SUMMARY

S.1 PROJECT SYNOPSIS

S.1.1 Overview

This Environmental Impact Report (EIR) evaluates the potential environmental impacts of approval of a Specific Plan Amendment (SPA), Major Use Permit (MUP), Reclamation Plan, and Boundary Adjustment for the Otay Hills Construction Aggregate and Inert Debris Engineered Fill Operation (IDEFO) (hereinafter referred to as "Proposed Project" or "Project") in the unincorporated community of East Otay Mesa in south San Diego County. The full duration of the Proposed Project would be approximately 120 years and would include site preparation, extraction and processing of construction aggregate, backfilling the pit with inert debris (i.e., IDEFO), and reclamation of the extraction areas.

Implementation of the Project would require the issuance of a Major Amendment to the Multiple Species Conservation Program (MSCP) County of San Diego (County) Subarea Plan ("Subarea Plan"). On March 17, 1998, the USFWS issued a section 10(a)(1)(B) permit (PRT-840414) pursuant to the Federal ESA, as amended (16 USC 1531 et seq.) for the County Subarea Plan. The California Department of Fish and Wildlife (CDFW) also issued Natural Community Conservation Plan Approval and Take Authorization per Section 2800 et seq., of the California Fish and Game Code. The County's Subarea Plan and its associated Implementing Agreement and permits with the USFWS and CDFW (collectively referred to as the Wildlife Agencies) establish the conditions under which the County, for the benefit of itself and of public and private landowners and other land development project proponents within its Subarea Plan boundaries, receives take authorizations for 85 Covered Species incidental to land development and other lawful land uses, that are authorized by the County and are covered by the permits (i.e., covered activities). The Biological Mitigation Ordinance (BMO) is the implementing ordinance for the County's Subarea Plan. Compliance with this ordinance allows the County to issue Incidental Take Permits (ITPs).

The Project site is comprised of all or portions of 10 parcels that total approximately 410 acres. The mining of construction aggregates, materials processing and IDEFO would occur on approximately 105 acres of the Project site. The balance of the area would be designated as MSCP Hardline Preserve land within the proposed Otay Hills Conservation Area (OHCA), which would be protected by a Federal Conservation Easement and a Biological Open Space Easement dedicated to the County.

This EIR has been prepared in conformance with the CEQA of 1970, as amended by Public Resources Code (PRC), Section 21000, et. seq., and the State CEQA guidelines, as amended by the California Administrative Code, Section 15000, et. seq. This EIR also complies with County of San Diego Planning & Development Services (PDS) Environmental Impact Report Format and General Content Requirements (revised September 2006); however, the document format also reflects previous drafts intended to fulfill Federal requirements as it was previously drafted as an EIR/Environmental Impact Statement (EIS). The National Environmental Policy Act (NEPA) portion of the document has since been removed and will be addressed in its own separate NEPA document to be prepared by the USFWS.

S.1.2 Goals and Objectives of the Proposed Project

The goal of the Project is the establishment of a mineral resource recovery operation and associated activities to create much-needed construction aggregates and materials to serve the economy of San Diego County for an approximate 90+-year period. During and after mineral resource recovery operations, the open pit would serve as a receiver site for inert debris such as concrete, asphalt, rock and soil.

The overall objectives of the Project are to:

- Secure permits for a long-term, dependable source of high quality aggregate located close enough to high development areas in the South County region, including the City of San Diego, the City of Chula Vista, and the unincorporated community of East Otay Mesa, in order to feasibly serve these areas.
- Establish an on-site processing plant in order to achieve maximum possible operational efficiency.
- Provide aggregate material to southern San Diego County, where it has been determined by the San Diego Association of Governments (SANDAG) that there is a significant shortfall of permitted, long-term aggregate reserves (2011a).
- Provide an IDEFO for debris such as concrete, asphalt, rock and soil.
- Return extracted areas to a useful purpose following depletion of mineral resources.
- Ensure compliance with the California Natural Community Conservation Planning (NCCP) Act and the California ESA.
- Provide conservation for the MSCP covered species and the Quino checkerspot butterfly (QCB) through conservation of a portion of the Project site to be managed in accordance with the Resource Management Plan (RMP) approved by the County and Wildlife Agencies.

S.1.3 Project Description

Operational Characteristics

The Proposed Project would include a hard rock extraction operation that would extract and process rock for construction aggregate purposes. Rock that has been processed for use in manufacturing other products (such as concrete or asphaltic concrete) is typically referred to as aggregate. Anticipated operations at the site would include the following:

- Phased recovery of rock resources
- Materials processing (primary and secondary plants)
- Concrete batch production

- Cement-treated base production
- Asphalt batch production
- Recycling of asphalt and concrete products
- IDEFO

The aggregate extraction operation would occur on a 105-acre area, while the bulk of processing activities would take place within this area on a 16.1-acre pad located at the northern portion of the Project site. Materials would be extracted using blasting to fracture and loosen the hard rock resources, followed by extraction and processing to size and sort the materials.

Six processing plants are proposed within the Project impact footprint: two materials processing plants (primary and secondary), a concrete batch plant, a cement-treated base plant, a recycling plant, and an asphalt batch plant. The primary plant is loosely defined as the process that takes the raw material and crushes it to a size suitable for further processing and screening. Typically, a primary plant would crush the rock, screen out unusable fine material, and deposit the crushed rock in a surge pile for use by the secondary plant. The primary plant is independent of the secondary plant and can be used without operating the secondary plant. It is anticipated that the primary plant equipment would consist of a jaw crusher, a screen, and a primary crusher.

