



Ken-Mar Gardens, Halcyon Water System, Halcyon Estates, and Grande Mobile Manor Consolidation Project

Final Subsequent Initial Study – Mitigated Negative Declaration (SCH#2024041238)

prepared by

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Introduction

This document is a Subsequent Initial Study – Mitigated Negative Declaration (IS-MND), which is “tiered” from the 2024 Final IS-MND adopted by Oceano Community Services District (OCSD) for the Waterline Improvement Project (2024 IS-MND; State Clearinghouse No. 2024041238). This Subsequent IS-MND has been prepared in accordance with relevant provisions of the California Environmental Quality Act (CEQA) of 1970 (as amended) and the CEQA Guidelines.

In accordance with CEQA Guidelines Section 15162(a), a lead agency shall prepare a Subsequent Environmental Impact Report or negative declaration if substantial changes are proposed to the project which will require major revisions of the previous Environmental Impact Report or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, this Subsequent IS-MND has been prepared to analyze the potential environmental impacts associated with the modifications to the Waterline Improvement Project (Original Project); the modifications involve consolidating the Ken-Mar Gardens Mobile Home Park, Halcyon Water System, Halcyon Estates Mobile Home Park, and Grande Mobile Manor Mobile Home Park into the OCSD system within its existing service area and Local Agency Formation Commission boundaries. These four proposed consolidations are collectively referred to herein as the “proposed modifications,” and the Original Project plus the proposed modifications are referred to collectively as the “Modified Project.”

Project Description

1 Lead Agency/Project Sponsor and Contact

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2 Description of Original Project

In August 2024, OCSD adopted an IS-MND for the Waterline Improvement Project, herein referred to as the Original Project. The Original Project includes the following components (OCSD 2024):

- Installation of new pipeline main sections;
- Replacement of existing main pipeline sections with upsized pipes;
- Extension of dead-end pipelines to form pipeline loops;
- Installation of an emergency intertie with the City of Arroyo Grande's system (at the intersection of Halcyon and The Pike); and
- Replacement and installation of control valves in the pipeline system.

The specific segments included in the Original Project are shown in Figure 1 and listed in Table 1.

Construction of the Original Project was proposed to occur over approximately one year and included site preparation, pipeline installation (both open cut trenching and jack-and-bore), and paving/ground restoration. Construction of the Original Project was expected to disturb approximately 1.75 acres in total with a typical maximum excavation depth of five feet, although greater depths were anticipated at certain locations to avoid existing utilities and drainage channels. Excavation of approximately 6,000 cubic yards of pavement and soil was expected to be required with approximately 3,000 cubic yards used as backfill and approximately 3,000 cubic yards exported. Approximately 2,400 cubic yards of soil was anticipated to be imported from off-site. Groundwater dewatering was expected to be necessary at certain locations based on site conditions with groundwater discharged to either the storm drain, sanitary sewer, or nearby existing recharge, retention, or detention basins.

The Original Project was expected to substantially reduce existing operation and maintenance activities associated with OCSD's water system by reducing the need for reactive maintenance activities including main breaks, leaks, service calls, and line flushing.

Figure 1 Map of Segments Included in Original Project

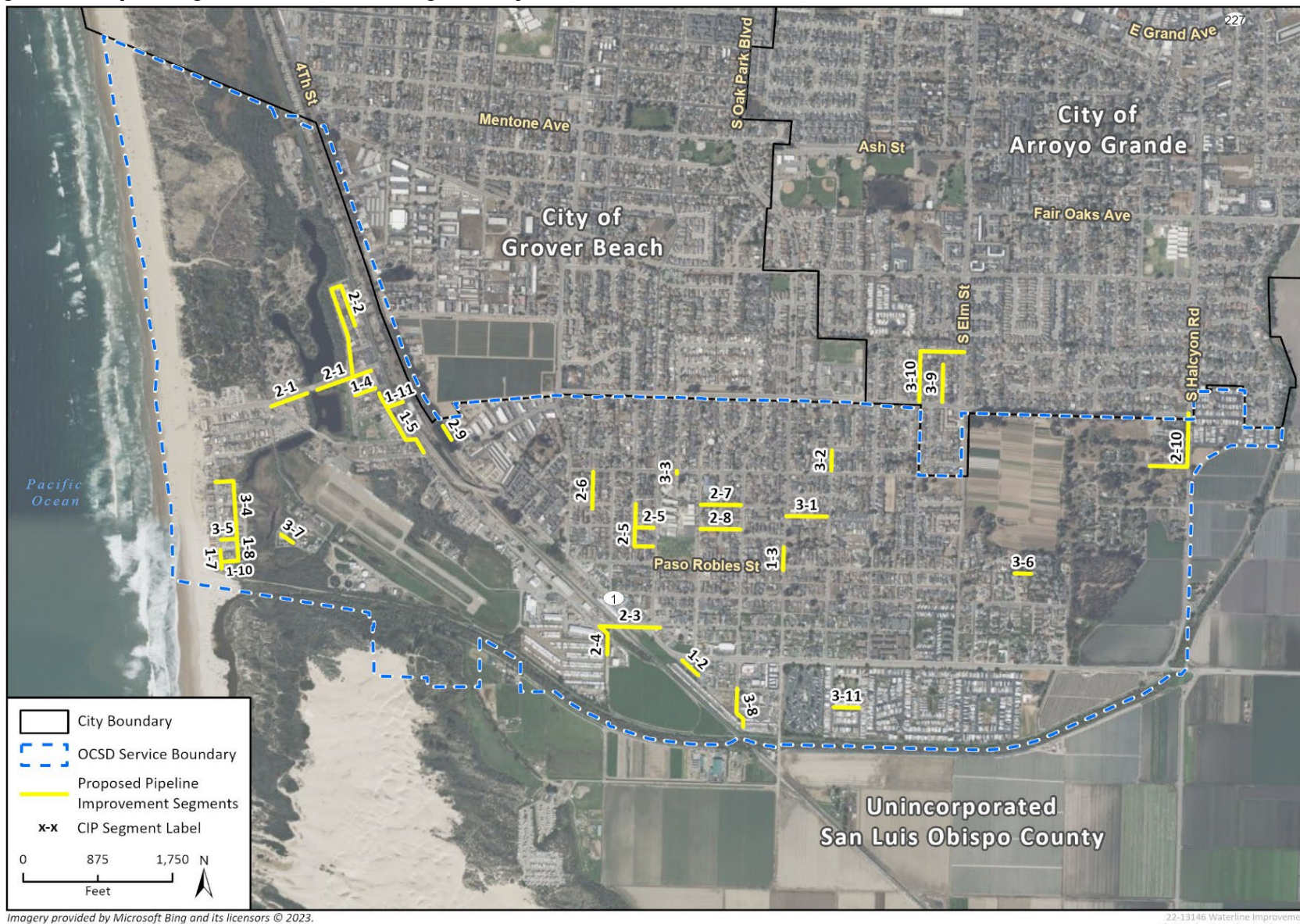


Table 1 Original Project Segments List

Segment No.	Description	Existing Diameter (inch)	Proposed Diameter (inch)	Length (linear feet)	Construction Method
1-2	Cabrillo Highway and Front Street	–	8	400	Open Cut
1-3	22nd Street at Paso Robles Street	–	8	225	Open Cut
1-4	Truman Drive	4	8	250	Open Cut
1-5	Railroad Street Alley (Truman Drive to Air Park)	4, 6	10	1,000	Open Cut
1-7	Strand Way (South of Utah Avenue)	4	8	235	Open Cut
1-8	Laguna Drive Alley (South of Utah Avenue)	4	8	130	Open Cut
1-10	Utah Avenue Alley (Strand Way to Utah Avenue)	3	8	195	Open Cut
1-11	Pershing Drive across SR 1	–	8	200	Jack and Bore
2-1	Pier Avenue (Lakeside to SR 1)	6	10	1,140	Open Cut
2-2	Norswing Drive Loop (North of Pier Avenue)	4 ¹	8	1,750	Open Cut
2-3	Railroad Street (Creek Road to 17th Street)	–	8	650	Jack and Bore
2-4	Creek Road (Sand Dollar to Railroad Street)	–	8	480	Open Cut
2-5	16th Street at Warner Street	2, 4, 6	8	940	Open Cut
2-6	14th Street at Wilmar Avenue	2	8	380	Open Cut
2-7	Vista Street (19th Street to 21st Street)	2	8	480	Open Cut
2-8	Warner Street (19th Street to 21st Street)	2	8	480	Open Cut
2-9	South 4th Street Upgrade	2	8	200	Open Cut
2-10	Temple Street and Halcyon Road	–	12	1,075	Open Cut
3-1	La Verne Avenue (22nd Street to 23rd Street)	4	8	500	Open Cut
3-2	23rd Street at Wilmar Avenue	4	8	300	Open Cut
3-3	18th Street at Wilmar Avenue	4	8	40	Open Cut
3-4	Laguna Drive Alley (Utah Avenue to Strand Way)	4	8	940	Open Cut
3-5	Utah Avenue Alley (York Avenue to Utah Avenue)	3	8	195	Open Cut
3-6	Rochelle Way Loop	–	8	200	Open Cut
3-7	Security Court at Sunset Lane	2	8	280	Open Cut
3-8	21st Street at River Avenue	–	8	690	Open Cut
3-9	La Vista Court at The Pike	4	8	425	Open Cut
3-10	Lancaster Drive at The Pike	4	8	1,150	Open Cut
3-11	Trinidad Dive at Martinique Drive	4	8	300	Open Cut
Total Linear Feet				15,230	

¹ In this segment, the project would replace/upsized a portion of existing pipeline and also install a portion of new pipeline.

Source: OCSD 2024

3 Description of Proposed Modifications

Subsequent to preparation of the 2024 IS-MND, the proposed Ken-Mar Gardens Mobile Home Park, Halcyon Water System, Halcyon Estates, and Grande Mobile Manor consolidations (i.e., the proposed modifications) were identified as necessary to resolve potable water quality violations and concerns and bring these water systems back into compliance with maximum contaminant levels for selenium, nitrate, and manganese. The proposed modifications would connect to the planned OCSD pipeline within Halcyon Road and Temple Street (Segment No. 2-10) included as part of the Original Project. The proposed modifications are being funded through the State Water Resources Control Board (SWRCB) Safe and Affordable Funding for Equity and Resilience (SAFER) program. OCSD has received an award letter from the SAFER program and signed a funding agreement for the project totaling \$9.274 million dollars for implementation of the proposed consolidations.

Location and Setting of Proposed Modifications

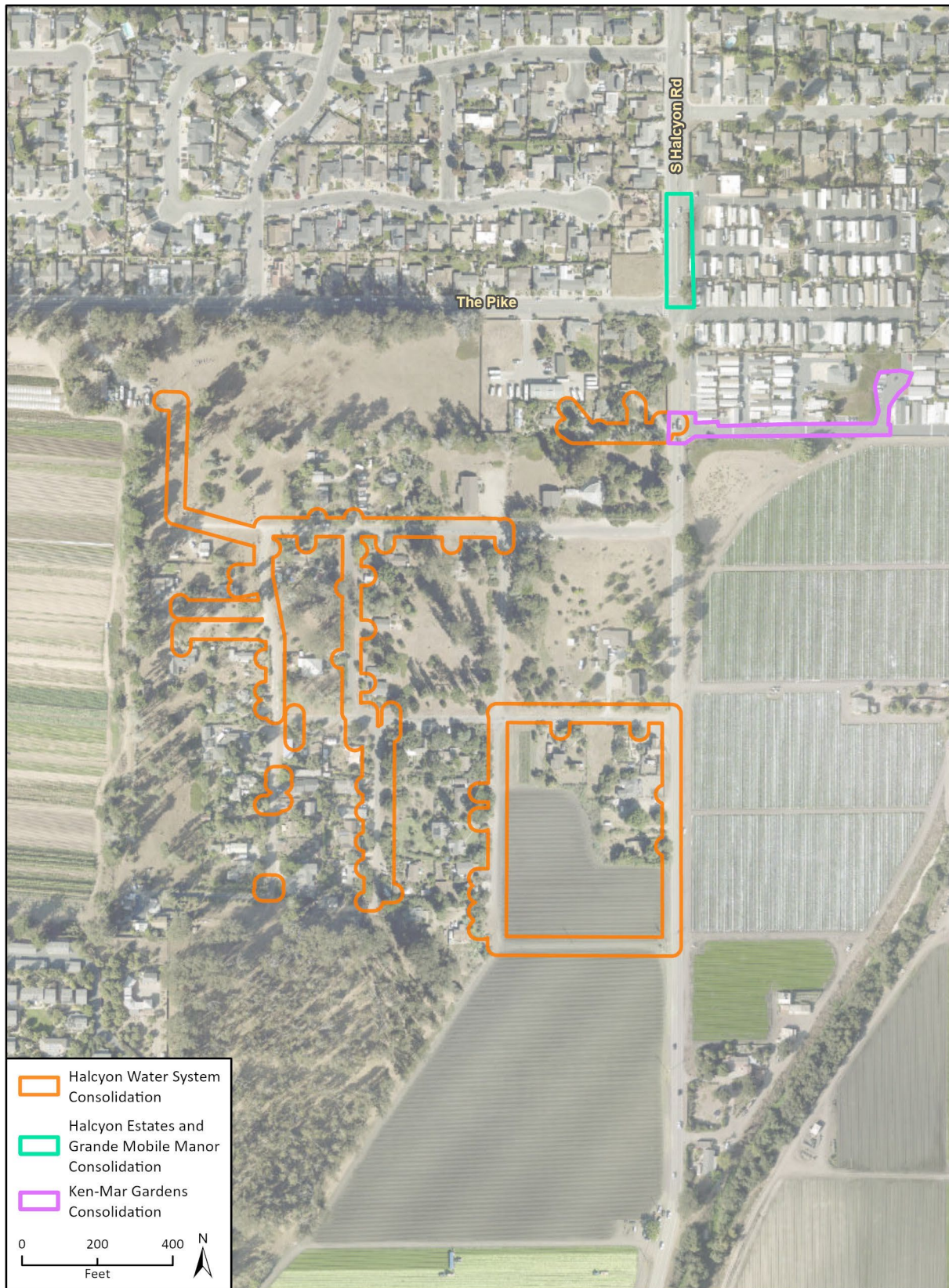
The proposed modifications are located in the northeastern portion of the community of Oceano, within the OCSD's service area (as determined by the Local Agency Formation Commission), in unincorporated San Luis Obispo County. The Ken-Mar Gardens Mobile Home Park is located at 801 South Halcyon Road (Assessor's Parcel Number [APN] 075-011-039). The neighborhood served by the Halcyon Water System is located just southwest of the Ken-Mar Gardens Mobile Home Park and is generally bounded by The Pike to the north, Halcyon Road to the east, Wilshire Street to the south, and Judge Avenue to the west. Halcyon Estates is located at 727 South Halcyon Road (APN 075-011-040), and Grande Mobile Manor is located at 655 South Halcyon Road (APN 075-011-037). The proposed modifications would be installed within public and private rights-of-way as well as within Ken-Mar Gardens Mobile Home Park and various single-family residential properties within the Halcyon neighborhood. The location of the proposed modifications is surrounded by residential and agricultural land uses. Figure 2 shows the location of the proposed modifications.

The location of the proposed modifications has various land use designations, including Residential Multi-Family, Residential Single-Family, and Agricultural, and various combining designations, including Airport Review Area, Flood Hazard Area, and Renewable Energy Overlay. Portions of the proposed modifications occurring within public and private rights-of-way do not have land use or combining designations.

Description of Proposed Modifications

The proposed modifications involve consolidating the Ken-Mar Gardens Mobile Home Park, Halcyon Water System, Halcyon Estates, and Grande Mobile Manor into the OCSD system. Similar to the Original Project, the proposed modifications would be implemented to address deficiencies in existing water supply systems within the OCSD service area. The following sections describe the specific improvements planned for each of the four consolidations included in the proposed modifications.

Figure 2 Location of Proposed Modifications



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Fig 2 Location of Proposed Modifications

Ken-Mar Gardens Mobile Home Park Consolidation

The Ken-Mar Gardens Mobile Home Park operates a public water system that serves approximately 84 residents through a total of 49 service connections. The system includes one well, four pressure tanks, and a chemical dosing system. The existing system has potable water quality violations related to elevated levels of manganese and selenium and is seeking to consolidate with OCSD to provide a clean and reliable source of water to residents of the Ken-Mar Gardens Mobile Home Park.

Specific improvements would include the following:

- Installation of approximately 100 linear feet of 12-inch, polyvinyl chloride pipeline to connect the planned 12-inch OCSD pipeline in South Halcyon Road to the master meter at the entrance of Ken-Mar Gardens Mobile Home Park.¹
- Installation of approximately 780 linear feet of four-inch, polyvinyl chloride pipeline within the existing Ken-Mar Gardens Mobile Home Park access road to connect the master meter to the existing Ken-Mar Gardens distribution system.
- Installation of a master meter, valving, and backflow prevention at the entrance of Ken-Mar Gardens Mobile Home Park.
- Installation of three fire hydrants along the existing Ken-Mar Gardens Mobile Home Park access road.
- Destruction of the existing well and removal of the chemical injection system and shed.

Upon the completion of construction, Ken-Mar Gardens Mobile Home Park would forego its public water system permit and become a customer of OCSD. OCSD staff would be responsible for maintaining water quality and reading the master meter. The proposed pipeline within the Ken-Mar Gardens Mobile Home Park driveway would be owned and maintained by Ken-Mar Gardens Mobile Home Park. The existing distribution system and all water infrastructure downstream of the master meter would remain under Ken-Mar Gardens Mobile Home Park's ownership, and it would be responsible for future maintenance of the distribution system, valves, wharthead hydrants, and customer service connections.

Halcyon Water System Consolidation

The Halcyon Water System serves a community of 100 residents through a total of 50 service connections in the community of Halcyon. The system is supplied by a single groundwater well owned and operated by the Halcyon Water Company. The well site consists of a well, two 5,000-gallon storage tanks, a chemical dosing system, and a self-cleaning metallic cartridge filter system. There is also a point-of-use reverse osmosis treatment facility where residents can fill potable water containers. The existing system has potable water quality violations related to elevated levels of nitrate and selenium and is seeking to consolidate with OCSD to provide a clean and reliable source of water to residents of Halcyon.

Specific improvements would include the following:

- Installation of approximately 4,830 linear feet of 8-inch potable water pipeline within Halcyon Road, Temple Street, Helena Street, Dower Street, La Due Street, and Hiawatha Street to connect properties in the Halcyon community to planned OCSD pipelines.²
- Installation of approximately 49 individual OCSD meters with backflow preventors and nine new fire hydrants.
- Re-routing of approximately 34 private service laterals to connect to new OCSD water mains.
- Re-routing of approximately 15 private service laterals to connect to an existing 12-inch OCSD water main.
- Re-purposing of the existing Halcyon Water System (including the existing well and pipelines) exclusively for irrigation purposes and installation of non-potable signage throughout the irrigation system at all potential points of use.

¹ The planned OCSD pipelines in Halcyon Road and Temple Street were analyzed under the Original Project.

² The planned OCSD pipelines in Halcyon Road and Temple Street were analyzed under the Original Project.

Upon completion of construction, the Halcyon Water Company would forego its public water system permit, and individual residents would become customers of OCSD. The new OCSD distribution system would be owned, operated, and maintained by OCSD. The Halcyon Water Company would continue to own, operate, and maintain the Halcyon Water System for irrigation purposes only.

Halcyon Estates and Grande Mobile Manor Consolidations

Halcyon Estates and Grande Mobile Manor are currently provided water from OCSD through a water wheeling agreement with the City of Arroyo Grande with 26 service connections in Halcyon Estates and 35 service connections in Grande Mobile Manor. Both mobile home parks have potable water wells and distribution systems; however, they are not currently in operation due to potable water quality violations. Halcyon Estates and Grande Mobile Manor are seeking to consolidate with OCSD to provide a clean and reliable source of water to their residents.

Specific improvements would include the following:

- Installation of approximately 300 linear feet of eight-inch polyvinyl chloride pipeline and one fire hydrant along Halcyon Road. The pipeline would be located between The Pike and Calle de Los Seui and would provide an interconnection to OCSD's potable water distribution system and the City of Arroyo Grande's potable water distribution system.
- Installation of two- and three-inch service laterals between the proposed OCSD pipeline in Halcyon Road and the Halcyon Estates and Grande Mobile Manor properties.
- Installation of new water meter boxes with reconnection to existing backflow preventers at each property.

Construction

Construction of the proposed modifications would begin as early as summer 2027 and would require approximately 12 months to complete. Construction work would occur Monday to Friday between the hours of 7:00 a.m. to 6:00 p.m. No nighttime construction would occur. Similar to the Original Project, construction of the proposed modifications would utilize open-cut trenching to install the proposed pipelines, which would involve site preparation, pipeline installation, and paving/ground restoration activities. In addition, minor excavation to install appurtenances would be necessary. Approximately 5,200 cubic yards of pavement and soil would be excavated during construction of the proposed modifications, 4,150 cubic yards of which would be temporarily stockpiled on site and used as backfill upon completion of pipeline installation. The remaining 1,050 cubic yards of excavated soil would be hauled away for re-use or disposal at an appropriately licensed facility. In addition, approximately 1,050 cubic yards of soil would be imported from off-site for use in the pipe bedding. The proposed modifications would require excavation to a maximum depth of approximately six feet. Construction equipment staging and worker parking for the proposed modifications would require coordination between the Contractor and property owners and are anticipated to occur primarily within vacant lots within the community of Halcyon and at the existing Ken-Mar Gardens Mobile Home Park parking lots and other existing parking lots and storage yards in the local area. Some staging and construction worker parking may also occur within public and private rights-of-way.

Best Management Practices

As with the Original Project, construction of the proposed modifications would adhere to the most current version of the OCSD Standard Specifications and Drawings (2025, at the time of preparation of this document), County of San Luis Obispo Public Improvement Standards (2022, at the time of preparation of this document), and City of Arroyo Grande Standard Specifications & Engineering Standards (2016, at the time of preparation of this document), which include design standards and construction specifications for projects involving public roadways as well as Best Management Practices (BMPs). The following project BMPs are informed by measures required in the above Public Improvement Standards:

- **Erosion Control BMPs.** Sediment and erosion control BMPs would be implemented, including pollutant source control, protection of stockpiles, protection of slopes, protection of all disturbed areas, protection of site access points, and perimeter containment measures. The intent of the sediment and erosion control BMPs would be to prevent disturbed sediment from entering drainage conveyances, generating fugitive dust, or migrating onto adjacent properties or the public right-of-way.
- **Traffic Control BMPs.** Construction signs and other necessary traffic control devices would be installed prior to the commencement of work in compliance with County of San Luis Obispo Public Works Department Encroachment Permit provisions. All private driveways and side streets would be kept open at all times, except when construction takes place immediately in front of the driveway or side street. At the conclusion of each workday, all paved traveled-way surfaces would be restored to an all-weather, traversable condition.

Operation and Maintenance

Operation and maintenance activities associated with the proposed modifications would be the same as those envisioned for Original Project and would consist of as-needed repairs and routine inspections of the pipelines and appurtenances.

Other Public Agencies Whose Approval is Required

OCSD is the lead agency under CEQA with responsibility for approving the proposed modifications. The SWRCB Division of Financial Assistance would serve as a responsible agency under CEQA with responsibility for approving the issuance of funding for the proposed modifications through the SAFER program. The proposed modifications would require permits from other public agencies, outlined below in Table 2, similar to those required for the Original Project. The encroachment permits may establish additional construction, utility, and traffic control requirements.

Table 2 Summary of Potentially Required Approvals

Regulating Agency	Potential Permit/Approval	Reason for Permit/Approval
State Water Resources Control Board, Central Coast Regional Water Quality Control Board	National Pollutant Discharge Elimination System (NPDES) Construction General Permit, NPDES General Permit for Discharges of Groundwater from Construction	Construction activities resulting in ground disturbance exceeding one acre, discharge of groundwater encountered during construction
County of San Luis Obispo	Encroachment Permit	Construction occurring in South Halcyon Road, Temple Street, Helena Street, Hiawatha Lane, Dower Avenue, and La Due Street
City of Arroyo Grande	Encroachment Permit	Construction occurring in South Halcyon Road

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Environmental Checklist and Impacts of Proposed Modifications

This Subsequent IS-MND evaluates potential environmental impacts which could result from the proposed modifications. Appendix G of the CEQA Guidelines provides a checklist of environmental issue areas suggested for assessment in CEQA analyses. The 2024 IS-MND addressed all suggested environmental issue areas in Appendix G of the 2024 CEQA Guidelines, including the following topics:

- | | |
|---------------------------------------|--|
| 1. Aesthetics | 12. Mineral Resources |
| 2. Agriculture and Forestry Resources | 13. Noise |
| 3. Air Quality | 14. Population and Housing |
| 4. Biological Resources | 15. Public Services |
| 5. Cultural Resources | 16. Recreation |
| 6. Energy | 17. Transportation |
| 7. Geology and Soils | 18. Tribal Cultural Resources |
| 8. Greenhouse Gas Emissions | 19. Utilities and Service Systems |
| 9. Hazards and Hazardous Materials | 20. Wildfire |
| 10. Hydrology and Water Quality | 21. Mandatory Findings of Significance |
| 11. Land Use and Planning | |

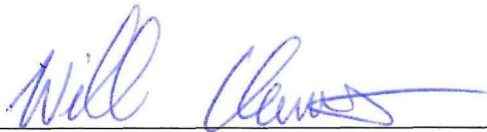
The potential environmental impacts of the proposed modifications are analyzed to determine whether impacts are consistent with the impact analyses provided in the 2024 IS-MND and whether additional mitigation measures are required to minimize or avoid potential impacts. For each checklist question in each issue area, this Supplemental IS-MND evaluates the four questions below to document consistency with CEQA Guidelines Section 15162:

- Do the proposed modifications require major revisions to the 2024 IS-MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects?
- Have substantial changes occurred with respect to the circumstances under which the Modified Project is taken that require major revisions to the 2024 IS-MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects?
- Is there any new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2024 IS-MND was adopted, that shows any of the following:
 - The project will have one or more significant effects not discussed in the previous negative declaration;
 - Significant effects previously examined will be substantially more severe than shown in the previous negative declaration;
 - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - Mitigation measures or alternatives which are considerably different from those analyzed in the previous negative declaration would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative?
- Do the mitigation measures from the 2024 IS-MND address and/or resolve environmental impacts?

Determination

Based on this initial evaluation:

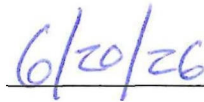
- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "less than significant with mitigation incorporated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



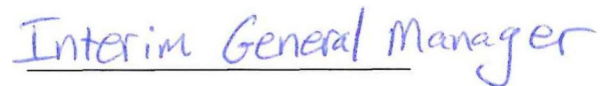
Signature



Printed Name



Date



Title

1 Aesthetics



	Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	No Impact	No	No Impact	No
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact	No	No Impact	No
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	No	No Impact	No
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	Less than Significant Impact	No	Less than Significant Impact	No

- Would the Modified Project have a substantial adverse effect on a scenic vista?*
- Would the Modified Project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*
- Would the Modified Project 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 Modified Project is in an urbanized area, would the Modified Project conflict with applicable zoning and other regulations governing scenic quality?*
- Would the Modified Project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in an area?*

The 2024 IS-MND determined the Original Project would result in no impacts to scenic vistas, scenic resources, or the existing visual character and quality of public views of the site and its surroundings. The 2024 IS-MND also determined the Original Project would result in less-than-significant impacts related to light and glare.

Similar to the Original Project, the Modified Project would not result in permanent aesthetic changes to scenic vistas, scenic resources, or existing visual character. Therefore, the Modified Project would result in no impacts to scenic vistas, scenic resources, or the existing surrounding visual character. Consistent

with the Original Project, construction of the proposed modifications would occur during daytime hours and would generally not require the use of lighting except during the afternoon hours in the late fall and early winter hours. In this case, construction lighting would be directed down towards construction activities to reduce glare and light trespass in adjacent areas, and construction lighting impacts would be both temporary and short-term. Therefore, the proposed modifications would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the vicinity of the location of the proposed modifications. Once construction is complete, the proposed modifications would not create a new source of light or glare because the waterline improvements would be located primarily below ground with the exception of minor aboveground appurtenances that would be consistent with existing infrastructure in the surrounding vicinity (e.g., fire hydrants). As such, similar to the Original Project, impacts to light and glare under the Modified Project would be less than significant.

Conclusion

The Modified Project would not result in new significant impacts to aesthetics or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

2 Agriculture and Forestry Resources

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact	No	No Impact	No
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	No Impact	No	No Impact	No
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	No	No Impact	No
d. Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact	No	No Impact	No
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	No	No Impact	No

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- a. *Would the Modified Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the Modified Project conflict with existing zoning for agricultural use or a Williamson Act contract?*
- c. *Would the Modified Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the Modified Project result in the loss of forest land or conversion of forest land to non-forest use?*
- e. *Would the Modified Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

The 2024 IS-MND determined the Original Project would result in no impacts to agricultural and forestry resources. Similar to the Original Project, the proposed modifications would not require ground disturbance of agricultural or forested lands and consist of water infrastructure that does not have the potential to result in the conversion of adjacent agricultural lands, such as those south of the Ken-Mar Gardens Mobile Home Park and south and east of the Halcyon community. Therefore, similar to the Original Project analyzed in the 2024 IS-MND, the Modified Project would result in no impacts to agriculture and forestry resources.

Conclusion

The Modified Project would not result in new significant impacts to agriculture and forestry resources or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

3 Air Quality

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	No Impact	No	No Impact	No
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 Impact	No	Less than Significant Impact	No
c. Expose sensitive receptors to substantial pollutant concentrations?	Less than Significant	No	Less than Significant Impact	No
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant Impact	No	Less than Significant Impact	No

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

The 2024 IS-MND determined the Original Project would result in no impacts related to applicable air quality plans.

Consistency with the San Luis Obispo County Air Pollution Control District (SLOAPCD) Clean Air Plan means that stationary and vehicle emissions associated with a project are accounted for in the Clean Air Plan's growth assumptions. According to the SLOAPCD (2023) guidelines, a project may result in significant air quality impacts if it is inconsistent with the assumptions in the SLOAPCD Clean Air Plan. Consistency with the SLOAPCD Clean Air Plan is evaluated based on three criteria: 1) whether a project would be consistent with applicable population projections; 2) whether a project would result in an increase in vehicle trips and miles traveled at a higher rate than the rate of population growth; and 3) whether a project includes Land Use and Transportation Control Measures (TCMs) and Land Use Strategies from the Clean Air Plan.

The purpose of the proposed modifications would be the same as that of the Original Project – to implement water pipeline improvements to address water system deficiencies in the OCSD service area. As with the Original Project, the proposed modifications would not directly generate population growth through construction of housing and are not intended to increase water system capacity to accommodate unplanned population growth. Given the small-scale nature of the construction activities, it is likely construction workers would be drawn from the existing, regional workforce and would not indirectly result in the relocation of people to San Luis Obispo County. The proposed modifications would require minor operation and maintenance activities related to as-needed repairs and routine inspections. Therefore, the increase in operational emissions would be minor as compared to existing conditions. In addition, the proposed modifications would not conflict with the Clean Air Plan's Land Use and TCMs because operation and maintenance trips would be infrequent and confined to the OCSD service area.

Therefore, similar to the Original Project, the Modified Project would not conflict with or obstruct implementation of the SLOAPCD Clean Air Plan, and no impact would occur.

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to criteria air pollutant emissions.

Construction of the proposed modifications would generate additional temporary air pollutant emissions through the use of heavy-duty equipment and vehicle trips beyond those required for the Original Project, which would contribute to the existing non-attainment status of the SLOAPCD region for the California Ambient Air Quality Standards (CAAQS) for ozone and particulate matter measuring 10 microns in diameter or less. Modeling of construction-related air pollutant emissions associated with the proposed modifications was performed using the California Emissions Estimator Model (CalEEMod) version 2022.1.0 in accordance with project details provided by the project engineer, including the construction schedule and construction equipment list. This analysis conservatively assumes construction of the proposed modifications would overlap with construction of the Original Project. In furtherance of this analysis, emissions from the Original Project were remodeled using the most recent version of CalEEMod (2022) because the 2024 IS-MND utilized an older version of CalEEMod (version 2020.4.0) that has since become outdated. As with the Original Project site, the proposed modifications are within the South Central Coast Air Basin (SCCAB), which is under SLOAPCD jurisdiction. The SLOAPCD quantitative regional significance thresholds for construction were used in this evaluation, similar to the 2024 IS-MND.

Table 3 presents the estimated temporary air pollutant emissions generated by construction of the proposed modifications. These emissions are combined with the emissions associated with construction of the Original Project to provide a conservative estimate of emissions that assumes construction of the Original Project would occur simultaneously with construction of the proposed modifications. The combined emissions are then compared to the total maximum daily and quarterly emissions SLOAPCD thresholds. As shown in Table 3, air pollutant emissions generated by construction of the proposed modifications in conjunction with the Original Project would not exceed the SLOAPCD daily or quarterly thresholds. Therefore, similar to the Original Project, construction of the Modified Project would not 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, and impacts would be less than significant.

