarly, you should also note opportunities that exist which will be utilized during project design. Upon completion of identifying Constraints and Opportunities, include these on your WQMP Site plan in Appendix 1.

Consideration of "highest and best use" of the discharge should also be considered. For example, Lake Elsinore is evaporating faster than runoff from natural precipitation can recharge it. Requiring infiltration of 85% of runoff events for projects tributary to Lake Elsinore would only exacerbate current water quality problems associated with Pollutant concentration due to lake water evaporation. In cases where rainfall events have low potential to recharge Lake Elsinore (i.e. no hydraulic connection between groundwater to Lake Elsinore, or other factors), requiring infiltration of Urban Runoff from projects is counterproductive to the overall watershed goals. Project proponents, in these cases, would be allowed to discharge Urban Runoff, provided they used equally effective filtration-based BMPs.

Site Optimization

The following questions are based upon Section 3.2 of the WQMP Guidance Document. Review of the WQMP Guidance Document will help you determine how best to optimize your site and subsequently identify opportunities and/or constraints, and document compliance.

Did you identify and preserve existing drainage patterns? If so, how? If not, why?

Existing drainage patterns have been identified on the DMA Exhibit. In predevelopment, the site drains from southeast to northwest. Due to the project scope, the site requires grading to accommodate the improvements, thus preventing the preservation of the existing drainage paths. The overall pattern across the site, however, is generally preserved and the site will continue to drain from southeast to northwest.

Did you identify and protect existing vegetation? If so, how? If not, why?

Existing vegetation is shown on the DMA exhibit and consists mostly of grass. One constraint in the vegetation is an existing tree on the property. This tree will be removed because it is in the center of the development, and it would not be feasible to protect it in place. Due to the proposed project and the thin existing vegetation, preservation of natural vegetation is not feasible.

Did you identify and preserve natural infiltration capacity? If so, how? If not, why?

The existing soil is mainly dense sand with silt and at least one location of clay according to the geotechnical report. The natural infiltration capacity is not known at this time but is expected to be low based on the existing soil which is HSG C according to the USDA NRCS Soil Survey. Due to this constraint, in the proposed development, proposed pervious areas will have the ability to infiltrate at a capacity similar to the pre-development condition, but proposed impervious areas will not infiltrate and will be directed to a biofiltration basin BMP which will not infiltrate due to the low permeability of the natural soil (see attached Infiltration Feasibility letter in Appendix 3).

Did you identify and minimize impervious area? If so, how? If not, why?

Impervious areas have been minimized to the minimum required amount which will still allow the project to be feasible. Impervious areas include paved parking, driveways, walkways, concrete for utilities and site features, and the building. D.G. paths have been incorporated where possible to also help minimize areas of pavement and concrete. These impervious areas are identified on the DMA exhibit.

Did you identify and disperse runoff to adjacent pervious areas? If so, how? If not, why?

Runoff is dispersed with landscaped medians and parking islands where the opportunity was feasible. Curb cuts allow gutter flow to be directed to landscaped areas before entering the biofiltration basin. Otherwise, dispersion is not feasible based on the proposed site layout and necessary site features. Roof drains have been directed towards landscaped areas where feasible based on necessary site design elements.

Section C: Delineate Drainage Management Areas (DMAs)

Utilizing the procedure in Section 3.3 of the WQMP Guidance Document which discusses the methods of delineating and mapping your project site into individual DMAs, complete Table C.1 below to appropriately categorize the types of classification (e.g., Type A, Type B, etc.) per DMA for your project site. Upon completion of this table, this information will then be used to populate and tabulate the corresponding tables for their respective DMA classifications.

Table C.1 DMA Classifications

DMA Name or ID	Surface Type(s)[1][2]	Area (Sq. Ft.)	DMA Type
1	Roof	19,940	D
2	Pavement	48,690	D
3	Landscaped	17,240	D
4	Biofiltration BMP	5,485	D
5	Landscape	12,755	A
6	Decomposed Granite	845	D

[1]*Reference Table 2-1 in the WQMP Guidance Document to populate this column*
[2]*If multi-surface provide back-up*

Table C.2 Type 'A', Self-Treating Areas

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)
5	12,755	Landscaping / Grass	N/A

Table C.3 Type 'B', Self-Retaining Areas

Self-Retaining Area				**Type 'C' DMAs that are draining to the Self-Retaining Area**		
DMA Name/ ID	Post-project surface type	Area (square feet) [A]	Storm Depth (inches) [B]	DMA Name / ID	[C] from Table C.4 = [C]	Required Retention Depth (inches) [D]

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas

DMA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet)	Post-project surface type	Impervious fraction	Product		Area (square feet)	Ratio
	[A]		[B]	[C] = [A] x [B]	DMA name /ID	[D]	[C]/[D]

Table C.5 Type 'D', Areas Draining to BMPs

DMA Name or ID	BMP Name or ID
1	BMP 1
2	BMP 1
3	BMP 1
4	BMP 1
6	BMP 1

Note: More than one drainage management area can drain to a single LID BMP, however, one drainage management area may not drain to more than one BMP.

Section D: Implement LID BMPs

D.1 Infiltration Applicability

Is there an approved downstream 'Highest and Best Use' for stormwater runoff (see discussion in Chapter 2.4.4 of the WQMP Guidance Document for further details)? ☐ Y ☒ N

If yes has been checked, Infiltration BMPs shall not be used for the site; proceed to section D.3

If no, continue working through this section to implement your LID BMPs. It is recommended that you contact your Co-Permittee to verify whether or not your project discharges to an approved downstream 'Highest and Best Use' feature.

Geotechnical Report

A Geotechnical Report or Phase I Environmental Site Assessment may be required by the Copermittee to confirm present and past site characteristics that may affect the use of Infiltration BMPs. In addition, the Co-Permittee, at their discretion, may not require a geotechnical report for small projects as described in Chapter 2 of the WQMP Guidance Document. If a geotechnical report has been prepared, include it in Appendix 3. In addition, if a Phase I Environmental Site Assessment has been prepared, include it in Appendix 4.

Is this project classified as a small project consistent with the requirements of Chapter 2 of the WQMP Guidance Document? ☐ Y ☒ N

Infiltration Feasibility

Table D.1 below is meant to provide a simple means of assessing which DMAs on your site support Infiltration BMPs and is discussed in the WQMP Guidance Document in Chapter 2.4.5. Check the appropriate box for each question and then list affected DMAs as applicable. If additional space is needed, add a row below the corresponding answer.

Table D.1 Infiltration Feasibility

Does the project site…	YES	NO
…have any DMAs with a seasonal high groundwater mark shallower than 10 feet?		X
If Yes, list affected DMAs:		
…have any DMAs located within 100 feet of a water supply well?		X
If Yes, list affected DMAs:		
…have any areas identified by the geotechnical report as posing a public safety risk where infiltration of stormwater could have a negative impact?		X
If Yes, list affected DMAs:		
…have measured in-situ infiltration rates of less than 1.6 inches / hour?		X
If Yes, list affected DMAs:		
…have significant cut and/or fill conditions that would preclude in-situ testing of infiltration rates at the final infiltration surface?		X
If Yes, list affected DMAs:		
…geotechnical report identify other site-specific factors that would preclude effective and safe infiltration?	X	
Describe here: Soil is mostly dense sand with silt, HSGs C and D according to USGS. See attached infiltration infeasibility letter for more information.		

If you answered "Yes" to any of the questions above for any DMA, Infiltration BMPs should not be used for those DMAs and you should proceed to the assessment for Harvest and Use below.

D.2 Harvest and Use Assessment

Please check what applies*:*

☐ Reclaimed water will be used for the non-potable water demands for the project.

☐Downstream water rights may be impacted by Harvest and Use as approved by the Regional Board (verify with the Copermittee).

☐The Design Capture Volume will be addressed using Infiltration Only BMPs. In such a case, Harvest and Use BMPs are still encouraged, but it would not be required if the Design Capture Volume will be infiltrated or evapotranspired.

If any of the above boxes have been checked, Harvest and Use BMPs need not be assessed for the site. If none of the above criteria applies, follow the steps below to assess the feasibility of irrigation use, toilet use and other non-potable uses (e.g., industrial use).

Irrigation Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for Irrigation Use BMPs on your site:

Step 1: Identify the total area of irrigated landscape on the site, and the type of landscaping used.

Total Area of Irrigated Landscape: 0.71 acres

Type of Landscaping (Conservation Design or Active Turf): Conservative Design

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for irrigation use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: 1.56 acres

Step 3: Cross reference the Design Storm depth for the project site (see Exhibit A of the WQMP Guidance Document) with the left column of Table 2-3 in Chapter 2 to determine the minimum area of Effective Irrigated Area per Tributary Impervious Area (EIATIA).

Enter your EIATIA factor: 0.47

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum irrigated area that would be required.

Minimum required irrigated area: 0.73 acres

Step 5: Determine if harvesting stormwater runoff for irrigation use is feasible for the project by comparing the total area of irrigated landscape (Step 1) to the minimum required irrigated area (Step 4).

Minimum required irrigated area (Step 4)	Available Irrigated Landscape (Step 1)
0.73 acres	0.71 acres

Toilet Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for toilet flushing uses on your site:

Step 1: Identify the projected total number of daily toilet users during the wet season, and account for any periodic shut downs or other lapses in occupancy:

Projected Number of Daily Toilet Users: 10

Project Type: Commercial/Industrial Auto Repair Shop

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for toilet use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: 1.56

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-2 in Chapter 2 to determine the minimum number or toilet users per tributary impervious acre (TUTIA).

Enter your TUTIA factor: 132

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of toilet users that would be required.

Minimum number of toilet users: 206

Step 5: Determine if harvesting stormwater runoff for toilet flushing use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

Minimum required Toilet Users (Step 4)	Projected number of toilet users (Step 1)
206	10

Other Non-Potable Use Feasibility

Are there other non-potable uses for stormwater runoff on the site (e.g. industrial use)? See Chapter 2 of the Guidance for further information. If yes, describe below. If no, write N/A.

N/A

Step 1: Identify the projected average daily non-potable demand, in gallons per day, during the wet season and accounting for any periodic shut downs or other lapses in occupancy or operation.

Average Daily Demand: Projected Average Daily Use (gpd)

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for the identified non-potable use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: Insert Area (Acres)

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-4 in Chapter 2 to determine the minimum demand for non-potable uses per tributary impervious acre.

Enter the factor from Table 2-4: Enter Value

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of gallons per day of non-potable use that would be required.

Minimum required use: Minimum use required (gpd)

Step 5: Determine if harvesting stormwater runoff for other non-potable use is feasible for the project by comparing the projected average daily use (Step 1) to the minimum required non-potable use (Step 4).

Minimum required non-potable use (Step 4)	**Projected average daily use (Step 1)**
Minimum use required (gpd)	Projected Average Daily Use (gpd)

If Irrigation, Toilet and Other Use feasibility anticipated demands are less than the applicable minimum values, Harvest and Use BMPs are not required and you should proceed to utilize LID Bioretention and Biotreatment per Section 3.4.2 of the WQMP Guidance Document.

D.3 Bioretention and Biotreatment Assessment

Other LID Bioretention and Biotreatment BMPs as described in Chapter 2.4.7 of the WQMP Guidance Document are feasible on nearly all development sites with sufficient advance planning.

Select one of the following:

☒ LID Bioretention/Biotreatment BMPs will be used for some or all DMAs of the project as noted below in Section D.4 (note the requirements of Section 3.4.2 in the WQMP Guidance Document).

☐ A site-specific analysis demonstrating the technical infeasibility of all LID BMPs has been performed and is included in Appendix 5. If you plan to submit an analysis demonstrating the technical infeasibility of LID BMPs, request a pre-submittal meeting with the Copermittee to discuss this option. Proceed to Section E to document your alternative compliance measures.

D.4 Feasibility Assessment Summaries

From the Infiltration, Harvest and Use, Bioretention and Biotreatment Sections above, complete Table D.2 below to summarize which LID BMPs are technically feasible, and which are not, based upon the established hierarchy.

Table D.2 LID Prioritization Summary Matrix

DMA Name/ID	LID BMP Hierarchy				No LID (Alternative Compliance)
	1. Infiltration	2. Harvest and use	3. Bioretention	4. Biotreatment	
1	☐	☐	☐	☒	☐
2	☐	☐	☐	☒	☐
3	☐	☐	☐	☒	☐
4	☐	☐	☐	☒	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

For those DMAs where LID BMPs are not feasible, provide a brief narrative below summarizing why they are not feasible, include your technical infeasibility criteria in Appendix 5, and proceed to Section E below to document Alternative Compliance measures for those DMAs. Recall that each proposed DMA must pass through the LID BMP hierarchy before alternative compliance measures may be considered.

A biotreatment BMP has been selected for DMA's 1-4. Per the infiltration feasibility letter, it is recommended to not rely on infiltration to manage stormwater. For this reason, biotreatment was selected instead of bioretention. DMA 5 is the only DMA on the site that will not be treated with the proposed Biofiltration basin. DMA 5 is self-treating (all vegetation) and drains immediately offsite to a natural drainage course.

D.5 LID BMP Sizing

Each LID BMP must be designed to ensure that the Design Capture Volume will be addressed by the selected BMPs. First**,** calculate the Design Capture Volume for each LID BMP using the V_{BMP} worksheet in Appendix F of the LID BMP Design Handbook. Second**,** design the LID BMP to meet the required V_{BMP} using a method approved by the Copermittee. Utilize the worksheets found in the LID BMP Design Handbook or consult with your Copermittee to assist you in correctly sizing your LID BMPs. Complete Table D.3 below to document the Design Capture Volume and the Proposed Volume for each LID BMP. Provide the completed design procedure sheets for each LID BMP in Appendix 6. You may add additional rows to the table below as needed.

Table D.3 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Enter BMP Name / Identifier Here* *BMP 1*		
	[A]		[B]	[C]	[A] x [C]			
1	*19,940*	*Roofs*	*1*	*0.89*	*17,787*			
2	*48,690*	*Concrete or Asphalt*	*1*	*0.89*	*43,432*			
3	*17,240*	*Natural (C Soil)*	*0.3*	*0.23*	*3,882*			
4	*5,485*	*Natural (C Soil)*	*0.3*	*0.23*	*1,235*			
6	*845*	*Decomposed Granite*	*0.4*	*0.28*	*236*			
						Design Storm Depth (in)	*Design Capture Volume,* $\mathbf{V_{BMP}}$ *(cubic feet)*	*Proposed Volume on Plans (cubic feet)*
	A_T = Σ[A] 92,200			Σ= [D] 66,572		[E] 0.59	$[F] = \frac{[D]x[E]}{12}$ 3273	[G] ***6110***

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Section E: Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to LID waiver approval by the Copermittee). Check one of the following Boxes:

☒ LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- *Or* -

☐ The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Co-Permittee and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The following alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

List DMAs here.

E.1 Identify Pollutants of Concern

Utilizing Table A.1 from Section A above which noted your project's receiving waters and their associated EPA approved 303(d) listed impairments, cross reference this information with that of your selected Priority Development Project Category in Table E.1 below. If the identified General Pollutant Categories are the same as those listed for your receiving waters, then these will be your Pollutants of Concern and the appropriate box or boxes will be checked on the last row. The purpose of this is to document compliance and to help you appropriately plan for mitigating your Pollutants of Concern in lieu of implementing LID BMPs.

Table E.1 Potential Pollutants by Land Use Type

Priority Development Project Categories and/or Project Features (check those that apply)	General Pollutant Categories							
	Bacterial Indicators	Metals	Nutrients	Pesticides	Toxic Organic Compounds	Sediments	Trash & Debris	Oil & Grease
☐ Detached Residential Development	P	N	P	P	N	P	P	P
☐ Attached Residential Development	P	N	P	P	N	P	P	P(2)
☐ Commercial/Industrial Development	P(3)	P	P(1)	P(1)	P(5)	P(1)	P	P
☒ Automotive Repair Shops	N	P	N	N	P(4, 5)	N	P	P
☐ Restaurants (>5,000 ft^2)	P	N	N	N	N	N	P	P
☐ Hillside Development (>5,000 ft^2)	P	N	P	P	N	P	P	P
☒ Parking Lots (>5,000 ft^2)	P(6)	P	P(1)	P(1)	P(4)	P(1)	P	P
☐ Retail Gasoline Outlets	N	P	N	N	P	N	P	P
Project Priority Pollutant(s) of Concern	☐	☐	☐	☐	☒	☐	☒	☒

P = Potential

N = Not Potential

(1) A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected

(2) A potential Pollutant if the project includes uncovered parking areas; otherwise not expected

(3) A potential Pollutant is land use involving animal waste

(4) Specifically petroleum hydrocarbons

(5) Specifically solvents

(6) Bacterial indicators are routinely detected in pavement runoff

E.2 Stormwater Credits

Projects that cannot implement LID BMPs but nevertheless implement smart growth principles are potentially eligible for Stormwater Credits. Utilize Table 3-8 within the WQMP Guidance Document to identify your Project Category and its associated Water Quality Credit. If not applicable, write N/A.

Table E.2 Water Quality Credits

Qualifying Project Categories	Credit Percentage[2]
N/A	
Total Credit Percentage[1]	

[1]Cannot Exceed 50%

[2]Obtain corresponding data from Table 3-8 in the WQMP Guidance Document

E.3 Sizing Criteria

After you appropriately considered Stormwater Credits for your project, utilize Table E.3 below to appropriately size them to the DCV, or Design Flow Rate, as applicable. Please reference Chapter 3.5.2 of the WQMP Guidance Document for further information.

Table E.3 Treatment Control BMP Sizing

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Area x Runoff Factor		***Enter BMP Name / Identifier Here***		
	[A]		[B]	[C]	[A] x [C]				
						Design Storm Depth (in)	*Minimum Design Capture Volume or Design Flow Rate (cubic feet or cfs)*	*Total Storm Water Credit % Reduction*	*Proposed Volume or Flow on Plans (cubic feet or cfs)*
	A_T = Σ[A]				Σ= [D]	[E]	$[F] = \frac{[D]x[E]}{[G]}$	[F] X (1-[H])	[I]

[B], [C] is obtained as described in Section 2.3.1 from the WQMP Guidance Document

[E] is for Flow-Based Treatment Control BMPs [E] = .2, for Volume-Based Control Treatment BMPs, [E] obtained from Exhibit A in the WQMP Guidance Document

[G] is for Flow-Based Treatment Control BMPs [G] = 43,560, for Volume-Based Control Treatment BMPs, [G] = 12

[H] is from the Total Credit Percentage as Calculated from Table E.2 above

[I] as obtained from a design procedure sheet from the BMP manufacturer and should be included in Appendix 6

E.4 Treatment Control BMP Selection

Treatment Control BMPs typically provide proprietary treatment mechanisms to treat potential pollutants in runoff, but do not sustain significant biological processes. Treatment Control BMPs must have a removal efficiency of a medium or high effectiveness as quantified below:

- **High**: equal to or greater than 80% removal efficiency
- **Medium**: between 40% and 80% removal efficiency

Such removal efficiency documentation (e.g., studies, reports, etc.) as further discussed in Chapter 3.5.2 of the WQMP Guidance Document, must be included in Appendix 6. In addition, ensure that proposed Treatment Control BMPs are properly identified on the WQMP Site Plan in Appendix 1.

Table E.4 Treatment Control BMP Selection

Selected Treatment Control BMP Name or ID[1]	Priority Pollutant(s) of Concern to Mitigate[2]	Removal Efficiency Percentage[3]

[1] Treatment Control BMPs must not be constructed within Receiving Waters. In addition, a proposed Treatment Control BMP may be listed more than once if they possess more than one qualifying pollutant removal efficiency.
[2] Cross Reference Table E.1 above to populate this column.
[3] As documented in a Co-Permittee Approved Study and provided in Appendix 6.

Section F: Hydromodification

F.1 Hydrologic Conditions of Concern (HCOC) Analysis

Once you have determined that the LID design is adequate to address water quality requirements, you will need to assess if the proposed LID Design may still create a HCOC. Review Chapters 2 and 3 (including Figure 3-7) of the WQMP Guidance Document to determine if your project must mitigate for Hydromodification impacts. If your project meets one of the following criteria which will be indicated by the check boxes below, you do not need to address Hydromodification at this time. However, if the project does not qualify for Exemptions 1, 2 or 3, then additional measures must be added to the design to comply with HCOC criteria. This is discussed in further detail below in Section F.2.

HCOC EXEMPTION 1: The Priority Development Project disturbs less than one acre. The Copermittee has the discretion to require a Project-Specific WQMP to address HCOCs on projects less than one acre on a case by case basis. The disturbed area calculation should include all disturbances associated with larger common plans of development.

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

If Yes, HCOC criteria do not apply.

HCOC EXEMPTION 2: The volume and time of concentration[1] of storm water runoff for the post-development condition is not significantly different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant) using one of the following methods to calculate:

- Riverside County Hydrology Manual
- Technical Release 55 (TR-55): Urban Hydrology for Small Watersheds (NRCS 1986), or derivatives thereof, such as the Santa Barbara Urban Hydrograph Method
- Other methods acceptable to the Co-Permittee

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

If Yes, report results in Table F.1 below and provide your substantiated hydrologic analysis in Appendix 7.

Table F.1 Hydrologic Conditions of Concern Summary

	2 year – 24 hour		
	Pre-condition	**Post-condition**	**% Difference**
Time of Concentration	INSERT VALUE	INSERT VALUE	INSERT VALUE
Volume (Cubic Feet)	INSERT VALUE	INSERT VALUE	INSERT VALUE

[1] Time of concentration is defined as the time after the beginning of the rainfall when all portions of the drainage basin are contributing to flow at the outlet.

HCOC EXEMPTION 3: All downstream conveyance channels to an adequate sump (for example, Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River, or other lake, reservoir or naturally erosion resistant feature) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on the Co-Permittees Hydromodification Susceptibility Maps.

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

If Yes, HCOC criteria do not apply and note below which adequate sump applies to this HCOC qualifier:

INSERT TEXT HERE

F.2 HCOC Mitigation

If none of the above HCOC Exemption Criteria are applicable, HCOC criteria is considered mitigated if they meet one of the following conditions:

a. Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.

b. The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.

c. Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

Be sure to include all pertinent documentation used in your analysis of the items a, b or c in Appendix 7.

Section G: Source Control BMPs

Source control BMPs include permanent, structural features that may be required in your project plans — such as roofs over and berms around trash and recycling areas — and Operational BMPs, such as regular sweeping and "housekeeping", that must be implemented by the site's occupant or user. The MEP standard typically requires both types of BMPs. In general, Operational BMPs cannot be substituted for a feasible and effective permanent BMP. Using the Pollutant Sources/Source Control Checklist in Appendix 8, review the following procedure to specify Source Control BMPs for your site:

1. ***Identify Pollutant Sources*:** Review Column 1 in the Pollutant Sources/Source Control Checklist. Check off the potential sources of Pollutants that apply to your site.

2. ***Note Locations on Project-Specific WQMP Exhibit*:** Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist. Show the location of each Pollutant source and each permanent Source Control BMP in your Project-Specific WQMP Exhibit located in Appendix 1.

3. ***Prepare a Table and Narrative*:** Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist. In the left column of Table G.1 below, list each potential source of runoff Pollutants on your site (from those that you checked in the Pollutant Sources/Source Control Checklist). In the middle column, list the corresponding permanent, Structural Source Control BMPs (from Columns 2 and 3 of the Pollutant Sources/Source Control Checklist) used to prevent Pollutants from entering runoff. **Add additional narrative** in this column that explains any special features, materials or methods of construction that will be used to implement these permanent, Structural Source Control BMPs.

4. ***Identify Operational Source Control BMPs:*** To complete your table, refer once again to the Pollutant Sources/Source Control Checklist. List in the right column of your table the Operational BMPs that should be implemented as long as the anticipated activities continue at the site. Copermittee stormwater ordinances require that applicable Source Control BMPs be implemented; the same BMPs may also be required as a condition of a use permit or other revocable Discretionary Approval for use of the site.

Table G.1 Permanent and Operational Source Control Measures

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
Interior floor drains and elevator shaft sump pumps	State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	Inspect and maintain drains to prevent blockages and overflow.
Landscape/Outdoor Pesticide Use	Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated	Maintain landscaping using minimum or no pesticides. See applicable operational BMPs in "What you should know for…..Landscape and Gardening" at http://rcflood.org/stormwater/Error! Hyperlink reference not valid. Provide IPM information to new owners, lessees and operators.

	soil conditions. Consider using pest-resistant plants, especially adjacent to hardscape. To ensure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	
Refuse areas	State how site refuse will be handled and provide supporting detail to what is shown on plans. State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
Vehicle/Equipment Repair and Maintenance	State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains. No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.
Fire Sprinkler Test Water	Provide a means to drain fire sprinkler test water to the sanitary sewer.	See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
Plazas, sidewalks, and parking lots.		Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

Section H: Construction Plan Checklist

Populate Table H.1 below to assist the plan checker in an expeditious review of your project. The first two columns will contain information that was prepared in previous steps, while the last column will be populated with the corresponding plan sheets. **This table is to be completed with the submittal of your final Project-Specific WQMP.**

Table H.1 Construction Plan Cross-reference

BMP No. or ID	BMP Identifier and Description	Corresponding Plan Sheet(s)	BMP Location (Lat/Long)
BMP 1	Bmp 1 – Biofiltration Basin	Site Grading Plan	33°38’19.27”N 117°10’39.20”W

Note that the updated table — or Construction Plan WQMP Checklist — is **only a reference tool** to facilitate an easy comparison of the construction plans to your Project-Specific WQMP. Co-Permittee staff can advise you regarding the process required to propose changes to the approved Project-Specific WQMP.

Section I: Operation, Maintenance and Funding

***This section will be completed and addressed at the time of the final WQMP Submittal*.**

The Copermittee will periodically verify that Stormwater BMPs on your site are maintained and continue to operate as designed. To make this possible, your Copermittee will require that you include in Appendix 9 of this Project-Specific WQMP:

1. A means to finance and implement facility maintenance in perpetuity, including replacement cost. *Funding and responsible party/owner will be determined at final engineering.*
2. Acceptance of responsibility for maintenance from the time the BMPs are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the Stormwater BMPs you have selected.
4. Figures delineating and designating pervious and impervious areas, location, and type of Stormwater BMP, and tables of pervious and impervious areas served by each facility. Geo-locating the BMPs using a coordinate system of latitude and longitude is recommended to help facilitate a future statewide database system.
5. A separate list and location of self-retaining areas or areas addressed by LID Principles that do not require specialized O&M or inspections but will require typical landscape maintenance as noted in Chapter 5, pages 85-86, in the WQMP Guidance. Include a brief description of typical landscape maintenance for these areas.

Your local Co-Permittee will also require that you prepare and submit a detailed Stormwater BMP Operation and Maintenance Plan that sets forth a maintenance schedule for each of the Stormwater BMPs built on your site. An agreement assigning responsibility for maintenance and providing for inspections and certification may also be required.

Details of these requirements and instructions for preparing a Stormwater BMP Operation and Maintenance Plan are in Chapter 5 of the WQMP Guidance Document.

Maintenance Mechanism: Insert text here.

Will the proposed BMPs be maintained by a Home Owners' Association (HOA) or Property Owners Association (POA)?

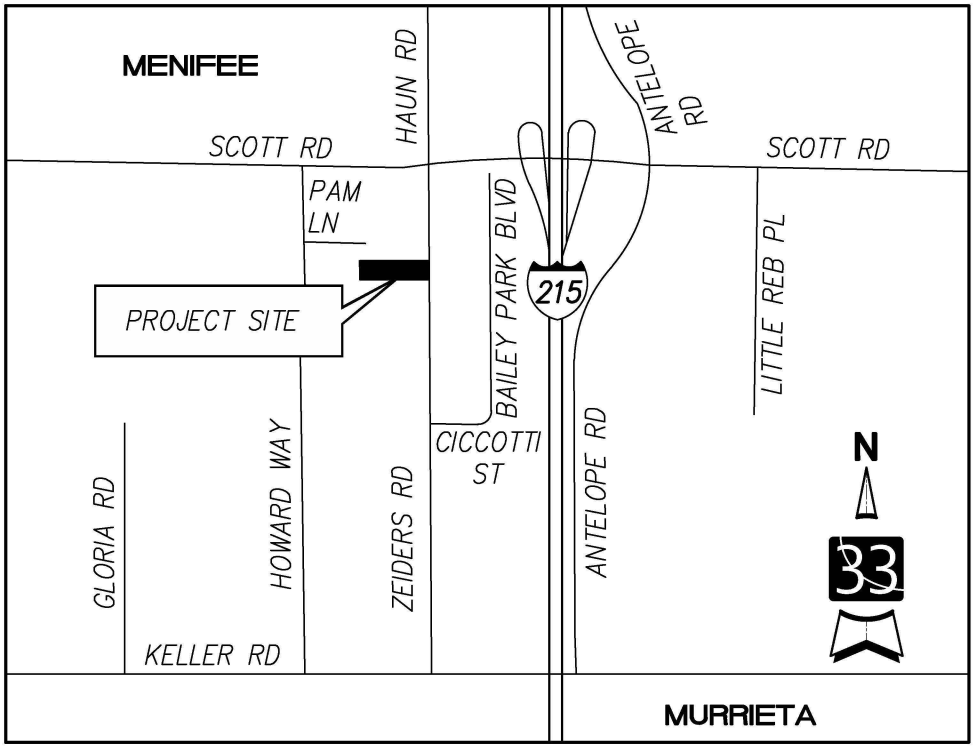
☐ Y ☒ N

Include your Operation and Maintenance Plan and Maintenance Mechanism in Appendix 9. Additionally, include all pertinent forms of educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP in Appendix 10.