The secondary plant would consist of two or four rock crushers to further reduce the size of the rock, five to seven screens to sort the material by size, and a washer to clean dirt from certain types of material to meet end product specifications. Materials washing would require construction of a pond to recycle and store water. Front end loaders would be needed to load trucks. Rock which has been processed for use in manufacturing other products, such as concrete and asphaltic concrete, is typically referred to as aggregate.

Finished aggregate would be stockpiled and/or stored in overhead loading bins. The stockpiles would be approximately 35 feet high. The aggregate would then be loaded onto trucks either with a front-end loader or by gates on the bottom of overhead loading bins. Prior to leaving the extraction area, loaded trucks would be top-watered to prevent roadway dust and would pass across a scale to determine the total weight of the truck and identify the type and weight of the aggregate. Dust would be controlled with a state-of-the-art dust control system, using best available control technology (BACT) and monitoring by the San Diego Air Pollution Control District (SDAPCD).

Buildings associated with the Proposed Project would likely include an office building, a small-scale office, and small maintenance shop. These facilities would be located near the secondary plant. Site operations would likely employ approximately 10 to 15 persons. On-site parking would be required.

The concrete ready-mix plant on site would be set up so that materials could be conveyed directly from the aggregate stockpiles to the concrete ready-mix plant. Within the concrete ready-mix plant, appropriate quantities of aggregate of various types, cement, and water would be weighed to make up batches of ready-mix concrete. These materials would then be discharged into a mixer drum on a ready mix concrete truck. Compliance with SDAPCD permits would require the use of BACT, which would ensure a relatively emission- and dust-free operation.

The concrete ready-mix plant would consist of a feed hopper, feed conveyor, batching plant, cement storage silos, and an operations building. A conveyor would feed the required aggregate into the aggregate storage bins. The cement and aggregates would then be weighed and added to the mixer truck with water and additives. Trucks would be loaded under the batcher in an area that would be ducted to a baghouse; this process controls dust during loading. Once loaded, the trucks would deliver concrete to various locations. The highest point for the concrete ready mix plant would be 75 feet.

Cement and fly ash powder are used in the processing of concrete. These two materials would be brought on site via powder trailers. Once on site, these materials would be unloaded into dry silos by means of blowers that effectively would pump the materials through 4-inch lines. The entire transfer process would be fully enclosed; therefore, any dry material spillage is unlikely. Once in the silos, the material would be transferred to the concrete batch plant through similar piping.

Cement additives are necessary for creating a number of useful reactions (e.g., delaying concrete setting) within the concrete. These additives would be stored on site in contained areas. When more additives are required, new totes would be delivered, or a tanker truck from the vendor would come and fill up the tanks. The entire process of filling these tanks would occur in a fully contained area. Once in the tanks, the additives would be automatically metered into the plant via a computerized batch control system.

The Hot Mix Asphalt (HMA) plant would be sited such that materials could be conveyed from the aggregate stockpiles for direct loading of the asphalt plant by conveyor. The asphalt plant would discharge the various types of aggregate into a large rotating drum, where the aggregate is heated by natural gas to drive off water. The heated materials would then be mixed with asphalt to make asphalt concrete. As in the case of the concrete batch plant, compliance with SDAPCD permits would require the use of BACT, which would ensure a relatively emission- and dust-free operation.

The total height of the HMA plant would be approximately 75 feet. Three silos, which look like grain silos on a farm, would be the tallest structures at the facility. The tall elevation is needed to allow for a surge of material to be stored and for gravity to discharge it to the trucks. The next highest structure would be the baghouse and its ducting, which typically stands 45 feet high.

The HMA would be loaded out via a silo surge system. This process works by positioning a truck under the load out area and placing the required mix amount into the truck bed via gravity feed. There would be no chemicals or loss of material during this procedure. Once full, the truck would drive out of the loading bay and proceed to the job site.

A cement-treated base plant would be located at the site. Cement-treated base is a rock/sand mixture that has been mixed with cement powder to provide improved strength and stability for highway and foundation projects.

A concrete and asphalt recycling plant also would be included as part of the Proposed Project. This process would involve the import of used concrete and asphalt materials, crushing, and then exporting the material for use as road base or foundation material. These materials also may be blended with rock originating from the site to improve performance characteristics.

The primary processing (which includes the use of a jaw crusher) may be extended to the extraction areas using conveyor belts. Some crushing and screening would eventually occur below grade, within the pit area. The HMA plant, aggregate processing plant, and concrete ready mix plant would be stationary and therefore, would not be relocated. Equipment shown on the southern end of the 16.1-acre pad, including the recycling plant and primary crusher, is portable and would eventually be relocated to the quarry floor as excavation progresses below grade.

Phasing

The Proposed Project would consist of four phases. Phase 1 involves site preparation activities prior to mining including initial grading to establish access routes, extending water and power service to the site, and grading pad areas for the processing plant location. Site preparation operations would be located in the northern portion of the site. Phase 1 grading consists of minor cutting of the landform to create a relatively flat working surface for the processing plant. Construction of the processing plant, concrete batch plant, asphalt plant, cement treated base plant, and site office would also be commenced. This initial phase would include 14.8 acres on the Project site, plus associated activities required to construct the access road. Ultimately, the processing area would also extend into the northern portion of Phase 2 and would consist of 16.1 acres. Activities in Phase 1 are expected to continue for about one year.

