SUMMARY

S.1 **Project Synopsis**

S.1.1 Location

The Cottonwood Sand Mine Project (hereafter referred to as "Proposed Project" or "Project") is located in the unincorporated portion of the County, in the Valle De Oro Community Planning Area. The Project site is located on the south side of Willow Glen Drive at 3121 Willow Glen Drive, El Cajon, California. Steele Canyon Road bisects the Project site. The western edge of the Project area is approximately 600 feet east of the intersection of Willow Glen Drive and State Route (SR) 54/Jamacha Road, with the site extending approximately 1.7 miles to the east of that intersection. SR 94/Campo Road is located approximately 0.7 mile southwest of the site. The site is situated within the Sweetwater River watershed and in the floodplain of the Sweetwater River, which flows in a northeast-to-southwest direction through the site.

The commercial village area of the Rancho San Diego community is located to the west of the Project site. An approximately 32-acre portion of the Project site is located within the Rancho San Diego Specific Plan area. The Cottonwood and Jamacha communities are located to the north and east of the Project site, respectively.

S.1.2 Description

The Project proposes sand mining activities on 251 acres of an approximately 280-acre site. The Project includes the following discretionary actions:

- A Major Use Permit (MUP) PDS2018-MUP-18-023 to allow mining activities on 251.1 acres of the 279.8-acre property; and
- A Reclamation Plan (RP) PDS2018-RP-18-001 to specify the standards to which the site must be reclaimed upon completion of mining activities in accordance with the California Surface Mining and Reclamation Act of 1975 (SMARA).

The Project proposes to convert the two golf courses within the Cottonwood Golf Club to a sand mining operation that would be conducted in three phases over 10 years. Approximately 214.4 acres of the approximately 280-acre site are proposed for extractive use. Areas included within the MUP boundary that are not disturbed by mining would be subject to habitat improvement through removal of invasive species in the river channel on the southwest portion of the site or be left in their current condition. The existing Sweetwater River channel and the majority of native habitat that currently exists on the site would be retained.

The Project consists of four phases; the extraction process would occur in three phases, each with subphases of less than 30 acres. Cleanup, equipment removal, and final reclamation would occur in the fourth phase. Extraction activities are proposed to begin on the Lakes Course west of the Steele Canyon Road bridge. All mining is expected to be completed after an approximately 10-year period, with reclamation anticipated to last two additional years.

The Project's mining operations would extract, process, and transport aggregate using conventional earth moving and processing equipment. Aggregate material extracted from the site would consist primarily of washed sand suitable for Portland cement concrete, but may also include fill sand, gravel, and rock. Approximately 4.3 million cubic yards (cy) (6.40 million tons) of material are proposed to be extracted, with approximately 3.8 million cy (5.7 million tons) produced for market use. Extraction operations would be limited to a maximum production of 380,000 cy (570,000 tons) of construction grade aggregate per calendar year. Material extracted and processed at the site would be suitable for construction uses and would be available to customers in San Diego County.

Sand excavation and processing would occur Monday through Friday, between the hours of 7:00 a.m. and 5:00 p.m. Trucking operations for material sales would occur from 9:00 a.m. to 3:30 p.m. Monday through Friday to avoid peak traffic periods. There would be no processing of materials or trucking from the site on Saturdays, Sundays, and major holidays.

Reclamation of the site would include: (1) removal of all manmade structures; (2) grading to achieve final landforms; and (3) incorporation of accumulated wash fines and salvaged topsoil (as applicable); and (4) revegetation and monitoring. Final grading would begin after mining and backfilling has completed within a given area, and as extractive operations proceed to the east. Reclamation would be an ongoing process starting in the second year as mining proceeds to the east and would continue in each 20- to 30-acre subphase over an approximately 10-year period, concluding two years after the completion of mining. The final landform is proposed to be a relatively flat plain that gently slopes downward from east to west, with a widened river channel bisecting the length of the site. The reclaimed river channel is expected to average approximately 250 to 300 feet in width and would be slightly higher in elevation than the existing low-flow channel. This low-flow channel would accommodate annual water transfers from Loveland Reservoir to Sweetwater Reservoir. Reclaimed and revegetated areas would be restored to an end use of undeveloped lands, multi-use trails, and land suitable for uses allowed by existing General Plan and zoning classifications. Revegetation monitoring would continue for a minimum of five years until revegetation standards are met after this final phase.

The Project proposes improvements to Willow Glen Drive, including restriping between Steele Canyon Road and the Project ingress driveway to provide Class II buffered bike lanes on both sides of the roadway and construction of a dedicated right-turn lane at the primary access to facilitate trucks and vehicles entering the Project site. A new secondary access point to the property from Willow Glen Drive west of the Steele Canyon Road would also be constructed at Muirfield Drive prior to the start of Phase 1 mining activities to accommodate large trucks used by service vendors. Other access points, such as an existing driveway at the northwestern corner of the property and an existing access point off Ivanhoe Ranch Road to the south of the project that is currently used for golf course maintenance would be used as needed, primarily for equipment delivery and/or reclamation maintenance and monitoring. A pedestrian pathway would be provided along the northern Project frontage/Willow Glen Drive east of Steele Canyon Road to provide pedestrian access within the Project vicinity where there are no existing sidewalks.

In addition to the MUP and RP, the Project will need subsequent approval of a landscape plan, public improvement plan, and right-of-way permits from the County. Additional discretionary approvals and permits anticipated for the Proposed Project and analyzed in this EIR include the

following: Section 401 Water Quality Certification Waste Discharge Order from the San Diego Regional Water Quality Control Board (RWQCB)/State Water Resources Control Board (SWRCB); Section 404 Permit – Dredge and Fill from the U.S. Army Corps of Engineers (USACE); Section 1602 Streambed Alteration Agreement (SAA) from the California Department of Fish and Wildlife (CDFW); National Pollutant Discharge Elimination System (NPDES), Industrial General Stormwater, and Waste Discharge Requirement permits from the Regional Water Quality Control Board (RWQCB); Authority to Construct and Permit to Operate from the San Diego Air Pollution Control District (SDAPCD); Fire District Approval from the San Miguel Consolidated Fire Protection District; and Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA).

S.1.3 Setting

S.1.3.1 Project Site

The Project site property is currently occupied by the Cottonwood Golf Club, which was permitted in 1962. The club consists of two 18-hole golf courses referred to as the Lakes Course and the Ivanhoe Course. Golf play on the Lakes Course was suspended indefinitely in 2017 to focus all operational efforts on the Ivanhoe Course. In addition to the golf courses, facilities include an 11,590-square foot clubhouse with a bar and grill, an open 13,000-square foot golf cart storage yard, an approximately 2.2-acre equipment maintenance and repair facility, and a 2.4-acre parking area for approximately 320 automobiles.

