

## 4.7 GEOLOGY AND SOILS

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 4.7.1 Environmental Setting

The following background setting information focuses on the existing topography of the project site, the underlying bedrock, and site seismicity, as well as the general conditions and expansiveness of the onsite soils. A Geotechnical Investigation dated February 5, 2020, was prepared for the project site by Rockridge Geotechnical (Appendix G).

The City is located in the Coast Range geomorphic province of California, a relatively geologically young and seismically-active region on the western margin of the North American plate. The Coast Range is composed of mountain ranges and valleys that trend northwest, subparallel to the San Andreas Fault. The Coast Range is composed of thick Mesozoic and Cenozoic sedimentary strata that dip beneath the alluvium of the Great Valley to the

east. To the west is the Pacific Ocean; the coastline is uplifted, terraced, and wave-cut. The northern and southern ranges are separated by a depression containing the San Francisco Bay. West of the San Andreas is the Salinian Block, a granitic core extending from the southern extremity of the Coast Ranges to the north of the Farallon Islands.

The Alquist-Priolo Special Studies Zone Act of December 1972 (AP Zone Act) regulates development near active faults to mitigate the hazard of surface fault rupture. The AP Zone Act requires that the State Geologist (Chief of the California Department of Mines and Geology [CDMG]) delineates “special study zones” along known active faults in California. Cities and counties affected by these zones must regulate certain development projects within these zones. The AP Zone Act prohibits the development of structures for human occupancy across the faults displaced during the last 11,000 years. “Potentially” active faults are those that show evidence of surface displacement during the last 1.6 million years. A fault may be presumed to be inactive based on satisfactory geologic evidence; however, the evidence necessary to prove inactivity is sometimes difficult to obtain and locally may not exist.

Seismic potential in the City is dominated by the nearby San Andreas and Gregorio Fault System, a complex of active faults, where moderate to strong earthquakes have been generated, which lies as close as 4.4 miles southwest of the project site. The faults that comprise this system are typified by right-lateral, strike-slip movement. Other active earthquake faults in the region include the Hayward Fault, which lies roughly 13 miles east of the project site across the San Francisco Bay, and the Serra Fault, which passes as close as 3 miles to the southwest. Based on maps published by the California Geological Survey, the only Alquist-Priolo Earthquake Fault Zone that has been mapped in the immediate vicinity of the project area is the zone that flanks the San Andreas Fault. This zone does not cross the project site (DOC 2010, Rockridge Geotechnical 2020).

According to the Geotechnical Investigation completed for the proposed project area, the overall probability of a magnitude 6.7 or greater earthquake on a fault in the greater Bay Area in the next 30 years is estimated at 72 percent. According to the General Plan EIR, the probability of a large earthquake on the San Andreas Fault—the fault responsible for the 1906 San Francisco earthquake and the 1989 Loma Prieta earthquake—in the next 30 years is about 21 percent. The expected earthquake intensity is between VII and X on the Modified Mercalli Intensity Scale for an earthquake magnitude of 7.2 on the San Andreas Fault. Earthquake resistance of any building is dependent upon an interaction of seismic frequency, intensity, and duration with the structure’s height, condition, and construction materials.

Soil properties can affect the construction and maintenance of roads, building foundations, and infrastructure. The General Plan EIR indicates that the Natural Resources Conservation Service (NRCS, formerly the Soil Conservation Service) has mapped over nine soil types in the City. The City may be susceptible to some soil hazards, such as erosion, shrink/swell potential (expansive soils), and subsidence. The project site is not located in, or within 20 miles of a landslide hazard area (California Geologic Service 2020).

According to the Geotechnical Investigation completed for the project site, the north portion of the project site is underlain by artificial fill with Pleistocene-age alluvium occurring along the northern most edge of the area. The south portion of the project site is underlain by Quaternary-age hillslope deposits (Rockridge Geotechnical 2020). The groundwater depth varies from 1 to 12 feet below ground surface (bgs) at the project site; however, for preliminary design purposes the Geotechnical Investigation recommends assuming groundwater may be encountered at about 4 bgs (Rockridge Geotechnical 2020).

### Paleontological Resources

The University of California Museum of Paleontology specimens list contains more than 300 localities where fossils have been found throughout San Mateo County. One such locality is located in the City at Mussel Rock; however,

exact locations of the fossils are not provided in order to protect the paleontological resources. Two fossilized plant species have been found in that location, including the *Pseudotsuga taxifolia* and *Pinus masonii* (City of Daly City 2012). Mussel Rock is located approximately 5 miles southwest of the project site.