Appendix 1: Maps and Site Plans

Location Map, WQMP Site Plan and Receiving Waters Map

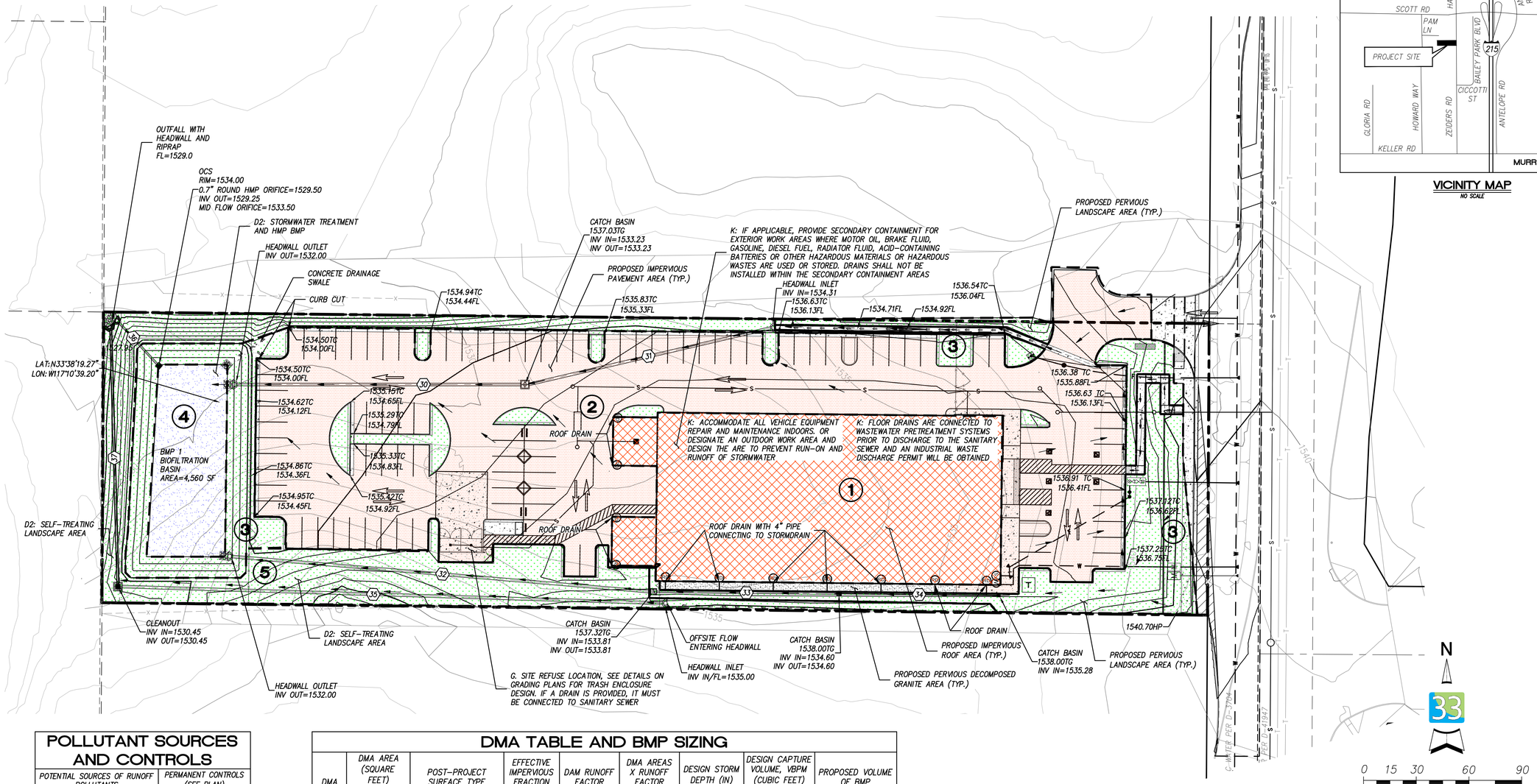
CALIBER COLLISION
33235-33185 ZEIDERS RD,
MENIFEE, CA 92584



VICINITY MAP

NO SCALE

POST-CONSTRUCTION BMP SITE PLAN
CALIBER COLLISION - PR21-0293



VICINITY MAP
NO SCALE

POLLUTANT SOURCES AND CONTROLS

POTENTIAL SOURCES OF RUNOFF POLLUTANTS	PERMANENT CONTROLS (SEE PLAN)
INTERIOR FLOOR DRAINS	B
LANDSCAPE/OUTDOOR PESTICIDE USE	D2
REFUSE AREAS	G
VEHICLE/EQUIPMENT REPAIR AND MAINTENANCE	K
FIRE SPRINKLER TEST WATER	N
PLAZAS, SIDEWALKS, AND PARKING LOTS	P

NOTE: SEE WQMP REPORT FOR PERMANENT CONTROLS AND OPERATIONAL BMPS LISTED IN TABLE AND NARRATIVE OF SECTION G: SOURCE CONTROL BMPS

STORM DRAIN DATA

NO	BEARING	LENGTH	SLOPE	NOTE
30	S89°59'57"W'	163.36'	0.75%	12.0" HDPE
31	S77°03'03"W'	142.66'	0.75%	12.0" HDPE
32	N85°13'37"W'	240.00'	0.75%	12.0" HDPE
33	N89°24'13"W'	103.62'	0.75%	12.0" HDPE
34	N89°21'04"W'	89.01'	0.75%	12.0" HDPE
35	N88°15'07"W'	309.47'	1.46%	12.0" HDPE
36	N42°37'31"W'	33.06'	0.73%	12.0" HDPE
37	N1°35'26"W'	145.42'	0.99%	12.0" HDPE

DMA TABLE AND BMP SIZING

DMA	DMA AREA (SQUARE FEET)	POST-PROJECT SURFACE TYPE	EFFECTIVE IMPERVIOUS FRACTION	DAM RUNOFF FACTOR	DMA AREAS X RUNOFF FACTOR	DESIGN STORM DEPTH (IN)	DESIGN CAPTURE VOLUME, VBPM (CUBIC FEET)	PROPOSED VOLUME OF BMP
1	19,940	ROOFS	1	0.89	17787			
2	48,690	CONCRETE OR ASPHALT	1	0.89	43432			
3	17,240	NATURAL (C SOIL)	0.3	0.23	3882			
4	5,485	NATURAL (C SOIL)	0.3	0.23	1235			
6	845	DECOMPOSED GRANITE	0.4	0.28	236			
TOTAL	92200				66571.3	0.59	3273.1	6110

NOTE:
1. DMA 5 IS SELF-TREATING AND NOT INCLUDED IN THIS TABLE. AREA=12,755 AND SURFACE TYPE IS NATURAL VEGETATION/GRASS
2. SEE WQMP SECTION D FOR FURTHER BMP SIZING CALCULATIONS

EXISTING SITE INFORMATION

HYDROLOGIC SOIL GROUP: SOIL CLASS TYPES "C" AND "D"

GROUNDWATER: ~20' DEPTH

EXISTING NATURAL HYDROLOGIC FEATURES: NO NATURAL HYDROLOGIC FEATURES EXIST ONSITE.

EXISTING TOPOGRAPHY AND IMPERVIOUS AREA: EXISTING TOPOGRAPHY SHOWN HEREON. SEE AREA SUMMARY TABLE FOR EXISTING IMPERVIOUS AREA.

EXISTING DRAINAGE: EXISTING DRAINAGE IS SHOWN HEREON.

PROPOSED SITE INFORMATION

PROPOSED GRADING: SHOWN HEREON.

PROPOSED IMPERVIOUS FEATURES: SHOWN HEREON.

PROPOSED DRAINAGE: SHOWN HEREON.

PROPOSED DESIGN FEATURES: SITE DESIGN REQUIREMENTS SHOWN HEREON.

DRAINAGE MANAGEMENT AREAS: SHOWN HEREON. SEE DMA SUMMARY TABLE.

POTENTIAL POLLUTANT SOURCE AREAS AND SOURCE CONTROL: SHOWN HEREON. SEE WQMP REPORT FOR EXPLANATION.

STRUCTURAL BMPS: BIOFILTRATION BASIN SHOWN HEREON. SEE DETAILS BELOW.

LEGEND

- IMPERVIOUS PAVEMENT AREA
- IMPERVIOUS ROOF AREA
- PERVIOUS DECOMPOSED GRANITE AREA
- PERVIOUS LANDSCAPE AREA
- PERVIOUS BMP AREA
- DMA BOUNDARY
- (1) DMA IDENTIFIER
- DRAINAGE PATTERNS

latitude 33
PLANNING & ENGINEERING
9988 Hibert Street 2nd Floor, San Diego, CA 92131
Tel 858.751.0633

BY	DATE	REVISION
XXX	10.27.2021	CUP APPLICATION

POST-CONSTRUCTION BMP SITE PLAN
CALIBER COLLISION - PR21-0293
33235-33185 ZEIDERS RD, MENIFEE, CA 92584

L33 PROJECT NUMBER (PN): 1799.00
OTHER PN: XXXX.XX
DESIGNED BY: MAM DATE: 10.27.2021
DRAWN BY: MAM DATE: 10.27.2021
CHECKED BY: SDD DATE: 10.27.2021

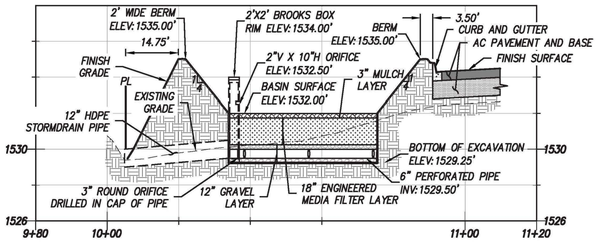
SHEET 1 OF 1

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1/28/2022 11:40:55 AM

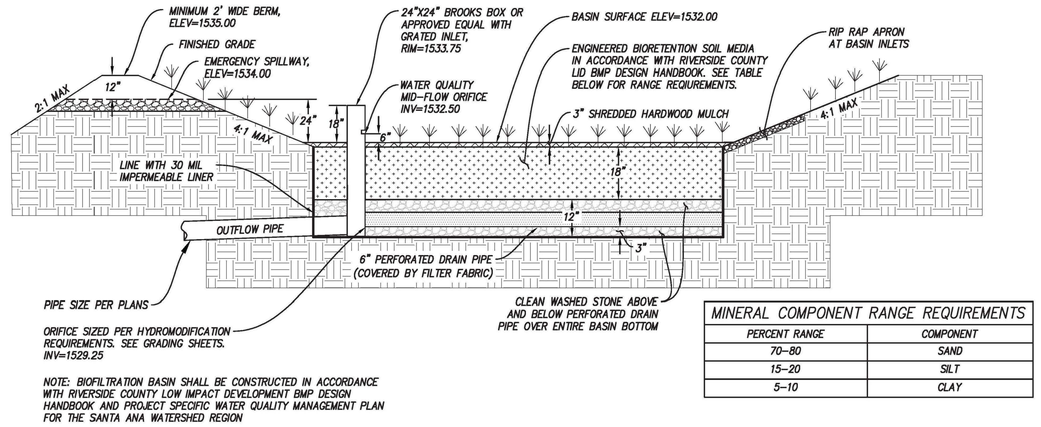
H:\1700\1799.00 - VO - Due Diligence Caliber Collision - Menifee\Engineering\Reports\Water Quality\Appendix 1 Maps and Site Plans\BMP Site Map\1799.00 BMP Site Map.dwg

POST-CONSTRUCTION BMP SITE PLAN
CALIBER COLLISION - PR21-0293
DETAILS AND CROSS SECTIONS



BIOFILTRATION BASIN CROSS SECTION

SCALE: 1"=10'



NOTE: BIOFILTRATION BASIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH RIVERSIDE COUNTY LOW IMPACT DEVELOPMENT BMP DESIGN HANDBOOK AND PROJECT SPECIFIC WATER QUALITY MANAGEMENT PLAN FOR THE SANTA ANA WATERSHED REGION

MINERAL COMPONENT RANGE REQUIREMENTS	
PERCENT RANGE	COMPONENT
70–80	SAND
15–20	SILT
5–10	CLAY

BIOFILTRATION BASIN DETAIL

CONCRETE SWALE

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9968 Hibert Street 2nd Floor, San Diego, CA 92131
Tel 858.751.0633

BY	DATE	REVISION
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MAM	02.11.2022	2ND CUP SUBMITTAL

DMA EXHIBIT
CALIBER COLLISION - PR21-0293

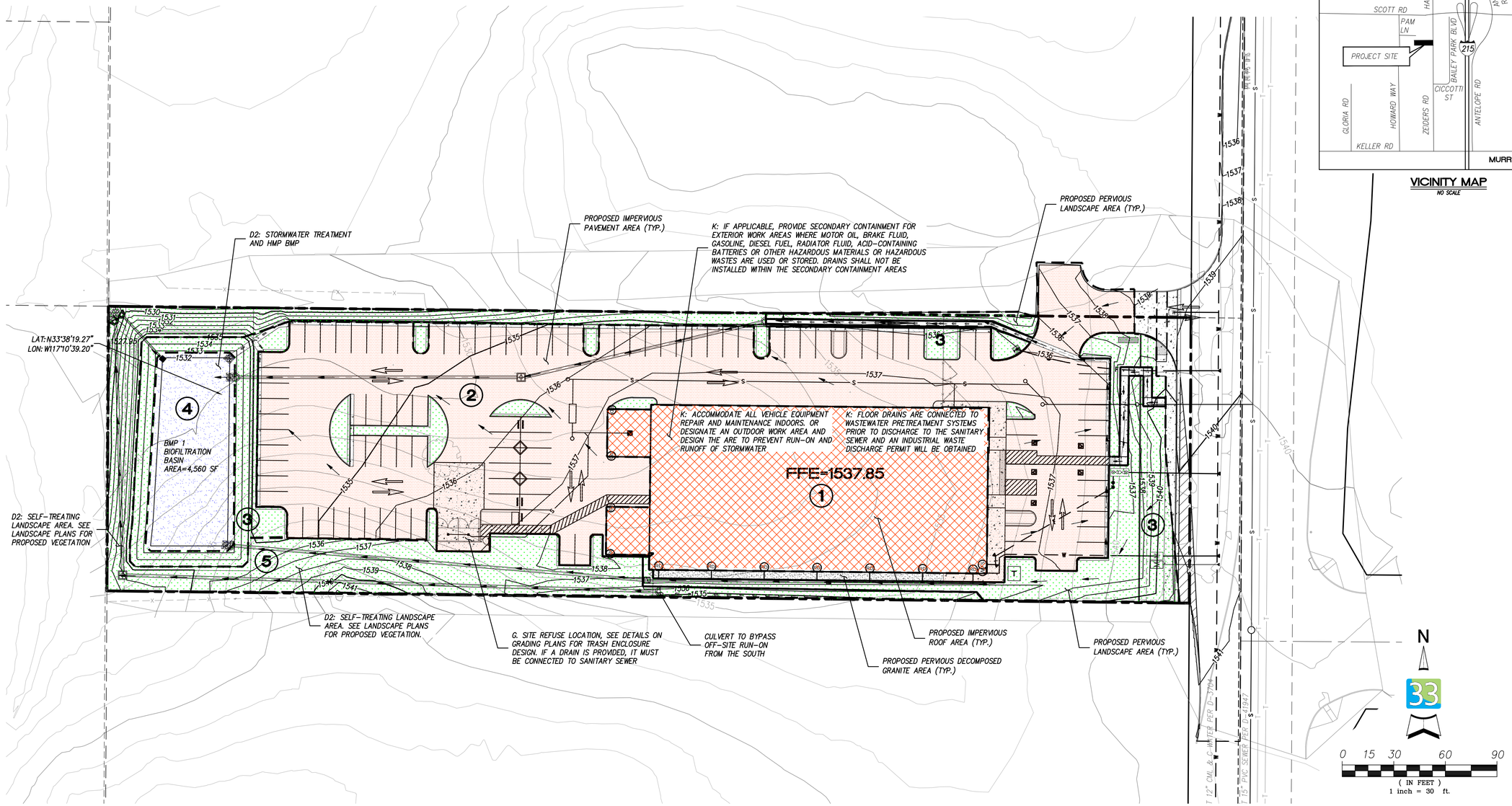
33235-33185 ZEIDERS RD, MENIFEE, CA 92584

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1 OF 1

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DMA EXHIBIT
CALIBER COLLISION – PR21-0293



VICINITY MAP
NO SCALE

POLLUTANT SOURCES AND CONTROLS

POTENTIAL SOURCES OF RUNOFF POLLUTANTS	PERMANENT CONTROLS (SEE PLAN)
INTERIOR FLOOR DRAINS	B
LANDSCAPE/OUTDOOR PESTICIDE USE	D2
REFUSE AREAS	G
VEHICLE/EQUIPMENT REPAIR AND MAINTENANCE	K
FIRE SPRINKLER TEST WATER	N
PLAZAS, SIDEWALKS, AND PARKING LOTS	P

NOTE: SEE WQMP REPORT FOR PERMANENT CONTROLS AND OPERATIONAL BMPS LISTED IN TABLE AND NARRATIVE OF SECTION G: SOURCE CONTROL BMPS

DMA TABLE AND BMP SIZING

DMA	DMA AREA (SQUARE FEET)	POST-PROJECT SURFACE TYPE	EFFECTIVE IMPERVIOUS FRACTION	DAM RUNOFF FACTOR	DMA AREAS X RUNOFF FACTOR	DESIGN STORM DEPTH (IN)	DESIGN CAPTURE VOLUME, VBPM (CUBIC FEET)	PROPOSED VOLUME OF BMP
1	19,940	ROOFS	1	0.89	17787			
2	48,690	CONCRETE OR ASPHALT	1	0.89	43432			
3	17,240	NATURAL (C SOIL)	0.3	0.23	3882			
4	5,485	NATURAL (C SOIL)	0.3	0.23	1235			
6	845	DECOMPOSED GRANITE	0.4	0.28	236			
TOTAL	92200				66571.3	0.59	3273.1	6110

NOTE:
1. DMA 5 IS SELF-TREATING AND NOT INCLUDED IN THIS TABLE. AREA=12,755 AND SURFACE TYPE IS NATURAL VEGETATION/GRASS
2. SEE WQMP SECTION D FOR FURTHER BMP SIZING CALCULATIONS

EXISTING SITE INFORMATION

HYDROLOGIC SOIL GROUP: SOIL CLASS TYPES "C" AND "D"

GROUNDWATER: ~20' DEPTH

EXISTING NATURAL HYDROLOGIC FEATURES: NO NATURAL HYDROLOGIC FEATURES EXIST ONSITE.

EXISTING TOPOGRAPHY AND IMPERVIOUS AREA: EXISTING TOPOGRAPHY SHOWN HEREON. SEE AREA SUMMARY TABLE FOR EXISTING IMPERVIOUS AREA.

EXISTING DRAINAGE: EXISTING DRAINAGE IS SHOWN HEREON.

PROPOSED SITE INFORMATION

PROPOSED GRADING: SHOWN HEREON.

PROPOSED IMPERVIOUS FEATURES: SHOWN HEREON.

PROPOSED DRAINAGE: SHOWN HEREON.

PROPOSED DESIGN FEATURES: SITE DESIGN REQUIREMENTS SHOWN HEREON.

DRAINAGE MANAGEMENT AREAS: SHOWN HEREON. SEE DMA SUMMARY TABLE.

POTENTIAL POLLUTANT SOURCE AREAS AND SOURCE CONTROL: SHOWN HEREON. SEE WQMP REPORT FOR EXPLANATION.

STRUCTURAL BMPS: BIOFILTRATION BASIN SHOWN HEREON. SEE DETAILS BELOW.

LEGEND

- IMPERVIOUS PAVEMENT AREA
- IMPERVIOUS ROOF AREA
- PERVIOUS DECOMPOSED GRANITE AREA
- PERVIOUS LANDSCAPE AREA
- PERVIOUS BMP AREA
- DMA BOUNDARY
- (1) DMA IDENTIFIER
- DRAINAGE PATTERNS

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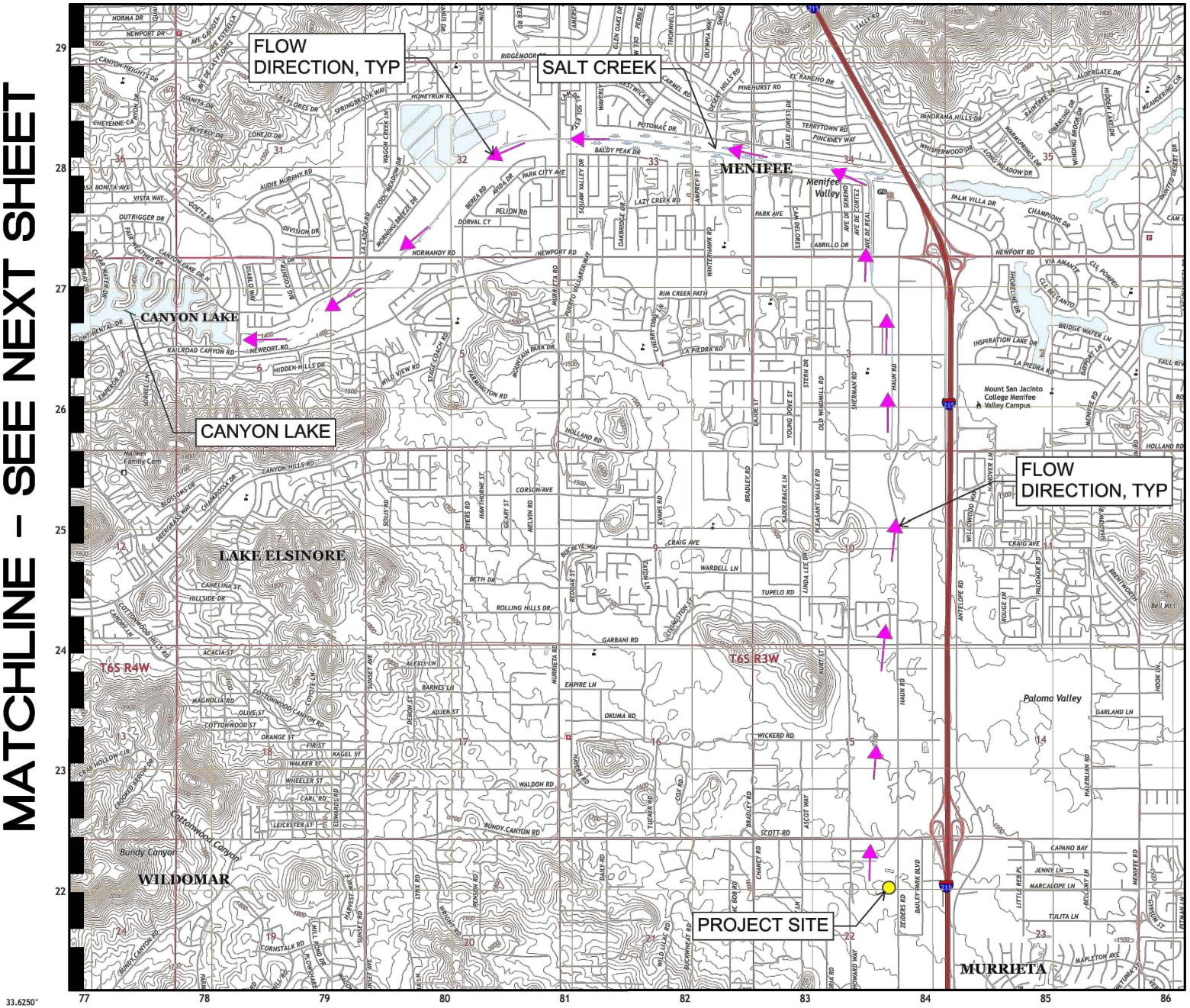
DMA EXHIBIT
CALIBER COLLISION – PR21-0293
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SHEET
1 OF 1

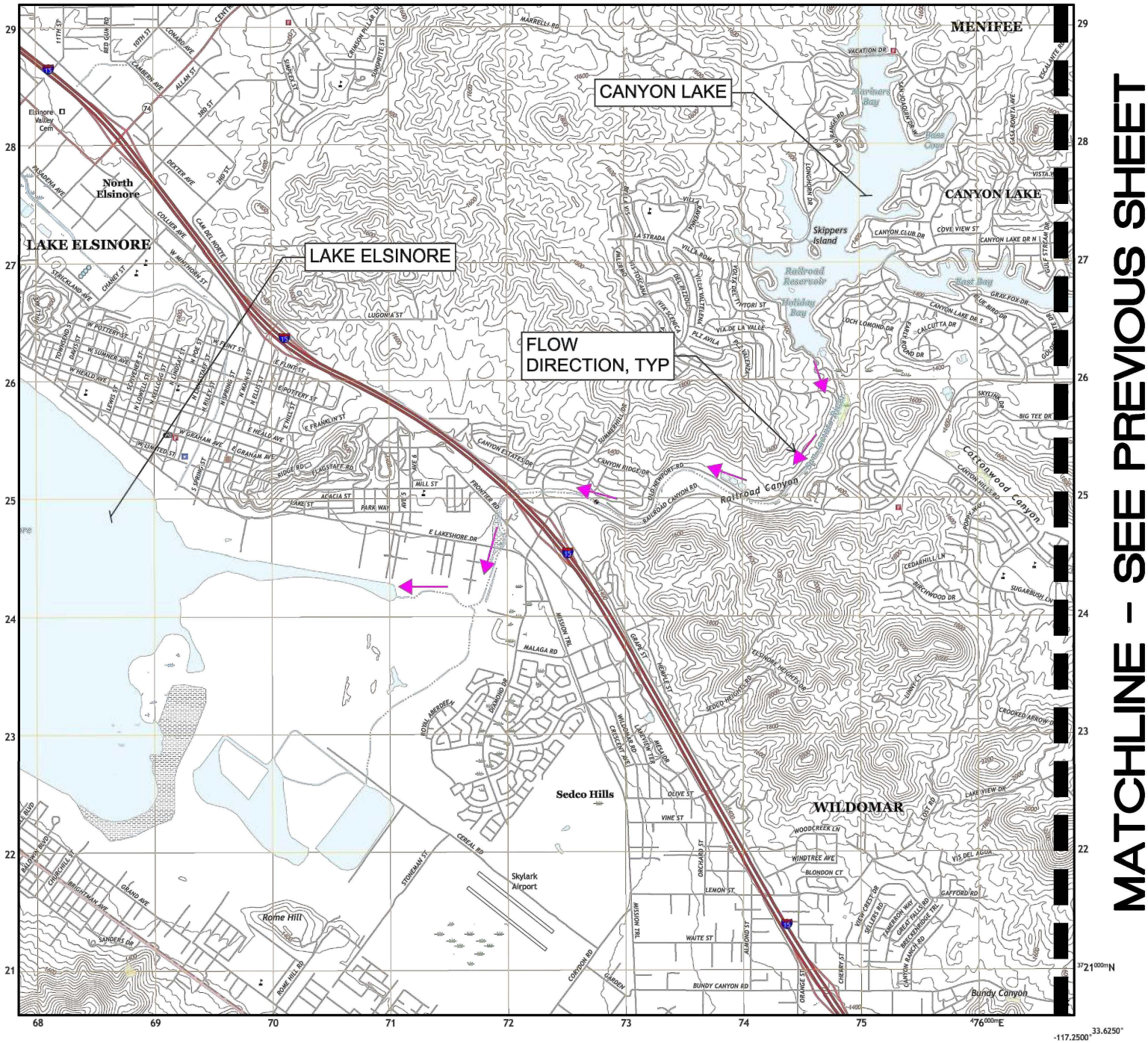
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MATCHLINE - SEE NEXT SHEET



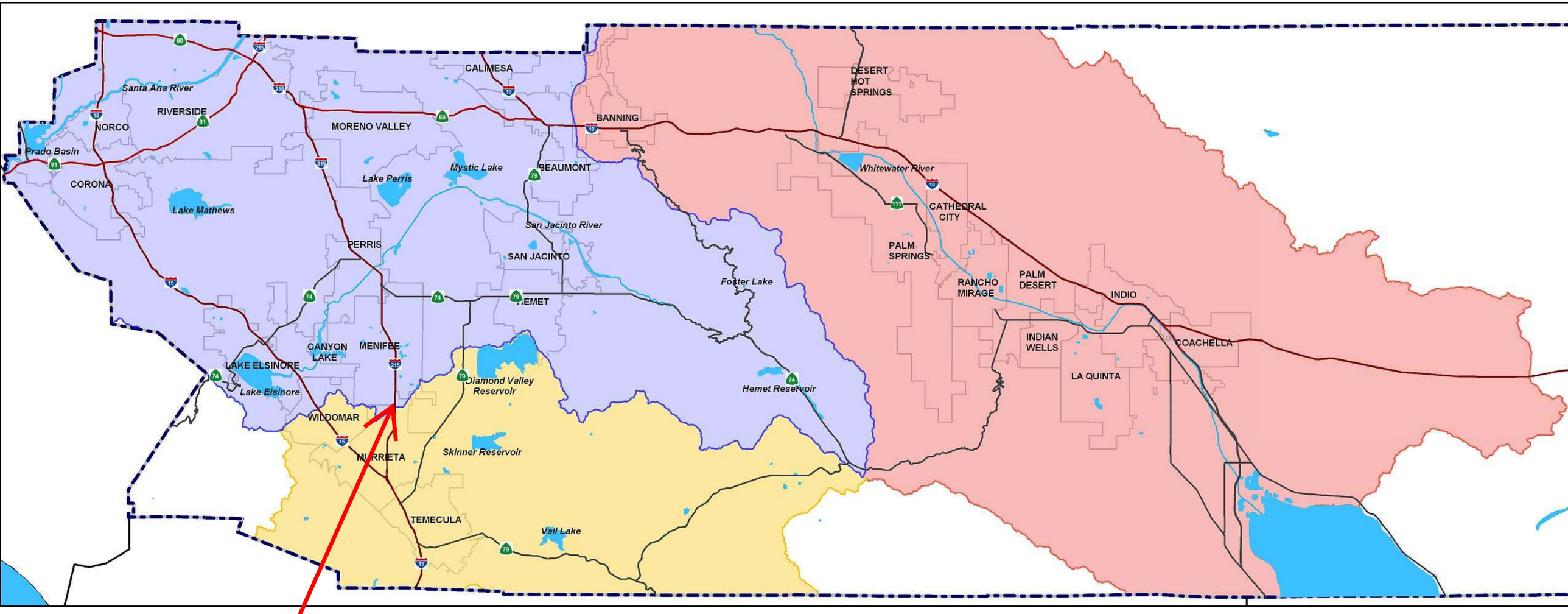
RECEIVING WATERS MAP

CALIBER COLLISION – P21-0293
SCALE: 1"=4000'
SHEET 1 OF 2



RECEIVING WATERS MAP

CALIBER COLLISION – P21-0293
SCALE: 1"=4000'
SHEET 2 OF 2


CALIMESA
DESERT HOT SPRINGS
Santa Ana River
RIVERSIDE
NORCO
BANNING
MORENO VALLEY
Prado Basin
Mystic Lake
BEAUMONT
Whitewater River
CORONA
Lake Perris
Lake Mathews
CATHEDRAL CITY
San Jacinto River
PERRIS
PALM SPRINGS
SAN JACINTO
Foster Lake
RANCHO MIRAGE
PALM DESERT
INDIO
HEMET
INDIAN WELLS
COACHELLA
CANYON LAKE
MENIFEE
LAKE ELSINORE
LA QUINTA
Diamond Valley Reservoir
Hemet Reservoir
Lake Elsinore
WILDOMAR
MURRIETA
Skinner Reservoir
TEMECULA
Vail Lake
PROJECT LOCATION

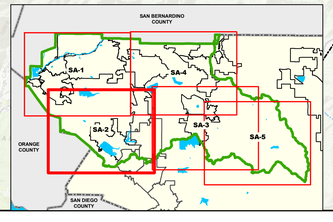
NPDES MUNICIPAL PERMIT
SANTA ANA RIVER WATERSHED
EXHIBIT SA-2
(LAKE ELSINORE, CANYON LAKE, PERRIS, MENIFEE, WILDOMAR AREAS)

- CITY MS4 FACILITIES
- COUNTY MS4 FACILITIES
- RCFC&WCD MS4 FACILITIES
- OTHER FACILITIES
- MAJOR OUTFALL SITES
- SAR CORE MONITORING STATIONS
- SANTA ANA RIVER WATERSHED BOUNDARY
- SANTA MARGARITA RIVER MS4 PERMIT AREA BOUNDARY
- LANDFILL SITES
- SEWAGE TREATMENT PLANTS
- SANTA ANA RIVER/SAN JACINTO RIVER
- BLUE LINE STREAMS
- RIVERSIDE COUNTY BOUNDARY
- INCORPORATED AREAS
- FREEWAYS/HIGHWAYS
- PRIMARY STREETS

N

0 0.5 1 1.5 2 MILES

UPDATED NOVEMBER 2017



CORONA
PERRIS
MENIFEE
CANYON LAKE
LAKE ELSINORE
WILDOMAR
TEMESCAL VALLEY
GAVILAN PLATEAU
RIVERSIDE COUNTY
ORANGE COUNTY
SEE FOOTNOTE 1
PROJECT LOCATION
SEE FOOTNOTE 1

FOOTNOTE:
1) MS4 PERMIT AREA REMOVED FROM REGION 8 BASED ON JURISDICTIONAL AREA SWAP AGREEMENT BETWEEN REGION 8 AND REGION 9

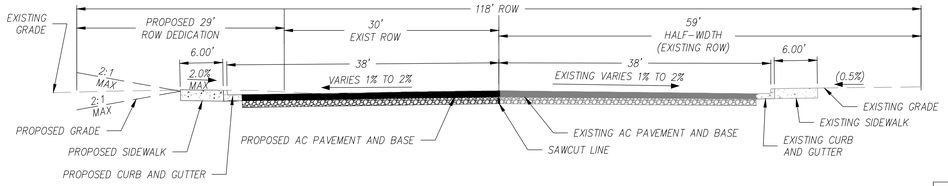
The graphical and tabular information shown on this document may be derived from a variety of public agency and/or private commercial sources such as Riverside County Transportation and Land Management Agency, Thomas Brothers Mapping, the Stephen P. Teale Data Center, GIS Technology Center, State of California, the United States Geologic Survey and the United States National Atlas. These sources may possess varying levels of accuracy and precision and this product is meant only as a guide to the relative position and scale of the depicted features. This GIS document is in no case to be interpreted as fundamental or decisive for purposes of land surveying, field engineering, plan drafting, code enforcement, land boundary determination and/or land acquisition.