The Project site was previously used for commercial ranching and agriculture prior to the 1940s. Mining for construction aggregates occurred in the 1950s to the south of the Sweetwater River west of Steele Canyon Road, and adjacent to Willow Glen Drive at the western end of the site. Mineral extraction activities expanded to the east side of Steele Canyon Road in the 1960s and continued into the 1970s as both golf courses were developed. Construction of the golf course began in 1962 and was completed in 1964. Sand extraction activities have continued within the site throughout the years, allowing for the creation of water hazards and expanded fairways associated with golf course improvements. The most recent mining activities occurred in the western and southwestern portions of the site between 2007 and 2009, and in the extreme eastern portion of the site in 2016. Work that was completed between 2007 and 2016 (under Grading Plan Permit L14806), included the excavation of water storage ponds within the fairways and development of unirrigated waste bunkers (i.e., unmaintained areas within the course design), which also served as hazards for golf play. Several fairways were regraded and realigned on the southwestern end of the Project site within the now closed Lakes Course. Although not a mining project, materials were removed from the site.

The site gently slopes from the east to the west, with elevations ranging from approximately 380 feet above mean sea level (amsl) in the northeastern portion of the site to 320 feet amsl in the southwestern portion of the site. The Sweetwater River runs through the length of the site from northeast to southwest, and continues southwest towards Sweetwater Reservoir.

Vegetation within the Project site reflects the site's disturbed and developed nature; 14 vegetation communities/land use types occur on the Project site. The portion west of Steele Canyon Road, which consists of the closed portion of the golf course, is characterized by ruderal vegetation,

disturbed habitat, and a mixture of native and non-native planted trees. The eastern portion of the site, which represents the active golf course, is characterized by landscaped turf grass, native and non-native planted trees, cart paths, parking lot, clubhouse, and other maintenance facilities. Vegetation along the Sweetwater River channel has been heavily modified as part of golf course development and past disturbances associated with previous mining activities.

The Project site is located on unincorporated lands within both the South County Segment and the Metro-Lakeside-Jamul Segment of the County's Multiple Species Conservation Program (MSCP) Subarea Plan. The southwestern portion of the site along the Sweetwater River is within a Minor Amendment Area (37.8 acres) of the South County Segment.

S.1.3.2 Surrounding Areas

As stated above, the Proposed Project is located within the County's Valle de Oro Community Planning area, with the Rancho San Diego community to the west, the Cottonwood community to the north, and the Jamacha community to the south of the Project site. The area is characterized by the Valle de Oro Community Plan as a balance of urban, semi-rural agricultural, and open space land uses, with the Rancho San Diego area developed with large-scale, well-planned residential and commercial developments interspersed with large areas of green-belt and biological open space for wildlife preservation.

Land uses in the surrounding area include residences, parks, and commercial uses of the Rancho San Diego community to the north and west; rural residential development, undeveloped land and extractive operations to the northeast; rural residential development, a residential treatment facility, and the Steele Canyon Golf Club (including a 27-hole golf course and associated residential uses) to the south and southeast; and the San Diego National Wildlife Refuge (SDNWR) to the southwest along the Sweetwater River. Jamacha Elementary School is located approximately one-quarter mile to the south, Steele Canyon High School is approximately one-half mile to the south, Valhalla High School approximately three-quarters of a mile to the northwest, Hillsdale Middle School approximately one-half mile to the west, and Cuyamaca College approximately two-thirds of a mile to the west.

Land use in the vicinity is limited by physical constraints with the presence of the Sweetwater River channel and by steep terrain north and south of the river. The Sweetwater River extends from its headwaters in the Cuyamaca Mountains (east of the site) to the San Diego Bay, approximately 15 miles southwest of the site. Important biological resources in the vicinity generally include core blocks of coastal sage scrub and chaparral, open space conserved within the SDNWR and on Dictionary Hill, and perennial waters and riparian habitat associated with Sweetwater River corridor.

S.2 <u>Summary of Significant Effects and Mitigation Measures that Reduce or Avoid the Significant Effects</u>

Table S-1, Summary of Significant Effects, summarizes the results of the environmental analysis completed for the Project. Table S-1 also includes mitigation measures proposed to reduce or avoid the environmental effects, with a conclusion as to whether the impact has been mitigated to below a level of significance. Detailed analyses of significant environmental effects are discussed in

Chapter 2.0, and effects found not to be significant during preparation of the Environmental Impact Report (EIR) or the Initial Study process are found in Chapter 3.0.

Environmental design considerations that have been incorporated into the Project include measures to reduce environmental impacts. These environmental design measures are outlined in Section 1.2.2, *Technical, Economic, and Environmental Characteristics*, of this EIR.

S.3 **Areas of Controversy**

A Notice of Preparation (NOP) was distributed on October 24, 2019, for a 30-day public review and comment period (refer to Appendix A for the NOP). Public comments were received and reflect concern or controversy on a number of environmental issues. In addition, a public scoping meeting was held on November 4, 2019, at Hillsdale Elementary School, 1301 Brabham Street, El Cajon, CA 92019.

A total of 295 (plus six late) communications were received on the NOP from agencies, groups and organizations, tribes, and individuals. Agencies include the California Department of Conservation (CDC), CDFW, Department of Toxic Substances Control (DTSC), Native American Heritage Commission (NAHC), and Sweetwater Authority. Groups and organizations include the Endangered Habitats League, San Diego County Archaeological Society, Sierra Club, Stop Cottonwood Sand Mine, Org., and Valle De Oro Community Planning Group. The Sycuan Band of the Kumeyaay Nation was the only tribal entity to submit comments.

Issues raised in the NOP comment letters include concerns regarding the following issue areas:

- Visual impacts
- Community character
- Air quality
- Biological resources
- Archaeological and tribal cultural resources
- Paleontological resources
- Greenhouse gases
- Hazardous materials and emissions
- Hydrology and water quality

- Groundwater contamination
- Land use consistency
- Noise generation
- Recreational opportunities
- Roadway capacity and safety
- Public utilities
- Evacuation during a wildfire
- Traffic generation
- School safety and student health
- Valley Fever

Issues raised within these letters are evaluated in this EIR in Chapters 2.0 through 3.2.

S.4 <u>Issues to be Resolved by the Decision-Making Body</u>

An EIR is an informational document intended to inform the public agency decision makers and the public of the significant effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the Proposed Project. The lead agency (in this case the County) must respond to each significant effect identified in this EIR by making "Findings" for each significant effect. The issues to be resolved by the decision-makers include whether or how to mitigate the significant effects of the project, and whether the project is consistent with County ordinances and General Plan goals and whether to implement a project alternative instead.

S.5 Project Alternatives

CEQA requires an EIR to consider a reasonable range of potentially feasible alternatives that would lessen significant impacts identified with the Proposed Project and to foster informed decision making. A summary of project alternatives is presented in Chapter 4.0 of this EIR. Based on initial review and consideration by the Applicant and County, it was determined that some of the preliminary alternatives did not accomplish most of the Project objectives or would result in greater impacts than the Proposed Project, including the Visual Screening Alternative, Reduced Footprint/Deeper Excavation Alternative, and Reduced Annual Mining Production/Increased Mining Duration Alternative discussed further in Section 4.1.1 of this EIR. Thus, these alternatives were considered but rejected and are described further in Chapter 4.0 of this EIR.