Phase 2 would involve commencement of extractive operations within the extraction footprint. This phase is divided into three sub phases, with Phase 2a occurring in the north and ending with Phase 2c in the south. Phase 2 would consist of cutting the landform to the natural grade elevation that exists along the western perimeter of the site. During Phase 2a, aggregate resource would be recovered over a 17.1-acre area of the site. Phase 2a would continue for approximately 4.5 years (±1 year). Phase 2b operations would include extraction of material from a 24.2-acre area and are expected to continue for approximately 5.5 years (±1 year). Phase 2c would consist of extracting of material from the remainder of the extraction footprint (approximately 45.4 acres). Phase 2c is expected to continue for approximately 11 years. As operations progress in Phase 2, slope areas within Phase 1 and Phase 2 would be seeded with a non-invasive erosion control mix.

Phase 3 also is divided into sub phases. Phases 3a through 3d would also progress in a north to south direction. Extraction operations that would occur during Phases 3b through 3d would extend to a maximum depth of approximately 525 feet from the existing grade. As part of the reclamation process, the site would be utilized as an IDEFO. Backfilling is expected to continue throughout the Phase 3 operations, on a phase-by-phase basis. The Phase 3a operations would involve additional extraction of material from an 8.5-acre area. This phase would continue for approximately 3 years (±1 year). As extraction operations advance in Phase 3a and space becomes available, backfilling of the Phase 3a sub-grade depression would commence. Phase 3b operations would consist of extracting material from a 22.1-acre area over approximately 12 years (±1 year). It is anticipated that Phase 3c would extract from a 22.1-acre area over approximately 18 years (±1 year). Lastly, Phase 3d operations are expected to extract materials from a 33.7-acre area over approximately 33 years (±1 year).

As extraction operations advance in Phase 3, the pit would be backfilled with inert fill material (fill dirt) on a phase-by-phase basis. The rate of backfill is estimated at 500,000 cubic yards per year. Throughout the phased mine plan, fill material that is used for backfilling would be

compacted to form pad areas. Depending on the rate at which fill material is imported to the site, it is anticipated that Phase 4 activities would continue for approximately 64 years throughout the extraction operation. Phase 4 operations are anticipated to continue for approximately 15 years beyond extraction operations.

Reclamation

Under the California Surface Mining and Reclamation Act (SMARA) of 1975 (California PRC Section 2710 et. seq.), all extractive operations are required to have a Reclamation Plan approved by the lead agency. A Reclamation Plan defines the activities to be carried out when extraction has been completed at a particular site. The extracted land must be returned to a useful, approved alternative purpose.

The Otay Hills Reclamation Plan (EnviroMINE, Inc. [EnviroMINE] 2019b) is contained in Appendix B of this EIR and describes the phased reclamation of extraction areas and sets forth standards to assure adequacy of the plan measures. Upon completion of each phase, reclamation would be commenced. Final reclamation would occur when all recovery operations have been completed. These activities would include final grading to establish the final land form, removal of plant equipment, application of topsoil resources, and revegetation.

Post-extraction Land Use

Reclamation of the extraction site is designed to conform to the planning goals described in the East Otay Mesa Specific Plan (EOMSP). The parcels are currently designated Mixed Industrial and Rural Residential. The proposed SPA would change areas currently designated as Rural Residential within the mining footprint to Mixed Industrial. Future development of the Project site would need to be consistent with the land use regulations set forth in the County General Plan, EOMSP and zoning ordinance. If future land uses were proposed that are not consistent with the EOMSP, a specific plan amendment and further environmental review would be required in accordance with CEQA.

S.1.4 <u>Alternatives to be Evaluated</u>

The alternatives selected for analysis in this EIR are described in S.1.4 and the following alternatives:

- Extraction to Natural Grade Alternative
- Extraction to Varying Depth Alternative
- No Project/Existing Plan Alternative
- No Project Alternative

Extraction to Natural Grade Alternative

The Extraction to Natural Grade Alternative would include only Phases 1 and 2 of the Proposed Project as described above. The impact footprint would be the same; however, the aggregate would only be extracted to natural grade elevation and the lifespan of this alternative would be approximately 20 years versus up to 120 years for the Proposed Project. Approximately 19 million tons of aggregate would be extracted under this alternative versus 90.9 million tons under the

Proposed Project. The operational characteristics would be the same as described for Proposed Project; however, the IDEFO (inert landfill) would not be included since the deep pit associated with Phase 3 of the Proposed Project would not occur.

Extraction to Varying Depth Alternative

The Extraction to Varying Depth Alternative would include the same operations and footprint as the Proposed Project (Figures 2-13a and 2-13b, *Extraction to Varying Depth Alternative*), except that the ultimate pit depth would be reduced from approximately 525 feet below the existing grade (under the Proposed Project) to a shallower depth. This alternative would result in a final extraction depth between 50 and 200 feet below the existing grade and would consist of four phases. These phases would be consistent with Phases 1 through 4 of the Proposed Project. Phase 1 would include site preparation and the construction of the processing plant. Phase 2 would consist of cutting the landform to the natural grade elevation that exists along the western perimeter of the site. The natural grade elevation of the mesa (west of the site) ranges between 580 and 650 feet AMSL. Extraction would progress in a north to south direction. Extraction operations during Phase 3 would extend below the Phase 2 area, to a maximum pit floor elevation of 380 to 530 feet AMSL, depending on the final depth of extraction. Phase 4 would involve backfilling the pit with inert fill material and compacting the material to form pad areas (IDEFO). Similar to the Proposed Project, the pit would be backfilled consecutively with extraction that occurs during Phase 3.