Table 3 Estimated Construction Emissions for Proposed Modifications¹

	ROG + NO _x	PM ₁₀	DPM (exhaust PM _{2.5})
Total Maximum Daily Construction Emissions (pounds per day)			
Original Project Emissions	13	1	<1
Proposed Modifications Emissions	19	1	<1
Total Maximum Daily Construction Emissions	32	2	1
SLOAPCD Daily Thresholds	137	n/a	n/a
Exceeds Daily Threshold?	No	-	-
Total Maximum Quarterly Construction Emissions (tons per quarter)²			
Original Project Emissions	<1	<1	<0.01
Proposed Modifications Emissions	<1	<1	<0.01
Total Maximum Quarterly Construction Emissions	1	<1	<0.01
SLOAPCD Quarterly Thresholds	2.5	2.5	0.13
Exceeds Daily Threshold?	No	No	No

¹ Construction emissions were quantified assuming a construction start date of August 2025, which provides a conservative emissions estimate given that construction equipment and vehicles generally become more efficient and less polluting over time.

² Quarterly emissions calculated based on annual emissions divided by four (i.e., one quarter of a year)

ROG = reactive organic gases; NO_x = nitrogen oxides; PM₁₀ = particulate matter 10 microns or less in diameter; DPM = diesel particulate matter; PM_{2.5} = particulate matter 2.5 microns or less in diameter; lbs/day = pounds per day, n/a = not applicable

See Appendix A for CalEEMod results.

Operational Emissions

Operation and maintenance of the proposed modifications would be similar to that of the Original Project and would result in similar off-gassing of coatings and routine maintenance trips. Therefore, operational emissions associated with the proposed modifications would be similar to those of the Original Project and would not exceed SLOAPCD thresholds. As such, operation of the Modified Project would not 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, and impacts would be less than significant.

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to exposure of sensitive receptors to substantial air pollutant emissions.

Similar to the Original Project, the proposed modifications are located near sensitive receptors (i.e., residences and schools), specifically residences within the Ken-Mar Gardens Mobile Home Park, Halcyon neighborhood, Halcyon Estates, and Grande Mobile Manor as well as those along South Halcyon Road and The Pike.

Toxic Air Contaminants

Similar to the Original Project, the greatest potential for toxic air contaminant (TAC) emissions during construction of the proposed modifications would be from heavy equipment operations that generate diesel particulate matter emissions. Generation of diesel particulate matter from construction projects typically occurs in a single area for a short period. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure

level for the Maximally Exposed Individual. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period (assumed to be the approximate time that a person spends in a household). The California Office of Environmental Health Hazard Assessment recommends this risk be bracketed with 9-year and 70-year exposure periods. Health risk assessments should be limited to the period/duration of activities associated with a proposed project.

As discussed under threshold 3.3(b), construction of the proposed modifications would result in emissions of criteria pollutants, including diesel particulate matter, reactive organic gases, and nitrogen oxides. Such emissions would be temporary in nature, and construction emissions for the proposed modifications would be dispersed across three separate areas at varying points of construction. Therefore, exposure of adjacent sensitive receptors would occur for only a limited portion of the overall construction period as construction progresses through each work site. For example, construction within the Ken-Mar Gardens Mobile Home Park would occur for approximately six months, and construction within the Halcyon neighborhood would occur for approximately one year. Maximum PM_{2.5} emissions, which are used to represent DPM emissions for this analysis, would occur during pipeline installation and paving construction activities. While pipeline installation and paving construction emissions represent the worst-case condition, such activities would occur for 12 months, which is approximately 11 percent of the 9-year health risk calculation period, three percent of the 30-year health risk calculation period, and one percent of the 30-year health risk calculation period. In addition, as discussed under threshold 3.3(b), construction-related and operational DPM emissions generated by the Modified Project would not exceed adopted SLOAPCD thresholds. Furthermore, operation of the proposed modifications would not introduce new sources of toxic air contaminant emissions. Therefore, the Modified Project would not expose sensitive receptors to substantial toxic air contaminant concentrations, and impacts would be less than significant.

San Joaquin Valley Fever

Construction of the proposed modifications, including grading and construction vehicle traffic, could generate substantial localized quantities of dust and expose sensitive receptors (nearby residents, construction workers, etc.) to potential health hazards associated with *Coccidioides immitis* spores, particularly during periods of high wind, which can cause San Joaquin Valley Fever. However, as stated in the 2024 IS-MND, soils along the pipeline segment alignments are already disturbed from construction of roadways, commercial structures, and residences, which is also the case for the proposed modifications. Due to the previous disturbance of the location of the proposed modifications, disturbance of soils during construction activities is unlikely to pose a substantial risk of infection of San Joaquin Valley Fever to people in the surrounding vicinity. Furthermore, similar to the Original Project, construction activities for the proposed modifications would be required to comply with SLOAPCD Fugitive Dust Mitigation Measures: Expanded List, which would reduce fugitive dust generation and further minimize the potential risk of infection. Therefore, the Modified Project would not expose sensitive receptors to substantial *Coccidioides* fungus concentrations, and impacts would be less than significant.

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to other air pollutant emissions adversely affecting a substantial number of people. The general nature of the proposed modifications (i.e., water infrastructure) would be the same as that of the Original Project. As such, odors sources associated with the proposed modifications (primarily equipment exhaust during construction activities) would be similar to those of the Original Project. Similar to the Original Project, the Modified Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and impacts would be less than significant.

Conclusion

The Modified Project would not result in new significant impacts to air quality or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

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4 Biological Resources



	Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less than Significant with Mitigation Incorporated	No	Less than Significant with Mitigation Incorporated	Yes
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less than Significant with Mitigation Incorporated	No	Less than Significant with Mitigation Incorporated	No
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?	Less than Significant with Mitigation Incorporated	No	Less than Significant with Mitigation Incorporated	No
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?	No Impact	No	No Impact	No
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than Significant with Mitigation Incorporated	No	Less than Significant with Mitigation Incorporated	No
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	No	No Impact	No

The following analysis is based on the Biological Resources Assessments (BRAs) prepared for the proposed modifications in 2025, which are included in Appendix B. For purposes of this analysis, the Biological Study Area consists of the limits of work for the proposed modifications plus a 50-foot buffer to capture potential indirect impacts. The BRAs consisted of field surveys and literature reviews to document existing conditions in the BSA and evaluations of the potential for the proposed modifications to result in significant impacts to biological resources under CEQA.

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

Special Status Plants

The 2024 IS-MND determined the Original Project would result in a potentially significant impact to La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*; federally endangered, state candidate threatened, California Rare Plant Rank 1B.1) during construction and required implementation of Mitigation Measures BIO-1 through BIO-3 and BIO-6 to reduce the impact to this special status plant species to a less-than-significant level.

Special-status plants species are not expected to occur within the BSA, and excavation and staging for the proposed modifications would occur primarily in paved areas (Appendix B). Therefore, the proposed modifications would result in no impact to special-status plants. Mitigation Measures BIO-1 through BIO-3 and BIO-6 would continue to apply to the Modified Project but would not be required for the proposed modifications to mitigate impacts to special status plant species. Similar to the Original Project, the impacts of the Modified Project to special status plant species would be less than significant with mitigation incorporated.

Special Status Wildlife

The 2024 IS-MND determined construction of the Original Project would result in potentially significant impacts to monarch butterfly – California overwintering population (*Danaus plexippus*; federal proposed threatened), California red-legged frog (*Rana draytonii*; federally threatened; California Department of Fish and Wildlife Species of Special Concern), and northern California legless lizard (*Anniella pulchra*; California Department of Fish and Wildlife Species of Special Concern) during construction and required implementation of Mitigation Measures BIO-1 through BIO-4 and BIO-6 to reduce impacts to special status wildlife species to a less-than-significant level.

No special status wildlife species have a moderate to high potential to occur in the BSA for the Ken-Mar Gardens Mobile Home Park, Halcyon Estates, and Grande Mobile Manor Consolidations due to a lack of suitable habitat (Appendix B). Therefore, these proposed modifications would result in less-than-significant impacts to special status wildlife species.

Similar to the Original Project, overwintering monarch butterfly is known to occur in the BSA for the Halcyon Water System Consolidation. Occurrences of overwintering monarch butterfly have been documented at a large stand of eucalyptus trees south of the termini of Helena Street and Dower Avenue. Approximately 0.03 acre of this site occurs within the southwest corner of the BSA (outside the limits of work for the proposed modifications), with the majority of the approximately 12-acre overwintering site located outside the BSA. Occurrences of overwintering monarch butterfly have also been documented in the immediate vicinity of the BSA at two autumnal sites located within eucalyptus stands at the northwest corner of Hiawatha Lane and La Due Street and along the south side of The Pike. Annual monitoring counts of the overwintering site south of the termini of Helena Street and Dower Avenue and the autumnal site along the south side of The Pike indicate populations fluctuate, but these two sites are occupied by monarchs most years. Many of the trees at the autumnal site at the northwest corner of Hiawatha Lane and La Due Street were removed in 2017, and the site no longer provides suitable habitat (Appendix B). Should monarchs be present within the BSA during construction activities for the Halcyon

Water System Consolidation, direct impacts could include injury or mortality of individuals due to encroachment or damage to trees within overwintering sites. Direct impacts to overwintering monarchs could also result from general construction-related disturbance such as dust, spills, and noise if transient individuals are visiting nectar sources and/or flying near the BSA at the time of construction. Overwintering monarchs in the immediate vicinity of the BSA for the Halcyon Water System Consolidation are likely highly tolerant of existing noise and disturbance associated with the public rights-of-way and surrounding residential and agricultural development. The additional noise and construction disturbance associated with the proposed modifications would not represent a significant new noise and disturbance effect, and this increased activity would be temporary in nature (Appendix B). Nevertheless, as with the Original Project, impacts to monarch butterflies would be potentially significant. Implementation of Mitigation Measures BIO-1 and BIO-2 from the 2024 IS-MND as well as a new Mitigation Measure BIO-8 would be required to reduce this impact to a less-than-significant level. Overall, Mitigation Measures BIO-1 through BIO-4 and BIO-6 would continue to apply to the Modified Project, but Mitigation Measures BIO-3 and BIO-4 would not be required for the proposed modifications to mitigate impacts to special status wildlife species. Similar to the Original Project, the impacts of the Modified Project to special status wildlife species would be less than significant with mitigation incorporated.

Other Protected Species

The 2024 IS-MND determined construction of the Original Project would result in potentially significant impacts to nesting birds, which are protected under the California Fish and Game Code and the Migratory Bird Treaty Act, and required implementation of Mitigation Measure BIO-5 to reduce impacts to nesting birds to a less-than-significant level.

Similar to the Original Project, birds may nest in trees, shrubs, or directly on the ground within and adjacent to the BSA for the proposed modifications. The BSA contains suitable nesting habitat for a variety of native avian species common to urban areas, including northern mockingbird (*Mimus polyglottos*), house finch, and black phoebe (*Sayornis nigricans*). If nesting birds protected by the California Fish and Game Code and the Migratory Bird Treaty Act are present on or near the location of the proposed modifications during construction, direct effects could include injury or mortality from construction activity, and indirect effects could include nest abandonment from construction noise, dust, and other project activities (Appendix B). As with the Original Project, implementation of Mitigation Measure BIO-5 from the 2024 IS-MND would be required to reduce this impact to a less-than-significant level. Similar to the Original Project, the impacts of the Modified Project to nesting birds would be less than significant with mitigation incorporated.

Mitigation Measures from the 2024 IS-MND

The following mitigation measures from the 2024 IS-MND would continue to apply to the Modified Project, although Mitigation Measures BIO-3 and BIO-4 would not be applicable to the proposed modifications. Where necessary, minor modifications/updates have been made to the text of the mitigation measures to ensure applicability to the proposed modifications, as shown in strikeout/underline.

BIO-1 General Best Management Practices

General requirements that shall be followed by construction personnel are listed below.

- Prior to project mobilization, limits of construction work adjacent to monarch butterfly overwintering sites, including near the Halcyon Water System Consolidation, and silver dune lupine – mock heather scrub habitats, including along Segments 1-5, 1-7, 1-11, and 3-4, shall be clearly delineated with orange construction fencing or similar highly visible material and maintained throughout the duration of construction. Silt fencing or similar exclusion fencing shall be installed along the limits of construction work adjacent to Oceano Lagoon and its associated riparian habitat, including along Segments 2-1 and 2-2.

- No native vegetation with a diameter at breast height (DBH) of more than four inches shall be removed or damaged without approval by an approved biologist. Vegetation trimming shall be minimized to the extent feasible.
- Staging and parking areas shall be limited to previously disturbed areas comprising ruderal vegetation, ornamental landscaping, and paved/graded areas, to the extent practicable.
- Materials and equipment (when not in use) shall be stored on impervious surfaces or plastic ground covers to prevent spills or leakage and shall be stored at least 50 feet from streams and wetland features, as feasible.
- Adequate spill prevention and response equipment shall be maintained on site and readily available to implement to minimize impacts to the aquatic environment.
- Construction materials and spoils shall be protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate.
- Off-site tracking of loose construction materials and soil shall be implementing street sweeping, vacuuming, and rumble plates, as appropriate.
- All vehicles and equipment shall be in good working condition and free of leaks. When vehicles or equipment are stationary, mats or drip pans shall be placed below vehicles to contain fluid leaks. The contractor shall prevent oil, petroleum products, or any other pollutants from contaminating the soil or entering a watercourse (dry or otherwise).
- Project-related vehicles shall adhere to a speed limit of 15 miles per hour.
- If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas.
- Fugitive dust from ground disturbance activities shall be minimized using water trucks and covering of soil stockpiles.
- Construction personnel shall adhere to all posted speed limits.
- All food related trash shall be disposed of in closed containers and removed from the project site each day during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the construction area. At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project site.
- Excavated material from trenching along any potentially jurisdictional feature shall be side cast away to prevent sediment deposition within the feature.
- All open trenches shall be fenced and sloped to prevent entrapment of wildlife species.
- All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality.
- No pets shall be allowed on the project site.
- No firearms shall be allowed on the project site.
- Herbicides shall not be used on-site during construction.
- Work shall be restricted to daylight hours.
- While encounters with special status species are not likely or anticipated, any worker who inadvertently injures or kills a special status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction foreman or biological monitor. The construction foreman or biological monitor shall immediately notify OCSD.
- Before starting or moving construction vehicles, especially after a few days of non-operation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm's way or temporarily stop activities until the animal leaves the area. Threatened or endangered species can only be moved with authorization of the United States Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW), as applicable.

BIO-2 Worker Environmental Awareness Training

Prior to the initiation of the project, an approved biologist shall present a pre-project environmental education program for all personnel working at the site, which shall be focused on conditions and protocols necessary to avoid and minimize potential impacts to biological resources. Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special status biological resources potentially occurring in the project site. This training will include information about the special status species with potential to occur in the project area. The specifics of this program shall include identification of special status species and habitats, a description of the regulatory status and general ecological characteristics of special status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the project site. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees shall sign a form provided by the trainer documenting they have attended the WEAP and understand the information presented to them. The crew foreman shall be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special status species.

BIO-3 Invasive Plant Species Control

Invasive plant species, for the purpose of this document, shall include all species with a California Invasive Plant Council (Cal-IPC) rating of moderate or high. Construction personnel and equipment shall be free of invasive plant seeds, propagules, and any material which may contain them (e.g., soil) prior to entering the project site. All potentially contaminated equipment will be carefully cleaned prior to the initiation of project activities. Staging areas and access routes shall avoid weed infestations and infestations within the project site and shall be flagged and avoided to the maximum extent feasible. Only certified weed-free materials (e.g., gravel, straw, and fill) will be used for the project.

BIO-4 Pre-construction Special Status Wildlife Surveys

Within seven days of any planned ground disturbance, a qualified biologist shall conduct pre-construction surveys of the project site prior to the initiation of project activities occurring within or adjacent to habitat suitable for special status wildlife species, specifically Segments 1-5, 1-11, 2-1, 2-2, and 3-4. If non-listed status species are detected within the project site, the approved biologist shall relocate the species out of harm's way; state and/or federally listed species may not be handled unless authorized by the CDFW and/or USFWS, as applicable.

BIO-5 Pre-construction Nesting Bird Surveys

To avoid disturbance of nesting birds, including special status species and birds protected by the MBTA and CFGC Section 3503, project activities shall occur outside of the breeding season for migratory birds (generally February 1 through August 31), if feasible. If construction must occur during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven days prior to the initiation of project activities. The nesting bird pre-construction survey shall be conducted on foot inside the project site and include a 500-foot buffer for raptors and a 300-foot buffer for all other species, unless reduced buffers are recommended by a site-specific Biological Resources Assessment. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur along the central coast of California. If nests are found, an avoidance buffer of up to 500 feet for raptors and up to 300 feet for non-raptors (dependent upon the species, the proposed work activity, and existing disturbances associated with land use outside of the workspace) shall be determined and demarcated by the biologist with construction fencing, flagging, or other means to mark the boundary. Intrusion into the buffer may be conducted at the discretion of the biologist.

BIO-6 Biological Monitoring

An approved biologist shall be on-site during all project-related activities occurring adjacent to sensitive habitat and/or habitat suitable for special status species, specifically Segments 1-5, 1-11, 2-1, 2-2, and 3-4. The approved biologist shall ensure that all mitigation measures are adhered to and should provide recommendations to avoid impacts to biological resources. If non-listed special-status wildlife species are observed within the project site during project activities, the approved biologist shall relocate the species out of harm's way. State and/or federally listed species, including candidate species, may not be handled unless authorized by the CDFW and/or USFWS, as applicable. The biologist shall have the authority to temporarily halt or redirect work to avoid impacts to special status plant and wildlife species or other protected biological resources.

New Mitigation Measure

The following mitigation measure is new and would be applicable to the proposed modifications but would not apply to the rest of the Modified Project.

BIO-8 Monarch Butterfly Avoidance and Minimization

Project construction activities within 300 feet of overwintering sites in the vicinity of the Halcyon Water System Consolidation (i.e., eucalyptus stands south of the termini of Helena Street and Dower Avenue and south of The Pike), including equipment staging, grading, and construction, shall be avoided during the monarch butterfly overwintering season between October 15 through March 15, if practicable. In the event project activities must occur during the overwintering season within the 300-foot buffer, a qualified biologist shall conduct surveys for roosting monarch butterflies every two weeks during the overwintering season to confirm presence and identify aggregation locations. If observed, the qualified biologist shall establish a protective buffer, ranging from 100 to 300 feet from the roosting site in which monarch butterflies are aggregating. The buffer shall be delineated on site by the biologist with flagging or staking visible to construction personnel. The construction contractor shall ensure no construction occurs within the protective buffer, including staging of equipment or stopping or idling in the buffer, during the overwintering season. In the event construction activities, or other use of equipment, must occur within the protective buffer, the qualified biologist shall be present on site to monitor construction activities and determine if the work is disturbing the aggregated butterflies. If the biologist determines the work is disturbing the butterflies, the biologist shall stop work within the protective buffer. In addition, due to the regular movement of the butterflies and the locations of the aggregations, the biologist shall adjust the protective buffers, as necessary and at their discretion.

Significance after Mitigation

Implementation of the mitigation measures above would reduce the potential impacts of the Modified Project to special status plant and wildlife species to a less-than-significant level. The general BMPs included in Mitigation Measure BIO-1 would reduce potential impacts to special status plant and wildlife species by isolating sensitive habitat from the Modified Project site with orange construction and/or silt fencing, minimizing vegetation removal and disturbance, minimizing the potential of adverse construction vehicle impacts, and establishing procedures for avoiding, monitoring, and reporting wildlife encounters. The Worker Environmental Awareness Training implemented as part of Mitigation Measure BIO-2 would train workers to identify, prevent, and avoid potential impacts to special status species, and Mitigation Measure BIO-3 would reduce the potential for invasive plant species to be introduced to the Modified Project site, which would reduce impacts to special status plant species. Mitigation Measures BIO-4 and BIO-5 as well as new Mitigation Measure BIO-8 would involve surveys for special status wildlife species (including overwintering monarch butterfly) and nesting birds along with implementation of appropriate avoidance buffers and relocation of non-listed species, which would identify, avoid, and minimize potential impacts to special status wildlife species and nesting birds that may be present in the Modified Project site. Mitigation Measure BIO-6 would involve biological monitoring, which would facilitate implementation of mitigation measures and would avoid or minimize impacts to special status species

within the Modified Project. Therefore, as with the Original Project, impacts to special status species under the Modified Project would be less than significant with mitigation incorporated, and no new or substantially more severe significant impacts would occur.

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

The 2024 IS-MND determined the Original Project would result in potentially significant indirect impacts to riparian habitat and sensitive natural communities, specifically silver dune lupine – mock heather scrub as well as Oceano Lagoon, a sensitive habitat surrounded by forested/shrub wetland features that is considered an Environmentally Sensitive Habitat Area under the County of San Luis Obispo's Local Coastal Program. The 2024 IS-MND required implementation of Mitigation Measures BIO-1 through BIO-3 and BIO-6 to reduce impacts to riparian habitat and sensitive natural communities to a less-than-significant level.

No sensitive natural communities or riparian habitat are present within the BSA for the proposed modifications (Appendix B). Therefore, the proposed modifications would result in no impacts to riparian habitat or sensitive natural communities. Mitigation Measures BIO-1 through BIO-3 and BIO-6 would continue to apply to the Modified Project but would not be required for the proposed modifications. Similar to the Original Project, the impacts of the Modified Project to riparian habitat and sensitive natural communities would be less than significant with mitigation incorporated.

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

The 2024 IS-MND determined the Original Project would result in potentially significant indirect impacts to state and federally protected wetlands, specifically three unnamed freshwater forested shrub/wetland features associated with Oceano Lagoon. The 2024 IS-MND required implementation of Mitigation Measures BIO-1 through BIO-3 to reduce impacts to state and federally protected wetlands to a less-than-significant level.

No state and federally protected wetlands are present within the BSA for the proposed modifications (Appendix B). Therefore, the proposed modifications would result in no impacts to state and federally protected wetlands. Mitigation Measures BIO-1 through BIO-3 would continue to apply to the Modified Project but would not be required for the proposed modifications. Similar to the Original Project, the impacts of the Modified Project to state and federally protected wetlands would be less than significant with mitigation incorporated.

- d. *Would the Modified 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?*

The 2024 IS-MND determined the Original Project would result in no impacts to wildlife movement or native wildlife nursery sites. Similar to the Original Project, no corridors for wildlife movement occur within the BSA for the proposed modifications because the site is completely surrounded by developed residential and agricultural areas. In addition, no native wildlife nursery sites are present within the BSA for the proposed modifications. Therefore, similar to the Original Project, the Modified Project would result in no impacts to wildlife movement corridors or native wildlife nursery sites.

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

The 2024 IS-MND determined the Original Project would result in less than significant impacts related to local policies and ordinances protecting biological resources, including Environmentally Sensitive Habitat

Areas protected by the San Luis Obispo County Local Coastal Plan and protected trees, with implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-6, and BIO-7.

The 2024 IS-MND determined the Original Project would result in potentially significant indirect impacts to Oceano Lagoon and its associated arroyo willow riparian habitat, which are considered an Environmentally Sensitive Habitat Area under the County of San Luis Obispo's Local Coastal Program. In addition, the 2024 IS-MND determined construction of the Original Project could impact the health of protected street trees along the project alignment, which would conflict with the County of San Luis Obispo's tree protection ordinance. The 2024 IS-MND required implementation of Mitigation Measures BIO-1 through BIO-3, BIO-6, and BIO-7 to reduce impacts pertaining to local biological resources protection policies and ordinances to a less-than-significant level.

The proposed modifications are not located within Environmentally Sensitive Habitat Areas and would not involve tree removal. In addition, the location of the proposed modifications is comprised of properties designated Residential Multi-family by the County of San Luis Obispo and public rights-of-way and is developed with residential land uses and roadways. Therefore, the tree permitting requirements of San Luis Obispo County Code Chapter 22.56 are not expected to apply to the proposed modifications. Accordingly, the proposed modifications would not conflict with any local policies or ordinances protecting biological resources, and no impact would occur. Mitigation Measures BIO-1 through BIO-3, BIO-6, and BIO-7 would continue to apply to the Modified Project but would not be required for the proposed modifications to mitigate impacts to locally-protected biological resources. Similar to the Original Project, the impacts of the Modified Project related to local biological resources protection policies and ordinances would be less than significant with mitigation incorporated.

Mitigation Measure from the 2024 IS-MND

The following mitigation measure from the 2024 IS-MND would continue to apply to the Modified Project but would not be applicable to the proposed modifications.

BIO-7 Protected Tree Measures

A Protected Tree Survey of all protected trees under the County definition that occur within 20 feet of proposed ground disturbance shall be conducted prior to project initiation. The Protected Tree Survey shall determine the number, location, and protection class of each tree in the project site and shall assess any potential project-related impacts. If protected trees are to be impacted and/or removed, a Tree Protection Plan and a Tree Replacement Plan (as applicable) shall be developed prior to the implementation of the project.

Fencing (at least 3 feet high, highly visible, staked to prevent collapse, and includes signage placed in 15-foot intervals identifying the protection area) shall be installed along the dripline of all protected trees that have a dripline that overlaps with the project site. No work shall be permitted within the fencing unless overseen by an approved arborist and approved by OCSD. All protective fencing shall be maintained throughout the duration of the project.

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

The 2024 IS-MND determined the Original Project is not within the planning area of a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan and therefore would result in no impacts related to conflicts with such plans. Similarly, the proposed modifications would not occur within any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan areas. Therefore, as with the Original Project, the Modified Project would not conflict with the provisions of any such plans, and no impact would occur.

Conclusion

The Modified Project would require implementation of one new mitigation measure (Mitigation Measure BIO-8) to address potentially significant impacts to monarch butterfly, resulting in a less-than-significant impact with mitigation incorporated to special status species, similar to the Original Project. Therefore, the Modified Project would not result in new significant impacts or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project.

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5 Cultural Resources

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	No Impact	No	Less than Significant Impact	No
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less than Significant with Mitigation Incorporated	No	Less than Significant with Mitigation Incorporated	No
c. Disturb any human remains, including those interred outside of formal cemeteries?	Less than Significant	No	Less than Significant	No

This section provides an analysis of the impacts of the proposed modifications on cultural resources, including historical and archaeological resources as well as human remains. CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant (CEQA Guidelines Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]). PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that 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; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The following analysis is based on the Cultural Resources Assessments prepared for the proposed modifications in 2025 and 2026 (Pfeiffer et. al 2025a, 2025b, and 2026). The assessments consisted of

literature reviews and Phase I pedestrian surveys as well as Extended Phase I and Phase II investigations for the Halcyon Water System Consolidation to document existing conditions and evaluate the potential for the proposed modifications to result in significant impacts to historic resources, archaeological resources, and human remains under CEQA.

- a. *Would the Modified Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

The 2024 IS-MND determined the Original Project would result in no impact to historic resources. To more clearly differentiate between archaeological and built environment resources, the analysis of potential impacts to historical resources under this threshold is limited to built environment resources. Archaeological resources, including those that may be considered historical resources pursuant to CEQA Guidelines Section 15064.5 and those that may be considered unique archaeological resources pursuant to PRC Section 21083.2, are considered under threshold 5(b).

Ken-Mar Gardens Mobile Home Park, Halcyon Estates, and Grande Mobile Manor Consolidations

No built environment resources are present within or adjacent to the location of the Ken-Mar Gardens Mobile Home Park, Halcyon Estates, and Grande Mobile Manor Consolidations (Pfeiffer et. al 2025a). Therefore, similar to the Original Project, the Ken-Mar Gardens Mobile Home Park, Halcyon Estates, and Grande Mobile Manor Consolidations would result in no impacts to historic resources.

Halcyon Water System Consolidation

The field survey and background research for the Halcyon Water System Consolidation identified one built environment historical resource – the Halcyon Historic District - within and surrounding the proposed disturbance footprint. The Halcyon Historic District is listed in the National Register of Historic Places (NRHP) and CRHR. Halcyon was founded in 1903 as a utopian society by members of the Temple of the People, an offshoot of the Theosophical Society in America. At the time of its founding, the group was led by New York transplants Dr. William H. Dower and Francia LaDue. Encompassing roughly 130 acres laid out in 16 square blocks, the Halcyon Historic District consists of 25 contributing buildings, three contributing sites (including the Halcyon Water Works), and 25 noncontributing buildings. The community's original design concept consisted of a central spiritual and administrative block with streets radiating out to encompass residential lots and small farms. The community survives today, and its physical form remains relatively consistent with the historic period. According to the NRHP nomination, the significance of the Halcyon Historic District is based on NRHP Criterion A (Event) at the local level of significance in the following areas (Pfeiffer et. al 2025b):

- **Community Planning and Development:** For exemplifying a settlement pattern and town planning unique to socialist reformers in the United States from the late 19th into the early 20th century.
- **Exploration/Settlement:** For being part of the wave of theosophical and utopian agricultural settlements moving from the East to California in the early 20th century, introducing a collective scheme through the Temple Home Association, building exemplary vernacular bungalow/craftsman architecture and a unique theosophical temple.
- **Philosophy:** For its commitment to an Anglo understanding of Native American culture, to socialist economic principles, and to the unity of religion and science through founding a nature cure sanatorium based on then-current Eclectic Medicine, Osteopathy, Naturopathy, and Electronic Reactions.
- **Religion:** As an important illustration of the impact of the 'first wave' of Theosophy and Eastern mysticism in America and as a community founded and built according to religious and mystical principles, with a unique leadership structure.

- **Social History:** For being one of the most culturally-oriented collective groups on the Central Coast of California through its emphases on education in the visual arts and pottery, public dramatic and musical performance (often by nationally recognized innovators), and scientific experimentation at the group's sanatorium, which inspired several children in the community to practical breakthroughs in applied physics.

As an NRHP- and CRHR-listed historic district, the Halcyon Historic District qualifies as a historical resource under CEQA. Projects that may cause a substantial adverse change in the significance of a historical resource would result in a significant effect on the environment under CEQA. These impacts could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR. For the purposes of CEQA, impacts to a historical resource are considered mitigated below a level of significance when the project conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (CEQA Guidelines Section 15126.4 [b][1]), the goal of which is to preserve the historic materials and distinctive character of a historical resource.

The Halcyon Water System Consolidation consists of the installation of potable water pipelines within existing road rights-of-way, meters with backflow preventors, and new fire hydrants as well as the re-routing of several private service laterals to connect to OCSD water mains. According to the NRHP nomination for the Halcyon Historic District, the Halcyon Water Works is a contributing site to the district. The existing above-grade components of the Halcyon Water Works consist of two 5,000-gallon storage tanks, a chemical dosing system, a self-cleaning metallic cartridge filter system and a point-of-use reverse osmosis treatment facility, located northeast of the intersection of Ross Lane and Helena Avenue at the well site. None of these components would be altered by the Halcyon Water System Consolidation. In addition, neither the system of existing water pipes nor the paved roadways throughout the Halcyon Historic District were identified in the NRHP nomination as contributing to the significance of the district.

The Halcyon Water System Consolidation would not result in any changes in land use within the Halcyon Historic District. In addition, the historic district's character would be retained and preserved following implementation of the Halcyon Water System Consolidation because no above-grade components of the Halcyon Water Works would be altered. While new pipelines would be installed throughout the community, these components would be located below-grade in existing roadway rights-of-way and would therefore not alter the character of the historic district or the setting of any of its contributing buildings or sites. Above-grade components consisting of water meters and fire hydrants installed throughout the historic district would be small scale and generally consistent with the historic district's existing character. The Halcyon Water System Consolidation does not include changes that would create a false sense of history or alter non-original elements of the historic district that may have acquired significance in their own right. The distinctive materials, features, and finishes of the Halcyon Historic District are primarily related to its contributing buildings and their architectural detailing and methods of construction. The historic district's character is largely defined by its semi-rural setting, and the Halcyon Water System Consolidation would not result in changes to that character. Following implementation of the Halcyon Water System Consolidation, the Halcyon Historic District's current and historic-period character as a semi-rural community would remain intact.

Furthermore, no components of the existing water system in the Halcyon community would be removed as part of the Halcyon Water System Consolidation. Rather, existing water lines would remain in place for potential future use for irrigation purposes. In addition, the Halcyon Water System Consolidation does not involve chemical or physical treatments with the potential to damage historic materials. The Halcyon Water System Consolidation also does not involve additions to contributing buildings or sites, such as the Halcyon Water Works. The elements proposed for installation as part of the Halcyon Water System Consolidation are small scale and would not destroy historic materials, features, or spatial relationships that characterize the historic district.

Based on the analysis presented above, the Halcyon Water System Consolidation is in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings and would not result in the material impairment of the Halcyon Historic District, meaning it would not alter in an adverse manner those physical characteristics of the district that convey its historical significance and that justify its inclusion in the NRHP and CRHR. Therefore, the Halcyon Water System Consolidation would result in a less-than-significant impact to historic resources.

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

The 2024 IS-MND determined the Original Project would result in a potentially significant impact to archaeological resources during construction and required implementation of Mitigation Measures CR-1 through CR-4 to reduce impacts to archaeological resources to a less-than-significant level.

Ken-Mar Gardens Mobile Home Park, Halcyon Estates, and Grande Mobile Manor Consolidations

The California Historical Resources Information System search identified five previously recorded cultural resources within a 0.5-mile radius of the location of the Ken-Mar Gardens Mobile Home Park, Halcyon Estates, and Grande Mobile Manor Consolidations. One (CA-SLO-406) is located in close proximity to the location of the Ken-Mar Gardens Mobile Home Park, Halcyon Estates, and Grande Mobile Manor Consolidations, but no resources have been formally recorded within it. CA-SLO-406, also known as the Fowler Site, was initially recorded in 1958 as a large prehistoric campsite with stone drills, mano fragments, metate fragments, pestle fragments, lithics, and human remains. CA-SLO-406 has not been evaluated for listing in the NRHP or CRHR. Previous studies (SL-00113, SL-00459, SL-04004, and SL-04463) and construction monitoring (SL-00459 and SL-04463) have identified intact and disturbed cultural deposits associated with CA-SLO-406, including human remains, within and outside of the resource's previously recorded boundaries. In addition, the results of the Sacred Lands File search with the Native American Heritage Commission were "positive," meaning there is a Sacred Land reported within the vicinity (within one to three miles) of the Ken-Mar Gardens Mobile Home Park, Halcyon Estates, and Grande Mobile Manor Consolidations. Furthermore, the pedestrian field survey identified one highly weathered clam shell within previously disturbed soils, directly north of the paved parking lot of the Ken-Mar Gardens Mobile Home Park (Pfeiffer et. al 2025a).

