CITY OF McFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT

ENVIRONMENTAL DOCUMENTATION

INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

OCTOBER 2025

STATE WATER RESOURCES CONTROL BOARD
EXPEDITED DRINKING WATER GRANT
PROJECT NO. EDWG-1510013-003C

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I. MITIGATED NEGATIVE DECLARATION

As Lead Agency under the California Environmental Quality Act (CEQA), the City of McFarland (CITY) has reviewed the project described below to determine whether it could have a significant impact on the environment because of its development. In accordance with CEQA Guidelines Section 15382, "significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

II. PROJECT NAME

Water System Improvement & Treatment Project

III. PROJECT LOCATION

The well is located in the northwest of the City of McFarland on the south side of Elmo Highway approximately 950-ft west of Highway 99 in Section 12, T26S, R25E, M.D.B.&M. See Figure 1 herein.

IV. PROJECT DESCRIPTION

The proposed project is for the City of McFarland (City) and involves drilling and equipping a new municipal water well, construction of an oxidation, coagulation, filtration iron removal water treatment system, construction of a welded steel water storage tank and booster station, and a connection to the existing City distribution system.

The well site property is approximately 100-ft by 400-ft or approximately 0.9-acres. The site is currently a vacant, unimproved lot. The earthwork will involve moving approximately 1,000 cubic yards which will be off-hauled for disposal off site as directed by the City.

The site grading is anticipated to involve approximately 20 working days. It is anticipated that the following pieces of equipment will be used during construction activities:

- Loader
- Backhoe
- Excavator
- Skip and Drag
- Sheepsfoot Compactor
- Rammax Compactor
- Whacker Packers

The site earthwork requirements include over-excavation to 18-inches below proposed concrete foundations and will be recompacted to 90% relative compaction to reduce the potential for settlement. Concrete foundations will be constructed for the deep well pump and motor, the booster pump foundations, the skid-mounted LayneOx treatment system, storage tank foundations, chemical building foundations, electrical foundation, and the hydropneumatic tank footings.

The well site property will be secured with approximately 930-ft of 8-ft tall masonry block wall and include drive gates and a personnel gate to Elmo Highway for site access. The well site will be surfaced with a combination of ¾" Class II aggregate base and hot mix asphalt paving, with the limits being the perimeter block wall.

The well is planned to be drilled to an approximate depth of 900-ft using the reverse rotary method. Water quality zone testing will be performed in the well pilot hole. The well construction work will include installing a 50-ft deep, 36-inch diameter steel conductor, drilling a 17 ½ - inch diameter pilot hole, performing geophysical logging, water quality depth sampling, reaming of the pilot hole to 28-inch diameter, installation of 16-inch diameter steel casing, installation of gravel pack, installation of a bentonite annular seal, and well development. The initial development water will be disposed of in a 20,000-gallon tank and removed from the site. The development water will then be discharged to the existing adjacent storm drain sump. It is expected that the completed well will exceed the secondary drinking water standard for iron and that well head treatment in the form of oxidation, coagulation, and filtration will be used to remove iron.

The production well drilling phase will involve the drilling, construction, and development of a new municipal water supply well. It is anticipated to involve approximately 90 working days with active well drilling taking place 24 hours per day, seven days per week for approximately 45 of those working days. It is anticipated that the following pieces of equipment will be used during construction activities:

- Well Drilling Rig with Pipe Trailer
- Mud Pits
- Backhoe
- Loader
- Forklift

The deep well will have a 10-ft by 10-ft by 30-in thick concrete foundation and be equipped with a vertical turbine pump and vertical hollowshaft electric motor with a variable speed drive. The well will have a 10-ft by 10-ft by 11-ft high removable metal enclosure building for noise attenuation. The 12-inch well discharge piping will be metered using an electromagnetic flow meter.

The well discharge flow will be divided so that approximately two-thirds of the flow is conveyed to a skid-mounted LayneOx iron treatment system with a concrete foundation that is 68-ft by 19-ft by 24-in thick. The remaining one-third of the well flow will bypass the LayneOx iron treatment system. The bypass flow rate will be regulated using an automatic modulating control valve and will be blended with the treated flow from the LayneOx iron removal treatment system.

The blended flow will be conveyed into an AWWA D100 welded steel storage tank that will be constructed with a concrete ringwall foundation and oiled sand cushion. The storage tank dimensions will be 60-ft diameter and 24-ft side shell height. The storage tank outlet piping will be 18-inch diameter steel piping that feeds the suction header for three horizontal centrifugal split-case booster pumps. Each booster pump will have a concrete foundation that is 3-ft by 6-ft by 36-in thick. The booster pumps are each equipped with variable speed drives. Two of the pumps are 50hp and the third pump is 100hp. The pump discharge piping then enters a 12-in diameter discharge header. The discharge header enters a 3,000-gallon hydropneumatic pressure vessel which will be anchored to two concrete footings each 13-ft long by 5-ft wide by 24-in thick. The 12-inch diameter booster station piping will transition below ground after the pressure vessel and transition to 12-inch C900 PVC pipe that will connect to the existing 12” PVC City distribution system water main that runs along the north side of the well site on the south side of Elmo Highway.

In addition, there will be a 144,000-gallon backwash tank with dimensions of 32-ft diameter and 24-ft side shell height. The tank will be an AWWA D100 welded steel storage tank on a concrete ringwall foundation and oiled sand cushion. The backwash tank will drain the supernatant back to the well discharge for treatment and/or drain to the City sewer.

There will be two fiber-reinforced polymer (FRP) chemical enclosure buildings to house the dual-walled chemical storage tanks, duplex chemical feed pump skids, and the continuous reagent-free pH and chlorine analyzer.

The first FRP building (18 ft × 12 ft) will provide protection for the 550-gallon chlorine storage tank, the 150-gallon ferric chloride storage tank, and the duplex chemical feed pump skids. These pumps will inject chlorine and ferric chloride for chemical pre-treatment of the raw groundwater prior to filtration through the LayneOx media.

The second FRP building (10 ft × 12 ft) will house the 550-gallon sulfuric acid storage tank and the duplex chemical feed pump skid used for sulfuric acid injection. This system will provide pre-treatment pH adjustment upstream of the LayneOx filter media vessels.

The well and treatment facility will be painted a neutral color (tan) and site landscaping installed around the perimeter of the site for it to be aesthetically pleasing and blend in with the adjacent community and neighborhood.

The well equipping and site development phase is anticipated to involve approximately 12 months. However, the equipment will not run continually or daily throughout this entire construction period. It is anticipated that the following heavy pieces of equipment will be used for approximately 180 working days during construction activities:

- Excavator
- Loader
- Backhoe
- Crane
- Concrete Trucks
- Generator
- Air Compressor
- Small Tools
- Service Trucks

Construction of the project is anticipated to span an approximate 18-to-24-month period.

The well site will be routinely visited by a City operator – typically once per day to check on the operation and inspect for any issues along with the preparation of a daily report. Routine maintenance operations will include:

- Well Lubrication Check - daily
- Chlorine Tank Level Check – daily
- Sulfuric Acid Tank Level Check – daily
- Ferric Chloride Tank Level Check – daily
- Chlorine Residual Check – daily
- pH Check – daily
- Iron Level Check – daily
- Water Production Reading Check – daily
- Booster Pump check – monthly
- Well water level measurements – monthly
- Air Conditioning service – annually
- Site Cleanup - quarterly

A back-up emergency generator will also be installed as part of this project.

The document and documents referenced in the Initial Study/Mitigated Negative Declaration are available for review at the City of McFarland office located at 401 W. Kern Avenue, McFarland, CA 93250.

As mandated by the California Environmental Quality Act (CEQA), the public review period for this document was 30 days (CEQA Section 15073[b]). The

public review period began on November 24th, 2025 and ended on December 24th, 2025. For further information, please contact Curtis M. Skaggs at (661) 393-4796 or cskaggs@djacivil.com.

V. CONTACT INFORMATION

City of McFarland
401 W. Kern Avenue
McFarland, CA 93250
Contact Person: Yerlys Hernandez, Public Works Director
Phone: (661) 792-3091

VI. FINDINGS

As Lead Agency, the City of McFarland (City) finds that the project will not have a significant impact on the environment. The Environmental Checklist (CEQA Guidelines Appendix G) or Initial Study (IS) identified one or more potentially significant effects on the environment, but revisions to the project have been made before the release of this Mitigated Negative Declaration (MND) or mitigation measures will be implemented that reduce all potentially significant impacts to less-than-significant levels. The Lead Agency further finds that there is no substantial evidence that this project would have a significant effect on the environment.

VII. MITIGATION MEASURES

AESTHETIC MITIGATION MEASURES

AES-1 The project lighting will be less than 20-ft tall and the light fixtures shielded and directed downward to comply with the Kern County "Dark Skies Ordinance".

AES-2 The site will be painted a neutral color (tan), be screened with an 8-ft tall masonry block wall, and have landscaping installed around the perimeter of the site.

AIR QUALITY MITIGATION MEASURES

AQ-1 Water will be applied to the project site during construction grading, trenching, and backfilling operations to control dust and keep the project area clean.

AQ-2 The contract documents will require the Contractor to obtain and comply with a San Joaquin Valley Air Pollution Control District Authority to Construct and Permit to Operate permits for the emergency backup diesel generator.

BIOLOGICAL RESOURCES MITIGATION MEASURES

BIO-1 A biological resource pre-activity survey conducted by a qualified biologist no more that 30- days before the start of construction activities**.**

Biological resource monitoring shall be conducted during each initial phase of ground disturbance**.**

Compliance reporting shall be provided to the required oversight agencies for all biological resource field surveys, monitoring, and additional tasks as warranted**.**

BIO-2 All personnel entering the project site should attend a Worker Environmental Awareness Program. The Worker Environmental Awareness Program will present measures required to avoid, minimize, and mitigate impacts to biological resources and will include, at a minimum, the following: an outline of special-status species that may access, use or otherwise transverse the project area, federal and state endangered species acts; biological survey results for the current construction area; life history information for the species of concern; biological resource avoidance, minimization, and mitigation requirements; consequences for failure to successfully implement requirements; and procedures to be followed if dead or injured wildlife are located during project activities. Upon completion of the orientation, employees should sign a form stating that they attended the program and understand all biological resource mitigation measures and receive a hard hat sticker or other means of identifying that they have attended the worker orientation. Forms verifying worker attendance should be filed at the applicant's office and be accessible to county, USFWS and CDFW staff. No untrained personnel will be allowed to work onsite with the exception of delivery trucks that are only onsite for one day or less, and are under the supervision of a trained employee.

BIO-3 If known or natal SJKF dens are identified at any time during construction, protocols enumerated in the *USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011) should be implemented, and the appropriate agencies contacted for guidance.

BIO-4 Vertical sided trenching deeper than 2-feet will include escape ramps at no more than a 1:1 ratio every 100 feet.

Vertical sided holes that are not capable of being ramped should be covered or otherwise secured to the greatest extent practicable**.**

BIO-5 All construction pipes, poles, culverts, hoses or similar structures stored at the construction site for one or more overnight periods should be capped or the ends covered in a way that prevents wildlife entrapment. Unburied pipes laid in trenches overnight should be capped. If a kit fox or other listed species is discovered inside a pipe, that section of pipe will not be moved until the animal leaves on its own, or the USFWS and the CDFW have been consulted.

In addition to the above recommended species-specific protection measures, the following additional general measures should be adopted that represent best management practices:

BIO-6 Traffic restraints and signs should be established to minimize temporary disturbances during construction. All construction traffic should be restricted to designated access roads and routes, project site, storage areas, and staging and parking areas. Off-road traffic outside designated project boundaries will be prohibited. A 15 mile-per-hour (32 kilometer-per-hour) speed limit should be observed in all project construction areas, except as otherwise posted on county roads and state and federal highways.

BIO-7 All equipment storage and parking during construction activities should be confined to the designated construction area or to previously disturbed off-site areas that are not habitat for listed species.

BIO-8 All project construction activities involving excavation or surface disturbance should be limited to daylight hours with the exception of well drilling activities.

BIO-9 Trenches should be inspected for entrapped wildlife each morning, prior to the onset of construction. Before such holes or trenches are filled, they should be thoroughly inspected for entrapped animals. Any animals so discovered shall be allowed to escape voluntarily, without harassment, before construction activities resume, or

removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

BIO-10 All food-related trash items such as wrappers, cans, bottles and food scraps generated by project activities shall be disposed of in closed containers and removed at least once each week from the site. Deliberate feeding of wildlife is prohibited.

BIO-11 To prevent harassment of special-status species, construction personnel should not be allowed to have firearms or pets on the project site.

BIO-12 All equipment and work-related materials shall be contained in closed containers either in the work area or on vehicles. Loose items (e.g., rags, hose, etc.) should be stored within closed containers or enclosed in vehicles when on the work site.

BIO-13 All liquids should be in closed, covered containers. Any spills of hazardous liquids should not be left unattended until cleanup has been completed.

BIO-14 Use of rodenticides and herbicides on the project site should be prohibited unless approved by the USFWS and the CDFW. This is necessary to prevent primary or secondary poisoning of special-status species using adjacent habitats, and to avoid the depletion of prey upon which they depend. Label restrictions and other restrictions imposed by the U.S. Environmental Protection Agency (EPA), the California Department of Food and Agricultural (CDFA), and other state and federal legislation shall be implemented. If rodent control must be conducted, zinc phosphide shall be used because of its proven lower risk to kit foxes.

BIO-15 Any employee who inadvertently kills or injures a listed species, or who finds any such animal dead, injured, or entrapped, shall be required to report the incident immediately to a designated site representative (e.g., foreman, project manager, environmental inspector, etc.), except animals killed on state and county roads when such mortality is not associated with project traffic. In the case of entrapped animals that are listed species, escape ramps or structures shall be installed immediately, if possible, to allow the subject animal(s) to escape unimpeded.

BIO-16 In the case of injured special-status wildlife, the CDFW shall be notified immediately. During business hours, Monday through Friday, the phone number is (559) 243-4017. For non-business hours, report to (800) 952-5400. Notification shall include the date, time, location, and circumstances of the incident. Instructions provided by the CDFW for the care of the injured animal shall be followed by the contractor onsite.

BIO-17 In the case of dead animal(s) that are listed as threatened or endangered, the USFWS and the CDFW shall be immediately (within 24 hours) notified by phone or in person and shall document the initial notification in writing within two working days of the findings of any such animal(s). Notification shall include the date, time, location and circumstances of the incident.

BIO-18 Prior to commencement of construction on any phase of work, work areas should be clearly marked with fencing, stakes with rope or cord, or other means of delineating the work area boundaries.

BIO-19 To protect nesting birds (covered by the MBTA) and all raptors, the following measures should be implemented:

- Pre-construction nesting bird surveys for the well area and within a 250-foot (76- meter) buffer around the perimeter should be conducted no more than one week prior to the commencement of ground disturbing activities, for project activities occurring between February 1 and August 31. If nesting birds are present, no new construction or new ground disturbance should occur within an appropriate avoidance area for the specific species until young have fledged, unless otherwise approved and monitored by a qualified onsite biologist. Avoidance zones should be implemented as follows:
  1. Ground or low-shrub nesting non-raptors – 300 feet (91 meters);
  2. Burrowing owl – as appropriate based on nest location, existing surrounding activity, and evaluation of owl behavior. Coordination with CDFW may be warranted.
  3. Sensitive raptors (e.g., prairie falcon, golden eagle) – 0.5 mile (811 meters)
  4. Other raptors – 500 feet (152 meters). Once young have fledged, avoidance zones can be removed.

- Activities on existing roads shall not be restricted as a result of implementation of this measure, unless those activities may result in direct impacts to nesting birds.
- All determinations regarding protection of nesting birds included in this measure should be made by a qualified biologist.

CULTURAL RESOURCES MITIGATION MEASURES

CUL-1 An unexpected discovery of cultural resources during any phase of the project shall result in an immediate work stoppage in the vicinity of the find until the resources can be evaluated by a professional archaeologist. If the resource is deemed to be an "important" cultural resource, impacts will be mitigated by avoidance, where feasible.

CUL-2 Contractor shall provide a Cultural Resource Sensitivity Training Course to all personnel prior to any ground-disturbing activities associated with this project.

HYDROLOGY AND WATER QUALITY MITIGATION MEASURES

HYD-1 The City of McFarland regularly monitors the groundwater levels in their wells to ensure the wells are not excessively lowering groundwater levels in the area. Well monitoring will continue in nearby wells during construction activity.

NOISE IMPACT MITIGATION MEASURES

NOI-1 Noise levels will be increased on a temporary basis during construction activities. Installation of sound barrier walls will be installed around the south, west, and east sides of the well site during well drilling activities to reduce noise and light to nearby residents.

NOI-2 The temporary noise impacts attributed to construction will be mitigated for all construction, with the exception of the well drilling activities, by limiting the hours of construction on-site to weekdays, Monday thru Friday, from 7 am to 5 pm.

NOI-3 The well will be equipped with an insulated motor enclosure to mitigate motor noise. The booster pumps are equipped with variable speed drives to help run at optimum efficiency and shorter, quieter run times. The well site will be secured with an 8-ft masonry wall, which is 2-ft taller than normal, to help reduce the overall noise impact.

TRANSPORTATION/TRAFFIC MITIGATION MEASURES

TRA-1 During construction there will be an increase in traffic as a result of material deliveries and construction crews, however construction signage will be provided to alert people around the construction activity, as needed.

TRA-2 All necessary encroachment permits for any proposed work within the City road right-of-way will be obtained.

VIII. INITIAL STUDY

A. Project Title

Water System Improvement & Treatment Project

B. Lead Agency Name and Contact Information

City of McFarland
401 W. Kern Avenue
McFarland, CA 93250
Contact Person: Yerlys Hernandez, Public Works Director
Phone: (661) 792-3091

C. Project Location

The project is located on APN 201-010-36, in the northwest of the City of McFarland on the south side of Elmo Highway approximately 950-ft west of Highway 99 in Section 12, T26S, R25E, M.D.B.&M. See Figure 1 herein.

D. General Plan Designation

The City of McFarland's 2040 General Plan Designation refers to a land use designation of "Facility: Government"

E. Zoning

The City of McFarland zoning is listed as an Automobile Parking Zone (P).

F. Description of Project

See Section IV above.

G. Surrounding Land Uses and Setting

The surrounding land uses include Limited Multiple-Family Dwelling Zone, (R-3) to the west, Two-Family Dwelling Zone (R-2) to the south, and Commercial Zone (C-2) to the east.

H. Public Agency Approvals

- California State Water Resources Control Board
- San Joaquin Valley Air Pollution Control District
- Kern County Environmental Health Department
- City of McFarland Streets Division

I. Environmental Factors Potentially Affected

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

J. 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.

MITIGATED NEGATIVE DECLARATION

☐ 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 (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on the 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.

INITIAL STUDY PREPARED BY: Dee Jaspar & Associates, Inc, Company Engineer, 2730 Unicorn Road, Bldg. A, Bakersfield, CA 93308, (661) 393-4796.

City of McFarland
401 W. Kern Avenue
McFarland, CA 93250

By: City of McFarland Date:

IX. 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. Section 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.

i. AESTHETICS

Question	CEQA Determination
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact
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?	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant with Mitigation Incorporated

a. This facility will be constructed on the south side of Elmo Highway approximately 950-ft west of Highway 99. The well site is currently vacant land and is used by the City as a parking area. There are no scenic vistas in the area.



Figure 1: Site Location (See Exhibit A for Full Size Version)

The well site will be developed with an 8-ft tall masonry block wall around the perimeter of the site to screen the well, pump, and piping facilities from the surrounding areas. In addition, the site will be painted a neutral color (tan) to make the site aesthetically pleasing and blend in with the community.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. The project does not include the removal of any trees determined to be scenic or of scenic value, the destruction of rock outcroppings, or degradation of any historic buildings. The project is not near a scenic highway. All City roads and other land disturbed during installation of the new water mains will be returned to their existing conditions as part of this project.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

c. The project site is within a residential and commercial area. It will be located on a Public Facility on an empty portion of the lot that is not utilized. Therefore, the project will not substantially degrade the existing visual character or quality of public views. All access roads and other lands will be returned to their existing conditions as part of this project. The well site will have an 8-ft tall masonry block wall around the perimeter of the site and landscape trees will be planted along the inside of the block wall to shield the on-site well and treatment equipment from neighboring properties.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

d. No new source of substantial light will be created as part of the project. The above ground buildings and other structures at the new municipal well facility will be painted to eliminate any substantial glare. Some site lighting will be provided at the new well site; however, the freestanding lighting at the well site will be less than 20-ft tall and the light fixtures will be shielded and directed downward to comply with the Kern County "Dark Skies Ordinance".

Mitigation Measure(s)

AES-1 Lighting will be less than 20-ft tall and the light fixtures shielded and directed downward to comply with the Kern County "Dark Skies Ordinance".

AES-2 The site will be painted a neutral color (tan), be screened with an 8-ft tall masonry block wall, and have landscaping installed around the perimeter of the site to blend in with the park.

Level of Significance

Impacts will be less than significant.

ii. AGRICULTURE RESOURCES

Question	CEQA Determination
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?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
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))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact

a. The project site is located on an existing, unused vacant government facility lot and is situated between an existing multi-family residential area to the west and a commercial area to the east. Referring to the City of McFarland Land Zoning, the area is classified as Zone P (Public Facility). This project will not convert farmland to non-agricultural use.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

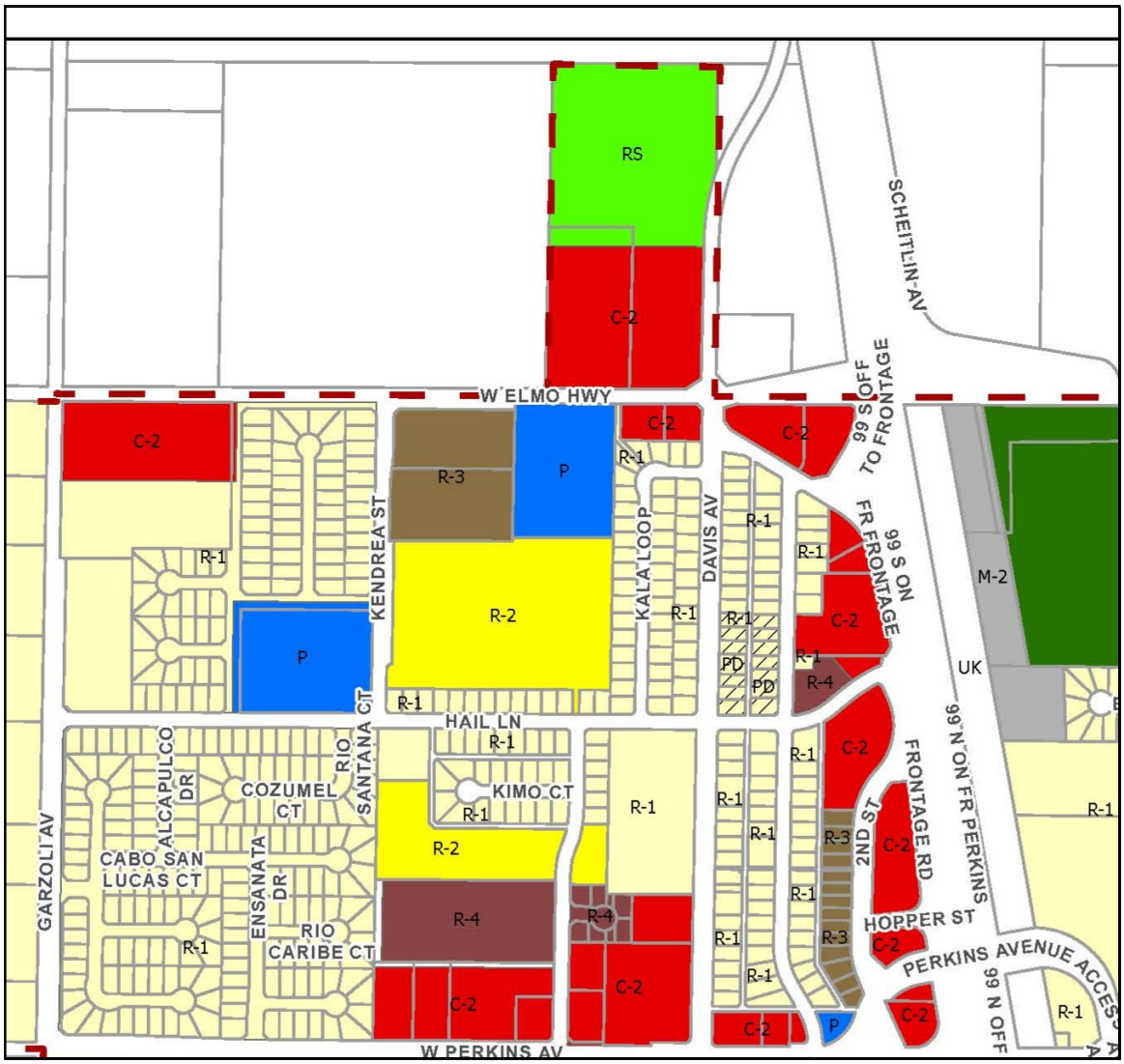


Figure 2: McFarland Zoning Map

b. The project site is primarily located within existing urban residential developments. It is not under the Williamson Act nor will it conflict with existing zoning.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

c. The project site will not conflict with existing zoning or cause rezoning of forest land. There are no forest lands or timberlands identified on the project site.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

d. The project site will not result in the loss of forest land or convert forest land to non-forest use.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

e. The project does not involve other changes to the existing environment that could result in conversion of farmland to non-agricultural use or forest land to non-forest use.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

iii. AIR QUALITY

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less Than Significant with Mitigation Incorporated
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant with Mitigation Incorporated
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant with Mitigation Incorporated

a. The project will not involve any conflicts or issues with the applicable air quality plan. The project is within the San Joaquin Valley Air Basin (SJVAB) and under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The adopted Air Quality Attainment Plans for the San Joaquin Valley Air Basin set forth comprehensive programs that will lead the SJVAB into compliance with federal and State ambient air quality standards.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. Using project type and size categories, the SJVAPCD has pre-quantified emissions and determined a size below which it is reasonable to conclude that a project would not exceed applicable thresholds of significance for criteria pollutants. Short-term criteria pollutant emissions were calculated based on the anticipated construction timelines, equipment needed, and default emission factors for said equipment. The construction period is estimated to span approximately 18 to 24 months. Construction emission estimates also included PM_{10} reduction measures in compliance with SJVAPCD Regulation VIII requirements, including exposed area watering three times a day and vehicle speed reduction to less than 15 miles per hour. Construction related emissions over the anticipated construction period are estimated to not exceed

SJVAPCD construction emissions thresholds and would result in a less-than-significant impact.

The construction phase of the project was evaluated for the construction emissions using the California Emissions Estimator Model. The combined annual emissions report is attached as Exhibit C. Construction emission estimates were generated in lbs/day for the duration of the project. These included nitrogen oxides, carbon monoxide, sulfur dioxide, carbon dioxide, PM 10, and PM 2.5 and many others. The thresholds and calculated emissions are outlined below:

Air Quality Thresholds of Significance-Criteria Pollutants	
CO Threshold	= 100 tons/yr
NO_x Threshold	= 10 tons/yr
SO_x Threshold	= 27 tons/yr
ROG Threshold	= 10 tons/yr
PM_{10} Threshold	= 15 tons/yr
$PM_{2.5}$ Threshold	= 15 tons/yr

Estimated Construction Emissions by Year, Mitigated		
CO	Estimate = 0.67 tons/yr	< 100 tons/yr
NO_x	Estimate = 0.43 tons/yr	< 10 tons/yr
SO_x	Estimate = <0.005 tons/yr	< 27 tons/yr
ROG	Estimate = 0.43 tons/yr	< 10 tons/yr
PM_{10}E	Estimate = 0.01 tons/yr	
PM_{10}D	Estimate = 0.01 tons/yr	
PM_{10}T	Estimate = 0.03 tons/yr	
Total PM_{10}	Estimate = 0.05 tons/yr	< 15 tons/yr
$PM_{2.5}$E	Estimate = 0.01 tons/yr	
$PM_{2.5}$D	Estimate = <0.005 tons/yr	
$PM_{2.5}$T	Estimate = 0.02 tons/yr	
Total $PM_{2.5}$	Estimate = 0.035 tons/yr	< 15 tons/yr
TOG	Estimate = 0.06 tons/yr	
N_2O	Estimate = <0.005 tons/yr	
CH_4	Estimate = 0.01 tons/yr	
R	Estimate = 0.02 tons/yr	
CO_2T	Estimate = 130.0 tons/yr	
CO_2E	Estimate = 131.0 tons/yr	
BCO_2	Estimate = N/A	
$NBCO_2$	Estimate = 130.0 tons/yr	

Footnotes:

1- Annual emission estimates based on an approximate 24-month construction period.

2- Project results in a significant impact if activities contribute to an exceedance of State or Federal ambient CO standards.
3- The District does not have a significance threshold for TOG.
4- Complying with APCD Regulations for controlling fugitive dust emissions during construction reduces potential impacts to less than significant.

Mitigation Measure(s)

AQ-1 Water will be applied to the project site during construction grading, trenching, and backfilling operations to control dust and keep the project area clean.

AQ-2 The contract documents will require the Contractor to obtain and comply with a San Joaquin Valley Air Pollution Control District Authority to Construct and Permit to Operate permits for the emergency backup diesel generator.

Level of Significance

Impacts will be less than significant.

c. Sensitive receptors are defined as areas where young children, chronically ill individuals, the elderly, or people who are more sensitive than the general population. The following locations are where several sensitive receptors are likely to reside and be affected by substantial pollutant concentrations: schools, hospitals, nursing homes, and daycare centers.

The project site property abuts McFarland Pediatrics Medical Center. There are no hospitals, nursing homes, or preschools within or other sensitive receptors to substantial pollutant concentrations with respect to air quality in the area.

The project will not involve emissions that would expose sensitive receptors to toxic air contaminants such as asbestos or lead. During construction, equipment will be kept from idling without being utilized and dust will be controlled. There are no emissions into the air as part of the facility operation as there will be no gas or diesel driven equipment as part of the project once construction is complete with the exception of the emergency backup diesel generator, which will only be used in the event of a power loss.

Mitigation Measure(s)

AQ-1 Water will be applied to the project site during construction grading, trenching, and backfilling operations to control dust and keep the project area clean.

AQ-2 The contract documents will require the Contractor to obtain and comply with a San Joaquin Valley Air Pollution Control District Authority to Construct and Permit to Operate permits for the emergency backup diesel generator.

Level of Significance

Impacts will be less than significant.

d. The project will not create objectionable odors that would affect a substantial number of people. The project is a water well facility. During construction, dust from the area will be controlled by watering.

Mitigation Measure(s)

AQ-1 Water will be applied to the project site during construction grading, trenching, and backfilling operations to control dust and keep the project area clean.

AQ-2 The contract documents will require the Contractor to obtain and comply with a San Joaquin Valley Air Pollution Control District Authority to Construct and Permit to Operate permits for the emergency backup diesel generator.

Level of Significance

Impacts will be less than significant.

iv. BIOLOGICAL RESOURCES

Question	CEQA Determination
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, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant with Mitigation Incorporated
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?	No Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less Than Significant with Mitigation Incorporated
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

a. The project area is located between existing residential and commercial developments and the City of McFarland land designation for the project site is a vacant public facility. The project will not adversely affect known species in local or regional plans, policies, regulations, or other. Pruett Biological Resource Consulting, Inc. performed a biological survey of the project area and their biological report is attached as Exhibit D. They found that the project will not have an impact on species. The biological report indicated no sensitive species nor were there signs observed during the field investigation. Per the report recommendations, preconstruction surveys will be performed prior to construction to ensure avoidance of Nesting Birds.

Mitigation measures were recommended as general measures to adopt the best management practices:

Mitigation Measure(s)

BIO-1 A biological resource pre-activity survey conducted by a qualified biologist no more that 30- days before the start of construction activities**.**

Biological resource monitoring shall be conducted during each initial phase of ground disturbance**.**

Compliance reporting shall be provided to the required oversight agencies for all biological resource field surveys, monitoring, and additional tasks as warranted**.**

BIO-2 All personnel entering the project site should attend a Worker Environmental Awareness Program. The Worker Environmental Awareness Program will present measures required to avoid, minimize, and mitigate impacts to biological resources and will include, at a minimum, the following: an outline of special-status species that may access, use or otherwise transverse the project area, federal and state endangered species acts; biological survey results for the current construction area; life history information for the species of concern; biological resource avoidance, minimization, and mitigation requirements; consequences for failure to successfully implement requirements; and procedures to be followed if dead or injured wildlife are located during project activities. Upon completion of the orientation, employees should sign a form stating that they attended the program and understand all biological resource mitigation measures and receive a hard hat sticker or other means of identifying that they have attended the worker orientation. Forms verifying worker attendance should be filed at the applicant's office and be accessible to county, USFWS and CDFW staff. No untrained personnel will be allowed to work onsite with the exception of delivery trucks that are only onsite for one day or less, and are under the supervision of a trained employee.

BIO-3 If known or natal SJKF dens are identified at any time during construction, protocols enumerated in the *USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011) should be implemented, and the appropriate agencies contacted for guidance.

BIO-4 Vertical sided trenching deeper than 2-feet will include escape ramps at no more than a 1:1 ratio every 100 feet.

Vertical sided holes that are not capable of being ramped should be covered or otherwise secured to the greatest extent practicable**.**

BIO-5 All construction pipes, poles, culverts, hoses or similar structures stored at the construction site for one or more overnight periods should be capped or the ends covered in a way that prevents wildlife entrapment. Unburied pipes laid in trenches overnight should be capped. If a kit fox or other listed species is discovered inside a pipe, that section of pipe will not be moved until the animal leaves on its own, or the USFWS and the CDFW have been consulted.

BIO-6 Traffic restraints and signs should be established to minimize temporary disturbances during construction. All construction traffic should be restricted to designated access roads and routes, project site, storage areas, and staging and parking areas. Off-road traffic outside designated project boundaries will be prohibited. A 15 mile-per-hour (32 kilometer-per-hour) speed limit should be observed in all project construction areas, except as otherwise posted on county roads and state and federal highways.

BIO-7 All equipment storage and parking during construction activities should be confined to the designated construction area or to previously disturbed off-site areas that are not habitat for listed species.

BIO-8 All project construction activities involving excavation or surface disturbance should be limited to daylight hours with the exception of well drilling activities.

BIO-9 Trenches should be inspected for entrapped wildlife each morning, prior to the onset of construction. Before such holes or trenches are filled, they should be thoroughly inspected for entrapped animals. Any animals so discovered shall be allowed to escape voluntarily, without harassment, before construction activities resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

BIO-10 All food-related trash items such as wrappers, cans, bottles and food scraps generated by project activities shall be disposed of in closed containers and removed at least once each week from the site. Deliberate feeding of wildlife is prohibited.

BIO-11 To prevent harassment of special-status species, construction personnel should not be allowed to have firearms or pets on the project site.

BIO-12 All equipment and work-related materials shall be contained in closed containers either in the work area or on vehicles. Loose items (e.g., rags, hose, etc.) should be stored within closed containers or enclosed in vehicles when on the work site.

BIO-13 All liquids should be in closed, covered containers. Any spills of hazardous liquids should not be left unattended until cleanup has been completed.

BIO-14 Use of rodenticides and herbicides on the project site should be prohibited unless approved by the USFWS and the CDFW. This is necessary to prevent primary or secondary poisoning of special-status species using adjacent habitats, and to avoid the depletion of prey upon which they depend. Label restrictions and other restrictions imposed by the U.S. Environmental Protection Agency (EPA), the California Department of Food and Agricultural (CDFA), and other state and federal legislation shall be implemented. If rodent control must be conducted, zinc phosphide shall be used because of its proven lower risk to kit foxes.

BIO-15 Any employee who inadvertently kills or injures a listed species, or who finds any such animal dead, injured, or entrapped, shall be required to report the incident immediately to a designated site representative (e.g., foreman, project manager, environmental inspector, etc.), except animals killed on state and county roads when such mortality is not associated with project traffic. In the case of entrapped animals that are listed species, escape ramps or structures shall be installed immediately, if possible, to allow the subject animal(s) to escape unimpeded.

BIO-16 In the case of injured special-status wildlife, the CDFW shall be

notified immediately. During business hours, Monday through Friday, the phone number is (559) 243-4017. For non-business hours, report to (800) 952-5400. Notification shall include the date, time, location, and circumstances of the incident. Instructions provided by the CDFW for the care of the injured animal shall be followed by the contractor onsite.

BIO-17 In the case of dead animal(s) that are listed as threatened or endangered, the USFWS and the CDFW shall be immediately (within 24 hours) notified by phone or in person and shall document the initial notification in writing within two working days of the findings of any such animal(s). Notification shall include the date, time, location and circumstances of the incident.

BIO-18 Prior to commencement of construction on any phase of work, work areas should be clearly marked with fencing, stakes with rope or cord, or other means of delineating the work area boundaries.

Level of Significance

Impacts will be less than significant.

b. The project does not plan disturbance to any regulated, sensitive habitat types such as wetlands or riparian. The project is not located within a river or an area that encompasses a river or potential floodplain and does not contain nor is near any riparian habitat.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

c. There are no federally protected wetlands or coastal areas in the vicinity of the project. The project site does not contain any water features that would meet the criteria for either federal jurisdiction or State regulatory authority. The biological survey did not identify any other non-wetland features within the biological survey area that would meet the criteria for either federal or State jurisdiction.

A search was also conducted online using the US Fish and Wildlife Service Wetlands Mapper and a map of the project area has been attached hereto as Exhibit I. No current wetlands are located within the project area.

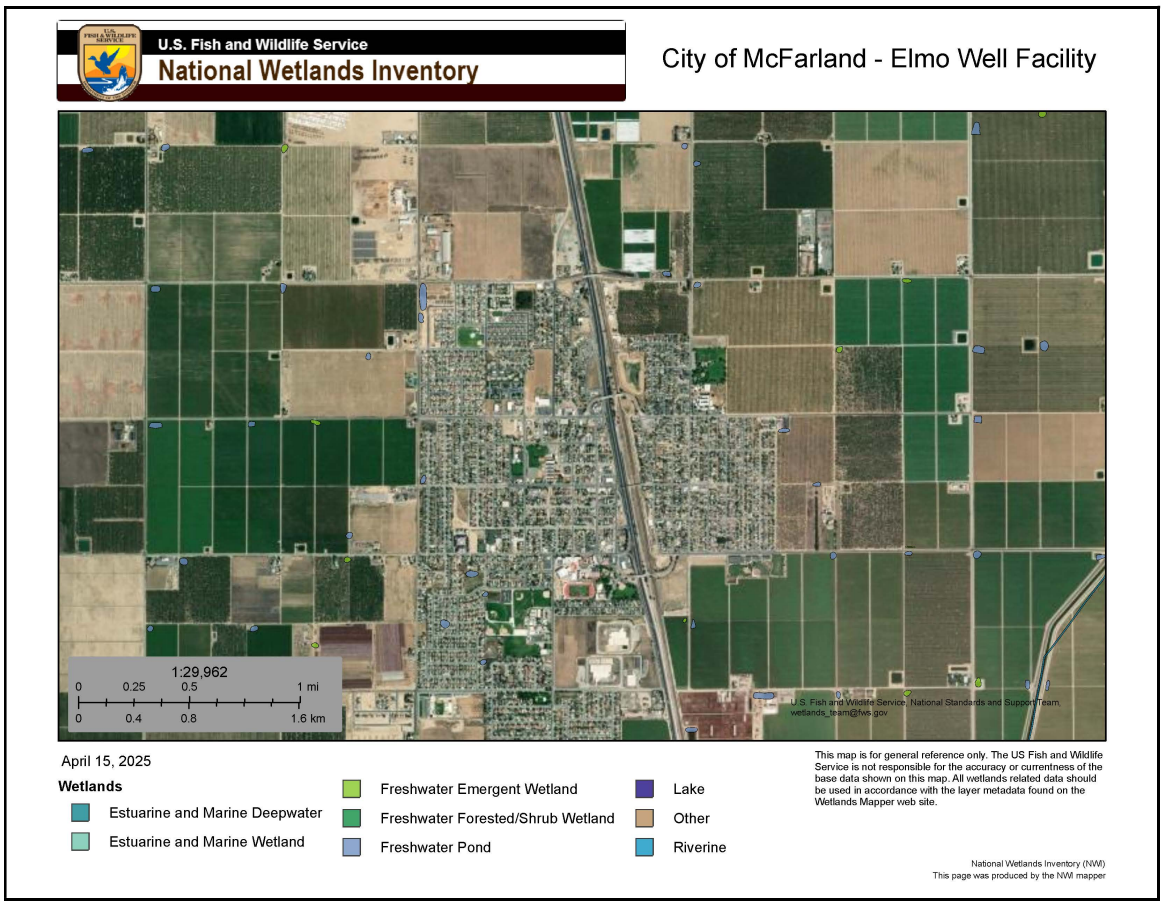


Figure 3: Wetlands Map (See Exhibit I for Full Size Version)

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

d. The project area is located within an existing suburban residential and commercial development in the City of McFarland. The project will not interfere with migratory corridors or habitat linkages between species' populations.

The project will not substantially affect migrating birds or other wildlife. The project will not restrict, eliminate, or significantly alter a wildlife movement corridor, wildlife core area, or Essential Habitat Connectivity area, either during construction or after the project has been constructed. Project construction will not substantially interfere with wildlife movements or reduce breeding opportunities.

The proposed project will not interfere with the movement of any native resident or migratory fish or wildlife species or with an established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. The following recommendations are provided for the general protection of bird species that may occur on the project site or vicinity in compliance with the MBTA:

Mitigation Measure(s)

BIO-19 To protect nesting birds (covered by the MBTA) and all raptors, the following measures should be implemented:

- Pre-construction nesting bird surveys for the well area and within a 250-foot (76- meter) buffer around the perimeter should be conducted no more than one week prior to the commencement of ground disturbing activities, for project activities occurring between February 1 and August 31. If nesting birds are present, no new construction or new ground disturbance should occur within an appropriate avoidance area for the specific species until young have fledged, unless otherwise approved and monitored by a qualified onsite biologist. Avoidance zones should be implemented as follows:
    5. Ground or low-shrub nesting non-raptors – 300 feet (91 meters);
    6. Burrowing owl – as appropriate based on nest location, existing surrounding activity, and evaluation of owl behavior. Coordination with CDFW may be warranted.
    7. Sensitive raptors (e.g., prairie falcon, golden eagle) – 0.5 mile (811 meters)
    8. Other raptors – 500 feet (152 meters). Once young have fledged, avoidance zones can be removed.

- Activities on existing roads shall not be restricted as a result of implementation of this measure, unless those activities may result in direct impacts to nesting birds.

- All determinations regarding protection of nesting birds included in this measure should be made by a qualified biologist.

Level of Significance

There will be no impact.

e. The project will not conflict with any local policies or ordinances protecting biological resources. There are no adopted local policies or ordinances protecting biological resources that would apply to the project.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

f. The proposed project area is located within the City of McFarland service area and is Zoned P (Public Facility). As proposed, the project will not conflict with any existing habitat conservation plans.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

v. CULTURAL RESOURCES

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Less Than Significant with Mitigation Incorporated
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant with Mitigation Incorporated
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant with Mitigation Incorporated

a. The proposed project is located within a Public Facility land designation. It will not cause a substantial change in the significance of a historical resource. A cultural resource assessment was performed by BCR Consulting LLC. See the assessment report attached as Exhibit E. The assessment confirmed that there are no recorded cultural resources within the proposed project areas or within a one-half mile radius of the project areas. A native American cultural resource records search was performed by the Native American Heritage Commission on April 7, 2025, see the NAHC Records Search attached as Exhibit F. The records search confirmed that there are no recorded Native American cultural resources within the proposed project areas or within a one-half mile radius of the project area.

Although the project is within an existing vacant site, unknown historical resources may be discovered during ground-disturbing activities. To account for unanticipated discoveries and the potential to impact previously undocumented or unknown resources, the following mitigation measures are recommended.

Mitigation Measure(s)

CUL-1 An unexpected discovery of cultural resources during any phase of the project shall result in an immediate work stoppage in the vicinity of the find until the resources can be evaluated by a professional archaeologist. If the resource is deemed to be an "important" cultural resource, impacts will be mitigated by avoidance, where feasible.

CUL-2 Contractor shall provide a Cultural Resource Sensitivity Training Course to all personnel prior to any ground-disturbing activities associated with this project.

Level of Significance

Impacts will be less than significant.

b. The project area is located within a residential and commercial area in the City of McFarland. According to the National and California Registers of Historic Resources, there are no historic or pre-historic resources in the vicinity of the project, and the project will therefore not have any substantial adverse change to any archaeological resources.

Although unlikely, there is a chance that trenching and grading activities could unearth previously unknown archaeological resources. Therefore, the following mitigation measures are recommended.