The total anticipated production of the quarry under this alternative would have an estimated life of 36 to 60 years and would extract approximately 35 to 60 million tons of mineral resource from the site, depending on the final depth of extraction. Annual production amounts are anticipated to be similar to the Proposed Project (i.e., between 0.6 and 1.6 million tons of aggregate per year).

Similar to the Proposed Project, the proposed construction aggregate operation would be developed in phases. The timing for Phases 1 through 4 could change in the future depending upon aggregate needs in southern San Diego County, such that the phases presented herein could change and/or more than one phase could be in use at any one time.

No Project/Existing Plan Alternative

Under the No Project/Existing Plan Alternative, 316 acres of the 410-acre Project site that are within the EOMSP area would be developed as envisioned in the EOMSP which is the existing plan for the Project site. The MUP would not be proposed and there would be no construction aggregate facility or inert landfill on site.

Current land use designations for the Project site under the EOMSP allow for Mixed Industrial and Rural Residential uses. The Mixed Industrial areas generally are located in the flatter, central and southern portions of the western site of the Project site and cover approximately 62 acres. The Mixed Industrial use designation is primarily intended for wholesale storage and distribution, research services, and general industrial uses. Compatible commercial uses such as construction sales and services, automotive and equipment uses, and custom manufacturing are also permitted. As outlined within the EOMSP, buildout of the "planning area" is expected to occur by the year 2020. During this development period, interim uses such as agricultural and vehicular storage,

construction equipment yards, and materials storage yards, and nurseries, are allowed within the designated Mixed Industrial use areas, as long as they are compatible with planned industrial uses.

The approximately 254-acre Rural Residential area is located in the hillier portions of the Project site. The Hillside Residential land use category allows low-density (1 dwelling unit [du]/20 gross acres) rural residential land use. Within the Project site, approximately 254 acres are designated for Hillside Residential use under the EOSMP. Therefore, at full buildout of the Project site, there could be up to 12 single-family dwelling units. Rural Residential areas with steep slopes and sensitive biological resources are given a "G" Designator and are subject to the Sensitive Resource Area Regulations of the Zoning Ordinance, which require a Site Plan Review Process. A County-approved Resource Conservation Plan also is required prior to any development, including clearing and grading. The EOMSP promotes dwelling unit clustering to protect sensitive environmental resources.

It is likely that an ITP would also be required under this alternative, as some portion of the Project site would be developed. Approximately 122 acres of vegetation would be directly affected upon implementation of the No Project/Existing Plan Alternative, based on full development of the 62-acre Mixed Industrial area and partial development of the 254-acre Rural Residential area. It is assumed that there would be a five-acre impact footprint for each of the 12 single-family rural residences, resulting in a total impact footprint of 60 acres within the Rural Residential area. Because no specific development plan exists for this alternative, the total impacts to individual vegetation communities and associated sensitive plant and animal species are not available for this alternative.

No Project Alternative

In accordance with Section 15126.6(e) of the State CEQA Guidelines, the No Project Alternatives includes a discussion of: (1) the existing conditions at the time the Notice of preparation (NOP) is published; and (2) circumstances under which the Project does not proceed, taking into account what would reasonably expected to occur in the future by others (e.g., in accordance with the EOMSP).

Under the No Project Alternative, no construction aggregate extraction operation or IDEFO developed by the Project Applicant would occur on the Project site. The Project site would remain as it is today, consisting of the undeveloped land crossed by a series of dirt roads used primarily by the U.S. Border Patrol for domestic security purposes. No changes in the existing environment would be expected. The Project impact footprint is located within Major and Minor Amendment Areas of the South County Segment of the County's MSCP. A 120-foot San Diego Gas & Electric (SDG&E) easement including power lines runs diagonally through the Project site. Three SDG&E utility towers are located approximately 50 feet from the impact footprint. An SDG&E 20-foot natural gas pipeline easement runs along the western and southern boundary of the project area.

Under the No Project/Alternative, an ESA incidental take permit through the MSCP Subarea Plan Amendment process would not be required as the site would not be developed.

S.1.5 Project Location

The Project site is located in the unincorporated community of East Otay Mesa within the Otay Subregional Planning Area in the southernmost portion of San Diego County. The Project impact footprint is located 8.5 miles east of Interstate 805 (I-805)/State Route 905 (SR 905) interchange and 0.5 mile east of the intersection of Otay Mesa Road and Alta Road. The Project impact footprint is located at the eastern extension of Otay Mesa on the southwestern flank of the San Ysidro Mountains approximately 0.75 miles north of the U.S.-Mexico international border.

S.1.6 Environmental Setting/Affected Environment

Project Vicinity

Surrounding uses include undeveloped land, industrial uses, and scattered rural residential uses. The closest developments to the Project impact footprint include the power plant on a lot abutting the northwestern edge of the impact footprint and an asphalt plant on a lot abutting the southwestern edge of the impact footprint; the land adjacent to the remainder of the impact footprint is undeveloped. The land adjacent to the remainder of the impact footprint is undeveloped. There are also some recently graded pads for industrial development located immediately south of the power plant. Areas to the immediate south consist of undeveloped land and further to the south industrial portions of Tijuana, Mexico. Two prison facilities, the R.J. Donovan State Correctional Facility and the George F. Bailey County Detention Facility, are located approximately 1.5 miles northwest of the Project impact footprint. Brown Field is a general aviation airport in the City of San Diego approximately 3 miles west of the impact footprint, and Tijuana International Airport is in Tijuana, Mexico, approximately 2.5 miles to the southwest.