Two alternatives would meet the Project objectives, are potentially feasible, and would avoid or lessen impacts as compared to the Proposed Project. These include the Biological Resources Avoidance Alternative and the Noise Receptor Setback Alternative. Additionally, a No Project Alternative is required to be included in the range of alternatives to provide a comparison of the environmental impacts that would result if the Proposed Project were not approved. These alternatives are summarized below:

S.5.1 Alternative 1: No Project/No Development Alternative

The No Project Alternative assumes the Proposed Project would not occur. Under the No Project Alternative, a MUP would not be issued, mining activities would not occur at the site, and a Reclamation Plan would not be implemented. The site would not be restored to an end use of open space, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications, including residential, essential services, fire protection services, or agriculture. The property would continue to be occupied by the Cottonwood Golf Club, with the Ivanhoe Course remaining as an operational golf course and the Lakes Course remaining as a decommissioned golf course.

The No Project Alternative would avoid all the significant and less than significant impacts associated with implementation of the Proposed Project. However, under the No Project Alternative, 570,000 tons of sand per year would not be produced at the Project site and this amount of sand would continue to be imported from sources north and south of the County, and these vehicle miles traveled (VMT) reductions would not be achieved. Although the No Project Alternative would not increase VMT or greenhouse gas (GHG) emissions from current conditions, it would not achieve the reductions the Proposed Project may achieve. Under existing conditions with a total County sand demand of 2.5 million tons per year, the total daily VMT associated with transporting 570,000 tons of sand (the anticipated annual Project sand production) into and within San Diego County without the Proposed Project is 13,499 miles. This is based on an estimate that 60 percent of the sand used in San Diego is imported from sources north of the county, 35 percent is imported from Mexico, and 5 percent is transported from the East County Sand Mine in the unincorporated community of Lakeside, California. The daily truck VMT associated with obtaining 570,000 tons of sand from the Project site rather than being imported from the north and south sources would be 2,806 miles, which is a reduction of 10,693 miles, or approximately 79.2 percent, from the No Project alternative.

GHG emissions are directly related to VMT; more than 95 percent of mobile GHG emissions for the Project would be from aggregate delivery trucks transporting material to concrete batch plants where it would be used. The EIR includes a conservative analysis wherein all Project GHG emissions are included in the Project GHG inventory; however, when factoring in the regional VMT reductions mentioned above, the Project would result in an overall net reduction in mobile source GHG emissions. However, as stated above, the No Project Alternative does not increase GHG emissions or VMT above existing conditions.

S.5.2 Alternative 2: Biological Resources Avoidance Alternative

Under Alternative 2, or the Biological Resources Avoidance Alternative, the proposed mining footprint would be set back 50 feet from the Sweetwater River channel and 500 feet from the riparian habitat to the south and west of the Project site. The total area mined under this alternative would be 117.6 acres and the total extraction volume would be approximately 2.9 million cy, an approximately 33-percent reduction compared to the Proposed Project. This alternative would involve the same overall annual extraction and marketable product of 380,000 cy (570,000 tons) as the Proposed Project but mining activities would occur over a period of approximately six years rather than 10 years. As with the Proposed Project, Alternative 2 would involve the reclamation of the site to an end use of open space, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications following mining activities.

Alternative 2 would meet all Project Objectives and would lessen impacts to several resource areas. With the proposed mining set back of 50 feet from the Sweetwater River channel and 500 feet from the riparian habitat to the south and west of the Project site, this alternative would avoid direct impacts to the southern cottonwood-willow riparian forest, southern willow scrub, and Diegan coastal sage scrub sensitive vegetation communities, as well as direct impacts to jurisdictional wetlands and riparian habitats identified for the Proposed Project. Further, through avoiding impacts to southern cottonwood-willow riparian forest, this alternative would avoid direct impacts to potentially occupied least Bell's vireo habitat. While Alternative 2 would avoid some of the potentially significant impacts to biological resources; mitigation would still be required for some potentially significant biological resource impacts, including indirect noise impacts to coastal California gnateatcher and potentially significant direct and indirect impacts to potential breeding, wintering, and foraging habitat for nesting Cooper's hawk, loggerhead shrike, peregrine falcon, red-shouldered hawk, sharp-shinned hawk, turkey vulture, vermilion flycatcher, white-tailed kite, yellow-breasted chat, yellow warbler, and/or nesting raptors may. With a reduced footprint, Alternative 2 would reduce the potential for impacts to cultural resources, paleontological resources, and tribal cultural resources but the potential for significant impacts would still exist and mitigation would still be required. Potential noise impacts to certain noise sensitive land uses would also be reduced with Alternative 2 but noise mitigation measures would still be required, and overall impacts would remain significant but mitigated. Similarly, aestheticsrelated impacts would be reduced under Alternative 2 but would remain significant and unmitigable.

S.5.3 Alternative 3: Noise Receptor Setback Alternative

Under Alternative 3, or the Noise Receptor Setback Alternative, the proposed mining footprint would be set back 400 feet from residential properties surrounding the Project site, as well as from

the Adeona Healthcare facility located east of Steele Canyon Road south of the Project site. The total area mined under this alternative would be 119.1 acres (approximately 95 acres less than the Proposed Project) and the total overall extraction volume would be approximately 3.5 million cy, an approximately 26-percent reduction compared to the Proposed Project. This alternative would involve the same overall annual extraction of 380,000 cy (570,000 tons) of marketable product as the Proposed Project, but mining activities would occur over a period of approximately seven years rather than 10. As with the Proposed Project, Alternative 3 would involve the reclamation of the site to an end use of open space, including the Sweetwater River and its floodplain, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications following mining activities.

Alternative 3 would avoid the potentially significant impact associated with noise from mining activities. With mining activities occurring at least 400 feet from noise-sensitive land uses, noise levels from the Project would be below the applicable noise level limit at these properties, and impacts would be less than significant. Similar to Alternative 2, Alternative 3 would reduce the potential for impacts to cultural resources, paleontological resources, and tribal cultural resources based on the reduced footprint, but the potential for significant impacts would still exist and mitigation would still be required. Similarly, aesthetics-related impacts would be reduced under Alternative 3 but would remain significant and unmitigable.