Based on these results, the archaeological sensitivity of the location of the Ken-Mar Gardens Mobile Home Park, Halcyon Estates, and Grande Mobile Manor Consolidations is considered high. Previous studies indicate the recorded boundaries of CA-SLO-406 are incompletely defined, and there is potential to encounter prehistoric archaeological deposits and human remains during project construction. Potential deposits within this area may have been previously disturbed from the grading, construction/installation, and maintenance of South Halcyon Road, Roberta Drive, the Ken-Mar Gardens Mobile Home Park parking lot, underground utilities, and previous cultivation of the area. Based on these existing conditions, the potential to encounter intact subsurface deposits is low. Given the primarily paved setting of the project site, Extended Phase I archaeological testing was determined not feasible to confirm the presence or absence of subsurface archaeological deposits. Moreover, the existing level of integrity noted within the project site coupled with previous testing and monitoring programs suggest that further investigations (e.g., testing) would likely provide redundant data. Previously disturbed resources are typically not considered significant under CEQA because they lack integrity. However, this does not preclude the heritage value of the resources to local tribes who often recommend these resources be protected or treated with sensitivity. In addition, the treatment of human remains, regardless of their condition or context, must be conducted pursuant to California Health and Safety Code Section 7050.5 and PRC Section 5097.98 (Pfeiffer et. al 2025a). Therefore, similar to the Original Project, the Ken-Mar Gardens Mobile Home Park, Halcyon Estates, and Grande Mobile Manor Consolidations would result in potentially significant impacts to archaeological resources, and implementation of Mitigation Measures CR-1 through CR-4 would continue to be required.

Halcyon Water System Consolidation

The California Historical Resources Information System search identified eight previously recorded cultural resources within a 0.5-mile radius of the location of the Halcyon Water System Consolidation. One (CA-SLO-406) is located in close proximity to the location of the Halcyon Water System Consolidation, but no resources are recorded within it. As indicated above, CA-SLO-406 is a large prehistoric campsite that has not been evaluated for listing in the NRHP or CRHR. Previous studies (SL-00113, SL-00459, SL-04004, and SL-04463) and construction monitoring (SL-00459 and SL-04463) have identified intact and disturbed cultural deposits associated with CA-SLO-406, including human remains, within and outside of the resource's formally documented boundaries. Previous studies (SL-00459, SL-04004, SL-04463, and SL-05574) indicate the recorded boundaries of CA-SLO-406 are incompletely defined, and subsurface deposits are known to extend into the location of the Halcyon Water System Consolidation. However, the resource boundaries have not been formally updated by the California Historical Resources Information System. In addition, the results of the Sacred Lands File search with the Native American Heritage Commission were "positive," meaning there is a Sacred Land reported within the vicinity (within one to three miles) of the Halcyon Water System Consolidation (Pfeiffer et. al 2025b).

Pedestrian surveys conducted in 2024 and 2025 identified isolated shell fragments at four separate areas within the location of the Halcyon Water System Consolidation, including private parcels and within the public right-of-way, as well as a shell scatter consisting of approximately 50 weathered and sun-bleached Pismo clam shell fragments, a shell isolate, a small scatter of shell fragments, unidentifiable faunal remains, and a glass bottle fragment. Six glass fragments and two saw cut faunal bones, one of which exhibited burning, were also identified in the same location as the shell scatter. The shell and faunal remains were all weathered and sun-bleached. The origin of the materials identified during the field surveys is unknown and they may represent an extension of CA-SLO-406, a previously unrecorded resource, or a naturally-occurring deposit (Pfeiffer et. al 2025b).

Due to the findings of the pedestrian field surveys, an Extended Phase I (XPI) archaeological investigation was conducted from March 10 through March 12, 2025 to determine the presence or absence of subsurface archaeological deposits associated with the archaeological materials identified as part of the pedestrian field surveys as well as the horizontal and vertical extent of subsurface deposits that may be present within the location of the Halcyon Water System Consolidation. Native American monitoring during the XPI investigation was conducted by Ernest Houston and Joseph Hudson of the Northern Tribal Chumash Council. The XPI fieldwork consisted of the excavation of 20 shovel test pits/hand auger units (STPs/HAUs) at approximately 20-meter intervals and identified prehistoric archaeological materials within previously disturbed soils. The prehistoric artifacts and ecofacts recovered during XPI testing consisted of 83 marine shell fragments, one groundstone fragment, one chert flake, and charcoal. Identifiable shellfish species consisted of Pismo clam (*Tivela stultorum*) and scallop (*Pectinidae*). The charcoal was identified within previously disturbed soils, indicating it may have been displaced from its original context. As a result, it cannot be definitively associated with specific artifacts or deposits identified in the STPs/HAUs and the conditions in which the charcoal was found may influence the results of radiocarbon dating. Therefore, testing of these charcoal samples was not completed. No archaeological features or human remains were identified. The types of archaeological materials recovered during the XPI investigation, and the density and diversity of those materials, are consistent with the information previously known about CA-SLO-406 (Pfeiffer et. al 2025b).

The findings of the XPI investigation indicated that cultural materials associated with resource CA-SLO-406 are present within and adjacent to the location of the Halcyon Water System Consolidation; therefore, a Phase II archaeological resource investigation was conducted from January 6 to January 9, 2026. The purpose of the Phase II investigation was to determine if intact archaeological deposits associated with CA-SLO-406 exist within the location of the Halcyon Water System Consolidation and to evaluate the deposit(s) for significance under CEQA. Native American monitoring during the Phase II investigation was conducted by Joseph Lathrop of the yak tit'vu tit'vu yak tilhini Northern Chumash Tribe. Two 1.0-meter by 0.5-meter test units (TUs) were excavated within the expanded resource boundaries of CA-SLO-406 as

documented in previous studies and in areas that had the greatest distribution, density and diversity of recovered artifacts as identified during the XPI investigation (Pfeiffer et. al 2026).

TU1 was located within the expanded resource boundaries of CA-SLO-406 and was excavated in 10-centimeter (4-inch) controlled levels to a depth of 80 centimeters below ground surface (cmbs) (32 inches). Previous disturbance and soil mixing were observed to a depth of 60 cmbs, evidenced by the presence of plastic, glass, ceramic, paper, nails, brick, charcoal, imported gravel, asphalt, and concrete. Intact soils were observed from 60 to 80 cmbs but were negative for archaeological deposits. Other materials identified in TU1 during the investigation included charcoal intermixed with modern disturbances, historic-period refuse, and prehistoric materials as well as historic-period materials, including glass fragments and nails. The charcoal was identified within previously-disturbed soils, indicating it may have been displaced from its original context. As a result, it cannot be definitively associated with specific artifacts or deposits identified in the TU, and the conditions in which the charcoal was found may influence the results of radiocarbon dating. Therefore, testing of these charcoal samples was not completed. Two of the glass fragments were light cobalt blue; cobalt glass was manufactured between 1890 and 1960 and commonly used for the production of medicine bottles, cosmetic containers, poison and ink bottles. Although the glass fragments did not retain further diagnostic markings to assist in dating the fragments, temporal information can be gleaned by the color, and the fragments are therefore assumed to originate from the historic-period. The two nails are machine cut nails dating from the 1830s to 1900. The ceramic, brick, and remaining glass fragments did not retain diagnostic markings that could assist in dating the materials to a specific time period and were therefore assumed to represent modern refuse. Disturbances within TU1 were determined to be likely the result of previous ground-disturbing activities associated with the construction and maintenance of adjacent roadways, underground utility installation, and the adjacent residence. Prehistoric cultural materials identified within TU1 were limited to low-density shell fragments. The shell count increased gradually from 0 to 40 cmbs, then declined slightly from 40 to 50 cmbs before significantly dropping between 50 to 60 cmbs, below which the soil became sterile and intact. No additional archaeological materials, features, or human remains were identified within TU1 (Pfeiffer et. al 2026).

TU2 was also located within the expanded resource boundaries of CA-SLO-406 and was excavated in 10-centimeter (4-inch), controlled levels to a depth of 100 cmbs (39 inches). Previously-disturbed soils and soil mixing were observed from 0 to 50 cmbs (evidenced by the presence of glass fragments, plastic, paper and concrete) before transitioning to intact soils from 50 to 100 cmbs. Archaeological deposits recovered from intact soils within TU2 consisted of nine flakes and five shell fragments. None of the glass fragments retained diagnostic markings that would assist in dating the fragments to a specific time period, and they are therefore assumed to represent modern refuse. Disturbances within TU2 are likely the result of previous ground-disturbing activities associated with construction and maintenance of the adjacent roadway, underground utility installation, and construction of the adjacent residence. Prehistoric archaeological materials identified within TU2 consisted of very low-density shell fragments and flakes. No additional archaeological materials, features, or human remains were identified within TU2 (Pfeiffer et. al 2026).

Although intact subsurface deposits associated with CA-SLO-406 were identified during the Phase II investigation, the deposit is limited to very low-density shell fragments and flakes. The very low-density and diversity of recovered cultural materials coupled with the lack of discrete features or temporal episodes limited the analysis that was conducted. The archaeological materials that were recovered from an intact deposit were submitted for radiocarbon dating to confirm the date(s) of prehistoric occupation of the site. The radiocarbon dating obtained as part of Rincon's Phase II investigation are able to establish chronology of CA-SLO-406 with an overlapping date range of 159 to 360 Common Era, consistent with the bead typology identified as part of Study SL-00113. As such, the types of archaeological materials recovered during the Phase II investigation, and the density and diversity of those materials, are consistent with the information previously known about CA-SLO-406 (Pfeiffer et. al 2026).

The tested areas exhibited a moderate level of ground disturbance from previous grading activities, underground utility installation, and the construction and maintenance of the adjacent roadways and residential development. Ground disturbances that would occur within CA-SLO-406's expanded resource boundary during implementation of the Halcyon Water System Consolidation would include the installation of approximately 450 linear feet of potable water pipeline (an approximately 125-square-meter disturbance area) along a roadway within the approximately 33,270-square-meter expanded resource boundary based on previous studies (roughly 0.4 percent of the total site area). Given the extent of excavation conducted, along with the existing level of previous disturbances, additional archaeological excavation would have a low potential to discover archaeological features or diagnostic artifacts that would provide additional data to inform on the practices of the inhabitants. Based on the current condition of the resource and disturbances noted, the Halcyon Water System Consolidation would not alter the existing level of integrity of CA-SLO-406.

The Phase II investigation was limited to areas along the periphery of the expanded CA-SLO-406 resource boundary, where archaeological materials tend to be more sparsely distributed and less dense, thereby further diminishing the potential to identify intact features or diagnostically significant artifacts. Because only a small portion of CA-SLO-406 was tested during the Phase II investigation, a formal CRHR evaluation for the resource cannot be completed. However, it is likely CA-SLO-406 is eligible for the CRHR based on previous investigations of the site and the resource's ability to address regional research themes. Nevertheless, given the very low-density and diversity of recovered artifacts and absence of discrete features or temporal episodes not previously known about the resource, the portion of the resource that overlaps the footprint of the Halcyon Water System Consolidation does not contribute to the CRHR eligibility of the resource as a whole under any criteria (Pfeiffer et. al 2026).

Although CA-SLO-406 has been disturbed and the data potential and integrity of the resource is limited, the heritage value of the resource as it relates to the local tribes and Native American community are not diminished. In addition, due to the high archaeological sensitivity of the location of the Halcyon Water System Consolidation, the project has the potential to encounter and possibly damage or destroy previously undiscovered subsurface archaeological deposits during construction activities. Such impacts would constitute a significant impact under CEQA. To reduce potential impacts to archaeological resources, the Halcyon Water System Consolidation would result in potentially significant impacts to archaeological resources, similar to the Original Project, and implementation of Mitigation Measures CR-1 through CR-4 would continue to be required.

Mitigation Measures from the 2024 IS-MND

The following mitigation measures from the 2024 IS-MND would continue to apply to the Modified Project. Where necessary, minor modifications/updates have been made to the text of the mitigation measures to ensure applicability to the proposed modifications, as shown in ~~strikeout~~/underline.

CR-1 Cultural Resources Sensitivity Training

An archaeologist shall be retained to prepare and conduct a cultural resources sensitivity training (CRST) for all construction personnel prior to the commencement of any ground-disturbing activities for each project component located within the full-time monitoring and spot check monitoring areas, including for the Ken-Mar Gardens, Halcyon Water System, Halcyon Estates, and Grande Mobile Manor Consolidations. The training shall be conducted by an archaeologist under the direction of a qualified archaeologist who meets or exceeds the Secretary of Interior's Professional Qualification Standards for archaeology (National Park Service 1983). The initial CRST shall be given to all construction personnel, including but not limited to OCSD personnel, contractors, and subcontractors prior to their involvement in any ground-disturbing activities within the designated cultural resource sensitivity areas. Additional personnel who subsequently become involved in the project will also receive the training prior to their involvement in ground disturbing activities identified within the designated cultural resource sensitivity areas. This can be accomplished by additional in-person training sessions by the archaeologist or through the distribution of hardcopy or electronic training materials. All personnel that receive the CRST training shall sign a form

that acknowledges receipt of the training. The CRST shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, the regulatory environment, and the proper protocol for treatment of the materials in the event of a find. The CRST will emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance to consulting tribes and will discuss appropriate behaviors and responsive actions, consistent with tribal values. Each consulting tribe shall be provided with an opportunity to review and provide input during development of the CRST and shall be afforded an opportunity to speak during its presentation.

CR-2 Cultural Resources Monitoring and Discovery Plan

A Cultural Resources Monitoring and Discovery Plan (CRMDP) shall be developed and implemented prior to the commencement of project-related ground-disturbing activities to address potential impacts to the portions of known cultural resources (e.g., P-40-000394/CA-SLO-394, P-40-000406/CA-SLO-406) located within the Area of Potential Effects in the event of a find during construction. The CRMDP shall include figures depicting where monitoring will be required for the project, outline the monitoring methods used during ground disturbing activities, stop work protocols in the event of a discovery, detailed treatment methods and discovery protocols, and treatment methods for rapid recovery and data recovery of any prehistoric site constituents of known cultural resources (e.g., P-40-000394/CA-SLO-394, P-40-000406/CA-SLO-406), if necessary. The CRMDP shall also specify:

- Monitoring methods within resource boundaries, including stop-work authority and procedures
- Protocol for recovery of artifacts, features, and soil samples
- The type of equipment and methods, both mechanical and hand, that shall be used to conduct excavations
- Types and level of analysis to be conducted on site constituents
- Final disposition of any artifacts or samples

Native American tribes consulting under Assembly Bill 52 or Section 106 of the National Historic Preservation Act for the proposed undertaking shall be given the opportunity to consult on and review the CRMDP prior to its implementation.

CR-3 Archaeological and Native American Monitoring and Reporting

During initial ground disturbance for the project, an archaeologist working under the direction of the qualified project archaeologist who meets or exceeds the Secretary of Interior's Professional Qualification Standards for archaeology, and a locally-affiliated Native American representative shall monitor project-related ground-disturbing activities within the designated full-time monitoring areas as well as for the Ken-Mar Gardens Mobile Home Park, Halcyon Water System, Halcyon Estates, and Grande Mobile Manor Consolidations, and complete spot checks and review any accessible spoil piles and excavation areas within the designated spot check monitoring areas. Spot checks shall be conducted once weekly during ground disturbing construction activities within the designated areas. Native American monitoring duties shall alternate equally between the Coastal Band of the Chumash Nation, the Northern Chumash Tribal Council, the Salinan Tribe of Monterey, the Santa Ynez Band of Chumash Indians, and the yak tityu tityu yak tiłhini – Northern Chumash Tribe. If, during initial ground disturbance, the archaeologist in consultation with the qualified project archaeologist determines construction activities have little or no potential to impact cultural resources (e.g., excavations are within non-native soils or within a soil formation not expected to yield cultural resources deposits), the qualified archaeologist may recommend monitoring be reduced or eliminated. The archaeological and Native American monitors shall prepare daily monitoring logs for the project, to be appended to a monitoring report completed at the end of project construction by the project archaeologist to document the results of the monitoring effort. If cultural resources are identified during initial monitoring, work in the immediate vicinity shall halt until CRMDP protocols have been implemented and the resource has been evaluated for significance.

CR-4 Unanticipated Discovery of Cultural Resources

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource, if not already on site. If the resource is determined by the archaeologist in consultation with the qualified project archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource, if not already on site. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for NRHP/CRHR eligibility shall be completed using the methods outlined in the CRMDP. If the resource proves to be eligible for the NRHP/CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource pursuant to the requirements of CEQA Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. OCSD shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to ~~Central Coast~~ Southern San Joaquin Valley Information Center pursuant to CEQA Guidelines Section 15126.4(b)(3)(C).

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts to human remains with compliance with state regulatory requirements.

No human remains are known to be present within the location of the proposed modifications; however, human remains have been documented in close proximity to the location of the proposed modifications within the recorded boundaries of archaeological resource CA-SLO-406 (Pfeiffer et. al 2025a and 2025b). Therefore, the discovery of human remains is a possibility during ground-disturbing activities associated with the proposed modifications. If human remains are found, California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant. The most likely descendant has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the most likely descendant does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. Therefore, similar to the Original Project, with adherence to existing regulations, impacts to human remains under the Modified Project would be less than significant.

Conclusion

The Modified Project would not result in new significant impacts to cultural resources or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

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6 Energy

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No Impact	No	No Impact	No
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact	No	No Impact	No

- a. *Would the Modified Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*
- b. *Would the Modified Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The 2024 IS-MND determined the Original Project would result in no impacts related to wasteful, inefficient, or unnecessary consumption of energy resources during construction and operation of the Original Project.

Energy use during construction of the proposed modifications would be generally similar to the Original Project; however, the additional construction equipment usage and vehicle trips associated with the proposed modifications would require approximately 7,700 more gallons of gasoline and 37,900 gallons of diesel fuel (see Appendix C for energy consumption calculations that were based on the CalEEMod modeling results in Appendix A). As with the Original Project, energy use during construction would be temporary in nature, and construction equipment used would be typical of construction projects in the region. In addition, construction contractors would be required to comply with the provisions of 13 California Code of Regulations Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes, which would minimize unnecessary fuel consumption. Construction equipment would be subject to the United States Environmental Protection Agency's Construction Equipment Fuel Efficiency Standard (40 Code of Federal Regulations Parts 1039, 1065, and 1068), which would minimize inefficient fuel consumption. Operation of the Modified Project would be similar to that of the Original Project and would result in similar energy consumption associated with occasional maintenance activities on an as-needed basis.

As noted in the 2024 IS-MND, OCSD has not adopted any specific renewable energy or energy efficiency plans. The County of San Luis Obispo (County) adopted its EnergyWise Plan in 2011, which intends to facilitate the goals of the County's General Plan Conservation and Open Space Element and reduce local greenhouse gas (GHG) emissions. Chapter 5 of the EnergyWise Plan outlines goals for energy efficiency, including improved energy efficiency in public utilities. The proposed modifications would not conflict with these goals. Therefore, similar to the Original Project, the Modified Project would result in no impacts related to energy.

Conclusion

The Modified Project would not result in new significant impacts to energy or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

7 Geology and Soils



	Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	No Impact	No	No Impact	No
2. Strong seismic ground shaking?	Less than Significant	No	Less than Significant	No
3. Seismic-related ground failure, including liquefaction?	Less than Significant	No	Less than Significant	No
4. Landslides?	Less than Significant	No	Less than Significant	No
b. Result in substantial soil erosion or the loss of topsoil?	Less than Significant	No	Less than Significant	N/A
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?	Less than Significant	No	Less than Significant	No
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	No Impact	No	No Impact	No
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	No	No Impact	No
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than Significant	No	Less than Significant	No

- a.1. *Would the Modified Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

The 2024 IS-MND determined the Original Project would result in no impacts related to fault rupture. Similar to the Original Project, the proposed modifications are not within the vicinity of an Alquist-Priolo Fault Zone (California Department of Conservation 2019). Therefore, similar to the Original Project analyzed in the 2024 IS-MND, the Modified Project would result in no impact related to fault rupture.

- a.2. *Would the Modified Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*
- a.3. *Would the Modified Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- a.4. *Would the Modified Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*
- c. *Would the Modified Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to seismic ground shaking, liquefaction, landslides, and unstable geologic units and soils. Similar to the Original Project, the proposed modifications are located in a seismically active region and could be subject to seismic ground shaking during an earthquake along the Los Osos Fault, San Andreas Fault, or other active faults in the region. The sites of the proposed modifications are not within a liquefaction or landslide hazard zone and do not include habitable development (California Department of Conservation 2020; California Geological Survey 2022). Like the Original Project, design and construction of the proposed modifications would consider the seismic environment and would comply with applicable seismic design standards. In the event an earthquake compromised any component of the proposed modifications due to ground failure during operation, OCSD would temporarily shut-off the waterline and conduct emergency repairs as soon as feasible. In addition, implementation of the proposed modifications would not exacerbate the existing risk of liquefaction, landslides, or seismic ground failure in the immediate vicinity because the proposed modifications would not directly result in a seismic event or destabilize soils prone to landslide. Therefore, similar to the Original Project, the Modified Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, seismic-related ground failure (including liquefaction), or landslides and would not 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. As with the Original Project, impacts under the Modified Project would be less than significant.

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to soil erosion and the loss of topsoil. Similar to the Original Project, grading, excavation, and other construction activities associated with the proposed modifications could result in soil erosion. As discussed in Section 3.10, *Hydrology and Water Quality*, the proposed modifications would be subject to compliance with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which requires implementation of a Stormwater Pollution Prevention Plan (SWPPP) outlining project-specific BMPs to control erosion. In addition, construction of the proposed modifications would adhere to County of San Luis Obispo Public Improvement Standards (listed under “Best Management Practices” in Section 2.3, *Description of Proposed Modifications*). Erosion control BMPs may include measures such as silt fencing, temporary sediment basins, and an on-site supply of erosion control

materials (gravel, straw bales, shovels, etc.). As with the Original Project, implementation of a SWPPP as required by the NPDES Construction General Permit would reduce the potential impacts of the proposed modifications related to soil erosion. Similar to the Original Project, the Modified Project would not result in substantial soil erosion or the loss of topsoil, and impacts would be less than significant.

- d. *Would the Modified Project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

The 2024 IS-MND determined the Original Project would result in no impact related to expansive soils. Similar to the Original Project, the proposed modifications would be constructed primarily within roadways with existing road bases, thus unstable or expansive soils underneath the proposed pipeline alignments have already been replaced with road base. During construction, trench spoils would be temporarily stockpiled within the construction staging and storage areas, then used to backfill the trench after pipeline placement; backfilling would be conducted to meet proper compaction and shear strength requirements. In addition, suitable soil would be imported for pipe bedding. Furthermore, the proposed modifications would not include habitable structures and would therefore not create substantial direct or indirect risks to life or property beyond existing conditions. Similar to the Original Project, the Modified Project would not create substantial risks to life or property due to expansive soils, and no impact would occur.

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

The 2024 IS-MND determined the Original Project would have no impact on soils supporting septic tanks or alternative wastewater disposal systems. As with the Original Project, the proposed modifications do not involve septic tanks or alternative wastewater disposal systems. Therefore, similar to the Original Project, the Modified Project would result in no impact related to soils supporting septic tanks or alternative wastewater disposal systems.

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

The 2024 IS-MND determined there would be low potential for the Original Project to impact paleontological resources due to the low sensitivity of sediments underlying the area and shallow excavation depths for the pipelines and that such impacts would be less than significant. The sites of the proposed modifications are located in the same area as the Original Project site and would involve similar construction activities. Specifically, the proposed modifications would be located in close proximity to Segment 2-10 of the Original Project, which the 2024 IS-MND determined is underlain by old eolian deposits with low paleontological sensitivity. Therefore, similar to the Original Project, the Modified Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, and impacts would be less than significant.

Conclusion

The Modified Project would not result in new significant impacts to geology and soils or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

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8 Greenhouse Gas Emissions



	Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant	No	Less than Significant	No
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant	No	Less than Significant	No

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

The 2024 IS-MND determined the Original Project would not generate GHG emissions that may have a significant impact on the environment and that such impacts would be less than significant. Like the Original Project, construction and operation of the proposed modifications would generate GHG emissions. This analysis considers the combined impact of GHG emissions from both construction and operation.

Construction of the proposed modifications would generate GHG emissions from the operation of heavy equipment, motor vehicles, and worker trips to and from the site. As shown in Table 4, GHG emissions during construction would be approximately 382 MT of CO₂e total, or approximately 15 MT of CO₂e per year when amortized over a 25-year period in accordance with SLOAPCD recommendations (SLOAPCD 2023), which represents an approximately 150 percent increase in construction-related GHG emissions as compared to the Original Project.

Table 4 Estimated Construction GHG Emissions – Proposed Modifications

Emission Source	Emissions (MT of CO ₂ e per year)
Original Project	
Total Construction Emissions	243
Total Amortized over 25 Years	10
Proposed Modifications	
2025	54
2026	279
2027	49
Total Construction Emissions	382
Total Amortized over 25 Years	15
Emissions Comparison	
Percent Increase in Annual Amortized Construction Emissions	150%

MT = metric tons, CO₂e = carbon dioxide equivalents
See Appendix A for CalEEMod results.

Similar to the Original Project, the proposed modifications would not generate new demand for energy, and no GHG emissions associated with energy use would be generated. Maintenance activities would occur infrequently and as-needed along the length of the pipeline alignments and would generate minor GHG emissions similar to the Original Project. Table 5 combines the estimated construction and operational GHG emissions associated with development of the Original Project in conjunction with the proposed modifications (i.e., the Modified Project). As shown therein, annual emissions from the Modified Project would be approximately 26 MT of CO₂e per year. Although the proposed modifications would result in increased GHG emissions as compared to the Original Project, this level of emissions would not exceed SLOAPCD's 2027 bright-line threshold of 780 MT of CO₂e per year. Therefore, the Modified Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.

Table 5 Combined Annual GHG Emissions– Modified Project

Emission Source	Annual Emissions (MT of CO₂e)
Construction – Original Project¹	10
Construction – Proposed Modifications¹	15
Operational	<1
Area	<1
Mobile	<1
Total	26
SLOAPCD Numeric Threshold (2027)	780
Exceeds Threshold?	No

MT = metric tons; CO₂e = carbon dioxide equivalent

¹ Amortized construction related GHG emissions over 25 years

See Appendix A for CalEEMod results.

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts associated with applicable GHG reduction plans, policies, or regulations. Construction and operation of the proposed modifications would be similar in nature to the Original Project. The general purpose of the Original Project would not change under the proposed modifications. The proposed modifications would improve the quality of potable water supply for four communities and thereby improve the reliability and resiliency of the local water distribution network, which would ultimately be consistent with the goals of the California Air Resources Board's (2022) 2022 Scoping Plan.

Therefore, similar to the Original Project, the Modified Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.

Conclusion

The Modified Project would not result in new significant impacts to GHG emissions or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

9 Hazards and Hazardous Materials



	Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant	No	Less than Significant	No
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 with Mitigation Incorporated	No	Less than Significant with Mitigation Incorporated	No
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	Less than Significant with Mitigation Incorporated	No	Less than Significant with Mitigation Incorporated	No
d. Be located on a site that is included on a list of hazardous material 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?	Less than Significant with Mitigation Incorporated	No	Less than Significant with Mitigation Incorporated	No
e. For a project located in 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?	Less than Significant	No	Less than Significant	No
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than Significant	No	Less than Significant	No
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	Less than Significant	No	Less than Significant	No

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to the routine transport, use, or disposal of hazardous materials. The proposed modifications would involve similar construction and operational characteristics as the Original Project and thus similar usage of hazardous materials. Therefore, as with the Original Project, the Modified Project would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials, and impacts would be less than significant.

- b. *Would the Modified Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

The 2024 IS-MND determined the Original Project would result in a potentially significant impact related to the creation of 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. The 2024 IS-MND required implementation of Mitigation Measures HAZ-1 and HAZ-2 to reduce this impact to a less-than-significant level.

The proposed modifications would involve similar construction and operational characteristics as the Original Project and thus similar usage of hazardous materials. Therefore, similar to the Original Project, the Modified Project would potentially 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. Implementation of Mitigation Measures HAZ-1 and HAZ-2 from the 2024 IS-MND, which include development and implementation of a Hazardous Materials Management and Spill Control Plan and Contaminated Soil Contingency Plan, would be required for the Modified Project. Similar to the Original Project, impacts of the Modified Project would be less than significant with mitigation incorporated.

Mitigation Measures from the 2024 IS-MND

The following mitigation measures from the 2024 IS-MND would continue to apply to the Modified Project.

HAZ-1 Hazardous Materials Management and Spill Control Plan

Before construction begins, the construction contractor shall develop and implement a Hazardous Materials Management and Spill Control Plan (HMMSCP) that includes a project-specific contingency plan for hazardous materials and waste operations. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, as well United States Department of Labor Occupational Safety and Health Administration and California Division of Occupational Safety and Health regulations. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials, and articulate a spill response plan in the event a spill occurs.

HAZ-2 Contaminated Soil Contingency Plan

OCSD or its contractor(s) shall develop and implement a Contaminated Soil Contingency Plan that outlines provisions for treatment and/or disposal of contaminated soils. The Contaminated Soil Contingency Plan shall include a requirement for a qualified environmental consultant to prepare and administer a Worker Environmental Awareness Program training prior to the initiation of project-related ground disturbing activities. This training will aid workers in recognizing potential soil contamination that may occur along the project alignments. The specifics of this program will include an overview of properties along the segments that have the potential for soil contamination, the anticipated types and

indicators of soil contamination, potential health hazards, and processes for properly addressing soil contamination if it is encountered.

The Contaminated Soil Contingency Plan will also include a requirement for a qualified environmental consultant to monitor soil excavation and loading activities along those segments of the alignment where soil contamination is most likely to be encountered (e.g., any construction activities adjacent to the closed leaking underground storage tank site located near Capital Improvement Plan Segment 2-3). If potential soil contamination is encountered, work in the area shall be halted and the qualified environmental consultant will assess the soil and evaluate whether contamination may be present. Depending on the nature and extent of the potential contamination, the qualified environmental consultant may determine that soil sampling is necessary to determine whether contamination is present at concentrations that would require special handling, transportation or disposal requirements.

The Contaminated Soil Contingency Plan shall also include processes for addressing unanticipated contaminated soil encountered during construction. At a minimum, a qualified environmental consultant will be retained on-call by OCSD, and if potential soil contamination is encountered, work will halt in the area and an assessment will be made by the on-call qualified environmental consultant to determine the nature and extent of the contamination and potential handling, transportation, and/or disposal requirements.

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The 2024 IS-MND determined the Original Project would result in a potentially significant impact related to the emission or handling of hazardous materials within 0.25 mile of schools. The 2024 IS-MND required implementation of Mitigation Measures HAZ-1 and HAZ-2 to reduce this impact to a less-than-significant level.

The proposed modifications are not located within 0.25 mile of schools and therefore would not change this conclusion. As such, similar to the Original Project analyzed in the 2024 IS-MND, impacts related to the emission or handling of hazardous materials within 0.25 mile of schools would be less than significant with mitigation incorporated under the Modified Project.

- d. *Would the Modified Project be located on a site that is included on a list of hazardous material 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?*

The 2024 IS-MND determined the Original Project would result in a potentially significant impact related to the creation of a significant hazard to the public or the environment due to hazardous materials sites. The 2024 IS-MND required implementation of Mitigation Measures HAZ-1 and HAZ-2 to reduce this impact to a less-than-significant level. Similar to the Original Project, the proposed modifications are not located on a hazardous materials list compiled pursuant to Government Code Section 65962.5 (California Department of Toxic Substances Control 2024; State Water Resources Control Board 2024). However, there is the potential for construction activities associated with the proposed modifications to encounter hazardous materials that may be present in the underlying soils and could pose a threat to workers, the public, or the environment. Therefore, implementation of Mitigation Measures HAZ-1 and HAZ-2 from the 2024 IS-MND, which include development and implementation of a Hazardous Materials Management and Spill Control Plan and Contaminated Soil Contingency Plan, would be required for the Modified Project. Similar to the Original Project, impacts of the Modified Project would be less than significant with mitigation incorporated.

- e. *For a project located in 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 Modified Project result in a safety hazard or excessive noise for people residing or working in the project area?*

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to the exposure of people to safety hazards and excessive noise associated with airport operations.

Similar to the Original Project, the closest airport to the proposed modifications is the Oceano County Airport, located approximately 1.6 miles west of the location of the proposed modifications. The proposed modifications are located outside of the 65-decibel single-event noise level contour for the Oceano County Airport (San Luis Obispo County Airport Land Use Commission 2007). Therefore, as with the Original Project, the Modified Project would not result in a safety hazard or excessive noise for people residing or working in the project area due to proximity to airports, and impacts would be less than significant.

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to impairment of adopted emergency response and evacuation plans.