SAR 2017 ArcMap - MS4 Maps_Map2.mxd

Appendix 2: Construction Plans

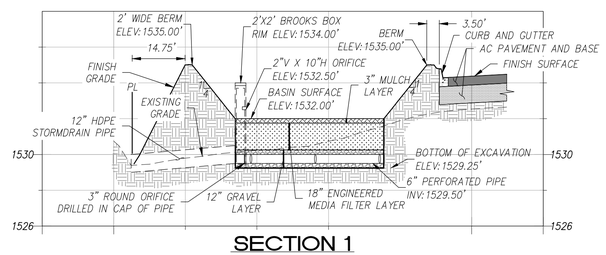
Grading and Drainage Plans

CONCEPTUAL SITE, GRADING, DRAINAGE, CIRCULATION, AND UTILITY PLAN

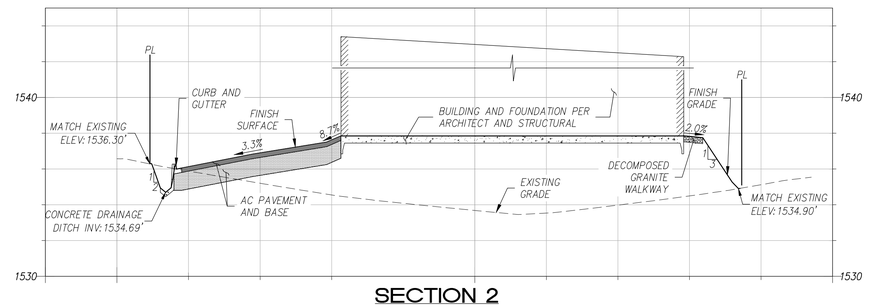


ZEIDERS ROAD IMPROVEMENTS - SECTION - NORTH VIEW

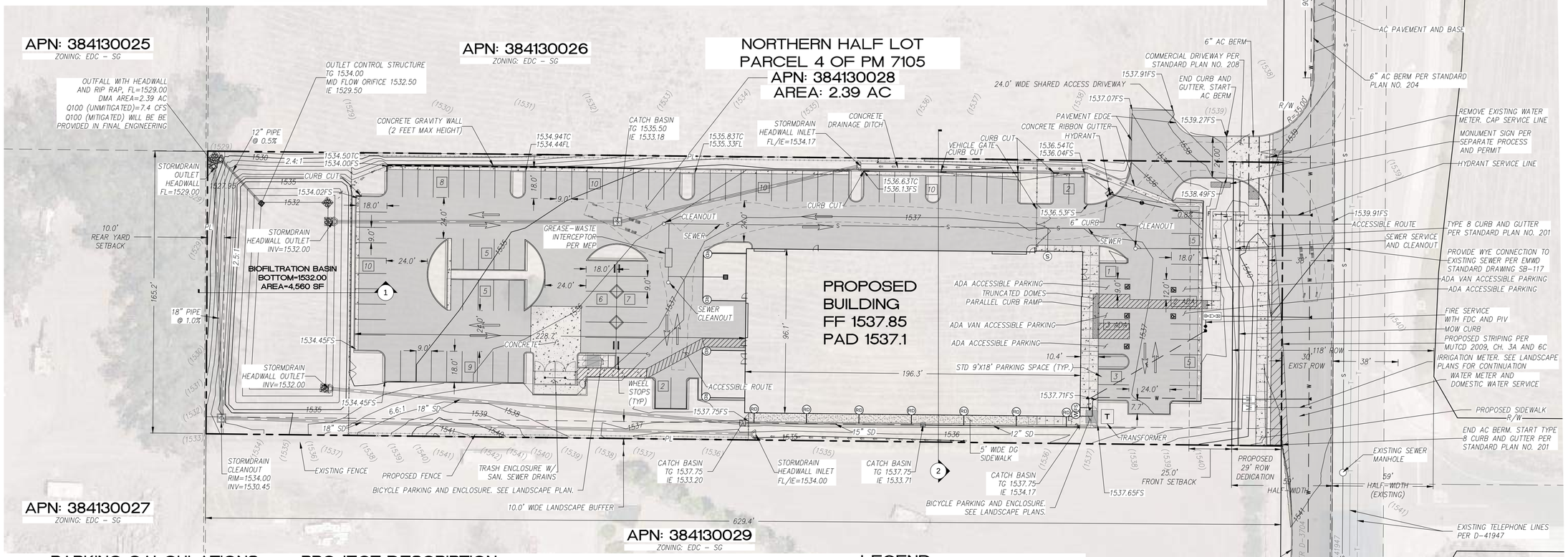
NOT TO SCALE



SECTION 1



SECTION 2



PARKING CALCULATIONS

STANDARD:
1 SPACE PER 150 SQ. FT GROSS FLOOR AREA (NOT INCLUDING FOR SERVICE BAYS) & 4 SPACES PER SERVICE BAY (CMDC TABLE 9.215.040-1)

TOTAL BUILDING AREA = 18,717 SF
6-SERVICE BAYS = 7,392 SF

18,717-7,392=11,325 SF -> 11,325/150 =75.5 SPACES

76+2 = 100 SPACES REQUIRED
101 PROVIDED (INCLUDES ADA STALLS)

ADA:
5 REQUIRED (CBC 11B-208)

5 PROVIDED:
2 VAN ACCESSIBLE
3 STANDARD ADA

BICYCLE:
1 PER 25 PARKING SPACES REQUIRED (CMDC 9.215.040-5)

101 / 25 = 4.04 REQ
8 PROVIDED IN 2X ENCLOSURES

UTILITY NOTES

DRY UTILITIES (GAS, ELECTRICAL, LIGHTING, TELECOMM) PER OTHERS AND NOT DEPICTED ON THESE PLANS.

UTILITY PURVEYORS

WATER & SEWER: EASTERN MUNICIPAL WATER DISTRICT
TELECOMMUNICATIONS: FRONTIER COMMUNICATIONS

PROJECT DESCRIPTION

THE PROPOSED PROJECT IS AN AUTO BODY REPAIR AND PAINT SHOP TO BE CONSTRUCTED ON THE SITE. THE PROJECT WILL CONSIST OF AN APPROXIMATELY 18,600 SQUARE FOOD BUILDING, AND WILL REQUIRE PARKING FOR CUSTOMERS AND EMPLOYEES, SERVICE BAYS FOR THE PAINT AND BODY SHOP WORK, AND VEHICLE STORAGE.

ZONING

EXISTING: ECONOMIC DEVELOPMENT CORRIDOR - SOUTHERN GATEWAY (EDC-SG)
PROPOSED: ECONOMIC DEVELOPMENT CORRIDOR - SOUTHERN GATEWAY (EDC-SG)

EARTHWORK QUANTITY RAW

ESTIMATED CUT VOLUME=4,700 CY
ESTIMATED FILL VOLUME=9,200 CY
NET VOLUME=4,200 CY IMPORT

ADJUSTED FOR PAVEMENT THICKNESS

GENERAL NOTES

1. THE PARCEL AREA EXPRESSED HEREON ARE DERIVED FROM THE REQUEST FOR PROPOSAL AND ARE NOT BASED ON BOUNDARY RESEARCH OR VERIFICATION.
2. TOPOGRAPHY SHOWN IS PRELIMINARY. OBTAINED FROM GOOGLE EARTH PRO AND ADJUSTED TO NAVD88.
3. NO INFILTRATION CONDITION ASSUMED. PER USDA WEB SOIL SURVEY, PROPERTY LIES IN TYPE C & D SOILS. NO SIGNIFICANT INFILTRATION CAPACITY IS EXPECTED, IF ANY.

0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

N

STATEMENT OF OPERATIONS

AUTO BODY REPAIR AND PAINT SERVICE
MONDAY THROUGH FRIDAY: 7:30AM - 5:30PM
SATURDAY: POSSIBLE HOURS 8AM - 12PM
20 FULL TIME EMPLOYEES
NUMBER OF CUSTOMERS PER DAY: 13 - 15

INTENDED USE

AUTO BODY REPAIR AND PAINT SHOP

LEGEND

- PROPERTY LINE
- SETBACKS
- RIGHT-OF-WAY (R/W)
- AC PAVEMENT
- PCC PAVEMENT/SIDEWALK
- DG SURFACING
- EX TELECOM (T)
- EX 12" WATER LINE (W)
- EX 15" SEWER LINE (S)
- 6" FIRE LINE (F)
- 2" WATER LATERAL (W)
- 4" SEWER LATERAL (S)
- STORMDRAIN
- FIRE HYDRANT
- WATER METER
- BACKFLOW PREVENTER

AREAS

TOTAL AREA: 2.39 ACRES
TOTAL PROPOSED BUILDING AREA: 0.43 ACRES
TOTAL PROPOSED PAVED AREA: 1.66 ACRES
TOTAL PROPOSED LANDSCAPE AREA: 0.30 ACRES

latitude 33
PLANNING & ENGINEERING
9988 Hibert Street 2nd Floor, San Diego, CA 92131
Tel 858.751.0633

DATE	REVISION	BY
10/28/2021	1ST CUP SUBMITTAL	MAM
02/11/2022	2ND CUP SUBMITTAL	MAM

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CONCEPTUAL SITE, GRADING, DRAINAGE, CIRCULATION, AND UTILITY PLAN

CALIBER COLLISION
ZEIDERS RD,
MENIFEE CA 92584

L33 PROJECT NUMBER (PN): 1799.00
OTHER PN: N/A
DESIGNED BY: DP DATE: 10.27.2021
DRAWN BY: AK DATE: 10.27.2021
CHECKED BY: SD/NP DATE: 10.27.2021

SHEET 2 OF 3

Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data

WILL BE PROVIDED IN FINAL WQMP

Appendix 4: Historical Site Conditions

Phase I Environmental Site Assessment or Other Information on Past Site Use

WILL BE PROVIDED IN FINAL WQMP

Appendix 5: LID Infeasibility

LID Technical Infeasibility Analysis

Infiltration, Harvest and Use, and Bioretention were determined to be infeasible as stormwater treatment BMPs for this project, so Biotreatment is proposed. The following letter from the Geotechnical Consultant states that the existing soils are not suitable for infiltration.

Professional Service Industries, Inc.
11980 Telegraph Road, Unit 104
Santa Fe Springs, California 90670
Phone: (714) 484-8600
Fax: (562) 777-0899

January 21, 2022

Victory Real Estate Development
8201 Preston Road, Suite 700
Dallas, Texas 75225

Attn: Mr. Tim Kraftson
tim.kraftson@vg-re.com

Re: **Geotechnical Evaluation of Infiltration Feasibility**
Proposed Caliber Collision Development
North of 33235 Zeiders Road
Menifee, California 92584
Project Number: 0066-2170

Reference:

Professional Service Industries, Inc. (PSI), "Geotechnical Investigation, Proposed Caliber Collision Development, North of 33235 Zeiders Road, Menifee, California 92584", Project No. 0066-2170, dated October 1, 2021.

As requested, Professional Service Industries (PSI), an Intertek company, is pleased to provide our opinion concerning possible infiltration at the subject project referenced above. This work has been performed based on our proposal (0066-352332) dated August 30, 2021 and authorized by Jessi Fazio on August 30, 2021.

Based on our geotechnical investigation of the site and the Conceptual Site Grading plan (Latitude33, 10/27/21), the soils below the proposed biofiltration basin generally consist of very dense silty sand. The USDA NCRS soil survey of the area reports Wyman Loam (WyC2) clay loam; hydric group C. This hydric group is known to have a slow infiltration rate when thoroughly wet. PSI recommends not relying on infiltration at this site to manage stormwater.

Should you have any questions after reviewing this letter, please feel free to contact our office at your convenience.

Respectfully submitted for,

PROFESSIONAL SERVICE INDUSTRIES, INC.

REGISTERED PROFESSIONAL ENGINEER
DOUGLAS T. ABERNATHY
GE 2547
Exp. 12/31/22
GEOTECHNICAL
STATE OF CALIFORNIA

Douglas T. Abernathy, PE, GE
Senior Project Manager

Thomas Vick
Principal Consultant

CC: Latitude33 (Sean Drake)

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	Latitude 33 Planning and Engineering	Date	1/26/2022
Designed by		Case No	
Company Project Number/Name	Caliber Collision, PR21-0293		

BMP Identification

BMP NAME / ID: BMP 1

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.59 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
1	19,940	Roofs	1	0.89	17786.5			
2	48690	Concrete or Asphalt	1	0.89	43431.5			
3	17240	Natural (C Soil)	0.3	0.23	3881.9			
4	5485	Natural (C Soil)	0.3	0.23	1235			
6	845	Decomposed Granite	0.4	0.28	236.4			
	92200	Total			66571.3	0.59	3273.1	6110

Notes:

Bioretention Facility - Design Procedure	BMP ID: BMP 1	Legend:	Required Entries / Calculated Cells

Company Name: Latitude 33 Planning and Engineering | Date: 2/10/2022

Designed by: Matt McGuirk | County/City Case No.:

Design Volume

Enter the area tributary to this feature — A_T = 2.0524564 acres

Enter V_{BMP} determined from Section 2.1 of this Handbook — V_{BMP} = 3,273 ft^3

Type of Bioretention Facility Design

(●) Side slopes required (parallel to parking spaces or adjacent to walkways)

( ) No side slopes required (perpendicular to parking space or Planter Boxes)

Bioretention Facility Surface Area

Depth of Soil Filter Media Layer — d_S = 1.5 ft

Top Width of Bioretention Facility, excluding curb — w_T = 50.0 ft

Total Effective Depth, d_E

$d_E = (0.3) \times d_S + (0.4) \times 1 - (0.7/w_T) + 0.5$ — d_E = 1.34 ft

Minimum Surface Area, A_m

$$A_M\ (ft^2) = \frac{V_{BMP}\ (ft^3)}{d_E\ (ft)}$$

A_M = 2,450 ft^2

Proposed Surface Area — A= 4,560 ft^2

Bioretention Facility Properties

Side Slopes in Bioretention Facility — z = 4 :1

Diameter of Underdrain — 6 inches

Longitudinal Slope of Site (3% maximum) — 0 %

6" Check Dam Spacing — 0 feet

Describe Vegetation: Shrubs

Notes:

3.5 Bioretention Facility

Type of BMP	LID – Bioretention
Treatment Mechanisms	Infiltration, Evapotranspiration, Evaporation, Biofiltration
Maximum Drainage Area	This BMP is intended to be integrated into a project's landscaped area in a distributed manner. Typically, contributing drainage areas to Bioretention Facilities range from less than 1 acre to a maximum of around 10 acres.
Other Names	Rain Garden, Bioretention Cell, Bioretention Basin, Biofiltration Basin, Landscaped Filter Basin, Porous Landscape Detention

Description

Bioretention Facilities are shallow, vegetated basins underlain by an engineered soil media. Healthy plant and biological activity in the root zone maintain and renew the macro-pore space in the soil and maximize plant uptake of pollutants and runoff. This keeps the Best Management Practice (BMP) from becoming clogged and allows more of the soil column to function as both a sponge (retaining water) and a highly effective and self-maintaining biofilter. In most cases, the bottom of a Bioretention Facility is unlined, which also provides an opportunity for infiltration to the extent the underlying onsite soil can accommodate. When the infiltration rate of the underlying soil is exceeded, fully biotreated flows are discharged via underdrains. Bioretention Facilities therefore will inherently achieve the maximum feasible level of infiltration and evapotranspiration and achieve the minimum feasible (but highly biotreated) discharge to the storm drain system.

Siting Considerations

These facilities work best when they are designed in a relatively level area. Unlike other BMPs, Bioretention Facilities can be used in smaller landscaped spaces on the site, such as:

- ✓ Parking islands
- ✓ Medians
- ✓ Site entrances

Landscaped areas on the site (such as may otherwise be required through minimum landscaping ordinances), can often be designed as Bioretention Facilities. This can be accomplished by:

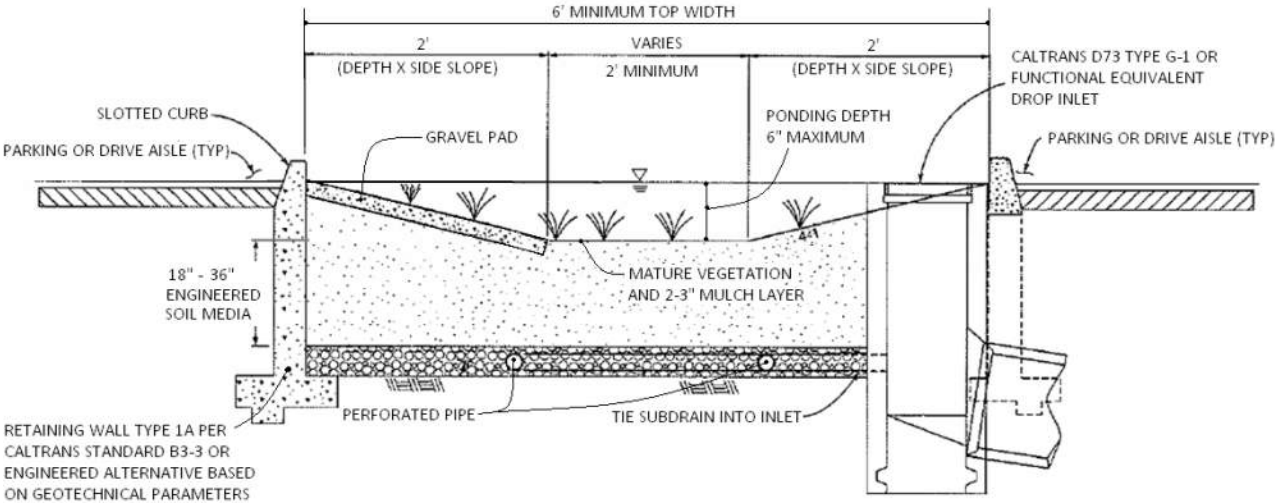
- *Depressing* landscaped areas below adjacent impervious surfaces, rather than elevating those areas
- Grading the site to direct runoff from those impervious surfaces *into* the Bioretention Facility, rather than away from the landscaping
- Sizing and designing the depressed landscaped area as a Bioretention Facility as described in this Fact Sheet

Bioretention Facilities should however not be used downstream of areas where large amounts of sediment can clog the system. Placing a Bioretention Facility at the toe of a steep slope should also be avoided due to the potential for clogging the engineered soil media with erosion from the slope, as well as the potential for damaging the vegetation.

Design and Sizing Criteria

The recommended cross section necessary for a Bioretention Facility includes:

- Vegetated area
- 18' minimum depth of engineered soil media
- 12' minimum gravel layer depth with 6' perforated pipes (added flow control features such as orifice plates may be required to mitigate for HCOC conditions)



While the 18-inch minimum engineered soil media depth can be used in some cases, it is recommended to use 24 inches or a preferred 36 inches to provide an adequate root zone for the chosen plant palate. Such a design also provides for improved removal effectiveness for nutrients. The recommended ponding depth inside of a Bioretention Facility is 6 inches; measured from the flat bottom surface to the top of the water surface as shown in Figure 1.

Because this BMP is filled with an engineered soil media, pore space in the soil and gravel layer is assumed to provide storage volume. However, several considerations must be noted:

- Surcharge storage above the soil surface (6 inches) is important to assure that design flows do not bypass the BMP when runoff exceeds the soil's absorption rate.
- In cases where the Bioretention Facility contains engineered soil media deeper than 36 inches, the pore space within the engineered soil media can only be counted to the 36-inch depth.
- A maximum of 30 percent pore space can be used for the soil media whereas a maximum of 40 percent pore space can be use for the gravel layer.

Figure 1: Standard Layout for a Bioretention Facility

Engineered Soil Media Requirements

The engineered soil media shall be comprised of 85 percent mineral component and 15 percent organic component, by volume, drum mixed prior to placement. The mineral component shall be a Class A sandy loam topsoil that meets the range specified in Table 1 below. The organic component shall be nitrogen stabilized compost[1], such that nitrogen does not leach from the media.

Table 1: Mineral Component Range Requirements

Percent Range	Component
70-80	Sand
15-20	Silt
5-10	Clay

The trip ticket, or certificate of compliance, shall be made available to the inspector to prove the engineered mix meets this specification.

Vegetation Requirements

Vegetative cover is important to minimize erosion and ensure that treatment occurs in the Bioretention Facility. The area should be designed for at least 70 percent mature coverage throughout the Bioretention Facility. To prevent the BMP from being used as walkways, Bioretention Facilities shall be planted with a combination of small trees, densely planted shrubs, and natural grasses. Grasses shall be native or ornamental; preferably ones that do not need to be mowed. The application of fertilizers and pesticides should be minimal. To maintain oxygen levels for the vegetation and promote biodegradation, it is important that vegetation not be completely submerged for any extended period of time. Therefore, a maximum of 6 inches of ponded water shall be used in the design to ensure that plants within the Bioretention Facility remain healthy.

A 2 to 3-inch layer of standard shredded aged hardwood mulch shall be placed as the top layer inside the Bioretention Facility. The 6-inch ponding depth shown in Figure 1 above shall be measured from the top surface of the 2 to 3-inch mulch layer.

Curb Cuts

To allow water to flow into the Bioretention Facility, 1-foot-wide (minimum) curb cuts should be placed approximately every 10 feet around the perimeter of the Bioretention Facility. Figure 2 shows a curb cut in a Bioretention Facility. Curb cut flow lines must be at or above the V_{BMP} water surface level.

[1] For more information on compost, visit the US Composting Council website at: http://compostingcouncil.org/



Figure 2: Curb Cut located in a Bioretention Facility

To reduce erosion, a gravel pad shall be placed at each inlet point to the Bioretention Facility. The gravel should be 1- to 1.5-inch diameter in size. The gravel should overlap the curb cut opening a minimum of 6 inches. The gravel pad inside the Bioretention Facility should be flush with the finished surface at the curb cut and extend to the bottom of the slope.

In addition, place an apron of stone or concrete, a foot square or larger, inside each inlet to prevent vegetation from growing up and blocking the inlet. See Figure 3.

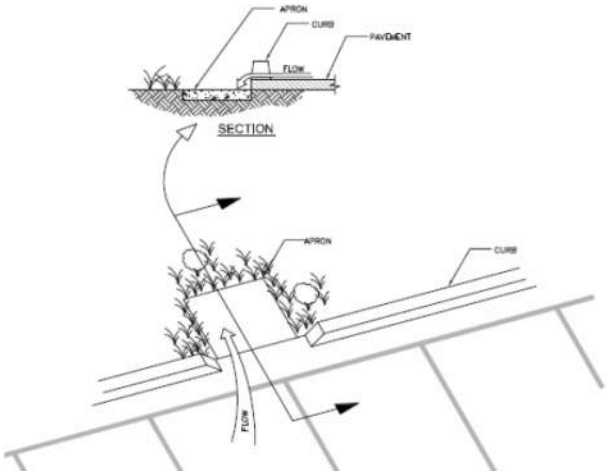


Figure 3: Apron located in a Bioretention Facility

Terracing the Landscaped Filter Basin

It is recommended that Bioretention Facilities be level. In the event the facility site slopes and lacks proper design, water would fill the lowest point of the BMP and then discharge from the basin without being treated. To ensure that the water will be held within the Bioretention Facility on sloped sites, the BMP must be terraced with nonporous check dams to provide the required storage and treatment capacity.

The terraced version of this BMP shall be used on non-flat sites with no more than a 3 percent slope. The surcharge depth cannot exceed 0.5 feet, and side slopes shall not exceed 4:1. Table 2 below shows the spacing of the check dams, and slopes shall be rounded up (i.e., 2.5 percent slope shall use 10' spacing for check dams).

Table 2: Check Dam Spacing

6" Check Dam Spacing	
Slope	**Spacing**
1%	*25'*
2%	*15'*
3%	*10'*

Roof Runoff

Roof downspouts may be directed towards Bioretention Facilities. However, the downspouts must discharge onto a concrete splash block to protect the Bioretention Facility from erosion.

Retaining Walls

It is recommended that Retaining Wall Type 1A, per Caltrans Standard B3-3 or equivalent, be constructed around the entire perimeter of the Bioretention Facility. This practice will protect the sides of the Bioretention Facility from collapsing during construction and maintenance or from high service loads adjacent to the BMP. Where such service loads would not exist adjacent to the BMP, an engineered alternative may be used if signed by a licensed civil engineer.

Side Slope Requirements

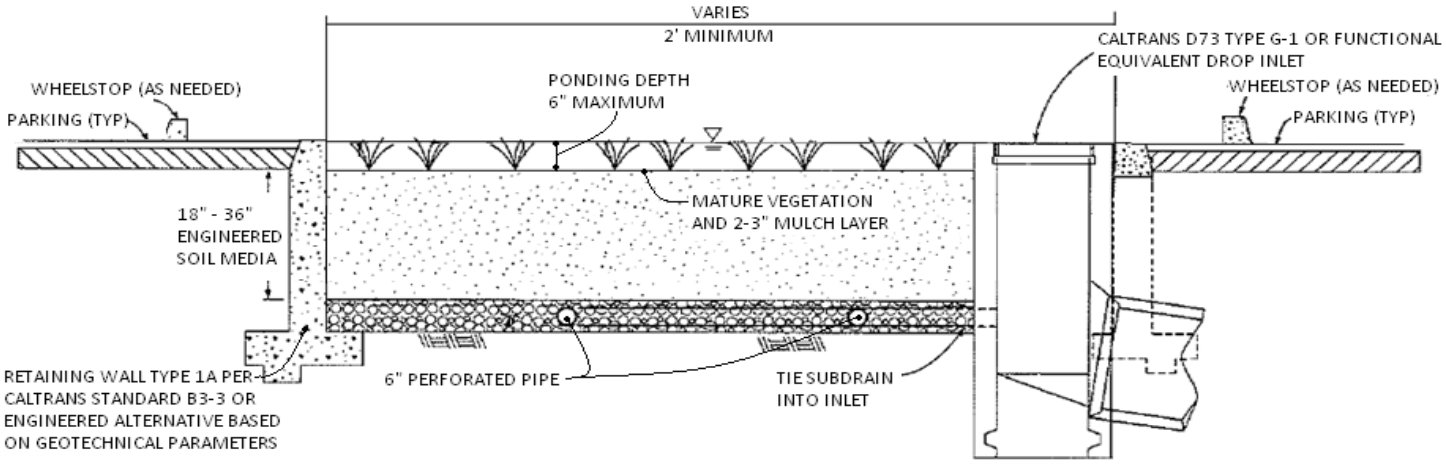
Bioretention Facilities Requiring Side Slopes

The design should assure that the Bioretention Facility does not present a tripping hazard. Bioretention Facilities proposed near pedestrian areas, such as areas parallel to parking spaces or along a walkway, must have a gentle slope to the bottom of the facility. Side slopes inside of a Bioretention Facility shall be 4:1. A typical cross section for the Bioretention Facility is shown in Figure 1.