Mitigation Measure(s)

CUL-1 An unexpected discovery of cultural resources during any phase of the project shall result in an immediate work stoppage in the vicinity of the find until the resources can be evaluated by a professional archaeologist. If the resource is deemed to be an "important" cultural resource, impacts will be mitigated by avoidance, where feasible.

CUL-2 Contractor shall provide a Cultural Resource Sensitivity Training Course to all personnel prior to any ground-disturbing activities associated with this project.

Level of Significance

Impacts will be less than significant.

c. No known burials are located within the project areas. It will not disturb any human remains. Although unlikely, subsurface construction activities, such as trenching and grading, associated with the proposed project could potentially disturb previously undiscovered human burial sites. Therefore, the following mitigation measures are recommended.

Mitigation Measure(s)

CUL-1 An unexpected discovery of cultural resources during any phase of the project shall result in an immediate work stoppage in the vicinity of the find until the resources can be evaluated by a professional archaeologist. If the resource is deemed to be an "important" cultural resource, impacts will be mitigated by avoidance, where feasible.

CUL-2 Contractor shall provide a Cultural Resource Sensitivity Training Course to all personnel prior to any ground-disturbing activities associated with this project.

Level of Significance

Impacts will be less than significant.

vi. ENERGY

Question	CEQA Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

a. Energy demand during the construction phase will result from the transportation of materials, construction equipment, and construction worker vehicle trips. Construction equipment can include tractors, loaded trucks, forklifts, excavators, backhoes, generators, cranes, compactors, and air compressors. The project will comply with the SJVAPCD requirements regarding the use of fuel-efficient vehicles and equipment to the extent feasible. The project will not use natural gas during the construction phase. Compliance with standard regional and local regulations will minimize fuel consumption during project construction.

   The project well pump enclosure building will comply with current applicable building code requirements, development standards, and energy efficiency requirements. Equipment used at the facility will be designed to be energy efficient and will not result in unnecessary energy use.

   The project will not result in significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy during project construction or operation. During construction, idling times will be limited to 5 minutes or less to reduce wasted energy.

   During operation, the well site motors will utilize variable speed drives to improve efficiency. The site is equipped with a welded steel storage tank which will allow the well to start less often and be more efficient.

   Mitigation Measure(s)

   No mitigation required.

   Level of Significance

   There will be no impact.

b. The project does not conflict with or obstruct state or local renewable energy or energy efficiency plans. The site is in compliance with California Building Energy Efficiency Standards.

Strategies being implemented to be energy efficient include diesel anti-idling measures, light-duty vehicle technology, usage of alternative fuels such as biodiesel blends, and heavy-duty vehicle design measures to reduce energy consumption.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

vii. GEOLOGY AND SOILS

Question	CEQA Determination
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.	No Impact
ii) Strong seismic ground shaking?	Less Than Significant Impact
iii) Seismic-related ground failure, including liquefaction?	No Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	No Impact
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?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

a. The proposed project involves drilling and equipping a new municipal water well and iron treatment facility and connecting it to the existing City distribution system. The project will not adversely affect the people in the area.

i) The risks of injury in the event of an earthquake for this project are less than significant. The project site is not located in an Alquist-Priolo Earthquake Fault Zone, as defined by Special Publication 42 (revised 2007) published by the California Geologic Survey (CGS). A record search was made on the Department of Conservations CGS EQ Zapp interactive web map. The project site is not located within a fault zone.

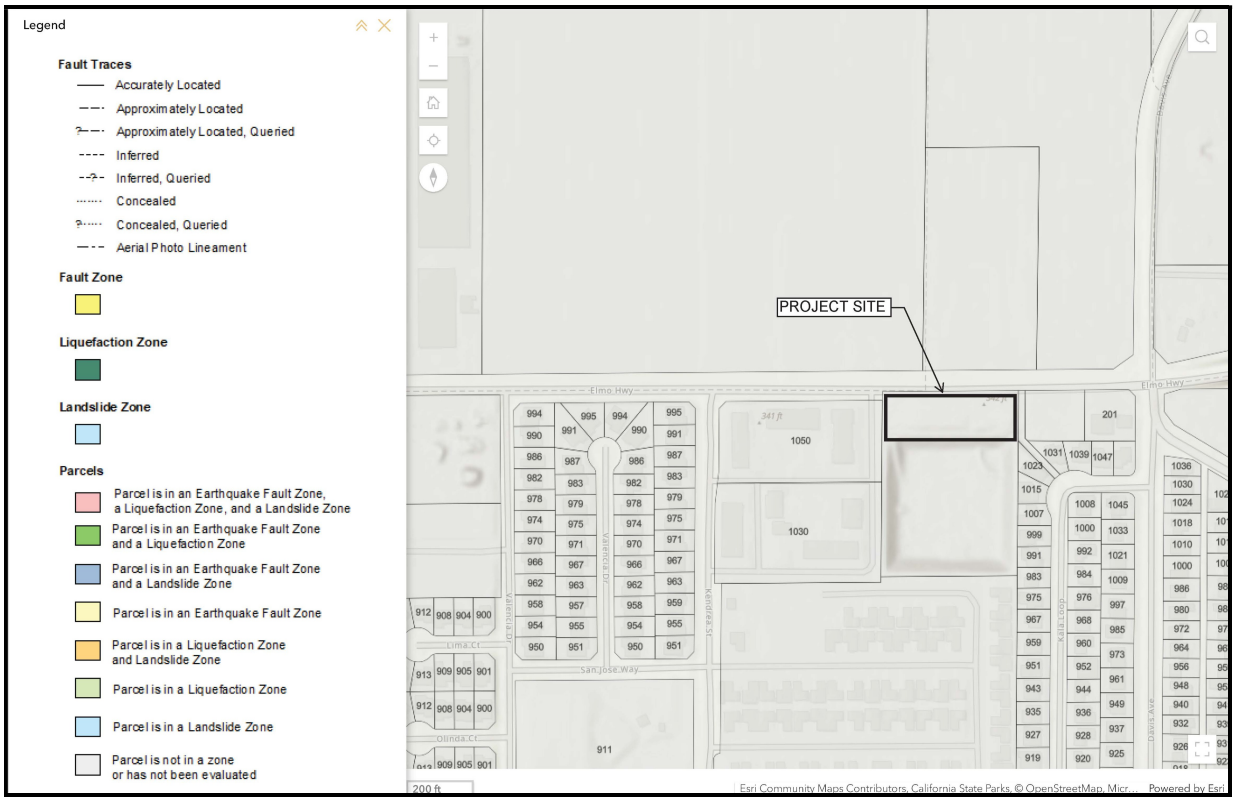


Figure 4: Fault Zone Map

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

ii) The project is in a seismically active region, however it is not at risk for high-magnitude earthquake destruction. The project area is in the middle of the San Joaquin Valley which experiences moderate to severe ground shaking. The project areas could potentially experience strong seismic ground shaking during the lifespan of the project; however, the risk of loss, injury, or death as a result of ground shaking is less than significant as the project primarily involves the installation of underground piping and a water well.

Water well construction is under the authority of the California Department of Water Resources. The wells will be constructed in accordance with the standards as outlined in Chapter II Section 2, including well location siting to limit contamination and pollution from off-site sources, the use of appropriate well casing, the placement and components of seals, the sizing of the well hole and the types of

casing materials to use based on soil types, etc. The project will adhere to the applicable standards as outlined by the State during the construction of the well.

Kern County has also adopted a well ordinance that is under the jurisdiction of the County Public Health Department. The project will adhere to the applicable Kern County regulations.

The only above ground buildings that will be built will be a well enclosure building. These above ground structures are designed to withstand seismic ground shaking in accordance with CBC 2022. A welded steel water storage tank and booster pumps will be located within the site as well. They are also designed to withstand seismic ground shaking in accordance with CBC 2022. Based on the above noted information the risks of injury in the event of strong seismic ground shaking is less than significant.

Mitigation Measure(s)

No mitigation required.

Level of Significance

Impacts will be less than significant.

iii) The depth to groundwater in this area is greater than 300-ft below ground surface. Since the depth to groundwater at the project site is much greater than 50-feet, there is a negligible risk of liquefaction occurring at the site during a seismic event. The risks of injury in the event of seismic related ground failure, including liquefaction is less than significant.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

iv) The project areas are flat lying areas and landslides are not considered a concern. There is no potential for rock falls or landslides to impact the project in the event of a major earthquake, as the area has no dramatic elevation changes.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. The project area is primarily located within an existing multi-family residential and commercial area and is relatively flat. Construction activities for the project may disturb minimal amounts of soil during construction and would expose these disturbed areas to erosion by wind and water. However, since the project is anticipated to disturb less than one acre of land, the project site is not subject to the National Pollutant Discharge Elimination System (NPDES) Program requirements. As such, it will not have to develop a Stormwater Pollution Prevention Plan (SWPPP). However, the project will be required to contain all stormwater runoff on-site and will implement various types of Best Management Practices (BMP's) to prevent erosion and sedimentation from occurring during construction.

   Typical BMP's intend to control erosion and include sandbags, silt fencing, street sweeping, etc. The project is not expected to result in substantial soil erosion or the loss of topsoil with the implementation of the BMP's. Overall, the project will not result in conditions where substantial surface soils would be exposed to wind and water erosion.

   Mitigation Measure(s)

   No mitigation required.

   Level of Significance

   There will be no impact.

c. The geologic conditions are stable. The project will not result in unstable geologic conditions or other unsatisfactory soil collapse. Based on the existing grade of the surrounding topography, landslides will not be an issue, and neither will lateral spreading, subsidence, liquefaction or collapse. Attached is a copy of a Soil Survey Map provided by the National Cooperative Soil Survey in Exhibit G. The soil classification is a McFarland Loam with 0 to 2% slopes.

   Mitigation Measure(s)

   No mitigation required.

Level of Significance

There will be no impact.

d. Soils in the area are not expansive based on the material being a McFarland Loam absent of clays. Any unsuitable soil encountered during site grading will be replaced with suitable engineered fill.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

e. Septic tanks and seepage pits will not be a part of this project. The project will not include any requirements for the disposal of waste on-site.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

f. Paleontological resources or unique geologic features will not be directly or indirectly destroyed as a result of this project.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

viii. GREENHOUSE GAS EMISSIONS

Question	CEQA Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No Impact

a. Construction of the proposed project may result in temporary emissions of greenhouse gases, however the project as a whole is not expected to generate greenhouse gas emissions, either directly or indirectly, that would have a significant impact on the environment. The project greenhouse gas emissions will be primarily from mobile source activities during construction. Long-term operation of the new well facility will not result in significant generation of greenhouse gas emissions.

Mitigation Measure(s)

No mitigation required.

Level of Significance

Impacts will be less than significant.

b. The project will not involve any conflicts or issues with the applicable air quality plans.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

ix. HAZARDS AND HAZARDOUS MATERIALS

Question	CEQA Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No Impact
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?	Less Than Significant
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
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?	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

a. Construction will involve small amounts of hazardous and non-hazardous materials such as diesel fuel, hydraulic oil, grease, solvents, adhesives, paints, and other petroleum-based products. These materials are commonly used during construction activities and will be removed and disposed of at an appropriate landfill or recycling facility. Workers are trained to properly identify and handle all hazardous materials and to follow OSHA/CAL-OSHA regulations. Hazardous wastes will be either recycled or disposed of at a permitted and licensed treatment and/or disposal facility. While being used during construction, these materials will be stored in an appropriate storage location and containers in the manner specified by the manufacturer and disposed of in accordance with local, federal, and State regulations. Therefore, there will be no impact.

Operation of the facility will require the transport and use of chlorine, ferric, and sulfuric acid for chemical pretreatment for the iron treatment system disinfection of the drinking water. Chlorine, will be in the form of 12.5%

Sodium Hypochlorite, Ferric will be in the form of 44% Ferric Chloride, and Acid will be in the form of 93% Sulfuric Acid. Chemical deliveries will be made on a bi-weekly or monthly basis depending on usage. A delivery will typically be less than 300 gallons. The chemicals will be contained on-site in double-walled polyethylene chemical tanks. Secondary containment will be provided as well for the chemical feed pumps to ensure that no leaks or spills reach the ground surface. Therefore, there is no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. Sodium hypochlorite will be stored on site at the new municipal well site; however, the chlorine will be stored in small quantities (less than 600 gallons) in an appropriate double-walled chemical storage tank to prevent the accidental release of hazardous materials into the environment.

   In addition, Sulfuric Acid will be stored on site at the new municipal well site; however, these chemicals will also be stored in small quantities (less than 500 gallons) in an appropriate double-walled chemical storage tank to prevent the accidental release of hazardous materials into the environment.

   Mitigation Measure(s)

   No mitigation required.

   Level of Significance

   Impacts will be less than significant.

c. The site is not located within one-quarter mile of an existing school or daycare, see the following Figure No. 5 and Exhibit K attached hereto.

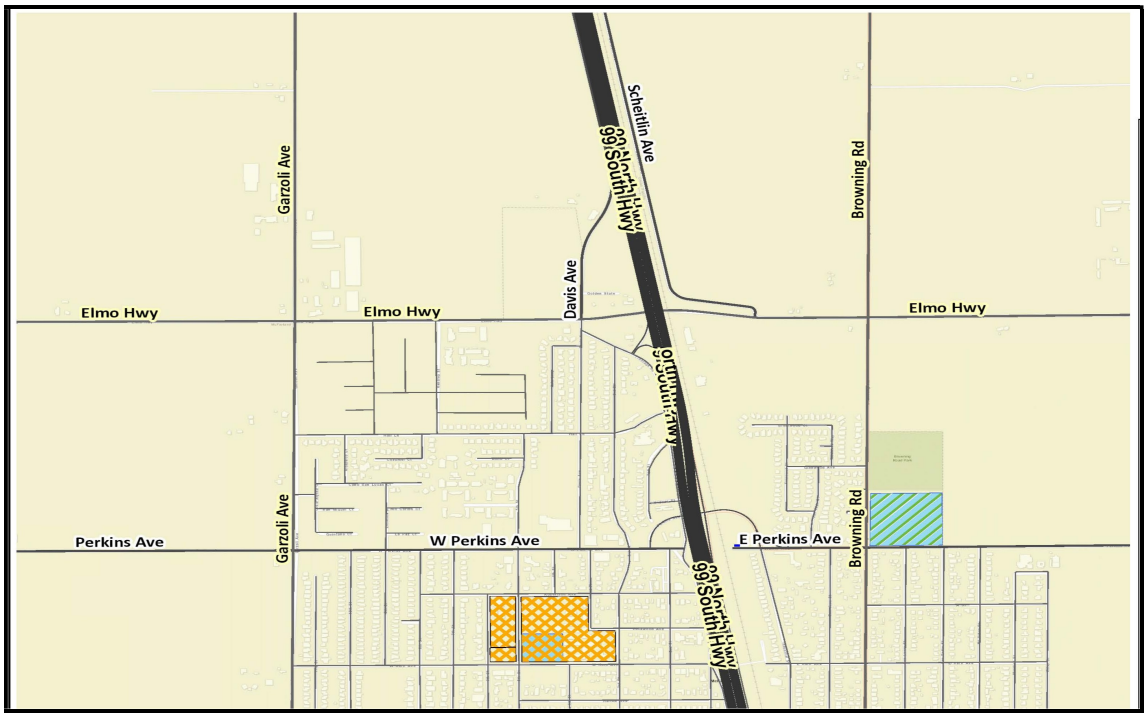


Figure 5: School Map (See Exhibit J for Full Size Version)

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

d. The project site is located adjacent to existing an residential development, and a pediatric doctor's office. It is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as verified from the current list of hazardous materials sites pulled from the California Dept. of Toxic Substances Control attached hereto for reference as Exhibit L.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

e. There is not a public airport or planned airport land use plan in the project area.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

f. This project will not impair or interfere with an adopted emergency response plan or emergency evacuation plan. The project will comply with all local and State regulations regarding emergency response plans and access. The project will not inhibit the ability of local roadways to continue to accommodate emergency response and evacuation activities. Therefore, there is no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

g. The project will not expose people or structures to wildland fires. The well facility will be covered in gravel rock ground cover upon completion. Therefore, there is no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

x. HYDROLOGY AND WATER QUALITY

Question	CEQA Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	No Impact
b) 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 with Mitigation Incorporated
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;	No Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	No Impact
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	No Impact
(iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

a. The proposed project involves drilling and equipping a new municipal water well facility and connecting it to the existing City of McFarland distribution system. The project will not violate any water quality standards nor will it involve waste discharge.

As part of this project, a water line will be installed for discharge to waste from the new well. In the event that the well needs to be flushed or discharged to waste, it will discharge to the ground at to the adjacent storm drain sump under Statewide Water Quality Order 2003-0003-DWQ, Statewide General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality.

The well will be designed such that the water produced meets all Title 22 drinking water standards. There is no surface water in the vicinity of the project.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. The project includes the construction and equipping of a new municipal well. The new municipal well will not substantially deplete groundwater supplies or lower the local groundwater table level. Historically, City water wells have maintained a consistent pumping water level due to the depth of the wells. The new well will be completed at a depth that is deeper than most wells in the area which will limit the impacts on shallower wells in the area.

The nearest municipal water well is the existing City Well #6, which is located approximately 1,550-ft away. A well spacing of approximately 1,300-ft to 1,500-ft generally mitigates any effects from the cone of depression.

The overlying GSA, the Southern San Joaquin Municipal Utility District, is responsible for the Project and Management Actions to maintain regional water levels. This municipal water well is required for the health and safety of the community.

Mitigation Measure(s)

HYD-1 The City regularly monitors the groundwater levels in their wells in order to ensure the wells are not excessively lowering groundwater levels in the area. Well monitoring will continue in nearby wells during construction activity.

Level of Significance

Impacts will be less than significant with the mitigation incorporated.

c. The project area is adjacent to an existing multi-family residential development and a pediatric medical clinic. The existing drainage pattern of the project areas will not be altered. This project site is relatively flat and will not alter the existing drainage pattern or result in substantial erosion or siltation.

i) The project site is relatively small (<1.0-acre) and flat and therefore will not result in substantial erosion or siltation on-site or

off-site. With the implementation of BMP's, erosion or siltation is less than significant.

ii) The project site is relatively small (<1.0-acre) and will be surfaced with a well-graded ¾-inch rock such that surface water will drain to the existing adjacent drainage sump as it does currently. The project will not cause substantial surface runoff that will result in flooding on-site or off-site.

iii) The project will not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site, contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, nor provide additional sources of polluted runoff. Therefore, the project will have no impact.

iv)The project is not located near a stream, river, or wetland area. However, the easterly portion of the well site is located within a 500-year floodplain.

A flood insurance rate map (FIRM) for the project area is attached hereto as Exhibit H.

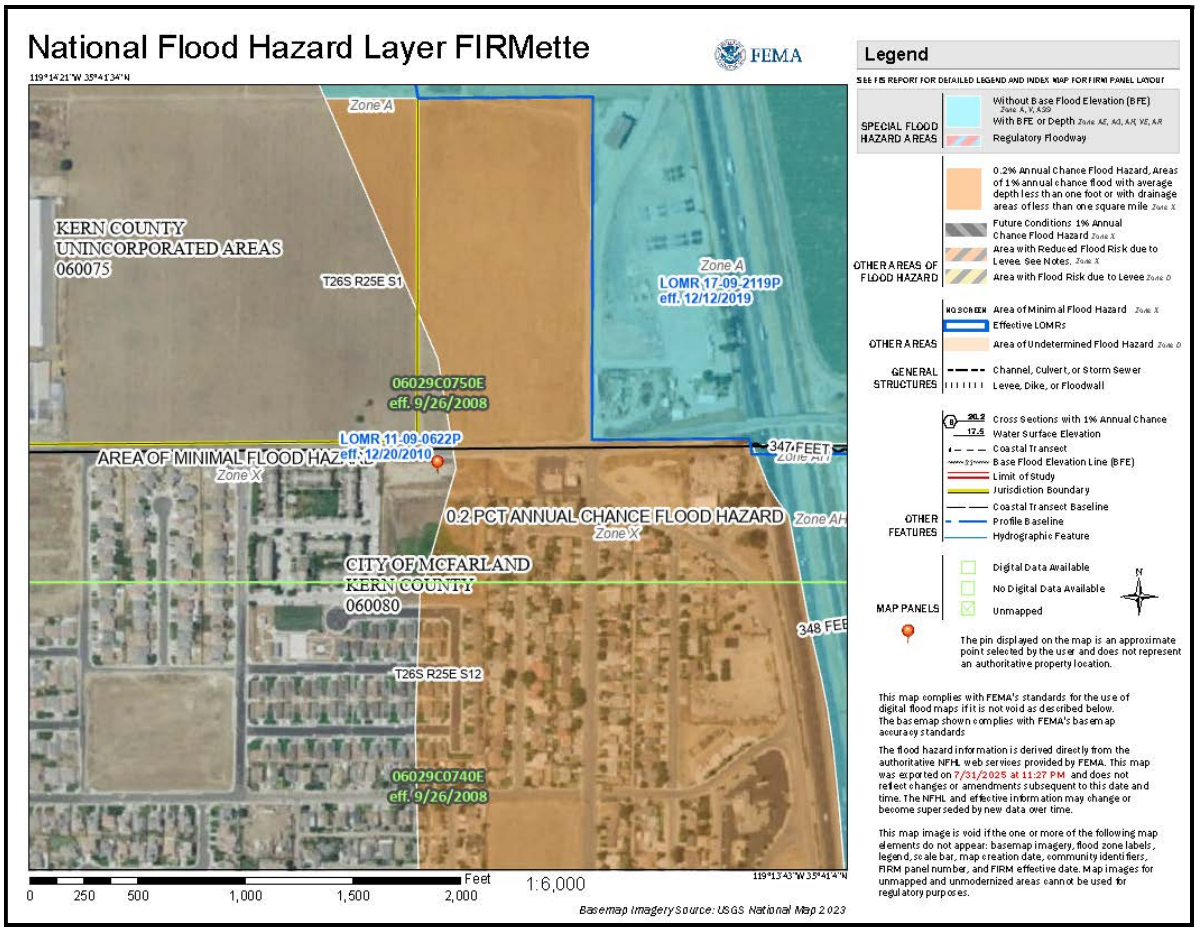


Figure 6: Flood Zone Map (See Exhibit H for Full Size Version)

The project will not impede or redirect flood flows. In addition, the water well concrete foundation will be constructed a minimum of 2-ft above natural ground surface to protect the groundwater quality from the influence of flood or surface waters, therefore the project will have no impact.

Mitigation Measure(s)

No Mitigation required.

Level of Significance

There will be no impact.

d. The project will not create nor contribute to a seiche, tsunami, or mudflow.

The project is not located near the ocean or a steep topographic feature. Tsunamis and seiche's precipitate out of large water bodies that are not

present near the project site. The Kern County Multi-Jurisdictional Hazard Mitigation Plan identifies dams and levees throughout Kern County and their potential hazard classification. The project site is located outside of the inundation exposure zone. Therefore, the project will have no impact.

Mitigation Measure(s)

No Mitigation required.

Level of Significance

There will be no impact.

e. The project will not conflict with or obstruct implementation of a quality control plan or sustainable groundwater management plan.

The City of McFarland has adopted the Kern Groundwater Agency's (KGA) Groundwater Sustainability Plan (GSP) and Southern San Joaquin Municipal Utility District's (SSJMUD) Management Area Plan.

The City of McFarland is located entirely within the SSJMUD's service area boundary. The District does not, however, make any direct deliveries to the City. The City relies on the local groundwater supply, which is naturally recharged. The District provides a small amount of recharge to the groundwater reservoir supply through on-farm, in-lieu recharge efforts and recharge efforts through District reservoirs. A portion of this recharge would accrue to the benefit of the urbanized areas. Future groundwater recharge projects in the District will provide additional benefit to urbanized areas by maintaining groundwater levels for municipal supply wells.

According to the land use projections provided in the District's Management Area Plan and the KGA GSP, urban expansion for the cities of Delano and McFarland are anticipated to remove approximately 1,200 acres from the District's irrigated acreage by 2030. The District also proposes to convert another 280 acres of land from irrigated acreage to dedicated recharge acreage by 2030. This represents a decrease in irrigated acreage from 46,367 acres to 44,887 acres.

The project will comply with all applicable local and State standards during construction and operation and the KGA GSP and SSJMUD's Management Area Plan. This project is not anticipated to use or substantially deplete groundwater supplies or conflict with any future adopted groundwater management plan. Therefore, the project will have no impact.

Mitigation Measure(s)

No Mitigation required.

Level of Significance

There will be no impact.

xi. LAND USE AND PLANNING

Question	CEQA Determination
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

a. The project site will be constructed on existing property owned by the City of McFarland and will not divide an established community. The well facility is planned to be installed on APN 201-010-36 located north of an existing drainage sump.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. The well project is being constructed on existing City property and the construction of the site will not conflict with any applicable land use plan, policy, or regulation. The land use designation per McFarland's General Plan is Facility: Government, which allows for the construction of a City water system supply/storage facility.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

xii. MINERAL RESOURCES

Question	CEQA Determination
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?	No Impact
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

a. The California Geologic Energy Management Division (CalGEM) prioritizes protecting public health, safety, and the environment in its oversight of the oil, natural gas, and geothermal industries. The project is not located in an identified CalGEM oilfield and there are no known wells located on the site. It will not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. Therefore, the project will have no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. The project is not designated as a mineral recovery area and will not alter any existing plans that protect mineral resources. The project will not result in the loss or availability of a locally important mineral resource recovery site and is considered to have no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

xiii. NOISE

Question	CEQA Determination
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?	Less Than Significant with Mitigation Incorporated
b) Generation of excessive groundborne vibration or groundborne noise levels?	Less Than Significant with Mitigation Incorporated
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact

a. The City of McFarland General Plan establishes acceptable levels for noise and land use compatibility. The land use in the project site area is multi-family residential, a pediatric clinic, and an existing drainage sump. The acceptable community noise exposure is as follows:

	Normally Acceptable	Conditionally Acceptable
Residential	50 – 60 L_{dn} or CNEL	60 – 70 L_{dn} or CNEL
School	50 – 60 L_{dn} or CNEL	60 – 65 L_{dn} or CNEL
Park	50 – 67.5 L_{dn} or CNEL	N/A

CNEL Community Noise Equivalent Level
L_{dn} Day/Night Average Sound Level

The nearest receptors are residences whose property is adjacent to the well site project site. The equipment to be utilized for the project is standard for conventional construction. However, the exception to this statement is the well drilling equipment and the well drilling hours.

During well drilling operations, sound barrier walls (insulated walls) will be installed that are 16-feet tall on the west, north, and east sides of the site to mitigate any construction noise. These walls will be temporary in nature but will remain in place during well drilling and well development to shield noise and light from the well drilling equipment.

Noise levels during pipeline and well equipping construction of the project will be mitigated by limiting construction hours to daylight hours and weekdays only.

For the operation of the facility, noise will be generated from pumps and motors. The well will be equipped with an insulated motor enclosure to mitigate motor noise. In addition, an 8-ft tall masonry block wall will be installed around the well site to further help mitigate any operational noise. Noise impacts are considered to be less than significant.

Mitigation Measure(s)

NOI-1 Noise levels will be increased on a temporary basis during construction activities. Installation of sound barrier walls will be installed around the north, west, and east sides of the well site during well drilling activities to reduce noise and light to nearby residents.

NOI-2 The temporary noise impacts attributed to construction will be mitigated for all construction, with the exception of the well drilling activities, by limiting the hours of construction on-site to weekdays, Monday thru Friday, from 7 am to 5 pm.

NOI-3 The well will be equipped with an insulated motor enclosure to mitigate motor noise. The booster pumps are equipped with variable speed drives to help run at optimum efficiency and shorter, quieter run times. The well site will be secured with an 8-ft masonry wall, which is 2-ft taller than normal, to help reduce the overall noise impact.

Level of Significance

Impacts will be less than significant with mitigation incorporated.

b. Construction activities, in general, can have the potential to create ground-borne vibrations and the project may generate these ground-borne vibration or noise levels. Construction activities most likely to cause vibration include heavy construction equipment and drilling. The nearest receptors are multi-family residences whose property is adjacent to the well site. Noise levels and vibrations will be increased temporarily during construction but will be mitigated as described above by limiting pipeline and well equipping work to daylight hours and weekdays only and installing sound barrier walls for well drilling activities. Therefore, vibration impacts associated with construction are anticipated to be less than significant.

Mitigation Measure(s)

NOI-1 Noise levels will be increased on a temporary basis during construction activities. Installation of sound barrier walls will be installed around the north, west, and east sides of the well site during well drilling activities to reduce noise and light to nearby residents.

NOI-2 The temporary noise impacts attributed to construction will be mitigated for all construction, with the exception of the well drilling activities, by limiting the hours of construction on-site to weekdays, Monday thru Friday, from 7 am to 5 pm.

NOI-3 The well will be equipped with an insulated motor enclosure to mitigate motor noise. The booster pumps are equipped with variable speed drives to help run at optimum efficiency and shorter, quieter run times. The well site will be secured with an 8-ft masonry wall, which is 2-ft taller than normal, to help reduce the overall noise impact.

Level of Significance

Impacts will be less than significant with mitigation incorporated.

c. The project site is not located within 2 miles of an airport. The project site location will not expose construction workers or operators to excessive noise.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

xiv. POPULATION AND HOUSING

Question	CEQA Determination
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)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

a. The project involves the drilling and equipping of a new municipal water well facility and connecting it to the existing City distribution system. The system improvements are necessary to provide municipal water supply to residences in McFarland and to replace the existing Browning Well, which exceeds the MCL for Nitrate and 1,2,3-TCP.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. This project will not displace any existing housing or residences. Therefore, the project will have no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

xv. PUBLIC SERVICES

Question	CEQA Determination
a) Fire protection?	No Impact
b) Police protection?	No Impact
c) Schools?	No Impact
d) Parks?	No Impact
e) Other public facilities?	No Impact

a. Fire protection for the project is provided by the Kern County Fire Department. The project will not result in substantial adverse physical impacts to or create the need for fire protection. The new well will aid the City in ensuring that the community has adequate pressure and fire flow protection, therefore there is no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. The City of McFarland Police Department provides law enforcement services to this area. As a water well site, the project will not result in substantial adverse physical impacts to or create the need for additional police protection.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

c. The project is located within the McFarland Unified School District. The project is a water well site and will not result in substantial adverse physical impacts to or create the need for schools.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

d. The project is a water well site and will not result in substantial adverse physical impacts to or create the need for parks.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

e. The project is a water well site and will not result in substantial adverse physical impacts to or create the need for any other public facilities.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

xvi. RECREATION

Question	CEQA Determination
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?	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

a. The project will not increase the use of existing neighborhood and regional parks or other recreational facilities. There will be no physical deterioration of the facilities and the project will not require the construction or expansion of recreational facilities therefore, there is no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. The project does not include or require the construction or expansion of recreational facilities and therefore has no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

xvii. TRANSPORTATION

Question	CEQA Determination
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less Than Significant with Mitigation Incorporated
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact
d) Result in inadequate emergency access?	No Impact

a. The project will not conflict with any programs, plans, ordinances, or policies including transit, roadway, bicycle and pedestrian facilities. Construction related traffic is anticipated to be short-term and will not significantly impact existing or planned circulation infrastructure. Construction signage will be provided to alert the public to the construction activity. All construction activities in the roadway and sidewalk will be returned to original conditions after construction. Two drive approaches into the well site will be added, however an encroachment permit will be obtained for any work performed in the road right-of-way.

   The proposed operation of the project does not require on-site employees and will have minimal impact on the City's circulation system.

   Mitigation Measure(s)

   TRA-1 During construction there will be an increase in traffic as a result of material deliveries and construction crews, however construction signage will be provided to alert people around the construction activity, as needed.

   TRA-2 All necessary encroachment permits for any proposed work within the City road right-of-way will be obtained.

   Level of Significance

   Impacts will be less than significant with mitigation incorporated.

b. The project will not conflict with CEQA Guidelines section 15064.3, subdivision (b). The project will not exceed a level of service standard established by the county congestion management agency for designated roads or highways. Vehicles traveling to and from the site during construction will temporarily increase traffic in the area. Once construction is complete, traffic to and from the site will be minimal and will not impact

congestion. The combined annual emissions report is attached as Exhibit C. In the report, estimates for traffic to and from the site during construction and operation are considered.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

c. The project does not include road design and construction and therefore has no impact. The project will not increase hazards due to sharp turns, curves, dangerous intersections, or incompatible uses. Construction signage will be provided to alert the public to the construction activity.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

d. The project will be required to comply with all emergency access requirements adopted and set forth in the City of McFarland Municipal Code. The proposed project will not require closure of public roads or inhibit access by emergency vehicles. The project will not result in inadequate emergency access and therefore has no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

xviii. TRIBAL CULTURAL RESOURCES

Question	CEQA Determination
a) 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
b) 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

a. The project is located within an existing vacant lot in the City of McFarland and County of Kern. A cultural resource records search was performed by the California Historical Resources Information System, see CHRIS Records Search attached as Exhibit E. The records search confirmed that there are no recorded cultural resources within the proposed project area or within a one-half mile radius of the project area.

   Upon any groundbreaking activity, there is the possibility of uncovering an object of cultural value. Mitigation measures CUL-1 and CUL-2 must be implemented if any artifacts or human remains are discovered. Therefore, the project will have a less than significant impact with mitigations incorporated.

   Mitigation Measure(s)

   Implementation of Mitigation Measures CUL-1 and CUL-2.

   Level of Significance

   Impacts will be less than significant with mitigation incorporated.

b. A records search was completed by the Native American Heritage Commission, see Exhibit F. Furthermore, a Tribal Consultation list was requested and the tribes recommended have been contacted.

   Mitigation Measure(s)

   Implementation of Mitigation Measures CUL-1 and CUL-2.

   Level of Significance

   Impacts will be less than significant with mitigation incorporated.

xix. UTILITIES AND SERVICE SYSTEMS

Question	CEQA Determination
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?	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less Than Significant with Mitigation Incorporated
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?	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

a. This project is the construction of a new water facility. The project will not require or result in the relocation or construction of expanded or new wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities of which could cause significant environmental effects.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

b. The project is a water supply and storage project. It will supply water to the City of McFarland's water mains and supply water to the community.

This water supply and storage project is required to replace the existing Browning Well, which exceeds the MCL for Nitrate and 1,2,3-TCP and may be abandoned once the project is completed.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

c. The project includes an oxidation coagulation filtration water system for the removal of iron from the groundwater in order to meet Drinking Water Standards. It will generate additional demand to the wastewater treatment provider; however, this increase will be mitigated by using a backwash waste storage tank to capture the backwash waste and then regulate the rate of discharge into the City Sewer.

The project will generate minimal demand to the City's wastewater treatment plant. Therefore, there will be an insignificant increase in wastewater and the project will have no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

d. The project does not have any solid waste disposal needs. During temporary construction, unused construction materials, which are not anticipated to contain hazardous materials, will be collected and transported away for the site and disposed of at an approved landfill facility.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

e. The project does not involve the generation of solid waste.

Mitigation Measure(s)

No mitigation required.

Level of Significance
There will be no impact.

xx. WILDFIRE

Question	CEQA Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No Impact

a. The proposed project involves drilling and equipping a new municipal water well facility and connecting it to the existing City of McFarland Water distribution system. The project is located in a Local Responsibility Area (LRA) and is greater than 5 miles from a moderate fire hazard severity zone according to the California Department of Forestry and Fire Protections FRAP FHSZ map. The project will not impair an adopted emergency response plan or emergency evacuation plan and therefore has no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

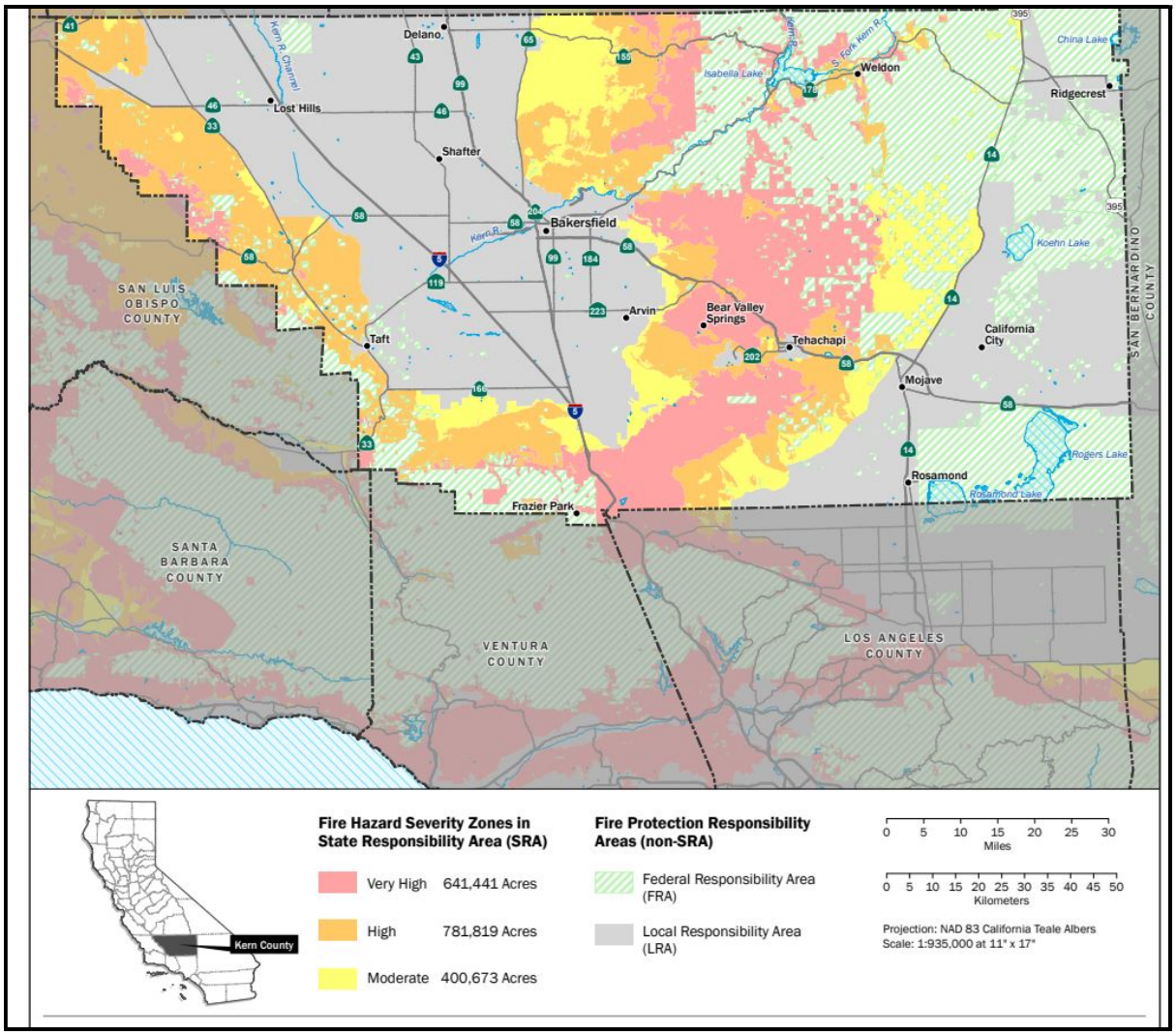


Figure 7: Fire Severity Zone Map

b. The project will be constructed and operated in an existing developed area. The project will not expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire and therefore has no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

c. The project will not require the installation or maintenance of associated infrastructure that may exacerbate fire risk and therefore has no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

d. The project is not located near State responsibility areas or lands classified as very high fire hazard severity zones. The project site is relatively flat. The project will not 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 and therefore has no impact.

Mitigation Measure(s)

No mitigation required.

Level of Significance

There will be no impact.

xxi. MANDATORY FINDINGS OF SIGNIFICANCE

Question	CEQA Determination
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
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
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less Than Significant with Mitigation Incorporated

a. As evaluated in this IS/MND, the project will not 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; reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory. With implementation of the mitigation measures recommended in this document, the proposed project would not have the potential to degrade the quality of the environment, significantly impact biological resources, or eliminate important examples of the major periods of California's history or prehistory. Therefore, with the following mitigation measures, the project will have a less than significant impact.

Mitigation Measure(s)

Implementation of Mitigation Measures AES-1 and AES-2; AQ-1 and AQ-2; BIO-1 through BIO-19; CUL-1 and CUL-2; HYD-1; NOI-1, NOI-2, NOI-3; and TRA-1 and TRA-2.

Level of Significance

The project will have a less than significant impact with the mitigations incorporated.

b. Any potentially significant impacts of the project will be reduced to a less than significant level following the incorporation of the mitigation measures listed. The proposed project will not otherwise combine with impacts of related development to add considerably to any cumulative impacts that are individually limited, but cumulatively considerable. Therefore, the project will have a less than significant impact with the mitigations incorporated.

Mitigation Measure(s)

Implementation of Mitigation Measures AES-1 and AES-2; AQ-1 and AQ-2; BIO-1 through BIO-19; CUL-1 and CUL-2; HYD-1; NOI-1, NOI-2, NOI-3; and TRA-1 and TRA-2.

Level of Significance

The project will have a less than significant impact with the mitigations incorporated.

c. All of the project's impacts, both direct and indirect that are attributable to the project were identified and mitigated. The project mitigation measures will substantially reduce or eliminate the impacts of the project. Therefore, the project does not have environmental effects which will cause substantial adverse effects on human beings directly or indirectly because all potentially adverse direct impacts of the project are identified as having no impact, less than significant impact, or less than significant impact with mitigation.

Mitigation Measure(s)

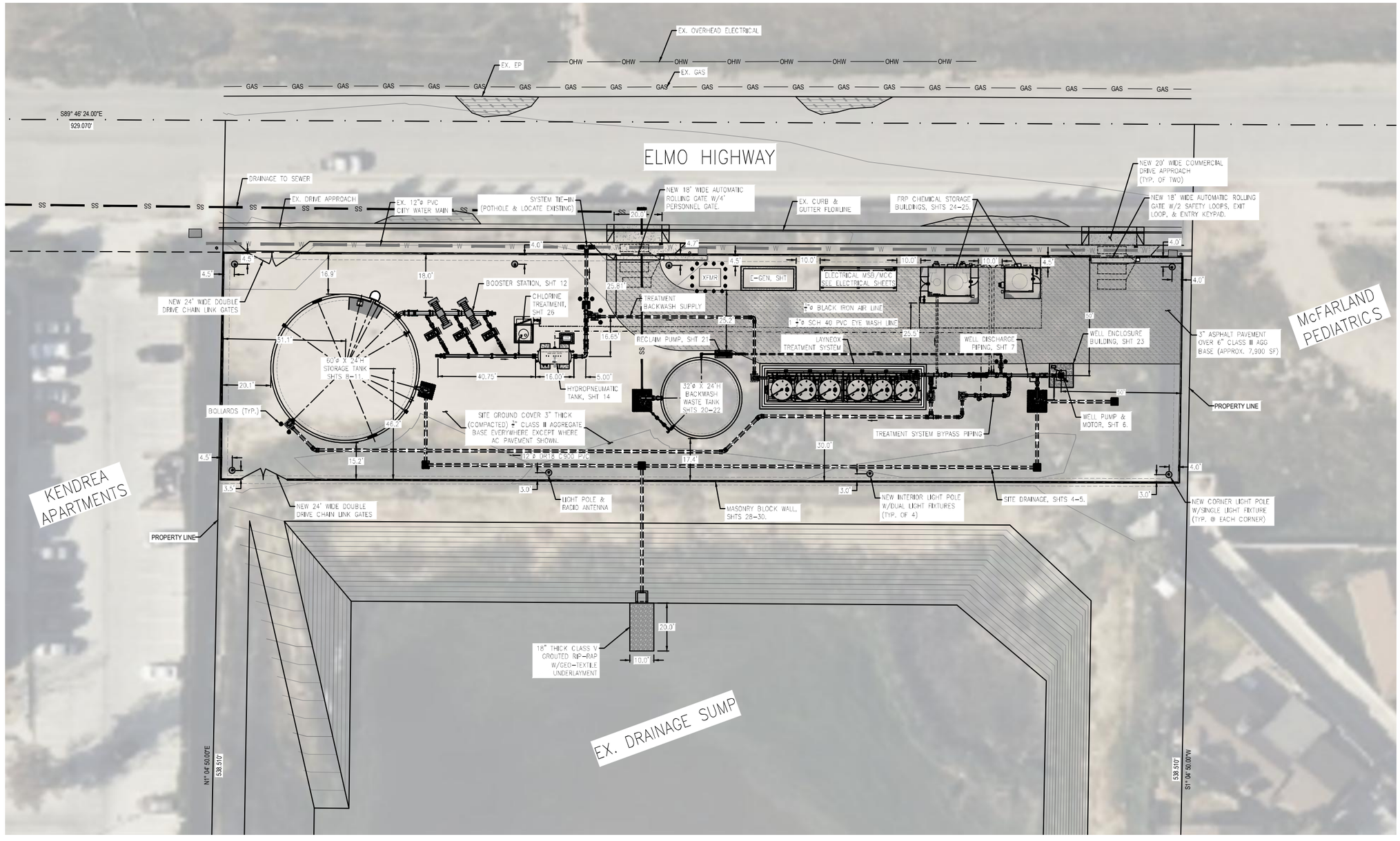
Implementation of Mitigation Measures AES-1 and AES-2; AQ-1 and AQ-2; BIO-1 through BIO-19; CUL-1 and CUL-2; HYD-1; NOI-1, NOI-2, NOI-3; and TRA-1 and TRA-2.