Similar to the Original Project, construction of the proposed modifications and any future maintenance activities requiring work in the public right-of-way would be conducted in accordance with traffic control BMPs specified in the County of San Luis Obispo Public Improvement Standards (listed under “Best Management Practices” in Section 2.3, *Description of Proposed Modifications*) as well as any encroachment permit requirements. These requirements include preparing and submitting traffic control plans, peak traffic hour avoidance, and post-construction pavement restoration. These BMPs are designed to protect the traveling public and would minimize impacts to emergency evacuation routes. Therefore, similar to the Original Project, the Modified Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to wildland fires. The proposed modifications are not adjacent to any mapped fire hazard severity zones. The nearest State Responsibility Area is approximately 0.6 mile to the east of the location of the proposed modifications and is designated as moderate fire hazard severity. The nearest Very High Fire Hazard Severity Zone is approximately 1.6 miles to the southwest (California Department of Forestry and Fire Protection 2025). Therefore, the risk of wildland fires at the location of the proposed modifications is low. In addition, the proposed modifications include the installation of new fire hydrants, which would enhance existing fire protection capabilities within the surrounding vicinity. Furthermore, as with the Original Project, construction of the proposed modifications would be required to comply with regulations related to fire hazards and wildfire safety, including mandatory use of spark arrestors (PRC Section 4442), maintenance of fire suppression equipment during the highest fire danger period (PRC Section 4428), and adherence to standards for conducting construction activities on days when a burning permit is required (PRC Sections 4427 and 4431). Therefore, similar to the Original Project, the Modified Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

Conclusion

The Modified Project would not result in new significant impacts to hazards and hazardous materials or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

10 Hydrology and Water Quality

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than Significant	No	Less than Significant	No
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	No	Less than Significant	No
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:	Less than Significant	No	Less than Significant	No
(i) Result in substantial erosion or siltation on- or off-site	Less than Significant	No	Less than Significant	No
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site	Less than Significant	No	Less than Significant	No
(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	Less than Significant	No	Less than Significant	No
(iv) Impede or redirect flood flows?	Less than Significant	No	Less than Significant	No
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less than Significant	No	Less than Significant	No

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant	No	Less than Significant	No

- a. *Would the Modified Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts to surface and groundwater quality. The proposed modifications would involve similar construction and operational characteristics as the Original Project and thus similar potential to impact surface and groundwater quality. Therefore, as with the Original Project, the Modified Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and impacts would be less than significant.

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

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to groundwater supplies, groundwater recharge, and sustainable groundwater management plans. Similar to the Original Project, the location of the proposed modifications overlies an adjudicated portion of the Santa Maria River Valley Groundwater Basin, and the Sustainable Groundwater Management Act does not apply to this part of the basin. The proposed modifications would involve similar construction and operational characteristics as the Original Project and thus generally similar potential to impact groundwater supplies and groundwater recharge. The proposed modifications would result in decreased demand for groundwater supplies in the immediate vicinity of these four communities, which currently rely on groundwater to meet potable water demands, and OCSD has verified it has adequate water supply availability across its water supply portfolio (e.g., groundwater, surface water supplies in Lopez Reservoir, imported State Water Project water) to support consolidation of these four communities into its distribution system. No changes to OCSD's groundwater allocation under the adjudication agreement for the Northern Cities Management Area of the Santa Maria River Valley Groundwater Basin are proposed. Therefore, as with the Original Project, the Modified Project would not decrease groundwater supplies or substantially interfere with groundwater recharge or conflict with or obstruct implementation of an applicable sustainable groundwater management plan, and impacts would be less than significant.

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to water quality control plans. As with the Original Project, the proposed modifications are located in the plan area of the Water Quality Control Plan for the Central Coastal Basin (Basin Plan). As discussed under threshold 3.10(a), the proposed modifications would involve similar construction and operational characteristics as the Original Project and thus similar potential to impact surface and groundwater quality. Therefore, similar to the Original Project, the Modified Project would not conflict with the Basin Plan, and impacts would be less than significant.

- c. *Would the Modified Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
- i. *Result in substantial erosion or situation on- or off-site?*
 - ii. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
 - 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?*
 - iv. *Impede or redirect flood flows?*

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to alteration of drainage patterns. Similarly, the proposed modifications would not alter the course of a stream or river and would not introduce new impervious surfaces that could result in substantial erosion, siltation, or flooding on or off site. The proposed modifications would not increase impervious surfaces along the proposed alignments because ground surfaces would be restored to pre-project conditions. Therefore, similar to the Original Project, the Modified Project would not alter the existing drainage pattern in the project area compared to existing conditions, and impacts would be less than significant.

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to the release of pollutants due to inundation. Similar to the Original Project, portions of the proposed modifications in the eastern portion of the Ken-Mar Gardens Mobile Home Park are within the 500-year flood hazard zone associated with Arroyo Grande Creek. The remainder of the proposed modifications are in Zone X, Area of Minimal Flood Hazard (Federal Emergency Management Agency 2012 and 2024). An extreme flood event could inundate portions of the location of the proposed modifications; however, as with the Original Project, implementation of spill response BMPs from the required SWPPP during construction would provide a rapid clean-up of any accidentally released materials to prevent pollutant release in a subsequent storm or flooding event. In addition, the proposed underground pipelines would be unaffected if the ground surface was inundated during operation, and the proposed modifications would involve conveyance of potable water supplies to residents that would not include the use or storage of hazardous materials or other potential pollutants that could adversely impact the environment if released during an inundation event. Therefore, similar to the Original Project, the Modified Project would not risk release of pollutants due to inundation, and impacts would be less than significant.

Conclusion

The Modified Project would not result in new significant impacts to hydrology and water quality or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

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11 Land Use and Planning

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
Would the project:				
a. Physically divide an established community?	No Impact	No	No Impact	No
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	No	No Impact	No

- a. *Would the Modified Project physically divide an established community?*
- b. *Would the Modified Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The 2024 IS-MND determined the Original Project would result in no land use and planning impacts. Similar to the Original Project, the proposed modifications would not physically divide an established community given the waterline improvements would be located primarily below ground with the exception of minor aboveground appurtenances that would be consistent with existing infrastructure in the surrounding vicinity (e.g., fire hydrants). As with the Original Project, building and zoning ordinances of the County and City of Arroyo Grande would not apply to the proposed modifications pursuant to California Government Code 53091. The proposed pipeline improvements would be constructed primarily underground and would not change surface land uses along the project alignments. As with the Original Project, the proposed modifications would be in furtherance of Goal 1 of the San Luis Obispo Countywide Regional Compact to strengthen community quality of life through resilient infrastructure and resources (County of San Luis Obispo 2020). Therefore, similar to the Original Project, the Modified Project would result in no impacts related to land use and planning.

Conclusion

The Modified Project would not result in new significant impacts to land use and planning or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

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12 Mineral Resources

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact	No	No Impact	No
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	No	No Impact	No

- a. *Would the Modified Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the Modified Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The 2024 IS-MND determined the Original Project would result in no impacts to mineral resources. As with the Original Project, the proposed modifications are not located within an Extractive Resource Area or Energy and Extractive Resource Area, as defined by San Luis Obispo County (San Luis Obispo County 2010). In addition, the proposed modifications are not situated near or within identified oil fields, and no active or previously abandoned oil wells are in proximity to the proposed modifications (California Department of Conservation 2025). Therefore, similar to the Original Project, the Modified Project would result in no impacts to mineral resources.

Conclusion

The Modified Project would not result in new significant impacts to mineral resources or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

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13 Noise



	Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
Would the project:				
a. Generate 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	No	Less than Significant with Mitigation Incorporated	No
b. Generate excessive groundborne vibration or groundborne noise levels?	Less than Significant	No	Less than Significant	No
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, expose people residing or working in the project area to excessive noise levels?	Less than Significant	No	Less than Significant	No

- a. *Would the Modified Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Modified Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The 2024 IS-MND determined the Original Project would result in a potentially significant impact related to construction noise but a less-than-significant impact related to operational noise. The 2024 IS-MND required implementation of Mitigation Measure NOI-1 to reduce the construction noise impact to a less-than-significant level.

The proposed modifications would be located at similar distances to sensitive receivers (e.g., residences, schools) and would require similar types of construction equipment and construction activities as the Original Project. Therefore, the proposed modifications would generate similar levels of construction noise as those analyzed in the 2024 IS-MND, and, similar to the Original Project, the temporary increase in ambient noise levels during construction would be potentially significant. Implementation of Mitigation Measure NOI-1 from the 2024 IS-MND would continue to be required for the Modified Project. Similar to the Original Project, the construction noise impacts of the Modified Project would be less than significant with mitigation incorporated.

As with the Original Project, the proposed modifications would be located primarily underground and would not generate noise during operation. Therefore, as with the Original Project, operation of the Modified Project would not result in a substantial permanent increase of ambient noise levels in the local area, and no operational noise impacts would occur.

Mitigation Measure from 2024 IS-MND

NOI-1 Construction Noise Reductions

OCSO and the construction contractor shall reduce construction noise levels at the adjacent single-family residential uses to a noise level not to exceed the FTA's residential construction noise threshold of 80 dBA L_{eq} (8 hour).³ This shall be accomplished through the following required measures:

- Installation of temporary sound barriers/blankets of sufficient height to break the line of sight between construction equipment and residences within 22 feet of construction equipment. The temporary barriers/blankets shall have a minimum sound transmission loss of 21 and noise reduction coefficient of 0.75.
- At the construction area, provide a sign that includes a 24-hour telephone number for project information, and a procedure where a field engineer/construction manager respond to and investigate noise complaints and take corrective action if necessary, in a timely manner.
- If a noise complaint(s) is registered, the contractor shall retain a County-approved noise consultant to conduct noise measurements at the use(s) that registered the complaint. The noise measurements will be conducted for a minimum of one hour and will include one-minute intervals. The consultant shall prepare a letter report for code enforcement summarizing the measurements, calculation data used in determining impacts, and potential measures to reduce noise levels to the maximum extent feasible.

The following measures may also be used to reduce noise levels:

- The use of bells, whistles, alarms, and horns shall be restricted to safety warning purposes only.
- Noise-reducing enclosures shall be used around stationary noise-generating equipment (e.g., compressors and generators) or located as far from sensitive receptors, as feasible.

b. Would the project generate excessive groundborne vibration or groundborne noise levels?

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to vibration. The proposed modifications would be located at similar distances from the nearest structures (e.g., residences) and would require similar types of construction equipment and construction activities as the Original Project. Therefore, construction of the proposed modifications would generate similar levels of vibration as those analyzed in the 2024 IS-MND and would not exceed established thresholds for structural damage due to vibration. Neither the Original Project nor the proposed modifications would include operational sources of vibration. Therefore, as with the Original Project, the Modified Project would not generate excessive groundborne vibration or groundborne noise levels, and impacts would be less than significant.

c. Would the Modified Project be 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, and expose people residing or working in the Modified Project area to excessive noise levels?

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to aircraft noise. As described in Section 3.8, *Hazards and Hazardous Materials*, the proposed modifications are located outside of the 65-decibel single-event noise level contour for the Oceano County Airport (San Luis Obispo County Airport Land Use Commission 2007). Therefore, construction workers and maintenance employees associated with the proposed modifications would not be exposed to excessive noise related to Oceano County Airport. Similar to the Original Project, the Modified Project would not expose people residing or working in the project area to excessive noise levels from aircraft operations, and impacts would be less than significant.

³ dBA = A-weighted decibels; L_{eq} = equivalent continuous sound level

Conclusion

The Modified Project would not result in new or significant impacts to noise or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

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14 Population and Housing

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	No Impact	No	No Impact	No
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact	No	No Impact	No

- a. *Would the Modified Project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?*
- b. *Would the Modified Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The 2024 IS-MND determined the Original Project would result in no impacts to population and housing. As with the Original Project, the proposed modifications involve water pipeline improvements to address water system deficiencies in the OCSD service area and would be similarly focused on enhancing existing potable water supply infrastructure to serve existing development. Like the Original Project, the proposed modifications do not include new homes, businesses, or other land uses that would generate population growth and would not result in displacement of people or housing. In addition, the proposed modifications are not intended to increase water system capacity to accommodate unplanned population growth. Therefore, similar to the Original Project, the Modified Project would result in no impacts to population and housing.

Conclusion

The Modified Project would not result in new significant impacts to population and housing or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are required.

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15 Public Services



Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
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Would the project:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1 Fire protection?	No Impact	No	No Impact	No
2 Police protection?	No Impact	No	No Impact	No
3 Schools?	No Impact	No	No Impact	No
4 Parks?	No Impact	No	No Impact	No
5 Other public facilities?	No Impact	No	No Impact	No

- a. *Would the Modified Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:*

1. *Fire protection?*
2. *Police protection?*
3. *Schools?*
4. *Parks?*
5. *Other public facilities?*

The 2024 IS-MND determined the Original Project would result in no impacts to public services. As discussed in Section 3.14, *Population and Housing*, the proposed modifications would not directly or indirectly contribute to population growth and thus would not alter the demand for fire or police protection services, schools, parks and recreational facilities, or any other public facilities, as with the Original Project. Furthermore, the proposed modifications include the installation of new fire hydrants, which would enhance existing fire protection capabilities within the surrounding vicinity. Therefore, similar to the Original Project, the Modified Project would result in no impacts to public services.

Conclusion

The Modified Project would not result in new significant impacts to public services or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are required.

16 Recreation

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
Would the project:				
a. 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	No	No Impact	No
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact	No	No Impact	No

- a. *Would the Modified Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. *Would the Modified Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The 2024 IS-MND determined the Original Project would result in no impacts to recreation. As discussed in Section 3.14, *Population and Housing*, the proposed modifications would not directly or indirectly induce population growth and would thus not increase the use of existing neighborhood and regional parks or other recreational facilities. Furthermore, construction or expansion of recreational facilities is not included in the proposed modifications. Similar to the Original Project, the Modified Project would result in no impacts to recreation.

Conclusion

The Modified Project would not result in new significant impacts to recreation or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are required.

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17 Transportation

	New Significant Impact or Substantially More Severe Significant Impact?			
	Original Project Impact Determination	Significance of Modified Project Impact	New Mitigation Measures Required?	
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than Significant	No	Less than Significant	No
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No Impact	No	No Impact	No
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	No Impact	No	No Impact	No
d. Result in inadequate emergency access?	Less than Significant	No	Less than Significant	No

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to programs, plans, ordinances, and policies addressing the circulation system. The proposed modifications would require similar construction and operational activities to the Original Project and thus similar temporary impacts to the circulation system during construction and no impacts during operation. As such, similar to the Original Project, the Modified Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and impacts would be less than significant.

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

The 2024 IS-MND determined the Original Project would result in no impact related to a conflict with CEQA Guidelines Section 15064.3(b). The proposed modifications would involve similar construction and operational characteristics as the Original Project and thus similar generation of vehicle miles traveled (VMT). The increase in VMT during construction of the proposed modifications would be short-term, minimal, and temporary, and routine operation and maintenance trips for inspections and repairs would be infrequent. Therefore, similar to the Original Project, the Modified Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and no impact would occur.

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

The 2024 IS-MND determined the Original Project would result in no impacts related to traffic hazards. The proposed modifications would involve installation of underground pipelines with minor aboveground appurtenances such as fire hydrants. Roadways would be returned to pre-construction conditions upon installation of the proposed improvements, and the project would not involve reconfiguration of roadways or intersections. Therefore, similar to the Original Project, the Modified Project would not substantially increase hazards due to a geometric design feature or incompatible use, and no impact would occur.

- d. *Would the Modified Project result in inadequate emergency access?*

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts to emergency access. The proposed modifications would involve similar construction and operational characteristics as the Original Project and thus similar impacts to emergency access. As such, similar to the Original Project, the Modified Project would not result in inadequate emergency access, and impacts would be less than significant.

Conclusion

The Modified Project would not result in new significant impacts to transportation or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are required.

18 Tribal Cultural Resources



	Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
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	No	Less than Significant with Mitigation Incorporated	No
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 Resources 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	No	Less than Significant with Mitigation Incorporated	No

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- 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*
- 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

The 2024 IS-MND determined the Original Project would have a less-than-significant impact on tribal cultural resources with incorporation of Mitigation Measures CR-1 through CR-4 and TCR-1. As part of the 2024 IS-MND, OCSD sent Assembly Bill (AB) 52 letters to the following eight Native American tribes that are traditionally and culturally affiliated with the project area:

- Barbareño/Ventureño Band of Mission Indians (two contacts)
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation (two contacts)

- Northern Chumash Tribal Council
- Salinan Tribe of Monterey and San Luis Obispo Counties
- San Luis Obispo County Chumash Council
- Santa Ynez Band of Chumash Indians
- yak tityu tityu yak tiłhini – Northern Chumash Tribe

Consultation meetings were held with the Santa Ynez Band of Chumash Indians, yak tityu tityu yak tiłhini – Northern Chumash Tribe, Northern Chumash Tribal Council, and Coastal Band of the Chumash Nation (Consulting Tribes). The AB 52 consultation determined the Original Project would have the potential to impact tribal cultural resources during construction, and mitigation measures were developed to reduce potential impacts to a less-than-significant level.

On October 9, 2024, OCSD sent AB 52 update notifications to the four Consulting Tribes to inform them of the proposed modifications. OCSD received one response from Patti Dunton, Tribal Administrator of the Salinan Tribe of Monterey, San Luis Obispo Counties on November 1, 2024, indicating the Tribe had reviewed the proposed modifications and requesting to be included in the cultural resources monitoring. No other responses were received.

The proposed modifications are located in the same area as the Original Project, specifically in close proximity to Segment 2-10 of the Original Project. Therefore, the area of the proposed modifications is considered sensitive for tribal cultural resources, similar to the Original Project, and construction of the proposed modifications has the potential to impact tribal cultural resources during ground-disturbing activities. Mitigation Measures from the 2024 IS-MND, including CR-1 through CR-4 (listed in Section 3.5, *Cultural Resources*) and Mitigation Measure TCR-1 (listed below) would continue to be required for the proposed modifications. As such, similar to the Original Project, impacts to tribal cultural resources would be less than significant with mitigation incorporated under the Modified Project.

Mitigation Measure from the 2024 IS-MND

TCR-1 Unanticipated Discovery of Tribal Cultural Resources

In the event cultural resources of Native American origin are identified during construction, all ground disturbing activities within a 50-foot radius of the find shall be halted and redirected until an archaeological monitor/or qualified archaeologist, if not already on site, has evaluated the nature and significance of the find. OCSD shall consult with the qualified project archaeologist and initiate Native American consultation procedures with the project's consulting tribes. If OCSD, in consultation with the Native American consulting tribes, determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with the Coastal Band of the Chumash Nation, the Northern Chumash Tribal Council, the Salinan Tribe of Monterey, the Santa Ynez Band of Chumash Indians, and the yak tityu tityu yak tiłhini – Northern Chumash Tribe. The mitigation plan may include avoidance of the resource, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archaeologist, if applicable, and Native American consulting tribes. The mitigation plan shall be reviewed and approved by OCSD within 30 days of discovery of the find(s). Work at the discovery location shall not resume until all necessary investigation and evaluation of the discovery under the requirements of CEQA have been satisfied.

Conclusion

The Modified Project would not result in new significant impacts to tribal cultural resources or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are necessary.

19 Utilities and Service Systems



	Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	No Impact	No	No Impact	No
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than Significant	No	Less than Significant	No
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?	No Impact	No	No Impact	No
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?	Less than Significant	No	Less than Significant	No
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than Significant	No	Less than Significant	No

- a. *Would the Modified Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

The 2024 IS-MND determined the Original Project would have no impacts related to relocating or constructing new or expanded utilities. The proposed modifications involve installation of potable water pipelines and appurtenances, the environmental impacts of which are analyzed throughout this document. No additional environmental impacts associated with the construction or relocation of water

facilities would occur beyond those analyzed herein. The proposed modifications would not require the relocation or construction of other new or expanded utilities, including wastewater, stormwater drainage, energy, and telecommunications facilities. As such, similar to the Original Project, the Modified Project would result in no impacts related to relocating or constructing new or expanded utilities.

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

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts to water supplies. Similar to the Original Project, small quantities of water would be required during construction of the proposed modifications for dust suppression, which would be provided by OCSD. Water consumption associated with dust suppression would be temporary and minimal because only disturbed areas would need to be watered. The proposed modifications would not include development of structures or infrastructure that would directly or indirectly increase the population of San Luis Obispo County, and there would be no increase in overall water demands. The proposed modifications would result in decreased demand for groundwater supplies in the immediate vicinity of these four communities, which currently rely on groundwater to meet potable water demands, and OCSD has verified that it has adequate water supply availability across its water supply portfolio (e.g., groundwater, surface water supplies in Lopez Reservoir, imported State Water Project water) to support consolidation of these four communities into its distribution system. Therefore, similar to the Original Project, impacts related to water supplies would be less than significant under the Modified Project.

- c. Would the Modified Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The 2024 IS-MND determined the Original Project would result in no impacts related to wastewater treatment. Similarly, the proposed modifications would not generate wastewater or otherwise contribute to an increase in wastewater treatment requirements. Therefore, as with the Original Project, the Modified Project would not directly or indirectly generate wastewater that would exceed the capacity of existing wastewater treatment facilities in the project area, and no impact would occur.

- d. Would the Modified Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. Would the Modified Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to solid waste generation. The proposed modifications would involve similar construction and operational characteristics as the Original Project and thus similar solid waste generation. Therefore, as with the Original Project, the Modified Project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure; otherwise impair the attainment of solid waste reduction goals; or conflict with federal, state, and local management and reduction statutes and regulations related to solid waste, and impacts would be less than significant.

Conclusion

The Modified Project would not result in new significant impacts to utilities and service systems or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are required.

20 Wildfire



	Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less than Significant	No	Less than Significant	No
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?	Less than Significant	No	Less than Significant	No
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	No	No Impact	No
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No Impact	No	No Impact	No

- a. *Substantially impair an adopted emergency response plan or emergency evacuation plan?*
- b. *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- c. *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*
- d. *Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The 2024 IS-MND determined the Original Project would result in less-than-significant impacts related to impairment of emergency response and emergency evacuation plans as they pertain to wildfires and the exposure of project occupants to pollutant concentrations from wildfires. In addition, the 2024 IS-MND determined the Original Project would have no impacts related to exacerbating fire risk or exposing people or structures to flooding or landslides.

As described under threshold 3.9(g), the proposed modifications are not adjacent to any mapped fire hazard severity zones. The nearest State Responsibility Area is approximately 0.6 mile to the east of the location of the proposed modifications and is designated as moderate fire hazard severity. The nearest Very High Fire Hazard Severity Zone is approximately 1.6 miles to the southwest (California Department of Forestry and Fire Protection 2025). Therefore, the risk of wildland fires at the location of the proposed modifications is low. The proposed modifications would involve development of similar infrastructure as included in the Original Project (e.g., underground pipelines) in the vicinity of similar types of land uses (e.g., residential). In addition, the proposed modifications include the installation of new fire hydrants, which would enhance existing fire protection capabilities within the surrounding vicinity. Furthermore, as with the Original Project, construction of the proposed modifications would be required to comply with regulations related to fire hazards and wildfire safety, including mandatory use of spark arrestors (PRC Section 4442), maintenance of fire suppression equipment during the highest fire danger period (PRC Section 4428), and adherence to standards for conducting construction activities on days when a burning permit is required (PRC Sections 4427 and 4431). Therefore, the Modified Project would result in similar impacts to wildfire as the Original Project with less-than-significant impacts related to impairment of emergency response and emergency evacuation plans as they pertain to wildfires and the exposure of project occupants to pollutant concentrations from wildfires and no impacts related to exacerbating fire risk or exposing people or structures to flooding or landslides.

Conclusion

The Modified Project would not result in new significant impacts related to wildfire or substantially increase the severity of significant impacts already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are required.

21 Mandatory Findings of Significance

	Original Project Impact Determination	New Significant Impact or Substantially More Severe Significant Impact?	Significance of Modified Project Impact	New Mitigation Measures Required?
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?	No Impact	No	No Impact	No
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	No	Less than Significant with Mitigation incorporated	No
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	No	Less than Significant with Mitigation incorporated	No

- a. *Does the Modified 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?*

The 2024 IS-MND determined the Original Project would have no impact to the above mandatory finding of significance checklist question. As discussed in Section 3.4, *Biological Resources*, the proposed modifications would not result in major, regional impacts such as substantially degrading the quality of the environment, substantially reducing the habitat of a fish or wildlife species, causing a fish or wildlife population to drop below self-sustaining levels, threatening to eliminate a plant or animal community, or substantially reducing the number or restrict the range of a rare or endangered plant or animal. As

discussed in Section 4.5, *Cultural Resources*, the project does not have the potential to eliminate important examples of the major periods of California history or prehistory. Therefore, similar to the Original Project, there would be no impact under the Modified Project.

- b. *Does the Modified 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)?*

The 2024 IS-MND determined the Original Project would potentially result in a cumulatively considerable contribution to a significant cumulative impact and required implementation of Mitigation Measures BIO-1 through BIO-7, CR-1 through CR-4, HAZ-1, HAZ-2, NOI-1, and TCR-1 to reduce impacts to less-than-significant levels.

As described in the discussion of Environmental Checklist Sections 3.1 through 3.20, with respect to all environmental issues, the Modified Project would not result in significant and unmitigable impacts to the environment; all anticipated impacts associated with construction and operation would be either less than significant or less than significant with mitigation incorporated. This is largely due to the fact that construction activities would be temporary, and operational activities would not significantly alter the environmental baseline condition. Cumulative impacts could occur if the construction of other projects occurs at the same time as the Modified Project and in the same geographic scope, such that the effects of similar impacts of multiple projects combine to create greater levels of impact than would occur at the project-level. For example, if the construction of other projects in the area occurs at the same time as the Modified Project, combined air quality and noise impacts may be greater than at the project-level. Six planned development projects are in the vicinity of the Modified Project site, which are summarized in Table 6. The exact implementation timing of these projects is not known at this time; therefore, it is conservatively assumed that construction of these planned projects could overlap with construction of the Modified Project.

Table 6 Cumulative Development Projects

No.	Project Name	Project Location	Project Components	Status
1	Caltrans SHOPP ID 22930	State Route 1 at intersection with Gracia Way in Oceano	Replacement or rehabilitation of a culvert	Project is in the planning phase
2	Caltrans SHOPP ID 24754	State Route 1 near intersection of Valley Road in unincorporated San Luis Obispo County, east of Oceano	Sidewalks, proactive safety improvements, Class IV separated bikeways, Class II bike lane	Project is conceptual
3	Caltrans SHOPP ID 19164	United States Route 101 in and near Pismo Beach, Arroyo Grande, and Nipomo from Los Barros Road to south of Hinds Avenue Overcrossing	Pavement rehabilitation, drainage systems, designated bikeways with pavement delineation, additional bike lanes and curb ramps, Transportation Management System elements	Project is in design stage
4	Oceano Revitalization Plan	Along Front Street and Cienaga Street in southwest Oceano	Roadway and pedestrian improvements, infill housing, and commercial uses in downtown Oceano	Plan adopted in August 2013; buildout to occur over 30 years
5	Dana Reserve Specific Plan	Dana Reserve, west of United States Route 101 and south of Willow Road in Nipomo	Specific Plan that includes housing, commercial uses, a satellite community college, daycare center, open space, trails, and parks	Specific Plan approved in 2024, buildout to occur through 2030

No.	Project Name	Project Location	Project Components	Status
6	Monarch Dunes Specific Plan Amendment-Phase 3	West of State Route 1 between Dawn Road and Via Entrada in Woodlands	Amendment to modify the allowable land uses on four sites to allow for completion of the Village Center with shops on the first floor and condominiums on the second floor, a 65-room hotel in the Village Center, additional duplex homes on land previously designated for the hotel and a public park, and a new public walking trail adjacent to an existing equestrian trail	Construction starting in 2024

Caltrans = California Department of Transportation; SHOPP = State Highway Operation and Protection Program
Source: Caltrans 2024; County of San Luis Obispo 2024; Zappelli 2023

As described in the discussion of Environmental Checklist Sections 3.1 through 3.20, the environmental impacts of the Modified Project would be largely the same as those of the Original Project. As such, the Modified Project would result in similar contributions to significant cumulative environmental impacts pertaining to air quality, biological resources, cultural and tribal cultural resources, GHG emissions, and wildfire. The contributions of the Modified Project that have the potential to be cumulatively considerable would be reduced through implementation of Mitigation Measures BIO-1 through BIO-8, CR-1 through CR-4, HAZ-1, HAZ-2, NOI-1, and TCR-1. Therefore, similar to the Original Project, the Modified Project would not result in cumulatively considerable contributions to significant cumulative impacts with mitigation incorporated.

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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, noise, and wildfire impacts. The 2024 IS-MND determined the Original Project would result in potentially significant impacts to human beings and required implementation of Mitigation Measures HAZ-1, HAZ-2, and NOI-1 to reduce such impacts to less-than-significant levels.

As discussed in Section 3.3, *Air Quality*, Section 3.9, *Hazards and Hazardous Materials*, Section 3.13, *Noise*, and Section 3.20, *Wildfire*, the proposed modifications would result in similar impacts to air quality, hazardous materials, noise, and wildfire as the Original Project. Implementation of Mitigation Measures HAZ-1, HAZ-2, and NOI-1 from the 2024 IS-MND would continue to be required for the Modified Project. Similar to the Original Project, the impacts of the Modified Project to human beings would be less than significant with mitigation incorporated.

Conclusion

The Modified Project would not result in new mandatory findings of significance or substantially increase the severity of the mandatory findings of significance already identified in the 2024 IS-MND for the Original Project. No new mitigation measures are required.

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Conclusion

The 2024 IS-MND for the Original Project identified potentially significant but mitigable impacts to biological resources, cultural resources, hazards and hazardous materials, noise, and tribal cultural resources. The 2024 IS-MND determined all environmental impacts associated with the Original Project would be reduced to less-than-significant levels with implementation of Mitigation Measures BIO-1 through BIO-7, CR-1 through CR-4, HAZ-1 and HAZ-2, NOI-1, and TCR-1 from the 2024 IS-MND.

This Subsequent IS-MND determines the Modified Project would have potentially significant but mitigable impacts to the same environmental resources as the Original Project, and the same mitigation measures adopted for the Original Project would be applied to the Modified Project with minor revisions in addition to a new Mitigation Measure BIO-8. With implementation of Mitigation Measures BIO-1 through BIO-8, CR-1 through CR-4, HAZ-1 and HAZ-2, NOI-1, and TCR-1, all environmental impacts associated with the Modified Project would be reduced to less-than-significant levels. As discussed in detail in the preceding sections, major revisions to the 2024 IS-MND are not necessary because no new unmitigable significant impacts or significant impacts of substantially greater severity than previously described would occur as a result of the proposed modifications.

Therefore, the following determinations have been found to be applicable:

- No further evaluation of environmental impacts is required for the proposed modifications; and
- This Subsequent IS-MND is the appropriate level of environmental analysis and documentation for the proposed modifications.