Bioretention Facilities Not Requiring Side Slopes

Where cars park perpendicular to the Bioretention Facility, side slopes are not required. A 6-inch maximum drop may be used, and the Bioretention Facility must be planted with trees and shrubs to prevent pedestrian access. In this case, a curb is not placed around the Bioretention Facility,

but wheel stops shall be used to prevent vehicles from entering the Bioretention Facility, as shown in Figure 4.



Planter Boxes

Bioretention Facilities can also be placed above ground as planter boxes. Planter boxes must have a minimum width of 2 feet, a maximum surcharge depth of 6 inches, and no side slopes are necessary. Planter boxes must be constructed so as to ensure that the top surface of the engineered soil media will remain level. This option may be constructed of concrete, brick, stone or other stable materials that will not warp or bend. Chemically treated wood or galvanized steel, which has the ability to contaminate stormwater, should not be used. Planter boxes must be lined with an impermeable liner on all sides, including the bottom. Due to the impermeable liner, the inside bottom of the planter box shall be designed and constructed with a cross fall, directing treated flows within the subdrain layer toward the point where subdrain exits the planter box, and subdrains shall be oriented with drain holes oriented down. These provisions will help avoid excessive stagnant water within the gravel underdrain layer. Similar to the in-ground Bioretention Facility versions, this BMP benefits from healthy plants and biological activity in the root zone. Planter boxes should be planted with appropriately selected vegetation.



Figure 5: Planter Box
Source: LA Team Effort

Overflow

An overflow route is needed in the Bioretention Facility design to bypass stored runoff from storm events larger than V_{BMP} or in the event of facility or subdrain clogging. Overflow systems must connect to an acceptable discharge point, such as a downstream conveyance system as shown in Figure 1 and Figure 4. The inlet to the overflow structure shall be elevated inside the Bioretention Facility to be flush with the ponding surface for the design capture volume (V_{BMP}) as shown in Figure 4. This will allow the design capture volume to be fully treated by the Bioretention Facility, and for larger events to safely be conveyed to downstream systems. The overflow inlet shall **not** be located in the entrance of a Bioretention Facility, as shown in Figure 6.

Underdrain Gravel and Pipes

An underdrain gravel layer and pipes shall be provided in accordance with Appendix B – Underdrains.



Figure 6: Incorrect Placement of an Overflow Inlet.

Inspection and Maintenance Schedule

The Bioretention Facility area shall be inspected for erosion, dead vegetation, soggy soils, or standing water. The use of fertilizers and pesticides on the plants inside the Bioretention Facility should be minimized.

Schedule	Activity
Ongoing	• Keep adjacent landscape areas maintained. Remove clippings from landscape maintenance activities. • Remove trash and debris • Replace damaged grass and/or plants • Replace surface mulch layer as needed to maintain a 2-3 inch soil cover.
After storm events	• Inspect areas for ponding
Annually	• Inspect/clean inlets and outlets

Bioretention Facility Design Procedure

1) Enter the area tributary, A_T, to the Bioretention Facility.

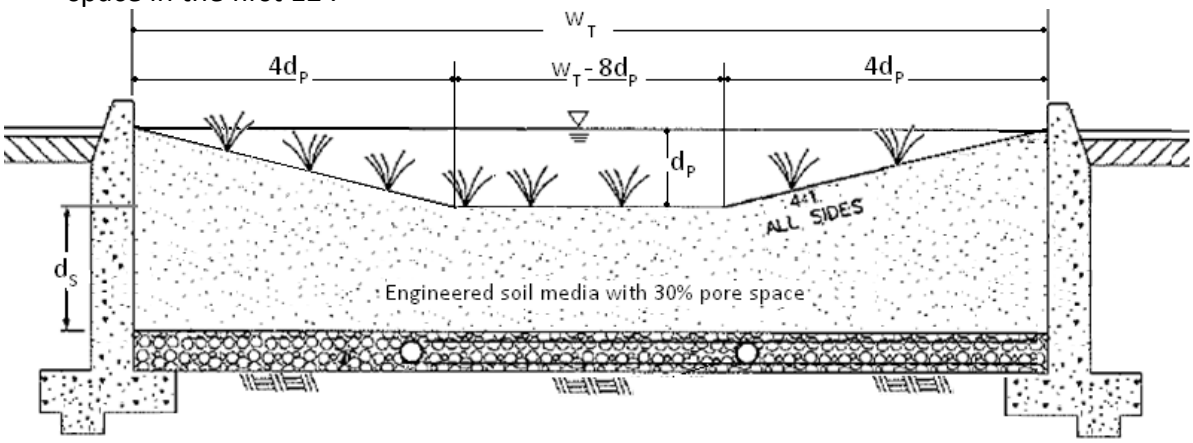
2) Enter the Design Volume, $V_{BMP,}$ determined from Section 2.1 of this Handbook.

3) Select the type of design used. There are two types of Bioretention Facility designs: the standard design used for most project sites that include side slopes, and the modified design used when the BMP is located perpendicular to the parking spaces or with planter boxes that do not use side slopes.

4) Enter the depth of the engineered soil media, d_S. The minimum depth for the engineered soil media can be 18' in limited cases, but it is recommended to use 24' or a preferred 36' to provide an adequate root zone for the chosen plant palette. Engineered soil media deeper than 36' will only get credit for the pore space in the first 36'.

5) Enter the top width of the Bioretention Facility.

6) Calculate the total effective depth, d_E, within the Bioretention Facility. The maximum allowable pore space of the soil media is 30% while the maximum allowable pore space for the gravel layer is 40%. Gravel layer deeper than 12' will only get credit for the pore space in the first 12'.



a. For the design with side slopes the following equation shall be used to determine the total effective depth. Where, d_P is the depth of ponding within the basin.

$$d_E(\text{ft}) = \frac{0.3 \times \left[\left(w_T(\text{ft}) \times d_S(\text{ft})\right) + 4\left(d_P(\text{ft})\right)^2\right] + 0.4 \times 1(\text{ft}) + d_P(\text{ft})\left[4d_P(\text{ft}) + \left(w_T(\text{ft}) - 8d_P(\text{ft})\right)\right]}{w_T(\text{ft})}$$

This above equation can be simplified if the maximum ponding depth of 0.5' is used. The equation below is used on the worksheet to find the minimum area required for the Bioretention Facility:

$$d_E(\text{ft}) = (0.3 \times d_S(\text{ft}) + 0.4 \text{ x } 1(\text{ft})) - \left(\frac{0.7\ (\text{ft}^2)}{w_T(\text{ft})}\right) + 0.5(\text{ft})$$

b. For the design without side slopes the following equation shall be used to determine the total effective depth:

$$d_E(\text{ft}) = d_P(\text{ft}) + [(0.3) \times d_S(\text{ft}) + (0.4) \times 1(\text{ft})]$$

The equation below, using the maximum ponding depth of 0.5', is used on the worksheet to find the minimum area required for the Bioretention Facility:

$$d_E(\text{ft}) = 0.5\ (\text{ft}) + [(0.3) \times d_S(\text{ft}) + (0.4) \times 1(\text{ft})]$$

7) Calculate the minimum surface area, A_M, required for the Bioretention Facility. This does not include the curb surrounding the Bioretention Facility or side slopes.

$$A_M(\text{ft}^2) = \frac{V_{BMP}(\text{ft}^3)}{d_E\ (\text{ft})}$$

8) Enter the proposed surface area. This area shall not be less than the minimum required surface area.

9) Verify that side slopes are no steeper than 4:1 in the standard design, and are not required in the modified design.

10) Provide the diameter, minimum 6 inches, of the perforated underdrain used in the Bioretention Facility. See Appendix B for specific information regarding perforated pipes.

11) Provide the slope of the site around the Bioretention Facility, if used. The maximum slope is 3 percent for a standard design.

12) Provide the check dam spacing, if the site around the Bioretention Facility is sloped.

13) Describe the vegetation used within the Bioretention Facility.

References Used to Develop this Fact Sheet

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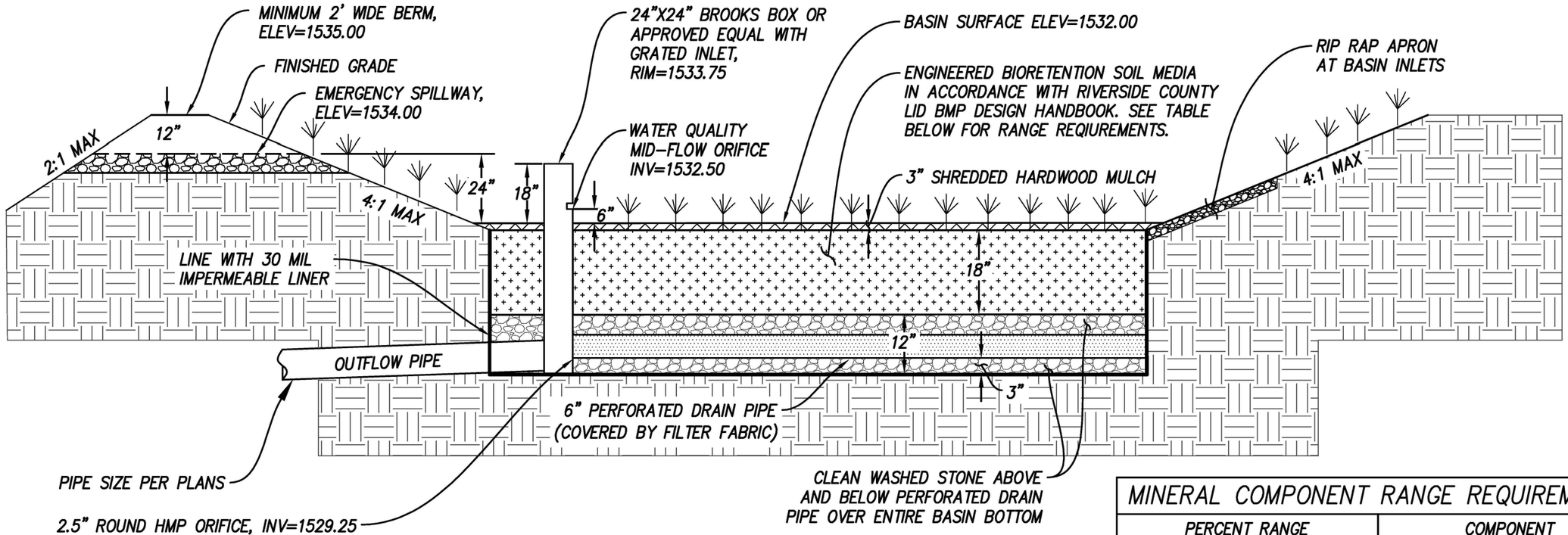
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MINERAL COMPONENT RANGE REQUIREMENTS	
PERCENT RANGE	COMPONENT
70-80	SAND
15-20	SILT
5-10	CLAY

NOTE: BIOFILTRATION BASIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH RIVERSIDE COUNTY LOW IMPACT DEVELOPMENT BMP DESIGN HANDBOOK AND PROJECT SPECIFIC WATER QUALITY MANAGEMENT PLAN FOR THE SANTA ANA WATERSHED REGION

BIO-FILTRATION BASIN DETAIL 1

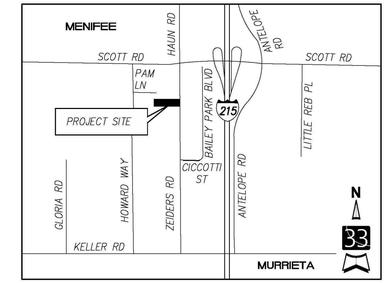
NTS

latitude 33
PLANNING & ENGINEERING
9968 Hibert Street 2nd Floor, San Diego, CA 92131
Tel 858.751.0633

Appendix 7: Hydromodification

Supporting Detail Relating to Hydrologic Conditions of Concern

EXISTING CONDITIONS
HYDROMODIFICATION EXHIBIT



VICINITY MAP
NO SCALE

APN: 384-130-026

APN: 384-130-028

APN: 384-130-029

ZEIDERS ROAD

DIRT ROAD

GRASS

POC-1
2-YEAR STORM
Q=0.54 CFS
2.40 AC

(C)
1528.6

B-2-1

E1
AREA=2.40 AC
CN=78
TC=25.92 MIN
Q2=0.54 CFS

(B)
1534.7

(A)
1541.2

1.10

WATER METER

SEWER PAINT MARK

1530
1535
1540

LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- MAJOR CONTOUR (365)
- MINOR CONTOUR
- K-RAIL
- FENCE
- TREES/SHRUBS
- SUB-BASINS
- DRAINAGE PATTERNS
- FLOWLINE
- CONVEYANCE LINK
- SUB-BASIN ID (XXXX)
- NODE ID
- TC SEGMENT (X)
- CONVEYANCE LINK ID [X]
- BASIN DATA (X / X / XXXX CFS / XXXX AC)

N

33

0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

latitude 33
PLANNING & ENGINEERING
9968 Hibert Street 2nd Floor, San Diego, CA 92131
Tel 858.751.0633

BY	DATE	REVISION
XXX	10.27.2021	CUP APPLICATION

CALIBER COLLISION

33235-33185 ZEIDERS RD, MENIFEE, CA 92584

L33 PROJECT NUMBER (PN): 1799.00
OTHER PN: XXXX.XX
DESIGNED BY: MAM DATE: 10.27.2021
DRAWN BY: MAM DATE: 10.27.2021
CHECKED BY: SDD DATE: 10.27.2021

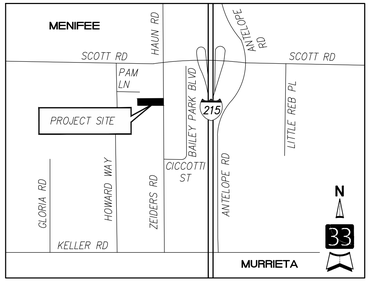
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1 OF 2

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PROPOSED CONDITIONS HYDROMODIFICATION EXHIBIT

SUBBASIN TABLE

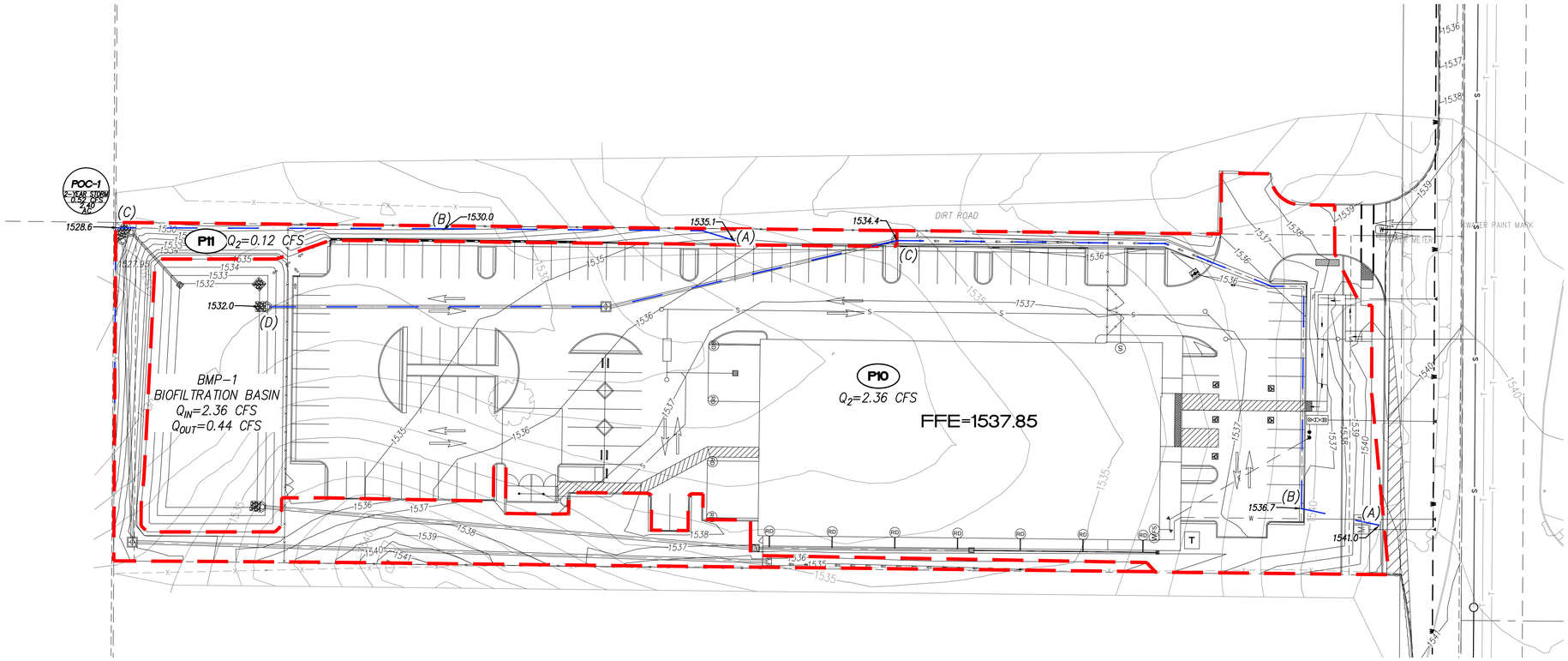
SUBBASIN ID	AREA (AC)	CURVE NUMBER (C)	TC (MIN)
P10	2.053	93.4	7.90
P11	0.357	80	19.45

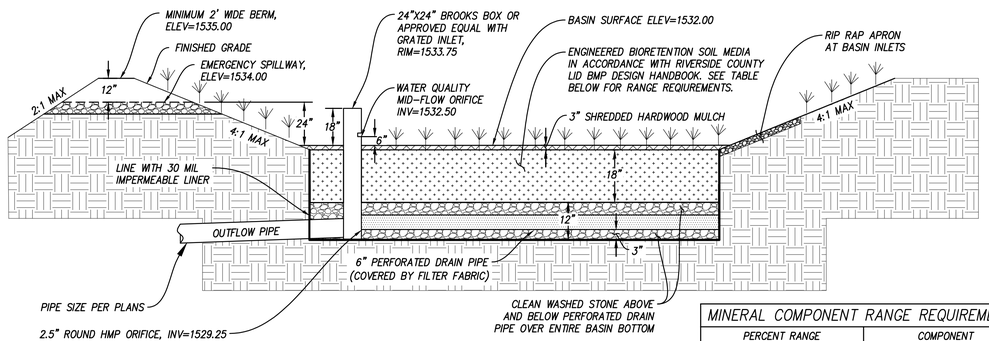


VICINITY MAP
NO SCALE

LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- MAJOR CONTOUR (365)
- MINOR CONTOUR
- K-RAIL
- FENCE
- TREES/SHRUBS
- SUB-BASINS
- DRAINAGE PATTERNS
- FLOWLINE
- CONVEYANCE LINK
- INITIAL SUB-BASIN ID (XXXX)
- NODE ID (XXX)
- ELEVATION AT NODE (XX.XX)
- CONVEYANCE LINK ID XXXX
- BASIN DATA X / X / CFS / XX.XX / AC





NOTE: BIOFILTRATION BASIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH RIVERSIDE COUNTY LOW IMPACT DEVELOPMENT BMP DESIGN HANDBOOK AND PROJECT SPECIFIC WATER QUALITY MANAGEMENT PLAN FOR THE SANTA ANA WATERSHED REGION

MINERAL COMPONENT RANGE REQUIREMENTS	
PERCENT RANGE	COMPONENT
70-80	SAND
15-20	SILT
5-10	CLAY

BMP 1 - BIOFILTRATION BASIN (1)
NTS

N

0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

latitude 33
PLANNING & ENGINEERING
9988 Hibert Street 2nd Floor, San Diego, CA 92131
Tel 858.751.0633

DATE	REVISION	BY
10.27.2021	CUP APPLICATION	MAM
02.11.2022	2ND CUP SUBMITTAL	MAM

CALIBER COLLISION
33235-33185 ZEIDERS RD,
MENIFEE, CA 92584

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L33 PROJECT NUMBER (PN): 1799.00
OTHER PN: XXXX.XX
DESIGNED BY: MAM DATE: 10.27.2021
DRAWN BY: MAM DATE: 10.27.2021
CHECKED BY: SDD DATE: 10.27.2021

SHEET
2 OF 2

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\\bet33-fs01\Engineering\1700\1799.00 - VD - Due Diligence Caliber Collision - Menifee\Engineering\Reports\Water Quality\Appendix 7 Hydromodification\1799.00 PROP HMP Map.dwg

Project Description

File Name ..... 1799.00 HMP Model 2 Year 24 Hour TR-55 PRE.SPF

Project Options

Flow Units ..... CFS
Elevation Type ..... Elevation
Hydrology Method ..... SCS TR-55
Time of Concentration (TOC) Method ..... SCS TR-55
Link Routing Method ..... Kinematic Wave
Enable Overflow Ponding at Nodes ..... YES
Skip Steady State Analysis Time Periods ... YES

Analysis Options

Start Analysis On ..... Oct 07, 2021 00:00:00
End Analysis On ..... Oct 08, 2021 00:00:00
Start Reporting On ..... Oct 07, 2021 00:00:00
Antecedent Dry Days ..... 0 days
Runoff (Dry Weather) Time Step ..... 0 01:00:00 days hh:mm:ss
Runoff (Wet Weather) Time Step ..... 0 00:05:00 days hh:mm:ss
Reporting Time Step ..... 0 00:05:00 days hh:mm:ss
Routing Time Step ..... 30 seconds

Number of Elements

	Qty
Rain Gages	2
Subbasins	1
Nodes	1
Junctions	0
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	0
Links	0
Channels	0
Pipes	0
Pumps	0
Orifices	0
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
1	100-YEAR	Time Series	100-YEAR	Cumulative	inches	California	Riverside (Lake Elsinore)	100	6.20	SCS Type I 24-hr
2	2-YEAR	Time Series	2-YEAR	Cumulative	inches	California	Riverside (Lake Elsinore)	2	2.20	SCS Type I 24-hr

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	E1	2.40	484.00	78.00	2.20	0.60	1.44	0.54	0 00:25:55

Subbasin Hydrology

Subbasin : E1

Input Data

Area (ac) 2.40
Peak Rate Factor 484.00
Weighted Curve Number 78.00
Rain Gage ID 2-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Meadow, non-grazed	2.40	D	78.00
Composite Area & Weighted CN	2.40		78.00

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Where :

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
R = Hydraulic Radius (ft)
Aq = Flow Area (ft^2)
Wp = Wetted Perimeter (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)
n = Manning's roughness

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.2	0.00	0.00
Flow Length (ft) :	150	0.00	0.00
Slope (%) :	4.333	0.00	0.00
2 yr, 24 hr Rainfall (in) :	2.20	0.00	0.00
Velocity (ft/sec) :	0.17	0.00	0.00
Computed Flow Time (min) :	15.10	0.00	0.00

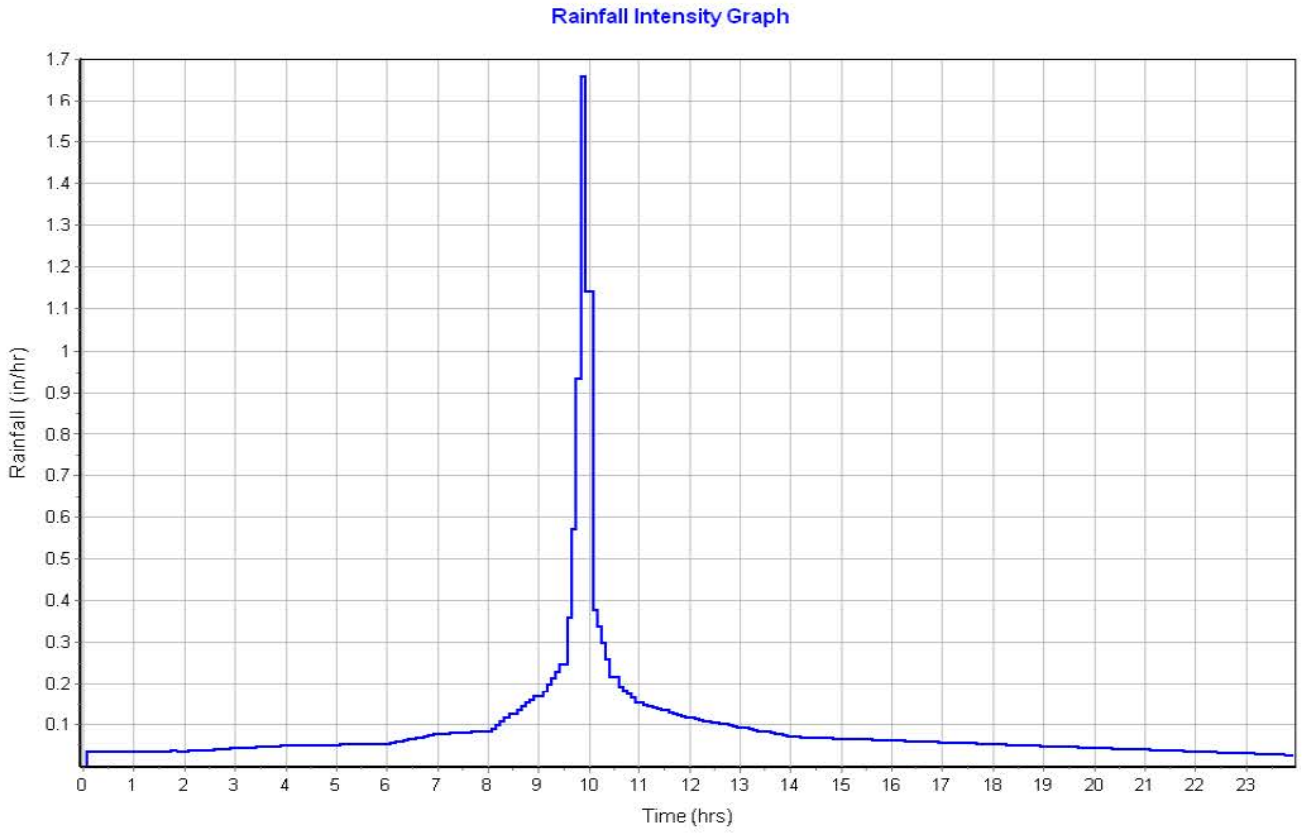
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	500	0.00	0.00
Slope (%) :	1.22	0.00	0.00
Surface Type :	Grass pasture	Unpaved	Unpaved
Velocity (ft/sec) :	0.77	0.00	0.00
Computed Flow Time (min) :	10.82	0.00	0.00

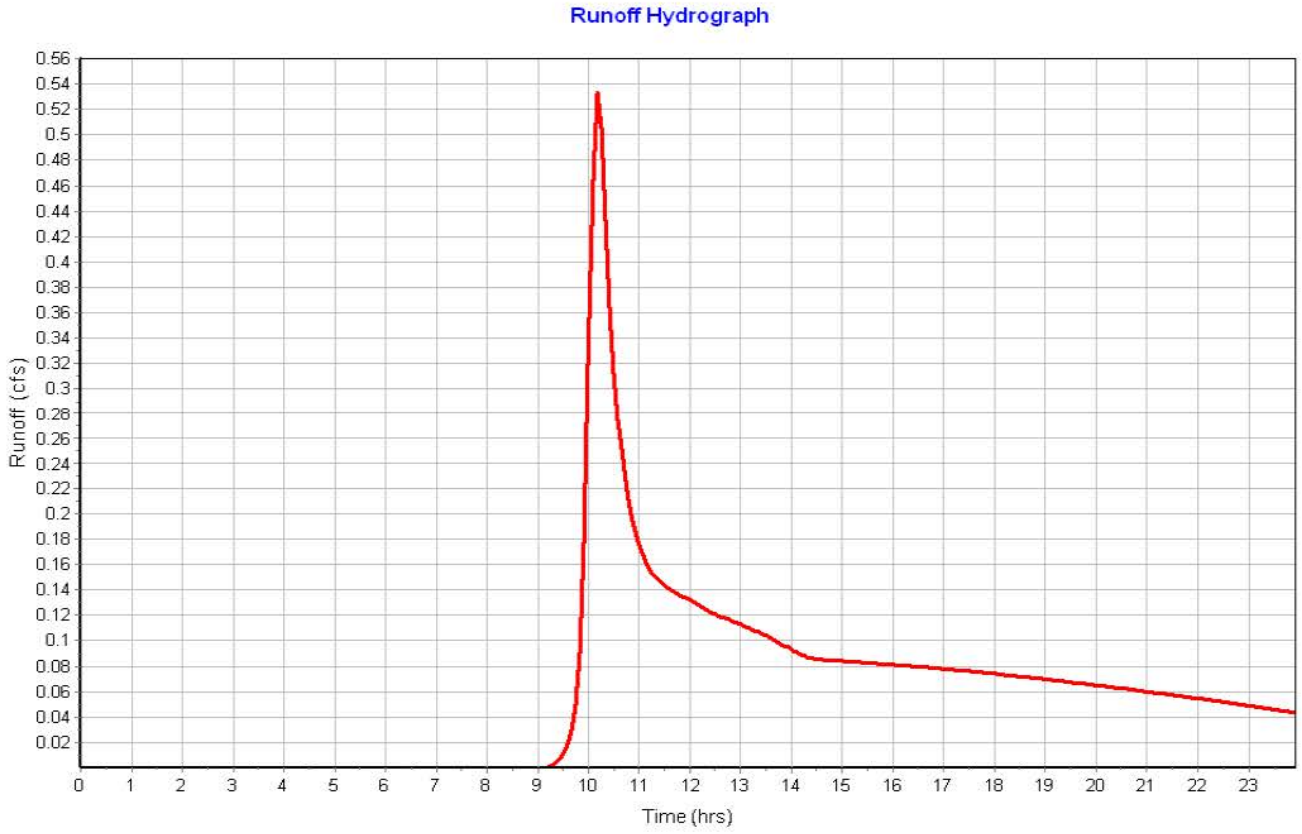
Total TOC (min) 25.92

Subbasin Runoff Results

Total Rainfall (in)	2.20
Total Runoff (in)	0.60
Peak Runoff (cfs)	0.54
Weighted Curve Number	78.00
Time of Concentration (days hh:mm:ss)	0 00:25:55

Subbasin : E1


Rainfall Intensity Graph
Rainfall (in/hr)
Time (hrs)


Runoff Hydrograph
Runoff (cfs)
Time (hrs)