Table S-1 SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
	SIGNIFICANT	AND UNMITIGABLE IMPACTS	
		Project-Level Impacts	
	Subchapter 2.1 Aesthetics		
AES-1	Implementation of the proposed mining and reclamation activities would detract from the visual quality of views from public viewpoints, resulting in a potentially significant impact related to scenic vistas.	No mitigation available beyond Project design considerations.	Significant and unmitigable
AES-2	Implementation of the proposed mining and reclamation activities would result in removal or substantial adverse change of features (i.e., golf course and visually notable trees) that contribute to the visual character of the area, resulting in a potentially significant impact related to scenic resources.	No mitigation available beyond Project design considerations.	Significant and unmitigable
AES-3a	Implementation of the proposed mining and reclamation activities would affect views across the Project site from Willow Glen Drive, resulting in a potentially significant impact related to obstruction, interruption, or detraction from a valued vista from a public road.	No mitigation available beyond Project design considerations.	Significant and unmitigable

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
AES-3b	Implementation of the proposed mining and reclamation activities would affect views across the Project site from elevated portions of the Wildlife Refuge Loop Trail, resulting in a potentially significant impact related to obstruction, interruption, or detraction from a valued vista from a trail within an adopted County and State trail system.	No mitigation available beyond Project design considerations.	Significant and unmitigable
AES-3c	Implementation of the proposed mining and reclamation activities would affect views across the Project site from the Sweetwater Regional Trail, resulting in a significant impact related to scenic resources related to obstruction, interruption, or detraction from a valued vista from a trail within an adopted County and State trail system.	No mitigation available beyond Project design considerations.	Significant and unmitigable
AES-4	Implementation of the proposed mining and reclamation activities would not conform to certain applicable goals and policies related to visual resources during mining activities, resulting in a significant impact.	No mitigation available beyond Project design considerations.	Significant and unmitigable
AES-5	Implementation of the proposed mining and reclamation activities would result in a considerable contribution to a potential cumulative impact associated with the combined visual contrast in the landscape.	No mitigation available beyond Project design considerations.	Significant and unmitigable

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	
		Project-Level Impacts	
DIO 1	Subchapter 2.2 Biological Resources		- d
BIO-1a	Direct impacts to potential foraging habitat for coastal California gnatcatcher would be potentially significant.	M-BIO-1 Mitigation for impacts to 0.8 acre of potential foraging habitat for coastal California gnatcatcher, comprised solely of Diegan coastal sage scrub, shall occur at a 1.5:1 ratio for a total mitigation requirement of 1.2 acres. Mitigation shall occur though on-site preservation of 0.72 acre of Diegan coastal sage scrub and on-site revegetation of 11.28 acres of Diegan coastal sage scrub for a total of 12.00 acres of Diegan coastal sage scrub to be preserved within the biological open space easement.	Less than Significant
BIO-1b	If mining and reclamation activities take place within 500 feet of suitable gnatcatcher habitat during the gnatcatcher breeding season (March 1 to August 15), indirect impacts related to noise to nesting gnatcatchers would be potentially significant.	M-BIO-2 Grading or clearing of vegetation within 500 feet of occupied Diegan coastal sage scrub during the breeding season of the coastal California gnatcatcher (March 1 to August 15) shall be avoided to the extent feasible. All grading permits, improvement plans, and the final map shall state the same. If clearing or grading would occur within 500 feet of suitable gnatcatcher habitat during the breeding season for the gnatcatcher, a pre-construction survey shall be conducted by a qualified biologist no more than three days (72 hours) prior to commencement of activities to determine whether gnatcatchers occur within 500 feet of the proposed impact area(s). If there are no gnatcatchers nesting (includes nest building or other breeding/nesting behavior) within that area, grading and clearing shall be allowed to proceed. If any gnatcatchers are observed nesting or displaying breeding/nesting behavior during the pre-construction survey or additional surveys within the area, construction shall be postponed within 500 feet of any location at which gnatcatchers have been observed until a qualified biologist has determined that all nesting (or breeding/nesting behavior) has ceased or until after August 15.	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		M-BIO-5 If operation of construction or excavation equipment is initiated within 500 feet of suitable habitat during the breeding seasons for the coastal California gnatcatcher (March 1 to August 15), nesting raptors (January 15 to July 15), or least Bell's vireo (March 15 to September 15), pre-construction survey(s) shall be conducted by a qualified biologist to determine whether these species occur within the areas potentially impacted by noise, with the final survey occurring within three days (72 hours) of the proposed start of construction, mining, or reclamation activities. If it is determined at the completion of pre-construction survey(s) that active nests belonging to these sensitive species are absent from the potential impact area, activities shall be allowed to proceed. If pre-construction surveys determine the presence of active nests belonging to these sensitive species, then activities shall: (1) be postponed until a qualified biologist determines the nest(s) is no longer active or until after the respective breeding season; or (2) not occur until a temporary noise barrier or berm is constructed at the edge of the impact footprint and/or around the piece of equipment to ensure that noise levels are reduced to below 60 dBA or ambient, whichever is greater. The type(s) and location(s) of noise barrier(s) shall be provided to the County and Wildlife Agencies along with the associated noise measurements demonstrating compliance with required noise level reductions. Decibel output would be confirmed by a County-approved noise specialist and intermittent monitoring by a qualified biologist to ensure that noise levels remain below 60 dBA at occupied areas.	