The scattered rural residential uses nearby consist of five private residential farms/ranches located within approximately two miles of the Project impact footprint. The properties include facilities for animals such as horses and sheep, multiple usable and derelict vehicles, as well as homes and scattered outbuildings. The closest house to the Project impact footprint is located off Alta Road via Kuebler Ranch Road (the former Kuebler residential ranch is currently a commercial establishment, R & F Metal, Inc.). Three houses are located on the north side of Old Otay Mesa Road, 1.4 miles directly west of the Project impact footprint. The fifth house is located between the two prison facilities, accessed via a dirt road off of Alta Road before Alta Road reaches the County Detention facility.

Site Characteristics

The Project's 105-acre impact footprint is currently undeveloped, with the exception of a few dirt roads that transect the site. Due to the Project site's location near the international border, the site is frequented by the U.S. Border Patrol, which patrols the site in an effort to secure the U.S. against unlawful entry. The Project impact footprint is located within Major and Minor Amendment Areas of the South County Segment of the County's MSCP. A 120-foot San Diego San Diego Gas & Electric (SDG&E) easement including power lines runs diagonally through the Project site. Three SDG&E utility towers are located approximately 50 feet from the impact footprint. An SDG&E 20-foot natural gas pipeline easement runs along the western and southern boundary of the project area.

Two knolls and several canyons, including one large canyon, exist within the Project impact footprint. The largest canyon on the 105-acre Project impact footprint contains the lowest site elevation, approximately 620 feet AMSL, along the western Project impact footprint boundary. This canyon flows via an unnamed drainage westward through the Project impact footprint and turns southward just beyond the Project impact footprint boundary. The northern and eastern slopes of the canyon rise into the San Ysidro Mountains bordering the Project impact footprint to the north and east. The southern slopes of this canyon rise to the highest point on the Project impact footprint, at 825 feet AMSL. This point of highest elevation occurs within the central-eastern boundary of the Project impact footprint. The two knolls occur southwest of this point at elevations of 758 and 725 feet. Approximately 21.7 acres of slopes steeper than 25 percent with a minimum 50-foot rise occur on the 105-acre Project impact footprint.

The Project site supports sensitive vegetation communities, including mule fat scrub, cismontane alkali marsh, native grassland, Diegan coastal sage scrub (including disturbed), chamise chaparral, southern mixed chaparral and non-native grassland.

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

Table S-1, Summary of Significant Environmental Effects and Mitigation Measures, located at the end of this chapter, provides a summary of significant environmental impacts that would result from implementation of the Proposed Project as well as each of the five alternatives. Table S-1 also includes mitigation measures to reduce and/or avoid the environmental effects, with a conclusion as to whether the impact would be mitigated to below a level of significance. Detailed analyses of significant environmental effects that can and cannot be avoided if the Project is implemented are provided in Chapter 4.0, Environmental Impacts and Mitigation, of this EIR. The mitigation measures listed in Table S-1 also are included in Chapter 10.0, List of Mitigation Measures and Environmental Design Considerations for Proposed Project, of this EIR.

S.3 **Areas of Controversy**

On May 26, 2005, the NOP of an EIR was published and the Initial Study and NOP were distributed by the County to the State Clearinghouse, responsible agencies, and interested citizens and community groups for a 30-day public review period, pursuant to CEQA Guidelines. A Public Scoping Meeting was held on June 16, 2005 at the County. Nine letters were received in response to the NOP.

Concerns were expressed by County staff, and USFWS and CDFW (collectively referred to as "Wildlife Agencies") regarding the Project footprint and potential biological impacts. The Applicant has spent several years working with County staff and Wildlife Agencies on an adequate biological mitigation strategy to address sensitive biological habitat on the Project site. Numerous meetings have been held with County staff, Wildlife Agencies and the Applicant between 2005 and 2010 to address these concerns. The Applicant worked with County staff to revise the footprint, which resulted in a reduced mining impact footprint of approximately 105 acres. A SPA application was resubmitted to the County on November 19, 2010. Following review of the SPA application, the County determined that a new NOP should be prepared because substantial changes were made to the Project since the initial NOP dated May 26, 2005. In addition, the

subsequent NOP was issued because a joint EIR/EIS was proposed to be prepared for this Project in cooperation with the USFWS to address the environmental effects associated with an incidental take permit under Section 10(a)(1)(B) of the ESA. Recently, based upon a preliminary analysis, USFWS has determined that their action would not result in significant impacts to the human environment under NEPA. Therefore, they anticipate going forward with a separate Environmental Assessment and Finding of No Significant Impact, for the issuance of an Incidental Take Permit under Section 10 of the Federal ESA.

An Initial Study was completed by the County for the revised Project on January 5, 2011. The resource areas potentially affected by the Proposed Project included land use and planning/community character, aesthetics, hazards, utilities/service systems, hydrology/water quality, geology/soils, noise, cultural resources, air quality, transportation/circulation, biological resources, greenhouse gas emissions, and public services. On March 17, 2011, the NOP of an EIR/EIS was published, and the Initial Study and NOP were distributed by the County to the Office of Planning and Research – State Clearinghouse (SCH), responsible agencies and interested citizens and community groups for a 30-day public review period, pursuant to CEQA Guidelines. A Public Scoping Meeting was held on March 30, 2011 at the County. Six letters were received in response to the NOP. Appendix A includes the NOP dated March 17, 2011 in its entirety and the related comment letters.

The USFWS issued a Notice of Intent (NOI) in the Federal Register on August 18, 2014 for a 30-day review period, pursuant to NEPA requirements. Two letters were received in response to the NOI. Appendix A-2 includes the NOI in its entirety and the related comment letters.