Level of Significance

The project will have a less than significant impact with the mitigations incorporated.

CITY OF McFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT
(PROJECT NO. EDWG-1510013-003C)

EXHIBIT A
"PROJECT SITE PLAN"



SITE PLAN
SCALE: 1" = 20'

SCALE 1"=20'

0 20' 40' 80'

LEGEND

EXISTING GRADE

NOTE
CONTRACTOR SHALL POTHOLE AND LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN THE EVENT OF ANY CONFLICT.

REV.	DATE	DESCRIPTION	BY

DEE JASPAR & ASSOCIATES, INC.
CIVIL ENGINEERS
3742 SPRING CREEK COURT
FRESNO, CALIFORNIA 93726
PHONE 559 224-1748
FAX 559 224-1755
538 N. MAIN STREET
PHONE 559 792-2295
FAX 559 792-2296
PORTERVILLE, CALIFORNIA 93257

SITE PLAN

ELMO WELL, TREATMENT, STORAGE, & BOOSTER STATION PROJECT

CITY OF McFARLAND
KERN COUNTY, CALIFORNIA

DRAWN	KRW
CHECKED	CMS
DATE	3/6/2025
SCALE	AS SHOWN
JOB NO.	
SHEET	2
OF	27 SHEETS

S:\CITY OF MCFARLAND\ELMO WELL PROJECT\DRAWINGS\CONFORMED TO MUNICIPAL WELL\DRAWINGS\SHT02_ELMO WELL SITE PLAN.DWG 10/9/2025 2:55 PM

CITY OF McFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT
(PROJECT NO. EDWG-1510013-003C)

EXHIBIT B
"PROJECT DESCRIPTION"

CITY OF MCFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT

I. PROJECT DESCRIPTION

The proposed project is for the City of McFarland (City) and involves drilling and equipping a new municipal water well, construction of an oxidation, coagulation, filtration iron removal water treatment system, construction of a welded steel water storage tank and booster station, and a connection to the existing City distribution system.

The well site property is approximately 100-ft by 400-ft or approximately 0.9-acres. The site is currently a vacant, unimproved lot. The earthwork will involve moving approximately 1,000 cubic yards which will be off-hauled for disposal off site as directed by the City.

The site grading is anticipated to involve approximately 20 working days. It is anticipated that the following pieces of equipment will be used during construction activities:

- Loader
- Backhoe
- Excavator
- Skip and Drag
- Sheepsfoot Compactor
- Rammax Compactor
- Whacker Packers

The site earthwork requirements include over-excavation to 18-inches below proposed concrete foundations and will be recompacted to 90% relative compaction to reduce the potential for settlement. Concrete foundations will be constructed for the deep well pump and motor, the booster pump foundations, the skid-mounted LayneOx treatment system, storage tank foundations, chemical building foundations, electrical foundation, and the hydropneumatic tank footings.

The well site property will be secured with approximately 930-ft of 8-ft tall masonry block wall and include drive gates and a personnel gate to Elmo Highway for site access. The well site will be surfaced with a combination of ¾" Class II aggregate base and hot mix asphalt paving, with the limits being the perimeter block wall.

The well is planned to be drilled to an approximate depth of 900-ft using the reverse rotary method. Water quality zone testing will be performed in the well pilot hole. The well construction work will include installing a 50-ft deep, 36-inch diameter steel conductor, drilling a 17 ½ - inch diameter pilot hole,

performing geophysical logging, water quality depth sampling, reaming of the pilot hole to 28-inch diameter, installation of 16-inch diameter steel casing, installation of gravel pack, installation of a bentonite annular seal, and well development. The initial development water will be disposed of in a 20,000-gallon tank and removed from the site. The development water will then be discharged to the existing adjacent storm drain sump. It is expected that the completed well will exceed the secondary drinking water standard for iron and that well head treatment in the form of oxidation, coagulation, and filtration will be used to remove iron.

The production well drilling phase will involve the drilling, construction, and development of a new municipal water supply well. It is anticipated to involve approximately 90 working days with active well drilling taking place 24 hours per day, seven days per week for approximately 45 of those working days. It is anticipated that the following pieces of equipment will be used during construction activities:

- Well Drilling Rig with Pipe Trailer
- Mud Pits
- Backhoe
- Loader
- Forklift

The deep well will have a 10-ft by 10-ft by 30-in thick concrete foundation and be equipped with a vertical turbine pump and vertical hollowshaft electric motor with a variable speed drive. The well will have a 10-ft by 10-ft by 11-ft high removable metal enclosure building for noise attenuation. The 12-inch well discharge piping will be metered using an electromagnetic flow meter.

The well discharge flow will be divided so that approximately two-thirds of the flow is conveyed to a skid-mounted LayneOx iron treatment system with a concrete foundation that is 68-ft by 19-ft by 24-in thick. The remaining one-third of the well flow will bypass the LayneOx iron treatment system. The bypass flow rate will be regulated using an automatic modulating control valve and will be blended with the treated flow from the LayneOx iron removal treatment system.

The blended flow will be conveyed into an AWWA D100 welded steel storage tank that will be constructed with a concrete ringwall foundation and oiled sand cushion. The storage tank dimensions will be 60-ft diameter and 24-ft side shell height. The storage tank outlet piping will be 18-inch diameter steel piping that feeds the suction header for three horizontal centrifugal split-case booster pumps. Each booster pump will have a concrete foundation that is 3-ft by 6-ft by 36-in thick. The booster pumps are each equipped with variable speed drives. Two of the pumps are 50hp and the third pump is 100hp. The pump discharge piping then enters a 12-in diameter discharge header. The discharge header enters a 3,000-gallon hydropneumatic pressure vessel which will be anchored to two concrete

footings each 13-ft long by 5-ft wide by 24-in thick. The 12-inch diameter booster station piping will transition below ground after the pressure vessel and transition to 12-inch C900 PVC pipe that will connect to the existing 12" PVC City distribution system water main that runs along the north side of the well site on the south side of Elmo Highway.

In addition, there will be a 144,000-gallon backwash tank with dimensions of 32-ft diameter and 24-ft side shell height. The tank will be an AWWA D100 welded steel storage tank on a concrete ringwall foundation and oiled sand cushion. The backwash tank will drain the supernatant back to the well discharge for treatment and/or drain to the City sewer.

There will be two fiber-reinforced polymer (FRP) chemical enclosure buildings to house the dual-walled chemical storage tanks, duplex chemical feed pump skids, and the continuous reagent-free pH and chlorine analyzer.

The first FRP building (18 ft × 12 ft) will provide protection for the 550-gallon chlorine storage tank, the 150-gallon ferric chloride storage tank, and the duplex chemical feed pump skids. These pumps will inject chlorine and ferric chloride for chemical pre-treatment of the raw groundwater prior to filtration through the LayneOx media.

The second FRP building (10 ft × 12 ft) will house the 550-gallon sulfuric acid storage tank and the duplex chemical feed pump skid used for sulfuric acid injection. This system will provide pre-treatment pH adjustment upstream of the LayneOx filter media vessels.

The well and treatment facility will be painted a neutral color (tan) and site landscaping installed around the perimeter of the site for it to be aesthetically pleasing and blend in with the adjacent community and neighborhood.

The well equipping and site development phase is anticipated to involve approximately 12 months. However, the equipment will not run continually or daily throughout this entire construction period. It is anticipated that the following heavy pieces of equipment will be used for approximately 180 working days during construction activities:

- Excavator
- Loader
- Backhoe
- Crane
- Concrete Trucks
- Generator
- Air Compressor
- Small Tools
- Service Trucks

Construction of the project is anticipated to span an approximate 18-to-24-month period.

The well site will be routinely visited by a City operator – typically once per day to check on the operation and inspect for any issues along with the preparation of a daily report. Routine maintenance operations will include:

- Well Lubrication Check - daily
- Chlorine Tank Level Check – daily
- Sulfuric Acid Tank Level Check – daily
- Ferric Chloride Tank Level Check – daily
- Chlorine Residual Check – daily
- pH Check – daily
- Iron Level Check – daily
- Water Production Reading Check – daily
- Booster Pump check – monthly
- Well water level measurements – monthly
- Air Conditioning service – annually
- Site Cleanup - quarterly

A back-up emergency generator will also be installed as part of this project.

CITY OF McFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT
(PROJECT NO. EDWG-1510013-003C)

EXHIBIT C
"CONSTRUCTION PHASE – AIR EMISSIONS DATA"

City of McFarland - Elmo Well Facility Summary Report

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6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

7. Health and Equity Details

7.3. Overall Health & Equity Scores

7.5. Evaluation Scorecard

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	City of McFarland - Elmo Well Facility
Construction Start Date	1/1/2026
Operational Year	2027
Lead Agency	City of McFarland
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	16.2
Location	35.688765471132484, -119.2340748871627
County	Kern-San Joaquin
City	McFarland
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2949
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

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
User Defined Industrial	0.00	User Defined Unit	0.90	100	0.00	0.00	—	Water Well & Treatment Facility

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-6	Use Diesel Particulate Filters
Construction	C-10-B	Water Active Demolition Sites

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.88	0.74	6.62	9.39	0.02	0.25	0.18	0.32	0.23	0.04	0.24	—	1,831	1,831	0.07	0.02	0.66	1,838
Mit.	0.88	0.74	6.62	9.39	0.02	0.25	0.18	0.30	0.23	0.04	0.24	—	1,831	1,831	0.07	0.02	0.66	1,838
% Reduced	—	—	—	—	—	—	—	5%	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.73	0.62	4.72	7.93	0.02	0.18	0.21	0.37	0.17	0.05	0.19	—	1,965	1,965	0.08	0.03	0.02	1,973
Mit.	0.73	0.62	4.72	7.93	0.02	0.16	0.21	0.37	0.14	0.05	0.19	—	1,965	1,965	0.08	0.03	0.02	1,973
% Reduced	—	—	—	—	—	13%	—	—	13%	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.33	0.27	2.33	3.69	0.01	0.08	0.06	0.14	0.07	0.01	0.09	—	786	786	0.03	0.01	0.10	789
Mit.	0.33	0.27	2.33	3.69	0.01	0.08	0.06	0.14	0.07	0.01	0.09	—	786	786	0.03	0.01	0.10	789

% Reduced	—	—	—	—	—	3%	—	2%	3%	—	2%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.05	0.43	0.67	< 0.005	0.01	0.01	0.03	0.01	< 0.005	0.02	—	130	130	0.01	< 0.005	0.02	131
Mit.	0.06	0.05	0.43	0.67	< 0.005	0.01	0.01	0.03	0.01	< 0.005	0.02	—	130	130	0.01	< 0.005	0.02	131
% Reduced	—	—	—	—	—	3%	< 0.5%	2%	3%	< 0.5%	2%	—	—	—	—	—	—	—

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	335	335	0.05	0.01	0.00	339
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	335	335	0.05	0.01	0.00	339
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.18	0.80	0.46	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	427	427	0.06	0.01	0.00	431
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.03	0.15	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	70.7	70.7	0.01	< 0.005	0.00	71.3

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	5	1
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	3	4	4	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	2	4	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 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	8	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	3	3	8	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	2	7	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 include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0
Healthy Places Index Score for Project Location (b)	6.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	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.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

City of McFarland - Elmo Well Facility Detailed Report

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2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

3.2. Demolition (2026) - Mitigated

3.3. Site Preparation (2025) - Unmitigated

3.4. Site Preparation (2025) - Mitigated

3.5. Rough Grading & Over-ex (2025) - Unmitigated

3.6. Rough Grading & Over-ex (2025) - Mitigated

3.7. Finish Grading (2026) - Unmitigated

3.8. Finish Grading (2026) - Mitigated

3.9. Well Site Fencing (2025) - Unmitigated

3.10. Well Site Fencing (2025) - Mitigated

3.11. Well Drilling (2025) - Unmitigated

3.12. Well Drilling (2025) - Mitigated

3.13. Well Drilling (2026) - Unmitigated

3.14. Well Drilling (2026) - Mitigated

3.15. Water Tank Construction (2026) - Unmitigated

3.16. Water Tank Construction (2026) - Mitigated

3.17. Treatment System (2026) - Unmitigated

3.18. Treatment System (2026) - Mitigated

3.19. Piping & Appurtenances (2026) - Unmitigated

3.20. Piping & Appurtenances (2026) - Mitigated

3.21. Pump & Motor Installation (2026) - Unmitigated

3.22. Pump & Motor Installation (2026) - Mitigated

3.23. Hydropneumatic Tank (2026) - Unmitigated

3.24. Hydropneumatic Tank (2026) - Mitigated

3.25. Site Electrical (2026) - Unmitigated

3.26. Site Electrical (2026) - Mitigated

3.27. Backup Generator (2026) - Unmitigated

3.28. Backup Generator (2026) - Mitigated

3.29. Paving & Sidewalk (2026) - Unmitigated

3.30. Paving & Sidewalk (2026) - Mitigated

3.31. Paving & Sidewalk (2027) - Unmitigated

3.32. Paving & Sidewalk (2027) - Mitigated

3.33. Site Painting (2027) - Unmitigated

3.34. Site Painting (2027) - Mitigated

3.35. Underground Pipeline (2026) - Unmitigated

3.36. Underground Pipeline (2026) - Mitigated

3.37. Underground Electrical (2026) - Unmitigated

3.38. Underground Electrical (2026) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

6.4.1. Temperature and Extreme Heat

6.4.2. Drought

6.4.3. Air Quality Degradation

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	City of McFarland - Elmo Well Facility
Construction Start Date	1/1/2026
Operational Year	2027
Lead Agency	City of McFarland
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	16.2
Location	35.688765471132484, -119.2340748871627
County	Kern-San Joaquin
City	McFarland
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2949
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

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
User Defined Industrial	0.00	User Defined Unit	0.90	100	0.00	0.00	—	Water Well & Treatment Facility

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-6	Use Diesel Particulate Filters
Construction	C-10-B	Water Active Demolition Sites

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.88	0.74	6.62	9.39	0.02	0.25	0.18	0.32	0.23	0.04	0.24	—	1,831	1,831	0.07	0.02	0.66	1,838
Mit.	0.88	0.74	6.62	9.39	0.02	0.25	0.18	0.30	0.23	0.04	0.24	—	1,831	1,831	0.07	0.02	0.66	1,838
% Reduced	—	—	—	—	—	—	—	5%	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.73	0.62	4.72	7.93	0.02	0.18	0.21	0.37	0.17	0.05	0.19	—	1,965	1,965	0.08	0.03	0.02	1,973
Mit.	0.73	0.62	4.72	7.93	0.02	0.16	0.21	0.37	0.14	0.05	0.19	—	1,965	1,965	0.08	0.03	0.02	1,973
% Reduced	—	—	—	—	—	13%	—	—	13%	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.33	0.27	2.33	3.69	0.01	0.08	0.06	0.14	0.07	0.01	0.09	—	786	786	0.03	0.01	0.10	789
Mit.	0.33	0.27	2.33	3.69	0.01	0.08	0.06	0.14	0.07	0.01	0.09	—	786	786	0.03	0.01	0.10	789

% Reduced	—	—	—	—	—	3%	—	2%	3%	—	2%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.05	0.43	0.67	< 0.005	0.01	0.01	0.03	0.01	< 0.005	0.02	—	130	130	0.01	< 0.005	0.02	131
Mit.	0.06	0.05	0.43	0.67	< 0.005	0.01	0.01	0.03	0.01	< 0.005	0.02	—	130	130	0.01	< 0.005	0.02	131
% Reduced	—	—	—	—	—	3%	< 0.5%	2%	3%	< 0.5%	2%	—	—	—	—	—	—	—

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.36	0.31	2.47	5.61	0.01	0.11	0.08	0.19	0.10	0.02	0.12	—	990	990	0.04	0.02	0.41	997
2026	0.88	0.74	6.62	9.39	0.02	0.25	0.18	0.32	0.23	0.04	0.24	—	1,831	1,831	0.07	0.02	0.66	1,838
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.63	0.53	4.72	7.30	0.02	0.18	0.09	0.27	0.17	0.02	0.19	—	1,794	1,794	0.07	0.02	0.01	1,801
2026	0.62	0.52	4.58	7.93	0.02	0.16	0.21	0.34	0.14	0.05	0.18	—	1,965	1,965	0.08	0.03	0.02	1,973
2027	0.73	0.62	4.30	5.66	0.01	0.16	0.21	0.37	0.14	0.05	0.19	—	941	941	0.03	0.01	0.02	946
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.06	0.05	0.44	0.76	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	171	171	0.01	< 0.005	0.03	172
2026	0.33	0.27	2.33	3.69	0.01	0.08	0.06	0.14	0.07	0.01	0.09	—	786	786	0.03	0.01	0.10	789
2027	0.02	0.02	0.14	0.16	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	< 0.005	23.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.01	0.01	0.08	0.14	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	28.3	28.3	< 0.005	< 0.005	< 0.005	28.4
2026	0.06	0.05	0.43	0.67	< 0.005	0.01	0.01	0.03	0.01	< 0.005	0.02	—	130	130	0.01	< 0.005	0.02	131

2027	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.93	3.93	< 0.005	< 0.005	< 0.005	3.94

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.36	0.31	2.47	5.61	0.01	0.11	0.08	0.19	0.10	0.02	0.12	—	990	990	0.04	0.02	0.41	997
2026	0.88	0.74	6.62	9.39	0.02	0.25	0.18	0.30	0.23	0.04	0.24	—	1,831	1,831	0.07	0.02	0.66	1,838
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.63	0.53	4.72	7.30	0.02	0.14	0.09	0.23	0.13	0.02	0.15	—	1,794	1,794	0.07	0.02	0.01	1,801
2026	0.62	0.52	4.58	7.93	0.02	0.16	0.21	0.34	0.14	0.05	0.18	—	1,965	1,965	0.08	0.03	0.02	1,973
2027	0.73	0.62	4.30	5.66	0.01	0.16	0.21	0.37	0.14	0.05	0.19	—	941	941	0.03	0.01	0.02	946
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.06	0.05	0.44	0.76	< 0.005	0.01	0.01	0.03	0.01	< 0.005	0.02	—	171	171	0.01	< 0.005	0.03	172
2026	0.33	0.27	2.33	3.69	0.01	0.08	0.06	0.14	0.07	0.01	0.09	—	786	786	0.03	0.01	0.10	789
2027	0.02	0.02	0.14	0.16	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	< 0.005	23.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.01	0.01	0.08	0.14	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	28.3	28.3	< 0.005	< 0.005	< 0.005	28.4
2026	0.06	0.05	0.43	0.67	< 0.005	0.01	0.01	0.03	0.01	< 0.005	0.02	—	130	130	0.01	< 0.005	0.02	131
2027	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.93	3.93	< 0.005	< 0.005	< 0.005	3.94

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	335	335	0.05	0.01	0.00	339
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	335	335	0.05	0.01	0.00	339
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.18	0.80	0.46	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	427	427	0.06	0.01	0.00	431
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.03	0.15	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	70.7	70.7	0.01	< 0.005	0.00	71.3

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	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	0.00
Area	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.02	0.02	< 0.005	< 0.005	—	0.02
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	335	335	0.05	0.01	—	339
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Stationary	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	0.00	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	335	335	0.05	0.01	0.00	339

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	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	0.00
Area	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	335	335	0.05	0.01	—	339
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Stationary	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	0.00	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	< 0.005	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	335	335	0.05	0.01	0.00	339
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	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	0.00
Area	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.01	0.01	< 0.005	< 0.005	—	0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	335	335	0.05	0.01	—	339
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.20	0.18	0.80	0.46	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	92.0	92.0	< 0.005	< 0.005	0.00	92.3
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	0.20	0.18	0.80	0.46	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	427	427	0.06	0.01	0.00	431
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	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	0.00
Area	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	55.5	55.5	0.01	< 0.005	—	56.1
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Stationa	0.04	0.03	0.15	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	15.2	15.2	< 0.005	< 0.005	0.00	15.3
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	0.04	0.03	0.15	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	70.7	70.7	0.01	< 0.005	0.00	71.3

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	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	0.00
Area	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.02	0.02	< 0.005	< 0.005	—	0.02
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	335	335	0.05	0.01	—	339
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Stationary	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	0.00	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	335	335	0.05	0.01	0.00	339
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	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	0.00
Area	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	335	335	0.05	0.01	—	339
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Stationary	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	0.00	0.00

Vegetati	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	< 0.005	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	335	335	0.05	0.01	0.00	339
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	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	0.00
Area	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.01	0.01	< 0.005	< 0.005	—	0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	335	335	0.05	0.01	—	339
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.20	0.18	0.80	0.46	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	92.0	92.0	< 0.005	< 0.005	0.00	92.3
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	0.20	0.18	0.80	0.46	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	427	427	0.06	0.01	0.00	431
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	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	0.00
Area	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	55.5	55.5	0.01	< 0.005	—	56.1
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.04	0.03	0.15	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	15.2	15.2	< 0.005	< 0.005	0.00	15.3
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	0.04	0.03	0.15	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	70.7	70.7	0.01	< 0.005	0.00	71.3

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.19	2.18	< 0.005	0.04	—	0.04	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.32	9.32	< 0.005	< 0.005	—	9.35
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.54	1.54	< 0.005	< 0.005	—	1.55
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.9	57.9	< 0.005	< 0.005	0.01	58.6
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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.77	6.77	< 0.005	< 0.005	< 0.005	7.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.67
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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28
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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	0.11	1.19	2.18	< 0.005	0.04	—	0.04	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.32	9.32	< 0.005	< 0.005	—	9.35
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.54	1.54	< 0.005	< 0.005	—	1.55
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.9	57.9	< 0.005	< 0.005	0.01	58.6
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	0.00

Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.77	6.77	< 0.005	< 0.005	< 0.005	7.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.67
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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28
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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03

3.3. 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	TOG	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	0.33	0.28	2.37	5.21	0.01	0.11	—	0.11	0.10	—	0.10	—	853	853	0.03	0.01	—	856
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.33	0.28	2.37	5.21	0.01	0.11	—	0.11	0.10	—	0.10	—	853	853	0.03	0.01	—	856
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.4	23.4	< 0.005	< 0.005	—	23.5
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.87	3.87	< 0.005	< 0.005	—	3.88
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.38	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	67.4	67.4	< 0.005	< 0.005	0.24	68.4

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	0.00
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.1	69.1	< 0.005	0.01	0.17	72.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.26	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.1	59.1	< 0.005	< 0.005	0.01	59.9
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	0.00
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.1	69.1	< 0.005	0.01	< 0.005	72.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.68	1.68	< 0.005	< 0.005	< 0.005	1.71
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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.98
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.28
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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33

3.4. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.28	2.37	5.21	0.01	0.11	—	0.11	0.10	—	0.10	—	853	853	0.03	0.01	—	856

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.28	2.37	5.21	0.01	0.11	—	0.11	0.10	—	0.10	—	853	853	0.03	0.01	—	856
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.4	23.4	< 0.005	< 0.005	—	23.5
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.87	3.87	< 0.005	< 0.005	—	3.88

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.38	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	67.4	67.4	< 0.005	< 0.005	0.24	68.4
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	0.00
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.1	69.1	< 0.005	0.01	0.17	72.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.26	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.1	59.1	< 0.005	< 0.005	0.01	59.9
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	0.00
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.1	69.1	< 0.005	0.01	< 0.005	72.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.68	1.68	< 0.005	< 0.005	< 0.005	1.71
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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.98
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.28
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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33

3.5. Rough Grading & Over-ex (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.50	4.69	6.91	0.02	0.18	—	0.18	0.17	—	0.17	—	1,705	1,705	0.07	0.01	—	1,711
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	93.4	93.4	< 0.005	< 0.005	—	93.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.5	15.5	< 0.005	< 0.005	—	15.5

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.39	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.7	88.7	< 0.005	< 0.005	0.01	89.8
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	0.01	5.12
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.85
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	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	0.00

3.6. Rough Grading & Over-ex (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.50	4.69	6.91	0.02	0.14	—	0.14	0.12	—	0.12	—	1,705	1,705	0.07	0.01	—	1,711
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	93.4	93.4	< 0.005	< 0.005	—	93.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.5	15.5	< 0.005	< 0.005	—	15.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.39	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.7	88.7	< 0.005	< 0.005	0.01	89.8
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	0.01	5.12
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.85
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	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	0.00

3.7. Finish Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.43	0.36	2.61	3.94	0.01	0.10	—	0.10	0.09	—	0.09	—	1,276	1,276	0.05	0.01	—	1,280
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	52.4	52.4	< 0.005	< 0.005	—	52.6
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.68	8.68	< 0.005	< 0.005	—	8.71
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.9	57.9	< 0.005	< 0.005	0.01	58.6
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	0.00
Hauling	< 0.005	< 0.005	0.17	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.01	142
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.47	2.47	< 0.005	< 0.005	< 0.005	2.51
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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.57	5.57	< 0.005	< 0.005	0.01	5.84
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.41	0.41	< 0.005	< 0.005	< 0.005	0.41
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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.92	0.92	< 0.005	< 0.005	< 0.005	0.97

3.8. Finish Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	2.61	3.94	0.01	0.07	—	0.07	0.07	—	0.07	—	1,276	1,276	0.05	0.01	—	1,280

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	52.4	52.4	< 0.005	< 0.005	—	52.6
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.68	8.68	< 0.005	< 0.005	—	8.71
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.9	57.9	< 0.005	< 0.005	0.01	58.6

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	0.00
Hauling	< 0.005	< 0.005	0.17	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.01	142
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.47	2.47	< 0.005	< 0.005	< 0.005	2.51
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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.57	5.57	< 0.005	< 0.005	0.01	5.84
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.41	0.41	< 0.005	< 0.005	< 0.005	0.41
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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.92	0.92	< 0.005	< 0.005	< 0.005	0.97

3.9. Well Site Fencing (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.55	0.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	145	145	0.01	< 0.005	—	146
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.01	< 0.005	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.9	11.9	< 0.005	< 0.005	—	12.0
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.98	1.98	< 0.005	< 0.005	—	1.98
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	71.0	71.0	< 0.005	< 0.005	0.01	71.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.06	6.06	< 0.005	< 0.005	0.01	6.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	0.00

3.10. Well Site Fencing (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.55	0.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	145	145	0.01	< 0.005	—	146
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.9	11.9	< 0.005	< 0.005	—	12.0
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.98	1.98	< 0.005	< 0.005	—	1.98
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	71.0	71.0	< 0.005	< 0.005	0.01	71.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.06	6.06	< 0.005	< 0.005	0.01	6.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	0.00

3.11. Well Drilling (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.39	3.57	5.23	0.01	0.14	—	0.14	0.13	—	0.13	—	1,490	1,490	0.06	0.01	—	1,495
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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.2	26.2	< 0.005	< 0.005	—	26.3
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.34	4.34	< 0.005	< 0.005	—	4.36
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	71.0	71.0	< 0.005	< 0.005	0.01	71.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.30	1.30	< 0.005	< 0.005	< 0.005	1.32
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
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	0.00

3.12. Well Drilling (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.39	3.57	5.23	0.01	0.14	—	0.14	0.13	—	0.13	—	1,490	1,490	0.06	0.01	—	1,495
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.2	26.2	< 0.005	< 0.005	—	26.3
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.34	4.34	< 0.005	< 0.005	—	4.36
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	71.0	71.0	< 0.005	< 0.005	0.01	71.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.30	1.30	< 0.005	< 0.005	< 0.005	1.32
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
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	0.00

3.13. Well Drilling (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.32	5.22	0.01	0.12	—	0.12	0.11	—	0.11	—	1,490	1,490	0.06	0.01	—	1,495
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.44	0.37	3.32	5.22	0.01	0.12	—	0.12	0.11	—	0.11	—	1,490	1,490	0.06	0.01	—	1,495
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.08	0.07	0.62	0.98	< 0.005	0.02	—	0.02	0.02	—	0.02	—	280	280	0.01	< 0.005	—	281
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.01	0.11	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.3	46.3	< 0.005	< 0.005	—	46.5
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.42	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	79.2	79.2	< 0.005	< 0.005	0.26	80.3
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	69.5	69.5	< 0.005	< 0.005	0.01	70.4
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	0.02	13.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.24	2.24	< 0.005	< 0.005	< 0.005	2.28
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
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	0.00

3.14. Well Drilling (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.32	5.22	0.01	0.12	—	0.12	0.11	—	0.11	—	1,490	1,490	0.06	0.01	—	1,495
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.32	5.22	0.01	0.12	—	0.12	0.11	—	0.11	—	1,490	1,490	0.06	0.01	—	1,495
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.08	0.07	0.62	0.98	< 0.005	0.02	—	0.02	0.02	—	0.02	—	280	280	0.01	< 0.005	—	281
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.3	46.3	< 0.005	< 0.005	—	46.5
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.42	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	79.2	79.2	< 0.005	< 0.005	0.26	80.3
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	69.5	69.5	< 0.005	< 0.005	0.01	70.4
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	0.02	13.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.24	2.24	< 0.005	< 0.005	< 0.005	2.28
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02

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	0.00

3.15. Water Tank Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.16	4.56	0.01	0.11	—	0.11	0.10	—	0.10	—	786	786	0.03	0.01	—	789
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.56	0.81	< 0.005	0.02	—	0.02	0.02	—	0.02	—	140	140	0.01	< 0.005	—	141
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.2	23.2	< 0.005	< 0.005	—	23.3
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.8	52.8	< 0.005	< 0.005	0.17	53.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.57	8.57	< 0.005	< 0.005	0.01	8.68
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.44
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
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	0.00

3.16. Water Tank Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.16	4.56	0.01	0.11	—	0.11	0.10	—	0.10	—	786	786	0.03	0.01	—	789
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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.56	0.81	< 0.005	0.02	—	0.02	0.02	—	0.02	—	140	140	0.01	< 0.005	—	141
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.2	23.2	< 0.005	< 0.005	—	23.3
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.8	52.8	< 0.005	< 0.005	0.17	53.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.57	8.57	< 0.005	< 0.005	0.01	8.68
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.44
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
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	0.00

3.17. Treatment System (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.60	4.27	0.01	0.09	—	0.09	0.08	—	0.08	—	719	719	0.03	0.01	—	721
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.1	59.1	< 0.005	< 0.005	—	59.3
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.78	9.78	< 0.005	< 0.005	—	9.81

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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.8	52.8	< 0.005	< 0.005	0.17	53.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.95	3.95	< 0.005	< 0.005	0.01	4.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	0.00

3.18. Treatment System (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.31	0.26	2.60	4.27	0.01	0.09	—	0.09	0.08	—	0.08	—	719	719	0.03	0.01	—	721
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.1	59.1	< 0.005	< 0.005	—	59.3
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.78	9.78	< 0.005	< 0.005	—	9.81
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.8	52.8	< 0.005	< 0.005	0.17	53.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.95	3.95	< 0.005	< 0.005	0.01	4.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	0.00

3.19. Piping & Appurtenances (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.89	1.29	< 0.005	0.03	—	0.03	0.02	—	0.02	—	196	196	0.01	< 0.005	—	197
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.8	26.8	< 0.005	< 0.005	—	26.9
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.44	4.44	< 0.005	< 0.005	—	4.46
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.8	52.8	< 0.005	< 0.005	0.17	53.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.59	6.59	< 0.005	< 0.005	0.01	6.68
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.09	1.09	< 0.005	< 0.005	< 0.005	1.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	0.00

3.20. Piping & Appurtenances (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.11	0.09	0.89	1.29	< 0.005	0.03	—	0.03	0.02	—	0.02	—	196	196	0.01	< 0.005	—	197
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.01	0.01	0.12	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.8	26.8	< 0.005	< 0.005	—	26.9
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.44	4.44	< 0.005	< 0.005	—	4.46
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.8	52.8	< 0.005	< 0.005	0.17	53.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.59	6.59	< 0.005	< 0.005	0.01	6.68

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.09	1.09	< 0.005	< 0.005	< 0.005	1.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	0.00

3.21. Pump & Motor Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.45	3.07	0.01	0.14	—	0.14	0.13	—	0.13	—	990	990	0.04	0.01	—	993
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.1	27.1	< 0.005	< 0.005	—	27.2
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.49	4.49	< 0.005	< 0.005	—	4.51
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
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	0.00

3.22. Pump & Motor Installation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.44	0.37	3.45	3.07	0.01	0.14	—	0.14	0.13	—	0.13	—	990	990	0.04	0.01	—	993
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.1	27.1	< 0.005	< 0.005	—	27.2
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.49	4.49	< 0.005	< 0.005	—	4.51
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
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	0.00

3.23. Hydropneumatic Tank (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.24	1.53	< 0.005	0.05	—	0.05	0.04	—	0.04	—	308	308	0.01	< 0.005	—	309
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.44	8.44	< 0.005	< 0.005	—	8.46
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.40	1.40	< 0.005	< 0.005	—	1.40
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
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	0.00

3.24. Hydropneumatic Tank (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.16	0.13	1.24	1.53	< 0.005	0.05	—	0.05	0.04	—	0.04	—	308	308	0.01	< 0.005	—	309
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.44	8.44	< 0.005	< 0.005	—	8.46
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.40	1.40	< 0.005	< 0.005	—	1.40
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
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	0.00

3.25. Site Electrical (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.37	2.43	< 0.005	0.05	—	0.05	0.05	—	0.05	—	367	367	0.01	< 0.005	—	368
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	45.2	45.2	< 0.005	< 0.005	—	45.4
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.48	7.48	< 0.005	< 0.005	—	7.51
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	0.00

3.26. Site Electrical (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.16	0.14	1.37	2.43	< 0.005	0.05	—	0.05	0.05	—	0.05	—	367	367	0.01	< 0.005	—	368
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.02	0.17	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	45.2	45.2	< 0.005	< 0.005	—	45.4
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.48	7.48	< 0.005	< 0.005	—	7.51
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	0.00

3.27. Backup Generator (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	160	160	0.01	< 0.005	—	161
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.58	6.58	< 0.005	< 0.005	—	6.60
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.09	1.09	< 0.005	< 0.005	—	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
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	0.00

3.28. Backup Generator (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.07	0.06	0.56	0.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	160	160	0.01	< 0.005	—	161
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.58	6.58	< 0.005	< 0.005	—	6.60
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.09	1.09	< 0.005	< 0.005	—	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
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	0.00

3.29. Paving & Sidewalk (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	2.96	3.44	0.01	0.12	—	0.12	0.11	—	0.11	—	543	543	0.02	< 0.005	—	545
Paving	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.5	25.5	< 0.005	< 0.005	—	25.6
Paving	< 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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.22	4.22	< 0.005	< 0.005	—	4.23
Paving	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	203	203	< 0.005	0.01	0.02	205
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.89	9.89	< 0.005	< 0.005	0.02	10.0
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.64	1.64	< 0.005	< 0.005	< 0.005	1.66
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	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	0.00

3.30. Paving & Sidewalk (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	2.96	3.44	0.01	0.12	—	0.12	0.11	—	0.11	—	543	543	0.02	< 0.005	—	545
Paving	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.5	25.5	< 0.005	< 0.005	—	25.6
Paving	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.22	4.22	< 0.005	< 0.005	—	4.23
Paving	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	203	203	< 0.005	0.01	0.02	205
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.89	9.89	< 0.005	< 0.005	0.02	10.0
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.64	1.64	< 0.005	< 0.005	< 0.005	1.66
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	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	0.00

3.31. Paving & Sidewalk (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	2.91	3.45	0.01	0.12	—	0.12	0.11	—	0.11	—	543	543	0.02	< 0.005	—	545
Paving	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.31	5.31	< 0.005	< 0.005	—	5.33
Paving	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.88
Paving	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.76	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	199	199	< 0.005	0.01	0.02	201
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.02	2.02	< 0.005	< 0.005	< 0.005	2.05
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	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
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	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	0.00

3.32. Paving & Sidewalk (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	2.91	3.45	0.01	0.12	—	0.12	0.11	—	0.11	—	543	543	0.02	< 0.005	—	545
Paving	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.31	5.31	< 0.005	< 0.005	—	5.33
Paving	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.88
Paving	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.76	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	199	199	< 0.005	0.01	0.02	201
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.02	2.02	< 0.005	< 0.005	< 0.005	2.05
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
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	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	0.00

3.33. Site Painting (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.32	1.45	< 0.005	0.04	—	0.04	0.04	—	0.04	—	198	198	0.01	< 0.005	—	199
Architectural Coatings	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.3	16.3	< 0.005	< 0.005	—	16.4
Architectural Coatings	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.70	2.70	< 0.005	< 0.005	—	2.71
Architectural Coatings	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.87
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	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	0.00

3.34. Site Painting (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.21	0.17	1.32	1.45	< 0.005	0.04	—	0.04	0.04	—	0.04	—	198	198	0.01	< 0.005	—	199
Architectural Coatings	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.3	16.3	< 0.005	< 0.005	—	16.4
Architectural Coatings	< 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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.70	2.70	< 0.005	< 0.005	—	2.71
Architectural Coatings	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.87
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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	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	0.00

3.35. Underground Pipeline (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.61	2.51	< 0.005	0.05	—	0.05	0.05	—	0.05	—	355	355	0.01	< 0.005	—	357
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.22	0.18	1.61	2.51	< 0.005	0.05	—	0.05	0.05	—	0.05	—	355	355	0.01	< 0.005	—	357
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.3	24.3	< 0.005	< 0.005	—	24.4
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.03	4.03	< 0.005	< 0.005	—	4.04
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.52	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	99.0	99.0	< 0.005	< 0.005	0.33	100
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	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.36	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.8	86.8	< 0.005	< 0.005	0.01	87.9
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.18	6.18	< 0.005	< 0.005	0.01	6.26
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.02	1.02	< 0.005	< 0.005	< 0.005	1.04
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	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	0.00

3.36. Underground Pipeline (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.61	2.51	< 0.005	0.04	—	0.04	0.04	—	0.04	—	355	355	0.01	< 0.005	—	357
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.61	2.51	< 0.005	0.04	—	0.04	0.04	—	0.04	—	355	355	0.01	< 0.005	—	357
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.02	0.01	0.11	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.3	24.3	< 0.005	< 0.005	—	24.4
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.03	4.03	< 0.005	< 0.005	—	4.04
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.52	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	99.0	99.0	< 0.005	< 0.005	0.33	100
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	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.36	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.8	86.8	< 0.005	< 0.005	0.01	87.9
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.18	6.18	< 0.005	< 0.005	0.01	6.26
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.02	1.02	< 0.005	< 0.005	< 0.005	1.04
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	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	0.00

3.37. Underground Electrical (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.03	1.53	< 0.005	0.03	—	0.03	0.03	—	0.03	—	229	229	0.01	< 0.005	—	230
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.03	1.53	< 0.005	0.03	—	0.03	0.03	—	0.03	—	229	229	0.01	< 0.005	—	230
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.7	15.7	< 0.005	< 0.005	—	15.7
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.60	2.60	< 0.005	< 0.005	—	2.61
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.52	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	99.0	99.0	< 0.005	< 0.005	0.33	100
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	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.36	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.8	86.8	< 0.005	< 0.005	0.01	87.9
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.18	6.18	< 0.005	< 0.005	0.01	6.26
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.02	1.02	< 0.005	< 0.005	< 0.005	1.04
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	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	0.00

3.38. Underground Electrical (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.03	1.53	< 0.005	0.03	—	0.03	0.02	—	0.02	—	229	229	0.01	< 0.005	—	230
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.03	1.53	< 0.005	0.03	—	0.03	0.02	—	0.02	—	229	229	0.01	< 0.005	—	230
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.7	15.7	< 0.005	< 0.005	—	15.7
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.60	2.60	< 0.005	< 0.005	—	2.61
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.52	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	99.0	99.0	< 0.005	< 0.005	0.33	100
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	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.36	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.8	86.8	< 0.005	< 0.005	0.01	87.9
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.18	6.18	< 0.005	< 0.005	0.01	6.26
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.02	1.02	< 0.005	< 0.005	< 0.005	1.04
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	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	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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	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	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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	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	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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	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	0.00	0.00	0.00	0.00

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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	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	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	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	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	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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	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	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	335	335	0.05	0.01	—	339
Total	—	—	—	—	—	—	—	—	—	—	—	—	335	335	0.05	0.01	—	339
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	335	335	0.05	0.01	—	339
Total	—	—	—	—	—	—	—	—	—	—	—	—	335	335	0.05	0.01	—	339
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	55.5	55.5	0.01	< 0.005	—	56.1

Total	—	—	—	—	—	—	—	—	—	—	—	—	55.5	55.5	0.01	< 0.005	—	56.1

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	335	335	0.05	0.01	—	339
Total	—	—	—	—	—	—	—	—	—	—	—	—	335	335	0.05	0.01	—	339
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	335	335	0.05	0.01	—	339
Total	—	—	—	—	—	—	—	—	—	—	—	—	335	335	0.05	0.01	—	339
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	55.5	55.5	0.01	< 0.005	—	56.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	55.5	55.5	0.01	< 0.005	—	56.1

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	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	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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	0.00	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

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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	0.00	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

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.02	0.02	< 0.005	< 0.005	—	0.02
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.02	0.02	< 0.005	< 0.005	—	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.02	0.02	< 0.005	< 0.005	—	0.02

Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.02	0.02	< 0.005	< 0.005	—	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	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

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	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	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	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	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	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	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.04	0.03	0.15	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	15.2	15.2	< 0.005	< 0.005	0.00	15.3
Total	0.04	0.03	0.15	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	15.2	15.2	< 0.005	< 0.005	0.00	15.3

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	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	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	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	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	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	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.04	0.03	0.15	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	15.2	15.2	< 0.005	< 0.005	0.00	15.3
Total	0.04	0.03	0.15	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	15.2	15.2	< 0.005	< 0.005	0.00	15.3

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	1/15/2026	5.00	10.0	Existing Fencing/Sidewalk
Site Preparation	Site Preparation	9/30/2025	10/13/2025	5.00	10.0	Clearing & Grubbing
Rough Grading & Over-ex	Grading	10/14/2025	11/10/2025	5.00	20.0	Rough Grading
Finish Grading	Grading	11/17/2026	12/7/2026	5.00	15.0	Finish Grading
Well Site Fencing	Building Construction	11/11/2025	12/22/2025	5.00	30.0	Block Wall & Gates
Well Drilling	Building Construction	12/23/2025	4/6/2026	5.00	75.0	Well Drilling
Water Tank Construction	Building Construction	4/7/2026	7/6/2026	5.00	65.0	Tank Construction & Coating

Treatment System	Building Construction	6/2/2026	7/13/2026	5.00	30.0	Treatment System
Piping & Appurtenances	Building Construction	7/14/2026	9/21/2026	5.00	50.0	Above Ground Piping & Appurtenances
Pump & Motor Installation	Building Construction	5/5/2026	5/18/2026	5.00	10.0	Well Pump & Motor
Hydropneumatic Tank	Building Construction	5/19/2026	6/1/2026	5.00	10.0	Hydropneumatic Tank
Site Electrical	Building Construction	7/28/2026	9/28/2026	5.00	45.0	Electrical Equipment
Backup Generator	Building Construction	8/25/2026	9/14/2026	5.00	15.0	Backup Generator
Paving & Sidewalk	Paving	12/8/2026	1/5/2027	5.00	21.0	Site Paving & Tie-in Location
Site Painting	Architectural Coating	1/5/2027	2/15/2027	5.00	30.0	Paint Piping & Storage Tanks
Underground Pipeline	Trenching	9/22/2026	10/26/2026	5.00	25.0	Underground Piping
Underground Electrical	Trenching	9/1/2026	10/5/2026	5.00	25.0	Underground Electrical

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Demolition	Skid Steer Loaders	Diesel	Average	1.00	4.00	71.0	0.37
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Rough Grading & Over-ex	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	148	0.41
Rough Grading & Over-ex	Rollers	Diesel	Average	1.00	6.00	367	0.40
Rough Grading & Over-ex	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37