Project Description

File Name ..... 1799.00 HMP Model 2 Year 24 Hour TR-55 POST.SPF

Project Options

Flow Units ..... CFS
Elevation Type ..... Elevation
Hydrology Method ..... SCS TR-55
Time of Concentration (TOC) Method ..... SCS TR-55
Link Routing Method ..... Kinematic Wave
Enable Overflow Ponding at Nodes ..... YES
Skip Steady State Analysis Time Periods ... YES

Analysis Options

Start Analysis On ..... Oct 07, 2021 00:00:00
End Analysis On ..... Oct 08, 2021 00:00:00
Start Reporting On ..... Oct 07, 2021 00:00:00
Antecedent Dry Days ..... 0 days
Runoff (Dry Weather) Time Step ..... 0 01:00:00 days hh:mm:ss
Runoff (Wet Weather) Time Step ..... 0 00:05:00 days hh:mm:ss
Reporting Time Step ..... 0 00:05:00 days hh:mm:ss
Routing Time Step ..... 30 seconds

Number of Elements

	Qty
Rain Gages	2
Subbasins	2
Nodes	3
Junctions	1
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	1
Links	4
Channels	0
Pipes	1
Pumps	0
Orifices	3
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
1	100-YEAR	Time Series	100-YEAR	Cumulative	inches	California	Riverside (Lake Elsinore)	100	6.20	SCS Type I 24-hr
2	2-YEAR	Time Series	2-YEAR	Cumulative	inches	California	Riverside (Lake Elsinore)	2	2.20	SCS Type I 24-hr

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	P10	2.05	484.00	93.42	2.20	1.53	3.15	2.36	0 00:07:54
2	P11	0.36	484.00	80.00	2.20	0.69	0.25	0.12	0 00:19:27

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	BMP-OUTLET	Junction	1528.50	1532.00	1528.50	1532.00	0.00	0.44	1529.70	0.00	2.30	0 00:00	0.00	0.00
2	POC-1	Outfall	1528.60					0.52	1529.20					
3	BMP-1	Storage Node	1532.00	1535.00	1532.00		0.00	2.24	1532.77				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	1	Pipe	BMP-OUTLET	POC-1	50.00	1529.50	1529.00	1.0000	18.000	0.0120	0.44	11.38	0.04	3.11	0.20	0.13	0.00	Calculated
2	HMP-ORIFICE	Orifice	BMP-1	BMP-OUTLET		1532.00	1528.50		2.500		0.14							
3	MID-FLOW	Orifice	BMP-1	BMP-OUTLET		1532.00	1528.50		2.000		0.30							
4	OVERFLOW	Orifice	BMP-1	BMP-OUTLET		1532.00	1528.50		24.000		0.00							

Subbasin Hydrology

Subbasin : P10

Input Data

Area (ac) 2.05
Peak Rate Factor 484.00
Weighted Curve Number 93.42
Rain Gage ID 2-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	0.52	D	80.00
Paved parking & roofs	1.53	D	98.00
Composite Area & Weighted CN	2.05		93.42

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Where :

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
R = Hydraulic Radius (ft)
Aq = Flow Area (ft²)
Wp = Wetted Perimeter (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)
n = Manning's roughness

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.2	0.00	0.00
Flow Length (ft) :	40	0.00	0.00
Slope (%) :	10	0.00	0.00
2 yr, 24 hr Rainfall (in) :	2.20	0.00	0.00
Velocity (ft/sec) :	0.18	0.00	0.00
Computed Flow Time (min) :	3.75	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	310	0.00	0.00
Slope (%) :	0.75	0.00	0.00
Surface Type :	Paved	Grassed waterway	Unpaved
Velocity (ft/sec) :	1.76	0.00	0.00
Computed Flow Time (min) :	2.94	0.00	0.00

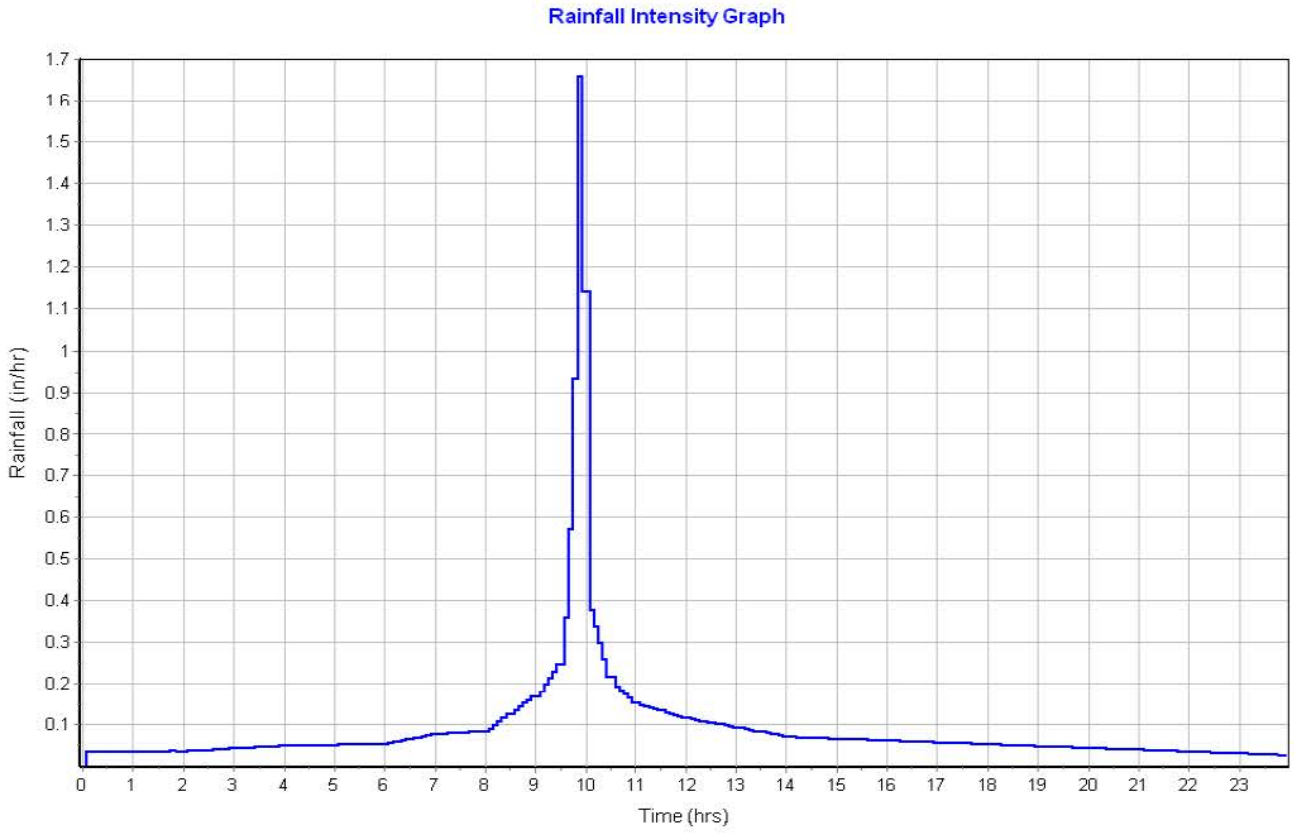
Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.012	0.00	0.00
Flow Length (ft) :	310	0.00	0.00
Channel Slope (%) :	.75	0.00	0.00
Cross Section Area (ft²) :	.7854	0.00	0.00
Wetted Perimeter (ft) :	3.14	0.00	0.00
Velocity (ft/sec) :	4.27	0.00	0.00
Computed Flow Time (min) :	1.21	0.00	0.00

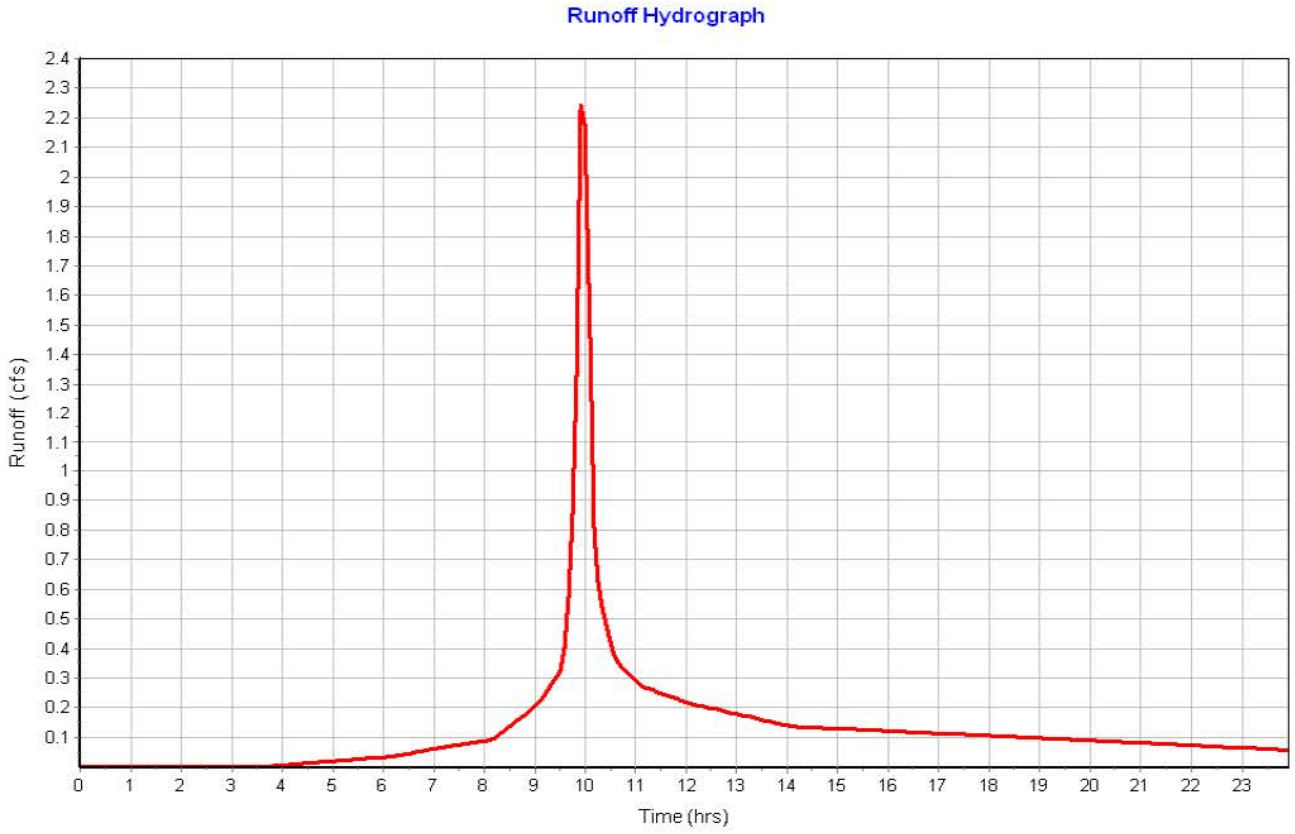
Total TOC (min) 7.90

Subbasin Runoff Results

Total Rainfall (in) 2.20
Total Runoff (in) 1.53
Peak Runoff (cfs) 2.36
Weighted Curve Number 93.42
Time of Concentration (days hh:mm:ss) 0 00:07:54

Subbasin : P10





Subbasin : P11

Input Data

Area (ac) 0.36
Peak Rate Factor 484.00
Weighted Curve Number 80.00
Rain Gage ID 2-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	0.36	D	80.00
Composite Area & Weighted CN	0.36		80.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.2	0.00	0.00
Flow Length (ft) :	150	0.00	0.00
Slope (%) :	3.4	0.00	0.00
2 yr, 24 hr Rainfall (in) :	2.20	0.00	0.00
Velocity (ft/sec) :	0.15	0.00	0.00
Computed Flow Time (min) :	16.64	0.00	0.00

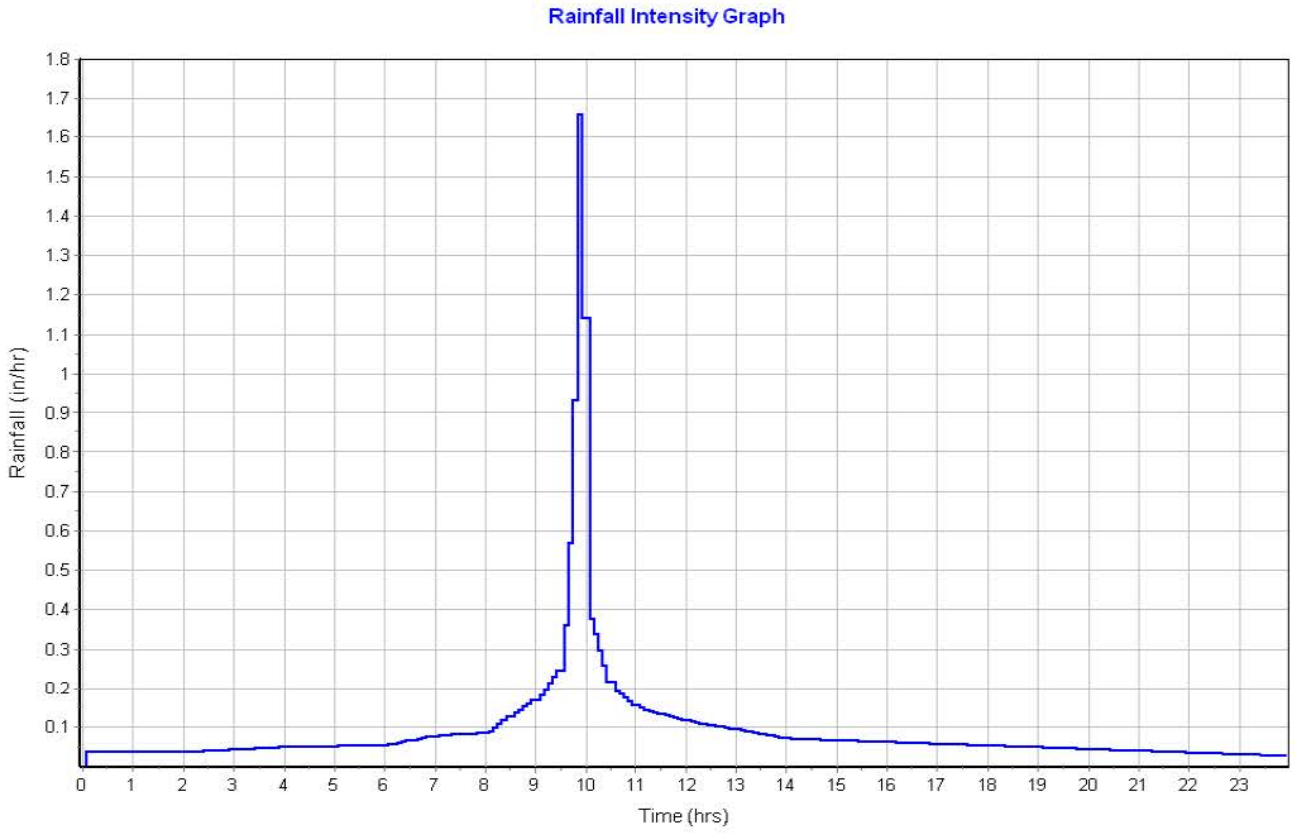
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	150	0.00	0.00
Slope (%) :	1.6	0.00	0.00
Surface Type :	Grass pasture	Unpaved	Unpaved
Velocity (ft/sec) :	0.89	0.00	0.00
Computed Flow Time (min) :	2.81	0.00	0.00

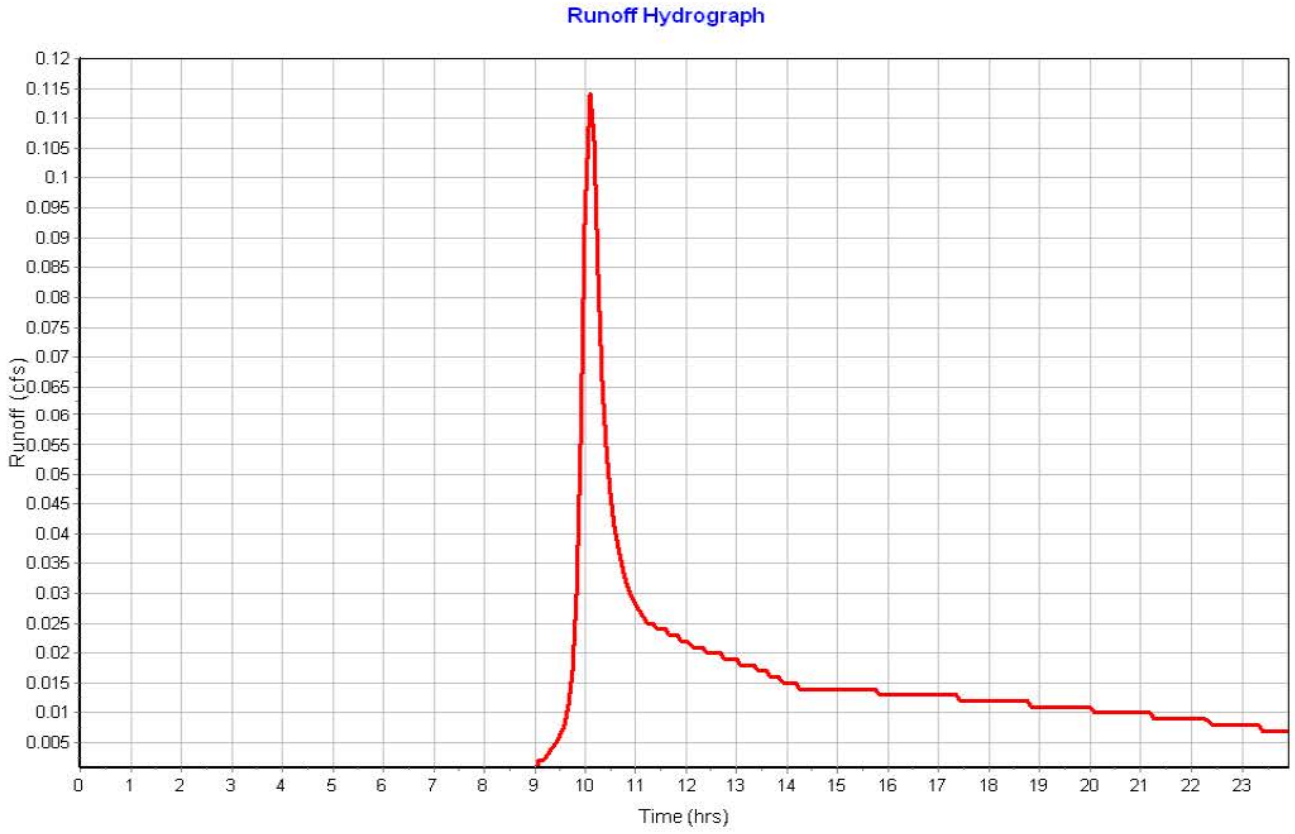
Total TOC (min) 19.45

Subbasin Runoff Results

Total Rainfall (in) 2.20
Total Runoff (in) 0.69
Peak Runoff (cfs) 0.12
Weighted Curve Number 80.00
Time of Concentration (days hh:mm:ss) 0 00:19:27

Subbasin : P11





Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft²)	Minimum Pipe Cover (in)
1	BMP-OUTLET	1528.50	1532.00	3.50	1528.50	0.00	1532.00	0.00	0.00	0.00

Junction Results

SN	Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation Attained (ft)	Max HGL Depth Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Average HGL Elevation Attained (ft)	Average HGL Depth Attained (ft)	Time of Max HGL Occurrence (days hh:mm)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	BMP-OUTLET	0.44	0.00	1529.70	1.20	0.00	2.30	1529.58	1.08	0 10:33	0 00:00	0.00	0.00

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow (cfs)	Flap Gate	No. of Barrels
1	1	50.00	1529.50	1.00	1529.00	0.40	0.50	1.0000	CIRCULAR	18.000	18.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1

Pipe Results

SN	Element ID	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Travel Time (min)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Froude Number	Reported Condition
1	1	0.44	0 10:34	11.38	0.04	3.11	0.27	0.20	0.13	0.00		Calculated

Storage Nodes

Storage Node : BMP-1

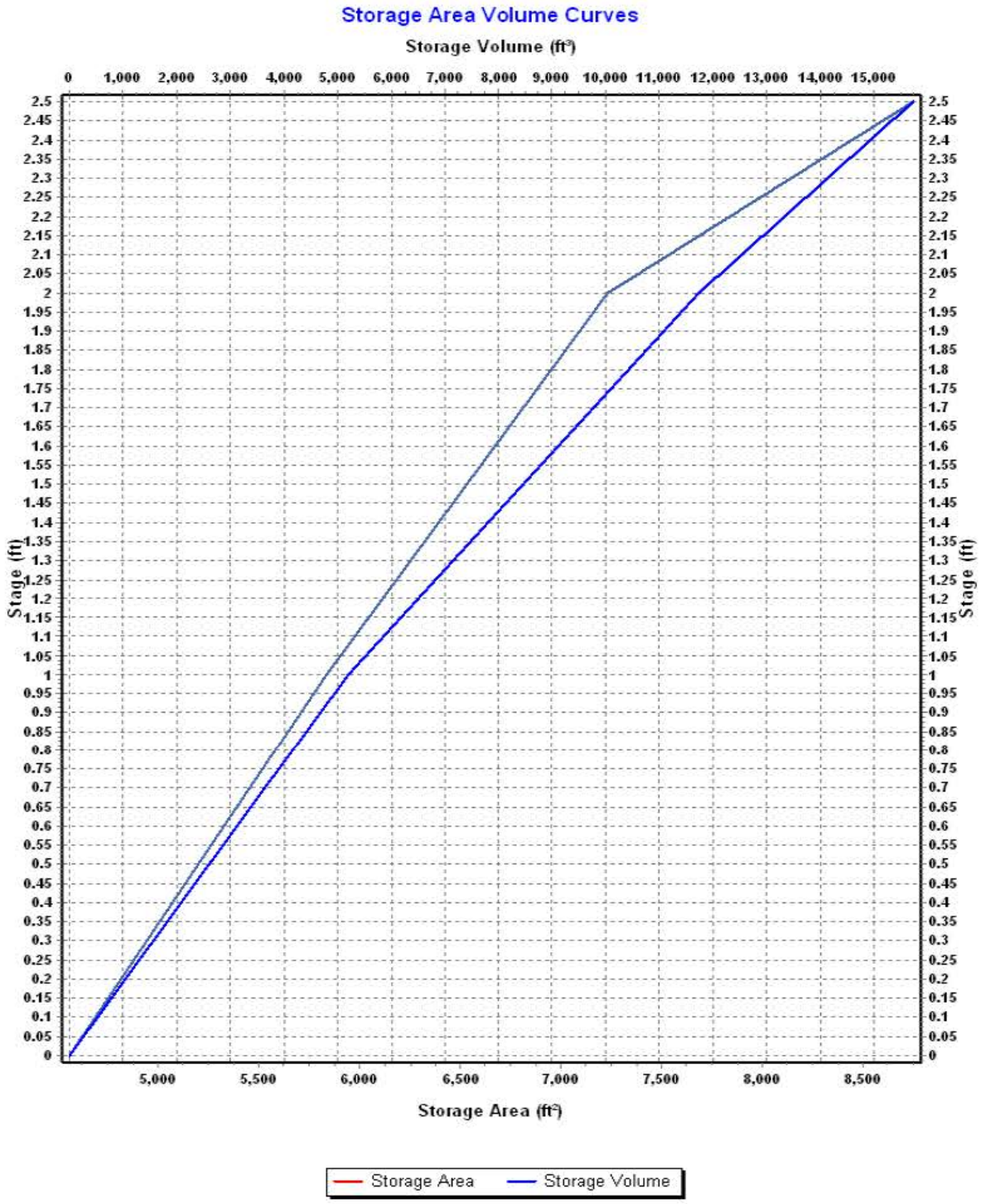
Input Data

Invert Elevation (ft)	1532.00
Max (Rim) Elevation (ft)	1535.00
Max (Rim) Offset (ft)	3.00
Initial Water Elevation (ft)	1532.00
Initial Water Depth (ft)	0.00
Ponded Area (ft²)	0.00
Evaporation Loss	0.00

Storage Area Volume Curves

Storage Curve : BMP-1

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	4560	0.000
1	5835	5197.50
2	7235	11732.50
2.5	8750	15728.75


Storage Area Volume Curves
Storage Volume (ft³)
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
10,000
11,000
12,000
13,000
14,000
15,000
Stage (ft)
Stage (ft)
5,000
5,500
6,000
6,500
7,000
7,500
8,000
8,500
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : BMP-1 (continued)

Outflow Orifices

SN	Element ID	Orifice Type	Orifice Shape	Flap Gate	Circular Orifice Diameter (in)	Rectangular Orifice Height (in)	Rectangular Orifice Width (in)	Orifice Invert Elevation (ft)	Orifice Coefficient
1	HMP-ORIFICE	Side	CIRCULAR	No	2.50			1529.50	0.61
2	MID-FLOW	Side	Rectangular	No		2.00	10.00	1532.50	0.63
3	OVERFLOW	Bottom	Rectangular	No		24.00	24.00	1534.00	0.63

Output Summary Results

Peak Inflow (cfs)	2.24
Peak Lateral Inflow (cfs)	2.24
Peak Outflow (cfs)	0.44
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	1532.77
Max HGL Depth Attained (ft)	0.77
Average HGL Elevation Attained (ft)	1532.35
Average HGL Depth Attained (ft)	0.35
Time of Max HGL Occurrence (days hh:mm)	0 10:33
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Appendix 8: Source Control

Pollutant Sources/Source Control Checklist

WILL BE PROVIDED IN FINAL WQMP

Appendix 9: O&M

Operation and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms

WILL BE PROVIDED IN FINAL WQMP

Appendix 10: Educational Materials

BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information

WILL BE PROVIDED IN FINAL WQMP

APPENDIX H

NOISE AND VIBRATION IMPACT ANALYSIS MEMORANDUM

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CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: November 15, 2024

TO: Jessica Williams, Assistant Planner, City of Menifee

FROM: Jason Lui, Associate / Senior Noise Specialist

SUBJECT: Noise and Vibration Impact Analysis for the Caliber Collision Paint and Auto Body Repair Shop Project

INTRODUCTION

This Noise and Vibration Impact Analysis has been prepared to evaluate the potential noise and vibration impacts associated with the construction and operation of the proposed Caliber Collision Paint and Auto Body Repair Shop Project (project) in Menifee, California. This report is intended to satisfy the City of Menifee (City) requirements and the California Environmental Quality Act for a project-specific analysis by examining the noise and vibration impacts to the adjacent land uses and identifying reduction measures that the project requires. All references cited in this memorandum are included in Attachment A.

Project Location

The 2.39-acre (gross) project site is located along the west side of Zeiders Road, south of Scott Road and east of Howard Way in Menifee, Riverside County, California. Figure 1 shows the regional and project location (all figures are provided in Attachment B of this document).

Project Description

The proposed project includes the construction of a one-story, 18,865-square-foot building to house the Caliber Collision Paint and Auto Body Repair shop with six bays, as shown in Figure 2, Site Plan. The project also includes construction of a parking lot with 103 parking spaces (including Americans with Disabilities Act-compliant parking) within the 2.39-acre site. The site's City of Menifee General Plan Land Use designation and Zoning Classification is Economic Development Corridor – Southern Gateway (EDC-SG). The EDC-SG zone allows development of an auto body repair and paint shop with a Conditional Use Permit. The project is consistent with the surrounding commercial and industrial land uses. The project also proposes a conceptual landscape plan that includes 0.3 acre of landscape area.

The project would import 9,200 cubic yards (cy) and export 4,700 cy of soil during grading. Project construction would include grading, paving, and construction of the facility building and parking areas. Project construction is expected to start in early 2025 and be completed in approximately 6 months.

The planned hours of operation would be from 7:30 a.m. to 5:30 p.m. Monday through Friday and 8:00 a.m. to 12:00 p.m. on Saturday. Figure 2 shows the site plan.

CHARACTERISTICS OF SOUND

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a wave, resulting in the tone's range from high to low. Loudness is the strength of a sound; it describes a noisy or quiet environment and is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound intensity and its effect on adjacent sensitive land uses.

Measurement of Sound

Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Decibels (dB), unlike the linear scale (e.g., inches or pounds), are measured on a logarithmic scale, which is a scale based on powers of 10.

For example, 10 dB is 10 times more intense than 0 dB, 20 dB is 100 times more intense than 0 dB, and 30 dB is 1,000 times more intense than 0 dB. Thirty decibels (30 dB) represents 1,000 times as much acoustic energy as 0 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. Ambient sounds generally range from 30 dB (very quiet) to 100 dB (very loud).

Sound levels generate from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source (e.g., highway traffic or railroad operations), the sound decreases 3 dB for each doubling of distance in a hard site environment; however, line source noise in a relatively flat environment with absorptive vegetation decreases 4.5 dB for each doubling of distance.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the

predominant rating scales for human communities in the State of California are L_{eq} and the Community Noise Equivalent Level (CNEL) or the day-night average noise level (L_{dn}) based on A-weighted decibels (dBA). CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours), and a 10 dBA weighting factor applied to noises occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable.

Other noise rating scales of importance when assessing the annoyance factor include the maximum instantaneous noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max}, which reflects peak operating conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale, or noise standards in terms of percentile noise levels, in noise ordinances for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first category, audible impacts, refers to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dB or greater because these levels have been found to be barely perceptible in exterior environments. The second category, potentially audible impacts, refers to a change in the noise level between 1 dB and 3 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category includes changes in noise levels of less than 1 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear, even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear (the threshold of pain). A sound level of 160 to 165 dBA will result in dizziness or loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying, less developed areas. Table A lists definitions of acoustical terms, and Table B shows common sound levels and their sources.

Table A: Definitions of Acoustical Terms

Term	Definitions
Decibel, dB	A unit of measurement that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in 1 second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter deemphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. (All sound levels in this report are A-weighted, unless reported otherwise.)
L_{01}, L_{10}, L_{50}, L_{90}	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 1%, 10%, 50%, and 90% of a stated time period.
Equivalent Continuous Noise Level, L_{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dBA to sound levels occurring in the evening from 7:00 PM to 10:00 PM and after the addition of 10 dBA to sound levels occurring in the night between 10:00 PM and 7:00 AM.
Day/Night Noise Level, L_{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dBA to sound levels occurring in the night between 10:00 PM and 7:00 AM.
L_{max}, L_{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time; usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content, as well as the prevailing ambient noise level.