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Appendix A

Air Quality and Greenhouse Gas Modeling

Halcyon - KenMar Subsequent IS-MND Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Halcyon - KenMar Subsequent IS-MND
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.20
Precipitation (days)	1.60
Location	35.10565, -120.591067
County	San Luis Obispo
City	Unincorporated
Air District	San Luis Obispo County APCD
Air Basin	South Central Coast
TAZ	3323
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.25

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
Road Construction	0.20	Mile	1.15	0.00	—	—	—	—

Road Construction	0.90	Mile	5.18	0.00	—	—	—	—
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	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.	1.57	1.33	11.4	17.4	0.02	0.34	0.25	0.59	0.31	0.06	0.37	—	2,749	2,749	0.11	0.04	1.06	2,765
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.39	2.02	17.2	25.6	0.04	0.52	0.37	0.88	0.48	0.09	0.56	—	4,058	4,058	0.17	0.06	0.04	4,080
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.98	0.83	7.09	10.7	0.02	0.22	0.15	0.36	0.20	0.03	0.24	—	1,678	1,678	0.07	0.03	0.28	1,687
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.18	0.15	1.29	1.94	< 0.005	0.04	0.03	0.07	0.04	0.01	0.04	—	278	278	0.01	< 0.005	0.05	279

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
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Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.90	0.76	6.15	9.31	0.01	0.21	0.14	0.35	0.19	0.03	0.23	—	1,404	1,404	0.06	0.02	0.69	1,413
2026	1.57	1.33	11.4	17.4	0.02	0.34	0.25	0.59	0.31	0.06	0.37	—	2,749	2,749	0.11	0.04	1.06	2,765
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.99	0.83	6.89	10.5	0.02	0.22	0.17	0.40	0.21	0.04	0.25	—	1,662	1,662	0.07	0.04	0.02	1,675
2026	2.39	2.02	17.2	25.6	0.04	0.52	0.37	0.88	0.48	0.09	0.56	—	4,058	4,058	0.17	0.06	0.04	4,080
2027	1.49	1.26	10.9	16.4	0.02	0.35	0.19	0.53	0.32	0.04	0.36	—	2,531	2,531	0.10	0.03	0.02	2,541
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.20	0.17	1.36	2.08	< 0.005	0.05	0.03	0.08	0.04	0.01	0.05	—	323	323	0.01	0.01	0.07	326
2026	0.98	0.83	7.09	10.7	0.02	0.22	0.15	0.36	0.20	0.03	0.24	—	1,678	1,678	0.07	0.03	0.28	1,687
2027	0.17	0.15	1.26	1.90	< 0.005	0.04	0.02	0.06	0.04	0.01	0.04	—	292	292	0.01	< 0.005	0.04	294
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.04	0.03	0.25	0.38	< 0.005	0.01	0.01	0.01	0.01	< 0.005	0.01	—	53.5	53.5	< 0.005	< 0.005	0.01	53.9
2026	0.18	0.15	1.29	1.94	< 0.005	0.04	0.03	0.07	0.04	0.01	0.04	—	278	278	0.01	< 0.005	0.05	279
2027	0.03	0.03	0.23	0.35	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	48.4	48.4	< 0.005	< 0.005	0.01	48.6

3. Construction Emissions Details

3.1. Halcyon Linear, Grubbing & Land Clearing (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	3.69	5.57	0.01	0.11	—	0.11	0.10	—	0.10	—	854	854	0.03	0.01	—	857
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.69	5.57	0.01	0.11	—	0.11	0.10	—	0.10	—	854	854	0.03	0.01	—	857
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	0.08	0.07	0.65	0.98	< 0.005	0.02	—	0.02	0.02	—	0.02	—	150	150	0.01	< 0.005	—	150
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	0.12	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.8	24.8	< 0.005	< 0.005	—	24.9
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.46	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	89.8	89.8	< 0.005	< 0.005	0.35	91.4
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	0.00	0.00	0.00	0.00	0.00	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	0.06	0.06	0.04	0.45	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.1	86.1	< 0.005	< 0.005	0.01	87.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	0.03	15.4
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	0.00	0.00	0.00	0.00	0.00	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	—	2.52	2.52	< 0.005	< 0.005	< 0.005	2.56
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

3.3. Ken-Mar Linear, Grubbing & Land Clearing (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	0.45	0.37	3.38	4.80	0.01	0.12	—	0.12	0.11	—	0.11	—	687	687	0.03	0.01	—	690
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.40	0.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	81.0	81.0	< 0.005	< 0.005	—	81.2
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	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.4
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.41	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	76.2	76.2	< 0.005	< 0.005	0.32	77.6
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	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.66	8.66	< 0.005	< 0.005	0.02	8.81
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	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.46
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

3.5. Halcyon Linear, Grading & Excavation (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	0.73	0.61	5.66	7.65	0.01	0.17	—	0.17	0.15	—	0.15	—	1,160	1,160	0.05	0.01	—	1,164

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	0.08	0.07	0.65	0.88	< 0.005	0.02	—	0.02	0.02	—	0.02	—	133	133	0.01	< 0.005	—	134
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	0.02	0.01	0.12	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.1	22.1	< 0.005	< 0.005	—	22.2
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	0.08	0.08	0.05	0.60	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	115	115	< 0.005	0.01	0.01	116
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.1	44.1	< 0.005	0.01	< 0.005	46.1
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	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.3	13.3	< 0.005	< 0.005	0.02	13.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.08	5.08	< 0.005	< 0.005	0.01	5.31
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	—	2.20	2.20	< 0.005	< 0.005	< 0.005	2.24
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.88
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. Ken-Mar Linear, Grading & Excavation (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	0.35	0.29	2.65	3.76	0.01	0.09	—	0.09	0.08	—	0.08	—	535	535	0.02	< 0.005	—	537
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.65	3.76	0.01	0.09	—	0.09	0.08	—	0.08	—	535	535	0.02	< 0.005	—	537

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	0.25	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.5
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.49	8.49	< 0.005	< 0.005	—	8.52
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.33	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	61.0	61.0	< 0.005	< 0.005	0.26	62.1
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.9	44.9	< 0.005	0.01	0.12	47.1
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	0.04	0.04	0.03	0.32	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.4	58.4	< 0.005	< 0.005	0.01	59.3
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.0	45.0	< 0.005	0.01	< 0.005	47.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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	—	5.64	5.64	< 0.005	< 0.005	0.01	5.73
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.31	4.31	< 0.005	< 0.005	< 0.005	4.51
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	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.95
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.75
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

3.9. Halcyon Linear, Drainage, Utilities, & Sub-Grade (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	0.96	0.80	7.51	10.6	0.02	0.23	—	0.23	0.21	—	0.21	—	1,592	1,592	0.06	0.01	—	1,597
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	0.96	0.80	7.51	10.6	0.02	0.23	—	0.23	0.21	—	0.21	—	1,592	1,592	0.06	0.01	—	1,597
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	0.52	0.43	4.03	5.68	0.01	0.12	—	0.12	0.11	—	0.11	—	855	855	0.03	0.01	—	858
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	0.09	0.08	0.74	1.04	< 0.005	0.02	—	0.02	0.02	—	0.02	—	141	141	0.01	< 0.005	—	142
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	0.10	0.10	0.06	0.77	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	150	150	< 0.005	0.01	0.59	152
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	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.9	63.9	< 0.005	0.01	0.12	67.1

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.07	0.75	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	143	143	0.01	0.01	0.02	146
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	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.9	63.9	< 0.005	0.01	< 0.005	67.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.40	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	77.6	77.6	< 0.005	< 0.005	0.14	78.8
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	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.3	34.3	< 0.005	0.01	0.03	36.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.02	13.1
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	—	5.68	5.68	< 0.005	< 0.005	< 0.005	5.96

3.11. Ken-Mar Linear, Drainage, Utilities, & Sub-Grade (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	0.52	0.43	4.00	5.88	0.01	0.14	—	0.14	0.13	—	0.13	—	860	860	0.03	0.01	—	863

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	0.09	0.07	0.67	0.99	< 0.005	0.02	—	0.02	0.02	—	0.02	—	145	145	0.01	< 0.005	—	145
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	0.02	0.01	0.12	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.0	24.0	< 0.005	< 0.005	—	24.0
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	0.06	0.06	0.04	0.48	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	87.6	87.6	< 0.005	< 0.005	0.01	88.9
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	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	76.6	76.6	< 0.005	0.01	< 0.005	80.3

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	0.03	15.1
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	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.9	12.9	< 0.005	< 0.005	0.01	13.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.46	2.46	< 0.005	< 0.005	< 0.005	2.50
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	—	2.13	2.13	< 0.005	< 0.005	< 0.005	2.24

3.13. Ken-Mar Linear, Drainage, Utilities, & Sub-Grade (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	0.49	0.41	3.82	5.86	0.01	0.12	—	0.12	0.11	—	0.11	—	859	859	0.03	0.01	—	862
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	0.03	0.02	0.23	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.1	52.1	< 0.005	< 0.005	—	52.3

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	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.63	8.63	< 0.005	< 0.005	—	8.66
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	0.06	0.06	0.04	0.45	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.1	86.1	< 0.005	< 0.005	0.01	87.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.0	75.0	< 0.005	0.01	< 0.005	78.6
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	—	5.26	5.26	< 0.005	< 0.005	0.01	5.34
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	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.55	4.55	< 0.005	< 0.005	< 0.005	4.77
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.88
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	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.79
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3.15. Halcyon Linear, Paving (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	1.41	1.18	11.1	15.5	0.02	0.39	—	0.39	0.35	—	0.35	—	2,347	2,347	0.10	0.02	—	2,355
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	0.09	0.07	0.67	0.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	142	142	0.01	< 0.005	—	143
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	0.12	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.6	23.6	< 0.005	< 0.005	—	23.7
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.09	0.97	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	186	186	0.01	0.01	0.02	189
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	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
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	0.00	0.00	0.00	0.00	0.00	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	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.92
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

3.17. Halcyon Linear, Paving (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	1.36	1.14	10.8	15.5	0.02	0.35	—	0.35	0.32	—	0.32	—	2,347	2,347	0.10	0.02	—	2,355
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	0.16	0.13	1.25	1.79	< 0.005	0.04	—	0.04	0.04	—	0.04	—	271	271	0.01	< 0.005	—	272
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	0.03	0.02	0.23	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.9	44.9	< 0.005	< 0.005	—	45.0
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.08	0.91	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	183	183	0.01	0.01	0.02	186
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	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.3	21.3	< 0.005	< 0.005	0.04	21.6
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	0.00	0.00	0.00	0.00	0.00	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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.53	3.53	< 0.005	< 0.005	0.01	3.58
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

3.19. Ken-Mar Linear, Paving (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	0.79	0.66	6.50	9.84	0.01	0.24	—	0.24	0.22	—	0.22	—	1,473	1,473	0.06	0.01	—	1,478
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	0.09	0.07	0.73	1.11	< 0.005	0.03	—	0.03	0.02	—	0.02	—	165	165	0.01	< 0.005	—	166
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	0.13	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.4	27.4	< 0.005	< 0.005	—	27.5
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.08	0.08	0.05	0.60	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	115	115	< 0.005	0.01	0.01	116
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	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.0	13.0	< 0.005	< 0.005	0.02	13.2
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	—	2.15	2.15	< 0.005	< 0.005	< 0.005	2.18
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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
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Halcyon Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	2/2/2026	4/30/2026	5.00	64.0	—
Ken-Mar Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	8/1/2025	9/30/2025	5.00	43.0	—
Halcyon Linear, Grading & Excavation	Linear, Grading & Excavation	2/2/2026	3/31/2026	5.00	42.0	—
Ken-Mar Linear, Grading & Excavation	Linear, Grading & Excavation	9/15/2025	10/31/2025	5.00	35.0	—
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	3/2/2026	11/30/2026	5.00	196	—
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	10/7/2025	1/31/2026	5.00	84.0	—
Halcyon Linear, Paving	Linear, Paving	12/1/2026	2/28/2027	5.00	64.0	—
Ken-Mar Linear, Paving	Linear, Paving	1/2/2026	2/28/2026	5.00	41.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Halcyon Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Halcyon Linear, Grubbing & Land Clearing	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Halcyon Linear, Grubbing & Land Clearing	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Halcyon Linear, Grubbing & Land Clearing	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37

Halcyon Linear, Grubbing & Land Clearing	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Ken-Mar Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Ken-Mar Linear, Grubbing & Land Clearing	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Ken-Mar Linear, Grubbing & Land Clearing	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Ken-Mar Linear, Grubbing & Land Clearing	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Halcyon Linear, Grading & Excavation	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Halcyon Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Halcyon Linear, Grading & Excavation	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Halcyon Linear, Grading & Excavation	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Halcyon Linear, Grading & Excavation	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Halcyon Linear, Grading & Excavation	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Halcyon Linear, Grading & Excavation	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Ken-Mar Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Ken-Mar Linear, Grading & Excavation	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Ken-Mar Linear, Grading & Excavation	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82

Halcyon Linear, Drainage, Utilities, & Sub-Grade	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82

Halcyon Linear, Paving	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Halcyon Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Halcyon Linear, Paving	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Halcyon Linear, Paving	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Halcyon Linear, Paving	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Halcyon Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Halcyon Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Halcyon Linear, Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Halcyon Linear, Paving	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Halcyon Linear, Paving	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Halcyon Linear, Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Ken-Mar Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Ken-Mar Linear, Paving	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Ken-Mar Linear, Paving	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Ken-Mar Linear, Paving	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Ken-Mar Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Ken-Mar Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Halcyon Linear, Grubbing & Land Clearing	—	—	—	—
Halcyon Linear, Grubbing & Land Clearing	Worker	15.0	8.10	LDA,LDT1,LDT2

Halcyon Linear, Grubbing & Land Clearing	Vendor	0.00	6.90	HHDT,MHDT
Halcyon Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Halcyon Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Ken-Mar Linear, Grubbing & Land Clearing	—	—	—	—
Ken-Mar Linear, Grubbing & Land Clearing	Worker	12.5	8.10	LDA,LDT1,LDT2
Ken-Mar Linear, Grubbing & Land Clearing	Vendor	0.00	6.90	HHDT,MHDT
Ken-Mar Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Ken-Mar Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Halcyon Linear, Grading & Excavation	—	—	—	—
Halcyon Linear, Grading & Excavation	Worker	20.0	8.10	LDA,LDT1,LDT2
Halcyon Linear, Grading & Excavation	Vendor	2.00	6.90	HHDT,MHDT
Halcyon Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Halcyon Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Ken-Mar Linear, Grading & Excavation	—	—	—	—
Ken-Mar Linear, Grading & Excavation	Worker	10.0	8.10	LDA,LDT1,LDT2
Ken-Mar Linear, Grading & Excavation	Vendor	2.00	6.90	HHDT,MHDT
Ken-Mar Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Ken-Mar Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Halcyon Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	8.10	LDA,LDT1,LDT2
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	6.90	HHDT,MHDT

Halcyon Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.89	20.0	HHDT
Halcyon Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	Worker	15.0	8.10	LDA,LDT1,LDT2
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	6.90	HHDT,MHDT
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.05	20.0	HHDT
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Halcyon Linear, Paving	—	—	—	—
Halcyon Linear, Paving	Worker	32.5	8.10	LDA,LDT1,LDT2
Halcyon Linear, Paving	Vendor	0.00	6.90	HHDT,MHDT
Halcyon Linear, Paving	Hauling	0.00	20.0	HHDT
Halcyon Linear, Paving	Onsite truck	—	—	HHDT
Ken-Mar Linear, Paving	—	—	—	—
Ken-Mar Linear, Paving	Worker	20.0	8.10	LDA,LDT1,LDT2
Ken-Mar Linear, Paving	Vendor	0.00	6.90	HHDT,MHDT
Ken-Mar Linear, Paving	Hauling	0.00	20.0	HHDT
Ken-Mar Linear, Paving	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%

Sweep paved roads once per month	9%	9%
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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)
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5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Halcyon Linear, Grubbing & Land Clearing	0.00	0.00	6.33	0.00	—
Ken-Mar Linear, Grubbing & Land Clearing	0.00	0.00	6.33	0.00	—
Halcyon Linear, Grading & Excavation	0.00	0.00	6.33	0.00	—
Ken-Mar Linear, Grading & Excavation	0.00	0.00	6.33	0.00	—
Halcyon Linear, Drainage, Utilities, & Sub-Grade	700	700	6.33	0.00	—
Ken-Mar Linear, Drainage, Utilities, & Sub-Grade	350	350	6.33	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	1.15	100%
Road Construction	5.18	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	176	204	0.03	< 0.005
2026	352	204	0.03	< 0.005
2027	58.7	204	0.03	< 0.005

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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	6.90	annual days of extreme heat
Extreme Precipitation	3.40	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	31.5	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 $\frac{3}{4}$ 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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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

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	16.8
AQ-PM	19.0
AQ-DPM	40.6

Drinking Water	68.9
Lead Risk Housing	23.2
Pesticides	97.8
Toxic Releases	12.4
Traffic	46.3
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	19.2
Impaired Water Bodies	58.7
Solid Waste	35.7
Sensitive Population	—
Asthma	48.7
Cardio-vascular	18.0
Low Birth Weights	9.93
Socioeconomic Factor Indicators	—
Education	19.8
Housing	24.5
Linguistic	7.38
Poverty	33.5
Unemployment	10.7

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	60.9393045

Employed	94.18709098
Median HI	35.0442705
Education	—
Bachelor's or higher	61.5167458
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	83.51084306
Active commuting	51.44360323
Social	—
2-parent households	91.59502117
Voting	89.56756063
Neighborhood	—
Alcohol availability	54.12549724
Park access	2.194276915
Retail density	32.96548184
Supermarket access	18.69626588
Tree canopy	43.66739381
Housing	—
Homeownership	69.22879507
Housing habitability	73.79699731
Low-inc homeowner severe housing cost burden	62.17117926
Low-inc renter severe housing cost burden	37.77749262
Uncrowded housing	85.268831
Health Outcomes	—
Insured adults	81.30373412
Arthritis	0.0

Asthma ER Admissions	79.9
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	56.6
Cognitively Disabled	54.2
Physically Disabled	54.0
Heart Attack ER Admissions	94.3
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	62.9
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	62.5
Elderly	3.0
English Speaking	90.0

Foreign-born	2.9
Outdoor Workers	44.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	70.5
Traffic Density	36.2
Traffic Access	0.0
Other Indices	—
Hardship	24.7
Other Decision Support	—
2016 Voting	91.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	12.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Information provided to Rincon. Added new phases.
Construction: Off-Road Equipment	Information provided to Rincon.
Construction: Trips and VMT	VMT for Original Project updated to reflect air model assumptions from approved IS-MND 2024.

Appendix B

Biological Resources Assessments



February 21, 2025
Project No: 22-12531

Eileen Shields, PE, Principal Engineer
MKN & Associates, Inc.
530 Paulding Circle, Suite B
Arroyo Grande, California 93420
Via email: eshields@mknassociates.us

Subject: Biological Resources Assessment for the Ken-Mar Gardens, Halcyon Estates, & Grande Mobile Manor Consolidation Project, Oceano, CA

Dear Ms. Shields:

This report documents the findings of a biological resources assessment (BRA) conducted by Rincon Consultants, Inc. (Rincon) for the Ken-Mar Gardens, Halcyon Estates, & Grande Mobile Manor Consolidation Project (project) in the community of Oceano and city of Arroyo Grande in San Luis Obispo County, California. The purpose of this report is to document existing conditions at the project site and to evaluate the potential for project impacts to special-status biological resources. The Oceano Community Services District (OCSD) is the lead agency under the California Environmental Quality Act (CEQA), and the State Water Resources Control Board (SWRCB) is a responsible agency under CEQA.

Project Location and Description

The project site is comprised of the following locations in San Luis Obispo County, California (Attachment 1: Figure 1):

- A portion of Assessor's Parcel Number 075-011-039, located at 801 South Halcyon Road in the unincorporated community of Oceano
- A portion of the public right of way along South Halcyon Road, located in the city of Arroyo Grande

The project site is north of State Route 1 and south of U.S. Highway 101. Surrounding land uses include agricultural and residential areas. The approximately 1.15-acre project site is bordered by existing development and paved surfaces on the north and east sides, agricultural land uses to the south, and residential neighborhoods to the west. The project site includes a paved road, driveway, and landscaping within Halcyon Road and the Ken-Mar Gardens Mobile Home Park. Arroyo Grande Creek is approximately 440 feet to the east of the project site and flows south through agricultural areas to the Pacific Ocean approximately three miles west of the project site.

The proposed project would connect the Ken-Mar Gardens Mobile Home Park water system with the OCSD water system. Approximately 850 linear feet of pipeline and several appurtenances (master meter, valving, backflow prevention) would be installed to connect the Ken-Mar Gardens Mobile Home Park water system to planned OCSD pipelines, which would be located in Halcyon Road and Temple Street. The existing well would be destroyed, the chemical injection system and shed would be removed, and the pressure tanks at Ken-Mar Gardens Mobile Home Park would be removed. An additional, approximately 300 linear feet of pipeline would be installed along Halcyon Road between The Pike and Calle De Los Suei to provide an interconnection to the existing OCSD distribution system for two other mobile home parks - Halcyon Estates and Grande Mobile Manor. In addition, two- to three-inch service laterals would be installed between the pipeline in Halcyon Road and the Halcyon



Estates and Grande Mobile Manor properties, and new water meter boxes would be installed. Other planned OCSD pipelines in Halcyon Road and Temple Street were analyzed in a separate technical report for the OCSD Waterline Improvements Project and are therefore not included in this analysis.

Project construction would occur over approximately seven months, Monday to Friday, between the hours of 6:00 a.m. to 4:00 p.m. No nighttime construction would occur. The project would disturb an estimated 50,000 square feet (1.15 acres), and the maximum depth of excavation would be approximately six feet. Construction equipment staging and worker parking would be located at the contractor's discretion but are anticipated to be primarily within the existing Ken-Mar Gardens Mobile Home Park parking lots as well as other existing parking lots and storage yards in the local area.

Regulatory Background

Regulatory authority over biological resources is shared by federal, state, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the County of San Luis Obispo). The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the state under CEQA and also has direct jurisdiction under the California Fish and Game Code (CFGF). Under the California and federal Endangered Species Acts (CESA/ESA), CDFW and the United States Fish and Wildlife Service (USFWS) have direct regulatory authority over species formally listed as threatened or endangered. USFWS and CDFW also have jurisdiction over native bird species protected by the Migratory Bird Treaty Act (MBTA) and CFGF. The United States Army Corps of Engineers (USACE) has regulatory authority over specific biological resources, namely wetlands and waters of the United States, under Section 404 of the federal Clean Water Act. CDFW and the Regional Water Quality Control Boards (RWQCB) protect waters and streambeds at the state level.

San Luis Obispo County General Plan

The San Luis Obispo County General Plan Conservation and Open Space Element outlines goals and policies that aim to preserve biodiversity, sustain healthy ecosystems, enhance degraded habitats, and protect the diverse landscapes throughout the county. Major goals include protecting special-status species, protecting and enhancing native habitat, and preserving wetlands and aquatic habitats. Relevant policies regarding resource protection include (County of San Luis Obispo 2010):

Policy BR-1.2 Limit Development Impacts: Regulate and minimize proposed development in areas that contain essential habitat for special status species, sensitive natural communities, wetlands, coastal and riparian habitats, and wildlife habitat and movement corridors as necessary to ensure the continued health and survival of these species and protection of sensitive areas.

Policy BR-1.15 Restrict Disturbance in Sensitive Habitat during Nesting Season: Avoid impacts to sensitive riparian corridors, wetlands, and coastal areas to protect bird-nesting activities.

Policy BR-3.1 Native Tree Protection: Protect native and biologically valuable trees, oak woodlands, trees with historical significance, and forest habitats to the maximum extent feasible.

Policy BR-3.5 Non-native Trees: Protect healthy and non-hazardous, non-native trees (e.g., eucalyptus groves) and forests that provide raptor nesting or roosting sites or support colonies of monarch butterflies.



San Luis Obispo County Code

San Luis Obispo County Code Chapter 22.56 prohibits the removal of trees without first obtaining a tree removal permit. In addition, San Luis Obispo County Code Section 22.62.030 requires zoning clearance before the removal or replacement of any existing trees except trees that are;

- Identified and approved for removal in an approved Zoning Clearance, Site Plan Review, Minor Use Permit or Conditional Use Permit, provided that such removal is subject to the standards of Section 22.56.030 (Tree Removal Standards); or
- Located within residential land use categories on sites developed with residential uses; or
- Located within or adjacent to a public or public utility right-of-way, when such trees are to be removed by a public agency, public utility or are to be removed under an encroachment permit issued by a public agency having jurisdiction; or
- In a hazardous condition which presents an immediate danger to health or property; or
- With trunks measuring less than eight inches in diameter at four feet above grade; or
- To be removed in preparation for agricultural cultivation and crop production in an Agriculture land use category; or
- To be removed as part of management practice in orchards of commercial agricultural production.

Land use permit applications that propose tree removal are required to include all information specified by Section 22.62.030 (Zoning Clearance Content) as well as the following:

- The size, species and condition (e.g., diseased, healthy, etc.) of each tree proposed for removal.
- The purpose of removal.
- The size and species of any trees proposed to replace those intended for removal.

City of Arroyo Grande General Plan

The City of Arroyo Grande General Plan contains policies requiring protection of special status plant and animal species. The General Plan's Agriculture, Conservation and Open Space Element contains relevant objectives and policies which include:

Goal C/OS2 – Safeguard important environmental and sensitive biological resources contributing to healthy, functioning ecosystems.

- **C/OS2:** Safeguard important environmental and sensitive biological resources
 - **C/OS2-2:** Identify unique or sensitive habitat areas and designate them Conservation/Open Space (C/OS) overlay.
 - **C/OS2-4:** Identify and protect wildlife corridors that link habitat areas as Conservation/Open Space (C/OS).
 - **C/OS2-4.1:** Encourage agricultural landowners and managers of Conservation/Open Space to adopt range and farmland management practices that will not interfere with the movement of wildlife through their properties.
 - **C/OS2-4.2:** Public or private developments that require discretionary permit or propose a land division, shall avoid disturbance of significant wildlife corridors, and/or wetlands identified by City or County environmental studies.



- **C/OS2-4.3:** When evaluating discretionary proposals as part of the CEQA process, require mitigation measures that would re-establish damaged or disturbed corridors and provide for long-term viability.

Arroyo Grande Municipal Code

Arroyo Grande Municipal Code Chapter 12.16 prohibits the removal of street trees and landmark trees without first obtaining a tree removal permit. Street tree requirements under Arroyo Grande Municipal Code Section 12.16.030 include:

- All existing and proposed street trees shall be identified by the applicant on all construction and building plans and maps presented to the City.
- No existing street tree shall be removed or replaced without written authorization of the director or the tree coordinator.
- Any street tree damaged or destroyed by an individual shall be replaced through payment by the person or persons causing such loss to the city. The amount of such payment shall be the replacement value of the tree, as determined by the director, but in no event shall it be less than one hundred fifty dollars (\$150.00) per tree and shall be in addition to any criminal fine or penalty for municipal code violation. Any act intentionally damaging or destroying a street tree shall constitute a misdemeanor violation of this chapter.

Protected trees also include Landmark trees, as designated by the City Council, and coastal live oak trees (*Quercus agrifolia*) greater than 12 inches in diameter when measured 4.5 feet from the base. Removing landmark and coast live oak trees is prohibited without first obtaining a permit.

Methods

This BRA consisted of a review of relevant literature and background information, a reconnaissance-level field survey to confirm existing conditions and determine which biological resources are present or may occur at the site, and an evaluation of the proposed project to determine whether it would result in potentially significant impacts to biological resources under CEQA. The potential presence of special-status species is based on the literature review and a field survey designed to map vegetation communities and assess habitat suitability and presence of target species. The biological study area (BSA) evaluated for this BRA is defined as the limits of work plus a 25-foot buffer (Attachment 2: **Error! Reference source not found.**).

Literature Review

The literature review included database research on special-status resource occurrences within the *Oceano, California* 7.5-minute U.S. Geological Survey quadrangle and seven surrounding quadrangles.¹ Sources included the CDFW California Natural Diversity Database (CNDDDB) (CDFW 2023a), Biogeographic Information and Observation System (CDFW 2023b), USFWS Information for Planning and Consultation (USFWS 2023a), and USFWS Critical Habitat Portal (USFWS 2023b). Other resources included the California Native Plant Society online Inventory of Rare and Endangered Plants of California (California Native Plant Society 2023), CDFW's Special Animals List (CDFW 2023c), and CDFW's Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2023d). Aerial photographs,

¹ Quadrangles are topographic maps that cover land only. Although a quadrangle is typically surrounded by nine other quadrangles, in areas near the ocean, there are often fewer than nine surrounding quadrangles because there are no quadrangles for areas within the ocean.



topographic maps, soil survey maps, geologic maps, and climatic data in the area were also examined. References are included at the end of this report.

Field Survey

A Rincon biologist conducted reconnaissance-level site visits of the BSA on August 22, 2023, and May 6, 2024, to assess the habitat suitability for potential special-status species; map existing vegetation communities and evident special-status biological resources; note the presence of potential jurisdictional waters or wetlands; document wildlife connectivity/movement features; and record observations of plant and wildlife species within the BSA. Site photos from the survey are included as Attachment 2.

Special Status-Species Assessment

Local, state, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted prior to the approval of proposed development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB from other sites in the vicinity of the BSA, and previous reports for the BSA. The potential for each special-status species to occur in the BSA was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Low Potential.** Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species' requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species' requirements are present, and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (i.e., within the last five years).

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the ESA; those listed or candidates for listing as rare, threatened, or endangered under the CESA or Native Plant Protection Act; those identified as Fully Protected by the CFGC (Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern by CDFW; and plants occurring on lists 1 and 2 of the California Native Plant Society's California Rare Plant Rank system pursuant to the following definitions:

- **Rank 1A:** Plants presumed extinct in California
- **Rank 1B.1:** Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- **Rank 1B.2:** Rare or endangered in California and elsewhere; fairly endangered in California (20 to 80 percent occurrences threatened)



- **Rank 1B.3:** Rare or endangered in California and elsewhere, not very endangered in California (less than 20 percent of occurrences threatened or no current threats known)
- **Rank 2:** Rare, threatened or endangered in California, but more common elsewhere

Existing Conditions

Topography and Soils

The elevation of the BSA is approximately 80 feet above mean sea level. The topography of the BSA and its immediate surroundings is generally flat and has been previously graded and compacted with developed areas and agricultural fields. Based on the most recent soil survey for San Luis Obispo County, the BSA contains two soil map units (United States Department of Agriculture Natural Resources Conservation Service [USDA NRCS] 2024):

Mocho Variant Fine Sandy Loam. This soil map unit is designated as a predominantly non-hydric soil in San Luis Obispo County. Mocho variant fine sandy loam is a well-drained soil that occurs on alluvial fans and alluvial flats. It is formed in alluvium derived from sedimentary rock. A typical soil profile consists of fine sandy loam to a depth of 15 inches, very fine sandy loam between 15 and 33 inches, and stratified gravelly sand from 33 to 64 inches. Available water storage is low (about 5.9 inches), and the runoff class is very low (USDA NRCS 2023).

Oceano Sand, 0 to 9 Percent Slopes. This soil map unit is not designated as a hydric soil in San Luis Obispo County. Oceano sand is excessively drained soil that occurs on beach dunes and is derived from Eolian deposits. A typical soil profile consists of sand from 0 to 60 inches. Available water storage is low (about 4.2 inches), and the runoff class is negligible (USDA NRCS 2023).

Vegetation and Land Cover

No natural vegetation communities exist within the BSA or adjacent existing development. The BSA consists of paved roads, landscaped vegetation, and agricultural areas (Attachment 1: Figure 3). Species observed in landscaped areas include lily of the Nile (*Agapanthus* sp.), iceplant (*Carpobrotus edulis*), African iris (*Dietes iridioides*), landscaped Monterey cypress (*Hesperocyparis macrocarpa*), candelabra aloe (*Aloe arborescens*), Japanese honeysuckle (*Lonicera japonica*), and English ivy (*Hedera helix*).

General Wildlife

The BSA and its surroundings provide habitat for bird and mammal species that commonly occur in urban habitats, such as house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), house sparrow (*Passer domesticus*), Botta's pocket gopher (*Thomomys bottae*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*).

Special-Status Biological Resources

Based on the results of the literature review, 56 special-status plant species and 29 special-status wildlife species were evaluated for the potential to occur within the BSA. Attachment 3 provides a detailed assessment, which is summarized in the following sections.



Special-Status Plant Species

Based on the developed nature of the BSA and the habitat requirements of special-status plant species, none of 56 special-status plant species known to occur in the region were determined to have the potential to occur within the BSA. No special-status plants were incidentally observed during the reconnaissance-level field survey. The reconnaissance survey was conducted in August, outside of the spring blooming period for plants when many species would not have been identifiable. However, the survey was sufficient to identify the lack of natural vegetation communities within the BSA. Monterey cypress, which has a California Rare Plant Rank of 1B, which are located adjacent to the BSA, represent ornamental plantings in landscaped areas. As such, Monterey cypress will not be addressed as a special status plant species because they are not part of a naturally-occurring stand of trees (Attachment 3).

Special-Status Wildlife Species

No federally-listed, state-listed, or other special-status wildlife species were observed during the field survey. Of the 29 species evaluated, Rincon determined one species has a low potential to occur within the BSA. Western bumble bee (*Bombus occidentalis*, state candidate endangered) has a low potential to occur in the BSA while foraging. However, suitable habitat for underground bumble bee colonies is not present due to the level of development and landscape maintenance. The remaining 28 special-status species do not have potential to occur in the BSA based on known ranges, the lack of natural vegetation communities on site, the level of development and disturbance from urban use, the lack of connectivity to natural vegetation communities and aquatic habitats, and the species-specific habitat requirements (Attachment 3).

Nesting Birds

Birds may nest in trees, shrubs, or directly on the ground within and adjacent to the BSA. The BSA contains suitable nesting habitat for a variety of native avian species common to urban areas, including northern mockingbird (*Mimus polyglottos*), house finch, and black phoebe (*Sayornis nigricans*). Native bird nests are protected by the MBTA and CFGC Section 3503. The nesting season generally extends from February through August but can vary based upon annual climatic conditions.

Sensitive Natural Communities and Riparian Habitat

Plant communities are considered special-status biological resources if they have limited distributions, have high wildlife value, support special-status species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in the CNDDDB. CNDDDB vegetation alliances are ranked 1 through 5 based on NatureServe's methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Some alliances with the rank of 4 and 5 have also been included in the 2023 sensitive natural communities list under CDFW's revised ranking methodology (CDFW 2023e).

Based on the current CDFW sensitive natural communities list and field survey, no special-status vegetation communities or riparian habitats are present in the BSA.

Jurisdictional Waters and Wetlands

Based on the literature review and field survey, no potentially jurisdictional features occur in the BSA.



Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations or those populations that are at risk of becoming isolated. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The BSA is not within an Essential Connectivity Areas or Natural Landscape Block (CDFW 2023b). Additionally, the BSA is surrounded by development and does not provide connectivity for local movement.

Impact Analysis and Mitigation Measures

This section discusses the potential impacts and effects to regulated biological resources that may occur from implementation of the proposed project and recommends mitigation measures that would reduce those impacts, where applicable.

Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Special-Status Plants

Special-status plants species are not expected to occur within the BSA, and excavation and staging would occur primarily in paved areas. Therefore, no impacts to special-status plants would occur, and no mitigation is recommended.

Special-Status Wildlife

Western bumble bee has a low potential to occur in the BSA while foraging; however, suitable habitat for bee colonies is not present, and excavation and staging would occur primarily in paved areas. Therefore, impacts to western bumble bee would be less than significant. The BSA does not contain suitable habitat for any other special-status wildlife species.

The BSA does contain habitat for nesting birds. If nesting birds protected by the MBTA and CFGC are present on site during construction, direct effects could include injury or mortality from construction activity or nest abandonment from construction noise, dust, and other project activities. The loss of active nests would be a violation of the MBTA and CFGC Sections 3503 and 3513 but does not constitute a significant impact under CEQA. Nevertheless, the following mitigation measure is recommended for all avian species to maintain compliance with federal and state laws:

- BIO-1** To avoid disturbance of nesting birds, including birds protected by the MBTA and CFGC Section 3503, project activities should occur outside of the breeding season for migratory birds (generally February 1 through August 31), if feasible. If construction must occur during the breeding season, then a pre-construction nesting bird survey should be conducted no more than seven days prior to the initiation of project activities. The nesting bird pre-construction



survey should be conducted on foot and include a 300-foot buffer around the project site for raptors and a 100-foot buffer for all other species. The survey should be conducted by a biologist familiar with the identification of avian species known to occur along the central coast of California. If nests are found, an avoidance buffer of up to 300 feet for raptors and up to 100 feet for non-raptors should be demarcated by the biologist with construction fencing, flagging, or other means to mark the boundary. Intrusion into the buffer may be conducted at the discretion of the biologist.