Finish Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	367	0.40
Finish Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Well Site Fencing	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Well Drilling	Bore/Drill Rigs	Diesel	Average	1.00	8.00	367	0.29
Well Drilling	Forklifts	Diesel	Average	1.00	4.00	82.0	0.20
Well Drilling	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Well Drilling	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Water Tank Construction	Cranes	Diesel	Average	1.00	2.00	367	0.29
Water Tank Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	82.0	0.20
Water Tank Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Water Tank Construction	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Treatment System	Cranes	Diesel	Average	1.00	1.00	367	0.29
Treatment System	Generator Sets	Diesel	Average	2.00	2.00	14.0	0.20
Treatment System	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Piping & Appurtenances	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.29
Piping & Appurtenances	Generator Sets	Diesel	Average	1.00	4.00	82.0	0.20
Pump & Motor Installation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Hydropneumatic Tank	Cranes	Diesel	Average	1.00	1.00	367	0.29
Hydropneumatic Tank	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Hydropneumatic Tank	Generator Sets	Diesel	Average	1.00	3.00	14.0	0.74

Site Electrical	Forklifts	Diesel	Average	1.00	4.00	82.0	0.20
Site Electrical	Tractors/Loaders/Backhoes	Diesel	Average	2.00	4.00	84.0	0.37
Backup Generator	Cranes	Diesel	Average	1.00	1.00	367	0.29
Backup Generator	Tractors/Loaders/Backhoes	Diesel	Average	1.00	1.00	84.0	0.37
Paving & Sidewalk	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Paving & Sidewalk	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving & Sidewalk	Pavers	Diesel	Average	1.00	4.00	81.0	0.42
Paving & Sidewalk	Rollers	Diesel	Average	1.00	4.00	36.0	0.38
Site Painting	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Site Painting	Generator Sets	Diesel	Average	1.00	5.00	14.0	0.74
Underground Pipeline	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Underground Pipeline	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
Underground Pipeline	Air Compressors	Diesel	Average	1.00	3.00	37.0	0.48
Underground Electrical	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
Underground Electrical	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Underground Electrical	Generator Sets	Diesel	Average	1.00	1.00	14.0	0.74

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Demolition	Skid Steer Loaders	Diesel	Average	1.00	4.00	71.0	0.37
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	148	0.41

Site Preparation	Tractors/Loaders/Back	Diesel	Average	1.00	8.00	84.0	0.37
Rough Grading & Over-ex	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	148	0.41
Rough Grading & Over-ex	Rollers	Diesel	Average	1.00	6.00	367	0.40
Rough Grading & Over-ex	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Finish Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	367	0.40
Finish Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Well Site Fencing	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Well Drilling	Bore/Drill Rigs	Diesel	Average	1.00	8.00	367	0.29
Well Drilling	Forklifts	Diesel	Average	1.00	4.00	82.0	0.20
Well Drilling	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Well Drilling	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Water Tank Construction	Cranes	Diesel	Average	1.00	2.00	367	0.29
Water Tank Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	82.0	0.20
Water Tank Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Water Tank Construction	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Treatment System	Cranes	Diesel	Average	1.00	1.00	367	0.29
Treatment System	Generator Sets	Diesel	Average	2.00	2.00	14.0	0.20
Treatment System	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Piping & Appurtenances	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.29

Piping & Appurtenances	Generator Sets	Diesel	Average	1.00	4.00	82.0	0.20
Pump & Motor Installation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Hydropneumatic Tank	Cranes	Diesel	Average	1.00	1.00	367	0.29
Hydropneumatic Tank	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Hydropneumatic Tank	Generator Sets	Diesel	Average	1.00	3.00	14.0	0.74
Site Electrical	Forklifts	Diesel	Average	1.00	4.00	82.0	0.20
Site Electrical	Tractors/Loaders/Backhoes	Diesel	Average	2.00	4.00	84.0	0.37
Backup Generator	Cranes	Diesel	Average	1.00	1.00	367	0.29
Backup Generator	Tractors/Loaders/Backhoes	Diesel	Average	1.00	1.00	84.0	0.37
Paving & Sidewalk	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Paving & Sidewalk	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving & Sidewalk	Pavers	Diesel	Average	1.00	4.00	81.0	0.42
Paving & Sidewalk	Rollers	Diesel	Average	1.00	4.00	36.0	0.38
Site Painting	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Site Painting	Generator Sets	Diesel	Average	1.00	5.00	14.0	0.74
Underground Pipeline	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Underground Pipeline	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
Underground Pipeline	Air Compressors	Diesel	Average	1.00	3.00	37.0	0.48
Underground Electrical	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
Underground Electrical	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Underground Electrical	Generator Sets	Diesel	Average	1.00	1.00	14.0	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	5.00	17.3	LDA,LDT1,LDT2
Demolition	Vendor	—	10.6	HHDT,MHDT
Demolition	Hauling	0.10	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	17.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.6	HHDT,MHDT
Site Preparation	Hauling	1.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Rough Grading & Over-ex	—	—	—	—
Rough Grading & Over-ex	Worker	7.50	17.3	LDA,LDT1,LDT2
Rough Grading & Over-ex	Vendor	—	10.6	HHDT,MHDT
Rough Grading & Over-ex	Hauling	0.00	20.0	HHDT
Rough Grading & Over-ex	Onsite truck	—	—	HHDT
Paving & Sidewalk	—	—	—	—
Paving & Sidewalk	Worker	17.5	17.3	LDA,LDT1,LDT2
Paving & Sidewalk	Vendor	—	10.6	HHDT,MHDT
Paving & Sidewalk	Hauling	0.00	20.0	HHDT
Paving & Sidewalk	Onsite truck	—	—	HHDT
Site Painting	—	—	—	—
Site Painting	Worker	0.08	17.3	LDA,LDT1,LDT2
Site Painting	Vendor	—	10.6	HHDT,MHDT
Site Painting	Hauling	0.00	20.0	HHDT

Site Painting	Onsite truck	—	—	HHDT
Finish Grading	—	—	—	—
Finish Grading	Worker	5.00	17.3	LDA,LDT1,LDT2
Finish Grading	Vendor	—	10.6	HHDT,MHDT
Finish Grading	Hauling	2.00	20.0	HHDT
Finish Grading	Onsite truck	—	—	HHDT
Well Site Fencing	—	—	—	—
Well Site Fencing	Worker	6.00	17.3	LDA,LDT1,LDT2
Well Site Fencing	Vendor	0.02	10.6	HHDT,MHDT
Well Site Fencing	Hauling	0.00	20.0	HHDT
Well Site Fencing	Onsite truck	—	—	HHDT
Well Drilling	—	—	—	—
Well Drilling	Worker	6.00	17.3	LDA,LDT1,LDT2
Well Drilling	Vendor	0.02	10.6	HHDT,MHDT
Well Drilling	Hauling	0.00	20.0	HHDT
Well Drilling	Onsite truck	—	—	HHDT
Water Tank Construction	—	—	—	—
Water Tank Construction	Worker	4.00	17.3	LDA,LDT1,LDT2
Water Tank Construction	Vendor	0.02	10.6	HHDT,MHDT
Water Tank Construction	Hauling	0.00	20.0	HHDT
Water Tank Construction	Onsite truck	—	—	HHDT
Treatment System	—	—	—	—
Treatment System	Worker	4.00	17.3	LDA,LDT1,LDT2
Treatment System	Vendor	0.02	10.6	HHDT,MHDT
Treatment System	Hauling	0.00	20.0	HHDT
Treatment System	Onsite truck	—	—	HHDT
Piping & Appurtenances	—	—	—	—
Piping & Appurtenances	Worker	4.00	17.3	LDA,LDT1,LDT2

Piping & Appurtenances	Vendor	0.02	10.6	HHDT,MHDT
Piping & Appurtenances	Hauling	0.00	20.0	HHDT
Piping & Appurtenances	Onsite truck	—	—	HHDT
Pump & Motor Installation	—	—	—	—
Pump & Motor Installation	Worker	0.04	17.3	LDA,LDT1,LDT2
Pump & Motor Installation	Vendor	0.02	10.6	HHDT,MHDT
Pump & Motor Installation	Hauling	0.00	20.0	HHDT
Pump & Motor Installation	Onsite truck	—	—	HHDT
Hydropneumatic Tank	—	—	—	—
Hydropneumatic Tank	Worker	0.04	17.3	LDA,LDT1,LDT2
Hydropneumatic Tank	Vendor	0.02	10.6	HHDT,MHDT
Hydropneumatic Tank	Hauling	0.00	20.0	HHDT
Hydropneumatic Tank	Onsite truck	—	—	HHDT
Site Electrical	—	—	—	—
Site Electrical	Worker	0.04	17.3	LDA,LDT1,LDT2
Site Electrical	Vendor	0.02	10.6	HHDT,MHDT
Site Electrical	Hauling	0.00	20.0	HHDT
Site Electrical	Onsite truck	—	—	HHDT
Backup Generator	—	—	—	—
Backup Generator	Worker	0.04	17.3	LDA,LDT1,LDT2
Backup Generator	Vendor	0.02	10.6	HHDT,MHDT
Backup Generator	Hauling	0.00	20.0	HHDT
Backup Generator	Onsite truck	—	—	HHDT
Underground Pipeline	—	—	—	—
Underground Pipeline	Worker	7.50	17.3	LDA,LDT1,LDT2
Underground Pipeline	Vendor	—	10.6	HHDT,MHDT
Underground Pipeline	Hauling	0.00	20.0	HHDT
Underground Pipeline	Onsite truck	—	—	HHDT

Underground Electrical	—	—	—	—
Underground Electrical	Worker	7.50	17.3	LDA,LDT1,LDT2
Underground Electrical	Vendor	—	10.6	HHDT,MHDT
Underground Electrical	Hauling	0.00	20.0	HHDT
Underground Electrical	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	5.00	17.3	LDA,LDT1,LDT2
Demolition	Vendor	—	10.6	HHDT,MHDT
Demolition	Hauling	0.10	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	17.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.6	HHDT,MHDT
Site Preparation	Hauling	1.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Rough Grading & Over-ex	—	—	—	—
Rough Grading & Over-ex	Worker	7.50	17.3	LDA,LDT1,LDT2
Rough Grading & Over-ex	Vendor	—	10.6	HHDT,MHDT
Rough Grading & Over-ex	Hauling	0.00	20.0	HHDT
Rough Grading & Over-ex	Onsite truck	—	—	HHDT
Paving & Sidewalk	—	—	—	—
Paving & Sidewalk	Worker	17.5	17.3	LDA,LDT1,LDT2
Paving & Sidewalk	Vendor	—	10.6	HHDT,MHDT
Paving & Sidewalk	Hauling	0.00	20.0	HHDT
Paving & Sidewalk	Onsite truck	—	—	HHDT

Site Painting	—	—	—	—
Site Painting	Worker	0.08	17.3	LDA,LDT1,LDT2
Site Painting	Vendor	—	10.6	HHDT,MHDT
Site Painting	Hauling	0.00	20.0	HHDT
Site Painting	Onsite truck	—	—	HHDT
Finish Grading	—	—	—	—
Finish Grading	Worker	5.00	17.3	LDA,LDT1,LDT2
Finish Grading	Vendor	—	10.6	HHDT,MHDT
Finish Grading	Hauling	2.00	20.0	HHDT
Finish Grading	Onsite truck	—	—	HHDT
Well Site Fencing	—	—	—	—
Well Site Fencing	Worker	6.00	17.3	LDA,LDT1,LDT2
Well Site Fencing	Vendor	0.02	10.6	HHDT,MHDT
Well Site Fencing	Hauling	0.00	20.0	HHDT
Well Site Fencing	Onsite truck	—	—	HHDT
Well Drilling	—	—	—	—
Well Drilling	Worker	6.00	17.3	LDA,LDT1,LDT2
Well Drilling	Vendor	0.02	10.6	HHDT,MHDT
Well Drilling	Hauling	0.00	20.0	HHDT
Well Drilling	Onsite truck	—	—	HHDT
Water Tank Construction	—	—	—	—
Water Tank Construction	Worker	4.00	17.3	LDA,LDT1,LDT2
Water Tank Construction	Vendor	0.02	10.6	HHDT,MHDT
Water Tank Construction	Hauling	0.00	20.0	HHDT
Water Tank Construction	Onsite truck	—	—	HHDT
Treatment System	—	—	—	—
Treatment System	Worker	4.00	17.3	LDA,LDT1,LDT2
Treatment System	Vendor	0.02	10.6	HHDT,MHDT

Treatment System	Hauling	0.00	20.0	HHDT
Treatment System	Onsite truck	—	—	HHDT
Piping & Appurtenances	—	—	—	—
Piping & Appurtenances	Worker	4.00	17.3	LDA,LDT1,LDT2
Piping & Appurtenances	Vendor	0.02	10.6	HHDT,MHDT
Piping & Appurtenances	Hauling	0.00	20.0	HHDT
Piping & Appurtenances	Onsite truck	—	—	HHDT
Pump & Motor Installation	—	—	—	—
Pump & Motor Installation	Worker	0.04	17.3	LDA,LDT1,LDT2
Pump & Motor Installation	Vendor	0.02	10.6	HHDT,MHDT
Pump & Motor Installation	Hauling	0.00	20.0	HHDT
Pump & Motor Installation	Onsite truck	—	—	HHDT
Hydropneumatic Tank	—	—	—	—
Hydropneumatic Tank	Worker	0.04	17.3	LDA,LDT1,LDT2
Hydropneumatic Tank	Vendor	0.02	10.6	HHDT,MHDT
Hydropneumatic Tank	Hauling	0.00	20.0	HHDT
Hydropneumatic Tank	Onsite truck	—	—	HHDT
Site Electrical	—	—	—	—
Site Electrical	Worker	0.04	17.3	LDA,LDT1,LDT2
Site Electrical	Vendor	0.02	10.6	HHDT,MHDT
Site Electrical	Hauling	0.00	20.0	HHDT
Site Electrical	Onsite truck	—	—	HHDT
Backup Generator	—	—	—	—
Backup Generator	Worker	0.04	17.3	LDA,LDT1,LDT2
Backup Generator	Vendor	0.02	10.6	HHDT,MHDT
Backup Generator	Hauling	0.00	20.0	HHDT
Backup Generator	Onsite truck	—	—	HHDT
Underground Pipeline	—	—	—	—

Underground Pipeline	Worker	7.50	17.3	LDA,LDT1,LDT2
Underground Pipeline	Vendor	—	10.6	HHDT,MHDT
Underground Pipeline	Hauling	0.00	20.0	HHDT
Underground Pipeline	Onsite truck	—	—	HHDT
Underground Electrical	—	—	—	—
Underground Electrical	Worker	7.50	17.3	LDA,LDT1,LDT2
Underground Electrical	Vendor	—	10.6	HHDT,MHDT
Underground Electrical	Hauling	0.00	20.0	HHDT
Underground Electrical	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%
Sweep paved roads once per month	9%	9%

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)
Site Painting	0.00	0.00	150	50.0	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)

Demolition	0.00	0.00	0.00	2.00	—
Site Preparation	40.0	40.0	0.90	0.00	—
Rough Grading & Over-ex	0.00	0.00	0.90	0.00	—
Finish Grading	233	0.00	0.90	0.00	—
Paving & Sidewalk	0.00	0.00	0.00	0.00	0.20

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
User Defined Industrial	0.20	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005
2027	0.00	204	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
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
User Defined Industrial	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

5.10.1.2. Mitigated

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	150	50.0	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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)
User Defined Industrial	600,000	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Industrial	600,000	204	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)
User Defined Industrial	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	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

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

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

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

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
Emergency Generator	Diesel	1.00	0.00	40.0	1,000	0.73

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
Urban	Entisols	0.90	0.90

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Urban	Entisols	0.90	0.90

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Urban	0.90	0.90

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Urban	0.90	0.90

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.3	annual days of extreme heat
Extreme Precipitation	0.75	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	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	1	5	1
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	3	4	4	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	2	4	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 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	8	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	3	3	8	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	2	7	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 include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

6.4.1. Temperature and Extreme Heat

User Selected Measures	Co-Benefits Achieved	Exposure Reduction	Sensitivity Reduction	Adaptive Capacity Increase
EH-5: Upgrade to Efficient Equipment/Infrastructure	Energy and Fuel Savings	—	—	3.00
MH-1: Strengthen Energy Infrastructure	Enhanced Energy Security, Improved Air Quality, Social Equity	—	2.00	—
MH-22: Improve Poor Drainage	Improved Public Health	—	1.00	—
MH-39: Implement Pervious and Climate-Smart Surfaces	Energy and Fuel Savings, Improved Air Quality, Improved Ecosystem Health, Improved Public Health, Water Conservation	—	1.00	—

6.4.2. Drought

User Selected Measures	Co-Benefits Achieved	Exposure Reduction	Sensitivity Reduction	Adaptive Capacity Increase
D-4: Educate on Water Conservation	Water Conservation	—	—	1.00
D-7: Diversify Water Supply Sources	Improved Public Health, Social Equity	—	—	4.00
D-8: Develop Groundwater Sustainability Plan	Improved Ecosystem Health	—	—	2.00
MH-39: Implement Pervious and Climate-Smart Surfaces	Energy and Fuel Savings, Improved Air Quality, Improved Ecosystem Health, Improved Public Health, Water Conservation	—	1.00	—

6.4.3. Air Quality Degradation

User Selected Measures	Co-Benefits Achieved	Exposure Reduction	Sensitivity Reduction	Adaptive Capacity Increase
EH-5: Upgrade to Efficient Equipment/Infrastructure	Energy and Fuel Savings	—	—	3.00

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	82.5
AQ-PM	96.7
AQ-DPM	61.9
Drinking Water	73.1
Lead Risk Housing	64.7
Pesticides	81.9
Toxic Releases	27.4
Traffic	23.8
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	32.4
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	0.00
Solid Waste	52.9
Sensitive Population	—
Asthma	68.7
Cardio-vascular	98.6
Low Birth Weights	32.0
Socioeconomic Factor Indicators	—
Education	94.0
Housing	66.1
Linguistic	89.5

Poverty	94.5
Unemployment	95.5

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	1.552675478
Employed	3.400487617
Median HI	11.75413833
Education	—
Bachelor's or higher	4.427049917
High school enrollment	25.31759271
Preschool enrollment	34.72346978
Transportation	—
Auto Access	64.27563198
Active commuting	19.79982035
Social	—
2-parent households	50.76350571
Voting	12.78070063
Neighborhood	—
Alcohol availability	49.9550879
Park access	29.77030669
Retail density	26.49813936
Supermarket access	55.357372
Tree canopy	2.617733864
Housing	—
Homeownership	47.60682664

Housing habitability	38.31643783
Low-inc homeowner severe housing cost burden	48.49223662
Low-inc renter severe housing cost burden	47.02938535
Uncrowded housing	13.80726293
Health Outcomes	—
Insured adults	12.98601309
Arthritis	0.0
Asthma ER Admissions	32.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	81.6
Cognitively Disabled	72.6
Physically Disabled	92.6
Heart Attack ER Admissions	17.5
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	7.8
Elderly	98.1
English Speaking	7.8
Foreign-born	68.8
Outdoor Workers	0.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	77.5
Traffic Density	46.9
Traffic Access	0.0
Other Indices	—
Hardship	96.5
Other Decision Support	—
2016 Voting	16.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0
Healthy Places Index Score for Project Location (b)	6.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	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

Measure Title	Co-Benefits Achieved
CCD-1: Consult Pre-existing Community Knowledge/Priorities	Social Equity
IE-1: Prioritize Outreach to Communities of Color and Underserved Groups	Social Equity
IE-4: Inclusive Community Meetings	Social Equity

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	Actual lot acreage
Construction: Construction Phases	Estimated project schedule
Construction: Off-Road Equipment	Estimated Construction Equipment Needed for each phase
Construction: Dust From Material Movement	Lot Area added for Total Acres Graded
Construction: Trips and VMT	Estimated # One-way Trips/day added for each phase.
Construction: On-Road Fugitive Dust	Construction phase estimates added
Construction: Architectural Coatings	—
Construction: Paving	Actual paved area.
Operations: Energy Use	Based on estimated electricity demand

CITY OF McFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT
(PROJECT NO. EDWG-1510013-003C)

EXHIBIT D
"BIOLOGICAL CLEARANCE SURVEY"

BIOLOGICAL RESOURCE EVALUATION

General Plan Amendment/Zone Change
Assessor's Parcel Map Number
201-010-36
County of Kern
McFarland, California

Prepared for:

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Prepared by:

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28 July 2025

EXECUTIVE SUMMARY

Pruett Biological Resource Consulting, Inc. (PruettBio) has prepared this biological resource evaluation for a proposed Site Plan Review of a portion of Assessor's Parcel Numbers (APN) 201-010-36**.** The project consists of approximately 1.16 gross acres (0.47 hectares)(project) Section 12, Township 26 South, Range 25 East, Mount Diablo Base and Meridian. The project is located approximately 400 feet southwest of the intersection of Elmo Highway and Davis Ave, within the incorporated limits of the City of McFarland, County of Kern, California.

The project is located within the geographic range of several federal-, and state-listed, threatened and/or endangered plant and animal taxa. Several non-listed, special-status species also have the potential to occur in the vicinity of the project.

The purpose of this report is to document biological resources identified during a reconnaissance-level field study of the project site and include potential biological resources identified during a literature review of the site and vicinity, identify potential impacts to biological resources resulting from the project. Evaluation of potential impacts to plant and animal species are required under federal and state regulation during a General Plan Amendment and Zone Change. California Environmental Quality Act (CEQA) Appendix G thresholds have been used to evaluate potential impacts to the biological resources from the proposed project development. Avoidance and minimization measures for implementation prior to and during project activities are recommended as appropriate.

The California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS) have not been contacted regarding the preparation of this report. Appendix B, Special-Status Plant and Animal Evaluations, satisfy the requirements for an initial determination of potential impacts under the CEQA Appendix G thresholds. If CEQA threshold determinations warrant, further consultation may be required with CDFW and USFWS. If additional consultation with the agencies results in the need for Application for a California Incidental Take Permit, Cal. Code Regs., tit. 14, § 783.2 outlines requirements for detailed species-specific take analysis, proposed measures to minimize and fully mitigate impacts, compliance monitoring, and funding. A detailed description satisfying Cal. Code Regs., tit. 14, § 783.2 is not required to meet the CEQA Appendix G thresholds.

A literature review was conducted of the site and vicinity, prior to the field study, of the biological resources known to occur based on recorded, direct observation, or potentially occurring in the project impact area based on current or historical habitat conditions. During the field study, existing habitat conditions, direct observations and/or species sign was recorded to assess the potential for occurrence of special-status species. This report includes an evaluation of the potential for those special-status biological resources not observed during the field study, with the potential to occur on the property based on the habitat conditions observed.

The project is in northwestern McFarland in an area historically farmed. Urban development has increased along the margins of McFarland in the past 50 years and has resulted in the conversion of farmland to residential and commercial properties. The project is solely vacant land. The project is surrounded by intensive agricultural production, residential development, and commercial development. No undisturbed, native, or recovering habitat is present on the site or adjacent parcels.

The federal and state database queries yielded 12 special-status plant species and 18 special-status animal species as potentially occurring within the vicinity of the project site. Of these, 5 plant species, and 10 animal species have federal-, and/or state-listing and are afforded protection under federal or state law.

A query of the California Native Plant Society (CNPS) database was made for the quadrangle in which the project exists and the eight-quadrangles surrounding the project. The CNPS tracks plant species that

do not meet the CEQA Section 15380 criteria for listing as threatened or endangered and are afforded no protection under federal or state law. A United States Geologic Service (USGS) nine-quadrangle query additionally includes a search area beyond a standard 10-mile radius. Plant species meeting the criteria for Special Status Plants as defined in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018) and evaluated under CEQA Section 15380 have been included in this report.

Some California Rare Plant Rank (CRPR) 4 taxa may meet the Section 15380 definition of an endangered, rare, or threatened species, and in the definition of CRPR 4, CNPS and CDFW suggest additional reasons for including CRPR 4 taxa in a CEQA analysis. These reasons include Regionally Rare Taxa. Considered locally significant plants, that is, plants that are not rare from a statewide perspective but are rare or uncommon in a local context such as within a county or region (CEQA Guidelines, § 15125, subd. (c)), or as designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). “Locally rare” has not been generally defined, but in counties where a “locally rare” policy exists, it applies to taxa with only five to 10 known occurrences in that county.

The California Natural Diversity Database (CNDDB), Information for Planning and Consultation (IPaC), and CNPS lists were cross-referenced for consistency. A separate CNDDB query for the County of Kern was also generated to evaluate plant species for local significance.

No special-status plants or animals or their sign were observed during the field study. The development of the proposed project is not expected to result in direct and indirect impacts, in the form of “incidental take” of a threatened, endangered, or otherwise protected species. The proposed project will not have a substantial adverse effect on any riparian habitat, federally protected wetlands, native resident or migratory wildlife corridors, or other sensitive natural community. The project will not conflict with existing or adopted Habitat Conservation Plans, Natural Community Conservation Plans, local or regional conservation plans, or local ordinances protecting biological resources. Implementation of standard measures for the protection of biological resources are recommended to avoid and minimize potential impact to general wildlife.

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INTRODUCTION

Pruett Biological Resource Consulting, Inc. (PruettBio) has prepared this biological resource evaluation for the proposed development within APN 201-010-36**.** The project consists of 1.16 gross acres (0.47 hectares)(project) Section 12, Township 26 South, Range 25 East, Mount Diablo Base and Meridian. The project is approximately 400 feet southwest of the intersection of Elmo Highway and Davis Ave, within the incorporated limits of the City of McFarland, County of Kern, California. The report documents biological resources identified during fieldwork conducted on the project site and those identified through a literature search as potentially occurring based on known observations or historic habitat conditions. The report uses the information collected during the field study and literature search to evaluate potential impacts to biological resources, resulting from the project. The report is intended to assist in the analysis of the proposed project for a Site Plan Review.

Listed plant and animal species are protected under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA). Protection of other non-listed, special-status species is afforded under additional regulation including the Migratory Bird Treaty Act (MBTA). Pursuant to the California Environmental Quality Act (CEQA) impacts to non-listed, special-status species must be evaluated. Where necessary, the report recommends avoidance and minimization measures for implementation prior to and during project activities. The report is intended to provide technical information in support of a CEQA preliminary review. For the purposes of this report, potential impacts to the biological resources of the proposed project were evaluated in accordance with Appendix G of the *CEQA Guidelines* (2025).

PROJECT LEGAL DESCRIPTION

The project consists of approximately 1.16 gross acres (0.47 hectares) of APN 201-010-36. The project site is located approximately 400 feet southwest of the intersection of Elmo Highway and Davis Ave, Section 12, Township 26 South, Range 25 East, Mount Diablo Base and Meridian.

PROJECT SETTING AND PHYSICAL DESCRIPTION

The project site is in the southern San Joaquin Valley; a broad, treeless plain in the rain shadow of the Inner Coast Ranges. The region's climate can be characterized as Mediterranean; with hot, dry summers and cool, moist winters. Summer high temperatures typically exceed 100 °Fahrenheit (°F); with an average of 110 days per year over 90 °F. Winter temperatures in the San Joaquin Valley are mild, with an average of only 16 days per year with frost (Twisselmann 1967).

Rainfall varies, increasing from west to east, with the west side of the valley receiving an average of around 4 inches (10 centimeters) per year and the east side averaging about 6 inches (15 centimeters) per year. Winter fog, called Tule fog, sometimes forms during the months of November, December, and January, supplementing the annual precipitation. Approximately 90% of the rainfall in the region occurs between November 1 and April 1. Drought cycles occur periodically, becoming severe enough that plant and animal populations can experience large fluctuations. The vegetation communities in the San Joaquin Valley are distinguishable from the Mojave Desert to the east due to Tule fog, higher humidity, and isolation from continental climatic influences by mountain ranges (Twisselmann 1967).

The general topography of the area is generally flat at about 345 feet (108 meters) above mean sea level. The project is solely vacant land and the parcel of the project also includes a sump. The project is surrounded by residential and commercial development. The project and vicinity were historically farmed for decades. The area north of the project remains land used for intensive agricultural production. Historical aerial imagery and records shows residential development southeast and commercial development east of the project beginning in 1987. Residential development has since continued to the west and south of the project. A second commercial building adjacent to and east of the project was completed in 2024. No undisturbed, native, or recovering habitat is present on the project site or adjacent parcels.

METHODS

LITERATURE REVIEW

PruettBio conducted a literature review to identify known observations and potential for listed, or otherwise special-status, species to occur in the vicinity of the project site. A standard, 10-mile (16-kilometer) radius query was performed. Database records reviewed included:

- **United States Fish & Wildlife Service (USFWS) IPaC:** The IPaC report generates a list of federal-listed species and other resources under the jurisdiction of the USFWS, including designated critical habitat for listed species, National Wildlife Refuge lands, and Wetlands in the National Wetlands Inventory. The list includes resources that are outside of the project site, but that have the potential to be impacted by project activities.

- **USFWS National Wetlands Inventory:** The Wetlands Mapper is an online inventory integrating digital map data and other resources to provide current information regarding the status of national wetlands, riparian, and deepwater habitats.

- **United States Department of Agriculture (USDA) WebSoil Survey:** The report is an online database providing soil data produced by the National Cooperative Soil Survey, a joint effort of the USDA and other federal, state, and local agencies. The information drawn for the Soil Survey of Kern County, California, Northwestern Part was originally drawn from fieldwork completed in 1981 with soil names and descriptions approved in 1982.

- **California Natural Diversity Database (CNDDB-RareFind 5):** The CNDDB is a database of listed, or otherwise special-status, plant and animal species and sensitive communities maintained by the California Department of Fish and Wildlife (CDFW). The information queried for this report included a standard 10-mile radius of the project site.

- **California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants:** CNPS is a private, professional organization that maintains a database evaluating the current conservation status of California's rare, threatened, and endangered plant species. The information queried for this report included a standard 10-mile radius of the project site. The list includes resources that are outside of the project site, but that have the potential to be impacted by project activities based on known historic or current habitat features. The data base was compared to the CNDDB and IPaC queries for consistency.

FIELD STUDY

A reconnaissance-level, biological field study was conducted by Jacob Spriester on July 25, 2025. The project was surveyed by walking the perimeter and random transects to evaluate all representative habitat features of the site. The field study conducted, allowed for 100% visual coverage of the project site. Field notes included observations of all plant and wildlife species observed. Direct observations and/or species sign was recorded to assess the potential for occurrence. Land cover types and general habitat conditions were recorded and photographed. Special-status species and habitat features, such as vegetation communities or ephemeral channels, were also recorded and photographed if observed.

Coordinates for important biological resource elements and direct observations of special-status species were recorded using a handheld geographic positioning system unit. If observed, San Joaquin kit fox (SJKF) dens were classified as defined by the *USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011). All plant taxa encountered were identified to the extent possible given the diagnostic features present. Identifications were made using keys contained in *The Jepson Manual: Vascular Plants of California* and online updates containing revisions to taxonomic treatments (Baldwin et al. 2012; Jepson Flora Project 2015).

RESULTS

This section summarizes the results of the field study conducted on the project site and evaluates those results for the known or potential for occurrence of special-status species based on the literature review and database queries and pursuant to statutory regulation. Discussions are provided describing the existing habitat conditions including vegetation communities, land cover and current use; soils; special-status biological resources potentially occurring in the vicinity of the project site; the potential for jurisdictional resources including designated critical habitat and riparian/wetland/water resource features; the potential for wildlife migration corridors and nursery sites; and regional and local policy.

VEGETATION COMMUNITIES AND LAND COVER

The project site is located at the northwest edge of urban development of McFarland. Before conversion to farmland, the original vegetive communities of the project site were Non-native Grassland (Holland 42200) and Valley Saltbush Scrub (Holland 36220). No undisturbed, native, or recovering habitat is present on the project site, adjacent parcels, or general vicinity of the project. The project is solely vacant land and the parcel of the project also includes a sump. The project is surrounded by intensive agricultural production, residential development, and commercial development. The project and vicinity were historically farmed for decades. Historical aerial imagery going back to 1985 shows residential development of the project with much of the surrounding land under row crops. Aerial imagery shows that by 1987, residential and commercial development had begun along Davis Ave in the immediate vicinity of the project. Residential and commercial development has continued to the south and west since. Land north of the project remains under row crops. No undisturbed, native, or recovering habitat is present on the project site or adjacent parcels. The potential for any native herbaceous species is extremely low due to ongoing disturbance. The project site and margins are dominated by ruderal/invasive plant species.

SOILS

Map Unit Symbol	Map Unit Name	Description
192	McFarland loam	This soil is loam found on flood plains and alluvial fans and is formed of alluvium derived from granite material.

Source: NRCS 2025

BIOLOGICAL RESOURCES

The literature review and database queries yielded 12 special-status plant species as potentially occurring within the vicinity of the project site. Eighteen animal species were identified as potentially occurring in the region of the project site. No evidence of any listed animal species was observed during the field study. No evidence of any locally rare plant or animal species was observed. No evidence of otherwise special-status plant or animal species, or animal species sign was observed during the field study.

No focused, protocol-level surveys were conducted for the preparation of this report. The field study was conducted outside of the blooming period for many of the special-status plant species potentially occurring in the vicinity of the project. The evaluation of special-status species that were found during the literature review with a potential to occur in the region are included in Appendix B.

Special-Status Plant Species

The federal and state database queries yielded 12 special-status plant species as potentially occurring within the vicinity of the project site. A query of the California Native Plant Society (CNPS) database was made for the nine-quadrangles surrounding the project. A USGS nine-quadrangle query additionally includes a search area beyond a standard 10-mile radius. Plant species meeting the criteria for Special Status Plants as defined in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant*

Populations and Sensitive Natural Communities (CDFW 2018) were evaluated under CEQA Section 15380.

Special-status plant species considered in this evaluation include all plant species that meet one or more of the following criteria:

- Listed or proposed for listing as threatened or endangered under ESA or candidates for possible future listing as threatened or endangered under the ESA (50 CFR §17.12).

- Listed or candidates for listing by the State of California as threatened or endangered under CESA (Fish and Game Code §2050 et seq.). A species, subspecies, or variety of plant is endangered when the prospects of its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, disease, or other factors (Fish and Game Code §2062). A plant is threatened when it is likely to become endangered in the foreseeable future in the absence of special protection and management measures (Fish and Game Code §2067).

- Listed as rare under the California Native Plant Protection Act (Fish and Game Code §1900 et seq.). A plant is rare when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens (Fish and Game Code §1901).

- Meet the definition of rare or endangered under CEQA §15380(b) and (d). Species that may meet the definition of rare or endangered include the following:
    - Species considered by the California Native Plant Society (CNPS) to be “rare, threatened or endangered in California” (Lists 1A, 1B and 2);
    - Species that may warrant consideration on the basis of local significance or recent biological information.
    - Some species included on the California Natural Diversity Database’s (CNDDB) Special Plants, Bryophytes, and Lichens List (California Department of Fish and Game 2008).

- Considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range or a species occurring on an uncommon soil type.

Some CRPR 4 taxa may meet the Section 15380 definition of an endangered, rare, or threatened species, and in the definition of CRPR 4, CNPS and CDFW suggest additional reasons for including CRPR 4 taxa in a CEQA analysis. These reasons include Regionally Rare Taxa. Considered locally significant plants, that is, plants that are not rare from a statewide perspective but are rare or uncommon in a local context such as within a county or region (CEQA Guidelines, § 15125, subd. (c)), or as designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). “Locally rare” has not been generally defined, but in counties where a “locally rare” policy exists, it applies to taxa with only five to 10 known occurrences in that county. The CNDDB, IPaC, and CNPS lists were cross-referenced for consistency.

Precipitation has been well above average to date, resulting in a good year for annual plant species observations. Of the 12 special-status plant species returned during database queries for the project vicinity, 5 species are either federally- or state-listed as threatened or endangered. Although CEQA requires consideration for impacts to locally significant plant species, no mitigation is legally required to compensate for impacts to non-listed plant species. No listed, or otherwise special-status plant species was observed during the fieldwork conducted for the preparation of this report. No listed, or otherwise special-status plant species, has been recorded as occurring within the project site.

Special-Status Animal Species

The federal and state database queries yielded 18 special-status animal species as potentially occurring within the vicinity of the project site. Of these, 10 animal species have federal-, and/or state-listing and are afforded protection under federal or state law. Special-status animal species considered in this evaluation include those that may occur in the project vicinity that have statutory protections. This includes federal- and state-listed (rare, threatened, or endangered; fully protected) species and candidates for listing under the respective endangered species acts. Species that are of special concern to the CDFW or the USFWS are included in this evaluation. Special-status bird species that are afforded protection under the MBTA which may nest on or within an approximate 10-mile (16-kilometer) radius of the project site are also evaluated. No evidence of any listed animal species was observed during the field study. No evidence of otherwise special-status animal species, or animal species sign was observed during the field study.

Designated Critical Habitat

The USFWS IPaC report and USFWS Designated Critical Habitat Mapper lists no Designated Critical Habitat (USFWS 2025). Designated Critical Habitats closest to the project site include vernal pool fairy shrimp (*Branchinecta lynchi*) approximately 13 miles north, Buena Vista Lake shrew (*Sorex ornatus relictus*) approximately 18.3-miles west/southwest of the project site, and California condor (*Gymnogyps californianus*) approximately 18.5-miles east. No suitable habitat for any of these species exists on the project site.

Jurisdictional Water Resource Features

Section 404 of the Federal Clean Water Act (CWA) regulates discharge of dredged and fill material into Waters of the United States. Wetlands are included under this jurisdiction. Proposed activities that may result in discharge of material into Waters of the U.S. require a permit review process by the U.S. Army Corps of Engineers as set forth under CWA section 404(b)(1). Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW before beginning any activity that will substantially modify a river, stream, or lake.

A search of the USFWS National Wetlands Inventory resulted in no riparian, wetlands, or other jurisdictional water features mapped on the project site (USFWS 2025). These results are consistent with the observed conditions within the survey area.

Special-Status Natural Communities

No special-status vegetation communities on the project site were identified by the USFWS IPaC query, the CNDDB, or the CNPS Inventory (USFWS 2025, CDFW 2025, CNPS 2025). These results are consistent with the observed conditions within the survey area.

Wildlife Migration Corridors and Nursery Sites

Wildlife corridors can be defined as connections between wildlife blocks that meet specific habitat needs for species movement generally during migratory periods but seasonally as well. Wildlife corridors generally contain habitat dissimilar to the surrounding vicinity and include examples such as riparian areas along rivers and streams, washes, canyons, or otherwise undisturbed areas within urbanization. Corridor width requirements can vary based on the needs of the species utilizing them. Development of the project would not impact wildlife migration corridors or nursery sites.

Regional and Local Policies

The proposed project will not conflict with existing or adopted Habitat Conservation Plans, Natural Community Conservation Plans, local or regional conservation plans, or local ordinances protecting biological resources.

IMPACT ANALYSIS AND RECOMMENDED MITIGATION MEASURES

CEQA Appendix G thresholds have been used to evaluate potential impacts to the biological resources from the proposed project. Appendix G provides an analysis of the impacts of the proposed project following the standards of CEQA and provides recommendations that, when implemented, would reduce impacts to less-than-significant levels. It is important to note that potential take of any federal- or state-listed species from project activities would require contacting the appropriate wildlife agency (the USFWS and/or the CDFW).

The California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS) have not been contacted regarding the preparation of this report. Appendix B, Special-Status Plant and Animal Evaluations, satisfy the requirements for an initial determination of potential impacts under the CEQA Appendix G thresholds. If CEQA threshold determinations warrant, further consultation may be required with CDFW and USFWS. If additional consultation with the agencies results in the need for Application for a California Incidental Take Permit, Cal. Code Regs., tit. 14, § 783.2 outlines requirements for detailed species-specific take analysis, proposed measures to minimize and fully mitigate impacts, compliance monitoring, and funding. A detailed description satisfying Cal. Code Regs., tit. 14, § 783.2 is not required to meet the CEQA Appendix G thresholds.

The project would create a significant impact to biological resources, based on the specifications in Appendix G of the CEQA Guidelines, if the following were to occur:

1. 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 Game or U.S. Fish and Wildlife Service;

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

3. Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

4. 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;

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

6. 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 following analysis discusses potential impacts associated with the development of the project and provides recommendations where appropriate to further reduce potential impacts.

1. **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, by the CDFW, or the USFWS?**

Direct and indirect impacts, in the form of "incidental take" of a threatened, endangered, or otherwise protected species, are not expected as a result of the development of the proposed project. Implementation of standard measures for the protection of biological resources are recommended to avoid and minimize potential impact to general wildlife. These measures include, but may not be limited to:

- A biological resource pre-activity survey conducted by a qualified biologist no more that 30-days before the start of construction activities,
- Biological resource monitoring during each initial phase of ground disturbance,
- Compliance reporting provided to the required oversight agencies for all biological resource field surveys, monitoring, and additional tasks as warranted.

If known or natal SJKF dens are identified at any time during construction, protocols enumerated in the *USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011) should be implemented, and the appropriate agencies contacted for guidance.

The project is within the historic range of Tipton kangaroo rat. The project was not included in the southwest focus area for the species in the previous habitat conservation plan. The most recent habitat suitability modeling (2021) does not include the project in any of the four tiers enumerated for suitability. Trapping would be required to confirm small mammal species occupying the project.

2. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the CDFW or the USFWS?

No 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 United States Fish and Wildlife Service exists on the project site. No adverse effect will occur as a result of the development of the proposed project and no mitigation measures are recommended.

3. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No features, identified in wetland categories, appear on the USFWS National Wetlands Inventory mapping (USFWS 2025) on the proposed, modified project site. No federally protected wetlands as defined by Section 404 of the Clean Water Act were identified during the field study conducted for the preparation of this report. No substantial adverse effect will occur as a result of the development of the project. No mitigation measures are recommended.

4. 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?

No migratory wildlife corridors were identified during the literature search or field study. The project will not interfere substantially with the movement of any native fish of wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. The following recommendations are provided for the general protection of bird species that may occur on the project site or vicinity in compliance with the MBTA:

If ground-disturbing activities are planned during the nesting season for migratory birds that may nest on or near the site (generally February 1 through August 31), nesting bird surveys are recommended prior to the commencement of ground disturbance for project activities. If nesting birds are present, no new construction or ground disturbance should occur within an appropriate avoidance area for that species until young have fledged, unless otherwise approved and monitored by a qualified onsite biologist.

Appropriate avoidance should be determined by a qualified biologist. In general, minimum avoidance zones for active nests should be implemented as follows: 1) ground or low-shrub nesting non-raptors – 300 feet (91 meters); 2) burrowing owl – as appropriate based on nest location, existing surrounding activity, and evaluation of owl behavior. Coordination with CDFW may be warranted. 3) Sensitive raptors (e.g., prairie falcon, golden eagle) – 0.5 miles (0.8 kilometers); 3) other raptors – 500 feet (152 meters).

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

There are no biological resources on the site which are protected by local policies. Impacts from conflicts with local policies will not occur. No additional mitigation measures are recommended.

6. 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 project does not conflict with any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No additional mitigation measures are recommended.

RECOMMENDED MITIGATION MEASURES

The following Avoidance and Minimization Measures (AMM) represent the authors professional opinion regarding reducing the probability of take occurring during project activities. The following AMMs are generally regarded as best management practices during construction activities in the southern San Joaquin valley, however they are not a substitute for procuring the appropriate state and federal permits to allow for take of special-status species during project activities and do not provide coverage should take occur during project activities. Communication with state and federal agencies regarding proposed AMMS is recommended prior to initial ground disturbance to fully comply with FESA, CESA, and CEQA.

These measures include, but may not be limited to:

- A biological resource pre-activity survey conducted by a qualified biologist no more that 30-days before the start of construction activities,
- Biological resource monitoring during each initial phase of ground disturbance,
- Compliance reporting provided to the required oversight agencies for all biological resource field surveys, monitoring, and additional tasks as warranted,
- A Worker Environmental Awareness Program outlining special-status species that may access, use or otherwise transverse the project area will be implemented,
- If known or natal SJKF dens are identified at any time during construction, protocols enumerated in the *USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011) should be implemented, and the appropriate agencies contacted for guidance.
- Vertical sided trenching deeper than 2-feet will include escape ramps at no more than a 1:1 ratio every 100 feet,
- Vertical sided holes that are not capable of being ramped should be covered or otherwise secured to the greatest extent practicable
- Pipes, conduit and similar material 3 inches or greater should be capped to prevent wildlife from becoming inadvertently trapped in the piping

The following recommendations are provided for the general protection of bird species that may occur on the project site or vicinity in compliance with the MBTA:

If ground-disturbing activities are planned during the nesting season for migratory birds that may nest on or near the site (generally February 1 through August 31), nesting bird surveys are recommended prior to the commencement of ground disturbance for project activities. If nesting birds are present, no new construction or ground disturbance should occur within an appropriate avoidance area for that species

until young have fledged, unless otherwise approved and monitored by a qualified onsite biologist. Appropriate avoidance should be determined by a qualified biologist. In general, minimum avoidance zones for active nests should be implemented as follows:

1) Ground or low-shrub nesting non-raptors – 300 feet (91 meters),
2) Burrowing owl – as appropriate based on nest location, existing surrounding activity, and evaluation of owl behavior. Coordination with CDFW may be warranted,
3) Sensitive raptors (e.g., prairie falcon, golden eagle) – 0.5 miles (0.8 kilometers),
4) Other raptors – 500 feet (152 meters).