## 4.7.2 Previous Environmental Analysis

### City of Daly City General Plan EIR Summary

Chapter 3.5 of the General Plan EIR discusses potential impacts on geology and soils. According to the General Plan EIR, part of the City is located within an Alquist-Priolo Earthquake Fault Hazard Zone, and as a result there is considerable risk of surface fault rupture within the City. Additionally, there is potential for soil erosion to increase during construction, and the threat of landslides also exists in the City. However, compliance with existing federal, state, and local laws, as well as policies contained in the General Plan would reduce potential impacts to less than significant levels.

The following General Plan policies are applicable to the proposed project:

- Policy SE-1.2:** Require site-specific geotechnical, soils, and foundation reports for development proposed on sites identified in the Safety Element and its Geologic and Hazard Maps as having moderate or high potential for ground failure.
- Policy SE-5.3:** Continue to analyze the significant seismic, geologic, and community-wide hazards as part of the environmental review process; require that mitigation measures be made as conditions of project approval.

### Plan Bay Area EIR Summary

#### Geology and Soils

Chapter 2.7 of the Plan Bay Area EIR evaluated potential impacts related to geology and soils. The Plan Bay Area EIR determined that all impacts related to geology and soils would be less than significant, and no mitigation measures were identified because there are existing federal, state, and local regulations and oversight in place that would effectively reduce the inherent hazards associated with these conditions to an acceptable level.

#### Paleontological Resources

Chapter 2.11 of the Plan Bay Area EIR discusses potential impacts related to paleontological resources that may result from implementation of the proposed Plan Bay Area. As discussed in the Plan Bay Area EIR, projects involving excavation, grading, or soil removal in previously undisturbed areas have the greatest likelihood to encounter these resources and result in a potentially significant impact. The Plan Bay Area EIR identifies Mitigation Measure 2.11-3 to reduce impacts related to paleontological resources to a less than significant level (Refer to Impact GEO-6 in Section 4.7.3, Project-Specific Analysis).

**PBA EIR MM 2.11-3:** *Implementing agencies and/or project sponsors shall implement measures where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:*

- *Before construction activities, project sponsors shall conduct a record search using an appropriate database, such as the UC Berkeley Museum of Paleontology to determine whether the project area has been previously surveyed and whether resources were identified.*

- *If record searches indicate that the project is located in an area likely to contain important paleontological, and/or geological resources, such as sedimentary rocks which have yielded significant terrestrial and other fossils, project sponsors shall retain a qualified paleontologist to train all construction personnel involved with earthmoving activities about the possibility of encountering fossils. The appearance and types of fossils likely to be seen during construction will be described. Construction personnel will be trained about the proper notification procedures should fossils be encountered.*
- *If paleontological resources are discovered during earthmoving activities, the construction crew will be directed to immediately cease work in the vicinity of the find and notify the implementing agencies and/or project sponsors. The project sponsor will retain a qualified paleontologist for identification and salvage of fossils so that construction delays can be minimized. The paleontologist will be responsible for implementing a recovery plan which could include the following:*
  - *in the event of discovery, salvage of unearthed fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster-jacketing of large and/or fragile specimens, or more elaborate quarry excavations of richly fossiliferous deposits;*
  - *recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting;*
  - *laboratory preparation (cleaning and repair) of collected fossil remains to a point of curation, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens;*
  - *cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;*
  - *transferal, for storage, of cataloged fossil remains to an appropriate repository, with consent of property owner;*
  - *preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection; and*
  - *project sponsors shall comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect paleontological or geologic resources.*

### 4.7.3 Project-Specific Analysis

**Impact GEO-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving:**

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
- ii) Strong seismic ground shaking?
- iii) Seismic-related ground failure, including liquefaction?
- iv) Landslides?

#### Impact Analysis

i) Fault Rupture

The project site is not located in a designated Alquist-Priolo Earthquake Fault Zone and there are no potentially active faults mapped within the site. The closest active faults to the project site include the San Andreas and San Gregorio faults which are over 4 miles southwest of the project site (Rockridge Geotechnical 2020). Therefore, the potential for damage to structures at the project site due to rupture of a known earthquake fault is low and impacts would be less than significant.