Based upon a preliminary analysis, USFWS has determined that their action would not result in significant impacts to the human environment under NEPA. Therefore, they anticipate going forward with a separate Environmental Assessment and Finding of No Significant Impact, for the issuance of an Incidental Take Permit under Section 10 of the Federal ESA.

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

Under CEQA, 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 project. The lead agency (in this case the County of San Diego) must respond to each significant effect identified in this EIR by making "Findings" for each significant effect. The decision makers also can decide whether to implement a project alternative or combination of alternatives. Preparation of a Statement of Overriding Considerations (explaining the overriding value of the Project despite adverse effects) would be required due to a significant and unmitigated impact associated with transportation noise to three single family residences on Otay Mesa Road.

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Table S-1 SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
	SI	GNIFICANT AND UNAVOIDABLE IMPACTS		
		Project-level Impacts		
D' (T. CC' M. I. (OCC '/ M. '. I.	111	4.5 Noise		
Direct Traffic Noise Impacts to Off-site Noise-sensitive Land Impact N-1: The backyards of two of the three analyzed houses along Otay Mesa Road (located at 6950 and 6980 Otay Mesa Road; APNs 646-080-012 and 646-080-11) would have noise levels above 60 CNEL during maximum operation levels due to Project-generated traffic along the roadway. Accordingly, direct project generated traffic noise impacts would be significant.	Impact N-1: Same as Proposed Project	Impact N-1: Same as Proposed Project	Impact N-1a: Same as Proposed Project.	No impacts associated with noise would result from implementation of the No Project Alternative.
No Permissible Mitigation: Noise barriers in excess of 20 feet with returns on the residential properties to accommodate driveways would be required to fully mitigate impacts to the three affected houses along Otay Mesa Road. The County of San Diego Zoning Ordinance 6708, Permitted Fences, Walls, Gates and Entry Structures, specifies that noise walls heights should not normally exceed 72 -inches in height for backyard walls and 42 inches for front yard walls. The County will normally permit walls to be planned as berm wall combinations up to nine feet in height (which is probably not feasible at these residences). The construction of noise walls to the requisite height to control the noise from heavy truck traffic immediately adjacent to the roadway would require walls significantly higher than specified above. Therefore, this mitigation, while feasible, would probably not be permitted by the County of San Diego and is unlikely to be desired by the residences of the houses. Residences may request the construction of shorter noise walls in front of their property; however, the walls would not fully mitigate impacts. Accordingly, impacts are conservatively assessed as significant and unmitigated.	No Permissible Mitigation: Same as Proposed Project	No Permissible Mitigation: Same as Proposed Project	No Permissible Mitigation: Same as Proposed Project.	
	1	4.6 Air Quality		
Operational Emissions Impacts Impact AQ-1: Peak daily operational emissions of NOx during Phase 2 would exceed the daily threshold, thus resulting in a significant impact.	Impact AQ-1: Same as Proposed Project	Impact AQ-1: Same as Proposed Project	Air quality impacts from implementation of the No Project/Existing Plan Alternative would be less than significant.	No impacts associated with air quality would result from implementation of the No Project Alternative.
No Permissible Mitigation	No Permissible Mitigation	No Permissible Mitigation		

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES					
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative	
SIGNIFICANT AND UNAVOIDABLE IMPACTS (cont.)					
		Project-level Impacts (cont.)			
4.9 Land Use and Planning Land Use					
Impact LU-1: Project implementation would result in a significant Project-level land use impact due to inconsistency with the Noise Element of the County General Plan, related to Project-generated transportation noise levels at three identified residences on Otay Mesa Road. Refer to Impact N-1. No Permissible Mitigation: Refer to the reasoning	Impact LU-1: Same as Proposed Project No Permissible Mitigation: Same as Proposed Project	Impact LU-1: Same as Proposed Project No Permissible Mitigation: Same as Proposed Project	Since the No Project/Existing Plan Alternative would consist of implementation of the land use designations for the Project site delineated in the EOMSP, this alternative would, by definition, be consistent with all applicable plans, policies and ordinances. Accordingly, no impacts related to land use would result from implementation of the No Project/Existing Plan Alternative.	No impacts related to land use would result from implementation of the No Project Alternative.	
provided above under Impact N-1.		Cumulative-level Impacts			
		4.5 Noise			
Impact N-3: Cumulative direct project generated traffic impacts to exterior use areas (backyards) of the three analyzed houses along Otay Mesa Road (located at 6950 and 6980 Otay Mesa Road; APNs 646-080-012 and 646-080-11) would be significant.	Impact N-3: Same as Proposed Project	Impact N-3: Same as Proposed Project	Impact N-3a: Same as Proposed Project.	No impacts associated with noise would result from implementation of the No Project Alternative.	
No Permissible Mitigation : Refer to the reasoning provided above under Impact N-1.	No Permissible Mitigation: Same as Proposed Project	No Permissible Mitigation: Same as Proposed Project	No Permissible Mitigation: Same as Proposed Project.		
		4.6 Air Quality			
Impact AQ-2: Peak daily operational emissions of NOx during Phase 2 would exceed the daily threshold, thus resulting in a significant cumulative air quality impact.	Impact AQ-2: Same as Proposed Project	Impact AQ-2: Same as Proposed Project	Cumulative air quality impacts from implementation of the No Project/Existing Plan Alternative would be less than significant.	No cumulative impacts associated with air quality would result from implementation of the No Project Alternative.	
No Permissible Mitigation	No Permissible Mitigation	No Permissible Mitigation			
		4.9 Land Use and Planning			
Impact LU-3: Project implementation would result in a significant cumulative land use impact due to inconsistency with the County General Plan Noise Element, related to Project-generated transportation noise levels at three identified residences on Otay Mesa Road.	Impact LU-3: Same as Proposed Project	Impact LU-3: Same as Proposed Project	Since the No Project/Existing Plan Alternative would consist of implementation of the land use designations for the Project site delineated in the EOMSP, this alternative would, by definition, be consistent with all applicable plans, policies and ordinances. Accordingly, no impacts related to land use would result from implementation of the No	No impacts related to land use would result from implementation of the No Project Alternative.	
No Permissible Mitigation : Refer to the reasoning provided above under Impact N-1.	No Permissible Mitigation: Same as Proposed Project	No Permissible Mitigation: Same as Proposed Project	Project/Existing Plan Alternative.		
	SIGNIFICANT IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT				
		Project-level Impacts			
Landelide Hazarda and Unetable Coolerie on Sail Visite	4.1 Geological Resources				
Landslide Hazards and Unstable Geologic or Soil Units Impact GE-1: Construction of temporary and permanent cut slopes could potentially result in significant impacts related to landslide/instability hazards due to uncertainties regarding geologic/structural conditions and the stability of extraction and final cut slopes with respect to rock/debris falls.	Impact GE-1: Same as Proposed Project	Impact GE-1: Same as Proposed Project	Impact GE-1: Same as Proposed Project	No significant impacts related to landslide/slope stability, settlement or liquefaction would result from implementation of the No Project Alternative.	