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APPENDIX A

PROJECT VICINTY AND SITE



Figure A-1. Aerial photograph of the project and vicinity.



Figure A-2 Soil map of the project site (USDA, Natural Resources Conservation Service 2025).



Figure A-3. Photograph of the project site taken from the NW corner facing E (July 25, 2025).



Figure A-4. Photograph of the project site taken from near the NW corner facing S (July 25, 2025).



Figure A-5. Photograph of the project site from near the SE corner facing W (July 25, 2025).



Figure A-6. Photograph of the project site taken from the SE corner facing N (July 25, 2025).

APPENDIX B

SPECIAL-STATUS PLANT AND ANIMAL EVALUATION

Table B-1: Special-status Plants That May Occur in the Vicinity of the Project.

Scientific Name **Common Name**	**Status Fed/State/CNPS**	**Description**	**Blooming Period**	**Field Study Results/Potential for Occurrence**
Atriplex cordulata var. *erecticaulis* Earlimart orache	S/-/1B.2	Annual herb in the Chenopodiaceae family found in valley and foothill grassland between 130 and 330 feet (40-100 meters) in elevation. Known to occur in Fresno, Kern, Kings, and Tulare Counties.	August to September (November)	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. The nearest known occurrence found was 3.6 miles away from 1989. A more recent occurrence was found 5.7 miles away and recorded in 2017.
Calochortus striatus Alkali mariposa-lily	S/-/1B.2	Bulbiferous perennial herb in the Liliaceae family found in chaparral, chenopod scrub, meadows and seeps, and Mojavean desert scrub in alkaline and mesic soils between 230 and 5235 feet (70–1,595 meters). Known to occur in the Inyo, Kern, Los Angeles, San Bernardino, and Tulare Counties.	April to June	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. No occurrences were found within the vicinity, but this species is known to occur in the quad to the northwest.
Caulanthus californicus California jewelflower	E/E/1B.1	Annual herb in the Brassicaceae family found in chenopod scrub, pinyon and juniper woodland, and valley and foothill grassland habitats on sandy soils between 200 and 3,280 feet (61 – 1000) in elevation.	February to May	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. Two known occurrences were found 4.5 and 6.9 miles away and are presumed extirpated.

Scientific Name **Common Name**	**Status Fed/State/CNPS**	**Description**	**Blooming Period**	**Field Study Results/Potential for Occurrence**
Delphinium recurvatum Recurved larkspur	S/-/1B.2	Perennial herb in the Ranunculaceae family found in chenopod scrub, cismontane woodland, and valley and foothill grassland habitats below 2,590 feet (790 meters) in elevation. Known to occur in Kern and Tulare Counties.	March to June	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. The nearest known occurrence found was 5.8 miles away and presumed extirpated. The nearest known, extant occurrence found was 6.6 miles away from 1973.
Eremalche parryi ssp. *kernensis* Kern mallow	E/-/1B.2	Annual herb in the Malvaceae family found in chenopod scrub, pinyon and juniper woodland, and valley and foothill grassland habitats in clay, dry, openings, and sandy soils often at the edge of balds between 230 and 4,230 feet (70 – 1,290 meters) in elevation. Known to occur in Kern, Kings, San Luis Obispo, Santa Barbara, Tulare, and Ventura Counties.	January to May	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. The nearest known occurrence found was 5.2 miles away recorded in 2017.
Eryngium spinosepalum Spiny-sepaled button-celery	S/-/1B.1	Annual or perennial herb in the Apiaceae family found in valley and foothill grassland and vernal pools at elevations between 260 and 3,200 feet (80-975 meters). Known to occur in Calaveras, Contra Costa, Fresno, Kern, Madera, Mariposa, Merced, San Luis Obispo, Stanislaus, Tulare, and Tuolumne Counties.	April to June	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. The only known occurrence found was 3.0 miles away and recorded in 1965.
Lasthenia chrysantha Alkali-sink goldfields	-/-/1B.1	Annual herb in the Asteraceae family found in vernal pools on alkaline soils at elevations below 655 feet (200 meters). Known to occur in Fresno, Kern, Kings, Madera, Merced, Sacramento, Solano, Stanislaus, and Tulare Counties.	February to April	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. The nearest known occurrence found was 6.5 miles away and recorded in 1979.

Scientific Name **Common Name**	**Status Fed/State/CNPS**	**Description**	**Blooming Period**	**Field Study Results/Potential for Occurrence**
Layia munzii Munz's tidy-tips	S/-/1B.2	Annual herb in the Asteraceae family found in chenopod scrub and valley and foothill grassland on alkaline or clay soils at elevations between 490 and 2,295 feet (150-700 meters). Known to occur in Fresno, Kern, Madera, Merced, San Benito, San Luis Obispo, and Ventura Counties.	March to April	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. The nearest known occurrence found was 3.8 miles away and is presumed extirpated.
Monolopia congdonii San Joaquin woolly-threads	E/-/1B.2	Annual herb in the Asteraceae family found in chenopod scrub and valley and foothill grassland habitats on sandy soils between 195 and 2,625 feet (60 – 800 meters) in elevation. Known to occur in Fresno, Kern, Kings, San Benito, San Luis Obispo, Santa Barbara, and Tulare Counties.	February to May	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. No occurrences were found within the vicinity, but this species is known to occur in the quad to the south.
Opuntia basilaris var. *treleasei* Bakersfield cactus	E/E/1B.1	Perennial stem succulent in the Cactaceae family found in chenopod scrub, cismontane woodland, and valley and foothill grasslands between 330 and 4,755 feet (100–1450 meters) in elevation. Known to occur in the Southeast San Joaquin Valley and Southern Sierra Nevada Foothills in Kern County.	April to May	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. No occurrences were found within the vicinity, but this species is known to occur in the quad to the southeast.
Pseudobahia peirsonii San Joaquin adobe sunburst	T/E/1B.1	Annual herb in the Asteraceae family found in cismontane woodland and valley and foothill grassland on adobe or clay soils between 295 and 2,625 feet (90–800 meters) in elevation. Known from locations in Kern, Los Angeles, Monterey, and San Luis Obispo Counties.	February to April	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. No occurrences were found within the vicinity, but this species is known to occur in the quad to the northeast.

Scientific Name **Common Name**	**Status Fed/State/CNPS**	**Description**	**Blooming Period**	**Field Study Results/Potential for Occurrence**
Schoenoplectiella saximontana Rocky Mountain bulrush	-/-/2B.1	Annual rhizomatous herb in the Cyperaceae family found in marshes and swamps and vernal pools on sandy soils between 150 and 2,360 feet (45–720 meters) in elevation. Known to occur in Butte, Fresno, Kern, Los Angeles, Riverside, San Diego, San Luis Obispo, Tehama, and Ventura Counties.	(March to May) June to September (October)	**Not Observed/Not Expected**. Decades of intensive farming has resulted in vegetation limited to invasive/ruderal species. The only known occurrence found was 5.5 miles away and possibly extirpated.

STATUS: Federal and State Listing Code
- D Delisted
- E Federally or State-listed Endangered
- T Federally or State-listed Threatened

CNPS
- 1A Plants presumed extirpated in California, and either rare or extinct elsewhere
- 1B.1 Plants considered rare, threatened, or endangered in California and elsewhere; seriously threatened in California
- 1B.2 Plants considered rare, threatened, or endangered in California and elsewhere; fairly threatened in California
- 2B.1 Plants considered rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California
- 4.2 Plants of limited distribution in California; fairly threatened in California

Table B-2: Special-status Animals That May Occur in the Vicinity of the Project.

Scientific Name **Common Name**	**Status Federal/State**	**General Habitat**	**Survey Results/Regional or Nearest Occurrence***
Invertebrates			
Bombus crotchii Crotch's bumble bee	-/C	Occurs in grasslands and shrublands in the Mediterranean region, Pacific coast, western desert, and adjacent foothills throughout California's southwest region. Food plant genera include but is not limited to *Antirrhinum*, *Clarkia*, *Eriogonum*. and *Phacelia.*	**Not Observed/Not Expected.** No *Antirrhium, Clarkia, Eriogonum,* or *Phacelia* were observed during the field study. The only known occurrence found was 8.3 miles away and recorded in 1965.
Branchinect lynchi Vernal pool fairy shrimp	T/-	Found in vernal pools throughout California. Exist as cysts during the dry season and reproduce when pools are filled with water again.	**Not Present**. No suitable habitat present. No known records in the vicinity of the project.
Danaus plexippus Monarch butterfly	PT/-	Occur for migration between San Diego and British Colombia. *Asclepias spp*. are used for egg laying throughout the range and are a crucial part of their life cycle.	**Not Observed/Not Expected.** No known records in the vicinity of the project. No *Asclepias spp.* observed on the project.
Fishes			
Lampetra hubbsi Kern brook lamprey	-/CSC	Requires silty backwaters of large rivers in foothill regions. Known to occur in six isolated populations in the Friant-Kern Canal and lower reaches of the Merced River, Kaweah River, Kings River, San Joaquin River, and the Kings River above Pine Flat Reservoir.	**Not Present**. No suitable habitat present. The only known occurrence found was 5.5 miles away and recorded in 1972 in the Friant-Kern Canal east of Delano.
Amphibians			
Spea hammondii Western spadefoot toad	PT/ CSC	Central valley and adjacent foothills, Coast Ranges from Point Conception south to the Mexico border; valley-foothill grasslands and valley-foothill hardwood, shallow temporary pools used for breeding, below 4,472 feet (1,363 meters).	**Moderate Probability of Occurrence**. Marginal habitat present on the project and potential breeding habitat in the sump south of the project. The nearest known occurrence found was 0.9 miles away and recorded in 1973. A more recent occurrence was found 3.3 miles away and recorded in 2006.
Reptiles			
Actinemys marmorata Northwestern pond turtle	PT/CSC	Found in streams, ponds, lakes and permanent and ephemeral streams.	**Not Present.** No suitable habitat present. No known records in the vicinity of the project.
Arizona elegans occidentalis California glossy snake	-/CSC	Found in low elevation scrub, grasslands and chaparral habitats.	**Not Present**. No suitable habitat present. The only occurrence in the vicinity found was 5.4 miles away and recorded in 1935.

Scientific Name **Common Name**	**Status Federal/State**	**General Habitat**	**Survey Results/Regional or Nearest Occurrence***
Gambelia sila Blunt-nosed leopard lizard (BNLL)	E/E,SFP	Found only in the San Joaquin Valley, adjacent Carrizo Plain, Elkhorn Plain, Cuyama Valley, and Panoche Valley; inhabits sparsely vegetated plains, lower canyon slopes, on valley floors, and washes; open grassland, saltbush scrub, and alkali sink are more common habitat types.	**Not Present.** No suitable habitat present. The nearest known occurrence found was 1.6 miles away, recorded in 1959, and possibly extirpated. The only known occurrence recorded since 2000 was 9.7 miles away and recorded in 2019.
Phrynosoma blainvillii Coast horned lizard	S/CSC	Inhabits valley-foothill hardwood, coniferous and riparian, as well as pine-cypress, juniper, and annual grasslands, in Sierra Nevada below 3,937 feet (1,200 meters) and in mountains of Southern California and into the adjacent valleys.	**Not Present**. No suitable habitat present. The only known occurrence found in the vicinity was 7.4 miles away and recorded in 1991.
Birds			
Agelaius tricolor Tricolored blackbird	S/T	Forages in grasslands, wetlands, rice fields, croplands, and weedy uplands dominated by mustards and thistles, etc.; breeds in marshes containing heavy growth of bulrushes, cattails, and blackberries; found throughout the Central Valley.	**Not Present/Low Probability of Occurrence in the Project Vicinity**. No suitable nesting habitat on the site. Potential for marginal foraging habitat in farmlands in the vicinity of the project. The nearest known occurrence found was 4.2 miles away and recorded in 2014.
Athene cunicularia Burrowing owl	S/C	Inhabits dry, open grasslands, rolling hills, desert floors, prairies, savannas, agricultural land, and other areas of open, bare ground. These owls will also inhabit open areas near human habitation, such as airports, golf courses, shoulders of roads, railroad embankments, and the banks of irrigation ditches and reservoirs.	**Not Observed/Moderate Probability of Occurrence in the Project Vicinity**. Suitable habitat for nesting and foraging in the vicinity of the project. No burrowing owls or owl burrows observed. The nearest known occurrence found was 4.7 miles away and recorded in 1982. A more recent occurrence was found 8.7 miles away and recorded in 2007.
Buteo swainsoni Swainson's hawk	S/T	Riparian and sometimes large isolated trees used for nesting; grasslands and agricultural lands used for foraging; in California, breeds primarily in the Sacramento Valley, with occasional nesting to the south through Kern County; migrate through the Central and San Joaquin Valleys to their wintering grounds in South America.	**Not Observed/Low Probability of Occurrence in the Project Vicinity**. No suitable nesting sites on the project. Low suitable foraging habitat exists across the row-crop farmland around McFarland. The only known occurrence found in the vicinity was 7.8 miles away and recorded in 1929.
Gymnogyps californianus California condor	E/E,SFP	Forages over large expanses of land including but not limited to, grasslands, foothills, coastal mountain ranges. Nests on cliff faces, large trees or manmade structures.	**Not Observed/Low Probability of Occurrence in the Project Vicinity.** No suitable nesting habitat on the site. Potential for marginal foraging habitat in farmlands in the vicinity of the project.

Scientific Name **Common Name**	**Status Federal/State**	**General Habitat**	**Survey Results/Regional or Nearest Occurrence***
Mammals			
Dipodomys nitratoides nitratoides Tipton kangaroo rat	E/E	Found in arid communities on the valley floor portions of Kern, Tulare, and Kings counties in scrub and grassland communities in level to near-level terrain with alluvial fan-floodplain soil (fine sands and sandy loams) with sparse grasses and woody vegetation such as iodine bush, saltbush, seep weed, and mesquite.	**Not Present.** No suitable habitat on the project. No stereotypical kangaroo rat burrows were observed. Small mammal trapping would be required to determine species occupation. The nearest and most recent known occurrence was 4.0 miles away and recorded in 1993.
Onychomys torridus tularensis Tulare grasshopper mouse	S/CSC	Found in valley grasslands habitats, blue oak savanna, desert associations dominated by annual grasses and California ephedra, alkali sink scrub, saltbush scrub, and upper Sonoran shrub associations, dominated by ephedra.	**Not Observed/Not Expected**. No suitable habitat present. The nearest known occurrence found was 4.5 miles away and recorded in 1900. The only other known occurrence found was 5.4 miles away and recorded in 1907.
Sorex ornatus relictus Buena Vista Lake shrew	E/CSC	Formerly occupied marshlands of the San Joaquin Valley and the Tulare Basin. Its range has become much restricted due to the loss of lakes and sloughs in the area. It has been recorded from the Kern Lake Preserve area and the Kern National Wildlife Refuge. Current distribution is unknown but likely to be very restricted due to the loss of habitat.	**Not Present**. No suitable habitat present. No records of occurrence were found in the vicinity.
Taxidea taxus American badger	-/CSC	Uncommon resident found through California; in less disturbed grassland and shrubland habitats in San Joaquin Valley.	**Not Present** No suitable habitat. The only known occurrence found was 9.1 miles away and recorded in 1989.
Vulpes macrotis mutica San Joaquin kit fox (SJKF)	E/T	Found in valley saltbush scrub, valley sink scrub, Interior Coast Range saltbush scrub, upper Sonoran sub-shrub scrub, non-native grassland, and valley sacaton grassland in the Central Valley and adjacent foothills and valleys, infrequently to the outer Coast Ranges; generally not found in densely wooded areas, wetland areas, or areas subject to frequent periodic flooding.	**Moderate Probability of Occurrence.** No potential, known, or natal dens were observed. SJKF potential for occurrence moderate in the vicinity of the project. The nearest known occurrence found was 1.1 miles away and recorded in 1975. A more recent occurrence was found 4.2 miles away and recorded in 2005.

STATUS:

Federal
- S Listed as a BLM Sensitive Species
- D Delisted
- E Listed as Endangered
- PT Proposed as Threatened
- T Listed as Threatened
- C Candidate for Endangered Status

State
- CSC California Department of Fish and Wildlife Designated Species of Special Concern
- D Delisted
- E Listed as Endangered
- SFP California Department of Fish and Wildlife Designated Fully Protected
- T Listed as Threatened

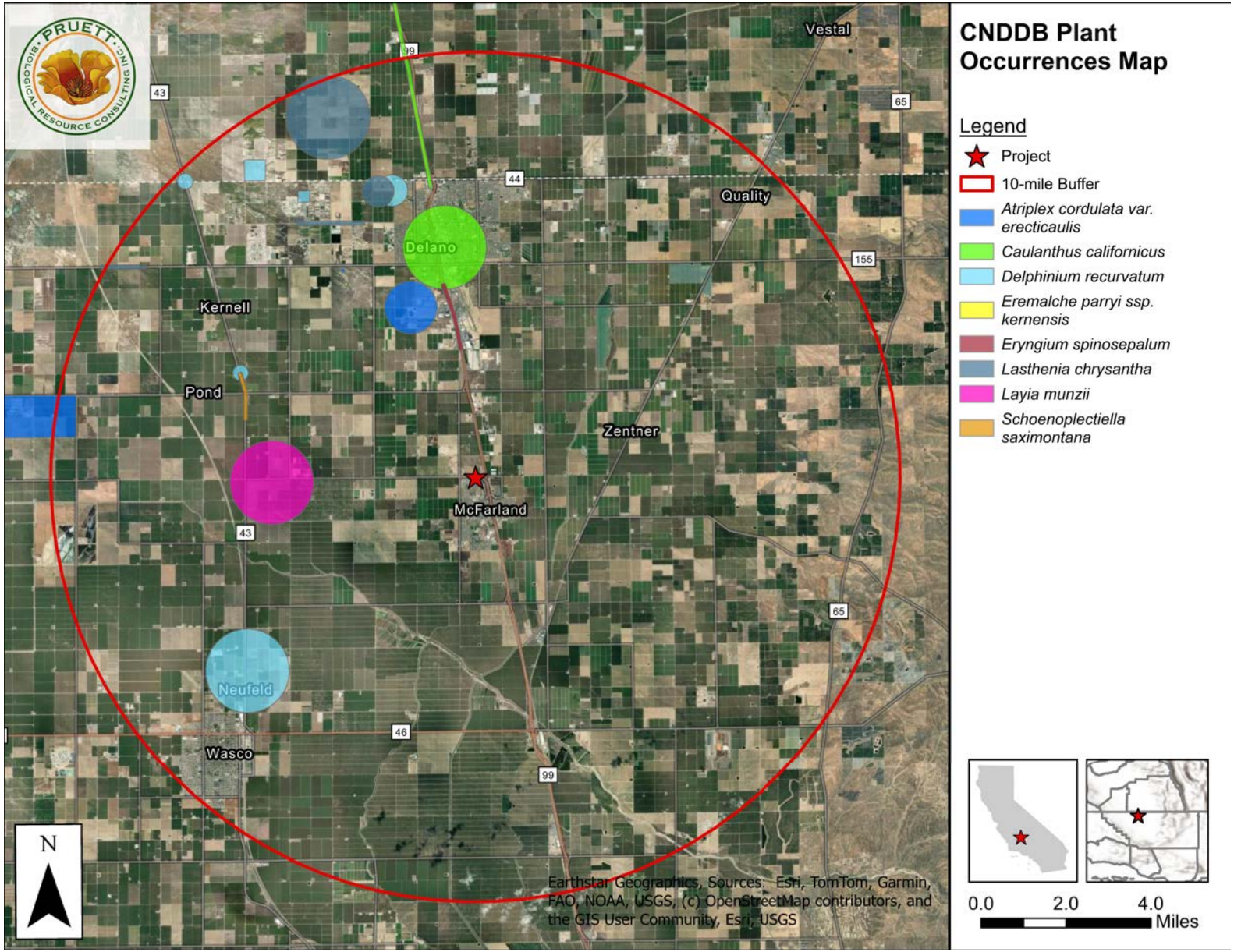


Figure B-1. CNDDB special-status plant species occurrences within a 10-mile radius of the project (CDFW 2025).

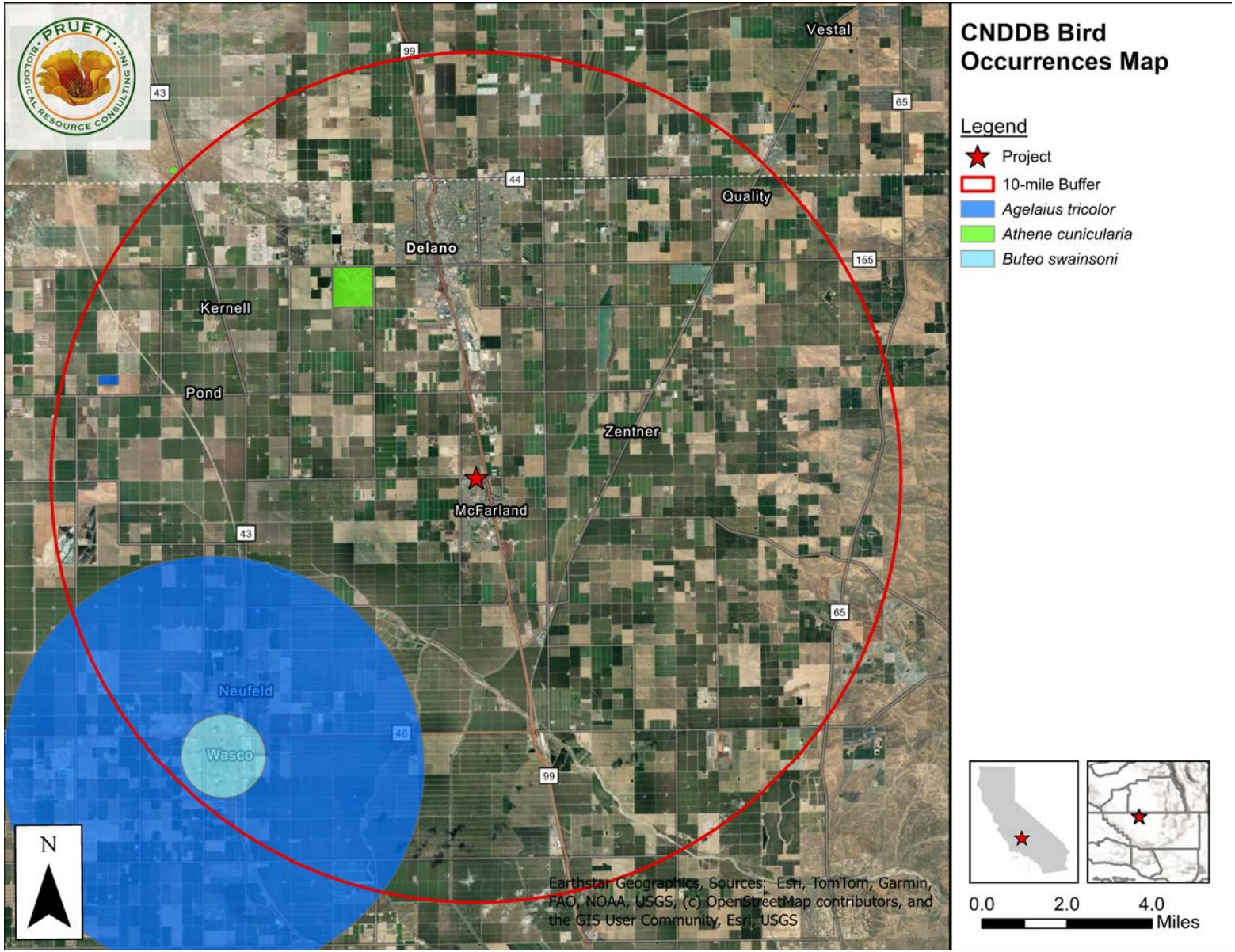


Figure B-2. CNDDB special-status bird species occurrences within a 10-mile radius of the project (CDFW 2025).

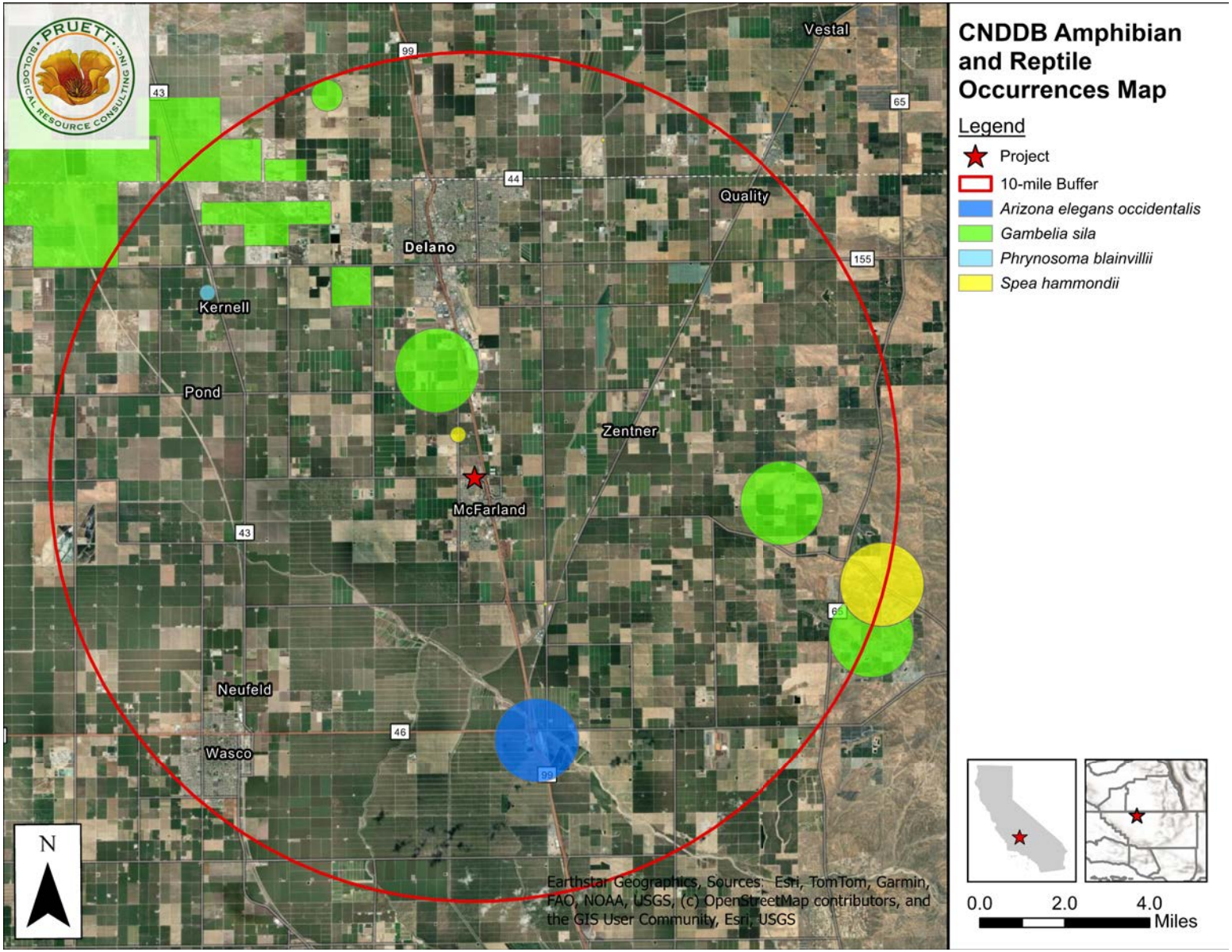


Figure B-3. CNDDB special-status amphibian and reptile species occurrences within a 10-mile radius of the project (CDFW 2025).

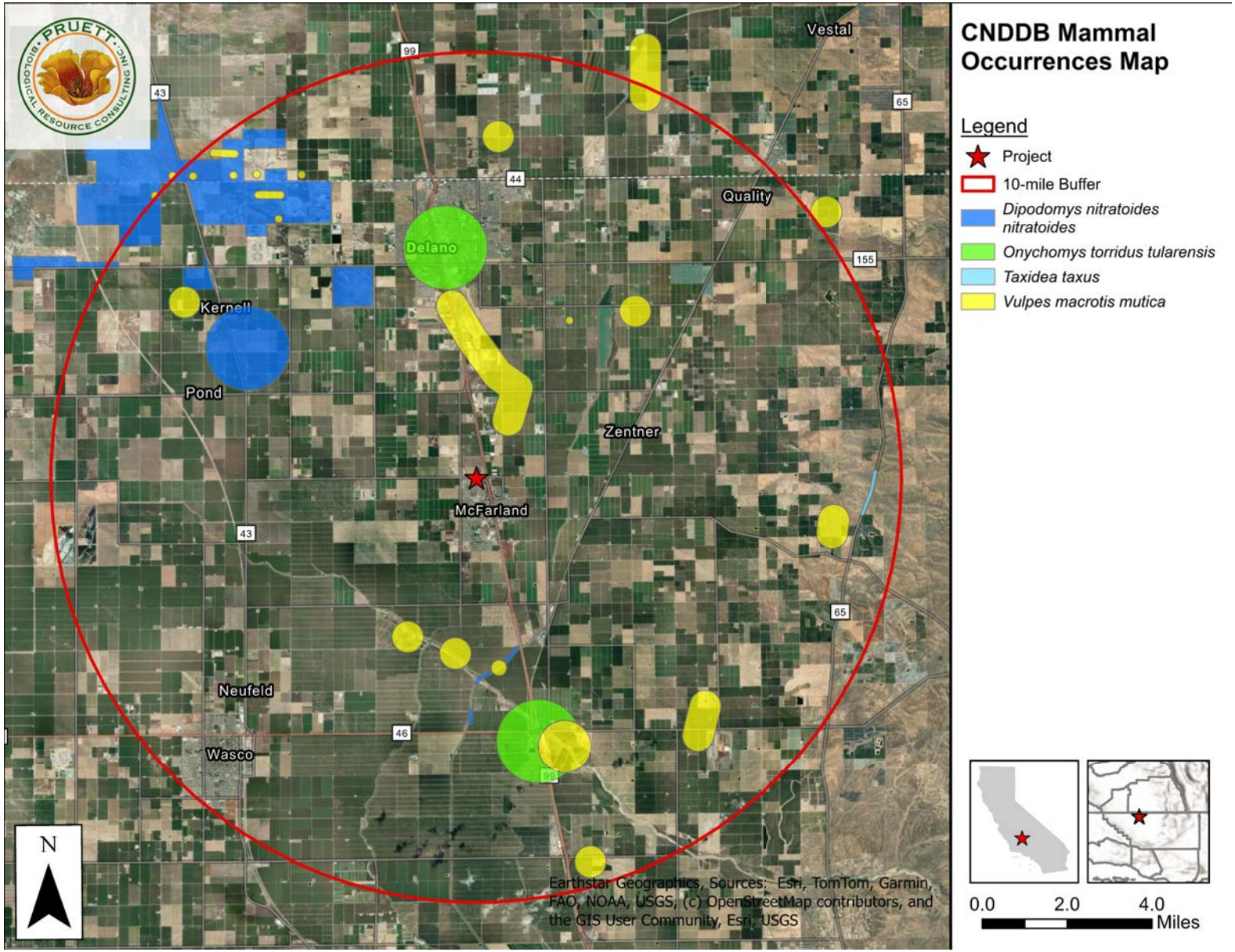


Figure B-4. CNDDB special-status mammal species occurrences within a 10-mile radius of the project (CDFW 2025).

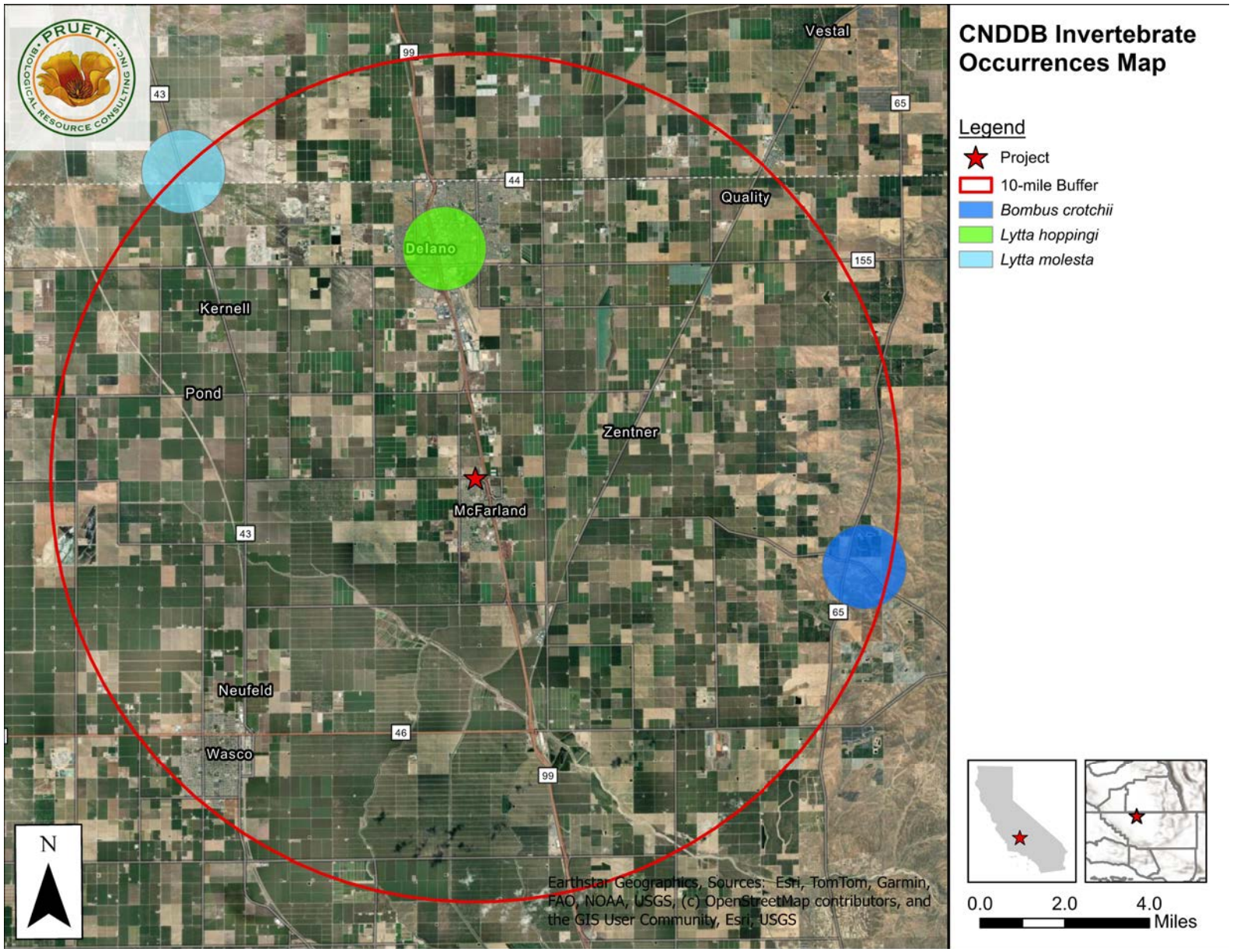


Figure B-5. CNDDB special-status invertebrate species occurrences within a 10-mile radius of the project (CDFW 2025).

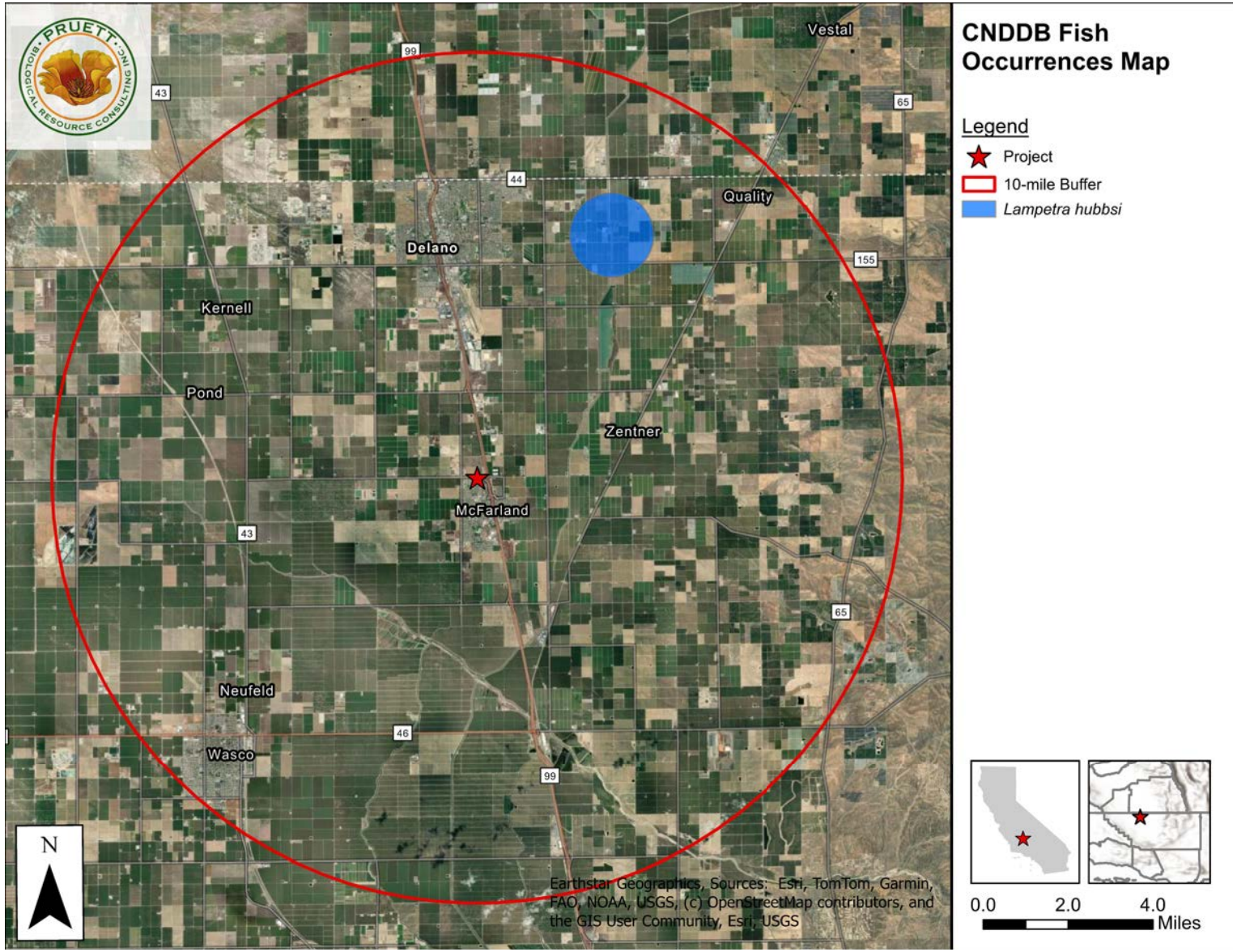


Figure B-6. CNDDB special-status fish species occurrences within a 10-mile radius of the project (CDFW 2025).

APPENDIX C

PLANTS AND ANIMALS OBSERVED ON THE PROJECT

FIELD STUDY CONDUCTED
July 25, 2025

Table C-1. Vascular plant species observed during the field study conducted on the project site.

Scientific Name	**Common Name**
Amaranthaceae	
Amaranthus albus	Pigweed amaranth
Amaranthus palmeri	Palmer's amaranth
Asphodelaceae	
Aloe vera	Aloe vera
Asteraceae	
Encelia farinosa	Brittlebush
Helianthus annuus	Common sunflower
Lactuca seriola	Prickly lettuce
Boraginaceae	
Amsinkia sp.	Fiddleneck
Chenopodiaceae	
Salsola tragus	Russian thistle
Convolvulaceae	
Convolvulus arvensis	Field bindweed
Malvaceae	
Malva parviflora	Cheeseweed
Poaceae	
Bromus diandrus	Ripgut
Bromus madritensis ssp. rubens	Red brome
Elymus triticoides	Beardless wild rye
Solanaceae	
Solanum elaeagnifolium	Silverleaf nightshade
Zygophyllaceae	
Tribulus terrestris	Puncturevine

Table C-2. Vertebrate animal species observed during the field study conducted on the project site.

Scientific Name	**Common Name**
Birds	
Zenaida macroura	Mourning dove

CITY OF McFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT
(PROJECT NO. EDWG-1510013-003C)

EXHIBIT E
"CULTURAL RESOURCES ASSESSMENT"

CULTURAL RESOURCES ASSESSMENT

Elmo Highway Well Site Project

McFarland, Kern County, California



BCRCONSULTING

October 15, 2025

CULTURAL RESOURCES ASSESSMENT

Elmo Highway Well Site Project

McFarland, Kern County, California

Prepared for:

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BCR Consulting
Claremont, California 91711

Project No. DJA2501

National Archaeological Data Base Information:
Type of Study: Cultural Resources Assessment/Inventory
Resources Recorded: None
Keywords: McFarland
USGS Quadrangle: 7.5-minute *McFarland, California* (1969)



BCRCONSULTING

October 15, 2025

MANAGEMENT SUMMARY

BCR Consulting LLC (BCR Consulting) is under contract to Dee Jasper & Associates, Inc. to complete a Cultural Resources Assessment of the proposed Elmo Highway Well Site Project (project) in the City of McFarland (City), Kern County, California. A cultural resources records search, intensive-level pedestrian field survey, Sacred Lands File Search through the Native American Heritage Commission, and vertebrate paleontological resources assessment were conducted for the project in partial fulfillment of the California Environmental Quality Act (CEQA).

The records search revealed that 13 cultural resource studies have taken place resulting in the recording of nine cultural resources within one mile of the project site. One of the 13 previous studies has previously assessed the project site for cultural resources and no cultural resources have been previously recorded within its boundaries. During the field survey BCR Consulting archaeologists identified no cultural resources or sensitivity for buried resources within the project site boundaries. Based on these results, no significant impact related to historical resources is anticipated and no further investigations are recommended for the proposed project unless:

- The proposed project is changed to include areas that have not been subject to this cultural resource assessment;
- Cultural materials are encountered during project activities.

The current study attempted to determine whether significant archaeological deposits were present on the proposed project site. Although none were yielded during the records search and field survey, ground-disturbing activities have the potential to reveal buried deposits not observed on the surface. Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register of Historic Places (National Register), plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic-period artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic-period structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks;
- human remains.

Findings were negative during the Sacred Lands File search with the NAHC. The Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52)

that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the lead agency will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff is available to answer questions and address concerns as necessary.

According to CEQA Guidelines, projects subject to CEQA must determine whether the project would "directly or indirectly destroy a unique paleontological resource". The Paleontological Overview provided in Appendix D has recommended that:

> The geologic units underlying this project are mapped as fan and basin deposits from the Holocene epoch (Smith, 1964). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching Pleistocene alluvial sediments would increase. The Western Science Center does not have localities within the project area or within a 1 mile radius, however this may be due in part to the project's distance from the museum and should not be taken as indicative of paleontological sensitivity. Other repositories may have localities in the area.
>
> While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed.

If human remains are encountered during the undertaking, 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 Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the 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 within 48 hours of notification by the NAHC.

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B: PROJECT PHOTOGRAPHS
C: NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE SEARCH
D: PALEONTOLOGICAL RESOURCES OVERVIEW

INTRODUCTION

BCR Consulting LLC is under contract to Dee jasper & Associates, Inc. to conduct a Cultural Resources Assessment of the proposed Elmo Highway Well Site Project in the City of McFarland, Kern County, California. The project site is located in Section 12 of Township 26 South, Range 25 East, Mount Diablo Baseline and Meridian. It is depicted on the United States Geological Survey (USGS) *McFarland, California* (1969) 7.5-minute topographic quadrangle (Figure 1). The work is being performed in fulfillment of requirements of the California Environmental Quality Act (CEQA).