ii) Ground Shaking

The project site is in a seismically active region, and earthquake-related ground shaking is expected to occur during the designed life of the proposed project. Construction of the proposed project would be required to conform to the latest edition of the CBC, which includes engineering standards appropriate to withstand anticipated ground accelerations at the project site. Conformance with the earthquake design parameters of the CBC would be subject to City review as part of the building permit review process. Additionally, the proposed project would conform with all recommendations included in the Geotechnical Investigation and any future geotechnical investigations completed for the proposed project, as required by Mitigation Measure GEO-1. Specifically, due to underlying soils, Mitigation Measure GEO-1 would require a uniform support for the proposed structures within the project site. Soils underlying the portion of the site south of Midway Drive has moderate to high strength and low to moderate compressibility (Rockridge Geotechnical 2020). By placement of conventional spread footings bottomed on well-compacted fill and/or native soil, the new structures within the project area would be adequately supported. Therefore, with compliance with the CBC requirements and with implementation of Mitigation Measure GEO-1, which includes design measures included in the current and any subsequent geotechnical investigations, implementation of the proposed project would result in a less than significant impact related to ground shaking.

iii) Ground Failure, including Liquefaction

According to the Geotechnical Investigation, the project site is not susceptible to liquefaction or at risk for ground failure due to liquefaction or lateral spreading (Rockridge Geotechnical 2020). However, due to the underlying soils within the area, it is possible that if not properly accounted for in the project design, the underlying site soils could fail from ground shaking. As described above, the proposed project would be required to comply with the CBC specifications as well as Mitigation Measure GEO-1 which includes recommendations within the Geotechnical

Investigation related to stability of underlying soils within the project site. Therefore, the site soils would be adequately stabilized prior to the construction of the structures and potential impacts would be less than significant with mitigation incorporated.

iv) Landslides

The project site is slightly sloped from south to north within the project area. Elevation of the site ranges from approximately 8 feet above mean sea level (amsl) at the property line between the PG&E property and the Midway Village property (northern end) to approximately 100 feet amsl at the southern end of the project site along Martin Street. According to the Landslide Map Index prepared and managed by the California Department of Conservation – California Geological Survey, the project site is not located in, or within 20 miles of a landslide hazard area (California Geologic Service 2020). Therefore, the project would not be subject to seismically induced landslide hazards and no impact would occur.

**Level of Significance Before Mitigation**

Potentially Significant Impact.

**Mitigation Measures**

Mitigation Measure GEO-1 is required.

**MM GEO-1:** **Implement Geotechnical Design Recommendations.** Prior to issuance of grading permits, the Applicant shall incorporate all design specifications and recommendations contained within the Geotechnical Investigation into relevant project plans and specifications. This includes the recommendations in the current Preliminary Geotechnical Investigation (Rockridge Geotechnical 2020) and any subsequent geotechnical investigations or studies completed for the project. These specifications include, but are not limited to, foundation and settlement, imported soils, placement of support for structures through the use of footings or mats, use of concrete slab-on-grade floors, seismic design requirements, site preparation and grading, exterior concrete flatwork, drainage and landscaping, retaining walls, flexible pavement design, and use of portland cement concrete pavement. The project site plans shall be submitted to the City and reviewed as part of the building permit review process.

**Level of Significance After Mitigation**

Less Than Significant Impact With Mitigation.

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**Impact GEO-2 Result in substantial soil erosion or the loss of topsoil?**

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**Impact Analysis**

Substantial soil erosion or loss of topsoil during construction could undermine structures and minor slopes, and this could be a concern during proposed project site development. Current project site design plans indicate there would be approximately 65,901 CY of cut and 108,993 CY of fill on the project site. The maximum depth of cut and fill onsite would range from 13 to 26 feet (pers. Comm. Patrick Chour June 28, 2019). Trees, roots, vegetation, and organic surficial soil would be removed from structural areas unless specified otherwise; the depth of organic surficial soil to be removed would vary from approximately 2 to 4 inches. It is anticipated that 12 of the 15 total acres of surface area would be affected by grading operation at the project site.

However, compliance with existing regulatory requirements, such as the implementation of grading erosion control measures specified in the CBC and Chapter 15.62 of the City's Municipal Code, would reduce impacts from erosion

and the loss of topsoil. Examples of these control measures are BMPs such as hydroseeding or short-term biodegradable erosion control blankets; vegetated swales, silt fences, or other forms of protection at storm drain inlets; post-construction inspection of drainage structures for accumulated sediment; and post-construction clearing of debris and sediment from these structures. Chapter 15.62 of the Municipal Code, also known as the City of Daly City Grading, Erosion and Sediment Control Ordinance, contains rules and regulations that control site clearing, vegetation disturbances, landfills, land excavations, soil storage, and other activities that can cause sediments and other pollutants to enter the storm drain system. The ordinance also includes permit requirements, as well as procedures for the administration and enforcement of permits to appropriately control these development-related activities.