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
BIO-1c	Direct impacts to potentially occupied vireo habitat would be potentially significant.	M-BIO-3 Mitigation for impacts to 0.32 acre of potential nesting and foraging habitat for least Bell's vireo (southern cottonwood-willow riparian forest) shall occur at a minimum 3:1 ratio with at least 1:1 creation (establishment/re-establishment) for a total mitigation requirement of 0.96 acre. Mitigation shall occur through on-site preservation of 15.01 acres of wetland and riparian habitat, on-site rehabilitation of 6.13 acres of riparian habitat, and on-site reestablishment and revegetation of 107.93 acres of riparian habitat for a total of 129.07 acres of wetland riparian habitat to be preserved within the biological open space easement.	Less than Significant
BIO-1d	If mining and reclamation activities take place within 500 feet of suitable vireo habitat during the vireo breeding season (March 15 to September 15), indirect noise impacts to nesting vireos would be potentially significant	M-BIO-4 Grading or clearing of riparian habitat during the breeding season of the least Bell's vireo (March 15 through September 15) shall be avoided to the extent feasible. All grading permits, improvement plans, and the final map shall state the same. If clearing or grubbing must occur within 500 feet of suitable vireo habitat during the least Bell's vireo breeding season, a pre-construction survey shall be conducted by a qualified biologist no more than three days (72 hours) prior to commencement of activities to determine whether vireos occur within 500 feet of proposed impact area(s). Impacts to occupied habitat shall be avoided. If there are no vireos nesting (includes nest building or other breeding/nesting behavior) within that area, grading and clearing shall be allowed to proceed. If any vireos are observed nesting or displaying breeding/ nesting behavior during the pre-construction survey or additional surveys within that area, construction shall be postponed within 500 feet of any location at which vireos have been observed until a qualified biologist has determined that all nesting (or breeding/nesting behavior) has ceased or until after September 15. Mitigate through pre-construction survey mitigation measure M-BIO-5 provided above.	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
BIO-2a	Direct impacts to potential breeding, wintering, and foraging habitat to the following County Group 1 animal species and/or state Species of Special Concern during mining and reclamation activities would be potentially significant: coastal California gnatcatcher, Cooper's hawk, least Bell's vireo, loggerhead shrike, peregrine falcon, red-shouldered hawk, sharp-shinned hawk, turkey vulture, vermilion flycatcher, white-tailed kite, yellow-breasted chat, yellow warbler, two-striped garter snake, and western spadefoot.	M-BIO-7 Upon completion of all extraction activities, reclamation, and final grading to establish the final landform shall occur in accordance with the approved Reclamation Plan. Revegetation with native species will occur within the expanded Sweetwater River floodplain and constructed bordering slopes according to a revegetation plan to be approved by the County. M-BIO-8 Mitigation for impacts to 0.32 acre of southern cottonwood-willow riparian forest, 0.01 acre of Arundo-dominated riparian, and 0.50 acre of disturbed wetland shall occur at a 3:1 ratio with at least 1:1 creation (establishment/re-establishment) for a total mitigation requirement of 0.96 acre. Mitigation shall occur through on-site preservation of 15.01 acres of wetland and riparian habitat, on-site rehabilitation of 6.13 acres of riparian habitat, and on-site reestablishment and revegetation of 107.93 acres of riparian habitat for a total of 129.07 acres of wetland riparian habitat to be preserved within the biological open space easement. M-BIO-9 Mitigation for 0.8 acre of impacts to Diegan coastal sage scrub shall occur at a 1.5:1 ratio through the on-site preservation of 1.2 acre of Tier II or Tier I habitat in the South County MSCP area within a biological resource core area. Mitigation shall occur through on-site preservation of 0.72 acre of Diegan coastal sage scrub and on-site revegetation of 11.28 acres of Diegan coastal sage scrub for a total of 12.00 acres of Tier II Diegan coastal sage scrub to be preserved within the biological open space easement.	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
BIO-2b	Direct impacts to nesting Cooper's hawk, red-shouldered hawk, white-tailed kite, and other raptors, and/or indirect noise impacts to nesting raptors within 300 feet of construction, mining, or reclamation areas would be potentially significant.	Mitigate through pre-construction survey mitigation measure M-BIO-5 provided above, as well as mitigation measure M-BIO-6 listed below. M-BIO-6 Grubbing or clearing of vegetation during the general avian breeding season (February 15 through August 31) or raptor breeding season (January 15 through July 15) shall be avoided to the extent feasible. If grubbing, clearing, or grading would occur during the general avian breeding season within 300 feet of general bird nesting habitat or 500 feet of nesting raptor habitat, a preconstruction survey shall be conducted by a qualified biologist no more than three days (72 hours) prior to the commencement of activities to determine if active bird nests are present in the affected areas. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within this area, clearing, grubbing, and grading shall be allowed to proceed. Furthermore, if construction activities are to resume in an area where they have not occurred for a period of seven or more days during the breeding season, an updated survey for avian nesting will be conducted. If active nests or nesting birds are observed within the area, the biologist shall flag the active nests and construction activities shall avoid active nests until a qualified biologist has determined that nesting behavior has ceased, nests have failed, or young have fledged.	Less than Significant
BIO-2c	Direct impacts to nesting coastal California gnatcatcher, Cooper's hawk, least Bell's vireo, loggerhead shrike, red-shouldered hawk, vermilion flycatcher, white-tailed kite, yellow-breasted chat, and yellow warbler individuals would be considered potentially significant.	Mitigate through pre-construction survey and breeding season avoidance mitigation measures M-BIO-2, M-BIO-4, M-BIO-5, and M-BIO-6 provided above.	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
BIO-3a	Direct impacts to four County List D San	Mitigate through habitat-based mitigation measure M-BIO-9	Less than
	Diego County viguiera shrubs would be considered potentially significant.	provided above.	Significant
BIO-3b	Direct impacts to potential breeding, wintering, or foraging habitat to the following County Group 2 animal species during mining and reclamation activities would be considered potentially significant: barn owl, California horned lark, Canada goose, great blue heron, green heron, merlin, western bluebird, yellow warbler, Belding's orange-throated whiptail, monarch butterfly, and western spadefoot.	Mitigate through Reclamation Plan and habitat-based mitigation measures M-BIO-7, M-BIO-8, and M-BIO-9 provided above.	Less than Significant
BIO-3c	Direct impacts to nesting barn owl, California horned lark, Canada goose, great blue heron, green heron, western bluebird, and yellow warbler individuals would be considered potentially significant.	Mitigate through pre-construction survey and breeding season avoidance mitigation measures M-BIO-5 and M-BIO-6 provided above.	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
BIO-4	Direct impacts to sensitive habitats located in lands designated as a biological core resource area during mining and reclamation activities would be considered potentially significant.	Mitigate through Reclamation Plan and habitat-based mitigation measures M-BIO-7, M-BIO-8, and M-BIO-9 provided above, as well as mitigation measures M-BIO-10, and M-BIO-11 listed below. M-BIO-10 The applicant shall dedicate 142.8 acres of biological open space to be managed by a long-term manager approved by the County in accordance with a Resource Management Plan. The biological open space easement shall include native habitat revegetation areas located within the expanded Sweetwater River floodplain and bordering constructed slopes. Permanent open space fencing and signage shall be installed around the perimeter of the biological open space as detailed in the final Resource Management Plan. M-BIO-11 The Project requires preparation of a Resource Management Plan (RMP) for on-site biological open space to be approved by the County. The RMP would provide direction for the permanent preservation and management of the on-site open space in accordance with County regulations.	Less than Significant
BIO-5	If construction or mining activities would be initiated within 500 feet of suitable habitat during the breeding seasons for California gnatcatcher (March 1 to August 15), nesting raptors (January 15 to July 15), or least Bell's vireo (March 15 to September 15), indirect noise effects would be potentially significant.	Mitigate through pre-construction survey mitigation measure M-BIO-5 provided above.	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
BIO-6	If protective measures are not implemented to control human access into open space areas, direct and indirect impacts to sensitive habitat and species located in the biological open space be potentially significant.	Mitigate through biological open space dedication mitigation measure M-BIO-10 and Resource Management Plan mitigation measure M-BIO-11 provided above.	Less than Significant
BIO-7	Implementation of the Proposed Project would result in direct impacts to approximately 1.63 acres of sensitive vegetation communities made up of 0.50 acre of disturbed wetland (Tier I), 0.32 acre of southern cottonwood-willow riparian forest (Tier I), 0.01 acre of Arundodominated riparian (Tier I), and 0.8 acre of Diegan coastal sage scrub (Tier II). Impacts to sensitive natural communities would be considered potentially significant.	Mitigate through Reclamation Plan mitigation measure M-BIO-7, habitat-based mitigation measures M-BIO-8 and M-BIO-9, biological open space dedication mitigation measure M-BIO-10, and Resource Management Plan mitigation measure M-BIO-11 provided above, as well as mitigation measures M-BIO-12 and M-BIO-13 listed below. M-BIO-12 To help ensure errant impacts to sensitive vegetation communities outside of the impact footprint are avoided during construction, temporary environmental fencing (including silt fencing where determined necessary by the SWPPP), would be installed at the edges of the impact limits prior to initiation of grading. All construction staging shall occur within the approved limits of construction. M-BIO-13 A qualified biologist shall monitor the installation of environmental fencing wherever it would abut sensitive vegetation communities, jurisdictional waters or wetlands, or open space. The biologist also would conduct a pre-construction environmental training session for construction personnel prior to all phases of construction to inform them of the sensitive biological resources on site and avoidance measures to remain in compliance with Project approvals. The biologist shall monitor initial vegetation clearing, grubbing, and grading activities to ensure that activities occur within the approved limits of work and avoid impacts to nesting birds. The biologist shall periodically monitor the limits of construction and	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		mining operations to ensure that mining and avoidance areas are delineated with temporary fencing and that fencing remains intact.	
BIO-8	Inadvertent intrusion into riparian habitat or other sensitive habitats located adjacent to work areas by construction vehicles, equipment, and personnel during mining and reclamation activities would be considered potentially significant.	Mitigate through environmental fencing installation mitigation measure M-BIO-12 and environmental fencing installation monitoring and pre-construction environmental training mitigation measure M-BIO-13 provided above.	Less than Significant
BIO-9	The Project would result in impacts to jurisdictional wetlands and riparian habitats as defined by the USACE, CDFW, and/or County. Impacts to jurisdictional waters and wetlands include 0.62 acre of wetland and 0.37 acre of non-wetland waters of the U.S. and 17.89 acres of CDFW jurisdictional areas (including 0.83 acres of vegetated habitat and 17.06 acres of streambed. Impacts to jurisdictional waters and wetlands would be considered potentially significant.	Mitigate through environmental fencing installation mitigation measure M-BIO-12 and environmental fencing installation monitoring and pre-construction environmental training mitigation measure M-BIO-13 provided above, as well as mitigation measures M-BIO-14, M-BIO-15, and M-BIO-16 listed below. M-BIO-14 Impacts to 0.62 acre of U.S. Army Corps of Engineers (USACE) wetland waters of the U.S. shall be mitigated a minimum 3:1 ratio and 0.37 acre of USACE non-wetland waters of the U.S. shall be mitigated at a minimum 1:1 ratio through one or a combination of the following: on- and/or off-site establishment, reestablishment, rehabilitation, and/or enhancement of 2.23 acres waters of the U.S.; and/or off-site purchase of waters of the U.S. credits at an approved mitigation bank, or other location deemed acceptable by the USACE. Any mitigation completed through purchase of mitigation credits shall be provided prior to issuance of a grading permit, and prior to use of the premises in reliance of this permit. Any applicant-initiated mitigation must be implemented prior to or concurrent with impacts to waters of the U.S. Impacts to waters of the U.S. would require issuance of a Section 404 CWA permit from the USACE prior to impacts. M-BIO-15 Impacts to 0.83 acre of California Department of Fish and Wildlife (CDFW) jurisdictional riparian habitat (0.32 acre of	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		southern cottonwood-willow riparian forest, 0.01 acre of Arundodominated riparian, and 0.50 acre of disturbed wetland) shall be mitigated at a 3:1 ratio, totaling 2.49 acres of riparian habitat mitigation. Impacts to 17.06 acres of CDFW streambed shall be mitigated at a minimum 1:1 ratio through one or a combination of the following: on- and/or off-site establishment, re-establishment, rehabilitation, and/or enhancement of 17.06 acres of riparian and/or stream habitat; and/or off-site purchase of riparian and/or stream credits at an approved mitigation bank, or other location deemed acceptable by the CDFW. Combined mitigation for CDFW riparian habitat and streambed totals 19.55 acres. Any mitigation completed through purchase of mitigation credits shall be provided prior to the issuance of a grading permit, and prior to use of the premises in reliance of this permit. Any applicant-initiated mitigation must be implemented prior to or concurrent with impacts to CDFW habitat. Impacts to CDFW jurisdictional habitat would require issuance of a CFG Code Section 1602 Streambed Authorization Agreement from the CDFW prior to impacts.	
		M-BIO-16. The Project requires preparation of a wetland mitigation plan for impacts to wetland habitat and jurisdictional waters to be approved by the County (wetland impacts only) and U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB) (impacts to waters of the U.S. and State, and CDFW riparian habitat and streambed), as applicable. Approval of the plan and/or acceptance of mitigation bank credits by the USACE, CDFW, and RWQCB shall be a condition of the associated wetland permits for the Project.	