Sensitive Natural Communities and Riparian Habitat

The proposed project would have a significant effect on biological resources if it would:

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

No CDFW-listed sensitive natural communities or riparian habitat are present within the BSA. Therefore, no impacts to sensitive natural communities or riparian habitat would occur, and no mitigation is recommended.

Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

- c) Have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) through direct removal, filling, hydrological interruption, or other means.

No jurisdictional wetlands or waters occur within the BSA. Therefore, no impacts to federally or state protected wetlands would occur, and no mitigation is recommended.

Wildlife Movement and Native Wildlife Nursery Sites

The proposed project would have a significant effect on biological resources if it would:

- 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.

No corridors for wildlife movement occur within the BSA, and the site is completely surrounded by developed residential and agricultural areas. In addition, no native wildlife nursery sites are present within the BSA. Therefore, there would be no impacts to wildlife movement corridors, and no mitigation is recommended.

Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

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

No trees are proposed for removal as part of the proposed project. The portion of the project site in unincorporated San Luis Obispo County is designated Residential Multi-family by the County of San Luis Obispo and is developed with residential land uses. Therefore, the tree permitting requirements



of San Luis Obispo County Code Chapter 22.56 are not expected to apply to the proposed project. In addition, the portion of the project site in the city of Arroyo Grande is within the public right-of-way, developed with a paved roadway, and is not within any Conservation/Open Space (C/OS) overlay areas designated by the City of Arroyo Grande. Accordingly, the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact would occur, and no mitigation is recommended

Habitat Conservation Plans

The proposed project would have a significant effect on biological resources if it would:

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

The BSA is not within the jurisdiction of any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no conflicts with state, regional, or local habitat conservation plans would occur, and no mitigation is recommended.

Conclusion

The project would not result in significant impacts to special status plants, special-status wildlife, sensitive natural communities, riparian habitat, jurisdictional waters and wetlands, wildlife movement, native wildlife nursery sites, local policies and ordinances protecting biological resources, or habitat conservation plans. Implementation of Mitigation Measure BIO-1 is recommended to maintain compliance with federal and state laws pertaining to nesting birds.

Thank you for the opportunity to work with you on this project. Please contact Samantha Kehr at skehr@rinconconsultants.com or Alex Hunt at ahunt@rinconconsultants.com if you have questions concerning the contents of this report.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "Samantha Kehr".

Samantha Kehr, B.S.
Senior Biologist

A handwritten signature in black ink, appearing to read "Alex Hunt".

Alex Hunt, M.S.
Director, Natural Resources

Attachments

- Attachment 1 Figures
- Attachment 2 Representative Site Photographs
- Attachment 3 Special-Status Species Evaluation Tables



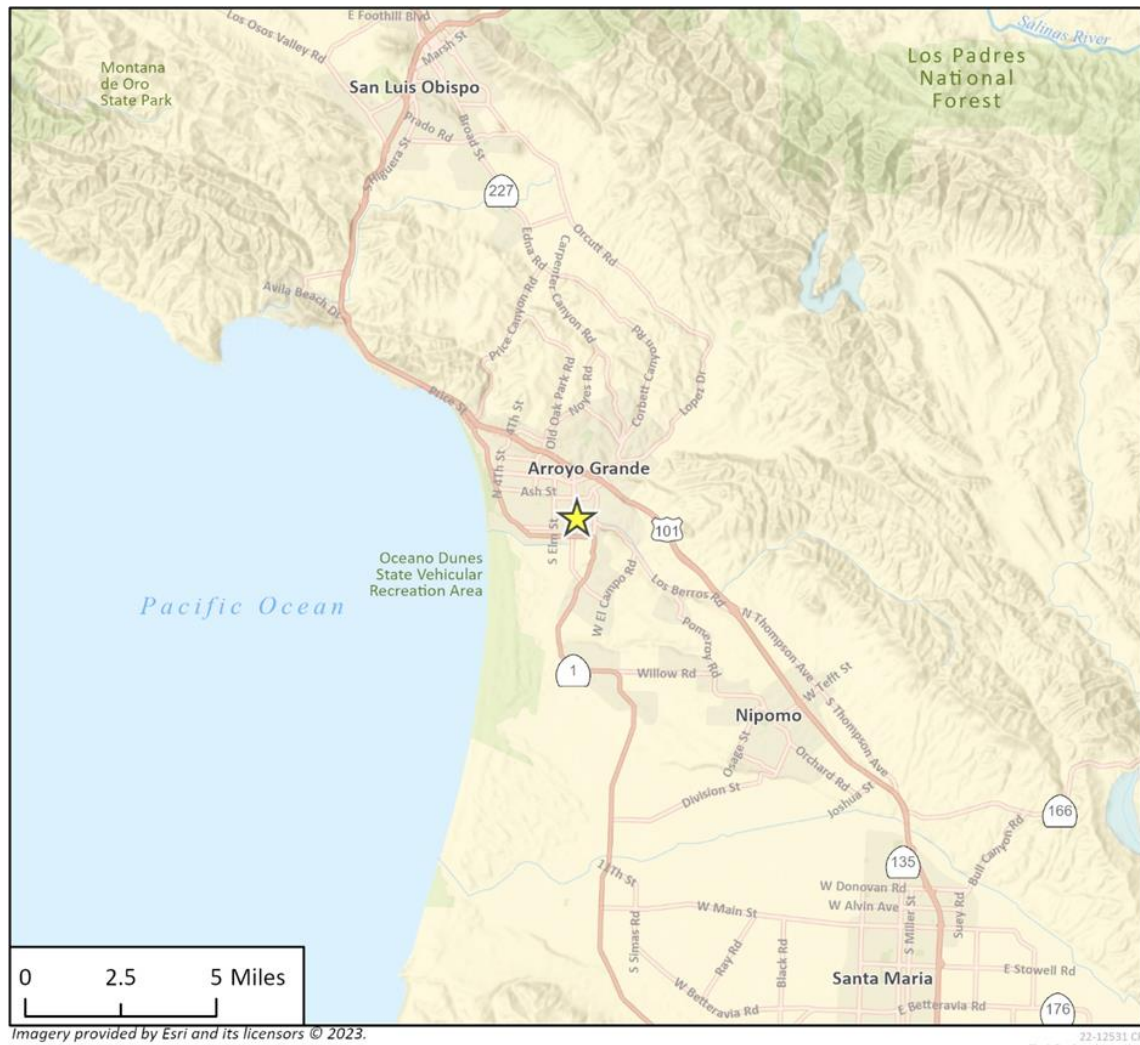
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Attachment 1

Figures

Figure 1 Regional Location



★ Project Location

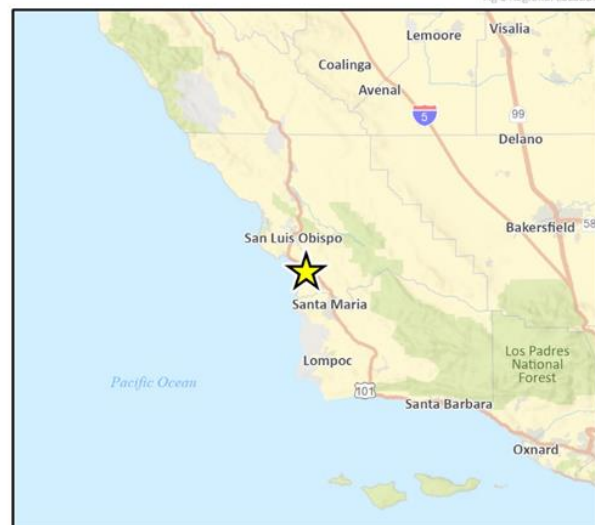


Figure 2 Biological Study Area



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22-12531 BIO
Fig 2 Biological Study Area

Figure 3a Vegetation and Land Cover – Northern Extent



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Fig 3b Vegetation and Land Cover Types

Figure 4b Vegetation and Land Cover – Southern Extent



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22-12531 B10
 Fig 3 Vegetation and Landcover

Attachment 2

Representative Site Photographs



Photograph 1. The Biological Study Area (BSA) within South Halcyon Road, facing east on August 22, 2023.



Photograph 2. The BSA within the Ken-Mar Gardens Mobile Home Park driveway, facing east on August 22, 2023.



Photograph 3. The BSA within the Ken-Mar Gardens Mobile Home Park driveway, facing west on August 22, 2023.



Photograph 4. The BSA within the Ken-Mar Gardens Mobile Home Park parking lot, facing north on August 22, 2023.



Photograph 5. The BSA within the Ken-Mar Gardens Mobile Home Park parking lot, facing southwest on August 22, 2023.



Photograph 6. Large Monterey Cypress trees west of the BSA, facing west on August 22, 2023.



Photograph 7. Landscaped and agricultural areas on the south side of the BSA, facing east on August 22, 2023.



Photograph 8. The BSA along Halcyon Road north of The Pike, facing northwest, May 6, 2024.



Photograph 9. Landscaped areas in the BSA along Halcyon Road, facing north, May 6, 2024.



Photograph 9. The BSA along Halcyon Road, facing northwest, May 6, 2024.

Attachment 3

Special-Status Species Evaluation Tables



Special-Status Plant and Lichen Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Agrostis hooveri</i> Hoover's bent grass	None/None G2/S2 1B.2	Perennial herb. Chaparral, cismontane woodland, closed-cone coniferous forest, valley and foothill grassland. Sandy (usually). Elevations: 20-2000 ft. (6-610 m.) Blooms Apr-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Aphanisma blitoides</i> aphanisma	None/None G3G4/S2 1B.2	Annual herb. Coastal bluff scrub, coastal dunes, coastal scrub. Gravelly (sometimes), sandy (sometimes). Elevations: 5-1000 ft. (1-305 m.) Blooms Feb-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arctostaphylos luciana</i> Santa Lucia manzanita	None/None G2/S2 1B.2	Perennial evergreen shrub. Chaparral, cismontane woodland. Shale. Elevations: 1150-2790 ft. (350-850 m.) Blooms Dec-Mar.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arctostaphylos pechoensis</i> Pecho manzanita	None/None G2/S2 1B.2	Perennial evergreen shrub. Chaparral, closed-cone coniferous forest, coastal scrub. Grows on siliceous shale with other chaparral associates. Elevations: 410-2790 ft. (125-850 m.) Blooms Nov-Mar.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arctostaphylos pilosula</i> Santa Margarita manzanita	None/None G2?/S2? 1B.2	Perennial evergreen shrub. Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest. Sandstone (sometimes). Elevations: 245-3610 ft. (75-1100 m.) Blooms Dec-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arctostaphylos purissima</i> La Purissima manzanita	None/None G2/S2 1B.1	Perennial evergreen shrub. Chaparral, coastal scrub. Sandstone outcrops, sandy soil. Elevations: 195-1280 ft. (60-390 m.) Blooms Nov-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arctostaphylos rudis</i> sand mesa manzanita	None/None G2/S2 1B.2	Perennial evergreen shrub. Chaparral, coastal scrub. Sandy. Elevations: 80-1055 ft. (25-322 m.) Blooms Nov-Feb.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arenaria paludicola</i> marsh sandwort	FE/SE G1/S1 1B.1	Perennial stoloniferous herb. Marshes and swamps. Openings, sandy. Elevations: 10-560 ft. (3-170 m.) Blooms May-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Calochortus obispoensis</i> San Luis mariposa-lily	None/None G2/S2 1B.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Serpentine (often). Elevations: 165-2395 ft. (50-730 m.) Blooms May-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Calochortus simulans</i> La Panza mariposa-lily	None/None G2/S2 1B.3	Perennial bulbiferous herb. Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Granitic (often), sandy, serpentinite (sometimes). Elevations: 1065-3775 ft. (325-1150 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Carex obispoensis</i> San Luis Obispo sedge	None/None G3?/S3? 1B.2	Perennial cespitose herb. Chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. Elevations: 35-2690 ft. (10-820 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Castilleja densiflora obispoensis</i> San Luis Obispo owl's-clover	None/None G5T2/S2 1B.2	Annual herb (hemiparasitic). Meadows and seeps, valley and foothill grassland. Serpentine (sometimes). Elevations: 35-1410 ft. (10-430 m.) Blooms Mar-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Ceanothus impressus</i> var. <i>impressus</i> Santa Barbara ceanothus	None/None G3T3/S3 1B.2	Perennial shrub. Chaparral. Sandy. Elevations: 130-1540 ft. (40-470 m.) Blooms Feb-Apr.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Ceanothus impressus</i> var. <i>nipomensis</i> Nipomo Mesa ceanothus	None/None G3T2/S2 1B.2	Perennial shrub. Chaparral. Sandy. Elevations: 100-805ft. (30-245m.) Blooms Feb-Apr.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	None/None G3T2/S2 1B.1	Annual herb. Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. Elevations: 0-755 ft. (0-230 m.) Blooms May-Oct(Nov).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Chenopodium littoreum</i> coastal goosefoot	None/None G1/S1 1B.2	Annual herb. Coastal dunes. Generally on sandy soils, and on dunes. Elevations: 35-100 ft. (10-30 m.) Blooms Apr-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Chlorogalum pomeridianum</i> var. <i>minus</i> dwarf soaproot	None/None G5T3/S3 1B.2	Perennial bulbiferous herb. Chaparral. Serpentine. Elevations: 1000-3280 ft. (305-1000 m.) Blooms May-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Chorizanthe aphanantha</i> Irish Hills spineflower	None/None G1/S1 1B.1	Annual herb. Chaparral, coastal scrub. Gravelly, rocky, serpentinite. Elevations: 330-1215 ft. (100-370 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Chorizanthe breweri</i> Brewer's spineflower	None/None G3/S3 1B.3	Annual herb. Chaparral, cismontane woodland, closed-cone coniferous forest, coastal scrub. Gravelly (sometimes), rocky (sometimes), serpentine. Elevations: 150-2625 ft. (45-800 m.) Blooms Apr-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Cirsium fontinale</i> var. <i>obispoense</i> Chorro Creek bog thistle	FE/SE G2T2/S2 1B.2	Perennial herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Drainages, seeps, serpentine. Elevations: 115-1265 ft. (35-385 m.) Blooms Feb-Jul(Aug-Sep).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Cirsium occidentale</i> var. <i>compactum</i> compact cobwebby thistle	None/None G3G4T2/S2 1B.2	Perennial herb. Chaparral, coastal dunes, coastal prairie, coastal scrub. On dunes and on clay in chaparral; also in grassland. Elevations: 15-490 ft. (5-150 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Cirsium rhotophilum</i> surf thistle	None/ST G1/S1 1B.2	Perennial herb. Coastal bluff scrub, coastal dunes. Open areas in central dune scrub; usually in coastal dunes. Elevations: 10-195 ft. (3-60 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Cirsium scariosum</i> var. <i>loncholepis</i> La Graciosa thistle	FE/ST G5T1/S1 1B.1	Perennial herb. Cismontane woodland, coastal dunes, coastal scrub, marshes and swamps, valley and foothill grassland. Mesic, sandy. Elevations: 15-720 ft. (4-220 m.) Blooms May-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Cladium californicum</i> California saw-grass	None/None G4/S2 2B.2	Perennial rhizomatous herb. Marshes and swamps, meadows and seeps. Freshwater or alkaline moist habitats. Elevations: 195-5250ft. (60-1600m.) Blooms Jun-Sep.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Clarkia speciosa</i> ssp. <i>immaculata</i> Pismo clarkia	FE/SR G4T1/S1 1B.1	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Sandy. Elevations: 80-605 ft. (25-185 m.) Blooms May-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Deinandra increscens</i> ssp. <i>villosa</i> Gaviota tarplant	FE/SE G3T2/S2 1B.1	Annual herb. Coastal bluff scrub, coastal scrub, valley and foothill grassland. Known from coastal terrace near Gaviota; sandy blowouts amid sandy loam soil; grassland/coast scrub ecotone. Elevations: 65-1410 ft. (20-430 m.) Blooms May-Oct.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i> dune larkspur	None/None G4T2/S2 1B.2	Perennial herb. Chaparral, coastal dunes. On rocky areas and dunes. Elevations: 0-655 ft. (0-200 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Delphinium parryi</i> ssp. <i>eastwoodiae</i> Eastwood's larkspur	None/None G4T2/S2 1B.2	Perennial herb. Chaparral, valley and foothill grassland. Serpentine. Openings. Elevations: 245-1640 ft. (75-500 m.) Blooms (Feb)Mar-Apr.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Delphinium umbraculorum</i> umbrella larkspur	None/None G3/S3 1B.3	Perennial herb. Chaparral, cismontane woodland. Mesic sites. Elevations: 1310-5250 ft. (400-1600 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Dithyrea maritima</i> beach spectaclepod	None/ST G1/S1 1B.1	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Sea shores, on sand dunes, and sandy places near the shore. Elevations: 10-165 ft. (3-50 m.) Blooms Mar-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Dudleya abramsii</i> ssp. <i>bettinae</i> Betty's dudleya	None/None G4T2/S2 1B.2	Perennial herb. Chaparral, coastal scrub, valley and foothill grassland. On rocky, barren exposures of serpentine within scrub vegetation. Elevations: 65-590 ft. (20-180 m.) Blooms May-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Dudleya abramsii</i> ssp. <i>murina</i> mouse-gray dudleya	None/None G4T2/S2 1B.1	Perennial leaf. Chaparral, cismontane woodland, valley and foothill grassland. Serpentine outcrops. Elevations: 295-1725 ft. (90-525 m.) Blooms May-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	None/None G3T2/S2 1B.1	Perennial herb. Chaparral, coastal bluff scrub, coastal scrub, valley and foothill grassland. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. Elevations: 15-1475 ft. (5-450 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Erigeron blochmaniae</i> Blochman's leafy daisy	None/None G2/S2 1B.2	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Sand dunes and hills. Elevations: 10-150 ft. (3-45 m.) Blooms Jun-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Eriodictyon altissimum</i> Indian Knob mountainbalm	FE/SE G1/S1 1B.1	Perennial evergreen shrub. Chaparral, cismontane woodland, coastal scrub. Ridges in open, disturbed areas within chaparral on Pismo sandstone. Elevations: 260-885 ft. (80-270 m.) Blooms Mar-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Eryngium aristulatum</i> var. <i>hooveri</i> Hoover's button-celery	None/None G5T1/S1 1B.1	Annual/perennial herb. Vernal pools. Alkaline depressions, vernal pools, roadside ditches and other wet places near the coast. Elevations: 10-150 ft. (3-45 m.) Blooms (Jun) Jul (Aug).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Erythranthe serpentinicola</i> Irish Hills monkeyflower	None/None G1/S1 1B.1	Chaparral (openings), meadows and seeps (edges). Serpentine, rocky, openings, mesic. 200-1200 ft. (60-360 m.) Blooms Feb-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Hesperocyparis macrocarpa</i> Monterey cypress	None/None G1/S1 1B.2	Perennial evergreen tree. Closed-cone coniferous forest. Granitic soils. Elevations: 35-100 ft. (10-30 m.)	Not Expected	No natural vegetation communities or suitable habitats are present. Landscaped individuals are present adjacent to the BSA, but naturally occurring stands are not expected.
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	None/None G4T1/S1 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. Elevations: 230-2660 ft. (70-810 m.) Blooms Feb-Jul(Sep).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Horkelia cuneata</i> var. <i>sericea</i> Kellogg's horkelia	None/None G4T1?/S1? 1B.1	Perennial herb. Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. Elevations: 35-655 ft. (10-200 m.) Blooms Apr-Sep.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Layia erubescens</i> blushing layia	None/None G2/S2 1B.2	Coastal dunes, Coastal scrub. Openings, Sandy 10-245m. Blooms (Feb)Mar-May(Jun).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Layia jonesii</i> Jones' layia	None/None G2/S2 1B.2	Annual herb. Chaparral, valley and foothill grassland. Clay soils and serpentine outcrops. Elevations: 15-1310 ft. (5-400 m.) Blooms Mar-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Lupinus ludovicianus</i> San Luis Obispo County lupine	None/None G1/S1 1B.2	Perennial herb. Chaparral, cismontane woodland. Open areas in sandy soil, Santa Margarita formation. Elevations: 165-1725 ft. (50-525 m.) Blooms Apr-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Lupinus nipomensis</i> Nipomo Mesa lupine	FE/SE G1/S1 1B.1	Annual herb. Coastal dunes. Dry sandy flats, restricted to back dunes, associated with central dune scrub habitat - a rare community type. Elevations: 35-165 ft. (10-50 m.) Blooms Dec-May.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Malacothamnus gracilis</i> slender bush-mallow	None/None G1Q/S1 1B.1	Perennial deciduous shrub. Chaparral. Dry, rocky slopes. Elevations: 625-1885 ft. (190-575 m.) Blooms May-Oct.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Monardella palmeri</i> Palmer's monardella	None/None G2/S2 1B.2	Perennial rhizomatous herb. Chaparral, cismontane woodland. On serpentine, often found associated with Sargent cypress forests. Elevations: 655-2625 ft. (200-800 m.) Blooms Jun-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Monardella sinuata</i> ssp. <i>sinuata</i> southern curly-leaved monardella	None/None G3T2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, coastal dunes, coastal scrub. Sandy soils. Elevations: 0-985 ft. (0-300 m.) Blooms Apr-Sep.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Monardella undulata</i> ssp. <i>crispa</i> crisp monardella	None/None G3T2/S2 1B.2	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Often on the borders of open, sand areas, usually adjacent to typical backdune scrub vegetation. Elevations: 35-395 ft. (10-120 m.) Blooms Apr-Aug (Dec).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Monardella undulata</i> ssp. <i>undulata</i> San Luis Obispo monardella	None/None G2/S2 1B.2	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Stabilized sand of the immediate coast. Elevations: 35-655 ft. (10-200 m.) Blooms May-Sep.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Muhlenbergia utilis</i> aparejo grass	None/None G4/S2S3 2B.2	Perennial rhizomatous herb. Chaparral, cismontane woodland, coastal scrub, marshes and swamps, meadows and seeps. Alkaline (sometimes), Serpentinite (sometimes). Elevations: 80-7630 ft. (25-2325 m.) Blooms Mar-Oct.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Nasturtium gambelii</i> Gambel's water cress	FE/ST G1/S1 1B.1	Perennial rhizomatous herb. Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Elevations: 15-1085 ft. (5-330 m.) Blooms Apr-Oct.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Nemacaulis denudata</i> var. <i>denudata</i> coast woolly-heads	None/None G3G4T2/S2 1B.2	Annual herb. Coastal dunes. Elevations: 0-330 ft. (0-100 m.) Blooms Apr-Sep.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Nemacladus secundiflorus</i> var. <i>robbinsii</i> Robbins' nemacladus	None/None G3T2/S2 1B.2	Annual herb. Chaparral, valley and foothill grassland. Dry, sandy or gravelly slopes. Openings. Elevations: 1150-5580ft. (350-1700 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Scrophularia atrata</i> black-flowered figwort	None/None G2?/S2? 1B.2	Perennial herb. Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub, riparian scrub. Sand, diatomaceous shales, and soils derived from other parent material; around swales and in sand dunes. Elevations: 35-1640 ft. (10-500 m.) Blooms Mar-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Senecio aphanactis</i> chaparral ragwort	None/None G3/S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625 ft. (15-800 m.) Blooms Jan-Apr(May).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Symphyotrichum defoliatum</i> San Bernardino aster	None/None G2/S2 1B.2	Perennial rhizomatous herb. Cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, meadows and seeps, valley and foothill grassland. Vernal mesic grassland or near ditches, streams and springs; disturbed areas. Elevations: 5-6695 ft. (2-2040 m.) Blooms Jul-Nov.	Not Expected	No natural vegetation communities or suitable habitats are present.

ESA = federal Endangered Species Act; CESA = California Endangered Species Act; BSA = Biological Study Area; ft. = feet; m. = meter

Regional Vicinity refers to within a nine-quad search radius of site (Quadrangles are topographic maps that cover land only. Although a quadrangle is typically surrounded by nine other quadrangles, in areas near the ocean, there are often fewer than nine surrounding quadrangles because there are no quadrangles for areas within the ocean. In this case an eight-quad search was conducted).

Status (Federal/State)

FE = Federal Endangered
FT = Federal Threatened
SE = State Endangered
ST = State Threatened
SR = State Rare

CRPR (California Native Plant Society California Rare Plant Rank)

1B = Rare, Threatened, or Endangered in California and elsewhere
2B = Rare, Threatened, or Endangered in California, but more common elsewhere

CRPR Threat Code Extension

.1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
.2 = Moderately threatened in California (20 to 80% of occurrences threatened/moderate degree and immediacy of threat)
.3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Other Statuses

G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)



		Status ESA/CESA	Global/State		
Scientific Name	Common Name	Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
G3 or S3	Vulnerable to extirpation or extinction Globally or Subnationally (state)				
G4/5 or S4/5	Apparently secure, common and abundant				
Additional notations may be provided as follows					
T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)					
Q – Questionable taxonomy that may reduce conservation priority					
? – Inexact numeric rank					



Special-Status Wildlife Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
Invertebrates				
<i>Bombus occidentalis</i> western bumble bee	None/SCE G3/S1	Once common and widespread, species has declined precipitously from central California to southern British Colombia (Canada), perhaps from disease.	Low Potential	Flowering plants are present; however, paved roads and parking lots are not suitable habitat for bee colonies, and no beehives were observed.
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT/None G3/S3	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Not Expected	Vernal pool aquatic habitats are not present.
<i>Danaus plexippus plexippus</i> pop. 1 monarch - California overwintering population	FC/None G4T1T2Q/S2	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Not Expected	Suitable wintering habitat with a wind-protecting grove of trees is not present.
Fish				
<i>Eucyclogobius newberryi</i> tidewater goby	FE/None G3/S3	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Not Expected	Brackish water habitats are not present.
<i>Gila orcuttii</i> arroyo chub	None/None G2/S2 SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Not Expected	Aquatic habitats are not present.
<i>Oncorhynchus mykiss irideus</i> pop. 9 steelhead - south-central California coast distinct population segment	FT/None G5T2Q/S2	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	Not Expected	Aquatic habitats are not present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
Amphibians				
<i>Ambystoma californiense</i> pop. 2 California tiger salamander - Santa Barbara County distinct population segment	FE/ST G2G3T2/S2 WL	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Not Expected	Suitable upland and aquatic habitats are not present.
<i>Rana boylei</i> pop. 6 foothill yellow-legged frog - south coast distinct population segment	FPE/SE G3T1/S1	Southern Coast Ranges from Monterey Bay south through San Gabriel Mountains; west of the Salinas River in Monterey County, south through Transverse Ranges, and east through San Gabriel Mountains. Historically may have ranged to Baja California. Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	Not Expected	Aquatic habitats are not present.
<i>Rana draytonii</i> California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not Expected	Aquatic freshwater habitats are not present, and the BSA is isolated by development.
<i>Spea hammondi</i> western spadefoot	None/None G2G3/S3S4 SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Not Expected	Suitable upland and aquatic habitats are not present.
<i>Taricha torosa</i> Coast Range newt	None/None G4/S4 SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate over 1 km to breed in ponds, reservoirs, and slow-moving streams.	Not Expected	Suitable upland and aquatic habitats are not present.
Reptiles				
<i>Anniella pulchra</i> Northern California legless lizard	None/None G3/S2S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Not Expected	Natural habitats with sandy soils are not present, and the BSA is isolated by development.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Emys marmorata</i> western pond turtle	FPT/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not Expected	Aquatic habitats with aquatic vegetation are not present, and the BSA is isolated by development.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G4/S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Not Expected	Natural habitats with sandy soils are not present, and the BSA is isolated by development.
<i>Thamnophis hammondi</i> two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Not Expected	Aquatic habitats with aquatic vegetation are not present, and the BSA is isolated by development.
Birds				
<i>Accipiter striatus</i> sharp-shinned hawk	None/None G5/S4 WL	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.	Not Expected	Woodland habitats with riparian trees suitable for nesting are not present.
<i>Agelaius tricolor</i> tricolored blackbird	None/ST G1G2/S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not Expected	Aquatic habitats with emergent vegetation are not present.
<i>Athene cunicularia</i> burrowing owl	None/None G4/S2 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not Expected	Natural habitats with ground squirrel burrows, suitable for nesting and foraging are not present.
<i>Buteo swainsoni</i> Swainson's hawk	None/ST G5/S4	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Not Expected	Woodland and grassland habitats with large trees suitable for nesting are not present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Charadrius nivosus nivosus</i> western snowy plover	FT/None G3T3/S3 SSC	Sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	Not Expected	Suitable sandy beaches and shores are not present.
<i>Circus hudsonius</i> northern harrier	None/None G5/S3 SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienegas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Not Expected	Natural habitats suitable for foraging are not present.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT/SE G5T2T3/S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not Expected	Natural riparian habitats suitable for nesting and foraging are not present.
<i>Elanus leucurus</i> white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Not Expected	Open habitat with small mammal burrows and suitable nest trees is not present.
<i>Falco mexicanus</i> prairie falcon	None/None G5/S4 WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Not Expected	Natural habitats suitable for foraging and cliffs for nesting are not present.
<i>Gymnogyps californianus</i> California condor	FE/SE G1/S2 FP	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	Not Expected	Natural habitats suitable for foraging and cliffs for nesting are not present.
<i>Laterallus jamaicensis coturniculus</i> California black rail	None/ST G3T1/S2 FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Not Expected	Aquatic habitats with emergent vegetation are not present.
<i>Sternula antillarum browni</i> California least tern	FE/SE G4T2T3Q/S2 FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, land fills, or paved areas.	Not Expected	Natural habitats suitable for foraging and sandy beaches for nesting are not present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
Mammals				
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls and ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.	Not Expected	Natural habitats with suitable for roosting structures and cavities are not present.
<i>Taxidea taxus</i> American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not Expected	Natural, dry, open grassland habitats are not present, and the BSA is isolated by development from open grasslands.

ESA = federal Endangered Species Act; CESA = California Endangered Species Act; ft. = feet; km = kilometer

Regional Vicinity refers to within a nine-quad search radius of site (Quadrangles are topographic maps that cover land only. Although a quadrangle is typically surrounded by nine other quadrangles, in areas near the ocean, there are often fewer than nine surrounding quadrangles because there are no quadrangles for areas within the ocean. In this case an eight-quad search was conducted).

Status (Federal/State)

FE = Federal Endangered

FT = Federal Threatened

FPE = Federal Proposed Endangered

SE = State Endangered

ST = State Threatened

SCE = State Candidate Endangered

SSC = CDFW Species of Special Concern

FP = CDFW Fully Protected

WL = CDFW Watch List

Other Statuses

G1 or S1 Critically Imperiled Globally or Subnationally (state)

G2 or S2 Imperiled Globally or Subnationally (state)

G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)

G4/5 or S4/5 Apparently secure, common and abundant

Additional notations may be provided as follows.

T - Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)

Q - Questionable taxonomy that may reduce conservation priority



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March 18, 2025
Project No: 22-12532

Eileen Shields, PE, Principal Engineer
MKN & Associates, Inc.
530 Paulding Circle, Suite B
Arroyo Grande, California 93420
Via email: eshields@mknassociates.us

Subject: Biological Resources Assessment for the Halcyon Water System Project, Oceano, CA

Dear Ms. Shields:

This report documents the findings of a biological resources assessment (BRA) conducted by Rincon Consultants, Inc. (Rincon) for the Halcyon Water System Project (project) in the community of Oceano, San Luis Obispo County, California. The purpose of this report is to document existing conditions at the project site and to evaluate the potential for project impacts to special-status biological resources. The Oceano Community Services District (OCSD) is the lead agency under the California Environmental Quality Act (CEQA), and the State Water Resources Control Board (SWRCB) is a responsible agency under CEQA.

Project Location and Description

The approximately 55.3-acre project site is located in the Halcyon neighborhood in the unincorporated community of Oceano, San Luis Obispo County, California (Attachment 1: Figure 1). The Halcyon neighborhood is generally bounded by The Pike to the north, Halcyon Road to the east, Wilshire Street to the south, and Judge Avenue to the west.

The Halcyon Water System serves a community of 100 residents through a total of 48 service connections in the community of Halcyon. The system is supplied by a single groundwater well owned and operated by the Halcyon Water Company. The well site consists of a well, two 5,000-gallon storage tanks, a chemical dosing system, and a self-cleaning metallic cartridge filter system. There is also a point-of-use reverse osmosis treatment facility where residents can fill potable water containers. The existing system has potable water quality violations and is seeking to consolidate with OCSD to provide a clean and reliable source of water to residents of Halcyon.

Specific improvements would include the following:

- Installation of approximately 4,830 linear feet of 8-inch potable water pipeline within Halcyon Road, Temple Street, Helena Street, Dower Street, La Due Street, and Hiawatha Street to connect properties in the Halcyon community to planned OCSD pipelines.¹
- Installation of approximately 49 individual OCSD meters with backflow preventors and nine new fire hydrants.
- Re-routing of approximately 34 private service laterals to connect to the new OCSD water mains.

¹ The planned OCSD pipelines in Halcyon Road and Temple Street were analyzed in a separate technical report for the OCSD Waterline Improvements Project and are therefore not included in this analysis.



- Re-routing of approximately 15 private service laterals to connect to an existing 12-inch OCSD water main.
- Re-purposing of the existing Halcyon Water System (including the existing well and pipelines) exclusively for irrigation purposes and installation of non-potable signage throughout the irrigation system at all potential points of use.