In addition, the proposed project would disturb more than 1 acre and be required to comply with the NPDES permitting program and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would identify BMPs to control the discharge of sediment and other pollutants during construction. As discussed in Section 4.10, Hydrology and Water Quality, the proposed project would implement a SWPPP and associated BMPs as part of Mitigation Measure HYD-1 (see Section, 4.10.3, Project-Specific Analysis) to reduce erosion impacts. Therefore, the proposed project would not result in substantial soil erosion or loss of topsoil, and impacts would be less than significant with implementation of Mitigation Measure HYD-1.

### **Level of Significance Before Mitigation**

Potentially Significant Impact.

### **Mitigation Measures**

Mitigation Measure HYD-1 is required.

### **Level of Significance After Mitigation**

Less Than Significant Impact With Mitigation.

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**Impact GEO-3 Be located on strata 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?**

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### **Impact Analysis**

According to the Geotechnical Investigation, the north portion of the project site is underlain by artificial fill with Pleistocene-age alluvium and the south portion of the project site is underlain by Quaternary-age hillslope deposits (Rockridge Geotechnical 2020). The fill in the north portion of the project site consists predominantly of medium dense to dense sand, silty sand and clayey sand, and stiff to very stiff clay. Additionally, the fill contains construction debris such as brick, metal, wood, glass, and concrete. Other areas within the north portion of the project site is underlain by marsh deposit consisting of soft to medium stiff clay with varying amounts of organics. The thickness of the marsh deposits range from about 2- to 4-feet. Beneath the marsh deposit lies alluvium consisting of interbedded medium dense to very dense sand with varying silt and clay content and stiff to hard clay. The south portion of the site, south of Midway Drive, consists of less than two feet of existing fill that is followed by alluvium consisting primarily of interbedded layers of very stiff to hard clay and medium dense to very dense clayey sand (Rockridge Geotechnical 2020). As such, the soils in the north portion of the project site are highly compressible and the soils in the south portion of the project site are low to moderately compressible (Rockridge Geotechnical 2020).

According to the Geotechnical Investigation, the project site is not susceptible to liquefaction or at risk for ground failure due to liquefaction or lateral spreading (Rockridge Geotechnical 2020). However, the underlying soils within the north portion of the project site are highly compressible and could become unstable with construction of the

proposed project. Additionally, according to the Geotechnical Investigation groundwater varies from 1 to 12 feet bgs at the project site, but for design purposes it is recommended to assume groundwater may be encountered at about 4 bgs (Rockridge Geotechnical 2020). Project construction activities would excavate the project site up the 26 feet, and therefore groundwater may be encountered and require dewatering and shoring.

The proposed project would comply with the latest edition of the CBC and would incorporate the recommendations identified in the Geotechnical Investigation as Mitigation Measure GEO-1 to ensure the stability of foundations and reduce potential for differential settlement. In the event that construction activities such as excavation and trenching encounters shallow groundwater, common practices employed to facilitate construction include either dewatering the excavation or shoring the sides of the excavation to reduce groundwater inflow. If dewatering is used, the Applicant would be required to comply with the San Francisco Bay Area RWQCB construction dewatering permit requirements. Discharge of non-stormwater from an excavation that contains sediments or other pollutants to sanitary sewer, storm drain systems, creek bed (even if dry), or receiving waters without treatment is prohibited. Discharge of uncontaminated groundwater from dewatering is a conditionally exempted discharge by the San Francisco RWQCB. However, the removed water could potentially be contaminated due to the presence of contaminated soils onsite, from construction equipment, or sediments from excavation. Discharge of water resulting from dewatering operations would require an NPDES Permit, or a waiver (exemption) from the San Francisco RWQCB, which would establish discharge limitations for specific chemicals (if they occur in the dewatering flows). Additionally, discharged groundwater would be disposed of in accordance with Mitigation Measure HAZ-1, which requires the proposed project to prepare a Remediation Action Workplan to address onsite contaminated soils and groundwater (refer to Section 4.9, Hazards and Hazardous Materials for further discussion).

The proposed project would also implement Mitigation Measure GEO-2 and prepare a dewatering plan in accordance with the requirements of the RWQCB. The dewatering plan would detail the location of dewatering activities, equipment, and discharge point in accordance with the requirements of the RWQCB. The dewatering plan would be submitted to the City for review and approval. In the event shoring methods are implemented for the estimated 26-foot excavations, the Applicant would be required to prepare shoring plans in accordance with the California Division of Occupational Safety and Health regulations and the City of Daly City Public Works Department engineering standards and specifications. The shoring plans would be submitted to the City for approval. As such, impacts related to unstable soils would be less than significant with implementation of Mitigation Measures GEO-1, GEO-2, and HAZ-1.

### **Level of Significance Before Mitigation**

Potentially Significant Impact.