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
BIO-10	Inadvertent intrusion into jurisdictional waters and wetlands located adjacent to work areas by construction vehicles, equipment, and personnel during mining and reclamation activities would be considered potentially significant.	Mitigate through environmental fencing installation mitigation measure M-BIO-12 and environmental fencing installation monitoring and pre-construction environmental training mitigation measure M-BIO-13 provided above.	Less than Significant
BIO-11	Implementation of the Proposed Project would result in potentially significant impacts to MSCP narrow endemic species during mining and reclamation activities.	Mitigate through breeding season avoidance mitigation measures M-BIO-4 and M-BIO-6 provided above.	Less than Significant
BIO-12	Implementation of the Proposed Project would result in potentially significant impacts to listed species during mining and reclamation activities.	Mitigate through on-site habitat preservation mitigation measure M-BIO-1, breeding season avoidance mitigation measure M-BIO-2, habitat mitigation measure M-BIO-3, breeding season avoidance mitigation measure M-BIO-4, pre-construction survey mitigation measure M-BIO-5, and Reclamation Plan mitigation measure M-BIO-7 provided above.	Less than Significant
BIO-13	Direct impacts to nesting birds protected under the Migratory Bird Treaty Act would be considered potentially significant.	Mitigate through breeding season avoidance mitigation measure M-BIO-6 provided above.	Less than Significant
CR-1	There is potential for significant direct impacts related to undiscovered buried archaeological resources on the Project site during the Project's ground-disturbing mining activities. Impacts to these resources would represent significant environmental effects.	M-CR-1 Cultural Resources Treatment Agreement and Preservation Plan. A single Cultural Resources Treatment Agreement and Preservation Plan shall be developed between the applicant or their representative and the culturally-affiliated Kumeyaay Native American tribe(s) prior to the commencement of sand extraction operations, including the removal of any trees or vegetation. The Cultural Resources Treatment Agreement and Preservation Plan shall be reviewed and agreed to by the County prior to final signature and authorization. The Cultural Resources Treatment Agreement and Preservation Plan shall include but is not limited to the following:	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		• Parties entering into the agreement and contact information.	
		 Responsibilities of the Property Owner or their representative, Principal Investigator, archaeological monitors, Kumeyaay Native American monitors, and consulting tribes. 	
		 Requirements of the Pre-Grade Survey and Data Recovery Program and Archaeological Monitoring Program including unanticipated discoveries. 	
		Requirements of tree removal monitoring.	
		 Identification of areas for archaeological and Native American monitoring during earth-disturbing activities related to sand extraction operations. 	
		Treatment of identified Native American cultural materials.	
		Treatment of Native American human remains and associated grave goods.	
		Confidentiality of cultural information including location and data.	
		 Negotiation of disagreements should they arise during the implementation of the Agreement and Preservation Plan. 	
		Regulations that apply to cultural resources that have been identified or may be identified during construction.	
		M-CR-2 Pre-Grade Survey and Data Recovery Program. Prior to sand extraction operations, a Pre-Grade Survey and Data Recovery Program shall be implemented, consistent with the Cultural Resources Treatment Agreement and Preservation Plan and criteria outlined below.	