Source: *Handbook of Acoustical Measurements and Noise Control* (Harris 1991).

Table B: Common Sound Levels and Their Noise Sources

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle at a Few Feet Away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	—
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Loud	—
Pneumatic Drill; Vacuum Cleaner	80	Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	—
Near Freeway Auto Traffic	70	Moderately Loud	—
Average Office	60	Quiet	One-half as loud
Suburban Street	55	Quiet	—
Light Traffic; Soft Radio Music in Apartment	50	Quiet	One-quarter as loud
Large Transformer	45	Quiet	—
Average Residence without Stereo Playing	40	Faint	One-eighth as loud
Soft Whisper	30	Faint	—
Rustling Leaves	20	Very Faint	—
Human Breathing	10	Very Faint	Threshold of Hearing
—	0	Very Faint	—

Source: Compiled by LSA (2015).

FUNDAMENTALS OF VIBRATION

Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Outdoors, the motion may be discernible, but without the effects associated with the shaking of a building, there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as the motion of building surfaces, the rattling of items sitting on shelves or hanging on walls, or a low-frequency rumbling noise. The rumbling noise is caused by the vibration of walls, floors, and ceilings that radiate sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 vibration velocity decibels (VdB) or less. This is an order of magnitude below the damage threshold for normal buildings. Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet (ft) from the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 ft (see the Federal Transit Administration [FTA] *Transit Noise and Vibration Impact Assessment Manual* [FTA 2018]). When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, both construction of a project and freight train operations on railroad tracks could result in ground-borne vibration that may be perceptible and annoying.

Ground-borne noise is not likely to be a problem because noise arriving via the normal airborne path will usually be greater than ground-borne noise. Ground-borne vibration has the potential to disturb people and damage buildings. Although it is very rare for train-induced ground-borne vibration to cause cosmetic building damage, it is not uncommon for heavy-duty construction processes (e.g., blasting and pile driving) to cause vibration of sufficient amplitudes to damage nearby buildings (FTA 2018). Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). The RMS velocity is best for characterizing human response to building vibration, and PPV is used to characterize potential for damage. Decibel notation acts to compress the range of numbers required to describe vibration. Vibration velocity level in decibels is defined as the following:

$$L_v = 20 \log_{10} [V/V_{ref}]$$

where L_v is the VdB, V is the RMS velocity amplitude, and V_{ref} is the reference velocity amplitude, or 1 x 10^{-6} inches per second (in/sec) used in the United States.

REGULATORY SETTING

Federal Guidelines

Federal Transit Administration

Vibration standards included in the FTA *Transit Noise and Vibration Impact Assessment Manual* (2018) were used to evaluate vibration impacts even though the City exempts vibration caused by motor vehicles and temporary construction. Table C provides the criteria for assessing the potential for interference or annoyance from vibration levels in a building, and Table D lists the potential vibration building damage criteria associated with construction activities.

Table C: Interpretation of Vibration Criteria for Detailed Analysis

Land Use	Maximum L_v (VdB)[1]	Description of Use
Workshop	90	Vibration that is distinctly felt. Appropriate for workshops and similar areas not as sensitive to vibration.
Office	84	Vibration that can be felt. Appropriate for offices and similar areas not as sensitive to vibration.
Residential Day	78	Vibration that is barely felt. Adequate for computer equipment and low-power optical microscopes (up to 20X).
Residential Night and Operating Rooms	72	Vibration is not felt, but ground-borne noise may be audible inside quiet rooms. Suitable for medium-power microscopes (100X) and other equipment of low sensitivity.

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
[1] As measured in 1/3-octave bands of frequency over the frequency range 8 to 80 Hz.
FTA = Federal Transit Administration
Hz = hertz
L_V = velocity in decibels
VdB = vibration velocity decibels

Table D: Construction Vibration Damage Criteria

Building Category	PPV (in/sec)	Approximate LV (VdB)1
Reinforced concrete, steel, or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.
µin/sec = microinches per second
FTA = Federal Transit Administration
in/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

Local Regulations

City of Menifee

Noise Element of the General Plan. The Noise Element of the City's General Plan (City of Menifee 2013) lists the goals and policies required to meet the City's noise-related goals. The following lists the applicable goals and policies for the project.

Goal N-1: Noise-sensitive land uses are protected from excessive noise and vibration exposure.

- **Policy N-1.1:** Assess the compatibility of proposed land uses with the noise environment when preparing, revising, or reviewing development project applications.
- **Policy N-1.2:** Require new projects to comply with the noise standards of local, regional, and state building code regulations, including but not limited to the city's Municipal Code, Title 24 of the California Code of Regulations, the California Green Building Code, and subdivision and development codes.
- **Policy N-1.3:** Require noise abatement measures to enforce compliance with any applicable regulatory mechanisms, including building codes and subdivision and zoning regulations, and ensure that the recommended mitigation measures are implemented.
- **Policy N-1.7:** Mitigate exterior and interior noises to the levels listed in Table E to the extent feasible, for stationary sources adjacent to sensitive receptors:

Table E: Stationary Source Noise Standards

Land Use	Period	Interior	Exterior
Residential	10:00 PM to 7:00 AM	40 dBA L_{eq} (10-minute)	45 dBA L_{eq} (10-minute)
	7:00 AM to 10:00 PM	55 dBA L_{eq} (10-minute)	65 dBA L_{eq} (10-minute)

Sources: General Plan Noise Element (City of Menifee 2013) and Development Code (City of Menifee 2019).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level

- **Policy N-1.8:** Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state, and city noise standards and guidelines as a part of new development review.
- **Policy N-1.12:** Minimize potential noise impacts associated with the development of mixed-use projects (vertical or horizontal mixed-use) where residential units are located above or adjacent to noise-generating uses.
- **Policy N-1.13:** Require new development to minimize vibration impacts to adjacent uses during demolition and construction.
- **Policy N-1.17:** Prevent the construction of new noise-sensitive land uses within airport noise impact zones. New residential land uses within the 65 dBA CNEL contours of any public-use or military airports, as defined by the Riverside County Airport Land Use Commission, shall be prohibited.

Municipal Code. Section 8.01.010 of the City's Municipal Code (City of Menifee 2024) permits any construction within the City within 0.25 mile from an occupied residence Monday through Saturday between the hours of 6:30 a.m. and 7:00 p.m., except on nationally recognized holidays. No construction shall be permitted on Sunday or nationally recognized holidays unless approval is obtained from the City Building Official or City Engineer.

Development Code. Section 9.210.060(B)(10) of the City's Development Code (City of Menifee 2019) exempts sound emanating from heating and air conditioning equipment in proper repair.

Section 9.210.060(C) of the City's Development Code (City of Menifee 2019) allows exceptions to be requested from the standards set forth in Section 9.210.060 of the City's Development Code and may be characterized as construction-related, single-event, or continuous-events exceptions:

- Private construction projects, with or without a building permit, located 0.25 mile or more from an inhabited dwelling.

- Private construction projects, with or without a building permit, located within 0.25 mile from an inhabited dwelling, shall be permitted Monday through Saturday, except on nationally recognized holidays, 6:30 a.m. to 7:00 p.m., or as specified in Section 8.01.010 of the Municipal Code (City of Menifee 2024). There shall be no construction permitted on Sunday or nationally recognized holidays unless approval is obtained from the City Building Official or City Engineer.

- Construction-related exceptions. If construction occurs during off hours or exceeds noise thresholds, an application for a construction-related exception shall be made using the temporary use application provided by the Community Development Director in Chapter 9.110 of the City's Development Code (City of Menifee 2019). For construction activities on Sunday or nationally recognized holidays, Section 8.01.010 of the Municipal Code shall prevail.

Section 9.215.060(D) of the City's Development Code (City of Menifee 2019) prohibits the creation of any sound on any property that causes the exterior and interior sound level on any other occupied property to exceed the noise standards shown in Table E (Stationary Source Noise Standards) above.

Section 9.215.070 of the City's Development Code (City of Menifee 2019) requires that all uses shall be operated so as not to generate vibration discernible without instruments by the average person while on or beyond the lot upon which the source is located or within an adjoining enclosed space if more than one establishment occupies a structure. Vibration caused by motor vehicles, trains, and temporary construction is exempted from this standard.

EXISTING SETTING

Sensitive Land Uses in the Project Vicinity

Existing land uses within the project area include residences, a construction and landscaping material yard land, commercial, and industrial uses. Single-family residences are located to the north and south of the project site. The construction and landscaping material yard is immediately north of the project site. Commercial and industrial uses are northeast and southwest, respectively, of the project site, across Zeiders Road.

Overview of the Existing Noise Environment

The primary existing noise sources in the project area are transportation facilities and activities from the construction and landscaping material yard as well as nearby commercial and industrial uses. Traffic on Zeiders Road and other local roadways contributes to the ambient noise levels in the project

vicinity. Noise from motor vehicles is generated by engines, the interaction between the tires and the road, and the vehicles' exhaust systems.

Ambient Noise Measurements

Short-Term Noise Measurements

Short-term (20-minute) noise level measurements were conducted on May 25, 2022, using a Larson Davis Model 824 Type 1 sound level meter. Table F shows the results of the short-term noise level measurements along with a description of the measurement location and noise sources that occurred during the measurement. As shown in Table F, the measured average noise levels in the project vicinity ranged from 54.2 to 55.9 dBA L_{eq}, and the measured maximum noise levels ranged from 62.6 to 71.2 dBA L_{max}. Figure 3 shows the short-term monitoring locations. The short-term noise level measurement sheets are provided in Attachment C.

Table F: Short-Term Ambient Noise Level Measurements

Monitor No.	Location	Date	Start Time	Noise Level (dBA)			Noise Sources
				L_{eq}	L_{max}	L_{min}	
ST-1	Located in the front yard of 33255 Zeiders Road, Menifee, CA 92584. At the southeast corner of the property, approximately 30 ft from the front yard's fountain and 20 ft from the southern fence.	5/25/22	10:52 a.m.	54.2	62.6	47.6	Traffic on Zeiders Road. Faint truck loading/unloading noise from the southeast of the residential property.
ST-2	Western edge of project site near group of trees. Approximately 100 ft south from the construction and landscaping material yard.	5/25/22	11:25 a.m.	55.9	71.2	50.4	Active cutting noise on site at the northwest corner of the project site. Truck loading/ unloading noise coming from the northwest corner of the project site.

Source: Compiled by LSA (2022).
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum instantaneous noise level

Long-Term Noise Measurements

The long-term (24-hour) noise level measurements were conducted from May 25 to May 26, 2022, using Larson Davis Spark dosimeters. Tables G and H show the hourly L_{eq} results from the long-term noise level measurements, and Table I shows the daytime noise level range (L_{eq} and L_{max}) along with the calculated CNEL from the long-term noise level measurements at LT-1 and LT-2.

As shown in Table I, the daytime noise levels ranged from 57.9 to 72.5 dBA L_{eq} at monitoring location LT-1 and from 50.5 to 66.8 dBA L_{eq} at monitoring location LT-2. The daytime maximum instantaneous noise level ranged from 70.8 to 87.3 dBA at LT-1 and from 63.5 to 82.7 dBA at LT-2. The calculated daily noise levels were 63.1 dBA CNEL at LT-1 and 67.8 dBA CNEL at LT-2. Figure 3 shows the long-term monitoring locations. The long-term noise level measurement sheets are provided in Attachment C.

Table G: Long-Term (24-Hour) Noise Level Measurement Results at LT-1

Start Time		Date	Noise Level (dBA)		
			L_{eq}	L_{max}	L_{min}
1	11:00 AM	5/25/22	65.9	81.9	52.2
2	12:00 PM	5/25/22	66.6	83.1	51.4
3	1:00 PM	5/25/22	70.2	84.4	52.7
4	2:00 PM	5/25/22	71.9	84.8	54.7
5	3:00 PM	5/25/22	71.1	87.3	55.7
6	4:00 PM	5/25/22	72.2	87.2	55.5
7	5:00 PM	5/25/22	67.9	84.5	52.6
8	6:00 PM	5/25/22	65.0	77.4	51.0
9	7:00 PM	5/25/22	63.3	78.9	50.4
10	8:00 PM	5/25/22	59.3	70.8	49.1
11	9:00 PM	5/25/22	57.9	72.5	49.1
12	10:00 PM	5/25/22	55.4	73.2	47.5
13	11:00 PM	5/25/22	55.1	72.1	46.2
14	12:00 AM	5/26/22	52.6	64.3	44.3
15	1:00 AM	5/26/22	51.8	67.5	41.9
16	2:00 AM	5/26/22	52.5	65.9	42.4
17	3:00 AM	5/26/22	55.3	69.2	45.0
18	4:00 AM	5/26/22	59.4	73.8	50.5
19	5:00 AM	5/26/22	62.4	74.4	55.7
20	6:00 AM	5/26/22	61.2	71.6	49.6
21	7:00 AM	5/26/22	61.1	71.1	49.4
22	8:00 AM	5/26/22	60.6	75.3	48.9
23	9:00 AM	5/26/22	62.0	87.2	48.6
24	10:00 AM	5/26/22	61.2	78.2	48.1

Source: Compiled by LSA (2022).
dBA = A-weighted decibels
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum instantaneous noise level

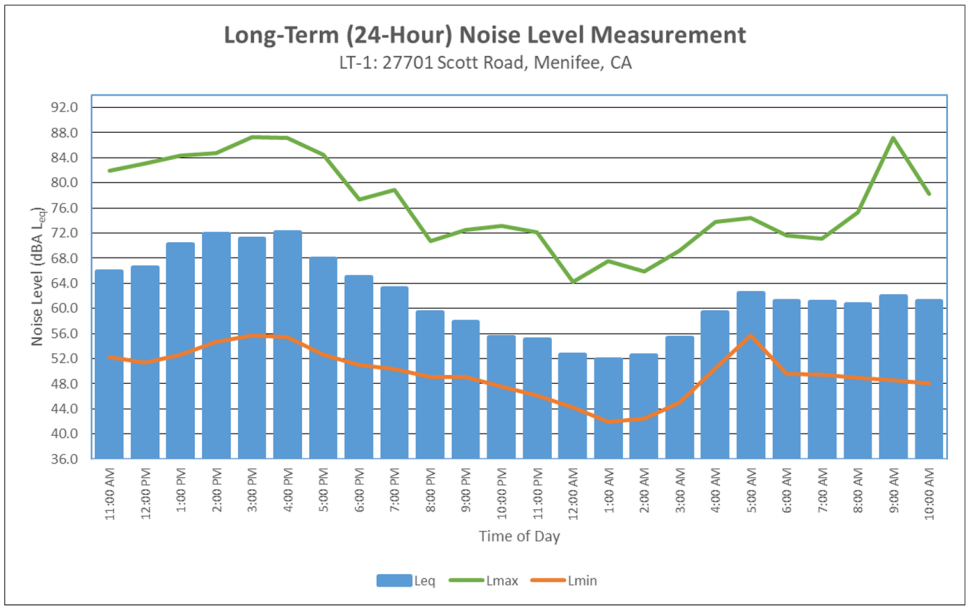


Table H: Long-Term (24-Hour) Noise Level Measurement Results at LT-2

Start Time		Date	Noise Level (dBA)		
			L_{eq}	L_{max}	L_{min}
1	11:00 AM	5/25/22	61.9	73.2	49.7
2	12:00 PM	5/25/22	63.7	75.8	50.0
3	1:00 PM	5/25/22	64.5	78.9	50.5
4	2:00 PM	5/25/22	66.2	82.7	53.5
5	3:00 PM	5/25/22	66.8	78.6	53.5
6	4:00 PM	5/25/22	66.5	75.5	54.2
7	5:00 PM	5/25/22	64.6	75.5	49.9
8	6:00 PM	5/25/22	60.8	71.2	50.2
9	7:00 PM	5/25/22	57.9	74.4	48.9
10	8:00 PM	5/25/22	53.8	64.4	47.8
11	9:00 PM	5/25/22	53.1	72.0	47.0
12	10:00 PM	5/25/22	51.1	67.0	45.1
13	11:00 PM	5/25/22	50.9	66.9	43.8
14	12:00 AM	5/26/22	49.2	57.1	41.1
15	1:00 AM	5/26/22	48.4	62.5	38.9
16	2:00 AM	5/26/22	50.3	59.3	39.6
17	3:00 AM	5/26/22	52.8	63.7	43.3
18	4:00 AM	5/26/22	55.4	68.2	49.9
19	5:00 AM	5/26/22	58.4	76.2	51.2
20	6:00 AM	5/26/22	55.9	75.3	46.5
21	7:00 AM	5/26/22	52.3	66.4	47.1
22	8:00 AM	5/26/22	52.1	76.7	46.0
23	9:00 AM	5/26/22	51.1	72.6	44.4
24	10:00 AM	5/26/22	50.5	63.5	44.8

Source: Compiled by LSA (2022).
dBA = A-weighted decibels
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum instantaneous noise level

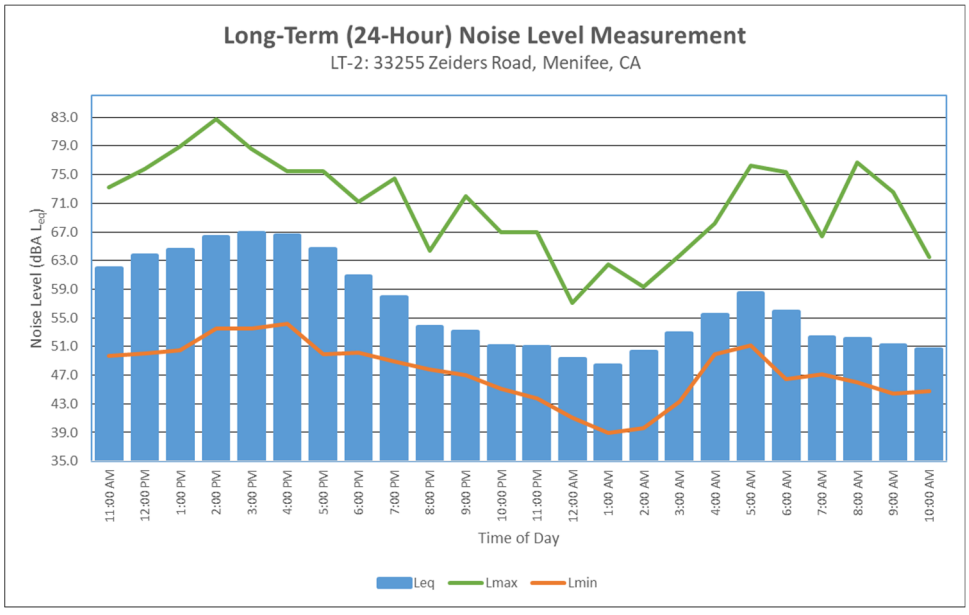


Table I: Long-Term Ambient Noise Monitoring Results

Monitoring No.	Location	Noise Level (dBA)			Noise Sources
		L_{eq}	L_{max}	CNEL	
LT-1	Located in the parking lot in front of 27701 Scott Road next to a light pole closest to Zeiders Road, southwest corner of the plaza.	57.9-72.2	70.8-87.3	67.8	Traffic on Zeiders Road and faint traffic on Interstate 215. Some parking lot activity.
LT-2	Located on the property at 33255 Zeiders Road along the southern fenced gate, where the trailer storage and residential property meet.	50.5-66.8	63.5-82.7	63.1	Activity from the construction and landscaping material yard, including noise from workers talking.

Source: Compiled by LSA (2022).
Note: The long-term (24-hour) noise level measurements were conducted from May 25 to May 26, 2022.
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous sound level

Existing Aircraft Noise

French Valley Airport is a public airport that is 4.7 miles southeast of the project site. Also, Perris Valley Airport is a private airport that is 8.5 miles northwest of the project site. The airport noise contours for both the French Valley Airport and the Perris Valley Airport in the *Riverside County Airport Land Use Compatibility Plan* (RCALUC 2004) show that the project site is outside the 55 dBA CNEL noise contour. Although there are no private airstrips within 2 miles of the project site, Loma Linda University Center – Murrieta has a heliport 1.6 miles southeast of the project site. The usage of this heliport would be infrequent due to emergencies and would not influence the noise environment at the project site. Therefore, the project would not expose people working in the project area to excessive noise levels and this topic is not further discussed.

Existing Traffic Noise

The guidelines included in the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA 1977; FHWA RD-77-108) were used to evaluate traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values. The existing (2024) average daily traffic (ADT) volumes were derived from the project trip generation information contained in the *Caliber Collision Paint and Auto Body Repair Shop Project Traffic Analysis Memorandum* (LSA 2024b) and traffic counts for the proposed project. The standard vehicle mix for Southern California roadways was used for traffic on these roadway segments. Table J provides the existing traffic noise levels in the project vicinity. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn. Attachment D provides the specific assumptions used in developing these noise levels and model printouts.

Table J: Existing (2024) Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Zeiders Road between Scott Road and Project Driveway	7,455	< 50	74	157	66.2
Scott Road between Haun Road/Zeiders Road and I-215 Southbound Ramps	32,441	94	196	418	71.5
Scott Road between I-215 Southbound Ramps and I-215 Northbound Ramps	37,535	103	216	461	72.0

Source: Compiled by LSA (2024).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibel
ft = foot/feet
I-215 = Interstate 215

IMPACTS

Short-Term Construction Noise Impacts

Two types of short-term noise impacts would occur during project construction. The first type would be from construction crew commutes and the transport of construction equipment and materials to the project site and would incrementally raise noise levels on roadways leading to the site. The pieces of construction equipment for construction activities would move on site, would remain for the duration of each construction phase, and would not add to the daily traffic volume in the project vicinity. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 ft would generate up to a maximum of 84 dBA), the effect on longer-term (hourly or daily) ambient noise levels would be small because the number of hourly/daily construction-related vehicle trips is small compared to the existing hourly/daily traffic volume on Zeiders Road and Scott Road. The grading phase would generate the most trips out of all of the construction phases, at 610 trips per day based on the California Emissions Estimator Model (Version 2022.1) results in Appendix C of the *Air Quality, Greenhouse Gas Emissions, and Energy Analysis for the Caliber Collision Paint and Auto Body Repair Project* (LSA 2024a). Roadways that would be used to access the project site are Zeiders Road and Scott Road. Based on Table J, Zeiders Road and Scott Road have existing daily traffic volumes of 7,555 and 32,441, respectively, near the project site. Based on the maximum daily trips generated by construction-related traffic, construction-related traffic would increase noise by up to 0.3 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, no short-term construction-related impacts associated with worker commutes and transport of construction equipment and material to the project site would occur, and no noise reduction measures would be required.

The second type of short-term noise impact is related noise generated from construction activities. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. The project anticipates site preparation and grading, building construction, paving, and architectural coating phases of construction. These various sequential phases change the character of the noise generated on a project site. Therefore, the noise

levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table K lists the L_{max} recommended for noise impact assessments for typical construction equipment included in the *FHWA Highway Construction Noise Handbook* (FHWA 2006), based on a distance of 50 ft between the equipment and a noise receptor.

Table K: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor[1] (%)	Maximum Noise Level (L_{max}) at 50 ft[2]
Backhoe	40	80
Compactor (ground)	20	80
Compressor	40	80
Crane	16	85
Dozer	40	85
Dump Truck	40	84
Excavator	40	85
Flatbed Truck	40	84
Forklift	20	85
Front-End Loader	40	80
Grader	40	85
Impact Pile Driver	20	95
Jackhammer	20	85
Pavement Scarifier	20	85
Paver	50	85
Pickup Truck	40	55
Pneumatic Tools	50	85
Pump	50	77
Rock Drill	20	85
Roller	20	85
Scraper	40	85
Tractor	40	84
Welder	40	73

Source: *FHWA Highway Construction Noise Handbook.* Table 9.1 (FHWA 2006).
Note: The noise levels reported in this table are rounded to the nearest whole number.
[1] The usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.
[2] Maximum noise levels were developed based on Specification 721.560 from the CA/T program to be consistent with the City of Boston, Massachusetts, Noise Code for the "Big Dig" project.
CA/T = Central Artery/Tunnel
FHWA = Federal Highway Administration
ft = foot/feet
L_{max} = maximum instantaneous noise level

Table L lists the anticipated construction equipment for each construction phase based on the CalEEMod (Version 2022.1) results contained in Appendix C of the *Air Quality, Greenhouse Gas Emissions, and Energy Analysis for the Caliber Collision Paint and Auto Body Repair Project* (LSA 2024a). Table L shows the combined noise level at 50 ft from all of the equipment in each phase and the L_{eq} noise level for each piece of equipment at 50 ft based on the quantity, reference L_{max} noise level at 50 ft, and the acoustical usage factor. As shown in Table L, construction noise levels would reach up to 88.5 dBA L_{eq} at a distance of 50 ft.

Table L: Summary of Construction Phase, Equipment, and Noise Levels

Construction Phase	Construction Equipment	Quantity	Reference Noise Level at 50 ft (dBA L_{max})	Acoustical Usage Factor[1] (%)	Noise Level at 50 ft (dBA L_{eq})	Combined Noise Level at 50 ft (dBA L_{eq})
Site Preparation	Front End Loader	4	80	40	82.0	87.3
	Dozer	3	85	40	85.8	
Grading	Grader	1	85	40	81.0	87.0
	Dozer	1	85	40	81.0	
	Front End Loader	3	80	40	80.8	
	Excavator	1	85	40	81.0	
Building Construction	Crane	1	85	16	77.0	86.5
	Man Lift	3	85	20	82.8	
	Generator	1	82	50	79.0	
	Front End Loader	3	80	40	80.8	
	Welder / Torch	1	73	40	69.0	
Paving	Concrete Mixer Truck	2	85	40	84.0	88.5
	Paver	1	85	50	82.0	
	Pavement Scarafier	2	85	20	81.0	
	Roller	2	85	20	81.0	
	Front End Loader	1	80	40	76.0	
Architectural Coating	Compressor (air)	1	80	40	76.0	76.0

Source: Compiled by LSA (2024).

[1] The acoustical usage factor is the percentage of time during a construction noise operation that a piece of construction equipment operates at full power

dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level

The closest residential property line is approximately 80 ft from the center of the project site and may be subject to noise levels of 84.4 dBA L_{eq}. Measured ambient noise levels in the project vicinity range between 50.5 and 72.5 dBA L_{eq} based on the short-term and long-term noise level measurements shown in Tables F and I. Although the noise generated by project construction activities would be higher than the ambient noise levels and may result in a temporary increase in the ambient noise levels, construction noise would stop once project construction is completed. Compliance with the allowable construction hours pursuant to Section 8.01.010 of the City's Municipal Code and best construction practices listed below would minimize construction noise.

- The construction contractor shall limit construction activities to between the hours of 6:30 a.m. and 7:00 p.m. on Monday through Saturday. No construction shall be permitted outside these hours, on Sunday, or on nationally recognized holidays unless approval is obtained from the City Building Official or City Engineer.

- During all project site excavation and grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.

- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and most noise-sensitive receptors nearest the project site during all project construction.

- The construction contractor shall place all stationary construction equipment so that the emitted noise is directed away from the sensitive receptors nearest the project site.

Therefore, no noise impacts from construction activities would occur. No noise reduction measures are required.

Short-Term Construction Vibration Impacts

Although vibration levels generated from short-term construction are exempt based on Section 9.215.070 of the City's Development Code (City of Menifee 2019), vibration levels generated from short-term construction were evaluated for the level of human annoyance and potential for building damage. This construction vibration impact analysis discusses the level of human annoyance using vibration levels in VdB and assesses the potential for building damage using vibration levels in PPV (in/sec). Vibration levels calculated in RMS velocity are best for characterizing human response to building vibration, whereas vibration levels in PPV are best for characterizing damage potential. As shown in Table D, the FTA guidelines indicate that a vibration level up to 0.5 PPV (in/sec) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster) and would not result in any construction vibration damage (FTA 2018). For a non-engineered timber and masonry building, the construction vibration damage criterion is 0.2 PPV (in/sec). For a fragile building, the construction vibration damage criterion is 0.12 PPV (in/sec).

Table M shows the reference vibration levels at a distance of 25 ft for each type of standard construction equipment from the *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018). Outdoor site preparation and grading for the project are expected to require the use of a large bulldozer and loaded trucks, which would generate ground-borne vibration levels of up to 87 VdB (0.089 PPV [in/sec]) and 86 VdB (0.076 PPV [in/sec]), respectively, when measured at 25 ft.

Table M: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	PPV (in/sec)	L_V (VdB)[1]
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer[2]	**0.089**	**87**
Caisson Drilling	0.089	87
Loaded Trucks[2]	**0.076**	**86**
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Sources: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).

[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.

[2] Equipment shown in **bold** is expected to be used on site.

µin/sec = micro-inches per second
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

The greatest vibration levels are anticipated during the site preparation and grading phase. All other phases are expected to result in lower vibration levels. The distance to the nearest buildings for

vibration impact analysis is measured between the nearest off-site buildings and the project boundary (assuming the construction equipment would be used at or near the project boundary), because vibration impacts normally occur within the buildings.

The formulas for vibration transmission are provided below:

$$L_vdB\ (D) = L_vdB\ (25\ ft) - 30\ Log\ (D/25)$$

$$PPV_{equip} = PPV_{ref}\ x\ (25/D)^{1.5}$$

Table N lists the projected vibration levels, from various construction equipment expected to be used on the project site in the active construction area, to the closest building structures in the project vicinity. As shown in Table N, the closest residential, industrial, and commercial building structures are approximately 175 ft, 580 ft, and 700 ft from the center of the project, respectively, and would experience a vibration level of up to 74 VdB, 56 VdB, and 51 VdB, respectively. These vibration levels would not result in community annoyance because vibration levels would not exceed the FTA's community annoyance threshold of 78 VdB for daytime residences and 84 VdB for uses not as sensitive to vibration. Other building structures that surround the project site would experience lower vibration levels because they are farther away.