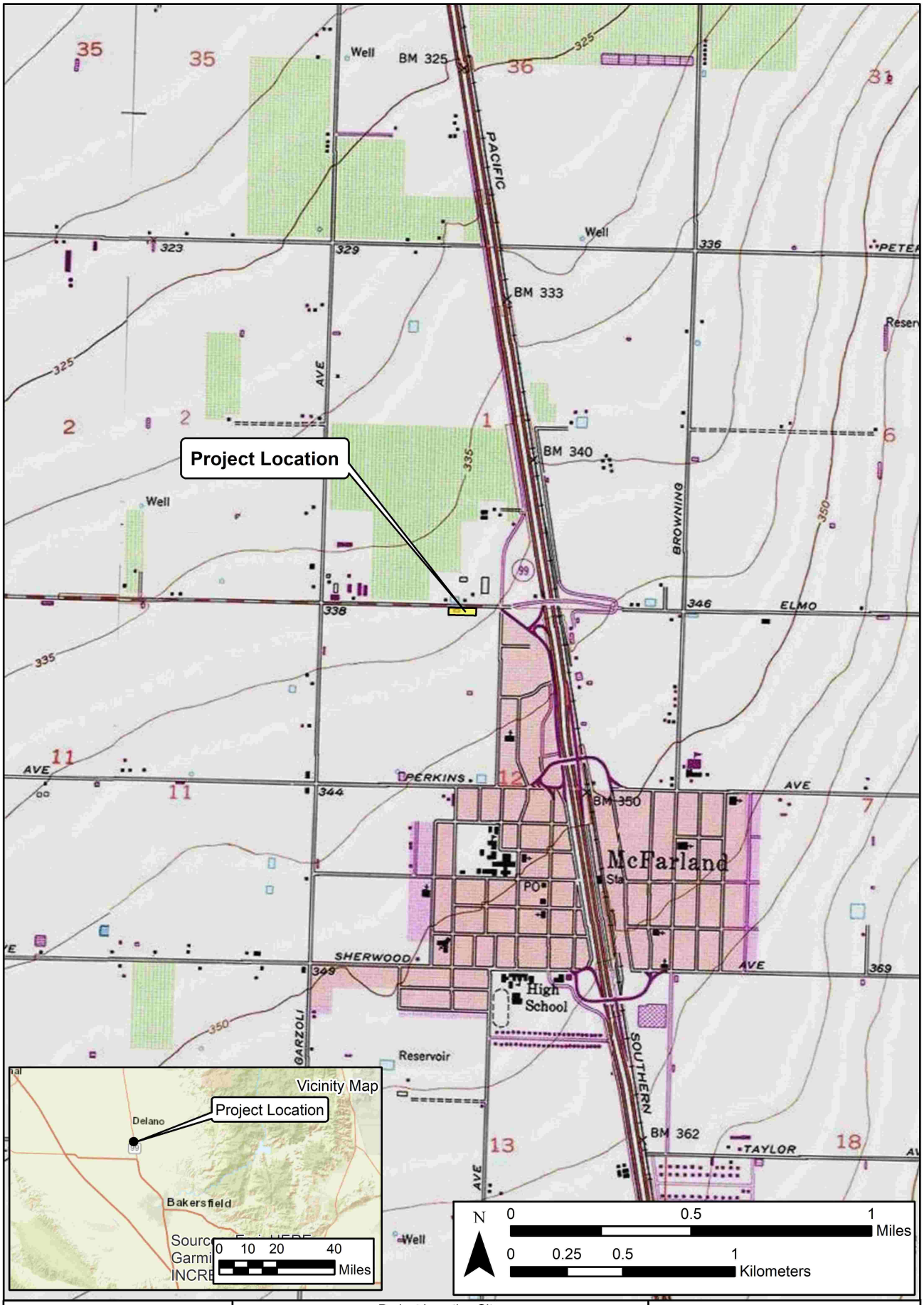
REGULATORY SETTING

The California Environmental Quality Act. CEQA applies to all discretionary projects undertaken or subject to approval by the state's public agencies (California Code of Regulations 14(3), § 15002(i)). Under CEQA, "A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (Cal. Code Regs. tit. 14(3), § 15064.5(b)). State CEQA Guidelines section 15064.5(a) defines a "historical resource" as a resource that meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources (California Register)
- Listed in a local register of historical resources (as defined at Cal. Public Res. Code § 5020.1(k))
- Identified as significant in a historical resource survey meeting the requirements of § 5024.1(g) of the Cal. Public Res. Code
- Determined to be a historical resource by a project's lead agency (Cal. Code Regs. tit. 14(3), § 15064.5(a))

A historical resource consists of "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California…Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing in the California Register of Historical Resources" (Cal. Code Regs. tit. 14(3), § 15064.5(a)(3)).

The significance of a historical resource is impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for the California Register. If an impact on a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact (State CEQA Guidelines § 15126.4 (a)(1)). Mitigation of significant impacts must lessen or eliminate the physical impact that the project will have on the resource. Section 5024.1 of the Cal. Public Res. Code established the California Register. Generally, a resource is considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register (Cal. Code Regs. tit. 14(3), § 15064.5(a)(3)). The eligibility criteria for the California Register are similar to those of the National Register of Historic Places (National Register), and a resource that meets one or more of the eligibility criteria of the National Register will be eligible for the California Register.



BCR CONSULTING LLC
Claremont Napa Tehachapi
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909-525-7378

Project Location Site
Elmo Highway Well Site Project
Reference: ESRI; USGS Quad: McFarland (1969), California

Figure 1

Dee Jasper & Associates, Inc.

The California Register program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under CEQA. Criteria for Designation:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. Associated with the lives of persons important to local, California or national history.
3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resources." (CCR 4852 [d][2]). Fifty years is normally considered sufficient time for a potential historical resource, and in order that the evaluation remain valid for a minimum of five years after the date of this report, all resources older than 45 years (i.e. resources from the "historic-period") will be evaluated for California Register listing eligibility, or CEQA significance. The California Register also requires that a resource possess integrity. This is defined as the ability for the resource to convey its significance through seven aspects: location, setting, design, materials, workmanship, feeling, and association.

Finally, CEQA requires that significant effects on unique archaeological resources be considered and addressed. CEQA defines a unique archaeological resource as any archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

CEQA Guidelines Section 15064.5 Appendix G includes significance criteria relative to archaeological and historical resources. These have been utilized as thresholds of significance here, and a project would have a significant environmental impact if it would:

a) cause a substantial adverse change in the significance of a historical resource as defined in section 10564.5;

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 10564.5;

c) Disturb any human remains, including those interred outside of formal cemeteries.

Tribal Cultural Resources. The Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the City will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff are available to answer questions and address comments as necessary.

Paleontological Resources. CEQA provides guidance relative to significant impacts on paleontological resources, indicating that a project would have a significant impact on paleontological resources if it disturbs or destroys a unique paleontological resource or site or unique geologic feature. Section 5097.5 of the California Public Resources Code specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, California Penal Code Section 622.5 sets the penalties for damage or removal of paleontological resources. CEQA documentation prepared for projects would be required to analyze paleontological resources as a condition of the CEQA process to disclose potential impacts. Please note that as of January 2018 paleontological resources are considered in the geological rather than cultural category. Therefore, paleontological resources are not summarized in the body of this report. A paleontological overview completed by the Western Science Center is provided as Appendix D.

NATURAL SETTING

The elevation of the project is approximately 345 feet above mean sea level. It is located in the southern portion of southern San Joaquin Valley. Local rainfall averages approximately eight inches per year, and the runoff is channeled from northeast to southwest. Most of the local vegetation currently consists of non-native seasonal grasses. Prior to the introduction of large-scale agriculture, the San Joaquin River and Tulare Lake's system of channels, sloughs, and tule-choked marshes defined the local ecosystem (Wallace 1978:462). As a result, the biotic character of the valley was historically much more diversified than is presently evident. Large freshwater marshes and vast expanses of grassland supported a variety of wildlife, including grizzly bears and wolves (both locally extinct), tule elk, jackrabbits, quail, and numerous fish, rodents, reptiles and birds (Twisselmann 1967, Osborne 1992, Cogswell 1977, and Moyle 1976).

CULTURAL SETTING

Prehistory

The project is situated within the traditional boundaries of the Southern Valley Yokuts. This prehistoric population depended heavily on the Tulare, Buena Vista, and Kern Lakes and their connecting sloughs and rivers for sustenance and transportation (Wallace 1978:448). The local Southern Valley Yokuts, referred to as the Chuxoxi, represented one of the southernmost Yokut political units and were associated with the channels and sloughs of the Kern River delta (Wallace 1978:449; Kroeber 1925:483). Chuxoxi trade routes and rights to the delta allowed them to reap the benefits of the related perennial water sources. This enabled local populations to pursue a relatively sedentary lifestyle in an otherwise arid climate. Prehistorically, such sedentism often coincides with a village-style residential model in which residential bases remain the same or seasonal, while specialized procurement parties are deployed to more remote areas to collect specialized resources (Binford 1980, Thomas 1983). This village model has been locally supported by early ethnographers, who considered Yokuts unique in California for forming "true tribes" and for developing an unparalleled array of dialects (Kroeber 1925:474).

History

The first Europeans to establish contact with the Southern Valley Yokuts were Spanish troops led by Captain Don Pedro Fages in pursuit of deserters. Father Francisco Garces also travelled through the San Joaquin Valley searching for an overland route from Yuma to Monterey. During his travels, Garces noted positive interactions with locals (see Smith 1939, Bailey 1984). The Mexican era (1821-1848) saw little notable cultural exchange between Mexicans and Southern Valley Yokuts, although an 1833 malaria epidemic devastated the local native population (Wallace 1978:460). The ensuing American era, punctuated by California’s annexation into the United States in 1848, resulted in overwhelming Anglo settlement and seizing of Indian lands, and disrupted any remaining prehistoric Yokut influence in the San Joaquin Valley. Mining and ranching represented the early historical focus of the San Joaquin Valley, although the region’s abundant natural water supply, mild climate, and huge tracts of arable land soon led to the successful development of agriculture. The resulting diversion of local water and skyrocketing real estate values transformed the physical and economic character of the valley and have allowed it to remain one of the most productive agricultural regions in the world to this day (Preston 1981).

PERSONNEL

David Brunzell, M.A., RPA, acted as the Principal Investigator for the current study. Joseph Orozco, M.A., RPA, acted as the Project Manager for the current study and complied the technical report. Mr. Orozco completed the cultural resources records search at the Southern San Joaquin Valley Information Center (SSJVIC) at California State University, Bakersfield. BCR Consulting Staff Archaeologist Doug Kazmier, B.A., PGC conducted the pedestrian field survey, and BCR Consulting Staff Archaeologists John J.P. G Defachelle Jr, B.A. and George Brentner B.A. contributed to the technical report.

METHODS

Research

Prior to fieldwork, an archaeological records search was conducted at the SSJVIC. This included a review of all recorded historic and prehistoric cultural resources, as well as a review of known cultural resources, and survey and excavation reports generated from projects located within one mile of the project site (see Appendix A). In addition, a review of the National Register, the California Register of Historical Resources (California Register), local listings, and the Built Environment Resource Directory (BERD) were performed. The BERD comprises a list of official California Office of Historic Preservation (OHP) determinations of eligibility for historic-period built environment resources.

Field Survey

Mr. Kazmier conducted a pedestrian field survey of the project on April 7, 2025. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across 100 percent of the project. Soil exposures, including natural and artificial clearings were carefully inspected for evidence of cultural resources

RESULTS

Research

Data from the SSJVIC revealed that 13 cultural resource studies have taken place and nine cultural resources were discovered within a one-mile radius of the project site. Of the 13 previous studies, one has previously assessed the project site, resulting in the recording of no cultural resources within its boundaries (see Appendix A).

Table A. Cultural Resources and Reports Within One Mile of the Project Site

USGS 7.5 Min Quad	Cultural Resources Within One Mile of Project Site	Studies W/in One Mile
McFarland, CA (1969)	P-15-2050: Southern Pacific Railroad (.35 Miles NE) P-15-8491: Historic-Period Single Family Property (.80 Miles SE) P-15-8494: Historic-Period Single Family Property (.20 Miles SE) P-15-8495: Historic-Period Single Family Property (.82 Miles SE) P-15-8497: Historic-Period Urban Open Space (.80 Miles SE) P-15-8498: Historic-Period Single Family Property (.65 Miles SE) P-15-8499: Historic-Period Single Family Property (.70 Miles SE) P-15-8501: Historic-Period Single Family Property (.95 Miles SE) P-15-8502: Historic-Period Single Family Property (.95 Miles SE)	KE-805, 830, 841, 1448, 1832, 2056, 2917, 3043, 3528, 3760*, 4333, 4764, 4813

*Within project boundaries

Field Survey

During the field survey, Mr. Kazmier carefully inspected the project site and identified no cultural resources of any kind within its boundaries. Surface visibility was approximately 80 percent within the project site. Soil in the area comprised moist brown sandy loam with traces of gravel inclusions. Vegetation was characterized as native weeds and season grasses. Ground disturbances were severe and resulted from a variety of factors including grading, modern pavement installation, and modern refuse deposits.

RECOMMENDATIONS

BCR Consulting conducted a Cultural Resources Assessment of the Elmo Highway Well Site Project in the City of McFarland, Kern County, California. This work was completed pursuant to CEQA. The records search and field survey did not identify any cultural resources (including prehistoric or historic archaeological sites or historic buildings) within the project site. Furthermore, research results combined with surface conditions have failed to indicate sensitivity for buried cultural resources. Based on these results, BCR Consulting recommends a finding of no historical resources affected for this undertaking. Based on these results, no significant impact related to historical resources is anticipated and no further investigations are recommended for the proposed project unless:

- The proposed project is changed to include areas that have not been subject to this cultural resource assessment;
- Cultural materials are encountered during project activities.

The current study attempted to determine whether significant archaeological deposits were present on the proposed project site. Although none were yielded during the records search and field survey, ground-disturbing activities have the potential to reveal buried deposits not observed on the surface. Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register of Historic Places (National Register), plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic-period artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic-period structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks;
- human remains.

Findings were negative during the Sacred Lands File search with the NAHC. The Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process.

To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the lead agency will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff is available to answer questions and address concerns as necessary.

According to CEQA Guidelines, projects subject to CEQA must determine whether the project would "directly or indirectly destroy a unique paleontological resource". The Paleontological Overview provided in Appendix D has recommended that:

> The geologic units underlying this project are mapped as fan and basin deposits from the Holocene epoch (Smith, 1964). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching Pleistocene alluvial sediments would increase. The Western Science Center does not have localities within the project area or within a 1 mile radius, however this may be due in part to the project's distance from the museum and should not be taken as indicative of paleontological sensitivity. Other repositories may have localities in the area.
>
> While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed.

If human remains are encountered during the undertaking, 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 Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the 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 within 48 hours of notification by the NAHC.

REFERENCES

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Smith, Arthur A.
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Smith, Wallace
1939 *Garden of the Sun.* Lymanhouse, Los Angeles.

Thomas, D.H.
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1967 *A Flora of Kern County, California.* University of San Francisco Press.

United States Geological Survey
1969 *McFarland, California* 7.5-minute topographic quadrangle map.

Wallace, William J.
1978 The Southern Valley Yokuts, and The Northern Valley Yokuts. In *Handbook of the North American Indians, Vol. 8, California,* edited by W.L. d'Azevedo, pp. 448-470. W.C. Sturtevant, General Editor. Smithsonian Institution, Washington D.C.

APPENDIX A

RECORDS SEARCH BIBLIOGRAPHY

Report List

Resources

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
KE-00805	NADB-R - 1140475; Submitter - CRF-89-62	1989	Parr, Robert E.	An Archaeological Assessment of Nine Acres of Land in McFarland, Kern County, California	Cultural Resource Facility, California State University, Bakersfield	
KE-00830	NADB-R - 1140499	1991	Parr, Robert E.	Cultural Resource Assessment of Two Structures at McFarland Mutual Water Company Well No. 1	Cultural Resource Facility, California State University, Bakersfield	
KE-00841	NADB-R - 1140510; Submitter - CRF-92-32	1992	Parr, Robert E.	An Archaeological Assessment of Tentative Tract #5177 in McFarland, Kern County, California	Cultural Resource Facility, California State University, Bakersfield	
KE-01448		1994	Schiffman, Robert A.	Archaeological Survey of the McFarland Garden Apartments	Bakersfield College	
KE-01832	NADB-R - 1140863	1995	Hatoff, Brian, Voss, Barb, Waechter, Sharon, Wee, Stephen, and Benté, Vance	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project	Woodward-Clyde Consultants	
KE-02056		1997	Wickstrom, Brian and Anderson, Emily	Cultural Resource Survey for the Selma to Bakersfield Fiberoptic Line, Southern San Joaquin Valley, California	KEA Environmental, Inc.	
KE-02917		2004	Schiffman, Robert and Gold, Alan	Cultural Resource Survey for an 80-Acre Mixed Use Development, Between Elmo Avenue and Perkins Avenue Near McFarland, Kern County, CA	Archaeological Associates of Kern County	
KE-03043		2005	Roper, Kristina	A Cultural Resources Assessment for the Proposed City of McFarland, 329 Single Family Residential Project, McFarland, Kern County, CA	Sierra Valley Cultural Planning	
KE-03528	Submitter - SWCA Cultural Resources Report Database No. 06-507; Submitter - SWCA Project No. 10715-180	2006	Arrington, Cindy, Bass, Bryon, Brown, Joan, Corey, Chris, and Hunt, Kevin	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants	
KE-03760		2010	Hudlow, Scott M.	A Phase I Cultural Resource Survey for Thomas Family Property, City of McFarland, California	Hudlow Cultural Resource Associates	
KE-04333	Submitter - Job #12-079	2012	Peak, Melinda A.	Determination of Eligibility and Effect for the McFarland Senior Apartments Project, City of McFarland Kern County, California	Peak & Associates, Inc.	

Report List

Resources

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
KE-04764	IC Record Search Nbr - 15-497	2015	Hudlow, Scott	A Phase I Cultural Resource Survey for NW 1/4 of the NW 1/4 of Section 12, City of McFarland, California	Hudlow Cultural Resource Associates	
KE-04813		2016	Hudlow, Scott	A Phase I Cultural Resource Survey Keandra Place Apartments, City of McFarland, California	Hudlow Cultural Resource Associates	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-15-002050	CA-KER-002050H	Resource Name - Southern Pacific Railroad; Other - KS-1; FCG-27; Old Southern Pacific Railroad Grade; NOTS Railroad Spur; US Government Railroad; Other - Asphalto Line of the South Pacific Railroad; Union Pacific (1996);; Other - Southern Pacific Railroad, McKittrick Branch; Midway-Sunset 2; Other - Southern Pacific Railroad (San Francisco and New Orleans Line), Union Pacific	Structure, Object, Site	Historic	AH01; AH02; AH04; AH06; AH07; AH15; HP04; HP08; HP11; HP17; HP19; HP37; HP39	1985 (R. Apple, J. Underwood, Wirth Environmental Services); 1987 (R. Schiffman, Unknown); 1992 (J. Berg, et. Al., Far Western Anthropological Research Group, Inc.); 1993 (M. Macko, Macko Archaeological Consulting); 1993 (Unknown, JRP Historical Consulting Services); 1993 (J. Costello, J. Marvin, C. Brownson, Foothill Resources, Ltd.); 1994 (Bruce Steidl, Keith Colvin, Helen Johnson, Woodward-Clyde Cosultants); 1995 (R.E. Parr, Center for Archaeological Research, California State University, Bakersfield); 1995 (James C. Killen, Department of Energy); 1996 (R. Tidmore, J. Gardner, R.E. Parr, J. Hinshaw, Center for Archaeological Research, California State University, Bakersfield); 1996 (James C. Killen, Department of Energy); 1998 (B. Hatoff, P. Frazier, D. Lawler, Woodward-Clyde International-Americas); 1998 (P. Frazier, L. Wear, B. Hattoff, D. Lawler, Woodward-Clyde International-Americans); 1999 (Unknown, Pacific Legacy, Inc.); 1999 (Mike Avina, Jones & Stokes Associates, Inc.); 1999 (Mike Aviña, Jones & Stokes Associates, Inc.); 1999 (Brian Wickstrom, Caltrans); 1999 (B. Hatoff, B. Bass, D. Lawler, URS Greiner Woodward-Clyde); 2000 (Jackson Underwood, KEA Environmental, Inc.); 2001 (William G. White, Harry Reid Center for Environmental Studies); 2005 (Dorothy Fleagle, Catherine	KE-00861, KE-00865, KE-01267, KE-01958, KE-01994, KE-02162, KE-02278, KE-02452, KE-02560, KE-04056, KE-04361, KE-04383, KE-04414, KE-04503, KE-05045, KE-05448, KE-05450

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
						Lewis Pruett, Three Girls and a Shovel); 2007 (Brian Wickstrom, Caltrans); 2007 (Wayne Glenny, EDAW); 2009 (S. Melvin, R. Flores, JRP Historical Consulting, LLC); 2009 (Jason D. Jones, Unknown); 2009 (Jeremy Hollins, URS Corp); 2009 (H. Calicher, R. Rolston, N. Lawson, CH2M Hill); 2009 (K.R. Way, J.M. Hamad, J. Sprague, G. Sprague, Pacific Legacy, Inc.); 2009 (K.R. Way, J. Sprague, N. Sims, P. Sharp-Garcia, C. Davis, M. Armstrong, A Stevenson, Pacific Legacy, Inc.); 2010 (M. Millett, J. P. Glover, J. W. Dougherty, Unknown); 2010 (L. Hoffman, J. Covert, SWCA Environmental Consultants); 2011 (M. Dalope, S. Andrews, C. Whitley, J. Neal, ASM Affiliates, Inc.); 2012 (S. Andrews, ASM Affiliates, Inc.); 2012 (A. Bell, C. Rambo, C. Whitley, S. Escamilla, A. Troupin, R. Azpitrate, ASM Affiliates, Inc.); 2013 (N. Lawson, CH2M Hill); 2013 (D. Martinez, C. Connolly, Far Western Anthropological Research Group, Inc.); 2013 (Linda Honey, Great Basin Sage, Inc.); 2016 (P. Carey, ASM Affiliates, Inc.); 2017 (B. Armstrong, M. Wooderson, and A. Schmidt, Epsilon Systems Solutions, Inc.); 2018 (Marcos Ramos Ponciano, Andrew York, AECOM); 2019 (Unknown, Urbana Preservation & Planning, LLC); 2019 (Merrick et al., Rincon Consultants, Inc.);	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
						2019 (Alexandra Madsen, Rincon Consultants, Inc.); 2020 (Unknown, Urbana Preservation & Planning, LLC); 2020 (Unknown, Urbana Preservation & Planning, LLC); 2020 (Trevor Gittelhough; Kyle Montgomery, SWCA Environmental Consultants); 2021 (D. Gravey, C. Caywood, Far Western Anthrpological Research Group, Inc.); 2021 (Jenna Farrell and Gena Granger, Tetra Tech, Inc.)	
P-15-008491		OHP Property Number - 065687; OTIS Resource Number - 467867	Building	Historic	HP02	1989	
P-15-008494		OHP Property Number - 066910; OTIS Resource Number - 469113	Building	Historic	HP02	1989	
P-15-008495		OHP Property Number - 066829; OTIS Resource Number - 469033	Building	Historic	HP02	1988	
P-15-008497		OHP Property Number - 066110; OTIS Resource Number - 468260	Building	Historic	HP31	1989	
P-15-008498		OHP Property Number - 066387; OTIS Resource Number - 468533	Building	Historic	HP02	1988	
P-15-008499		OHP Property Number - 066559; OTIS Resource Number - 468701	Building	Historic	HP02	1988	
P-15-008501		OHP Property Number - 066552; OTIS Resource Number - 468694	Building	Historic	HP02	1988	
P-15-008502		OHP Property Number - 065686; OTIS Resource Number - 467866	Building	Historic	HP02	1989	

APPENDIX B

PROJECT PHOTOGRAPHS

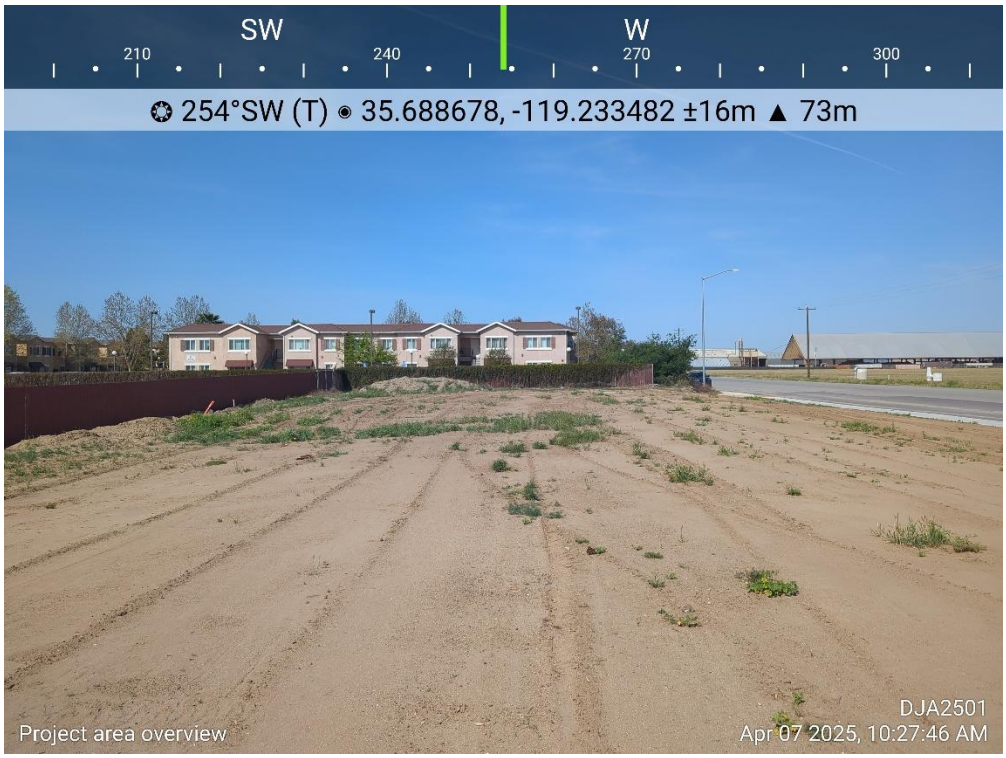


Photo 1: Overview of Project Site (View W)



Photo 2: Overview of Project Site (View E)



Photo 3: Overview of Project Site (View SE)

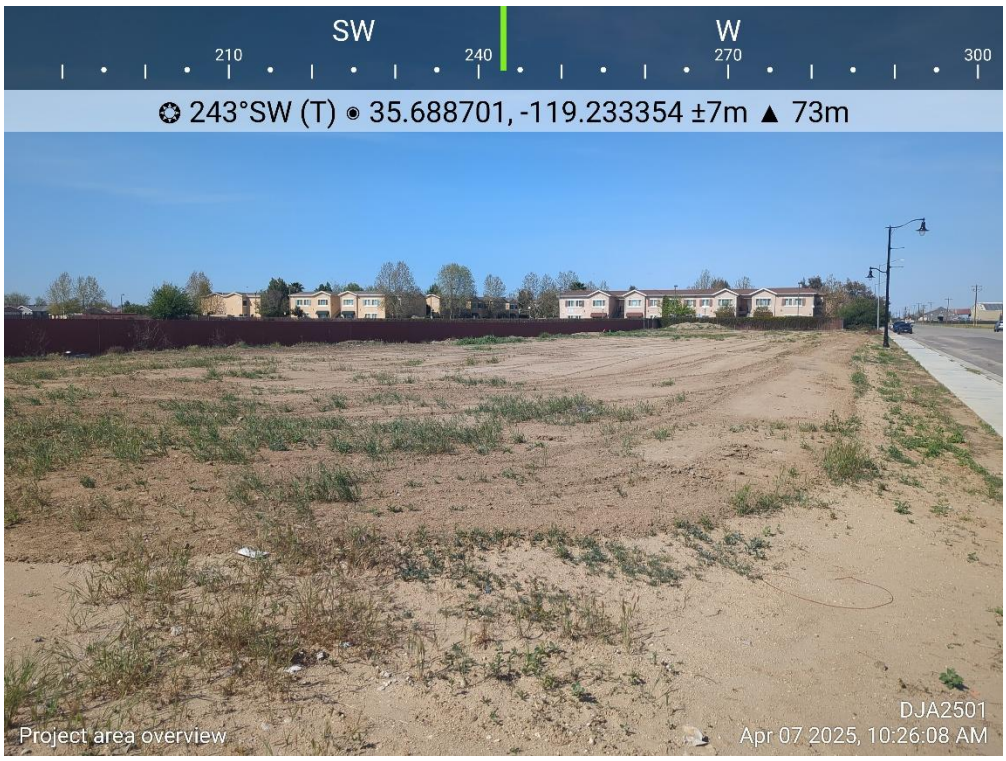


Photo 4: Overview of Project Site (View SW)



Photo 5: Overview of Project Site (View E)



Photo 6: Overview of Project Site (View W)

APPENDIX C

NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE SEARCH

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

Commissioner
Vacant

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
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California 95691
(916) 373-3710
nahc@nahc.ca.gov

April 7, 2025

David Brunzell
BCR Consulting, LLC

Via Email to: bcrllc2008@gmail.com

Re: Elmo Highway Well Site (DJA2501) Project, Kern County

To Whom It May Concern:

As requested, a record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed based on information submitted for the above referenced project. The results were negative. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. As such, a SLF search is not a substitute for consultation with all tribes that are traditionally and culturally affiliated with a project's geographic area.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. If within two weeks of notification, a response has not been received, the Commission requests that you follow-up with a telephone call or email to ensure that the project information was received.

If you receive notification of a change of address or phone number from a tribe, please notify the NAHC so that we can assure that our lists contain current information.

In addition to engaging in tribal consultation, you should consult the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center to determine whether it has information regarding the presence of recorded archaeological sites within the project area.

If you have any questions or need additional information, please contact me at melina.carlos@nahc.ca.gov.

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Kern County
4/7/2025

Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Email Address	Cultural Affiliation	Last Updated
Kitanemuk & Yowlumne Tejon Indians	N	Delia Dominguez, Chairperson	115 Radio Street Bakersfield, CA, 93305	(626) 339-6785	2deedominguez@gmail.com	Kitanemuk Southern Valley Yokut	
Northern Chumash Tribal Council	N	Violet Walker, Chairperson	P.O. Box 6533 Los Osos, CA, 93412	(760) 549-3532	violetsagewalker@gmail.com	Chumash	6/5/2023
Table Mountain Rancheria	F	Bob Pennell, Cultural Resource Director	P.O. Box 410 Friant, CA, 93626	(559) 325-0351	rpennell@tmr.org	Yokut	
Table Mountain Rancheria	F	Michelle Heredia-Cordova, Chairperson	P.O. Box 410 Friant, CA, 93626	(559) 822-2587	mhcordova@tmr.org	Yokut	12/21/2023
Tejon Indian Tribe	F	Candice Garza, CRM Scheduler	4941 David Road Bakersfield, CA, 93307	(661) 345-0632	cgarza@tejonindiantribe-nsn.gov	Kitanemuk	3/4/2025
Tejon Indian Tribe	F	Curtis Alcantar, Cultural and Natural Resource Manager	4941 David Road Bakersfield, CA, 93307	(661) 699-5138	calcantar@tejonindiantribe-nsn.gov	Kitanemuk	3/4/2025
Tule River Indian Tribe	F	Neil Peyron, Chairperson	P.O. Box 589 Porterville, CA, 93258	(559) 781-4271	neil.peyron@tulerivertribe-nsn.gov	Yokut	
Tule River Indian Tribe	F	Kerri Vera, Environmental Department	P. O. Box 589 Porterville, CA, 93258	(559) 783-8892	kerri.vera@tulerivertribe-nsn.gov	Yokut	7/22/2016

Native American Heritage Commission
Native American Contact List
Kern County
4/7/2025

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Elmo Highway Well Site (DJA2501) Project, Kern County.

Record: PROJ-2025-001816
Report Type: List of Tribes

APPENDIX D

PALEONTOLOGICAL RESOURCES OVERVIEW

WESTERN SCIENCE CENTER

August 27th, 2025

BCR Consulting, LLC
Joseph Orozco
505 W. 8th St.
Claremont, CA 91711

Dear Mr. Orozco,

This letter presents the results of a record search conducted for the Elmo Highway Well Site Project located in McFarland, Kern County, CA. The project site is located south of Elmo Highway and west of California State Route 99 on Township 26 South, Range 25 East, Section 12 on the *McFarland, CA* USGS 7.5 minute quadrangle.

The geologic units underlying this project are mapped as fan and basin deposits from the Holocene epoch (Smith, 1964). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching Pleistocene alluvial sediments would increase. The Western Science Center does not have localities within the project area or within a 1 mile radius, however this may be due in part to the project's distance from the museum and should not be taken as indicative of paleontological sensitivity. Other repositories may have localities in the area.

While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed.

If you have any questions, or would like further information, please feel free to contact me at bstoneburg@westerncentermuseum.org.

Sincerely,

Brittney Elizabeth Stoneburg, MSc
Collections Manager

Elmo Highway Well Site Project

project area + 1 mile radius

Legend

- 1 Mile Radius
- Elmo Highway Well Site Project
- Q: Quaternary alluvium and marine deposits (Pliocene to Holocene)

Stradley Ave
Garzoli Ave
Sunview Cold Storage
Browning Rd
Jakov P Dulcich & Sons
Central Valley Almond Association
Elmo Hwy
Elmo Hwy
Elmo Hwy
Off The Charts - Dispensary in McFarland
Perkins Ave
W Perkins Ave
Mi Rancho Market
Industrial St
McFarland
McFarland
Sherwood Ave
A & M Food Market
McDonald's
Sherwood Ave
Sherwood Ave
McFarland Park
Driver Rd
99
Hure Bro
Survey Google Earth
Image © 2025 Airbus
N
Hollis

EXHIBIT F
"NATIVE AMERICAN HERITAGE COMMISSION – CULTURAL RESOURCES RESEARCH"

(See Appendix C of the Cultural Resources Assessment attached hereto as Exhibit E)

CITY OF McFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT
(PROJECT NO. EDWG-1510013-003C)

EXHIBIT G
"NATIONAL COOPERATIVE SOIL SURVEY – WEB SOIL SURVEY MAP"

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Kern County, California, Northwestern Part

Elmo Well Site, McFarland, CA



July 31, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Kern County, California, Northwestern Part.....13
192—McFarland loam.....13
References.....15

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:678 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 10 20 40 60

Feet
0 30 60 120 180

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 Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

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 1:24,000.

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: Kern County, California, Northwestern Part
Survey Area Data: Version 17, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 12, 2022—Mar 22, 2022

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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
192	McFarland loam	1.3	100.0%
Totals for Area of Interest		**1.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Kern County, California, Northwestern Part

192—McFarland loam

Map Unit Setting

National map unit symbol: hkk8
Elevation: 290 to 400 feet
Mean annual precipitation: 5 to 7 inches
Mean annual air temperature: 63 to 66 degrees F
Frost-free period: 250 to 275 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Mcfarland and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mcfarland

Setting

Landform: Flood plains, alluvial fans
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

A - 0 to 24 inches: loam
C - 24 to 64 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: B
Ecological site: R017XY906CA - Non-Alkali San Joaquin Valley Desert
Hydric soil rating: No

Minor Components

Wasco

Percent of map unit: 5 percent
Landform: Alluvial fans

Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Kimberlina

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Panoche

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

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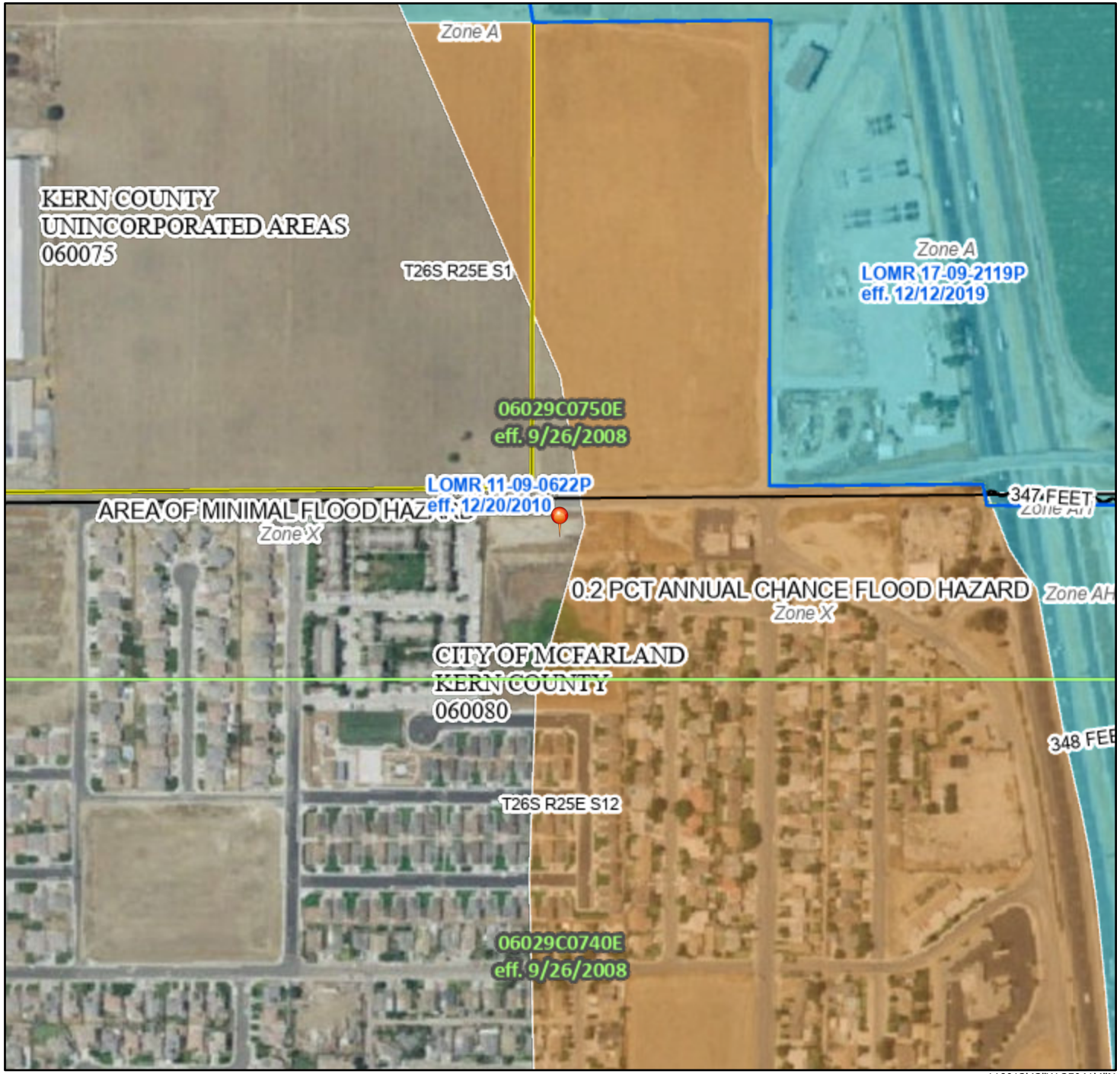
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EXHIBIT H
"FLOOD ZONE MAP"

National Flood Hazard Layer FIRMette

FEMA

119°14'21"W 35°41'34"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

119°13'43"W 35°41'4"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/31/2025 at 11:27 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

EXHIBIT I
"U.S. FISH AND WILDLIFE SERVICE – NATIONAL WETLANDS INVENTORY MAP"

U.S. Fish and Wildlife Service
National Wetlands Inventory

City of McFarland - Elmo Well Facility



April 15, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

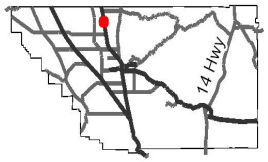
National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

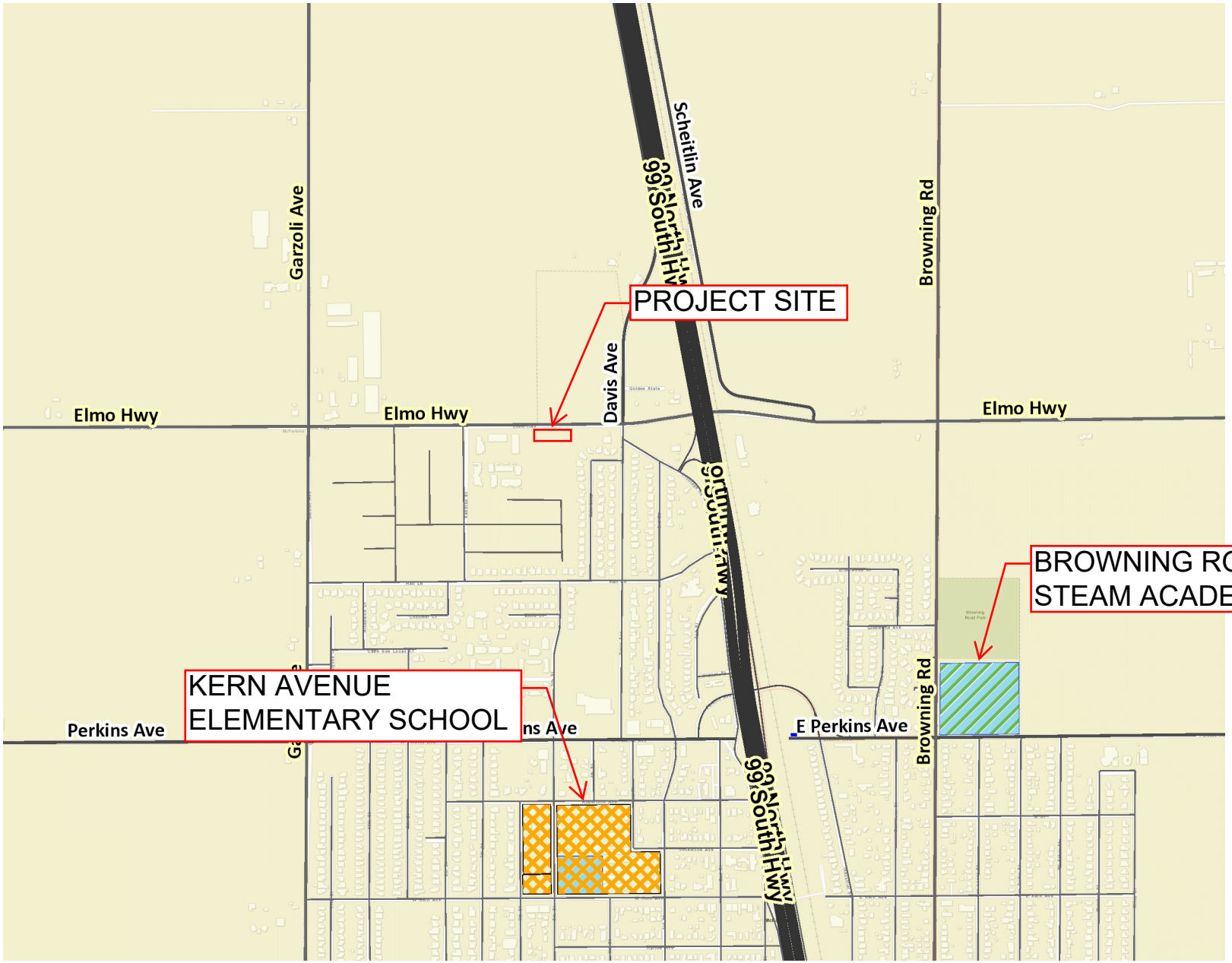
CITY OF McFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT
(PROJECT NO. EDWG-1510013-003C)

EXHIBIT J
"MAP OF SCHOOLS IN THE PROJECT VICINITY"

Kern County Online Mapping System

Generated by Kern County Web Map Service





Legend

Roads 10k-24k

- Freeway
- Highway
- Major
- Minor
- Local
- Ramp
- Unpaved

Schools

- Childcare Center
- Private School
- Public School

1: 18,056

0.6 0 0.28 0.6 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

© Latitude Geographics Group Ltd.

This map is a user generated static output from an Internet mapping site and is for general reference only. The County of Kern assumes no liability for damages, incurred by the user of this information, which occur directly or indirectly as a result of errors, omissions or discrepancies in the information.