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		 Pre-Construction A pre-grade survey shall be implemented due to the sensitivity of the area. The pre-grade and data recovery program shall include the following: Tree Removal: Removal of trees shall be monitored by an Archaeological Monitor and Kumeyaay Native American Monitor for the presence of cultural resources. Pre-Grade: Upon completion of grubbing and vegetation removal, and prior to sand extraction activities, a pre-grade survey shall be conducted in all areas identified for development. Development shall be defined as construction, extraction, or any other grading activity. The pre-grade survey shall include both an Archaeological Monitor and Kumeyaay Native American Monitor. Identified Resources. In the event that cultural resources are identified:	

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		 Isolates and non-significant deposits shall be minimally documented in the field. Should the isolates and non-significant deposits not be collected by the Project Archaeologist, the Kumeyaay Native American monitor(s) may collect the cultural material for transfer to a Tribal curation facility or repatriation program. If cultural resources are determined to be significant, a Research Design and Data Recovery Program shall be prepared by the Project Archaeologist in consultation with the Kumeyaay Native American monitor(s) and approved by the County Archaeologist. The program shall include reasonable efforts to preserve (avoid) unique cultural resources or Sacred Sites; the capping of identified Sacred Sites or unique cultural resources and placement of development over the cap if avoidance is infeasible; and data recovery for non-unique cultural resources. The preferred option is preservation (avoidance). 	
		 Human Remains The Property Owner or their representative shall contact the County Coroner and the PDS Staff Archaeologist. Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin. Should the human remains need to be taken offsite for evaluation, they shall be accompanied by a Kumeyaay Native American monitor. 	

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		 If the remains are determined to be of Native American origin, the MLD, as identified by the NAHC, shall be contacted by the Property Owner or their representative in order to determine proper treatment and disposition of the remains. The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the MLD regarding their recommendations as required by Public Resources Code Section 5097.98 has been conducted. Public Resources Code §5097.98, CEQA §15064.5 and Health & Safety Code §7050.5 shall be followed in the event that human remains are discovered. 	
		 Vegetation Removal Completion Upon completion of grubbing and vegetation removal for each phase, a monitoring report shall be prepared identifying whether resources were encountered during the removal of trees or Pre-Grade Survey. A copy of the monitoring report shall be provided to any culturally-affiliated tribe who requests a copy. If resources were encountered, the analysis shall be included in the final archaeological monitoring report and shall comply with all requirements of that condition. 	
		 M-CR-3 Archeological Monitoring Program Pre-Construction Contract with a County approved archaeologist to perform archaeological monitoring and a potential data recovery program during earth-disturbing activities in 	

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		 areas identified in the Treatment and Preservation Agreement described in M-CR-1. The Project Archaeologist shall perform the monitoring duties before, during and after construction. Pre-construction meeting to be attended by the Project Archaeologist and Kumeyaay Native American monitor to explain the monitoring requirements. 	
		 Construction Monitoring: Both the Project Archaeologist and Kumeyaay Native American monitor are to be onsite during earth disturbing activities. The frequency and location of monitoring of native soils will be determined by the Project Archaeologist in consultation with the Kumeyaay Native American monitor. Identified Resources. In the event that cultural resources are identified: Both the Project Archaeologist and Kumeyaay Native American monitor have the authority to divert or temporarily halt ground disturbance operations in the area of the discovery. The Project Archaeologist shall contact the County Archaeologist at the time of discovery. The Project Archaeologist in consultation with the County Archaeologist and Kumeyaay Native American shall determine the significance of discovered resources. Construction activities will be allowed to resume after the County Archaeologist has concurred with the significance evaluation. Isolates and non-significant deposits shall be minimally documented in the field. Should the 	

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		isolates and non-significant deposits not be collected by the Project Archaeologist, the Kumeyaay Native American monitor may collect the cultural material for transfer to a Tribal curation facility or repatriation program. If cultural resources are determined to be significant, a Research Design and Data Recovery Program shall be prepared by the Project Archaeologist in consultation with the Kumeyaay Native American monitor and approved by the County Archaeologist. The program shall include reasonable efforts to preserve (avoid) unique cultural resources of Sacred Sites; the capping of identified Sacred Sites or unique cultural resources and placement of development over the cap if avoidance is infeasible; and data recovery for non-unique cultural resources. The preferred option is preservation (avoidance).	
		 Human Remains The Property Owner or their representative shall contact the County Coroner and the PDS Staff Archaeologist. Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin. If the human remains are to be taken offsite for evaluation, they shall be accompanied by the Kumeyaay Native American monitor. If the remains are determined to be of Native American origin, the MLD, as identified by the NAHC, shall be contacted by the Property Owner 	

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		or their representative in order to determine proper treatment and disposition of the remains. The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the MLD regarding their recommendations as required by Public Resources Code Section 5097.98 has been conducted. Public Resources Code §5097.98, CEQA §15064.5 and Health & Safety Code §7050.5 shall be followed in the event that human remains are discovered. Rough Grading Monitoring Report: Upon completion of Rough Grading, a monitoring report shall be prepared identifying whether resources were encountered. A copy of the monitoring report shall be provided to the South Coastal Information Center and any culturally-affiliated tribe who requests a copy. Final Grading Final Report: A final monitoring report shall be prepared substantiating that earth-disturbing activities are completed and whether cultural resources were encountered. A copy of the final report shall be submitted to the South Coastal Information Center, and any culturally-affiliated tribe who requests a copy.	