Table N: Potential Construction Vibration Annoyance

Land Use	Direction	Equipment/ Activity	Reference Vibration Level (VdB) at 25 ft	Distance (ft)[1]	Vibration Level (VdB)
Residence	North	Large bulldozers	87	330	60
		Loaded trucks	86	330	59
Commercial	Northeast	Large bulldozers	87	700	51
		Loaded trucks	86	700	50
Industrial	Southeast	Large bulldozers	87	580	56
		Loaded trucks	86	580	55
Residence	South	Large bulldozers	87	175	74
		Loaded trucks	86	175	73

Source: Compiled by LSA (2024).
Note: The FTA community annoyance thresholds are 78 VdB for daytime residences and 84 VdB for uses not as sensitive to vibration.
[1] Distance from the center of the project site to the building structure.
ft = foot/feet
FTA = Federal Transit Administration
VdB = vibration velocity decibels

Similarly, Table O lists the projected vibration levels from various construction equipment expected to be used on the project site at the project construction boundary to the closest building structures in the project vicinity. As shown in Table O, the closest residential, industrial, and commercial building structures are approximately 70 ft, 260 ft, and 400 ft from the project construction boundary, respectively, and would experience a vibration level of up to 0.019 PPV (in/sec), 0.003 PPV (in/sec), and 0.001 PPV (in/sec), respectively. These vibration levels would not have the potential to result in building damage because the closest residential, industrial, and commercial building structures would be constructed equivalent to or better than non-engineered timber and masonry, and vibration levels would not exceed the FTA vibration damage threshold of 0.2 PPV (in/sec). Other building structures that surround the project site would experience lower vibration levels because they are farther away.

Table O: Potential Construction Vibration Damage

Land Use	Direction	Equipment/ Activity	Reference Vibration Level at 25 ft	Distance to Structure (ft)[1]	Vibration Level
			PPV (in/sec)		PPV (in/sec)
Residence	North	Large bulldozers	0.089	195	0.004
		Loaded trucks	0.076	195	0.003
Commercial	Northeast	Large bulldozers	0.089	400	0.001
		Loaded trucks	0.076	400	0.001
Industrial	Southeast	Large bulldozers	0.089	260	0.003
		Loaded trucks	0.076	260	0.002
Residence	South	Large bulldozers	0.089	70	0.019
		Loaded trucks	0.076	70	0.016

Source: Compiled by LSA (2024).
Note: The FTA-recommended building damage threshold is 0.20 PPV (in/sec) at the receiving nonengineered timber and masonry building.
[1] Distance from the project construction boundary to the building structure.
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inches per second
PPV = peak particle velocity

Therefore, no construction vibration impacts would occur, and no vibration reduction measures are required.

Long-Term Traffic Noise Impacts

The guidelines included in the *FHWA Highway Traffic Noise Prediction Model* (FHWA 1977) (FHWA RD-77-108) were used to evaluate traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values. The existing (2024) ADT volumes were derived from the project trip generation information contained in the *Caliber Collision Paint and Auto Body Repair Shop Project Traffic Analysis Memorandum* (LSA 2024b) and traffic counts. The standard vehicle mix for Southern California roadways was used for traffic on these roadway segments. Table P shows the existing (2024) traffic noise levels without and with the project along roadways in the project vicinity. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn. Attachment D provides the specific assumptions used in developing these noise levels and model printouts.

As shown in Table P, the project-related traffic noise would not increase noise levels. Therefore, no traffic noise impacts from project-related traffic on off-site sensitive receptors would occur. No noise reduction measures are required.

Table P: Existing (2024) Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Baseline Conditions
Zeiders Road between Scott Road and Project Driveway	7,455	< 50	74	157	66.2	7,540	< 50	74	159	66.2	0.0
Scott Road between Haun Road/Zeiders Road and I-215 Southbound Ramps	32,441	94	196	418	71.5	32,522	94	196	419	71.5	0.0
Scott Road between I-215 Southbound Ramps and I-215 Northbound Ramps	37,535	103	216	461	72.0	37,578	103	216	461	72.0	0.0

Source: Compiled by LSA (2024).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibel
ft = foot/feet
I-215 = Interstate 215

Long-Term Stationary Noise Impacts

Operations of the proposed paint and auto body repair shop would generate stationary noise sources that would include heating, ventilation, and air conditioning (HVAC) equipment, pneumatic tools, air compressor, parking activities, and trucks delivering parts supplies and vehicles along with truck unloading activities. Stationary noise sources associated with the project would potentially affect the existing off-site sensitive land uses. The following provides a detailed noise analysis and discussion of each stationary noise source.

Heating, Ventilation, and Air Conditioning Equipment

The project would include a rooftop HVAC unit for the office portion of the project. The HVAC equipment could operate 24 hours per day. Each HVAC unit would generate a noise level of 44.4 dBA at 50 ft. Section 9.215.060(B)(10) of the City's Development Code (City of Menifee 2019) exempts sound emanating from heating and air conditioning equipment in proper repair. Therefore, no noise impacts from on-site HVAC equipment would occur. No noise reduction measures are required.

Auto Body Repair Activities

The project would include service bays within the proposed building to repair vehicles. Noise generated from repair and service activities would include noise generated by a torque gun, vehicle lift, and compressor similar to a typical auto mechanic garage, which would occur during the planned hours of operation from 7:30 a.m. to 5:30 p.m. Monday through Friday and 8:00 a.m. to 12:00 p.m. on Saturday. Noise generated by the torque gun, vehicle lift, and compressor are 73.8 dBA L_{eq}, 60.8 dBA L_{eq}, and 71.0 dBA L_{eq}, respectively, at a distance of 50 ft based on noise level measurements conducted by LSA. The combined noise level from the torque gun, vehicle lift, and compressor operating together at the same time as a worst-case scenario is 75.7 dBA L_{eq} at 50 ft.

The proposed auto body shop building with the overhead doors open on the north and west sides would shield noise generated from auto body shop activities occurring within the building and would provide a minimum noise reduction of 5 dBA and 20 dBA for the residences to the north and south, respectively. The residential property lines are approximately 235 ft north and 35 ft south, respectively, from the center of the auto body shop area.

Parking Activity

The project would include surface parking on the north, east, and west sides of the proposed building. Noise generated from parking lot activities would include noise generated by vehicles traveling at slow speeds, engine start-up noise, car door slams, car horns, car alarms, and tire squeals. These activities would occur during the planned hours of operation from 7:30 a.m. to 5:30 p.m. Monday through Friday and 8:00 a.m. to 12:00 p.m. on Saturday. Representative parking activities would generate 60 to 70 dBA L_{max} at 50 ft. It is estimated that parking activities would generate the maximum noise level for a cumulative period of 5 minutes in any hour and parking activities would generate a noise level of 49.2 to 59.2 dBA L_{eq} at 50 ft. The residential property lines are approximately 235 ft north and 95 ft south, respectively, from the center of the parking area.

Truck Delivery and Truck Unloading Activities

Trucks delivering parts supplies and vehicles in need of repair along with truck unloading activities for the project would take place on either the north or west sides of the auto body shop building. These activities would take place during the planned hours of operation from 7:30 a.m. to 5:30 p.m. Monday through Friday and 8:00 a.m. to 12:00 p.m. on Saturday. Noise levels generated from these activities include truck movement, backup alarms, air brakes, idling, and unloading activities. These activities would result in a maximum noise similar to noise readings from truck delivery and truck unloading activities for other projects, which would generate a noise level of 75 dBA L_{max} at 50 ft. Although a typical truck unloading process takes an average of 15 to 20 minutes, this maximum noise level occurs in a much shorter period of time (less than 5 minutes). Also, it is estimated that there would be a maximum of five delivery trucks and truck unloading activities per hour, which would result in a cumulative period of 25 minutes in any hour. Based on the assumptions above, truck delivery and truck unloading activities would generate a noise level of 61.2 dBA L_{eq} at 50 ft. The residential property lines are approximately 195 ft north and 40 ft south, respectively, from truck delivery and truck unloading activities.

Stationary Noise Impacts Summary

Table Q shows the individual and combined stationary noise from the operations of the proposed auto body shop, which include noise generated from auto body shop activities (torque gun, vehicle lift, and compressor), parking activities, and trucks delivering parts supplies and vehicles along with truck unloading activities. As shown in Table Q, the combined stationary noise generated from the proposed project would be 58.2 dBA L_{eq} and 64.8 dBA L_{eq} at the residential property lines to the north and south, respectively. These noise levels would not exceed the City's daytime exterior 10-minute noise standard of 65 dBA L_{eq}.

In addition, interior noise levels at the closest residences were calculated based on windows and doors open, which would have an exterior-to-interior noise reduction of 12 dBA (EPA 1978). Table Q shows that interior noise levels from the project's combined stationary noise at the closest residence to the north and south would be 46.2 dBA L_{eq} and 52.8 dBA L_{eq}, respectively. These noise levels would not exceed the City's daytime interior 10-minute noise standard of 55 dBA L_{eq}. Also, the City's nighttime exterior and interior noise standards would not be exceeded because the proposed project would not operate during nighttime hours. Therefore, no noise impacts from project operations would occur. No noise reduction measures are required.

Long-Term Vibration Impacts

The project would not generate vibration. In addition, vibration levels generated from project-related traffic on the adjacent roadways (Zeiders Road and Scott Road) are exempt based on Section 9.215.070 of the City's Development Code. Therefore, no vibration impacts from project-related operations would occur, and no vibration reduction measures are required.

Table Q: Stationary Noise Levels

Land Use	Direction	Activity	Reference Noise Level at 50 ft (dBA L_{max})	Reference Noise Level at 50 ft (dBA L_{eq})	Distance (ft)	Distance Attenuation (dBA)	Shielding (dBA)	Exterior Noise Level (dBA L_{max})	Exterior Noise Level (dBA L_{eq})	Combined Exterior Noise Level (dBA L_{eq})	Combined Interior Noise Level[2] (dBA L_{eq})
Residential	North	Auto body Repair	--	75.7	235	13.4	5[3]	--	57.3	58.2	46.2
		Parking Activity	70	59.2	235	13.4	0	56.6	45.8		
		Truck[1]	75	61.2	195	11.8	0	63.2	49.4		
Residential	South	Auto body Repair	--	75.7	35	-3.1	20[4]	--	58.8	64.8	52.8
		Parking Activity	70	59.2	95	5.6	0	64.4	53.6		
		Truck[1]	75	61.2	40	-1.9	0	76.9	63.1		

Source: Compiled by LSA (2024).

[1] Trucks delivering parts supplies and vehicles along with truck unloading activities.

[2] The interior noise level was calculated based on an exterior-to-interior noise level reduction of 12 dBA with windows and doors open based on the United States Environmental Protection Agency (EPA) Protective Noise Levels: Condensed Version of EPA Levels Document (1978), with a combination of exterior walls, doors, and windows, and standard construction for Southern California (warm climate).

[3] The proposed auto body shop building with the overhead doors open on the north and west side would shield noise generated from auto body shop activities occurring within the building and would provide a minimum noise reduction of 5 dBA.

[4] The proposed auto body shop building with the overhead doors open on the north and west side would shield noise generated from auto body shop activities occurring within the building and would provide a minimum noise reduction of 20 dBA.

dBA = A-weighted decibel

ft = feet/foot

L_{eq} = equivalent continuous sound level

BEST CONSTRUCTION PRACTICES

The following best construction practices would be consistent with the City's requirements outlined in Section 9.215.060(B)(10) of the City's Development Code and would further minimize construction noise.

- The construction contractor shall limit construction activities to between the hours of 6:30 a.m. and 7:00 p.m. on Monday through Saturday. No construction shall be permitted outside these hours, on Sunday, or on nationally recognized holidays unless approval is obtained from the City Building Official or City Engineer.
- During all project site excavation and grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and most noise-sensitive receptors nearest the project site during all project construction.
- The construction contractor shall place all stationary construction equipment so that the emitted noise is directed away from the sensitive receptors nearest the project site.

REDUCTION MEASURES

Short-Term Construction Noise Impacts

No noise reduction measures are required.

Short-Term Construction Vibration Impacts

No vibration reduction measures are required.

Aircraft Noise Impacts

No noise reduction measures are required.

Traffic Noise Impacts

No noise reduction measures are required.

Long-Term Stationary Noise Impacts

No noise reduction measures are required.

Long-Term Vibration Impacts

No vibration reduction measures are required.

Attachments: A: References
B: Figures 1 through 3
C: Noise Monitoring Results
D: FHWA Traffic Noise Model Printouts

ATTACHMENT A

REFERENCES

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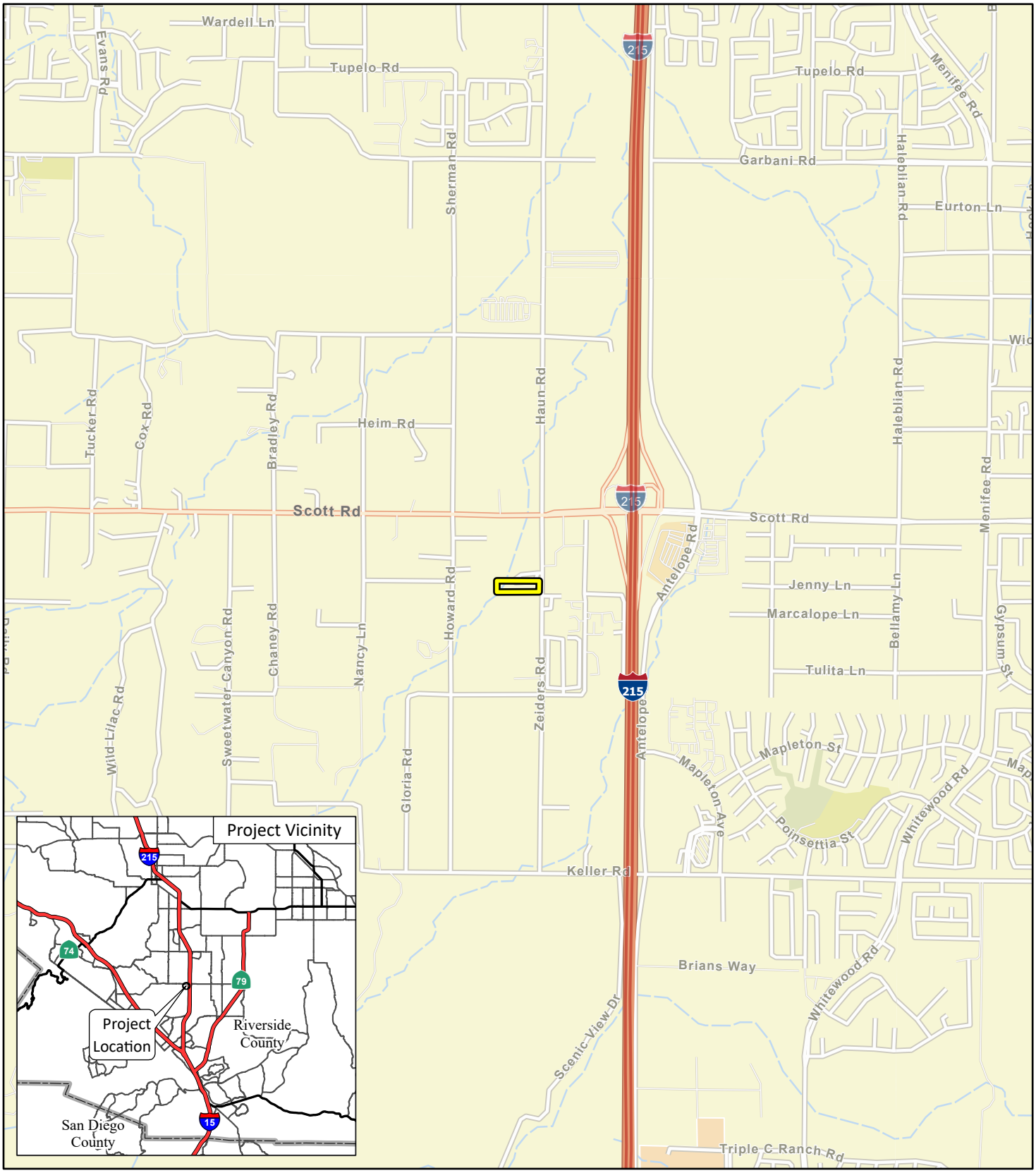
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ATTACHMENT B

FIGURES 1 THROUGH 3

Figure 1: Project Location and Vicinity
Figure 2: Site Plan
Figure 3: Noise Monitoring Locations



LSA

Project Location

FIGURE 1

N

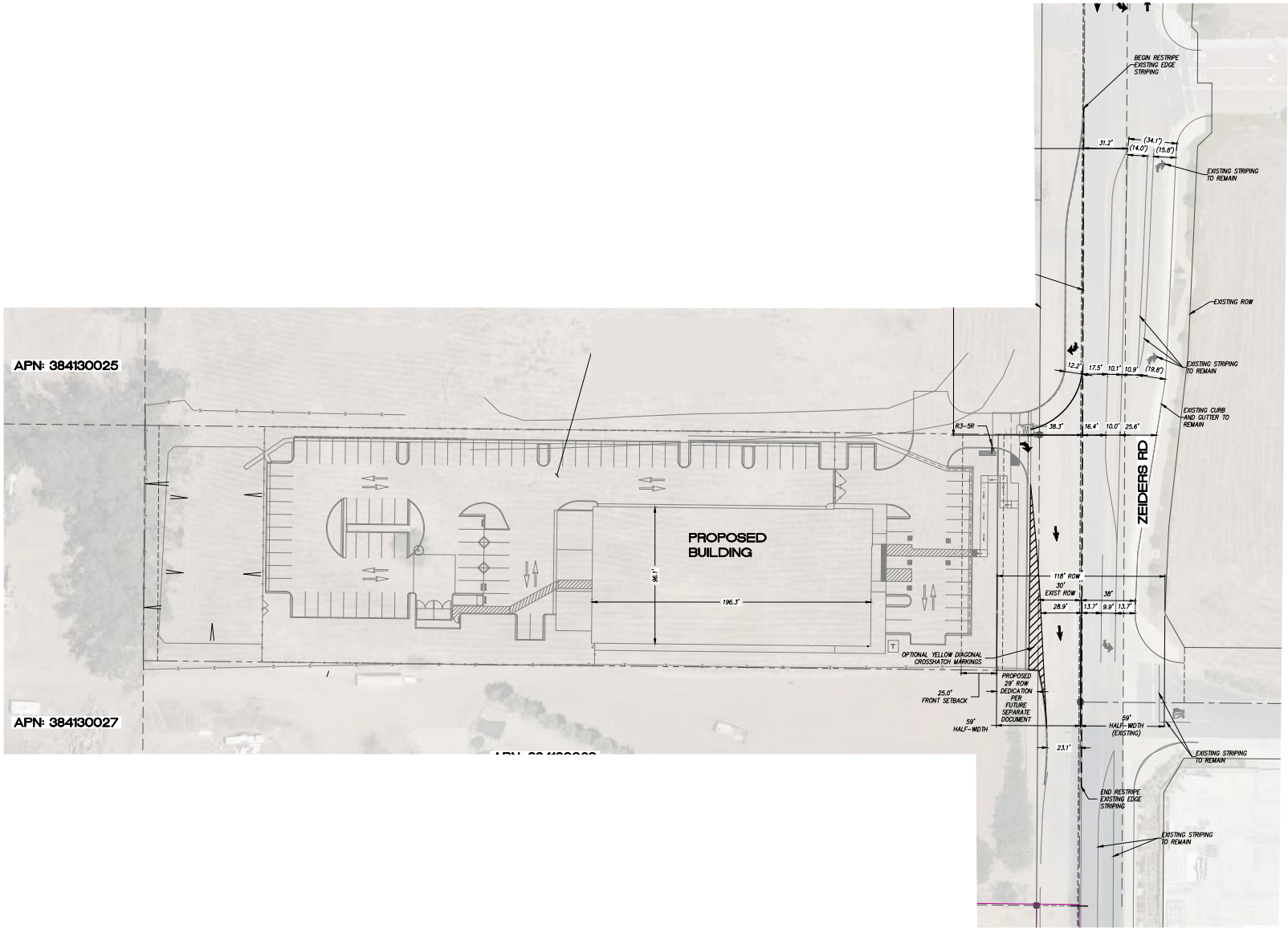
0 1000 2000
FEET

SOURCE: Esri Street Map 2024

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Caliber Collision Paint and Auto Body Repair Shop Project

Project Location and Vicinity



LSA

FIGURE 2

N

0 70 140

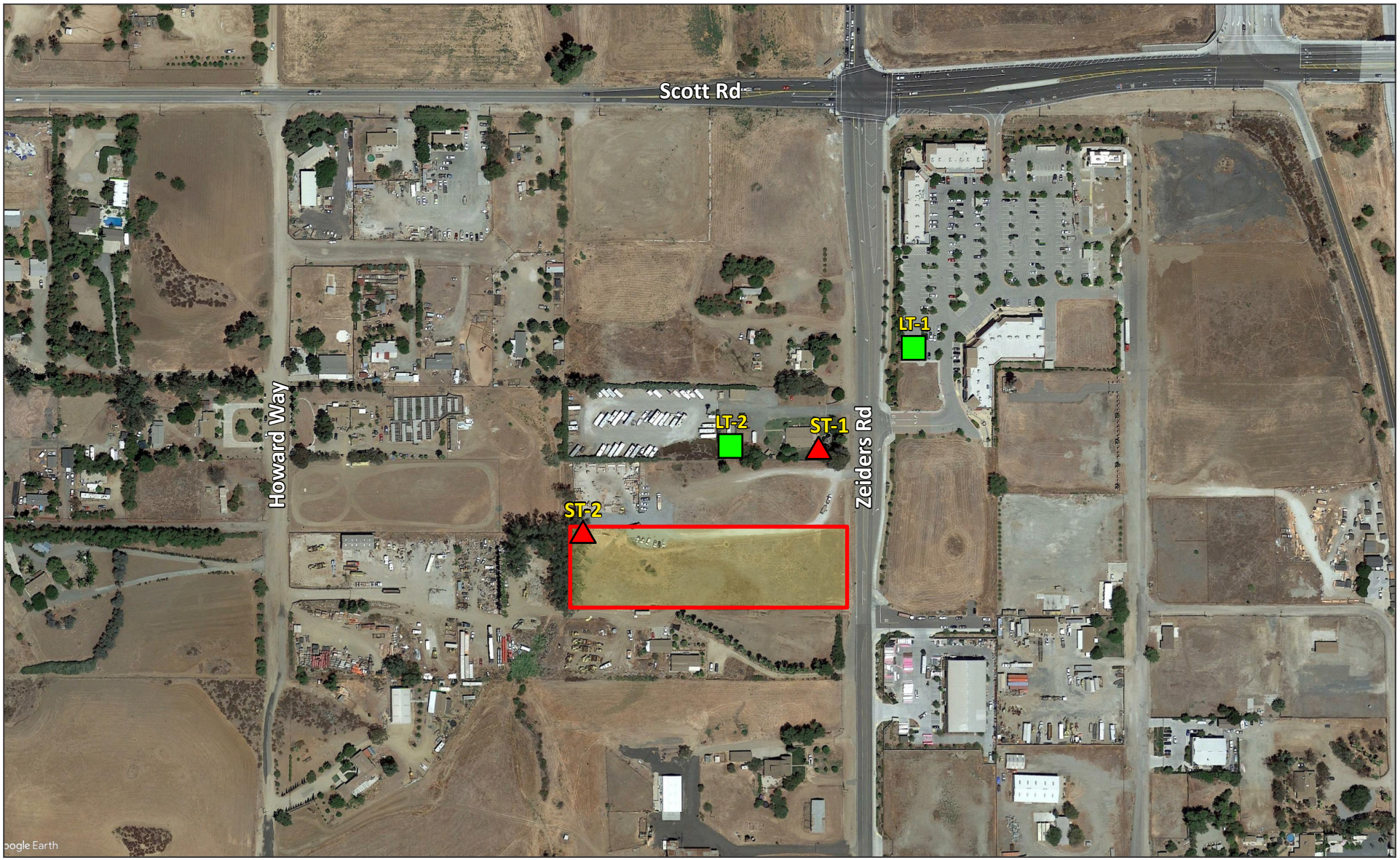
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SOURCE: Latitude 33 Engineering

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Caliber Collision Paint and Auto Body Repair Shop

Site Plan



LSA

FIGURE 3

LEGEND

Project Location

ST-1 Short-term Noise Monitoring Location

LT-1 Long-term Noise Monitoring Location

0 100 200

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SOURCE: Google Earth 2022

Caliber Collision Paint and Auto Body Repair Shop

Noise Monitoring Locations

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ATTACHMENT C

NOISE SURVEY SHEETS

Noise Measurement Survey

Project Number: CIM2201 Test Personnel: Kevin Nguyendo

Project Name: Caliber Collision Equipment: Larson Davis 824

Site Number: ST-1 Date: 5/25/22 Time: From 10:52 a.m. To 11:12 a.m.

Site Location: Located in the front yard of 33255 Zeiders Road, Menifee, CA 92584. At the Southeast corner of the property. Approximately 30 feet from the front yard's fountain and 20feet from the southern fence.

Primary Noise Sources: Faint water fountain noise. Faint truck loading/unloading noise from southeast of the residential property. Regular traffic noise on Zeiders Road. Faint construction noise.

Measurement Results

	dBA
L_{eq}	54.2
L_{max}	62.6
L_{min}	47.6
L_{peak}	88.1
L_2	59.4
L_8	57.4
L_{25}	54.8
L_{50}	53.0
SEL	--

Atmospheric Conditions:

Maximum Wind Velocity (mph)	4.3
Average Wind Velocity (mph)	1.7
Temperature (F)	83.5
Relative Humidity (%)	37.4
Comments:	

Comments: File # 30. Chain link fence surrounds property. Running water fountain located in the front yard. Fence is approximately 7 feet high.

Traffic Description:

Roadway	# Lanes	Speeds	NB/EB Counts			SB/WB Counts		
			Auto	MT	HT	Auto	MT	HT

Diagram:



Location Photo:



Noise Measurement Survey

Project Number: CIM2201 Test Personnel: Kevin Nguyendo

Project Name: Caliber Collision Equipment: Larson Davis 824

Site Number: ST-2 Date: 5/25/22 Time: From 11:25 a.m. To 11:45 a.m.

Site Location: Western edge of project site near group of trees. Approximately 100 feet south from construction and landscaping material yard.

Primary Noise Sources: Active cutting noise on site at the northwest corner of the project Site. Loading/unloading noise coming from the northwest corner of the project site.

Measurement Results

	dBA
L_{eq}	55.9
L_{max}	71.2
L_{min}	50.4
L_{peak}	98.3
L_2	61.5
L_8	58.2
L_{25}	55.8
L_{50}	54.3
SEL	--

Atmospheric Conditions:

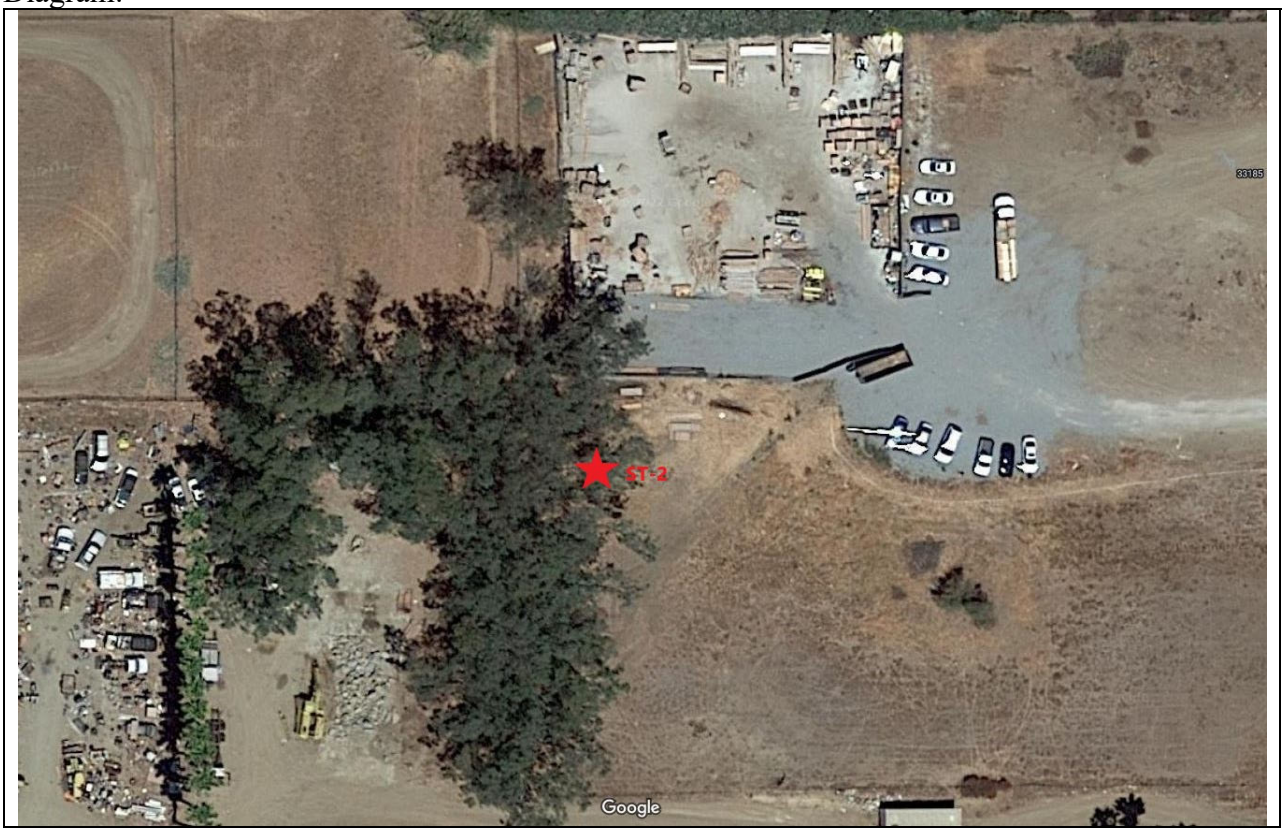
Maximum Wind Velocity (mph)	4.4
Average Wind Velocity (mph)	2.0
Temperature (F)	89.5
Relative Humidity (%)	36.7
Comments:	

Comments: File # 31. Saw blade cutting noise throughout measurement. Actively cutting and loading pallets of wood on-site. At 11 minutes 16 seconds into measurement, saw noise stopped and then resumed at the 15 minute mark.