	SUMMARY OF SIGNIFICAL	Table S-1 (cont.) NT ENVIRONMENTAL EFFECTS AND MITIGATION M	IEASURES		
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative	
7		MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	C (cont.)		
Project-level Impacts					
		4.1 Geological Resources (cont.)			
Landslide Hazards and Unstable Geologic or Soil Units (con		Market Market OF 1 C	M'C - C - M CE 1 - C - D - ID ' - C		
Mitigation Measure GE-1: A qualified geologist shall be on-site during applicable temporary and permanent cut slope excavations to monitor for localized unstable geologic conditions associated with the exposure of intersecting fractures, planes of weakness, or other conditions that may result in unstable slopes. Applicable recommendations from the noted monitoring shall be provided to a qualified engineer and incorporated into the Project design and construction efforts, through measures approved by the County such as localized changes in cut slope grades, use of stabilizing structures (e.g., rock bolts or wire mesh) and installation of protective devices (e.g., rock/debris fall fences or barriers).	Mitigation Measure GE-1: Same as Proposed Project	Mitigation Measure GE-1: Same as Proposed Project	Mitigation Measure GE-1: Same as Proposed Project		
Impact GE-2 : Implementation of the Proposed Project IDEFO would potentially result in significant impacts related to short- and long-term settlement of fill materials.	Impact GE-2: Same as Proposed Project	Impact GE-2: Same as Proposed Project			
Mitigation Measure M-GE-2: A Settlement Monitoring Program (SMP) approved by the County shall be implemented by a qualified geotechnical engineer to monitor and document potential short- and long-term settlement related to the IDEFO. Specific elements that this program shall include are discussed in Subchapter 4.1.3.3, <i>Geological Resources</i> .	Mitigation Measure M-GE-2: Same as Proposed Project	Mitigation Measure M-GE-2: Same as Proposed Project			
		4.3 Biological Resources			
Riparian Habitat and Other Sensitive Natural Communities					
Impact BI-1 : Implementation of the Proposed Project would result in removal of 0.27 acre of cismontane alkali marsh.	Impact BI-1: Same as Proposed Project	Impact BI-1: Same as Proposed Project	Impact BI-1: Approximately 122 acres of vegetation would be directly affected upon implementation of the No Project/Existing Plan Alternative; however, no specific development plan exists for this alternative. Therefore,	Under the No Project Alternative, no impacts to cismontane alkali marsh would occur.	
Mitigation Measure M-BI-1 : Mitigation for removal of 0.27 acre of cismontane alkali marsh shall occur at a 3:1 ratio through on- or off-site creation, restoration and/or	Mitigation Measure M-BI-1: Same as Proposed Project	Mitigation Measure M-BI-1: Same as Proposed Project	specific impacts to individual vegetation communities are not available for this alternative.		
enhancement of 0.81 acre of wetland or riparian habitat, or alternative mitigation acceptable to the County and resource agencies prior to commencement of construction of extraction operation support facilities or extraction operations. At least 0.27 acre of the mitigation shall be habitat creation to ensure no-net-loss of wetlands. Prior to the clearing of habitat and commencement of			Mitigation Measure M-BI-1: Mitigation for impacts to cismontane alkali marsh shall occur at a 3:1 ratio through on- or off-site creation, restoration and/or enhancement of cismontane alkali marsh in consultation with the County and resource agencies prior to commencement of construction of extraction operations support facilities or extraction operations.		
construction of extraction operation support facilities or extraction operations for the Proposed Project, the applicant shall either: (1) purchase wetland habitat credits, (2) identify (and acquire, if necessary) appropriate habitat within the County and prepare a wetland restoration plan, or (3) identify and provide alternative mitigation acceptable to the County, the Corps, RWQCB, and CDFW. Such alternative mitigation could include financial or in-kind contributions to a larger restoration or enhancement project. The wetland restoration plan would require written approval from the Corps, RWQCB, CDFW, and County. In addition, a bond shall be provided to the County prior to habitat clearing and commencement of construction of extraction			Prior to the clearing of habitat and commencement of construction activities for the No Project/Existing Plan Alternative, the applicant shall either: (1) purchase wetland habitat credits or (2) identify (and acquire, if necessary) appropriate habitat within the County and prepare a wetland restoration plan. The wetland restoration plan would require written approval from the USACE, CDFW, and County. In addition, a bond shall be provided to the County prior to habitat clearing and commencement of construction of		