Notes

EXHIBIT K
"LIST OF HAZARDOUS MATERIALS SITES PER CALIFORNIA DEPT. OF TOXIC SUBSTANCES CONTROL"

Dee Jaspar Associates, Inc.
2730 Unicorn Road, Building A
Bakersfield, CA 93308

List of Hazardous Waste and Substances Sites per
California Department of Toxic Substances Control

Current as of 7/30/2025

SITE / FACILITY NAME	ENVIROSTOR ID	STATUS	STATUS DATE	ADDRESS DESCRIPTION	CITY	ZIP	COUNTY
FORMER J. H. BAXTER FACILITY, ALAMEDA	1240036	ACTIVE	10/26/2005	2189, 2199, 2201, 2229 CLEMENT AVENUE	ALAMEDA	94501	ALAMEDA
THE RITZ CLEANERS	60003480	ACTIVE	2/1/2023	935 N. EUCLID ST	ANAHEIM	92801	ORANGE
GBF / PITTSBURG DUMPS	7490038	ACTIVE - LAND USE RESTRICTIONS	1/1/1988	SOMERVILLE RD & JAMES DONLON BLVD	ANTIOCH	94509	CONTRA COSTA
FULTON SHIPYARD	7440009	ACTIVE	1/27/2005	307 FULTON SHIPYARD ROAD	ANTIOCH	94509	CONTRA COSTA
MCNAMARA AND PEEPE LUMBER MILL	12240115	ACTIVE - LAND USE RESTRICTIONS	1/2/2019	1619 GLENDALE DRIVE	ARCATA	95521	HUMBOLDT
BROWN AND BRYANT, INC., ARVIN FACILITY	15280011	ACTIVE	3/1/1985	600 S DERBY ST	ARVIN	93203	KERN
CALTRANS SITE 15	19990002	CERTIFIED / OPERATION & MAINTENANCE -	4/9/1996	NE OF INTRSECTN OF WESTERN AVE & 120	ATHENS	90047	LOS ANGELES
ONE-HOUR MARTINIZING CLEANERS	60003037	ACTIVE	8/27/2020	1275 SOLANO AVENUE	ALBANY	94706	ALAMEDA
AREA 3 (SAN GABRIEL VALLEY SUPERFUND SITE)	60001335	ACTIVE	5/12/2015	COVERS CITY OF SAN GABRIEL, PORTIONS	ALHAMBRA	91778	LOS ANGELES
AFTER 5 TUX SHOP	60002994	BACKLOG	7/19/2023	1681 & 1683 WEST LINCOLN AVENUE	ANAHEIM	62860	ORANGE
DUCKETT REALTY ANAHEIM PROPERTY	60002000	ACTIVE	4/14/2014	2811 E. LINCOLN AVENUE	ANAHEIM	92806	ORANGE
FORT MCDOWELL	71000007	ACTIVE	11/4/2019	4 MILES NORTH OF SAN FRANCISCO	ANGEL ISLAND	93933	MARIN
SAN JOAQUIN DRUM COMPANY	15340023	ACTIVE	9/1/2010	3930 GILMORE AVENUE	BAKERSFIELD	93308	KERN
BENHAM AND JOHNSON	15280253	ACTIVE	8/30/2010	340 DANIELS LN	BAKERSFIELD	93307	KERN
ENVIRONMENTAL PROTECTION CORPORATION - EASTSIDE DIS	15490019	ACTIVE	7/1/1994	ROUND MOUNTAIN ROAD	BAKERSFIELD	93301	KERN
K & D SALVAGE	15500001	ACTIVE	6/29/1998	600 SOUTH UNION AVENUE	BAKERSFIELD	93307	KERN
CHEMICAL AND PIGMENT COMPANY	7280017	CERTIFIED / OPERATION & MAINTENANCE	11/18/2014	600 NICHOLS ROAD	BAY POINT	94565	CONTRA COSTA
LOCKHEED PROPULSION-BEAUMONT NO. 1	33370039	ACTIVE	5/13/2008	HIGHLAND SPRINGS ROAD	BEAUMONT	92223	RIVERSIDE
LOCKHEED PROPULSION-BEAUMONT NO. 2	33370038	ACTIVE	12/15/2006	JACK RABBIT TRAIL	BEAUMONT	92223	RIVERSIDE
CHROME CRANKSHAFT COMPANY	19350473	ACTIVE - LAND USE RESTRICTIONS	1/25/1999	6845 FLORENCE PL	BELL GARDENS	90201	LOS ANGELES
J&S CHROME PLATING	19340358	ACTIVE - LAND USE RESTRICTIONS	8/15/1995	6863 FLORENCE PL	BELL GARDENS	90201	LOS ANGELES
SHAMROCK CLEANERS	60003296	ACTIVE	3/1/2022	7616 EASTERN AVE	BELL GARDENS	90201	LOS ANGELES
SHAMROCK CLEANERS	60003300	ACTIVE	4/1/2022	5936 CLARA ST	BELL GARDENS	90201	LOS ANGELES
BENICIA ARSENAL (J09CA0756)	48970007	ACTIVE	1/12/2018	BETWEEN HWY 680 & 4TH STREET	BENICIA	94510	SOLANO
BORREGO SITES (J09CA701100 AND J09CA701800 AND OTHER /	37970028	ACTIVE	12/18/2019	ANZA-BORREGO DESERT STATE PARK	BORREGO SPRINGS	92004	SAN DIEGO
PUREGRO COMPANY	13070097	ACTIVE	3/25/2004	1025 RIVER DRIVE	BRAWLEY	92227	IMPERIAL
SOUTHERN PACIFIC - BRISBANE (NORTH AREA)	41490037	ACTIVE	5/13/2014	GENEVA AVENUE AND BAYSHORE BOULEVA	BRISBANE	94005	SAN MATEO
BALDWIN PARK (SAN GABRIEL VALLEY SUPERFUND SITE)	60001336	ACTIVE	5/12/2015	COVERS PORTIONS OF CITIES OF AZUSA, I	BALDWIN PARK	91706	LOS ANGELES
BAYWOOD PARK TRAINING AREA (J09CA0031)	71000008	ACTIVE	3/30/2005	13 MI NW OF SAN LUIS OBISPO	BAYWOOD PARK	93402	SAN LUIS OBISPO
FORMER D.L. GIN CLEANERS & LAUNDRY	60001235	ACTIVE	11/1/2009	4032 GAGE AVENUE	BELL	90201	LOS ANGELES
BENICIA ARSENAL, AREA I, BUILDING 165	60001960	ACTIVE	6/24/2014	750 JACKSON STREET	BENICIA	94510	SOLANO
BENICIA ARSENAL, AREA I, BUILDING 50 COMPLEX	60001959	ACTIVE	6/24/2014	946 TYLER ROAD	BENICIA	94510	SOLANO
CARRIZO IMPACT AREA	71000046	ACTIVE	8/24/2020	ANZA-BORREGO DESERT STATE PARK	BORREGO SPRINGS	92004	SAN DIEGO
NEW FASHION DRY CLEANERS	60001918	ACTIVE	5/28/2013	4548 BEACH BOULEVARD	BUENA PARK	90621	ORANGE
ALL METALS PROCESSING CO., INC.	71002180	ACTIVE	1/26/2024	264 W. SPAZIER AVENUE	BURBANK	91502	LOS ANGELES
DYNAMIC PLATING	60000535	ACTIVE	6/27/2023	1102 WEST ISABEL STREET	BURBANK	91506	LOS ANGELES
MONSANTO CHEMICAL COMPANY	19281200	ACTIVE	4/23/1996	2100 EAST 223RD STREET	CARSON	90810	LOS ANGELES
GOLDEN EAGLE REFINERY (FORMER)	19290167	CERTIFIED / OPERATION & MAINTENANCE -	1/30/2025	21000 SOUTH FIGUEROA STREET	CARSON	90745	LOS ANGELES
STAUFFER CHEMICAL, CARSON	19280083	CERTIFIED / OPERATION & MAINTENANCE -	8/2/2023	2112 EAST 223RD STREET	CARSON	90810	LOS ANGELES
CAL COMPACT LANDFILL	19490019	ACTIVE - LAND USE RESTRICTIONS	4/18/1996	20400 MAIN ST	CARSON	90745	LOS ANGELES
VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP)	19490191	ACTIVE	6/9/2006	340 EAST 192ND STREET	CARSON	90746	LOS ANGELES
CASMALIA RESOURCES	42490025	ACTIVE	5/8/1995	3300 NTU ROAD	CASMALIA	93429	SANTA BARBARA
FLAIR CUSTOM CLEANERS	4720003	ACTIVE	7/26/2010	660 MANGROVE AVE	CHICO	95926	BUTTE
NORTH VALLEY PLAZA CLEANERS	4720005	ACTIVE	7/1/1995	801 EAST AVENUE	CHICO	95926	BUTTE
CHICO MUNICIPAL AIRPORT	4450006	ACTIVE - LAND USE RESTRICTIONS	1/1/1985	651 AND 681 LIBERATOR STREET	CHICO	95926	BUTTE
NORGE VILLAGE CLEANERS	4720004	CERTIFIED / OPERATION & MAINTENANCE -	2/14/2006	254 EAST FIRST STREET	CHICO	95926	BUTTE
ESPLANADE CLEANERS	4720001	ACTIVE	2/7/2011	164 E 2ND AVE	CHICO	95926	BUTTE
FIRST AVENUE CLEANERS	4720002	ACTIVE	6/26/2003	1082 EAST 1ST AVENUE	CHICO	95927	BUTTE
CHICO - SKYWAY SUBDIVISION GROUNDWATER PLUME	4880002	ACTIVE - LAND USE RESTRICTIONS	6/21/2004	HAGEN LANE/SKYWAY AVENUE	CHICO	95928	BUTTE
LOUISIANA-PACIFIC CORP - CHICO	4240002	CERTIFIED / OPERATION & MAINTENANCE -	6/29/1999	WEST 16TH STREET	CHICO	95926	BUTTE
VICTOR INDUSTRIES - 20TH STREET	4360003	ACTIVE - LAND USE RESTRICTIONS	10/1/1990	365 E 20TH ST	CHICO	95928	BUTTE
CHICO GROUNDWATER - CENTRAL PLUME	4990003	ACTIVE	6/13/1997	CHICO AREA GROUNDWATER	CHICO	95926	BUTTE
CHICO GROUNDWATER - SOUTHWEST PLUME	4990002	ACTIVE - LAND USE RESTRICTIONS	8/14/2003	CHICO AREA GROUNDWATER	CHICO	95926	BUTTE
SULPHUR BANK MERCURY MINE	17100001	ACTIVE	1/1/1984	SULPHUR BANK ROAD	CLEARLAKE	95422	LAKE
FOSTER-GARDNER	33280137	ACTIVE - LAND USE RESTRICTIONS	9/27/2021	1577 FIRST STREET	COACHELLA	92236	RIVERSIDE
COALINGA ASBESTOS MINE	10140003	CERTIFIED / OPERATION & MAINTENANCE -	6/30/1994	PINE CANYON, 15 MILES NW OF COALINGA	COALINGA	93210	FRESNO
ATLAS ASBESTOS MINE	10320044	ACTIVE - LAND USE RESTRICTIONS	1/1/1983	20 MILES NW OF COALINGA-LOS GATOS CK	COALINGA	93210	FRESNO
CITY OF COALINGA ASBESTOS SITE	10330041	CERTIFIED / OPERATION & MAINTENANCE -	6/25/1991	AREA SE OF LUCILLE AVENUE & HWY 198	COALINGA	93210	FRESNO

SITE / FACILITY NAME	ENVIROSTOR ID	STATUS	STATUS DATE	ADDRESS DESCRIPTION	CITY	ZIP	COUNTY
WESTERN LEAD PRODUCTS, COMMERCE & UPR RIGHT-OF-WA	19330383	CERTIFIED / OPERATION & MAINTENANCE	4/11/2023	4530 E PACIFIC WAY	COMMERCE	90040	LOS ANGELES
SOUTHLAND OIL	19290003	CERTIFIED / OPERATION & MAINTENANCE -	8/16/2002	5619-5621 RANDOLPH STREET	COMMERCE	90040	LOS ANGELES
VILLA DRY CLEANERS	60003357	ACTIVE	4/1/2022	14329 S CENTRAL AVE	COMPTON	90220	LOS ANGELES
COURTESY CLEANERS	60003350	ACTIVE	4/1/2022	1705 E COMPTON BLVD	COMPTON	90221	LOS ANGELES
CASTLE CLEANERS	60003335	ACTIVE	4/1/2022	2524 E ALONDRA BLVD	COMPTON	90221	LOS ANGELES
J & J CLEANERS	60003351	ACTIVE	4/1/2022	1225 E COMPTON BLVD	COMPTON	90221	LOS ANGELES
KEY CLEANERS	60003352	ACTIVE	4/1/2022	1209 E ROSECRANS AVE	COMPTON	90221	LOS ANGELES
FRANK'S CLEANERS	19720023	ACTIVE	4/1/2022	224 1/2 W. ROSECRANS AVE.	COMPTON	90222	LOS ANGELES
TONY'S CLEANERS	60003356	ACTIVE	4/1/2022	914 S. CENTRAL AVENUE	COMPTON	90220	LOS ANGELES
ALEX CLEANERS	60003345	ACTIVE	4/1/2022	2036 N SANTA FE AVE	COMPTON	90221	LOS ANGELES
LYMART CLEANERS	60003353	ACTIVE	4/1/2022	1602 E ALONDRA	COMPTON	90220	LOS ANGELES
THOMAS RANCH	33290115	CERTIFIED / OPERATION & MAINTENANCE -	5/22/2013	S OF PALISADES DR, W OF SERFAS CLUB D	CORONA	91720	RIVERSIDE
DEL NORTE PESTICIDE STORAGE	8420001	CERTIFIED / OPERATION & MAINTENANCE	9/26/2012	2650 W WASHINGTON BLVD	CRESCENT CITY	95531	DEL NORTE
FORMER APEX METAL POLISHING	19340792	ACTIVE	12/31/2024	5977 W. WASHINGTON BLVD.	CULVER CITY	90232	LOS ANGELES
CADIZ LAKE SONIC TARGET #9	80000206	ACTIVE	11/10/2021	66-MILES EAST OF 29-PALMS	CADIZ	92277	SAN BERNARDINO
CARMEL CLEANERS	60002209	ACTIVE	7/14/2015	SWC OF JUNIPERO STREET AND 3RD AVEN	CARMEL	93921	MONTEREY
MARSHALL STEEL CLEANERS	60000250	ACTIVE	12/26/2017	20447 REDWOOD ROAD	CASTRO VALLEY	94546	ALAMEDA
CHICO SCRAP METAL - 20TH STREET	60000800	ACTIVE	1/31/2008	878 EAST 20TH STREET	CHICO	95928	BUTTE
FLOWSERVE CORPORATION - CHICO	60001983	ACTIVE	3/4/2014	844 BROADWAY STREET, APN 004-285-002-0	CHICO	95928	BUTTE
AVALON PROPERTY	60001560	ACTIVE - LAND USE RESTRICTIONS	10/6/2011	200 FALLS CANYON ROAD	CITY OF AVALON	90704	LOS ANGELES
PUENTE VALLEY (SAN GABRIEL VALLEY SUPERFUND SITE)	60001338	ACTIVE	10/23/2013	COVERS MOST OF CITY OF INDUSTRY, POR	CITY OF INDUSTRY	91744	LOS ANGELES
MOUNT LAGUNA AF STATION (J09CA1008)	80000625	ACTIVE	5/28/2025		CLEVELAND NAT F		SAN DIEGO
MOUNT OWEN RIFLE RANGE- IR/MMRP(J09CA0877)	71000033	ACTIVE	5/20/2008	APPROXIMATELY 6 MILES NORTHEAST OF C	CLOVIS	93911	FRESNO
NEWCROW II	60000714	ACTIVE	5/11/2021	6141 TO 6241 RANDOLPH STREET	COMMERCE	90040	LOS ANGELES
GALINDOS CLEANERS 2	60003475	ACTIVE	2/1/2023	526 W ALONDRA BLVD	COMPTON	90220	LOS ANGELES
SOUTHERN CALIFORNIA EDISON LAFAYETTE SUBSTATION	60001509	ACTIVE	1/5/2012	1680 MONROVIA AVENUE	COSTA MESA	92627	ORANGE
CLA-VAL FACILITY	60001550	ACTIVE	4/19/2011	1701 PLACENTIA AVENUE	COSTA MESA	92627	ORANGE
PRECISION OPTICAL INCORPORATED FACILITY	60001612	ACTIVE	12/13/2011	865 AND 869 WEST 17TH STREET	COSTA MESA	92627	ORANGE
PARKWAY FEED	60002993	ACTIVE	4/1/2020	120 JAKES WAY	CRESCENT CITY	95531	DEL NORTE
PG&E - MARTIN SERVICE DALY CITY YARD	41360100	CERTIFIED / OPERATION & MAINTENANCE -	5/4/1995	731 SCHWERIN STREET	DALY CITY	94014	SAN MATEO
MIDWAY VILLAGE	41650007	CERTIFIED / OPERATION & MAINTENANCE -	5/13/2003	47 MIDWAY DRIVE	DALY CITY	94014	SAN MATEO
PG&E - MARTIN SERVICE OU-2 AND LEVISON	41360093	CERTIFIED / OPERATION & MAINTENANCE -	6/30/2003	731 SCHWERIN STREET	DALY CITY	94014	SAN MATEO
FRONTIER FERTILIZER	57070001	ACTIVE - LAND USE RESTRICTIONS	4/1/1985	SECOND STREET/BTWN PENA & MACE BLVI	DAVIS	95616	YOLO
H S MANN METAL WASTE COMPANY	10330038	ACTIVE - LAND USE RESTRICTIONS	1/1/1984	5404 SOUTH DEL REY AVENUE	DEL REY	93616	FRESNO
SO CAL GAS/DINUBA MGP	54830001	ACTIVE	5/1/1986	216 S O ST	DINUBA	93618	TULARE
CENTRAL VALLEY FERTILIZER CO., INC.	24280039	ACTIVE	6/29/1998	7657 AZUSA AVE	DOS PALOS	93620	MERCED
OASIS CLEANERS	60002269	ACTIVE	11/19/2015	920 MAIN STREET	DELANO	93215	KERN
FORMER NATIONAL CLEANERS	60002270	ACTIVE	11/19/2015	811 11TH AVENUE	DELANO	93215	KERN
OAK LANE CLEANERS	60002268	ACTIVE	11/19/2015	910 MAIN STREET	DELANO	93215	KERN
DELANO PCE PLUME	60001327	ACTIVE	8/4/2010	MAIN STREET AND 10TH AVENUE	DELANO	93215	KERN
DRY CANYON ARTILLERY RANGE	80000411	ACTIVE	4/26/2023	53 MILES NORTHWEST OF THE CITY OF VEN	DRY CANYON	93222	VENTURA
PARKS AIR FORCE BASE (J09CA0083)	80000158	ACTIVE	3/22/2013		DUBLIN		ALAMEDA
J R SIMPLOT, EDISON	15070030	ACTIVE - LAND USE RESTRICTIONS	5/1/1986	430 PEPPER DRIVE	EDISON	93220	KERN
KETEMA AEROSPACE & ELECTRONICS	37370033	ACTIVE	9/28/2017	790 GREENFIELD DR.	EL CAJON	92021	SAN DIEGO
CASPIAN INC	13280019	CERTIFIED / OPERATION & MAINTENANCE -	6/30/1998	287 WEST ATEN ROAD	EL CENTRO	92243	IMPERIAL
SAN GABRIEL GROUNDWATER BASIN (1-4)*	19990006	ACTIVE	5/12/2015	10-20 MI E OF L.A. ON HWY 10 IN AZUSA	EL MONTE	91732	LOS ANGELES
WICKES FOREST INDUSTRIES	48240001	ACTIVE - LAND USE RESTRICTIONS	3/11/1996	INTERSECTION OF HOLDENER & A STREETS	ELMIRA	95625	SOLANO
IKEA (FORMER BARBARY COAST)	1440005	CERTIFIED / OPERATION & MAINTENANCE -	9/19/2000	4300 EASTSHORE HIGHWAY	EMERYVILLE	94608	ALAMEDA
MYERS DRUM - EMERYVILLE	1340110	CERTIFIED / OPERATION & MAINTENANCE -	5/11/2001	4500 SHELLMOUND STREET	EMERYVILLE	94608	ALAMEDA
CHATHAM BROTHERS BARREL YARD	37490029	CERTIFIED / OPERATION & MAINTENANCE	8/3/2020	2257 BERNARDO AVE	ESCONDIDO	92029	SAN DIEGO
MAGNOLIA ELEMENTARY SCHOOL	60000488	ACTIVE	10/18/2006	650 GREENFIELD DRIVE	EL CAJON	92021	SAN DIEGO
EL CENTRO ROCKET TARGET NO.1 (#92)	80000167	ACTIVE	12/7/2021	E1/2, NW1/2, S25, T14S & R12E	EL CENTRO	92244	IMPERIAL
EL CENTRO ROCKET TARGET NO. 2 (#93)	80000101	ACTIVE	1/9/2020	E1/2, NW1/2, S13, T14S & R12E	EL CENTRO	92244	IMPERIAL
EL MONTE (SAN GABRIEL VALLEY SUPERFUND SITE)	60001337	ACTIVE	6/16/2015	COVERS PORTIONS OF CITIES OF EL MONT	EL MONTE	91732	LOS ANGELES
HYTONE CLEANERS	60000629	ACTIVE	5/1/2007	2702 MOUNTAIN VIEW ROAD	EL MONTE	91732	LOS ANGELES
U.S. EPA SAN GABRIEL VALLEY - BOOSTER STATION	60003743	ACTIVE	1/1/2023	COVERS VARIOUS CITIES	EL MONTE	91732	LOS ANGELES
OBIE'S DUMP	60001365	ACTIVE	6/23/2022	8437 SHELDON ROAD	ELK GROVE	95624	SACRAMENTO
MARCHANT/WHITNEY	60001628	ACTIVE	2/7/2012	5679 HORTON STREET	EMERYVILLE	94608	ALAMEDA

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SOUTHERN PACIFIC, SUISUN MARSH	48400001	CERTIFIED / OPERATION & MAINTENANCE -	8/25/1998	END OF CHADBORNE RD, SUISUN MARSH	FAIRFIELD	94585	SOLANO
PACIFIC COAST PIPE LINES	56130038	CERTIFIED / OPERATION & MAINTENANCE -	10/25/2024	67 EAST TELEGRAPH ROAD	FILLMORE	93015	VENTURA
TRI-AIR, INCORPORATED	10070021	ACTIVE - LAND USE RESTRICTIONS	5/1/1986	915 TENTH STREET	FIREBAUGH	93622	FRESNO
BRITZ FERTILIZERS, INC - FIVE POINTS	10280077	CERTIFIED / OPERATION & MAINTENANCE -	2/19/2004	21817 SOUTH COALINGA ROAD	FIVE POINTS	93624	FRESNO
GEORGIA-PACIFIC CORPORATION	23240008	ACTIVE - LAND USE RESTRICTIONS	8/1/2006	90 WEST REDWOOD AVENUE	FORT BRAGG	95437	MENDOCINO
EEL RIVER SAWMILLS, MILL A	12240119	ACTIVE	6/16/1999	1053 NORTHWESTERN AVE	FORTUNA	95540	HUMBOLDT
FRESNO AIR TERMINAL/OLD HAMMER FIELD (J09CA0823)	10450005	ACTIVE	1/1/1990	MCKINLEY AND CLOVIS AVENUES	FRESNO	93727	FRESNO
FRESNO SANITARY LANDFILL	10490097	ACTIVE - LAND USE RESTRICTIONS	1/1/1989	SW CORNER OF JENSEN & WEST AVENUES	FRESNO	93706	FRESNO
T H AGRICULTURE & NUTRITION, L.L.C.	10280334	CERTIFIED / OPERATION & MAINTENANCE -	1/12/2006	7183 EAST MCKINLEY AVENUE	FRESNO	93727	FRESNO
SOUTH FRESNO REGIONAL GROUNDWATER PLUME	10400005	ACTIVE	11/26/2002	NORTH OF CHURCH AVENUE AT SOUTH EA	FRESNO	93721	FRESNO
WEIR FLOWAY INC.	10340137	CERTIFIED / OPERATION & MAINTENANCE -	6/11/2015	2494 SOUTH RAILROAD AVENUE, P.O. BOX 1	FRESNO	93707	FRESNO
FMC CORPORATION - FRESNO	10280013	ACTIVE	1/1/1985	2501 SOUTH SUNLAND AVENUE	FRESNO	93725	FRESNO
COMMERCIAL ELECTROPLATERS	10340074	ACTIVE	4/28/1993	2940 SOUTH ELM AVENUE	FRESNO	93706	FRESNO
VALLEY FOUNDRY AND MACHINE WORKS	10390001	ACTIVE	5/16/2011	2510 SOUTH EAST AVENUE	FRESNO	93717	FRESNO
MCCOLL	30290001	CERTIFIED / OPERATION & MAINTENANCE -	8/26/2014	ROSECRANS & SUNNY RIDGE	FULLERTON	92833	ORANGE
AUTONETICS/RAYTHEON	60002054	ACTIVE	8/21/2017	310 EAST WALNUT AVENUE	FULLERTON	92832	ORANGE
CBS FENDER	60002051	ACTIVE	8/21/2017	500 SOUTH RAYMOND BLVD.	FULLERTON	92831	ORANGE
GOLDEN WEST TOWING EQUIPMENT	60002066	BACKLOG	8/26/2017	1850 EAST ORANGETHORPE AVENUE	FULLERTON	92831	ORANGE
NORTHROP Y-19	60002053	ACTIVE	8/21/2017	1401 EAST ORANGETHORPE AVENUE	FULLERTON	92831	ORANGE
ORANGE COUNTY NORTH BASIN GROUP	60002058	ACTIVE	8/19/2014	VARIOUS SITES LOCATED NORTH OF THE 9	FULLERTON AND PLAC	92832	ORANGE
FAIRFAX FRENCH LAUNDRY & CLEANERS	60003887	ACTIVE	5/1/2025	101 BOLINAS ROAD	FAIRFAX	94930	MARIN
FAIR ANSELM CENTER, INC.	60001218	ACTIVE	11/25/2009	709 & 711 CENTER BOULEVARD	FAIRFAX	94930	MARIN
CITY OF FORT BRAGG COASTAL TRAIL	60002118	ACTIVE - LAND USE RESTRICTIONS	11/5/2014	STATE HIGHWAY 1	FORT BRAGG	95437	MENDOCINO
CALIFORNIA AND ELM GROUNDWATER PLUME	60003220	ACTIVE	1/1/2022	1802 EAST CALIFORNIA AVENUE	FRESNO	93706	FRESNO
POTENTIAL RELEASE SOUTHEAST OF GOLDEN STATE BLVD. &	60003415	ACTIVE	9/27/2022	SOUTHEAST OF GOLDEN STATE BLVD& S. E	FRESNO	93706	FRESNO
SOUTH FRESNO PCE GROUNDWATER PLUME	60000706	ACTIVE	10/17/2003	2376 S. RAILROAD AVENUE	FRESNO	93721	FRESNO
DOWNGRADIENT PORTION OF SOUTH FRESNO REGIONAL GRO	60003394	ACTIVE	5/15/2022	NORTH OF EAST WOODWARD AVENUE AT S	FRESNO	93721	FRESNO
FORMER NEES ONE HOUR MARTINIZING	60003167	ACTIVE	7/1/2021	7763 NORTH FIRST STREET	FRESNO	93720	FRESNO
ORANGE COUNTY METAL PROCESSING	71002520	ACTIVE	12/20/2007	1711 E. KIMBERLY AVENUE	FULLERTON	92831	ORANGE
CHICAGO MUSICAL INSTRUMENTS (FORMER)	60001251	ACTIVE - LAND USE RESTRICTIONS	2/16/2010	350 SOUTH RAYMOND AVENUE	FULLERTON	92831	ORANGE
PCA METAL FINISHING, INC.	71002360	ACTIVE	6/27/2007	1726 E. ROSSLYNN AVENUE	FULLERTON	92831	ORANGE
GARDENA SUMPS	19490135	ACTIVE	9/25/1995	1450 WEST ARTESIA BOULEVARD (AT NORM	GARDENA	90247	LOS ANGELES
SAN FERNANDO VALLEY (AREA 2)	19990012	ACTIVE	1/1/1984	CRYSTAL SPRINGS WELLFIELD AREA	GLENDALE	91209	LOS ANGELES
WINDSOR CLEANERS	60003369	ACTIVE	4/1/2022	721 S CENTRAL AVE STE D	GLENDALE	91204	LOS ANGELES
WINDSOR CLEANERS	60003368	ACTIVE	4/1/2022	730 S CENTRAL AVE #114	GLENDALE	91204	LOS ANGELES
SHELL- FORMER HERCULES GAS PLANT	42290014	CERTIFIED / OPERATION & MAINTENANCE -	4/26/2021	14730 HIGHWAY 101	GOLETA	93117	SANTA BARBARA
EMPIRE MINE STATE PARK	29100003	ACTIVE	11/1/2005	10791 E EMPIRE ST	GRASS VALLEY	95945	NEVADA
PRIME DRY CLEANERS	60003180	ACTIVE	9/1/2021	16402 NORMANDIE AVENUE	GARDENA	90247	LOS ANGELES
LABRIC/ALCO PACIFIC	60003385	ACTIVE	4/26/2022	16914 SOUTH BROADWAY	GARDENA	90248	LOS ANGELES
GARDENA HALLDALE/ROSECRANS	60003763	ACTIVE	2/28/2024	14315 HALLDALE AVENUE	GARDENA	90247	LOS ANGELES
INDUSTRIAL POLYCHEMICAL SERVICE CORP	60001937	ACTIVE	9/30/2013	17109 SOUTH MAIN STREET	GARDENA	90248	LOS ANGELES
2403 MARINE AVENUE	60002922	ACTIVE	1/3/2020	2403 MARINE AVENUE	GARDENA	90249	LOS ANGELES
PALACE CLEANERS GLENDALE	60002013	ACTIVE	6/2/2014	201 SOUTH GLENDALE AVENUE	GLENDALE	91205	LOS ANGELES
THE DRILUBE CO.	71002199	ACTIVE	1/26/2024	711 W. BROADWAY	GLENDALE	91204	LOS ANGELES
GOFFS CPSITE	80000412	ACTIVE	12/13/2017	35 MILES WEST OF NEEDLES	GOFFS	92363	SAN BERNARDINO
GOSHEN CARBON TET PLUME	60002004	ACTIVE	5/5/2014	BETTY DRIVE	GOSHEN	93227	TULARE
GREENVILLE SOIL REMOVAL	60003346	ACTIVE	4/7/2022	GREENVILLE	GREENVILLE	95947	PLUMAS
GUSTINE BOMBING RANGE (J09CA7287) - MMRP	80001093	ACTIVE	6/11/2020	5 MILES WEST OF GUSTINE AND 156 MILES	GUSTINE	95322	MERCED
SO CAL GAS/HANFORD MGP	16490005	CERTIFIED / OPERATION & MAINTENANCE -	8/21/2012	325 EAST 5TH STREET	HANFORD	93230	KINGS
HERCULES PROPERTIES, LTD.	7280016	CERTIFIED / OPERATION & MAINTENANCE -	6/9/1997	560 RAILROAD AVENUE	HERCULES	94547	CONTRA COSTA
HERCULES INC	7280156	CERTIFIED / OPERATION & MAINTENANCE -	11/25/1992	CORNER OF SAN PABLO & SYCAMORE AVE	HERCULES	94547	CONTRA COSTA
STEVERSON BROS. BOUCHER SITE	30490053	ACTIVE	2/24/2023	SE OF BOLSA CHICA & DUNBAR	HUNTINGTON BEACH	92649	ORANGE
ASCON LANDFILL	30490018	ACTIVE	1/1/1984	21641 MAGNOLIA STREET	HUNTINGTON BEACH	92646	ORANGE
VIP LAUNDRY	60003303	ACTIVE	4/1/2022	6101 S SANTA FE AVE	HUNTINGTON PARK	90255	LOS ANGELES
HOLTVILLE ROCKET TARGET 1R #94	80000145	ACTIVE	1/9/2020	8 MILES NORTH-NORTHEAST OF HOLTVILLE	HOLTVILLE	92250	IMPERIAL
LAX INFLITE SERVICES LLC DBA ROYAL AIRLINE LINEN	60003321	ACTIVE	4/1/2022	125 N ASH AVE	INGLEWOOD	90301	LOS ANGELES
AFTERTHOUGHT MINE AND SMELTER	45100004	ACTIVE	12/13/2023	HIGHWAY 299, 20 MI NORTH EAST OF REDD	INGOT	96008	SHASTA
MP ASSOCIATES, INC.	3390001	ACTIVE	3/31/2003	6555 JACKSON VALLEY ROAD	IONE	95640	AMADOR

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ARGONAUT MINE	3100002	ACTIVE	10/11/2016	ARGONAUT LANE	JACKSON	95642	AMADOR
ALLEN RANCH TAILINGS	70000030	BACKLOG	1/12/2024	APPROXIMATELY ONE HALF MILE WEST OF	JACKSON	95968	AMADOR
PYRITE LEASING	60002153	ACTIVE	3/5/2015	3500 PYRITE STREET	JURUPA VALLEY	92509	RIVERSIDE
KELLEHER EQUIPMENT SUPPLY INC	60003341	ACTIVE	4/1/2022	2121 EAST CURRY STREET	LONG BEACH	90805	LOS ANGELES
SPEND A BUCK CLEANERS	60003344	ACTIVE	4/1/2022	910 DAISEY AVE	LONG BEACH	90813	LOS ANGELES
LEONS CLEANERS	60003323	ACTIVE	4/1/2022	8252 S MAIN ST	LOS ANGELES	90003	LOS ANGELES
SAVE-WAY CLEANERS	60003316	ACTIVE	4/1/2022	3727 E OLYMPIC BLVD	LOS ANGELES	90023	LOS ANGELES
PARK LANE CLEANERS	60003315	ACTIVE	4/1/2022	3574 S LACIENEGA BLVD	LOS ANGELES	90016	LOS ANGELES
ARAMARK UNIFORM & CAREER APPAREL LLC	60003289	ACTIVE	3/1/2022	1405 E 58TH PL	LOS ANGELES	90001	LOS ANGELES
BEEFAIR CLEANER & LAUNDRY	60003318	ACTIVE	4/1/2022	2114 W SLAUSON (2112 W SLAUSON)	LOS ANGELES	90047	LOS ANGELES
SWEDISH HAND DRY	60003329	ACTIVE	4/1/2022	5950 S WESTERN	LOS ANGELES	90047	LOS ANGELES
PALACE PLATING	19340646	ACTIVE	2/21/2022	710 EAST 29TH STREET	LOS ANGELES	90011	LOS ANGELES
SAN FERNANDO VALLEY (AREA 4)	19990009	CERTIFIED / OPERATION & MAINTENANCE	1/1/1999	POLLOCK WELLFIELD	LOS ANGELES	90086	LOS ANGELES
1X SLOAN DRY CLEANERS	60003305	ACTIVE	4/1/2022	2924 WHITTIER BLVD	LOS ANGELES	90023	LOS ANGELES
AMTRAK REDONDO JUNCTION FACILITY	19400012	ACTIVE	1/10/2003	2435 E. WASHINGTON BLVD.	LOS ANGELES	90021	LOS ANGELES
FRANCISCAN CERAMICS, INC.	19320112	CERTIFIED / OPERATION & MAINTENANCE -	12/30/1994	2901 LOS FELIZ BOULEVARD	LOS ANGELES	90039	LOS ANGELES
INTERNATIONAL LEAD CO. (A.K.A. WESTERN LEAD AND METAL	19390044	CERTIFIED / OPERATION & MAINTENANCE -	12/30/2007	2182 EAST 11TH STREET	LOS ANGELES	90021	LOS ANGELES
410 E. 32ND STREET & 317 E. 33RD STREET	60002760	ACTIVE	12/6/2018	410 E. 32ND STREET & 317 E. 33RD STREET	LOS ANGELES	90011	LOS ANGELES
DEL AMO FACILITY	19300230	ACTIVE - LAND USE RESTRICTIONS	4/22/1996	DEL AMO BLVD & VERMONT AVE	LOS ANGELES	90020	LOS ANGELES
CALTRANS I-105 #16 & 17	19990003	CERTIFIED / OPERATION & MAINTENANCE -	6/30/1994	I-5 FWY BTW NORMANDIE BLV & IMPERIAL H	LOS ANGELES	90047	LOS ANGELES
SAN FERNANDO VALLEY (AREA 1)	19990011	ACTIVE	5/15/1996	NORTH HOLLYWOOD WELLFIELD AREA	LOS ANGELES	91601	LOS ANGELES
CHARLES CAINE COMPANY, INC.	19281216	ACTIVE	7/2/2001	8325 HINDRY AVENUE	LOS ANGELES	90045	LOS ANGELES
WILLIAM MEAD HOMES	19290312	ACTIVE - LAND USE RESTRICTIONS	7/25/2024	1300 CARDINAL STREET	LOS ANGELES	90012	LOS ANGELES
VERMONT CLEANERS	60003330	ACTIVE	4/1/2022	11949 S VERMONT AVE	LOS ANGELES	90044	LOS ANGELES
HARD CHROME PRODUCTS	19340231	ACTIVE	7/1/2001	617 EAST 56TH STREET	LOS ANGELES	90011	LOS ANGELES
WEAVER'S DRY CLEANERS	60003304	ACTIVE	4/1/2022	9915 COMPTON AVE	LOS ANGELES	90002	LOS ANGELES
DOVE CLEANERS	60003322	ACTIVE	4/1/2022	10553 SANTA MONICA	LOS ANGELES	90025	LOS ANGELES
LA HABRA NORGE VILLAGE CLEANERS	60002635	ACTIVE	4/11/2018	650 NORTH HARBOR BOULEVARD	LA HABRA	90631	ORANGE
SAN PEDRO BASIN DEEPWATER DISPOSAL SITES	60003073	ACTIVE	12/3/2020	SAN PEDRO BASIN (BETWEEN THE COAST (	LONG BEACH	90802	LOS ANGELES
20245 SUNBURST STREET	60003847	ACTIVE	1/1/2025	20245 SUNBURST STREET	LOS ANGELES	91311	LOS ANGELES
SANIT CLEANERS	60002829	ACTIVE	3/1/2022	5870 HOOPER AVENUE	LOS ANGELES	90001	LOS ANGELES
SAINT VINCENT DE PAUL	60003547	ACTIVE	8/8/2023	210 N AVENUE 21	LOS ANGELES	90031	LOS ANGELES
SOUTH BROADWAY & 65TH STREET	60002974	ACTIVE	2/23/2021	6421 SOUTH BROADWAY	LOS ANGELES	90003	LOS ANGELES
20150 SUNBURST STREET	60003872	ACTIVE	1/1/2025	20150 SUNBURST STREET	LOS ANGELES	91311	LOS ANGELES
LABRIC/WESTERN LEAD AND EASTERN SMELTING SITES	60003955	ACTIVE	7/1/2025	2182, 2200, AND 2300 EAST 11TH STREET	LOS ANGELES	90021	LOS ANGELES
SPENCE PROPERTY AKA DRY CLEANER IN EAGLE ROCK	60000305	ACTIVE	5/5/2006	7047-7051 NORTH FIGUEROA STREET	LOS ANGELES	90042	LOS ANGELES
SERVICE PLATING COMPANY INC	60002166	ACTIVE	4/1/2015	1855 EAST 62ND STREET	LOS ANGELES	90001	LOS ANGELES
LABRIC/BERG METALS	60002774	ACTIVE	1/17/2019	2652 LONG BEACH AVENUE	LOS ANGELES	90058	LOS ANGELES
STANDARD NICKEL CHROMIUM PLATING CO.	71003183	ACTIVE - LAND USE RESTRICTIONS	6/4/2004	811,817/819, 825 & 826 E. 62ND STREET	LOS ANGELES	90001	LOS ANGELES
SOLVAY USA INC.	60002912	ACTIVE	12/5/2019	500 FEET WEST OF INTERSECTION OF SALT	LOS ANGELES	90280	LOS ANGELES
MACGILLIS AND GIBBS	20240001	CERTIFIED / OPERATION & MAINTENANCE -	4/17/2024	11272 ROAD 32	MADERA	93639	MADERA
321 S. C STREET	60003808	ACTIVE	5/1/2024	321 S C STREET	MADERA	93638	MADERA
PURITY OIL SALES, INC	10500005	ACTIVE	1/1/1985	3265 SOUTH MAPLE AVENUE	MALAGA	93726	FRESNO
CORNELL-DUBILIER ELECTRONICS (RODNEY FRENCH, INC.)	19360279	ACTIVE - LAND USE RESTRICTIONS	5/11/2021	4144 GLENCOE AVENUE	MARINA DEL REY	90292	LOS ANGELES
AMERICAN FOREST PRODUCTS - MARTELL	3240002	BACKLOG	5/30/2000	HIGHWAY 49 AND HIGHWAY 88 JUNCTION	MARTELL	95654	AMADOR
PEMACO CHEMICAL CORPORATION FORMER	19281217	ACTIVE - LAND USE RESTRICTIONS	6/15/2020	5040-5050 SLAUSON BLVD.	MAYWOOD	90270	LOS ANGELES
MODESTO GROUNDWATER CONTAMINATION	50950002	ACTIVE - LAND USE RESTRICTIONS	3/31/1989	MCHENRY AVE., SOUTH OF ORANGEBURG A	MODESTO	95351	STANISLAUS
PURDY COMPANY	15330010	CERTIFIED / OPERATION & MAINTENANCE -	2/28/1997	12901 UNITED STREET	MOJAVE	93501	KERN
COMMODITY REFINING EXCHANGE	15330008	CERTIFIED / OPERATION & MAINTENANCE -	6/27/2003	11847 UNITED STREET	MOJAVE	93501	KERN
UNITED METAL RECOVERY	15330007	CERTIFIED / OPERATION & MAINTENANCE -	6/1/1995	12433 UNITED STREET	MOJAVE	93501	KERN
SILVER QUEEN JUNKYARD	15500002	CERTIFIED / OPERATION & MAINTENANCE -	6/30/2006	BACK LOT AT 11847 UNITED STREET	MOJAVE	93501	KERN
MOBILE SMELTING	15330011	ACTIVE	6/29/1998	UNITED STREET & REED ROAD	MOJAVE	93501	KERN
OPERATING INDUSTRIES, INC. LANDFILL	19490207	CERTIFIED / OPERATION & MAINTENANCE -	8/2/2012	900 POTRERO GRANDE DR	MONTEREY PARK	91755	LOS ANGELES
PLESSEY MICRO SCIENCE	43360069	CERTIFIED / OPERATION & MAINTENANCE -	6/28/2007	2274 MORA DRIVE	MOUNTAIN VIEW	94040	SANTA CLARA
MADERA PCE GROUNDWATER PLUME	60001450	ACTIVE	10/19/2010	SOUTH C STREET AND 7TH STREET	MADERA	93638	MADERA
MADERA AIR FORCE STATION (J09CA0858)	80000555	ACTIVE	3/3/2021		MADERA		MADERA
1201 W. YOSEMITE AVENUE	60003810	ACTIVE	5/1/2024	1201 W. YOSEMITE AVENUE	MADERA	93638	MADERA
1170 COUNTRY CLUB DRIVE	60003809	ACTIVE	5/1/2024	1170 COUNTRY CLUB DRIVE	MADERA	93638	MADERA