Upon the completion of construction, the Halcyon Water System would forego their public water system permit, and individual residents would become customers of OCSD. The new OCSD distribution system would be owned, operated, and maintained by OCSD. The Halcyon Water Company would continue to own, operate, and maintain the Halcyon Water System for irrigation purposes only.

Construction

Construction would utilize open-cut trenching to install the proposed pipelines and would include site preparation, pipeline installation, and paving/ground restoration activities. The following is a general description of each phase of construction:

- **Site Preparation.** The existing pavement along the pipeline alignment would be cut with a concrete saw or otherwise broken and removed using jackhammers, pavement breakers, and loaders. Other similar equipment may be used. The pavement would then be removed from the project site and recycled or disposed of at an appropriate facility.
- **Pipeline Installation.** Open-cut trenching typically consists of trench excavation (including saw cutting of pavement where applicable), shoring to stabilize the pipe bed, pipe installation, and backfilling. Construction usually progresses along the alignment with the maximum length of open trench at one time being approximately 500 feet in length.
- **Paving/Ground Restoration.** Any portion of the roadway or landscaped areas damaged by construction activities would be repaved or restored in accordance with all applicable San Luis Obispo County Public Improvement Standards. Once the pavement has been restored, traffic delineation (striping) would also be restored.

Construction would start as early as summer 2027 and require approximately 12 months to complete. No nighttime construction would be required. Typical excavation depths would be approximately 4.5 feet but may reach approximately 8 feet as needed for utility crossings.

Construction equipment staging and worker parking would be located at the contractor's discretion but are anticipated to be primarily within existing parking lots and storage yards in the local area as well as the public right-of-way. However, the contractor may also coordinate with private property owners to stage construction equipment and materials on empty lots within the Halcyon community.

Best Management Practices

The proposed project would adhere to the most current version of the County of San Luis Obispo Public Improvement Standards (2022, at the time of preparation of this document) and the OCSD Standard Specifications and Drawings (1997, at the time of preparation of this document), which include design standards and construction specifications for projects involving public roadways as well as Best Management Practices (BMPs). The following project BMPs are informed by measures required in the 2022 Public Improvement Standards:

- **Erosion Control BMPs.** Sediment and erosion control BMPs would be implemented, including pollutant source control, protection of stockpiles, protection of slopes, protection of all disturbed areas, protection of site access points, and perimeter containment measures. The intent of the sediment and erosion control BMPs would be to prevent disturbed sediment from entering



drainage conveyances, generating fugitive dust, or migrating onto adjacent properties or the public right-of-way.

- **Traffic Control BMPs.** Construction signs and other necessary traffic control devices would be installed prior to the commencement of work. All private driveways and side streets would be kept open at all times, except when construction takes place immediately in front of the driveway or side street. At the conclusion of each workday, all paved traveled-way surfaces would be restored to an all-weather, traversable condition.

Regulatory Background

Regulatory authority over biological resources is shared by federal, state, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the County of San Luis Obispo). The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the state under CEQA and also has direct jurisdiction under the California Fish and Game Code (CFGF). Under the California and federal Endangered Species Acts (CESA/ESA), CDFW and the United States Fish and Wildlife Service (USFWS) have direct regulatory authority over species formally listed as threatened or endangered. USFWS and CDFW also have jurisdiction over native bird species protected by the Migratory Bird Treaty Act (MBTA) and CFGF. The United States Army Corps of Engineers (USACE) has regulatory authority over specific biological resources, namely wetlands and waters of the United States, under Section 404 of the federal Clean Water Act. CDFW and the Regional Water Quality Control Boards (RWQCB) protect waters and streambeds at the state level.

San Luis Obispo County General Plan

The San Luis Obispo County General Plan Conservation and Open Space Element outlines goals and policies that aim to preserve biodiversity, sustain healthy ecosystems, enhance degraded habitats, and protect the diverse landscapes throughout the county. Major goals include protecting special-status species, protecting and enhancing native habitat, and preserving wetlands and aquatic habitats. Relevant policies regarding resource protection include (County of San Luis Obispo 2010):

Policy BR-1.2 Limit Development Impacts: Regulate and minimize proposed development in areas that contain essential habitat for special-status species, sensitive natural communities, wetlands, coastal and riparian habitats, and wildlife habitat and movement corridors as necessary to ensure the continued health and survival of these species and protection of sensitive areas.

Policy BR-1.15 Restrict Disturbance in Sensitive Habitat during Nesting Season: Avoid impacts to sensitive riparian corridors, wetlands, and coastal areas to protect bird-nesting activities.

Policy BR-3.1 Native Tree Protection: Protect native and biologically valuable trees, oak woodlands, trees with historical significance, and forest habitats to the maximum extent feasible.

Policy BR-3.5 Non-native Trees: Protect healthy and non-hazardous, non-native trees (e.g., eucalyptus groves) and forests that provide raptor nesting or roosting sites or support colonies of monarch butterflies.

San Luis Obispo County Code

San Luis Obispo County Code Chapter 22.56 prohibits the removal of trees without first obtaining a tree removal permit. In addition, San Luis Obispo County Code Section 22.62.030 requires zoning clearance before the removal or replacement of any existing trees except trees that are:



- Identified and approved for removal in an approved Zoning Clearance, Site Plan Review, Minor Use Permit or Conditional Use Permit, provided that such removal is subject to the standards of Section 22.56.030 (Tree Removal Standards); or
- Located within residential land use categories on sites developed with residential uses; or
- Located within or adjacent to a public or public utility right-of-way, when such trees are to be removed by a public agency, public utility or are to be removed under an encroachment permit issued by a public agency having jurisdiction; or
- In a hazardous condition which presents an immediate danger to health or property; or
- With trunks measuring less than eight inches in diameter at four feet above grade; or
- To be removed in preparation for agricultural cultivation and crop production in an Agriculture land use category; or
- To be removed as part of management practice in orchards of commercial agricultural production.

Land use permit applications that propose tree removal are required to include all information specified by Section 22.62.030 (Zoning Clearance Content) as well as the following:

- The size, species and condition (e.g., diseased, healthy, etc.) of each tree proposed for removal.
- The purpose of removal.
- The size and species of any trees proposed to replace those intended for removal.

Methods

This BRA consisted of a review of relevant literature and background information, a reconnaissance-level field survey to confirm existing conditions and determine which biological resources are present or may occur at the site, and an evaluation of the proposed project to determine whether it would result in potentially significant impacts to biological resources under CEQA. The potential presence of special-status species is based on the literature review and a field survey designed to map vegetation communities and assess habitat suitability and presence of target species. The biological study area (BSA) evaluated for this BRA is defined as the limits of work plus a 50-foot buffer (Attachment 2: Figure 2).

Literature Review

The literature review included database research on special-status resource occurrences within the *Oceano, California* 7.5-minute United States Geological Survey quadrangle and seven surrounding quadrangles.² Sources included the CDFW California Natural Diversity Database (CNDDDB) (CDFW 2024a), Biogeographic Information and Observation System (CDFW 2024b), USFWS Information for Planning and Consultation (USWFS 2024a), USFWS Critical Habitat Portal (USWFS 2024b), and USFWS National Wetlands Inventory (NWI, USFWS 2024c). Other resources included the California Native Plant Society online Inventory of Rare and Endangered Plants of California (California Native Plant Society 2024), CDFW's Special Animals List (CDFW 2024c), and CDFW's Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2024d). Aerial photographs, topographic maps, soil survey maps,

² Quadrangles are topographic maps that cover land only. Although a quadrangle is typically surrounded by nine other quadrangles, in areas near the ocean, there are often fewer than nine surrounding quadrangles because there are no quadrangles for areas within the ocean.



geologic maps, and climatic data in the area were also examined. References are included at the end of this report.

Field Survey

A Rincon biologist conducted a reconnaissance-level site visit of the BSA on May 6, 2024, to assess the habitat suitability for potential special-status species; map existing vegetation communities and evident special-status biological resources; note the presence of potential jurisdictional waters or wetlands; document wildlife connectivity/movement features; and record observations of plant and wildlife species within the BSA. Site photos from the survey are included as Attachment 2.

Special-status-Species Assessment

Local, state, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted prior to the approval of proposed development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB from other sites in the vicinity of the BSA, and previous reports for the BSA. The potential for each special-status species to occur in the BSA was evaluated according to the following criteria:

- 1) **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- 2) **Low Potential.** Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- 3) **Moderate Potential.** Some of the habitat components meeting the species' requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- 4) **High Potential.** All of the habitat components meeting the species' requirements are present, and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- 5) **Present.** Species is observed on the site or has been recorded (e.g., CNDDDB, other reports) on the site recently (i.e., within the last five years).

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the ESA; those listed or candidates for listing as rare, threatened, or endangered under the CESA or Native Plant Protection Act; those identified as Fully Protected by the CFGC (Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern by CDFW; and plants occurring on lists 1 and 2 of the California Native Plant Society's California Rare Plant Rank system pursuant to the following definitions:

- **Rank 1A:** Plants presumed extinct in California
- **Rank 1B.1:** Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- **Rank 1B.2:** Rare or endangered in California and elsewhere; fairly endangered in California (20 to 80 percent occurrences threatened)



- **Rank 1B.3:** Rare or endangered in California and elsewhere, not very endangered in California (less than 20 percent of occurrences threatened or no current threats known)
- **Rank 2:** Rare, threatened or endangered in California, but more common elsewhere

Existing Conditions

Topography and Soils

The elevation of the BSA is approximately 80 feet above mean sea level. The topography of the BSA and its immediate surroundings is generally flat and has been previously graded and compacted with developed areas and agricultural fields. Based on the most recent soil survey for San Luis Obispo County, the BSA contains three soil map units (United States Department of Agriculture Natural Resources Conservation Service [USDA NRCS] 2024a):

Marimel silty clay loam drained. This soil map unit is designated as a hydric soil type in San Luis Obispo County (USDA NRCS 2024b). Marimel silty clay loam is a well-drained soil that occurs on alluvial fans and footslopes. It is formed in alluvium derived from sedimentary rock. A typical soil profile consists of silty clay loam to a depth of 16 inches and stratified loam to clay loam to silty clay loam from 16 to 60 inches. Available water storage is high (about 10.3 inches), and the runoff class is medium (USDA NRCS 2024a).

Mocho Variant Fine Sandy Loam. This soil map unit is designated as a predominantly non-hydric soil in San Luis Obispo County (USDA NRCS 2024b). Mocho variant fine sandy loam is a well-drained soil that occurs on alluvial fans and alluvial flats. It is formed in alluvium derived from sedimentary rock. A typical soil profile consists of fine sandy loam to a depth of 15 inches, very fine sandy loam between 15 and 33 inches, and stratified gravelly sand from 33 to 64 inches. Available water storage is low (about 5.9 inches), and the runoff class is very low (USDA NRCS 2024a).

Oceano Sand, 0 to 9 Percent Slopes. This soil map unit is not designated as a hydric soil in San Luis Obispo County (USDA NRCS 2024b). Oceano sand is excessively drained soil that occurs on beach dunes and is derived from Eolian deposits. A typical soil profile consists of sand from 0 to 60 inches. Available water storage is low (about 4.2 inches), and the runoff class is negligible (USDA NRCS 2024a).

Vegetation and Land Cover

No natural vegetation communities exist within the BSA or adjacent existing development. The BSA consists of paved roads, landscaped vegetation, and agricultural areas (Attachment 1: Figure 3). Species observed in landscaped areas include blue gum (*Eucalyptus globulus*), coast live oak (*Quercus agrifolia*), mission cactus (*Opuntia ficus-indica*), Spanish dagger (*Yucca gloriosa*), pride of madeira (*Echium candicans*), Canary island date palm (*Phoenix canariensis*), European white birch (*Betula pendula*), California poppy (*Eschscholzia californica*), Bermuda buttercup (*Oxalis pes-caprae*), iceplant (*Carpobrotus edulis*), and landscaped Monterey cypress (*Hesperocyparis macrocarpa*).

General Wildlife

The BSA and its surroundings provide habitat for bird and mammal species that commonly occur in urban habitats, such as house finch (*Haemorhous mexicanus*), mourning dove (*Zenaidura macroura*), house sparrow (*Passer domesticus*), Botta's pocket gopher (*Thomomys bottae*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*).



Special-Status Biological Resources

Based on the results of the literature review, 56 special-status plant species and 29 special-status wildlife species were evaluated for the potential to occur within the BSA. Attachment 3 provides a detailed assessment, which is summarized in the following sections.

Special-Status Plant Species

Based on the developed nature of the BSA and the habitat requirements of special-status plant species, none of 56 special-status plant species known to occur in the region were determined to have the potential to occur within the BSA. No special-status plants were incidentally observed during the reconnaissance-level field survey. The reconnaissance survey was conducted in May, during the spring blooming period when many species would have been identifiable. Monterey cypress, which has a California Rare Plant Rank of 1B, is present within the BSA but as ornamental plantings in landscaped areas. As such, Monterey cypress will not be addressed as a special-status plant species because they are not part of a naturally-occurring stand of trees (Attachment 3).

Special-Status Wildlife Species

No federally-listed, state-listed, or other special-status wildlife species were observed during the field survey. Of the 29 species evaluated, Rincon determined one species is present within the BSA. Occurrences of overwintering monarch butterfly (*Danaus plexippus*, federally proposed threatened) have been documented at a large stand of eucalyptus trees south of the termini of Helena Street and Dower Avenue (CDFW 2024a). However only 0.03 acre of this site occurs within the southwest corner of the BSA (outside the project footprint), and the majority of the approximately 12-acre overwintering site is outside the BSA. Occurrences of overwintering monarch butterfly have also been documented in the immediate vicinity of the BSA at two autumnal sites located within eucalyptus stands at the northwest corner of Hiawatha Lane and La Due Street and along the south side of The Pike (CDFW 2024a). Annual monitoring counts of the overwintering site south of the termini of Helena Street and Dower Avenue and the autumnal site along the south side of The Pike indicate populations fluctuate, but these two sites are occupied by monarchs most years (Xerces Society 2024). Many of the trees at the autumnal site at the northwest corner of Hiawatha Lane and La Due Street were removed in 2017, and the site no longer provides suitable habitat (CDFW 2024a).

Two species were determined to have a low potential to occur - western bumble bee (*Bombus occidentalis*, state candidate endangered) and Northern California legless lizard (*Anniella pulchra*, California Species of Special Concern). Western bumble bee has a low potential to occur in the BSA while foraging; nesting habitat may be present in landscaped areas outside of developed and agricultural areas. Only marginal habitat for Northern California legless lizard is present due to the level of development and landscape maintenance. The remaining 26 special-status species do not have potential to occur in the BSA based on known ranges, the lack of natural vegetation communities on site, the level of development and disturbance from urban use, the lack of connectivity to natural vegetation communities and aquatic habitats, and the species-specific habitat requirements (Attachment 3).

Nesting Birds

Birds may nest in trees, shrubs, or directly on the ground within and adjacent to the BSA. The BSA contains suitable nesting habitat for a variety of native avian species common to urban areas, including northern mockingbird (*Mimus polyglottos*), house finch, and black phoebe (*Sayornis nigricans*). Native bird nests are protected by the MBTA and CFGC Sections 3503 and 3513. The



nesting season generally extends from February through August but can vary based upon annual climatic conditions.

Sensitive Natural Communities and Riparian Habitat

Plant communities are considered special-status biological resources if they have limited distributions, have high wildlife value, support special-status species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in the CNDDDB. CNDDDB vegetation alliances are ranked 1 through 5 based on NatureServe's methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Some alliances with the rank of 4 and 5 have also been included in the 2023 sensitive natural communities list under CDFW's revised ranking methodology (CDFW 2023).

Based on the current CDFW sensitive natural communities list and field survey, no sensitive natural communities or riparian habitats are present in the BSA.

Jurisdictional Waters and Wetlands

Based on the literature review and field survey, no potentially jurisdictional waters or wetlands occur in the BSA (USFWS 2024c).

Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations or those populations that are at risk of becoming isolated. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The BSA is not within an Essential Connectivity Areas or Natural Landscape Block (CDFW 2024b). Additionally, the BSA is surrounded by development and does not provide connectivity for local movement.

Impact Analysis and Mitigation Measures

This section discusses the potential impacts and effects to regulated biological resources that may occur from implementation of the proposed project and recommends mitigation measures that would reduce those impacts, where applicable.

Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.



Special-Status Plants

Special-status plants species are not expected to occur within the BSA, and excavation and staging would occur primarily in developed or landscaped areas. Therefore, no impacts to special-status plants would occur.

Special-Status Wildlife

Eucalyptus groves within the BSA provide important overwintering habitat for monarch butterflies, and the species is known to be present. Should monarchs be present within the BSA during construction, direct impacts could include injury or mortality of individuals due to encroachment or damage to trees within overwintering sites. Direct impacts to overwintering monarchs could also result from general construction-related disturbance such as dust, spills, and noise if transient individuals are visiting nectar sources and/or flying near the BSA at the time of construction. Overwintering monarchs in the immediate vicinity of the BSA are likely highly tolerant of existing noise and disturbance associated with the public right-of-way and surrounding residential and agricultural development. The additional noise and construction disturbance associated with the proposed project would not represent a significant new noise and disturbance effect, and this increased activity would be temporary in nature. Nevertheless, impacts to monarch butterflies would be potentially significant. Implementation of Measures BIO-1, BIO-2, and BIO-3, which includes BMPs for reducing construction-related disturbance of monarch butterflies and their habitat, is recommended to avoid and/or minimize potential impacts to overwintering monarchs, if present. With implementation of these measures, potential impacts to monarch butterfly would be less than significant.

Western bumble bee has a low potential to occur in the BSA, and excavation and staging would occur primarily in paved and developed areas where bees are not expected for forage or nest. Northern California legless lizard also has a low potential to occur because the site is heavily disturbed by residential development and landscaping. Therefore, because these species have low potential to occur, impacts to western bumble bee and Northern California legless lizard would be less than significant.

The BSA contains habitat for nesting birds. If nesting birds protected by the MBTA and CFGC are present on or near the project site during construction, direct effects could include injury or mortality from construction activity, and indirect effects could include nest abandonment from construction noise, dust, and other project activities. The loss of active nests would be a violation of the MBTA and CFGC Sections 3503 and 3513 but does not constitute a significant impact under CEQA. Nevertheless, implementation of Measure BIO-4 is recommended for all avian species to maintain compliance with federal and state laws.

Recommended Measures

BIO-1 General Best Management Practices

General requirements that should be followed by construction personnel are listed below.

- Prior to project mobilization, limits of construction work adjacent to monarch butterfly overwintering sites, should be clearly delineated with orange construction fencing or similar highly visible material and maintained throughout the duration of construction.
- No native vegetation with a diameter at breast height of more than four inches should be removed or damaged without approval by an approved biologist. Vegetation trimming should be minimized to the extent feasible.



- Staging and parking areas should be limited to previously disturbed areas comprising ruderal vegetation, ornamental landscaping, and paved/graded areas, to the extent practicable.
- Materials and equipment (when not in use) should be stored on impervious surfaces or plastic ground covers to prevent spills or leakage.
- Adequate spill prevention and response equipment should be maintained on site and readily available to implement to minimize impacts to the environment.
- Construction materials and spoils should be protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate.
- All vehicles and equipment should be in good working condition and free of leaks. When vehicles or equipment are stationary, mats or drip pans should be placed below vehicles to contain fluid leaks. The contractor should prevent oil, petroleum products, or any other pollutants from contaminating the soil.
- Project-related vehicles should adhere to a speed limit of 15 miles per hour within the BSA.
- If vehicle or equipment maintenance is necessary, it should be performed in the designated staging areas.
- Fugitive dust from ground disturbance activities should be minimized using water trucks and covering of soil stockpiles.
- All food related trash should be disposed of in closed containers and removed from the project site each day during the construction period. Construction personnel should not feed or otherwise attract wildlife to the construction area. At project completion, all project-generated debris, vehicles, building materials, and rubbish should be removed from the project site.
- Herbicides should not be used on-site during construction.
- Work should be restricted to daylight hours.
- While encounters with special-status species are not likely or anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped should immediately report the incident to the construction foreman and/or biological monitor. The construction foreman or biological monitor should immediately notify OCSD.

BIO-2 Worker Environmental Awareness Training

Prior to the initiation of the project, an approved biologist should present a pre-project environmental education program for all personnel working at the site, which should be focused on conditions and protocols necessary to avoid and minimize potential impacts to biological resources. Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction should attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special-status biological resources potentially occurring on the project site. This training should include information about the special-status species with potential to occur in the project area. The specifics of this program should include identification of special-status species and habitats, a description of the regulatory status and general ecological characteristics of special-status resources, and a review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the project site. A fact sheet conveying this information should also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees should sign a form provided by the trainer documenting they have attended the WEAP and understand the information presented to them. The crew foreman should be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special-status species.



BIO-3 Monarch Butterfly Avoidance and Minimization

Project construction activities within 300 feet of overwintering sites (i.e., eucalyptus stands south of the termini of Helena Street and Dower Avenue and south of The Pike), including equipment staging, grading, and construction, should be avoided during the monarch butterfly overwintering season between October 15 through March 15, if practicable. In the event project activities must occur during the overwintering season within the 300-foot buffer, a qualified biologist should conduct surveys for roosting monarch butterflies every two weeks during the overwintering season to confirm presence and identify aggregation locations. If observed, the qualified biologist should establish a protective buffer, ranging from 100 to 300 feet from the roosting site in which monarch butterflies are aggregating. The buffer should be delineated on site by the biologist with flagging or staking visible to construction personnel. The construction contractor should ensure no construction occurs within the protective buffer, including staging of equipment or stopping or idling in the buffer, during the overwintering season. In the event construction activities, or other use of equipment, must occur within the protective buffer, the qualified biologist should be present on site to monitor construction activities and determine if the work is disturbing the aggregated butterflies. If the biologist determines the work is disturbing the butterflies, the biologist should stop work within the protective buffer. In addition, due to the regular movement of the butterflies and the locations of the aggregations, the biologist should adjust the protective buffers, as necessary and at their discretion.

BIO-4 Pre-construction Nesting Bird Surveys

To avoid disturbance of nesting birds, including special-status species and birds protected by the MBTA and CFGC Section 3503, project activities should occur outside of the breeding season for migratory birds (generally February 1 through August 31), if feasible. If construction must occur during the breeding season, then a pre-construction nesting bird survey should be conducted no more than seven days prior to the initiation of project activities. The nesting bird pre-construction survey should be conducted on foot inside the project site and include a 300-foot buffer for raptors and a 100-foot buffer for all other species. The survey should be conducted by a biologist familiar with the identification of avian species known to occur along the central coast of California. If nests are found, an avoidance buffer of up to 300 feet for raptors and up to 100 feet for non-raptors (dependent upon the species, the proposed work activity, and existing disturbances associated with land use outside of the workspace) should be determined and demarcated by the biologist with construction fencing, flagging, or other means to mark the boundary. Intrusion into the buffer may be conducted at the discretion of the biologist.

Sensitive Natural Communities and Riparian Habitat

The proposed project would have a significant effect on biological resources if it would:

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

No CDFW-listed sensitive natural communities or riparian habitat are present within the BSA. Therefore, no impacts to sensitive natural communities or riparian habitat would occur.

Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

- c) Have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) through direct removal, filling, hydrological interruption, or other means.



No jurisdictional wetlands or waters occur within the BSA; therefore, no impacts to federally or state protected wetlands would occur.

Wildlife Movement and Native Wildlife Nursery Sites

The proposed project would have a significant effect on biological resources if it would:

- 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.

No corridors for wildlife movement occur within the BSA, and the project site is surrounded by developed residential and agricultural areas. In addition, no native wildlife nursery sites are present within the BSA. Therefore, no impacts to wildlife movement corridors or nursery sites would occur.

Local Policies and Ordinance

The proposed project would have a significant effect on biological resources if it would:

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

No trees are proposed for removal as part of the proposed project. In addition, the project site is comprised of properties designated Residential Multi-family by the County of San Luis Obispo and public rights-of-way and is developed with residential land uses and roadways. Therefore, the tree permitting requirements of San Luis Obispo County Code Chapter 22.56 are not expected to apply to the proposed project. Accordingly, the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and no impact would occur.

Habitat Conservation Plan

The proposed project would have a significant effect on biological resources if it would:

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

The BSA is not within the jurisdiction of any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no conflicts with state, regional, or local habitat conservation plans would occur.

Thank you for the opportunity to work with you on this project. Please contact Samantha Kehr at skehr@rinconconsultants.com or Alex Hunt at ahunt@rinconconsultants.com if you have questions concerning the contents of this report.



Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "Samantha Kehr".

Samantha Kehr, B.S.
Senior Biologist

A handwritten signature in black ink, appearing to read "Alex Hunt".

Alex Hunt, M.S.
Director, Natural Resources

Attachments

- Attachment 1 Figures
- Attachment 2 Representative Site Photographs
- Attachment 3 Special-Status Species Evaluation Tables



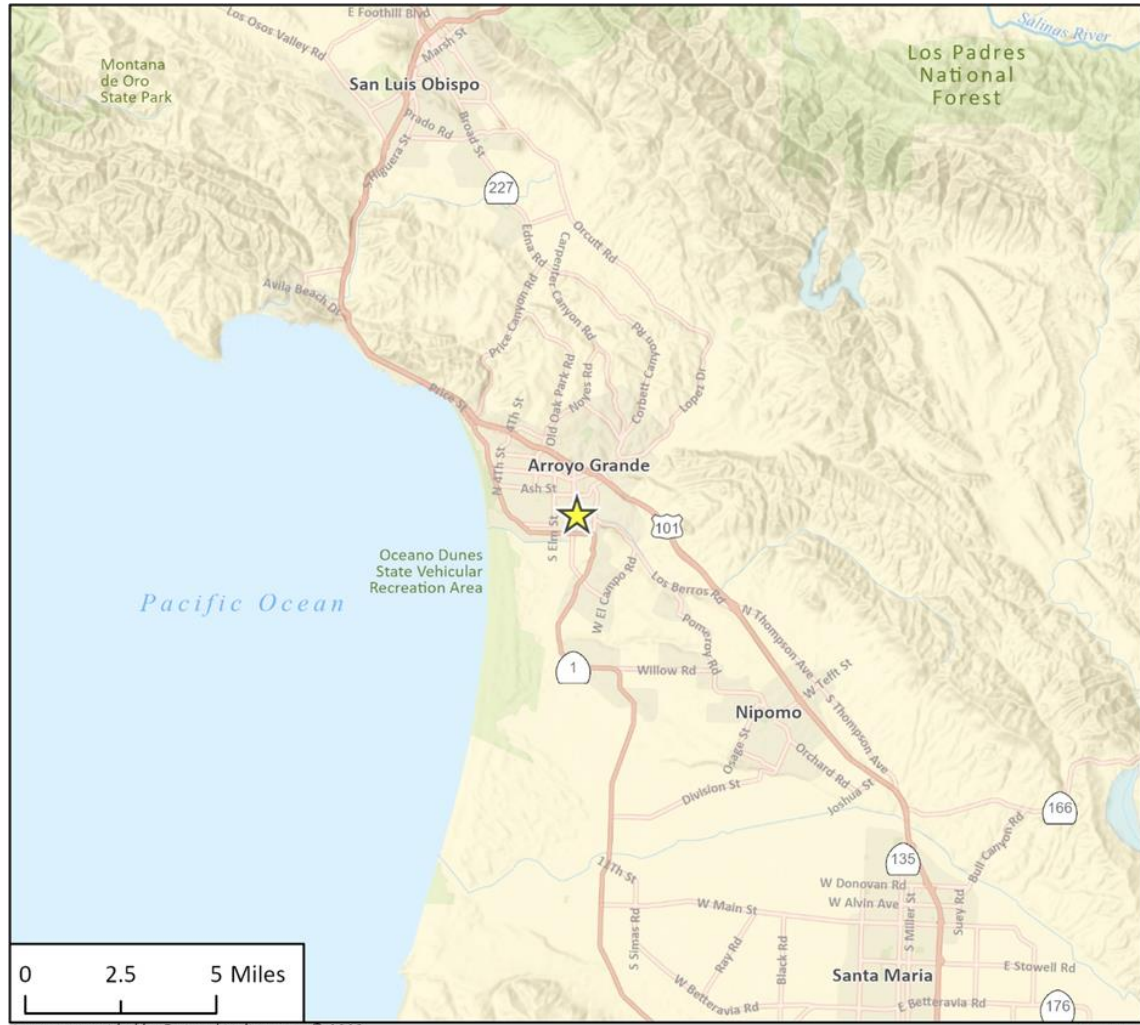
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Attachment 1

Figures

Figure 1 Regional Location



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★ Project Location

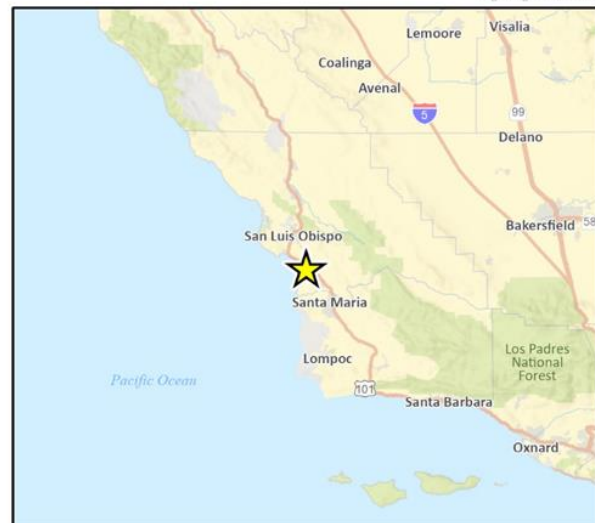
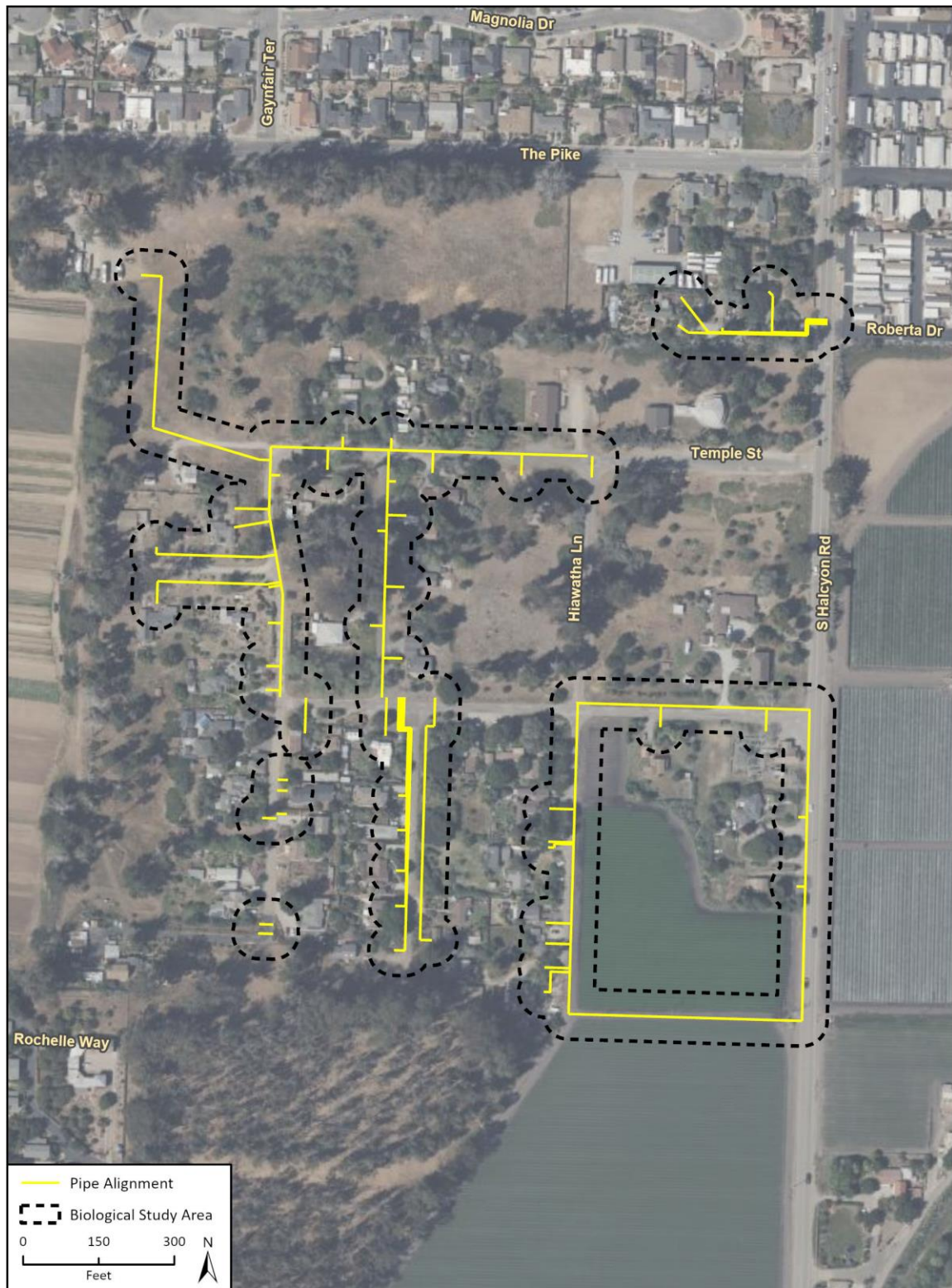


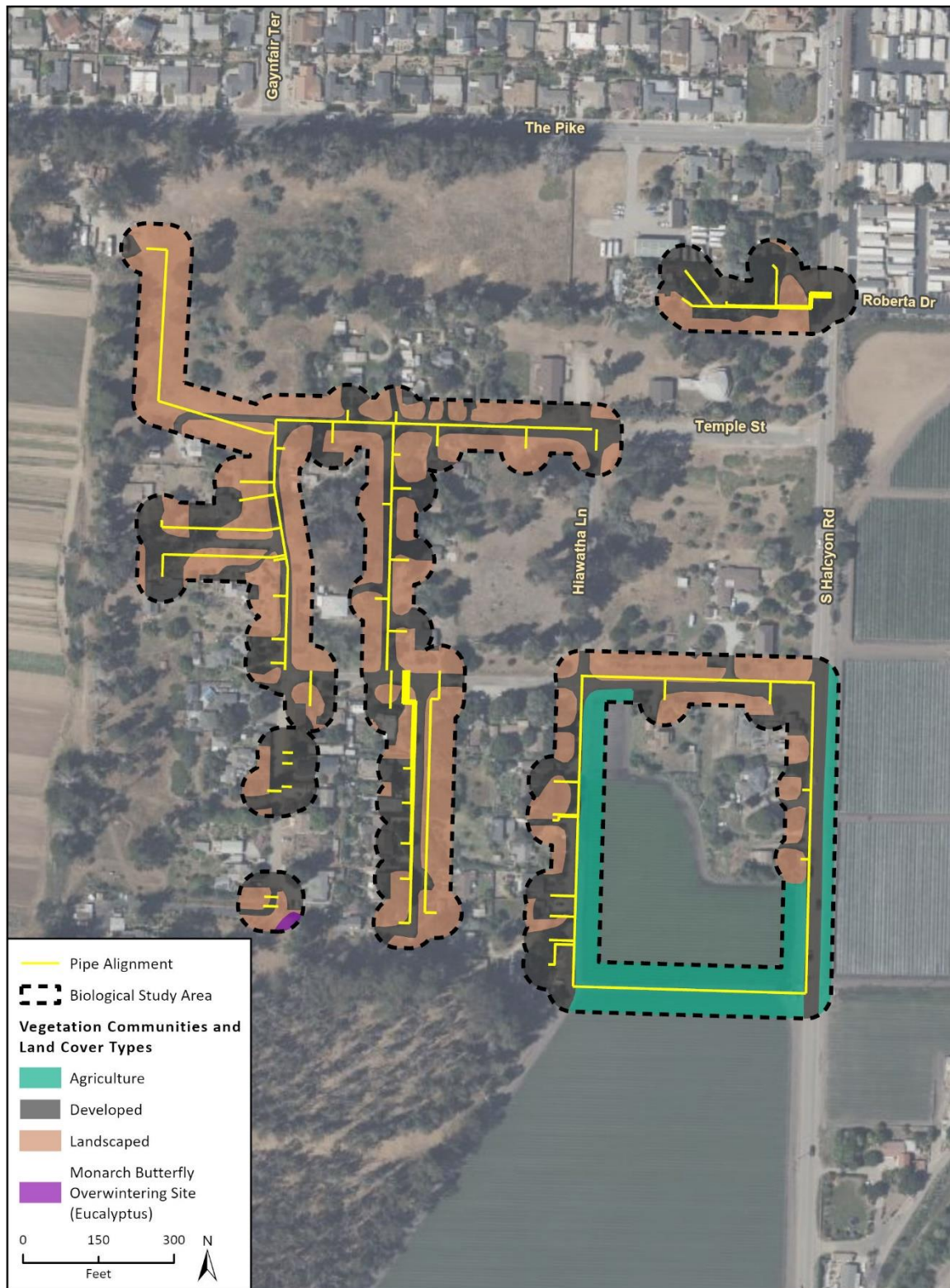
Figure 2 Biological Study Area



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22-12532.BIO
Fig 2 Biological Study Area

Figure 3 Vegetation and Land Cover



Imagery provided by Microsoft Bing and its licensors © 2025.