### **Mitigation Measures**

Mitigation Measures GEO-1, GEO-2, and HAZ-1 are required.

**MM GEO-2: Prepare and Implement Dewatering and Shoring Plans.** If construction plans include excavation to 4 feet bgs, prior to issuance of a grading permit, the Applicant shall prepare and submit a dewatering plan to the City for approval. At a minimum, the dewatering plan shall detail dewatering methods, location of dewatering activities, equipment, groundwater sampling, disposal, and discharge point in accordance with the requirements of the San Francisco RWQCB. In the event shoring methods are implemented for the estimated 26-foot excavations, the Applicant shall submit all shoring plans to the City for approval prior to the issuance of a grading permit. All shoring plans shall be in accordance with the California Division of Occupational Safety and Health regulations and the City of Daly City Public Works Department engineering standards and specifications.

### **Level of Significance After Mitigation**

Less Than Significant Impact With Mitigation.

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#### **Impact GEO-4 Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

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### **Impact Analysis**

The north portion of the project site consists of 10 feet of fill that is underlain by about 11 feet of highly compressible marsh deposits. The south portion of the site, south of Midway Drive, consists of less than two feet of fill that is underlain by alluvium (Rockridge Geotechnical 2020). These soils could have the potential to become unstable if not properly managed prior to the construction of structures due to the depth to groundwater and the presence of some clay soils. The proposed project would comply with the latest edition of the CBC and incorporate soil and structure stabilization recommendations as required by Mitigation Measure GEO-1, which includes the design recommendations of the Geotechnical Investigation completed for the proposed project. Specifically, the Geotechnical Investigation recommendations include installation of footings, mats, and engineered fill to be placed in various areas within the project site to support structures and reduce the potential for expanding soils (Rockridge Geotechnical 2020). All structures would be placed above ground and would not be located on expansive soils once constructed. Therefore, impacts related to expansive soils would be less than significant with Mitigation Measure GEO-1 incorporated.

### **Level of Significance Before Mitigation**

Potentially Significant Impact.

### **Mitigation Measures**

Mitigation Measure GEO-1 is required.

### **Level of Significance After Mitigation**

Less Than Significant Impact With Mitigation.

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#### **Impact GEO-5 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?**

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### **Impact Analysis**

The proposed project includes a connection to the existing sewer line; therefore, no impact regarding the capability of soil to adequately support the use of septic tanks or alternative wastewater disposal systems would occur.

### **Level of Significance Before Mitigation**

No Impact.

### **Mitigation Measures**

No mitigation is necessary.

### **Level of Significance After Mitigation**

No Impact.

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**Impact GEO-6 Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?**

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**Impact Analysis**

The proposed project would cause a significant impact if it directly or indirectly destroyed a unique paleontological resource or site or unique geologic feature. The proposed project would include some ground-disturbance during construction-related activities, such as grading and the rerouting of utilities, which could directly or indirectly destroy a unique paleontological or unique geologic feature. As described in Chapter 2.0, Project Description, the maximum depth of cut and fill onsite would range from 13 to 26 feet. Although paleontological resources have been discovered at Mussel Rock, the project site is located approximately 5 miles southwest of that area and, therefore, would not directly or indirectly destroy those resources.

Even though discovery of paleontological or unique geological features is unlikely, it is still possible that unknown resources could be found. However, federal and state regulations would require protective measures for procedures in the event that resources are discovered. Section 5097 of the PRC specifies the procedures to be followed in the event of the unexpected discovery paleontological resources. Additionally, Section 15064.5(f) of the CEQA Guidelines requires that construction activities be halted until a qualified specialist can assess the significance of the find. Mitigation Measure GEO-3 (PBA EIR MM 2.11-3) would also be required and would ensure that a paleontological records search is completed for the project site and if the records search indicated that the project area is likely to contain paleontological and/or geologic resources, then a qualified paleontologist shall be required on the project site to train workers about the possibility of encountering fossils. Additionally, MM GEO-3 (PBA EIR MM 2.11-3) requires certain procedures to be followed in the event that a previously unknown paleontological or geologic resource is discovered during earth moving activities. Proper treatment and documentation of all discovered paleontological or geologic resources would be performed.

Adherence to the aforementioned requirements, General Plan policies, Mitigation Measure GEO-3 (PBA EIR MM 2.11-3) would ensure that the proposed project impacts associated with paleontological resources would be less than significant with mitigation.

**Level of Significance Before Mitigation**

Potentially Significant Impact.

**Mitigation Measures**

Mitigation Measure GEO-3 (PBA EIR MM 2.11-3) is required.

**Level of Significance After Mitigation**

Less Than Significant Impact With Mitigation.