Traffic Description:

Roadway	# Lanes	Speeds	NB/EB Counts			SB/WB Counts		
			Auto	MT	HT	Auto	MT	HT

Diagram:



Location Photo:



Noise Measurement Survey – 24 HR

Project Number: CIM2201
Project Name: Caliber Collision

Test Personnel: Kevin Nguyendo
Equipment: Spark 706RC (SN:18905)

Site Number: LT-1 Date: 5/25/22

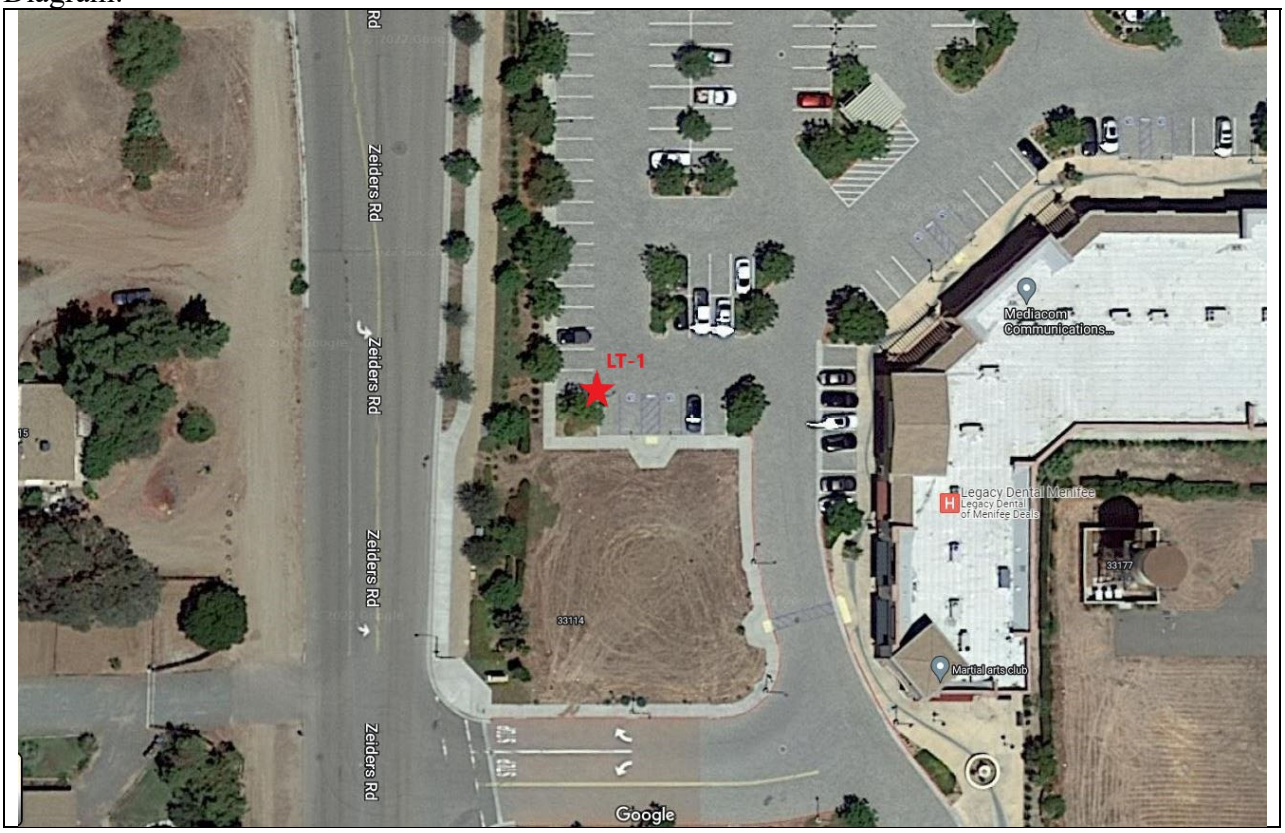
Time: From 11:00 a.m. To 11:00 a.m.

Site Location: Located in the parking lot in front of 27701 Scott Road. On a light pole closest to Zeiders Road. Southwest corner of the plaza.

Primary Noise Sources: Faint constant traffic noise from I-215 freeway and regular traffic noise on Zeiders Road. Parking lot noise activity. Some bird noise.

Comments:

Diagram:



Location Photo:



Noise Measurement Survey – 24 HR

Project Number: CIM2201
Project Name: Caliber Collision

Test Personnel: Kevin Nguyendo
Equipment: Spark 706RC (SN:18906)

Site Number: LT-2 Date: 5/25/22

Time: From 11:00 a.m. To 11:00 a.m.

Site Location: Located on the property of 33255 Zeiders Road, Menifee, CA 92584
Along the southern chained fence where the trailer storage and residential property meet.

Primary Noise Sources: Faint noise coming from the construction and landscaping material yard and workers talking. Some bird noise.

Comments:

Diagram:



Location Photo:



ATTACHMENT D

FHWA TRAFFIC NOISE MODEL PRINTOUTS

TABLE Existing No Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/17/2024
ROADWAY SEGMENT: Zeiders Road Between Scott Road and Project Driveway
NOTES: Caliber Collision - Existing No Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7455 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.18

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	73.9	157.4	338.3

TABLE Existing No Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/17/2024
ROADWAY SEGMENT: Scott Road Between Haun Road/Zeiders Road and I-215 Southbound Ramps
NOTES: Caliber Collision - Existing No Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 32441 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 26 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.51

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
93.7	195.6	418.5	900.1

TABLE Existing No Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/17/2024
ROADWAY SEGMENT: Scott Road Between I-215 Southbound Ramps and I-215 Northbound Ramps
NOTES: Caliber Collision - Existing No Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 37535 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 29 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.96

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
103.3	215.6	461.1	991.7

TABLE Existing With Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/17/2024
ROADWAY SEGMENT: Zeiders Road Between Scott Road and Project Driveway
NOTES: Caliber Collision - Existing With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7540 SPEED (MPH): 50 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.23

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	74.4	158.6	340.9

TABLE Existing With Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/17/2024
ROADWAY SEGMENT: Scott Road Between Haun Road/Zeiders Road and I-215 Southbound Ramps
NOTES: Caliber Collision - Existing With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 32522 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 26 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.52

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
93.8	196.0	419.2	901.6

TABLE Existing With Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/17/2024
ROADWAY SEGMENT: Scott Road Between I-215 Southbound Ramps and I-215 Northbound Ramps
NOTES: Caliber Collision - Existing With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 37578 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 29 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.96

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
103.4	215.8	461.5	992.5

APPENDIX I

TRAFFIC ANALYSIS MEMORANDUM

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CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: October 16, 2024

TO: Christopher Heron, City Traffic Engineer
City of Menifee, Community Development Department

FROM: Ambarish Mukherjee, AICP PE, Principal, LSA Associates

SUBJECT: Caliber Collision Paint and Auto Body Repair Shop Project Traffic Analysis Memorandum (LSA Project No. 20231078.02)

LSA Associates, Inc. (LSA) has prepared this Traffic Analysis Memorandum (Memo) for the proposed Caliber Collision Paint and Auto Body Repair Shop Project (project) in Menifee, California. The project will consist of one paint and auto body repair shop building totaling 18,600 square feet (sf). The project will be located on the west side of Zeiders Road, approximately 930 feet (ft) south of the southwest corner of the intersection of Haun Road – Zeiders Road/Scott Road. The project is consistent with the City's General Plan land use and zoning designation. Figure 1 (all figures and tables attached) illustrates the regional and project location. Figure 2 illustrates the conceptual site plan for the project.

The objectives of this Memo are as follows:

- To estimate the trip generation for the proposed project and determine whether a level of service (LOS) Traffic Study (TS) will be required for the project;
- To determine whether a detailed Vehicle Miles Traveled (VMT) analysis will be required for the proposed project; and
- To perform an active transportation and public transit analysis and determine whether the project will have any impact on public transit, bicycle, and pedestrian facilities.

TRIP GENERATION ANALYSIS

The City of Menifee (City) Engineering Department *LOS Traffic Study Guidelines* (TS Guidelines) dated October 2020, states that a LOS study may not be required if the project is estimated to generate less than 50 peak hour trips.

Trip generation for the project was developed using the statement of operations included in the Conceptual Site, Grading, Drainage, Circulation and Utility Plan, developed by Latitude 33, dated May 2024. The statement of operations is included in Attachment C. The statement of operations summarizes the estimated number of employees and customers per day. It estimates the project

will have 20 full-time employees and approximately 13 to 15 customers on a typical weekday. Additionally, the statement of operation states that the project's operational hours will be from 7:30 a.m. to 5:30 p.m. Monday through Friday, and possibly 8:00 a.m. to 12:00 p.m. on Saturday.

As such, the project trip generation was prepared that separately accounts for employee trips and customer trips. Attached Table A summarizes the project trip generation. Following is a brief description of the project trip generation estimation:

Employee Trip Generation

Based on the project's statement of operation, the project is anticipated to have 20 full-time employees. Therefore, it could be estimated that the project will be generating 40 daily employee trips (inbound and outbound combined). Based on the operational hours, these trips could be estimated as peak hour trips, with 20 inbound trips occurring during a.m. peak hour, and 20 outbound trips occurring during the p.m. peak hour.

Customer Trip Generation

Based on the project's statement of operations, the project is anticipated to have 13 to 15 customers per day. As a conservative estimate, it was estimated that the project will have 15 customers per day. This includes customers both arriving with vehicles requiring repair or vehicles that have been repaired and are ready for pick-up. As such, the following methodology was applied to develop the trip generation for the customer trips:

Customer Vehicle Drop-off:

- It is anticipated that most customers arriving with vehicles requiring repair will either drive their vehicle to Caliber by themselves or ride along with tow trucks to drop off their vehicle. As such, one customer will generate 1 inbound trip as a starting point.

- After customers drop off their vehicles, customers would have the option to wait for their vehicle, utilize a rental vehicle service or a rideshare service to leave the facility, or have a friend/acquaintance come pick them up.

- As a conservative approach, it has been assumed that the customer would not be able to pick-up the vehicle on the same day. Therefore, the customer would utilize one of the aforementioned options to depart the facility. Additionally, the tow truck bringing in the vehicle would also be leaving the facility. Therefore, there would be two outbound trips for each customer arriving to drop-off their vehicle.

- In summary, for each customer arriving to drop-off their vehicle, there would be one inbound trip and two outbound trips.

Customer Vehicle Pick-up:

- If the customer decides to wait at the facility to pick up their vehicle, each customer will only generate 1 outbound trip.

- If the customer had utilized the rental car service or rideshare service, then the customer would generate one inbound trip (arriving with the rental vehicle or rideshare vehicle) and two outbound trips that would include departure of the customer with their personal vehicle and departure of the rideshare vehicle. The rental vehicle may be parked on-site and not add to a second outbound trip.

- As such, as a conservative estimate, two outbound trips have been assumed for every vehicle pick-up for purposes of preparing this trip generation.

Based on the above approach, it could be estimated that the project will be generating approximately 45 daily customer trips (inbound and outbound combined) for the 15 customers per day.

For a typical regular weekday, it has been observed that within urbanized areas, peak hour traffic volumes contribute to approximately 10% of the daily traffic volumes (20 percent total of the daily trips from both peak hours). Therefore, it can be estimated that 5 customer trips (10 percent of the 45 daily trips) may occur during the a.m. peak hour and 5 customer trips may occur during the p.m. peak hour.

Table A summarizes the project trip generation as described above and shows that the proposed project is anticipated to generate 25 trips in the a.m. peak hour, 25 trips in the p.m. peak hour, and 85 daily trips.

Since the anticipated number of peak hour trips generated by the proposed project is lower than the 50-trip threshold established by the City's TS Guidelines, a LOS study may not be required for the project.

VEHICLE MILES TRAVELED ANALYSIS

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) Guidelines for use. Among the changes to the guidelines was the removal of vehicle delay and level of service as the sole basis of determining CEQA impacts. With the implementation of the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on VMT. The analysis was conducted pursuant to the City of Menifee *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled*, (VMT Guidelines) updated January 2022.

Pursuant to the City's VMT Guidelines, Project Screening "Step 3: Project Type Screening", projects generating less than 110 daily vehicle trips could be presumed to have a less than significant impact on VMT. As shown in Table A, the project is anticipated to generate 85 daily trips, which is lower than the City's daily trip threshold of 110 daily vehicle trips. Therefore, based on the City's VMT Guidelines, the project could be screened out from a detailed VMT analysis using the project type screening. As such, the project is anticipated to have a less than significant VMT impact.

Additionally, the existing nearby Caliber Collision facilities are located in Hemet, Lake Elsinore, and Murrieta. It is anticipated that customers in the vicinity of the project location will be using the

proposed project instead of traveling to these existing facilities. As such, the project will help reducing the total regional VMT.

ACTIVE TRANSPORTATION AND PUBLIC TRANSIT ANALYSIS

According to the City's VMT Guidelines, a significant impact occurs when a project conflicts with adopted plans, policies, or programs regarding active transportation or public transit facilities, or otherwise decreases the performance or safety of such facilities.

Currently, there are no existing bikeways along Scott Road and Zeiders Road in the project vicinity. Based on City's General Plan Circulation Element, adopted in 2013, future Class II on-street bicycle lanes will be added along both directions of Scott Road and future Class I off-road trail will be added along Haun Road and Zeiders Road within the project vicinity. The project will not affect any proposed bicycle facilities within the study area. As such, the project will not decrease the performance or safety of proposed bicycle facilities.

According to the City's General Plan Circulation Element, the existence of sidewalks provides more transportation choices for non-work trips, which can replace some auto trips, reducing growth in congestion and air pollution. Within the project vicinity, currently there are paved sidewalks on the north side of Scott Road and east side of Zeiders Road. The project will add sidewalks along the project frontage on the west side of Zeiders Road. As such, the project will help eliminate existing sidewalk gaps and will increase the performance or safety of the existing pedestrian facilities.

The nearest bus stops from the project site are approximately 0.75 miles, located at the southwest and southeast corners of the intersection of Antelope Road/Heritage Market Place. Riverside Transit Agency (RTA) bus route 61 serves these bus stops. RTA bus route 61 connects Menifee to communities in adjacent jurisdictions such as Perris, Sun City, Murrieta and Temecula. At present, there are no proposed service changes in RTA's transit network. As such, the project will not decrease the performance or safety of any existing or proposed public transit facilities.

As summarized above, the project does not conflict with existing or proposed bicycle, pedestrian, and public transit facilities. Therefore, it can be considered to conform to all adopted policies, plans, or programs concerning these facilities, and will not have a significant impact.

If you have any questions, please do not hesitate to contact me at (951) 781-9310 or Ambarish.Mukherjee@lsa.net.

Attachments: A: Figures
B: Table
C: Table

ATTACHMENT A

FIGURES

Figure 1: Regional and Project Location
Figure 2: Conceptual Site Plan



LSA

FIGURE 1

N

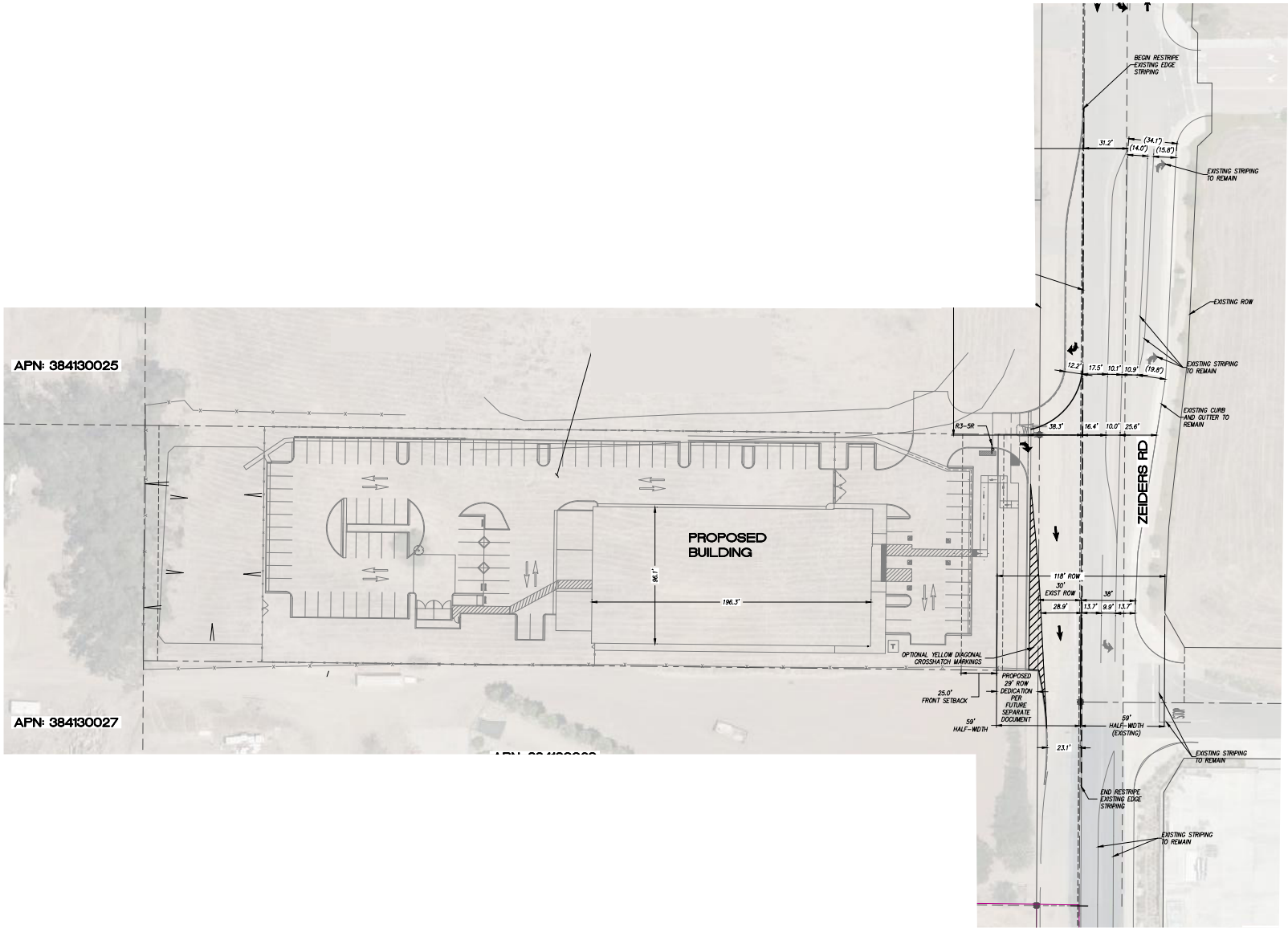
0 500 1000
FEET

Caliber Collision Paint and Auto Body Repair Shop Project
Traffic Analysis Memorandum

Regional and Project Location

SOURCE: ESRI Streetmap, 2013; SCAG, 2020; Google Earth, 2018.

P:\20231078.02 Menifee - Caliber Collision\Product\Tech Reports\Traffic\GIS\Reports\fig1_RegProjLoc.mxd (3/27/2022)



LSA

FIGURE 2

N

0 70 140

FEET

SOURCE: Latitude 33 Engineering

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Caliber Collision Paint and Auto Body Repair Shop

Site Plan

ATTACHMENT B

TABLE

Table A: Project Trip Generation

LSA

Table A - Project Trip Generation

Land Uses	Units	A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
Collision Center[1]	18.60 TSF							
Employee Trip Generation		20	0	20	0	20	20	40
Customer Trip Generation		3	2	5	2	3	5	45
Total Trip Generation		**23**	**2**	**25**	**2**	**23**	**25**	**85**

Notes:

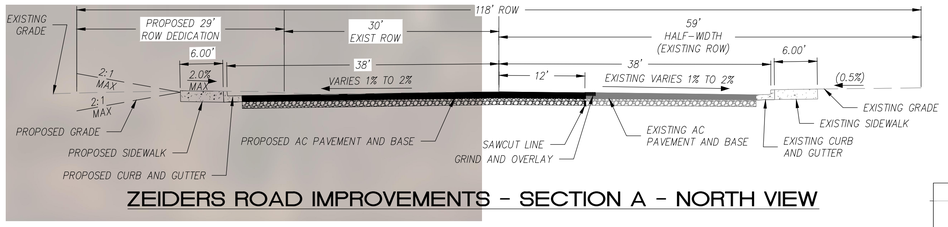
TSF = thousand square-feet

[1] The trip generation was developed based on the the statement of operations from the Conceptual Site, Grading, Drainage, Circulation and Utility Plan.

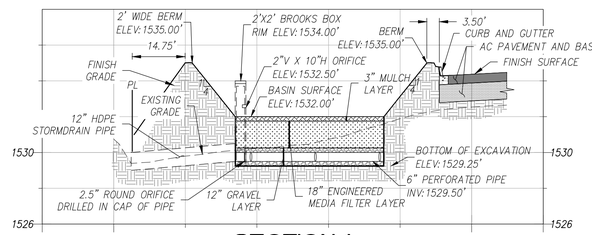
ATTACHMENT C

CONCEPTUAL SITE, GRADING, DRAINAGE, CIRCULATION AND UTILITY PLAN

CONCEPTUAL SITE, GRADING, DRAINAGE, CIRCULATION, AND UTILITY PLAN

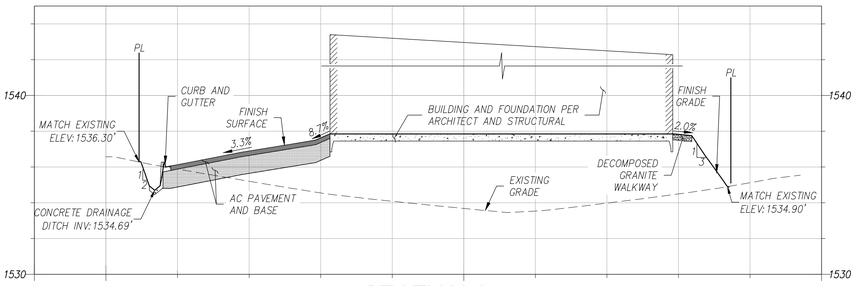


ZEIDERS ROAD IMPROVEMENTS - SECTION A - NORTH VIEW



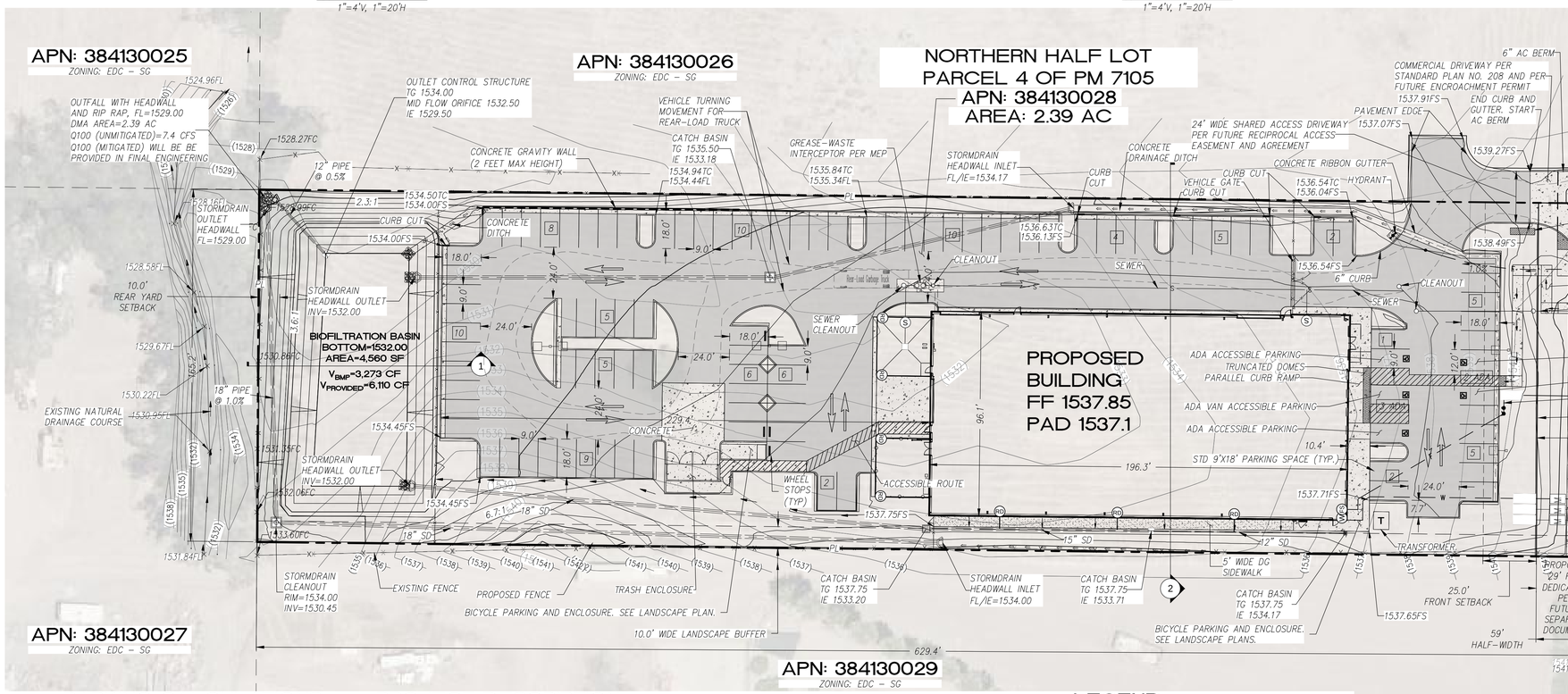
SECTION 1

1"=4'V, 1"=20'H



SECTION 2

1"=4'V, 1"=20'H



PARKING CALCULATIONS

STANDARD:
1 SPACE PER 150 SQ. FT GROSS FLOOR AREA (NOT INCLUDING FOR SERVICE BAYS) & 4 SPACES PER SERVICE BAY (CMDC TABLE 9.215.040-1)

TOTAL BUILDING AREA = 18,717 SF
6-SERVICE BAYS = 7,392 SF

18,717-7,392=11,325 SF -> 11,325/150 =75.5 SPACES

76+24 = 100 SPACES REQUIRED
100 PROVIDED (INCLUDES ADA STALLS)

ADA:
5 REQUIRED (CBC 11B-208)

5 PROVIDED:
2 VAN ACCESSIBLE
3 STANDARD ADA

BICYCLE:
1 PER 25 PARKING SPACES REQUIRED (CMDC 9.215.040-5)
101 / 25 = 4.04 REQ
8 PROVIDED IN 2X ENCLOSURES

UTILITY PURVEYORS

WATER & SEWER: EASTERN MUNICIPAL WATER DISTRICT
TELECOMMUNICATIONS: FRONTIER COMMUNICATIONS
ELECTRICAL & GAS: SOUTHERN CALIFORNIA EDISON
MUNICIPAL SOLID WASTE & RECYCLING: WASTE MANAGEMENT

PROJECT DESCRIPTION

THE PROPOSED PROJECT IS AN AUTO BODY REPAIR AND PAINT SHOP TO BE CONSTRUCTED ON THE SITE. THE PROJECT WILL CONSIST OF AN 18,717 SQUARE FOOT BUILDING, AND WILL REQUIRE PARKING FOR CUSTOMERS AND EMPLOYEES, SERVICE BAYS FOR THE PAINT AND BODY SHOP WORK, AND VEHICLE STORAGE.
MAXIMUM BUILDING HEIGHT = 26 FEET

ZONING

EXISTING: ECONOMIC DEVELOPMENT CORRIDOR - SOUTHERN GATEWAY (EDC-SG)
PROPOSED: ECONOMIC DEVELOPMENT CORRIDOR - SOUTHERN GATEWAY (EDC-SG)

INTENDED USE

AUTO BODY REPAIR AND PAINT SHOP

GENERAL NOTES

1. THE PARCEL AREA EXPRESSED HEREON ARE DERIVED FROM THE REQUEST FOR PROPOSAL AND ARE NOT BASED ON BOUNDARY RESEARCH OR VERIFICATION.
2. TOPOGRAPHY SHOWN IS PRELIMINARY. OBTAINED FROM GOOGLE EARTH PRO AND ADJUSTED TO NAVD88.
3. NO INFILTRATION CONDITION ASSUMED. PER USDA WEB SOIL SURVEY, PROPERTY LIES IN TYPE C & D SOILS. NO SIGNIFICANT INFILTRATION CAPACITY IS EXPECTED, IF ANY.

UTILITY NOTES

DRY UTILITIES (GAS, ELECTRICAL, LIGHTING, TELECOMM) PER OTHERS AND NOT DEPICTED ON THESE PLANS.

0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

N

33

STATEMENT OF OPERATIONS

AUTO BODY REPAIR AND PAINT SERVICE
MONDAY THROUGH FRIDAY: 7:30AM - 5:30PM
SATURDAY: POSSIBLE HOURS 8AM - 12PM
20 FULL TIME EMPLOYEES
NUMBER OF CUSTOMERS PER DAY: 13 - 15

EARTHWORK QUANTITY RAW

ESTIMATED CUT VOLUME=1,800 CY
ESTIMATED FILL VOLUME=9,200 CY
NET VOLUME=7,400 CY IMPORT

LEGEND

PROPERTY LINE
SETBACKS
RIGHT-OF-WAY R/W
AC PAVEMENT
PCC PAVEMENT/SIDEWALK
DG SURFACING
EX TELECOM T
EX 12" WATER LINE W
EX 15" SEWER LINE S
6" FIRE LINE F
2" WATER LATERAL W
4" SEWER LATERAL S
STORMDRAIN
FIRE HYDRANT
WATER METER
BACKFLOW PREVENTER

AREAS

TOTAL AREA: 2.39 ACRES
TOTAL PROPOSED BUILDING AREA: 0.43 ACRES
TOTAL PROPOSED PAVED AREA: 0.98 ACRES
TOTAL PROPOSED LANDSCAPE AREA: 0.83 ACRES

latitude 33
PLANNING & ENGINEERING
10731 Treena Street, San Diego, CA 92131
Tel 858.751.0633

BY	DATE	REVISION
	03/13/2024	1ST CUP SUBMITTAL

CONCEPTUAL SITE, GRADING, DRAINAGE, CIRCULATION, AND UTILITY PLAN

CALIBER COLLISION
ZEIDERS RD,
MENIFEE CA 92584

L33 PROJECT NUMBER (PN): 1937.0
OTHER PN: N/A
DESIGNED BY: DATE: 05.06.2024
DRAWN BY: AK DATE: 05.06.2024
CHECKED BY: ER/SD DATE: 05.06.2024

SHEET
2 OF 4

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