22-12532.B10
Fig 3 Vegetation Communities and Land Cover Types

Attachment 2

Representative Site Photographs



Photograph 1. The Biological Study Area (BSA) within South Halcyon Road, facing north.



Photograph 2. The BSA at the west end of Temple Street, crossing an open field, facing northwest.



Photograph 3. The BSA at the north end of Dower Avenue, facing south.



Photograph 4. The BSA at the east end of Ross Lane, facing west.



Photograph 5. The BSA at the south end of Helena Street, facing south.



Photograph 6. The BSA at the south end of Dower Avenue, at the monarch butterfly overwintering site (eucalyptus on the left), facing west.



Photograph 7. The monarch butterfly overwintering site south of the BSA at Helena Street, facing south.



Photograph 8. Agriculture within the BSA east of Hiawatha Lane, facing southeast



Photograph 9. The BSA at La Due Street and Hiawatha Lane, facing east.



Photograph 10. The BSA at Temple Street and Hiawatha Lane, facing north

Attachment 3

Special-Status Species Evaluation Tables



Special-Status Plant and Lichen Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Agrostis hooveri</i> Hoover's bent grass	None/None G2/S2 1B.2	Perennial herb. Chaparral, cismontane woodland, closed-cone coniferous forest, valley and foothill grassland. Sandy (usually). Elevations: 20-2000 ft. (6-610 m.) Blooms Apr-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Aphanisma blitoides</i> aphanisma	None/None G3G4/S2 1B.2	Annual herb. Coastal bluff scrub, coastal dunes, coastal scrub. Gravelly (sometimes), sandy (sometimes). Elevations: 5-1000 ft. (1-305 m.) Blooms Feb-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arctostaphylos luciana</i> Santa Lucia manzanita	None/None G2/S2 1B.2	Perennial evergreen shrub. Chaparral, cismontane woodland. Shale. Elevations: 1150-2790 ft. (350-850 m.) Blooms Dec-Mar.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arctostaphylos pechoensis</i> Pecho manzanita	None/None G2/S2 1B.2	Perennial evergreen shrub. Chaparral, closed-cone coniferous forest, coastal scrub. Grows on siliceous shale with other chaparral associates. Elevations: 410-2790 ft. (125-850 m.) Blooms Nov-Mar.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arctostaphylos pilosula</i> Santa Margarita manzanita	None/None G2?/S2? 1B.2	Perennial evergreen shrub. Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest. Sandstone (sometimes). Elevations: 245-3610 ft. (75-1100 m.) Blooms Dec-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arctostaphylos purissima</i> La Purisima manzanita	None/None G2/S2 1B.1	Perennial evergreen shrub. Chaparral, coastal scrub. Sandstone outcrops, sandy soil. Elevations: 195-1280 ft. (60-390 m.) Blooms Nov-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arctostaphylos rudis</i> sand mesa manzanita	None/None G2/S2 1B.2	Perennial evergreen shrub. Chaparral, coastal scrub. Sandy. Elevations: 80-1055 ft. (25-322 m.) Blooms Nov-Feb.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Arenaria paludicola</i> marsh sandwort	FE/SCE G1/S1 1B.1	Perennial stoloniferous herb. Marshes and swamps. Openings, sandy. Elevations: 10-560 ft. (3-170 m.) Blooms May-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Calochortus obispoensis</i> San Luis mariposa-lily	None/None G2/S2 1B.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Serpentine (often). Elevations: 165-2395 ft. (50-730 m.) Blooms May-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Calochortus simulans</i> La Panza mariposa-lily	None/None G2/S2 1B.3	Perennial bulbiferous herb. Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Granitic (often), sandy, serpentinite (sometimes). Elevations: 1065-3775 ft. (325-1150 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Carex obispoensis</i> San Luis Obispo sedge	None/None G3?/S3? 1B.2	Perennial cespitose herb. Chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. Elevations: 35-2690 ft. (10-820 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Castilleja densiflora obispoensis</i> San Luis Obispo owl's-clover	None/None G5T2/S2 1B.2	Annual herb (hemiparasitic). Meadows and seeps, valley and foothill grassland. Serpentine (sometimes). Elevations: 35-1410 ft. (10-430 m.) Blooms Mar-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Ceanothus impressus</i> var. <i>impressus</i> Santa Barbara ceanothus	None/None G3T3/S3 1B.2	Perennial shrub. Chaparral. Sandy. Elevations: 130-1540 ft. (40-470 m.) Blooms Feb-Apr.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Ceanothus impressus</i> var. <i>nipomensis</i> Nipomo Mesa ceanothus	None/None G3T2/S2 1B.2	Perennial shrub. Chaparral. Sandy. Elevations: 100-805ft. (30-245m.) Blooms Feb-Apr.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	None/None G3T2/S2 1B.1	Annual herb. Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. Elevations: 0-755 ft. (0-230 m.) Blooms May-Oct(Nov).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Chenopodium littoreum</i> coastal goosefoot	None/None G1/S1 1B.2	Annual herb. Coastal dunes. Generally on sandy soils, and on dunes. Elevations: 35-100 ft. (10-30 m.) Blooms Apr-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Chlorogalum pomeridianum</i> var. <i>minus</i> dwarf soaproot	None/None G5T3/S3 1B.2	Perennial bulbiferous herb. Chaparral. Serpentine. Elevations: 1000-3280 ft. (305-1000 m.) Blooms May-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Chorizanthe aphanantha</i> Irish Hills spineflower	None/None G1/S1 1B.1	Annual herb. Chaparral, coastal scrub. Gravelly, rocky, serpentinite. Elevations: 330-1215 ft. (100-370 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Chorizanthe breweri</i> Brewer's spineflower	None/None G3/S3 1B.3	Annual herb. Chaparral, cismontane woodland, closed-cone coniferous forest, coastal scrub. Gravelly (sometimes), rocky (sometimes), serpentinite. Elevations: 150-2625 ft. (45-800 m.) Blooms Apr-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Cirsium fontinale</i> var. <i>obispoense</i> Chorro Creek bog thistle	FE/SCE G2T2/S2 1B.2	Perennial herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Drainages, seeps, serpentinite. Elevations: 115-1265 ft. (35-385 m.) Blooms Feb-Jul(Aug-Sep).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Cirsium occidentale</i> var. <i>compactum</i> compact cobwebby thistle	None/None G3G4T2/S2 1B.2	Perennial herb. Chaparral, coastal dunes, coastal prairie, coastal scrub. On dunes and on clay in chaparral; also in grassland. Elevations: 15-490 ft. (5-150 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Cirsium rhotophilum</i> surf thistle	None/SCT G1/S1 1B.2	Perennial herb. Coastal bluff scrub, coastal dunes. Open areas in central dune scrub; usually in coastal dunes. Elevations: 10-195 ft. (3-60 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Cirsium scariosum</i> var. <i>loncholepis</i> La Graciosa thistle	FE/SCT G5T1/S1 1B.1	Perennial herb. Cismontane woodland, coastal dunes, coastal scrub, marshes and swamps, valley and foothill grassland. Mesic, sandy. Elevations: 15-720 ft. (4-220 m.) Blooms May-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Cladium californicum</i> California saw-grass	None/None G4/S2 2B.2	Perennial rhizomatous herb. Marshes and swamps, meadows and seeps. Freshwater or alkaline moist habitats. Elevations: 195-5250ft. (60-1600m.) Blooms Jun-Sep.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Clarkia speciosa</i> ssp. <i>immaculata</i> Pismo clarkia	FE/SCR G4T1/S1 1B.1	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Sandy. Elevations: 80-605 ft. (25-185 m.) Blooms May-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Deinandra increscens</i> ssp. <i>villosa</i> Gaviota tarplant	FE/SCE G3T2/S2 1B.1	Annual herb. Coastal bluff scrub, coastal scrub, valley and foothill grassland. Known from coastal terrace near Gaviota; sandy blowouts amid sandy loam soil; grassland/coast scrub ecotone. Elevations: 65-1410 ft. (20-430 m.) Blooms May-Oct.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i> dune larkspur	None/None G4T2/S2 1B.2	Perennial herb. Chaparral, coastal dunes. On rocky areas and dunes. Elevations: 0-655 ft. (0-200 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Delphinium parryi</i> ssp. <i>eastwoodiae</i> Eastwood's larkspur	None/None G4T2/S2 1B.2	Perennial herb. Chaparral, valley and foothill grassland. Serpentine. Openings. Elevations: 245-1640 ft. (75-500 m.) Blooms (Feb)Mar-Apr.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Delphinium umbraculorum</i> umbrella larkspur	None/None G3/S3 1B.3	Perennial herb. Chaparral, cismontane woodland. Mesic sites. Elevations: 1310-5250 ft. (400-1600 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Dithyrea maritima</i> beach spectaclepod	None/SCT G1/S1 1B.1	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Sea shores, on sand dunes, and sandy places near the shore. Elevations: 10-165 ft. (3-50 m.) Blooms Mar-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Dudleya abramsii</i> ssp. <i>bettinae</i> Betty's dudleya	None/None G4T2/S2 1B.2	Perennial herb. Chaparral, coastal scrub, valley and foothill grassland. On rocky, barren exposures of serpentine within scrub vegetation. Elevations: 65-590 ft. (20-180 m.) Blooms May-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Dudleya abramsii</i> ssp. <i>murina</i> mouse-gray dudleya	None/None G4T2/S2 1B.1	Perennial leaf. Chaparral, cismontane woodland, valley and foothill grassland. Serpentine outcrops. Elevations: 295-1725 ft. (90-525 m.) Blooms May-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	None/None G3T2/S2 1B.1	Perennial herb. Chaparral, coastal bluff scrub, coastal scrub, valley and foothill grassland. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. Elevations: 15-1475 ft. (5-450 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Erigeron blochmaniae</i> Blochman's leafy daisy	None/None G2/S2 1B.2	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Sand dunes and hills. Elevations: 10-150 ft. (3-45 m.) Blooms Jun-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Eriodictyon altissimum</i> Indian Knob mountainbalm	FE/SCE G1/S1 1B.1	Perennial evergreen shrub. Chaparral, cismontane woodland, coastal scrub. Ridges in open, disturbed areas within chaparral on Pismo sandstone. Elevations: 260-885 ft. (80-270 m.) Blooms Mar-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Eryngium aristulatum</i> var. <i>hooveri</i> Hoover's button-celery	None/None G5T1/S1 1B.1	Annual/perennial herb. Vernal pools. Alkaline depressions, vernal pools, roadside ditches and other wet places near the coast. Elevations: 10-150 ft. (3-45 m.) Blooms (Jun) Jul (Aug).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Erythranthe serpentinicola</i> Irish Hills monkeyflower	None/None G1/S1 1B.1	Chaparral (openings), meadows and seeps (edges). Serpentine, rocky, openings, mesic. 200-1200 ft. (60-360 m.) Blooms Feb-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Hesperocyparis macrocarpa</i> Monterey cypress	None/None G4T1/S1 1B.1	Perennial evergreen tree. Closed-cone coniferous forest. Granitic soils. Elevations: 35-100 ft. (10-30 m.)	Not Expected	No natural vegetation communities or suitable habitats are present. Landscaped individuals are present within the BSA, but naturally occurring stands were not observed.
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	None/None G4T1?/S1? 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. Elevations: 230-2660 ft. (70-810 m.) Blooms Feb-Jul(Sep).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Horkelia cuneata</i> var. <i>sericea</i> Kellogg's horkelia	None/None G2/S2 1B.2	Perennial herb. Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. Elevations: 35-655 ft. (10-200 m.) Blooms Apr-Sep.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Layia erubescens</i> blushing layia	None/None G2/S2 1B.2	Coastal dunes, Coastal scrub. Openings, Sandy 10-245m. Blooms (Feb)Mar-May(Jun).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Layia jonesii</i> Jones' layia	None/None G1/S1 1B.2	Annual herb. Chaparral, valley and foothill grassland. Clay soils and serpentine outcrops. Elevations: 15-1310 ft. (5-400 m.) Blooms Mar-May.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Lupinus ludovicianus</i> San Luis Obispo County lupine	FE/SCE G1/S1 1B.1	Perennial herb. Chaparral, cismontane woodland. Open areas in sandy soil, Santa Margarita formation. Elevations: 165-1725 ft. (50-525 m.) Blooms Apr-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Lupinus nipomensis</i> Nipomo Mesa lupine	None/None G1Q/S1 1B.1	Annual herb. Coastal dunes. Dry sandy flats, restricted to back dunes, associated with central dune scrub habitat - a rare community type. Elevations: 35-165 ft. (10-50 m.) Blooms Dec-May.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Malacothamnus gracilis</i> slender bush-mallow	None/None G1Q/S1 1B.1	Perennial deciduous shrub. Chaparral. Dry, rocky slopes. Elevations: 625-1885 ft. (190-575 m.) Blooms May-Oct.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Monardella palmeri</i> Palmer's monardella	None/None G2/S2 1B.2	Perennial rhizomatous herb. Chaparral, cismontane woodland. On serpentine, often found associated with Sargent cypress forests. Elevations: 655-2625 ft. (200-800 m.) Blooms Jun-Aug.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Monardella sinuata</i> ssp. <i>sinuata</i> southern curly-leaved monardella	None/None G3T2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, coastal dunes, coastal scrub. Sandy soils. Elevations: 0-985 ft. (0-300 m.) Blooms Apr-Sep.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Monardella undulata</i> ssp. <i>crispa</i> crisp monardella	None/None G3T2/S2 1B.2	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Often on the borders of open, sand areas, usually adjacent to typical backdune scrub vegetation. Elevations: 35-395 ft. (10-120 m.) Blooms Apr-Aug (Dec).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Monardella undulata</i> ssp. <i>undulata</i> San Luis Obispo monardella	None/None G2/S2 1B.2	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Stabilized sand of the immediate coast. Elevations: 35-655 ft. (10-200 m.) Blooms May-Sep.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Muhlenbergia utilis</i> aparejo grass	None/None G4/S2S3 2B.2	Perennial rhizomatous herb. Chaparral, cismontane woodland, coastal scrub, marshes and swamps, meadows and seeps. Alkaline (sometimes), Serpentinite (sometimes). Elevations: 80-7630 ft. (25-2325 m.) Blooms Mar-Oct.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Nasturtium gambelii</i> Gambel's water cress	FE/SCT G1/S1 1B.1	Perennial rhizomatous herb. Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Elevations: 15-1085 ft. (5-330 m.) Blooms Apr-Oct.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Nemacaulis denudata</i> var. <i>denudata</i> coast woolly-heads	None/None G3G4T2/S2 1B.2	Annual herb. Coastal dunes. Elevations: 0-330 ft. (0-100 m.) Blooms Apr-Sep.	Not Expected	No natural vegetation communities or suitable habitats are present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Nemacladus secundiflorus</i> var. <i>robbinsii</i> Robbins' nemacladus	None/None G3T2/S2 1B.2	Annual herb. Chaparral, valley and foothill grassland. Dry, sandy or gravelly slopes. Openings. Elevations: 1150-5580ft. (350-1700 m.) Blooms Apr-Jun.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Scrophularia atrata</i> black-flowered figwort	None/None G2?/S2? 1B.2	Perennial herb. Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub, riparian scrub. Sand, diatomaceous shales, and soils derived from other parent material; around swales and in sand dunes. Elevations: 35-1640 ft. (10-500 m.) Blooms Mar-Jul.	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Senecio aphanactis</i> chaparral ragwort	None/None G3/S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625 ft. (15-800 m.) Blooms Jan-Apr(May).	Not Expected	No natural vegetation communities or suitable habitats are present.
<i>Symphyotrichum defoliatum</i> San Bernardino aster	None/None G2/S2 1B.2	Perennial rhizomatous herb. Cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, meadows and seeps, valley and foothill grassland. Vernal mesic grassland or near ditches, streams and springs; disturbed areas. Elevations: 5-6695 ft. (2-2040 m.) Blooms Jul-Nov.	Not Expected	No natural vegetation communities or suitable habitats are present.

ESA = federal Endangered Species Act; CESA = California Endangered Species Act; BSA = Biological Study Area; ft. = feet; m. = meter

Regional Vicinity refers to within a nine-quad search radius of site. (Quadrangles are topographic maps that cover land only. Although a quadrangle is typically surrounded by nine other quadrangles, in areas near the ocean, there are often fewer than nine surrounding quadrangles because there are no quadrangles for areas within the ocean. In this case an eight-quad search was conducted.)

Status (Federal/State)

FE = Federal Endangered
FT = Federal Threatened
SE = State Endangered
ST = State Threatened
SR = State Rare

CRPR (California Native Plant Society California Rare Plant Rank)

1B = Rare, Threatened, or Endangered in California and elsewhere
2B = Rare, Threatened, or Endangered in California, but more common elsewhere

CRPR Threat Code Extension

.1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
.2 = Moderately threatened in California (20 to 80% of occurrences threatened/moderate degree and immediacy of threat)
.3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Other Statuses

G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)



Scientific Name Common Name		Status ESA/CESA Global/State Rank CRPR	Habitat Requirements	Potential to Occur	Rationale
G3 or S3		Vulnerable to extirpation or extinction Globally or Subnationally (state)			
G4/5 or S4/5		Apparently secure, common and abundant			
Additional notations may be provided as follows					
T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)					
Q – Questionable taxonomy that may reduce conservation priority					
? – Inexact numeric rank					



Special-Status Wildlife Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
Invertebrates				
<i>Bombus occidentalis</i> western bumble bee	None/SCE G3/S1	Once common and widespread, species has declined precipitously from central California to southern British Colombia (Canada), perhaps from disease.	Low Potential	Flowering plants are present; however, paved roads, driveways, and gravel pullouts are not suitable habitat for bee colonies, and no beehives were observed.
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT/None G3/S3	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Not Expected	Vernal pool aquatic habitats are not present.
<i>Danaus plexippus plexippus</i> pop. 1 monarch - California overwintering population	FPT/None G4T1T2Q/S2	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Presumed Present	There is a known overwintering site at the south end of the project site, in a stand of eucalyptus trees, between Helena Street and Dower Avenue (#252, CDFW 2024a). There is also an overwintering site (autumnal) near the corner of Hiawatha Lane (#251, CDFW 2024a) and south of The Pike (#249, CDFW2014a).
Fish				
<i>Eucyclogobius newberryi</i> tidewater goby	FE/None G3/S3	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Not Expected	Brackish water habitats are not present.
<i>Gila orcuttii</i> arroyo chub	None/None G2/S2 SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Not Expected	Aquatic habitats are not present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Oncorhynchus mykiss irideus</i> pop. 9 steelhead - south-central California coast distinct population segment	FT/None G5T2Q/S2 SSC	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	Not Expected	Aquatic habitats are not present.
Amphibians				
<i>Ambystoma californiense</i> pop. 2 California tiger salamander - Santa Barbara County distinct population segment	FE/ST G2G3T2/S2 WL	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Not Expected	Suitable upland and aquatic habitats are not present.
<i>Rana boylei</i> pop. 6 foothill yellow-legged frog - south coast distinct population segment	FPE/SE G3T1/S1	Southern Coast Ranges from Monterey Bay south through San Gabriel Mountains; west of the Salinas River in Monterey County, south through Transverse Ranges, and east through San Gabriel Mountains. Historically may have ranged to Baja California. Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	Not Expected	Aquatic habitats are not present.
<i>Rana draytonii</i> California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not Expected	Aquatic freshwater habitats are not present, and the BSA is isolated by development.
<i>Spea hammondi</i> western spadefoot	None/None G2G3/S3S4 SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Not Expected	Suitable upland and aquatic habitats are not present.
<i>Taricha torosa</i> Coast Range newt	None/None G4/S4 SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate over 1 km to breed in ponds, reservoirs, and slow-moving streams.	Not Expected	Suitable upland and aquatic habitats are not present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
Reptiles				
<i>Anniella pulchra</i> Northern California legless lizard	None/None G3/S2S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Low Potential	Marginal habitat with sandy soils may be present in the project vicinity, however the BSA is isolated by development.
<i>Emys marmorata</i> western pond turtle	FPT/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not Expected	Aquatic habitats with aquatic vegetation are not present, and the BSA is isolated by development.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G4/S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Not Expected	Natural habitats with sandy soils are not present, and the BSA is isolated by development.
<i>Thamnophis hammondi</i> two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Not Expected	Aquatic habitats with aquatic vegetation are not present, and the BSA is isolated by development.
Birds				
<i>Accipiter striatus</i> sharp-shinned hawk	None/None G5/S4 WL	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.	Not Expected	Woodland habitats with riparian trees suitable for nesting are not present.
<i>Agelaius tricolor</i> tricolored blackbird	None/ST G1G2/S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not Expected	Aquatic habitats with emergent vegetation are not present.
<i>Athene cunicularia</i> burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not Expected	Suitable grassland habitats are not present, and the BSA is isolated by development from open dry habitat.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Buteo swainsoni</i> Swainson's hawk	None/ST G5/S4	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Not Expected	Woodland and grassland habitats with large trees suitable for nesting are not present.
<i>Charadrius nivosus nivosus</i> western snowy plover	FT/None G3T3/S3 SSC	Sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	Not Expected	Suitable sandy beaches and shores are not present.
<i>Circus hudsonius</i> northern harrier	None/None G5/S3 SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienegas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Not Expected	Natural habitats suitable for foraging are not present.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT/SE G5T2T3/S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not Expected	Natural riparian habitats suitable for nesting and foraging are not present.
<i>Elanus leucurus</i> white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Not Expected	Open habitat with small mammal burrows and suitable nest trees is not present.
<i>Falco mexicanus</i> prairie falcon	None/None G5/S4 WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Not Expected	Natural habitats suitable for foraging and cliffs for nesting are not present.
<i>Gymnogyps californianus</i> California condor	FE/SE G1/S2 FP	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	Not Expected	Natural habitats suitable for foraging and cliffs for nesting are not present.
<i>Laterallus jamaicensis coturniculus</i> California black rail	None/ST G3T1/S2 FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Not Expected	Aquatic habitats with emergent vegetation are not present.



Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Sternula antillarum browni</i> California least tern	FE/SE G4T2T3Q/S2 FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, land fills, or paved areas.	Not Expected	Natural habitats suitable for foraging and sandy beaches for nesting are not present.
Mammals				
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	"None/None G4/S2 SSC"	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls & ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.	Not Expected	Natural habitats with suitable for roosting structures and cavities are not present.
<i>Taxidea taxus</i> American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not Expected	Natural, dry, open grassland habitats are not present, and the BSA is isolated by development from open grasslands.
ESA = federal Endangered Species Act; CESA = California Endangered Species Act; ft. = feet; km = kilometer Regional Vicinity refers to within a nine-quad search radius of site (Quadrangles are topographic maps that cover land only. Although a quadrangle is typically surrounded by nine other quadrangles, in areas near the ocean, there are often fewer than nine surrounding quadrangles because there are no quadrangles for areas within the ocean. In this case an eight-quad search was conducted).				
Status (Federal/State) FE = Federal Endangered FT = Federal Threatened FPE = Federal Proposed Endangered SE = State Endangered ST = State Threatened SCE = State Candidate Endangered SSC = CDFW Species of Special Concern FP = CDFW Fully Protected WL = CDFW Watch List				



Scientific Name Common Name	Status ESA/CESA Global/State Rank CDFW	Habitat Requirements	Potential to Occur	Rationale
Other Statutes				
G1 or S1	Critically Imperiled Globally or Subnationally (state)			
G2 or S2	Imperiled Globally or Subnationally (state)			
G3 or S3	Vulnerable to extirpation or extinction Globally or Subnationally (state)			
G4/5 or S4/5	Apparently secure, common and abundant			
Additional notations may be provided as follows.				
T –	Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)			
Q –	Questionable taxonomy that may reduce conservation priority			

Appendix C

Energy Calculations

Ken-Mar Gardens, Halcyon, Halcyon Estates, and Grande Mobile Manor Consolidations Project

Last Updated: 7/26/2024

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
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Values above are expressed in gallons per horsepower-hour/BSFC.

Construction Equipment	#	CONSTRUCTION EQUIPMENT		Load Factor	Construction Phase	Fuel Used (gallons)
		Hours per Day	Horsepower			
Aerial Lifts	1	8	46	0.31	Halcyon Grubbing/Land Clearing	429
Tractors/Loaders/Backhoes	1	8	84	0.37	Halcyon Grubbing/Land Clearing	935
Skid Steer Loaders	1	8	71	0.37	Halcyon Grubbing/Land Clearing	790
Sweepers/Scrubbers	1	8	36	0.46	Halcyon Grubbing/Land Clearing	498
Tractors/Loaders/Backhoes	1	8	84	0.37	Ken-Mar Grubbing/Land Clearing	628
Concrete/Industrial Saws	1	8	33	0.73	Ken-Mar Grubbing/Land Clearing	487
Forklifts	1	8	82	0.2	Ken-Mar Grubbing/Land Clearing	332
Aerial Lifts	1	8	46	0.31	Halcyon Grading/Excavation	282
Tractors/Loaders/Backhoes	1	8	84	0.37	Halcyon Grading/Excavation	614
Concrete/Industrial Saws	1	8	33	0.73	Halcyon Grading/Excavation	476
Dumpers/Tenders	1	8	16	0.38	Halcyon Grading/Excavation	120
Skid Steer Loaders	1	8	71	0.37	Halcyon Grading/Excavation	519
Sweepers/Scrubbers	1	8	36	0.46	Halcyon Grading/Excavation	327
Tractors/Loaders/Backhoes	1	8	84	0.37	Ken-Mar Grading/Excavation	511
Concrete/Industrial Saws	1	8	33	0.73	Ken-Mar Grading/Excavation	396
Aerial Lifts	1	8	46	0.31	Halcyon Drainage/Utilities/Sub-Grade	1,314
Tractors/Loaders/Backhoes	2	8	84	0.37	Halcyon Drainage/Utilities/Sub-Grade	5,728
Concrete/Industrial Saws	1	8	33	0.73	Halcyon Drainage/Utilities/Sub-Grade	2,220
Dumpers/Tenders	1	8	16	0.38	Halcyon Drainage/Utilities/Sub-Grade	560
Excavators	1	8	36	0.38	Halcyon Drainage/Utilities/Sub-Grade	1,261
Skid Steer Loaders	1	8	71	0.37	Halcyon Drainage/Utilities/Sub-Grade	2,421
Sweepers/Scrubbers	1	8	36	0.46	Halcyon Drainage/Utilities/Sub-Grade	1,526
Tractors/Loaders/Backhoes	2	8	84	0.37	Ken-Mar Drainage/Utilities/Sub-Grade	2,455
Concrete/Industrial Saws	1	8	33	0.73	Ken-Mar Drainage/Utilities/Sub-Grade	951
Plate Compactors	1	8	8	0.43	Ken-Mar Drainage/Utilities/Sub-Grade	136
Aerial Lifts	1	8	46	0.31	Halcyon Paving	429
Tractors/Loaders/Backhoes	2	8	84	0.37	Halcyon Paving	1,870
Concrete/Industrial Saws	1	8	33	0.73	Halcyon Paving	725
Dumpers/Tenders	1	8	16	0.38	Halcyon Paving	183
Excavators	1	8	36	0.38	Halcyon Paving	412
Pavers	1	8	81	0.42	Halcyon Paving	1,024
Paving Equipment	1	8	89	0.36	Halcyon Paving	964
Rollers	1	8	36	0.38	Halcyon Paving	412

Skid Steer Loaders	1	8	71	0.37	Halcyon Paving	790
Sweepers/Scrubbers	1	8	36	0.46	Halcyon Paving	498
Tractors/Loaders/Backhoes	2	8	84	0.37	Ken-Mar Paving	1,198
Concrete/Industrial Saws	1	8	33	0.73	Ken-Mar Paving	464
Plate Compactors	1	8	8	0.43	Ken-Mar Paving	66
Pavers	1	8	81	0.42	Ken-Mar Paving	656
Paving Equipment	1	8	89	0.36	Ken-Mar Paving	618
Total Fuel Used						36,223 (Gallons)

Construction Phase	Days of Operation
Halcyon Grubbing/Land Clearing	64
Ken-Mar Grubbing/Land Clearing	43
Halcyon Grading/Excavation	42
Ken-Mar Grading/Excavation	35
Halcyon Drainage/Utilities/Sub-Grade	196
Ken-Mar Drainage/Utilities/Sub-Grade	84
Halcyon Paving	64
Ken-Mar Paving	41
Total Days	569

WORKER TRIPS				
Constuction Phase	MPG [2]	Trips per day (one way)	Trip Length (miles)	Fuel Used (gallons)
Halcyon Grubbing/Land Clearing	24.8	15	8.1	627.10
Ken-Mar Grubbing/Land Clearing	24.8	13	8.1	365.15
Halcyon Grading/Excavation	24.8	20	8.1	548.71
Ken-Mar Grading/Excavation	24.8	10	8.1	228.63
Halcyon Drainage/Utilities/Sub-Grade	24.8	25	8.1	3200.81
Ken-Mar Drainage/Utilities/Sub-Grade	24.8	15	8.1	823.06
Halcyon Paving	24.8	33	8.1	1379.61
Ken-Mar Paving	24.8	20	8.1	535.65
Total				7,708.72

HAULING AND VENDOR TRIPS				
Trip Class	MPG [2]	Trips per day (one way)	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Halcyon Drainage/Utilities/Sub-Grade	7.9	1	20.0	992.41
Ken-Mar Drainage/Utilities/Sub-Grade	7.9	1	20.0	425.32
Total				1,417.72
VENDOR TRIPS				
Halcyon Grading/Excavation	7.9	2	6.9	146.73
Ken-Mar Grading/Excavation	7.9	2	6.9	122.28
Total				269.01

Total Gasoline Consumption (gallons)	7,709
Total Diesel Consumption (gallons)	37,909

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2*. September. Available at: <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1013KWQ.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2024. *National Transportation Statistics*. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.