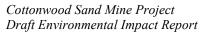
Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		 Cultural Material Conveyance The final report shall include evidence that all prehistoric materials have been curated at a San Diego curation facility or Tribal curation facility that meets federal standards per 36 Code of Federal Regulations (CFR) Part 79, or alternatively have been repatriated to a culturally affiliated tribe. The final report shall include evidence that all historic materials have been curated at a San Diego curation facility that meets federal standards per 36 CFR Part 79. 	
CR-2	There is potential for significant direct impacts related to discovery of unknown human remains on the Project site during the Project's ground-disturbing mining activities. Impacts to these resources would represent significant environmental effects.	Mitigate through Archaeological Monitoring Program mitigation measure M-CR-3, above.	Less than Significant
N-1	Noise levels could exceed the 60 dB CNEL maximum allowable noise level for 11 NSLUs surrounding the Project site: the Adeona Healthcare facility, Isolated Residence 2, Isolated Residence 3, and residential groups 1 through 5, 8, 10, and 11.	M-NOI-1 Below-Grade Excavation and Noise Barriers: Raw material extraction equipment operating within 400 feet of off-site noise-sensitive land uses (NSLU) useable space areas shall be located at the lowest feasible elevation within the Project's excavation areas such that the topography shall provide noise attenuation to off-site properties. To achieve the lowest feasible elevation, initial at-grade excavation activities shall be performed at least 400 feet from off-site NSLU usable space areas, as indicated in Figures 2.4-3a-c, <i>Noise Barriers</i> . Following this initial excavation to the lowest feasible elevation, excavation can extend outward and toward the NSLUs while maintaining the lowest feasible elevation at the active working face where extraction equipment is operating.	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		For NSLUs located at residential groups 5 and 8 (as shown on Figure 2.4-2, <i>Receivers and Residential Groups</i>), as well as Isolated Residence 2, Isolated Residence 3, and the Adeona Healthcare facility, an 8-foot-high noise barrier, constructed to the specifications identified below, shall be provided between excavation activities and the off-site NSLUs, when excavation is occurring within 400 feet of each location. When mining activities are occurring at distances greater than 400 feet from a given receiver location, a barrier would not be required adjacent to that receiver location. The barriers shall be located as shown on Figures 2.4-3a-c, and break the line of sight between the excavation activities and receivers. For the barriers adjacent to residential groups 5 and 8, the required barrier height (8 feet) shall be measured relative to the adjacent Project site property line elevation. If the barrier is constructed at a location with an elevation lower than that of the adjacent property line, the total barrier height would be greater than the required barrier height in order to provide adequate noise attenuation (e.g., if the barrier with a required height of 8 feet is to be located at a surface elevation 5 feet below the adjacent Project site property line elevation, the total barrier height would be 13 feet).	
		For NSLUs located at residential groups 1, 2, 3, 4, 10, and 11 (as shown on Figure 2.4-2), a 12-foot-high noise barrier, constructed to the specifications identified below, shall be provided between excavation activities and the off-site NSLUs, when excavation is occurring within 400 feet of each location. When mining activities are occurring at distances greater than 400 feet from a given receiver location, a barrier would not be required adjacent to that receiver location. The barriers shall be located as shown on Figures 2.4-3a-c, and break the line of sight between the excavation activities and receivers. For the barriers adjacent to residential groups 1, 2, 3, and 4, the required barrier height (12 feet) shall be measured relative to	

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		the adjacent Project site property line elevation. If the barrier is constructed at a location with an elevation lower than that of the adjacent property line, the total barrier height would be greater than the required barrier height in order to provide adequate noise attenuation (e.g., if the barrier with a required height of 12 feet is to be located at a surface elevation 5 feet below the adjacent project site property line elevation, the total barrier height would be 17 feet).	
		The noise barriers must be solid. They can be constructed of soil (in the form of a berm), masonry, wood, plastic, fiberglass, steel, or a combination of those materials, as long as there are no cracks or gaps, through or below the walls. Any seams or cracks must be filled or caulked. If wood is used, it can be tongue and groove and must be at least one-inch total thickness or have a density of at least 3.5 pounds per square foot. Sheet metal of 18-gauge (minimum) may be used if it meets the other criteria and is properly supported and stiffened so that it does not rattle or create noise itself from vibration or wind. Any door(s) or gate(s) must be designed with overlapping closures on the bottom and sides and meet the minimum specifications of the wall materials described above. The gate(s) may be of wood with a thickness of at least one-inch, solid-sheet metal of at least 18-gauge metal, or an exterior-grade solid-core steel door with pre-fabricated doorjambs. Stockpiles must be continuous and maintain the required height along their entire length.	
N-2	Project operations could cause an increase of 3 dB CNEL compared to existing conditions at three NSLUs where noise levels exceed 60 CNEL; these NSLUs are residential groups 1, 2, and 5.	Mitigate through Below-Grade Excavation and Noise Barriers mitigation measure M-N-1 provided above.	Less than Significant

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
N-3	Project operations combined with cumulative traffic noise could cause an increase of 3 dB CNEL compared to existing conditions at four NSLUs where noise levels would exceed 60 dB CNEL; these NSLUs are residential groups 1, 2, 3, and 5. Additionally, the Project could result in more than a 1 dBA increase over existing plus cumulative conditions at these locations, thus resulting in a cumulatively considerable impact.	Mitigate through Below-Grade Excavation and Noise Barriers mitigation measure M-N-1 provided above.	Less than Significant
	Subchapter 2.5 Paleontology		
PAL-1	The Proposed Project could result in significant impacts to paleontological resources from the excavation of previously undisturbed deposits exhibiting low resource potential (i.e., Quaternary alluvial deposits).	M-PAL-1. The Project site has marginal levels of sensitive paleontological resources. All excavation activities are subject to the <i>County of San Diego Grading Ordinance Section 87.430</i> , if any significant resources (fossils) are encountered during excavation activities.	Less than Significant
		a. The grading contractor is responsible to monitor for paleontological resources during all grading activities. If any fossils are found greater than 12 inches in any dimension, stop all grading activities and contact PDS before continuing grading operations.	
		b. If any paleontological resources are discovered and salvaged, the monitoring, recovery, and subsequent work determined necessary shall be completed by or under the supervision of a Qualified Paleontologist pursuant to the San Diego County Guidelines for Determining Significance for Paleontological Resources.	

Impact No.	Impact	Mitigation	Conclusion and Mitigation Effectiveness
		M-PAL-2. One of the following letters shall be prepared upon completion of the excavation/mining activities that require monitoring:	
		a. If no paleontological resources were discovered, submit a "No Fossils Found" letter from the grading contractor to PDS stating that the monitoring has been completed and that no fossils were discovered, and including the names and signatures from the fossil monitors. The letter shall be in the format of Attachment E of the San Diego County Guidelines for Determining Significance for Paleontological Resources.	
		b. If paleontological resources were encountered during grading, a letter shall be prepared stating that the field grading monitoring activities have been completed, and that resources have been encountered. The letter shall detail the anticipated time schedule for completion of the curation phase of the monitoring.	
Subchapter 2.6 Tribal Cultural Resources			
TCR-1	There is potential for significant direct impacts related to undiscovered buried TCRs on the Project site during the Project's ground-disturbing mining activities. Impacts to these resources would represent significant environmental effects.	Mitigate through Cultural Resources Treatment Agreement and Preservation Plan mitigation measure M-CR-1 , Pre-Grade Survey and Data Recovery Program mitigation measure M-CR-2 , and Archaeological Monitoring Program mitigation measure M-CR-3, above.	Less than Significant





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