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200 N E STREET	60003807	ACTIVE	5/1/2024	200 N. E. STREET	MADERA	93638	MADERA
RESOURCE RENEWAL TECHNOLOGY, INC. - MARICOPA FACILIT	70000045	ACTIVE	9/14/2011	24306 HIGHWAY 166	MARICOPA	93252	KERN
CAMP BEALE (J09CA0136) - MMRP	58970001	ACTIVE	7/12/2001	97.74 SQ MI; 40 MI N OF SACRAMENTO	MARYSVILLE	95901	YUBA
DERRY LANE MIXED USE DEVELOPMENT	60000286	ACTIVE	5/1/2006	DERRY LANE	MENLO PARK	94025	SAN MATEO
FORMER NORGE / ATHERTON VILLAGE CLEANERS	60001376	ACTIVE	11/22/2010	1438 EL CAMINO REAL	MENLO PARK	94025	SAN MATEO
TARGET MASTERS WEST	60002853	ACTIVE	7/1/2019	122 MINNIS CIRCLE	MILPITAS	95035	SANTA CLARA
MOJAVE GUNNERY RANGE - (J09CA7281) MMRP	80000950	ACTIVE	9/14/2006	2 MILE SW OF 21000 HACIENDA BLVD	MOJAVE	93505	KERN
OWL CLEANERS	60002357	ACTIVE	5/17/2016	153 WEBSTER STREET	MONTEREY	93940	MONTEREY
CAMP IBIS (J09CA028300)	36970011	ACTIVE	4/24/2023	21 MILES NORTHWEST OF NEEDLES	NEEDLES	92363	SAN BERNARDINO
LAVA CAP MINE	29100004	ACTIVE	11/25/1996	14501 LAVA CAP MINE ROAD	NEVADA CITY	95959	NEVADA
NEW IDRIA MINE	35100001	ACTIVE	4/1/2025	NEW IDRIA	NEW IDRIA	95043	SAN BENITO
NIPOMO WASTE OIL DUMP	40880001	ACTIVE	8/11/2023	725 MONARCH LANE	NIPOMO	93444	SAN LUIS OBISPO
WYLE LABS - NORCO FACILITY	33730084	ACTIVE - LAND USE RESTRICTIONS	10/3/2004	1841 HILLSIDE AVENUE	NORCO	92860	RIVERSIDE
HAMILTON AAF - (J09CA7062) - NORTH ANTENNA FIELD - IR/MM	21970012	ACTIVE	7/20/1999	HIGHWAY 101; 3 MI N OF LUCAS VALLEY RO	NOVATO	94947	MARIN
HAMILTON AAF (J09CA7062) (GSA PHASE II_LF26) IR	21970010	CERTIFIED / OPERATION & MAINTENANCE	6/26/2013	HIGHWY 101; 3 MI N OF LUCAS VALLEY ROA	NOVATO	94947	MARIN
DAVIS MILL/HOGE MINE	60000691	ACTIVE	8/2/2018	13145 NORTH BLOOMFIELD-GRANITEVILLE I	NEVADA CITY	95959	NEVADA
HARD CHROME ENGINEERING	1870003	ACTIVE	4/30/2003	750 107TH AVENUE	OAKLAND	94603	ALAMEDA
NORTHWESTERN VENETIAN SUPPLY CORP. SITE	1340123	ACTIVE - LAND USE RESTRICTIONS	5/27/2014	1218 24TH STREET	OAKLAND	94607	ALAMEDA
CAL TECH METAL FINISHERS	1340118	ACTIVE	5/2/2006	825, 829, 841 31ST STREET	OAKLAND	94608	ALAMEDA
E-D COAT INC	60002501	ACTIVE	4/21/2017	715 4TH STREET	OAKLAND	94607	ALAMEDA
COMMERCIAL BUILDINGS	1720110	ACTIVE	6/10/2003	1250-1276, 1284 W. GRAND & 2232 POPLAR	OAKLAND	94607	ALAMEDA
UNION PACIFIC OAKLAND COLISEUM SITE	1400015	ACTIVE	4/4/2002	700 73RD AVENUE	OAKLAND	94621	ALAMEDA
SOUTHERN PACIFIC -WEST OAKLAND RAIL YARD	1400010	CERTIFIED / OPERATION & MAINTENANCE -	5/28/2009	CYPRESS CORRIDOR	OAKLAND	94607	ALAMEDA
ACTION PLATING (2W)	1340116	CERTIFIED / OPERATION & MAINTENANCE -	4/30/2012	10132 EDES AVENUE	OAKLAND	94603	ALAMEDA
HOWARD MARINE TERMINAL SITE	1440006	ACTIVE - LAND USE RESTRICTIONS	1/28/2020	EMBARCADERO WEST AND MARKET STREE	OAKLAND	94604	ALAMEDA
PORT OF OAKLAND - EMBARCADERO COVE	1510021	CERTIFIED / OPERATION & MAINTENANCE -	3/28/1997	DENNISON AND EMBARCADERO STREETS	OAKLAND	94606	ALAMEDA
AMCO CHEMICAL	1390001	ACTIVE	5/1/2002	1414 THIRD STREET	OAKLAND	94607	ALAMEDA
PORT OF OAKLAND, BERTH 25 AND 26	1280092	CERTIFIED / OPERATION & MAINTENANCE -	9/20/2011	2500 7TH STREET	OAKLAND	94607	ALAMEDA
DUTCH BOY #3	1390006	CERTIFIED / OPERATION & MAINTENANCE -	12/18/2008	4825 SAN LEANDRO STREET	OAKLAND	94601	ALAMEDA
HARRIS DRY CLEANERS	1720109	ACTIVE	6/16/2000	2801 MARTIN LUTHER KING JR. WAY	OAKLAND	94609	ALAMEDA
GENERAL ELECTRIC - OAKLAND	1360059	ACTIVE - LAND USE RESTRICTIONS	6/25/1997	5441 INTERNATIONAL BOULEVARD	OAKLAND	94601	ALAMEDA
COOK BATTERY (OAKLEY BATTERY)	7360035	CERTIFIED / OPERATION & MAINTENANCE	6/28/2006	139 HILL AVENUE	OAKLEY	94561	CONTRA COSTA
TRI-CITY PLATING, INCORPORATED	37340034	ACTIVE	2/19/2019	1307 SOUTH COAST HIGHWAY	OCEANSIDE	92054	SAN DIEGO
ORLAND CLEANERS	11720001	CERTIFIED / OPERATION & MAINTENANCE	10/23/2013	726 FIFTH STREET	ORLAND	95963	GLENN
PARMENTER AND BRYAN	54070063	ACTIVE - LAND USE RESTRICTIONS	7/20/2018	13133 AVENUE 416	OROSI	93647	TULARE
KOPPERS INDUSTRIES INC (OROVILLE PLANT)	4240001	CERTIFIED / OPERATION & MAINTENANCE -	2/14/2004	BAGGETT-MARYSVILLE ROAD	OROVILLE	95965	BUTTE
HALACO ENGINEERING COMPANY	56330002	ACTIVE	3/28/2007	6200 PERKINS ROAD	OXNARD	93033	VENTURA
ACTS COMMUNITY DEVELOPMENT	60003038	ACTIVE	8/27/2020	1001 77TH AVENUE	OAKLAND	94621	ALAMEDA
LANE METAL FINISHERS	60000594	ACTIVE	3/15/2007	2942 SAN PABLO AVENUE	OAKLAND	94608	ALAMEDA
ALUMIN-ART PLATING COMPANY INC.	60001398	ACTIVE	2/1/2011	803 WEST STATE ST	ONTARIO	91762	SAN BERNARDINO
IRVINE PARK - ARMY CAMP	80000831	ACTIVE	12/16/2019	LOCATED ON APPROX. 225 ACRES WITHIN S	ORANGE	92869	ORANGE
HOLCHEM, INC.	19281213	ACTIVE - LAND USE RESTRICTIONS	5/13/1997	13546 DESMOND STREET	PACOIMA	91331	LOS ANGELES
WATKINS JOHNSON COMPANY (SRP)	43360076	CERTIFIED / OPERATION & MAINTENANCE	8/30/1996	3333 HILLVIEW AVENUE	PALO ALTO	94304	SANTA CLARA
SMITHKLINE AND FRENCH LABORATORIES	43360079	CERTIFIED / OPERATION & MAINTENANCE	4/29/1996	3400 HILLVIEW AVENUE	PALO ALTO	94304	SANTA CLARA
TELEDYNE SINGER	43360073	CERTIFIED / OPERATION & MAINTENANCE	7/31/1995	3176 PORTER DRIVE	PALO ALTO	94304	SANTA CLARA
HEWLETT PACKARD BUILDING 15	43360078	CERTIFIED / OPERATION & MAINTENANCE	7/31/1995	3215 PORTER DRIVE	PALO ALTO	94304	SANTA CLARA
SYNTEX	43360114	CERTIFIED / OPERATION & MAINTENANCE	5/28/1996	3300 HILLVIEW AVE	PALO ALTO	94304	SANTA CLARA
VARIAN	43360086	CERTIFIED / OPERATION & MAINTENANCE	8/21/1997	611 HANSEN WAY	PALO ALTO	94304	SANTA CLARA
TELEDYNE MEC	43360088	CERTIFIED / OPERATION & MAINTENANCE	9/12/1995	3165 PORTER DR	PALO ALTO	94304	SANTA CLARA
HILLVIEW PORTER PLUME	43360077	CERTIFIED / OPERATION & MAINTENANCE	6/30/1997	HILLVIEW AVENUE AND PORTER DRIVE	PALO ALTO	94304	SANTA CLARA
HEWLETT PACKARD BUILDINGS 28A, B, AND C	43350089	CERTIFIED / OPERATION & MAINTENANCE	6/30/1995	CORNER OF PAGE MILL RD AND PORTER DI	PALO ALTO	94304	SANTA CLARA
AYDIN ENERGY	43360085	CERTIFIED / OPERATION & MAINTENANCE -	9/30/1997	3180 HANOVER STREET	PALO ALTO	94304	SANTA CLARA
LOCKHEED MISSILES AND SPACE CO BLDG 255	43280130	CERTIFIED / OPERATION & MAINTENANCE	4/30/1997	3170 PORTER DRIVE	PALO ALTO	94304	SANTA CLARA
COHERENT INC	43360115	CERTIFIED / OPERATION & MAINTENANCE	7/11/1996	3210 PORTER DR	PALO ALTO	94304	SANTA CLARA
PALOS VERDES SHELF	19460003	ACTIVE	2/26/1999	PACIFIC OCEAN - WHITE POINT OUTFALL	PALOS VERDES	90000	LOS ANGELES
JET PROPULSION LABORATORY	19970008	ACTIVE	9/20/1993	4800 OAK GROVE DRIVE	PASADENA	91109	LOS ANGELES
GAVILAN PLATEAU MANEUVER AREA	33970011	ACTIVE	11/10/2021	S35, T4 SOUTH, R5 WEST	PERRIS	92057	RIVERSIDE
ROSEN'S ELECTRICAL EQUIPMENT	19360068	CERTIFIED / OPERATION & MAINTENANCE -	5/11/2021	8226 E. WHITTIER BLVD.	PICO RIVERA	90660	LOS ANGELES

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INDUSTRIAL WASTE PROCESSING	10330040	ACTIVE	4/13/2022	7140 NORTH HARRISON	PINEDALE	93650	FRESNO
VENDO COMPANY, THE	10590001	ACTIVE - LAND USE RESTRICTIONS	10/1/1990	7209 NORTH INGRAM AVENUE	PINEDALE	93650	FRESNO
DELTA AUTO WRECKERS	7750026	ACTIVE	6/5/2009	6 INDUSTRY ROAD	PITTSBURG	94565	CONTRA COSTA
HARMON FIELD	54070051	CERTIFIED / OPERATION & MAINTENANCE -	8/26/2020	1494 SOUTH AIRPORT DRIVE	PIXLEY	93256	TULARE
J C LIBERTY CLEANERS	60003364	ACTIVE	4/1/2022	687 INDIAN HILL BLVD	POMONA	91767	LOS ANGELES
A Z DECASING COMPANY	19330371	CERTIFIED / OPERATION & MAINTENANCE -	9/29/2014	1420 SOUTH SIGNAL DRIVE	POMONA	91766	LOS ANGELES
BECKMAN INSTRUMENTS, PORTERVILLE PLANT	54360008	ACTIVE	9/30/2005	167 WEST POPLAR AVENUE	PORTERVILLE	93257	TULARE
LAND USE COVENANT MONITORING	60003566	ACTIVE	1/1/2021	855 EL CAMINO REAL, STE 309	PALO ALTO	94301	SANTA CLARA
BUENA VISTA/KLAU MERCURY MINES	60000405	ACTIVE	9/15/2006	12 MILES WEST OF PASO ROBLES, SAN LUIS	PASO ROBLES	93447	SAN LUIS OBISPO
1X FAULTLESS CLEANERS	60003218	ACTIVE	1/12/2022	427 EAST 10TH STREET	PITTSBURG	94565	CONTRA COSTA
SIMPSON PAPER	60003516	ACTIVE	5/1/2023	1404 W HOLT AVE	POMONA	91768	LOS ANGELES
LABRIC/AZ DECASING	60003956	ACTIVE	6/30/2025	1420 S. SIGNAL DRIVE	POMONA	91766	LOS ANGELES
1525 AETNA SPRINGS ROAD	60003205	ACTIVE	11/1/2021	1525 AETNA SPRINGS ROAD	POPE VALLEY	94567	NAPA
PORTERVILLE PCE PLUME	60001216	ACTIVE	11/1/2009	NO ADDRESS-PRELIMINARY SITE SCREENIN	PORTERVILLE	93257	TULARE
PORTERVILLE MGP	60002076	ACTIVE	5/20/2014	309 S. MAIN STREET	PORTERVILLE	93257	TULARE
PURITY OIL SALES - DELTA GUNITE	34170001	CERTIFIED / OPERATION & MAINTENANCE -	6/30/2014	WHITE ROCK ROAD & KILGORE ROAD	RANCHO CORDOVA	95670	SACRAMENTO
MCDONNELL DOUGLAS - INACTIVE TEST SITE	34370069	ACTIVE - LAND USE RESTRICTIONS	1/12/1988	11505 DOUGLAS RD	RANCHO CORDOVA	95742	SACRAMENTO
AEROJET GENERAL CORPORATION	34370002	ACTIVE - LAND USE RESTRICTIONS	1/1/1983	HIGHWAY 50 AND AEROJET ROAD	RANCHO CORDOVA	95670	SACRAMENTO
POINT VICENTE	19970023	CERTIFIED / OPERATION & MAINTENANCE -	1/6/2009	PALOS VERDES DR. AND HAWTHORNE BLVI	RANCHO PALOS VER	90275	LOS ANGELES
IRON MOUNTAIN MINE	45100001	ACTIVE	1/1/1983	OFF HWY 299 - 9 MI NW OF REDDING	REDDING	96001	SHASTA
FOLSOM PRISON	34920001	CERTIFIED / OPERATION & MAINTENANCE -	8/16/2005	N OF FOLSOM CITY; ADJ TO AMERICAN RIVE	REPRESA	95671	SACRAMENTO
FMC CORPORATION - RICHMOND	7280011	CERTIFIED / OPERATION & MAINTENANCE -	5/29/1992	855 PARR BLVD	RICHMOND	94801	CONTRA COSTA
FASS METALS	7330030	CERTIFIED / OPERATION & MAINTENANCE -	11/6/2012	818 W. GERTRUDE AVENUE	RICHMOND	94801	CONTRA COSTA
ELECTRO FORMING CO. - RICHMOND	1330044	ACTIVE	5/2/2006	130 NEVIN AVENUE	RICHMOND	94801	CONTRA COSTA
DREW SALES	7500035	CERTIFIED / OPERATION & MAINTENANCE -	1/30/1990	1156 CASTRO STREET	RICHMOND	94804	CONTRA COSTA
PORT OF RICHMOND (SHIPYARD #3)	7370030	CERTIFIED / OPERATION & MAINTENANCE -	9/22/2006	1312 CANAL BLVD	RICHMOND	94804	CONTRA COSTA
HARBOUR WAY SOUTH	7340024	ACTIVE	10/15/2007	738 HARBOUR WAY SOUTH	RICHMOND	94804	CONTRA COSTA
RICHMOND TOWNHOUSE APARTMENTS	7990005	CERTIFIED / OPERATION & MAINTENANCE -	6/19/2002	2887 AND 2989 PULLMAN AVENUE	RICHMOND	94804	CONTRA COSTA
BLAIR SOUTHERN PACIFIC LANDFILL	7490012	ACTIVE	12/22/2005	AT THE FOOT OF SOUTH 51ST STREET	RICHMOND	94804	CONTRA COSTA
UNITED HECKATHORN	7280015	ACTIVE - LAND USE RESTRICTIONS	1/1/1983	8TH & WRIGHT	RICHMOND	94804	CONTRA COSTA
CLASSIC CLEANERS	60003260	ACTIVE	3/1/2022	118 HARBOUR SOUTH	RICHMOND	94804	CONTRA COSTA
REACTION PRODUCTS	7280013	ACTIVE	11/7/1996	840 MORTON AVENUE	RICHMOND	94806	CONTRA COSTA
ZENECA RICHMOND AG PRODUCTS	7280002	ACTIVE - LAND USE RESTRICTIONS	11/6/2004	1415 SOUTH 47TH STREET	RICHMOND	94804	CONTRA COSTA
LIQUID GOLD OIL CORP	7290039	ACTIVE - LAND USE RESTRICTIONS	6/13/2013	HOFFMAN BLVD & S 47TH ST	RICHMOND	94804	CONTRA COSTA
UNIVERSITY OF CALIFORNIA, RICHMOND SE	7730003	ACTIVE	7/20/2005	1301 SOUTH 46TH STREET	RICHMOND	94804	CONTRA COSTA
COOPER CHEMICAL	7280154	CERTIFIED / OPERATION & MAINTENANCE -	3/7/1997	2801 GIANT ROAD	RICHMOND	94806	CONTRA COSTA
STRINGFELLOW HAZARDOUS WASTE SITE - SITE OPERATIONS	60002365	CERTIFIED / OPERATION & MAINTENANCE	6/1/2016	3450 PYRITE STREET	RIVERSIDE	92509	RIVERSIDE
ALARK HARD CHROME	33340002	ACTIVE	4/19/1996	2775 MAIN STREET	RIVERSIDE	92501	RIVERSIDE
STRINGFELLOW HAZARDOUS WASTE SITE - PLUME CHARACTE	33490001	CERTIFIED / OPERATION & MAINTENANCE -	6/1/2016	3450 PYRITE STREET	RIVERSIDE	92509	RIVERSIDE
PALOS VERDES LANDFILL	19490181	CERTIFIED / OPERATION & MAINTENANCE -	4/13/1999	25706 HAWTHORNE BLVD.	ROLLING HILLS ESTATE	90274	LOS ANGELES
S R KILBY PROPERTY	15100009	ACTIVE	6/29/1998	2021 WEST 15TH STREET	ROSAMOND	93560	KERN
AVENUE A UNAUTHORIZED DISPOSAL SITE	15490015	ACTIVE	10/2/1996	AVENUE A 1-1/2 MILE EAST HIGHWAY 14	ROSAMOND	93560	KERN
BRIDGES AND SON TRUCKING	15280037	ACTIVE	5/1/2006	1200 ORANGE AVENUE	ROSAMOND	93560	KERN
OSAGE INDUSTRIES, 60TH STREET WEST	15330005	ACTIVE	6/2/1994	60TH STREET WEST T9N, R13W, S10 SE COI	ROSAMOND	93560	KERN
JOHN ALEXANDER RESEARCH INC	15330004	CERTIFIED / OPERATION & MAINTENANCE -	3/7/2003	1753 SIERRA HIGHWAY	ROSAMOND	93560	KERN
OSAGE INDUSTRIES, 15TH STREET	15330001	ACTIVE	12/27/2017	2001 15TH STREET, WEST	ROSAMOND	93560	KERN
GROSSI/CALANDRI PROPERTY	15100008	CERTIFIED / OPERATION & MAINTENANCE -	2/7/1997	INTERSECTION OF MARIE AVE & W 15TH ST	ROSAMOND	93560	KERN
SP-ROSEVILLE-SOUTH YARD	31400007	ACTIVE	1/1/1983	SP ROSEVILLE RAILYARD	ROSEVILLE	95678	PLACER
SP-ROSEVILLE: NORTH YARD	31400006	ACTIVE	10/1/1990	SP ROSEVILLE RAILYARD	ROSEVILLE	95678	PLACER
WHITE ROCK ROAD DUMPS (WRRD) 1 AND 2	60001748	CERTIFIED / OPERATION & MAINTENANCE -	6/22/2018	SW & ENE OF WHITE ROCK RD/NIKE RD INT	RANCHO CORDOVA	95742	SACRAMENTO
MODERN DRY CLEANERS	60001154	ACTIVE	5/6/2010	609 WALNUT STREET	RED BLUFF	96080	TEHAMA
QUONG LEE LAUNDRY	60003266	ACTIVE	3/1/2022	1681 BROADWAY	REDWOOD CITY	94063	SAN MATEO
1772 BROADWAY	60002678	ACTIVE	5/31/2019	1772 BROADWAY	REDWOOD CITY	94063	SAN MATEO
HARBORFRONT TRACT	70000178	ACTIVE	7/1/2005	MEADE SOUTH 49TH EAST MONTGOMERY	RICHMOND	94804	CONTRA COSTA
OMO FABRICARE DRY CLEANERS	60001434	ACTIVE	11/15/2016	12210 SAN PABLO AVENUE	RICHMOND	94804	CONTRA COSTA
DANA CLEANERS	60003258	ACTIVE	3/1/2022	429 SOUTH 34TH STREET	RICHMOND	94804	CONTRA COSTA
COURTEOUS CLEANERS	60003256	ACTIVE	3/1/2022	2022 BARRETT AVENUE	RICHMOND	94801	CONTRA COSTA
BOB'S CLEANERS	60003255	ACTIVE	3/1/2022	777 23RD STREET	RICHMOND	94804	CONTRA COSTA

SITE / FACILITY NAME	ENVIROSTOR ID	STATUS	STATUS DATE	ADDRESS DESCRIPTION	CITY	ZIP	COUNTY
PYRITE QUARRY	60003381	ACTIVE	5/11/2022	3400 PYRITE STREET	RIVERSIDE	92509	RIVERSIDE
PYRITE QUARRY	60003779	ACTIVE	4/30/2024	WEST OF PYRITE STREET, NORTH OF HWY.	RIVERSIDE	92509	RIVERSIDE
TELEDYNE	60003780	ACTIVE	4/30/2024	CANYON WEST OF THE WESTERN RIDGE FO	RIVERSIDE	92509	RIVERSIDE
NORTRONICS	60003781	ACTIVE	4/30/2024	PYRITE CANYON	RIVERSIDE	92509	RIVERSIDE
UNIVERSAL PROPULSION COMPANY INC	60003778	ACTIVE	4/30/2024	SOUTHWEST AND SOUTHEAST OF THE FOR	RIVERSIDE	92509	RIVERSIDE
BLUE LEDGE MINE	60001382	ACTIVE	3/2/2011	2 MILES SOUTH OF OREGON ON ROAD 1060	ROGUE RIVER NATIONA	0	SISKIYOU
UP, DOWNTOWN SAC - LAGOON	34400008	ACTIVE - LAND USE RESTRICTIONS	6/3/1992	401 I STREET	SACRAMENTO	95814	SACRAMENTO
UNION PACIFIC RAILROAD, CURTIS PARK	34400003	ACTIVE - LAND USE RESTRICTIONS	1/1/1987	3675 WESTERN PACIFIC AVENUE	SACRAMENTO	95818	SACRAMENTO
SACRAMENTO PLATING INC.	34370014	ACTIVE	6/12/1997	2809 S STREET	SACRAMENTO	95816	SACRAMENTO
PG&E - SACRAMENTO SITE	34490048	ACTIVE - LAND USE RESTRICTIONS	1/1/1987	2000 FRONT STREET	SACRAMENTO	95818	SACRAMENTO
UP, DOWNTOWN SAC - PONDS AND DITCH	34400005	CERTIFIED / OPERATION & MAINTENANCE -	1/12/1996	401 I STREET	SACRAMENTO	95814	SACRAMENTO
UP, DOWNTOWN SAC - CENTRAL SHOPS	34400004	ACTIVE	1/1/1983	401 I STREET	SACRAMENTO	95814	SACRAMENTO
BERMAN STEEL-SALINAS	27350001	CERTIFIED / OPERATION & MAINTENANCE -	12/22/1992	HIGHWAY 101 AT SPENCE ROAD	SALINAS	93908	MONTEREY
NEWMARK GROUNDWATER CONTAMINATION	36990002	ACTIVE - LAND USE RESTRICTIONS	4/22/1996	BUNKER HILL GROUND WATER BASIN	SAN BERNARDINO	92408	SAN BERNARDINO
ABC DRIVE-IN CLEANERS	60003333	ACTIVE	4/1/2022	905 N SIERRA WAY	SAN BERNARDINO	92410	SAN BERNARDINO
LOTZ QUALITY DRAPERY CLEANERS	60003342	ACTIVE	4/1/2022	1269 N D ST	SAN BERNARDINO	92405	SAN BERNARDINO
FAMILY DRY CLEANERS, INC.	60003338	ACTIVE	4/1/2022	663 WEST 2ND. ST.	SAN BERNARDINO	92410	SAN BERNARDINO
SUNFLOWER PROPERTIES INC.	37590003	ACTIVE	7/24/1998	9755 DISTRIBUTION AVENUE	SAN DIEGO	92121	SAN DIEGO
CAMP ELLIOTT-J09CA0067	37970025	ACTIVE	9/21/1998	NORTHERN PORTION OF SAN DIEGO	SAN DIEGO	92103	SAN DIEGO
1450 MARIN ST. LLC PROJECT / FEDERATED FRY METALS	38330005	CERTIFIED / OPERATION & MAINTENANCE -	7/6/2012	1450 MARIN STREET/1901 CESAR CHAVEZ	SAN FRANCISCO	94124	SAN FRANCISCO
PG&E - NORTH BEACH MARINA SUBSTATION	38490007	ACTIVE	2/23/2010	BAY STREET AND BUCHANAN, CORNER OF	SAN FRANCISCO	94123	SAN FRANCISCO
SCHLAGE LOCK COMPANY	38340157	CERTIFIED / OPERATION & MAINTENANCE -	5/4/2021	BAYSHORE BLVD AND SUNNYDALE AVE.	SAN FRANCISCO	94134	SAN FRANCISCO
LORENTZ BARREL & DRUM COMPANY	43300026	ACTIVE - LAND USE RESTRICTIONS	10/4/1989	1507 SOUTH 10TH STREET	SAN JOSE	95112	SANTA CLARA
SOUTH BAY ASBESTOS AREA	43490060	ACTIVE - LAND USE RESTRICTIONS	1/1/1985	FT OF LIBERTY ST GUADALUPE RIV	SAN JOSE	95002	SANTA CLARA
ALMADEN QUICKSILVER COUNTY PARK	43100001	CERTIFIED / OPERATION & MAINTENANCE	12/29/1999	ALAMITOS ROAD & HICKS ROAD	SAN JOSE	95110	SANTA CLARA
TOWN & COUNTRY VILLAGE SHOPPING CENTER	43590001	CERTIFIED / OPERATION & MAINTENANCE -	3/23/2005	2980 & 3030 STEVENS CREEK BOULEVARD	SAN JOSE	95113	SANTA CLARA
CATERPILLAR INC	1350119	CERTIFIED / OPERATION & MAINTENANCE	5/9/1997	800 DAVIS STREET	SAN LEANDRO	94577	ALAMEDA
CINTAS/DEDOMENICO SITE	1890017	CERTIFIED / OPERATION & MAINTENANCE -	10/2/2006	777 139TH AVENUE	SAN LEANDRO	94578	ALAMEDA
SINGER FRIDEN	1360094	CERTIFIED / OPERATION & MAINTENANCE	4/28/2003	2350 AND 2450 WASHINGTON AVENUE	SAN LEANDRO	94577	ALAMEDA
DWA PLUME	1990002	ACTIVE	12/31/1999	SAN LEANDRO (GROUNDWATER CONTAMIN	SAN LEANDRO	94578	ALAMEDA
KAISER AEROSPACE & ELECTRONICS COMPANY	1990015	CERTIFIED / OPERATION & MAINTENANCE -	1/25/2013	880 DOOLITTLE DRIVE	SAN LEANDRO	94577	ALAMEDA
SOUTHWEST MARINE TERMINAL ISLAND FACILITY	60000999	ACTIVE	11/5/2008	985 SEASIDE AVENUE	SAN PEDRO	90731	LOS ANGELES
RICHARDS CLEANERS	60000408	ACTIVE	9/19/2013	538 WEST 5TH STREET	SAN PEDRO	90731	LOS ANGELES
GATX ANNEX TERMINAL-SAN PEDRO	19420029	CERTIFIED / OPERATION & MAINTENANCE -	5/28/2002	208 EAST 22ND STREET	SAN PEDRO	90731	LOS ANGELES
SO CAL GAS/SANTA BARBARA (QUARANTINA MGP	42490036	CERTIFIED / OPERATION & MAINTENANCE -	7/18/1994	630 EAST MONTECITO STREET	SANTA BARBARA	93103	SANTA BARBARA
MANSION GROVE	43280031	CERTIFIED / OPERATION & MAINTENANCE	11/15/1996	4101 LICK MILL BOULEVARD	SANTA CLARA	95054	SANTA CLARA
NEVILLE CHEMICAL COMPANY	19280515	CERTIFIED / OPERATION & MAINTENANCE -	4/21/2006	12800 IMPERIAL HWY	SANTA FE SPRINGS	90670	LOS ANGELES
ANGELES CHEMICAL COMPANY INC	19290306	ACTIVE	5/11/2021	8915 SORENSEN AVENUE	SANTA FE SPRINGS	90670	LOS ANGELES
WASTE DISPOSAL, INC.	19490194	CERTIFIED / OPERATION & MAINTENANCE -	12/5/2024	12731 LOS NIETOS RD	SANTA FE SPRINGS	90670	LOS ANGELES
SELBY SLAG	7330031	ACTIVE	1/1/1983	SHORELINE&MARSH ADJ. TO CARQUINEZ S	SELBY	94802	CONTRA COSTA
SELMA TREATING COMPANY	10240051	ACTIVE - LAND USE RESTRICTIONS	1/1/1983	1735 DOCKERY AVE & ADJOINING	SELMA	93662	FRESNO
BROWN AND BRYANT - SHAFTER FACILITY	15280010	ACTIVE	3/1/1985	135 COMMERCIAL DRIVE	SHAFTER	93263	KERN
SHAFTER AIRPORT	15070029	CERTIFIED / OPERATION & MAINTENANCE -	2/7/1992	LERDO HIGHWAY AT HIGHWAY 99	SHAFTER	93263	KERN
COOPER DRUM	19500052	ACTIVE	12/12/1996	9316 ATLANTIC AVENUE	SOUTH GATE	90280	LOS ANGELES
TITAN TERMINAL & TRANSPORT	19280830	ACTIVE	9/29/2015	4570 ARDINE ST.	SOUTH GATE	90280	LOS ANGELES
FIRESTONE - PARCEL 1A	19300231	ACTIVE	4/19/1996	2323 FIRESTONE BLVD	SOUTH GATE	90280	LOS ANGELES
STOCKTON, ROUGH AND READY ISLAND	39420010	ACTIVE - LAND USE RESTRICTIONS	10/1/2003	2201 W. WASHINGTON STREET	STOCKTON	95203	SAN JOAQUIN
MCCORMICK & BAXTER CREOSOTING CO	39240001	ACTIVE - LAND USE RESTRICTIONS	5/1/1986	1214 W. WASHINGTON STREET	STOCKTON	95203	SAN JOAQUIN
CENTRAL EUREKA MINE	3100003	CERTIFIED / OPERATION & MAINTENANCE -	7/16/2008	OLD RIDGE ROAD AND EUREKA ROAD	SUTTER CREEK	95685	AMADOR
UP, DOWNTOWN SAC - SITE-WIDE	60001957	ACTIVE	1/8/2014	401 I STREET	SACRAMENTO	95814	SACRAMENTO
HANAMI LINE AT MATSUI PARK PROJECT	60003512	ACTIVE	2/1/2023	400 JIBBOOM ST. APN# 001-0190-021	SACRAMENTO	95811	SACRAMENTO
KEN'S BUFF AND PLATING	70000051	ACTIVE	9/14/2010	1816 21ST STREET	SACRAMENTO	95814	SACRAMENTO
SIMS METAL SITE	70000019	ACTIVE - LAND USE RESTRICTIONS	10/30/2004	130 NORTH 12 STREET; AT INTERSECTION (	SACRAMENTO	95814	SACRAMENTO
UP, DOWNTOWN SAC - MANUFACTURED GAS PLANT	70000034	ACTIVE	10/1/2004	400 I STREET	SACRAMENTO	95814	SACRAMENTO
BOLINAS AVENUE CENTER	60001614	ACTIVE	12/19/2011	4&8 BOLINAS AVENUE & 21 SAN ANSELMO A	SAN ANSELMO	94960	MARIN
FORMER VEL CLEANERS	60003019	ACTIVE	7/3/2020	485 O'FARRELL STREET	SAN FRANCISCO	94102	SAN FRANCISCO
ARLENE'S CLEANERS	60001242	ACTIVE	8/8/2011	2017 CHESTNUT STREET	SAN FRANCISCO	94123	SAN FRANCISCO
1601-1633 OCEAN AVENUE	60002818	ACTIVE	5/2/2019	1601-1633 OCEAN AVENUE	SAN FRANCISCO	94112	SAN FRANCISCO

SITE / FACILITY NAME	ENVIROSTOR ID	STATUS	STATUS DATE	ADDRESS DESCRIPTION	CITY	ZIP	COUNTY
FORMER ALBRITE CLEANERS	60003141	ACTIVE	6/11/2021	2511 IRVING STREET	SAN FRANCISCO	94122	SAN FRANCISCO
SWISS CLEANERS	60001870	ACTIVE	2/25/2013	14540 CAMDEN AVENUE	SAN JOSE	95124	SANTA CLARA
MOYER CHEMICAL	60001663	ACTIVE - LAND USE RESTRICTIONS	5/17/2012	1300,1310, 1336 OLD BAYSHORE HWY	SAN JOSE	95112	SANTA CLARA
AJ COMMERCIAL LAUNDRY/ALL CHEM SUPPLY	60000133	ACTIVE	4/19/2005	1173-1175 CAMPBELL AVENUE	SAN JOSE	95126	SANTA CLARA
CAMP SAN LUIS OBISPO - IR/MMRP	40910001	ACTIVE	12/21/2005	7 MILES W OF SAN LUIS OBISPO/HWY 1	SAN LUIS OBISPO	93401	SAN LUIS OBISPO
FORMER KLEEN-RITE CLEANERS	60003225	ACTIVE	1/1/2022	1115 SANTA ROSA STREET	SAN LUIS OBISPO	93401	SAN LUIS OBISPO
MODEL INDUSTRIAL SUPPLY (FORMER MISSION LAUNDRY)	60002305	ACTIVE	2/22/2016	331 PACIFIC STREET	SAN LUIS OBISPO	93401	SAN LUIS OBISPO
SAN LUIS OBISPO PCE PLUME	60001343	ACTIVE	9/14/2018	LOS OSOS VALLEY ROAD AND HWY. 101	SAN LUIS OBISPO	93401	SAN LUIS OBISPO
FORMER SPOTLESS DRY CLEANERS	60003224	ACTIVE	1/1/2022	385 HIGUERA STREET	SAN LUIS OBISPO	93401	SAN LUIS OBISPO
PAUL'S DRY CLEANERS	60003223	ACTIVE	1/1/2021	214 HIGUERA STREET	SAN LUIS OBISPO	93401	SAN LUIS OBISPO
704 NORTH SAN MATEO DRIVE	60003138	ACTIVE	5/21/2021	704 NORTH SAN MATEO DRIVE	SAN MATEO	94401	SAN MATEO
SAN PEDRO BOAT WORKS	70000023	ACTIVE	4/1/2005	PORT OF LOS ANGELES BERTHS 44-45	SAN PEDRO	90731	LOS ANGELES
WEST COAST AIR TRAINING CENTER	80000827	ACTIVE	7/20/2017		SANTA ANA		ORANGE
ENGINEERING PLATING CORP.	71003391	ACTIVE	4/28/1999	1224 E. POMONA STREET	SANTA ANA	92707	ORANGE
SOCO WEST INC./FORMER HOLCHEM FACILITY	60002003	ACTIVE	4/1/2014	1341 MAYWOOD AVENUE	SANTA ANA	92705	ORANGE
OLD ORCHARD SHOPPING CENTER	19720018	ACTIVE	6/12/2011	23357 LYONS AVENUE	SANTA CLARITA	91355	LOS ANGELES
WHITTAKER/BERMITE FACILITY	19281087	ACTIVE	4/14/1995	22116 SOLEDAD CANYON RD	SANTA CLARITA	91350	LOS ANGELES
SONIC PLATING CO., INC. - SANTA FE SPRINGS	71002233	ACTIVE	9/10/2014	13002 LOS NIETOS ROAD	SANTA FE SPRINGS	90670	LOS ANGELES
FORT BARRY (J09CA3107)	71000009	ACTIVE	8/4/2022	9 MILES NORTHWEST OF SAN FRANCISCO I	SAUSALITO	94965	MARIN
HERITAGE DRY CLEANERS	60000237	ACTIVE	10/1/2019	13855 MONO WAY	SONORA	95370	TUOLUMNE
SIERRA LAUNDERERS & CLEANERS	60001220	ACTIVE	2/24/2011	407 N. WASHINGTON STREET	SONORA	95370	TUOLUMNE
WHITTIER NARROWS (SAN GABRIEL VALLEY SUPERFUND SITE	60001340	ACTIVE	5/12/2015	BETWEEN HIGHWAY 60 AND THE MONTEBE	SOUTH EL MONTE	91733	LOS ANGELES
SOUTH EL MONTE (SAN GABRIEL VALLEY SUPERFUND SITE)	60001339	ACTIVE	6/16/2015	COVERS ALL OF CITY OF SOUTH EL MONTE	SOUTH EL MONTE	91733	LOS ANGELES
SEAM MASTER INDUSTRIES (SAIA)	60000483	ACTIVE	9/13/2014	5211 SOUTHERN AVE.	SOUTH GATE	90280	LOS ANGELES
GREEN'S CLEANERS	60002279	ACTIVE	12/1/2015	4600 FIRESTONE BOULEVARD	SOUTH GATE	90280	LOS ANGELES
JERVIS WEBB	60000332	ACTIVE	9/13/2014	9301 RAYO AVE.	SOUTH GATE	90280	LOS ANGELES
LABRIC / BASAPCO	60003650	ACTIVE	9/6/2023	27 SOUTH LINDEN AVENUE	SOUTH SAN FRANCISC	94080	SAN MATEO
KLASS CLEANERS	60002699	ACTIVE	8/8/2018	1141 MAIN STREET	ST. HELENA	94574	NAPA
CVCI DISCOVERY AND ENFORCEMENT (D&E) STATEWIDE PRO	60003235	ACTIVE	7/1/2021	STATEWIDE	STATEWIDE	0	LOS ANGELES
MARLEY COOLING TOWER COMPANY	39240014	CERTIFIED / OPERATION & MAINTENANCE -	2/11/2002	200 NORTH WAGNER AVENUE	STOCKTON	95215	SAN JOAQUIN
CANNON CLEANERS	60003271	ACTIVE	3/1/2022	48 WEST HARDING WAY	STOCKTON	95204	SAN JOAQUIN
SNOW CLEANERS INC	60003274	ACTIVE	3/1/2022	38 WEST SONORA STREET	STOCKTON	95203	SAN JOAQUIN
MONTROSE CHEMICAL CORP	19280024	ACTIVE - LAND USE RESTRICTIONS	4/22/1996	20201 NORMANDIE AVENUE	TORRANCE	90502	LOS ANGELES
VALLEY WOOD PRESERVING, INC.	50240001	ACTIVE - LAND USE RESTRICTIONS	1/1/1983	2237 SOUTH GOLDEN STATE BLVD	TURLOCK	95380	STANISLAUS
FREEMAN PRODUCTS / AVNET INC.	60000835	ACTIVE	2/29/2008	2040 ARTESIA BOULEVARD	TORRANCE	90504	LOS ANGELES
HARVEY MACHINE CO	80000078	ACTIVE	7/20/2017		TORRANCE		LOS ANGELES
MOMIN LODGE	60001010	ACTIVE	8/18/2015	1918 ARTESIA BOULEVARD	TORRANCE	90504	LOS ANGELES
SIMPLOT - TRAVER	60003023	ACTIVE	6/1/2020	36624 AND 36148 SOUTH BURKE DRIVE	TRAVER	93631	TULARE
COAST WOOD PRESERVING	23240013	CERTIFIED / OPERATION & MAINTENANCE -	5/10/2011	PLANT RD & TAYLOR DR	UKIAH	95482	MENDOCINO
PACIFIC STATES STEEL - PHASE III	1330031	CERTIFIED / OPERATION & MAINTENANCE -	9/22/2006	35124 ALVARADO-NILES ROAD	UNION CITY	94587	ALAMEDA
READY PROPERTY	56750014	BACKLOG	1/7/2025	89 PEKING STREET	VENTURA	93001	VENTURA
GOSHEN AVENUE AND SHIRK ROAD SITE	54270005	ACTIVE	5/1/1986	6941 AND 6707 WEST GOSHEN AVENUE	VISALIA	93291	TULARE
SO CAL GAS/VISALIA MGP	54490015	CERTIFIED / OPERATION & MAINTENANCE -	6/25/1998	300 NORTH TIPTON STREET	VISALIA	93277	TULARE
FORMER VALLEJO STEAM LAUNDRY AND DRY CLEANING	60003454	ACTIVE	1/4/2022	301 PENNSYLVANIA STREET	VALLEJO	94590	SOLANO
EXIDE PARKWAYS RESIDENTIAL	60002705	ACTIVE	12/15/2021	VARIOUS LOCATIONS IN THE COUNTY OF L	VARIOUS	90058	LOS ANGELES
EXIDE RESIDENTIAL CLEANUP	60002267	ACTIVE	11/9/2015	VARIOUS LOCATIONS IN THE COUNTY OF L	VARIOUS	90058	LOS ANGELES
PECHINEY	60001187	ACTIVE - LAND USE RESTRICTIONS	10/27/2009	3200 FRUITLAND AVENUE	VERNON	90058	LOS ANGELES
COUNTRY CLUB CLEANERS, WHITENDALE	60001054	ACTIVE	8/3/2018	2000 W. WHITENDALE	VISALIA	93277	TULARE
ONE HOUR MARTINIZING MOONEY	60002277	ACTIVE	1/17/2017	1841 SOUTH MOONEY BOULEVARD	VISALIA	93277	TULARE
KAWEAH - SHANNON AND RITCHIE SHOP SITE	60001917	CERTIFIED / OPERATION & MAINTENANCE -	6/26/2009	11878 AVENUE 328	VISALIA	93291	TULARE
MILLER'S CLEANERS, WHITENDALE	60001050	ACTIVE	12/10/2015	2235 W. WHITENDALE AVENUE	VISALIA	93277	TULARE
VISALIA DRY CLEANER INVESTIGATION	60000403	ACTIVE	8/4/2006	CENTRAL CITY AREA	VISALIA	93277	TULARE
PARAGON DRY CLEANERS	60000240	ACTIVE	10/31/2008	119 SOUTH WILLIS STREET	VISALIA	93291	TULARE
FORMER WEBSTER CLEANERS	60001352	ACTIVE	9/1/2010	4634 W. MINERAL KING AVENUE	VISALIA	93291	TULARE
ONE HOUR MARTINIZING	60000236	ACTIVE	10/31/2008	717 WEST MAIN STREET	VISALIA	93291	TULARE
MISSION UNIFORM	60000969	ACTIVE	9/15/2008	520 E. MINERAL KING AVENUE	VISALIA	93292	TULARE
FORMER VILLAGE CLEANERS	60001053	ACTIVE	8/3/2018	2615 S. MOONEY BLVD.	VISALIA	93277	TULARE
LAMOUR'S CLEANERS, MOONEY	60001052	ACTIVE	11/8/2010	2911 S. MOONEY BLVD.	VISALIA	93277	TULARE

SITE / FACILITY NAME	ENVIROSTOR ID	STATUS	STATUS DATE	ADDRESS DESCRIPTION	CITY	ZIP	COUNTY
J H BAXTER CO	47240001	CERTIFIED / OPERATION & MAINTENANCE -	5/14/2007	422 MILL STREET	WEED	96094	SISKIYOU
BKK SANITARY LANDFILL / CLASS I AREA	19490005	ACTIVE - LAND USE RESTRICTIONS	11/18/2004	2210 SOUTH AZUSA AVENUE	WEST COVINA	91792	LOS ANGELES
CAPITOL PLATING CORPORATION	57340006	ACTIVE	8/13/2021	319 3RD STREET	WEST SACRAMENTO	95605	YOLO
OMEGA CHEMICAL CORPORATION	19280436	ACTIVE	5/11/2021	12504 WHITTIER BLVD	WHITTIER	90602	LOS ANGELES
TCL CORP./TCL2 (PORT OF LONG BEACH)	19510060	CERTIFIED / OPERATION & MAINTENANCE	12/15/1997	420 N HENRY FORD AVE	WILMINGTON	90744	LOS ANGELES
TCL CORPORATION - TOYOTA PARCEL	19510062	CERTIFIED / OPERATION & MAINTENANCE -	8/2/1995	420 N HENRY FORD AVE	WILMINGTON	90744	LOS ANGELES
BASIN BY-PRODUCTS	19290278	ACTIVE	1/1/1985	3031 EAST I STREET	WILMINGTON	90744	LOS ANGELES
LABRIC/C & S BATTERY AND LEAD	60002773	ACTIVE	1/17/2019	860 RISKE LANE	WEST SACRAMENTO	95691	YOLO
FORMER MERLE WEST	60003071	ACTIVE	8/31/2021	12430 WHITTIER BOULEVARD	WHITTIER	90602	LOS ANGELES
TOOL AND JIG/HARD CHROME FACILITY	60003072	ACTIVE	11/30/2022	7635 BALDWIN PLACE	WHITTIER	90602	LOS ANGELES
THE SHILOH GROUP PROPERTY	60002191	ACTIVE	5/12/2015	930 SHILOH ROAD	WINDSOR	95492	SONOMA
CUSTOM CHROME AND BUMPER	51340009	ACTIVE	12/23/2013	335 GARDEN HIGHWAY	YUBA CITY	95991	SUTTER
EMPIRE STEEL	51990001	BACKLOG	7/7/2022	3094 1\2 NORTH TOWNSHIP ROAD	YUBA CITY	95991	SUTTER
OPHIR ROAD PROPERTY	60000689	ACTIVE	8/1/2007	ASSESSOR'S PARCEL NUMBERS (APNS)078-	OROVILLE	95965	BUTTE
BF GOODRICH	60001389	ACTIVE	8/12/2020	3196 NORTH LOCUST AVE.	RIALTO	92377	SAN BERNARDINO
DIESEL LOGISTICS	60001272	ACTIVE	4/6/2010	1331 E. WARNER AVE	SANTA ANA	92705	ORANGE

CITY OF McFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT
(PROJECT NO. EDWG-1510013-003C)

EXHIBIT L
"COMMENT LETTERS AND RESPONSES"