		Table (1 (4)					
	CHMMADY OF CICNIFICA	Table S-1 (cont.)	TE A CLIDEC				
	SUMMARI OF SIGNIFICA	ANT ENVIRONMENTAL EFFECTS AND MITIGATION M	IEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative			
	SIGNIFICANT IMPACT	S MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	cont.)				
	Project-level Impacts						
	4.3 Biological Resources (cont.)						
Riparian Habitat and Other Sensitive Natural Communities	(cont.)						
Mitigation Measure M-BI-1 (cont.)							
operation support facilities or extraction operations to cover							
120 percent of any restoration plan implementation costs. A							
biological open space easement shall be placed over all							
areas used for wetland mitigation and an endowment							
provided for management in perpetuity. This shall be in							
addition to the biological open space proposed for areas							
preserved on site and its associated endowment.							
Impact BI-2: Implementation of the Proposed Project	Impact BI-2: Same as Proposed Project	Impact BI-2: Same as Proposed Project	Impact BI-2: Refer to Impact BI-1 under the No	Under the No Project Alternative, no			
would result in removal of 0.06 acre of tamarisk scrub.			Project/Existing Plan Alternative.	impacts to tamarisk scrub would occur.			
				_			
Mitigation Measure M-BI-2: Mitigation for removal of	Mitigation Measure M-BI-2: Same as Proposed Project	Mitigation Measure M-BI-2: Same as Proposed Project	Mitigation Measure M-BI-2: Mitigation for impacts to				
0.06 acre of tamarisk scrub shall occur at a 1:1 ratio through			tamarisk scrub shall occur at a 1:1 ratio through on- or off-				
on- or off-site creation of 0.06 acre of wetland or riparian			site creation of wetland or riparian habitat in consultation				
habitat, or alternative in consultation with the County and			with the County and resource agencies prior to				
resource agencies prior to commencement of construction of			commencement of construction activities. Mitigation for				
extraction operation support facilities or extraction			disturbed wetland shall occur as follows:				
operations. Mitigation for tamarisk scrub shall occur as							
follows:			Prior to the clearing of habitat and commencement of				
			construction activities for the No Project/Existing Plan				
Prior to the clearing of habitat and commencement of			Alternative, the applicant shall either: (1) purchase wetland				
construction of extraction operation support facilities or			habitat credits or (2) identify (and acquire, if necessary)				
extraction operations for the Proposed Project, the applicant			appropriate habitat within the County and prepare a wetland				
shall either: (1) purchase wetland habitat credits, (2) identify			restoration plan. The wetland restoration plan would require				
(and acquire, if necessary) appropriate habitat within the			written approval from the Corps, CDFW, and County. In				
County and prepare a wetland restoration plan, or (3) identify and provide alternative mitigation acceptable to the			addition, a bond shall be provided to the County prior to habitat clearing and commencement of construction of				
County, the Corps, RWQCB, and CDFW. Such alternative			extraction operation support facilities or extraction				
mitigation could include financial or in-kind contributions to			operations to cover 120 percent of any restoration plan				
a larger restoration or enhancement project. The wetland			implementation costs. A biological open space easement				
restoration plan would require written approval from the			shall be placed over all areas used for wetland mitigation				
Corps, RWQCB, CDFW, and County. In addition, a bond			and an endowment provided for management in perpetuity.				
shall be provided to the County prior to habitat clearing and			This shall be in addition to the biological open space				
commencement of construction of extraction operation			proposed for areas preserved on site and its associated				
support facilities or extraction operations to cover 120			endowment.				
percent of any restoration plan implementation costs. A							
biological open space easement shall be placed over all							
areas used for wetland mitigation and an endowment							
provided for management in perpetuity. This shall be in							
addition to the biological open space proposed for areas							
preserved on site and its associated endowment.							

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
	SIGNIFICANT IMPACTS	S MITIGATED TO A LEVEL OF LESS THAN SIGNIFICAN	T (cont.)	
		Project-level Impacts	2 (vonu)	
		4.3 Biological Resources (cont.)		
Riparian Habitat and Other Sensitive Natural Communities	(cont.)	<u> </u>		
Impact BI-3: Implementation of the Proposed Project	Impact BI-3: Same as Proposed Project	Impact BI-3: Same as Proposed Project	Impact BI-3: Refer to Impact BI-1 under the No	Under the No Project Alternative, no
would result in removal of 0.01 acre of disturbed wetland.			Project/Existing Plan Alternative.	impacts disturbed wetland would
			3 8	occur.
Mitigation Measure M-BI-3: Mitigation for removal of	Mitigation Measure M-BI-3: Same as Proposed Project	Mitigation Measure M-BI-3: Same as Proposed Project	Mitigation Measure M-BI-3: Mitigation for impacts to	
0.01 acre of disturbed wetland shall occur at a 1:1 ratio			disturbed wetland shall occur at a 1:1 ration through on- or	
through on- or off-site creation of 0.01 acre of wetland or			off-site creation of wetland or riparian habitat in	
riparian habitat, or alternative mitigation acceptable to the			consultation with the County and resource agencies prior to	
County and resource agencies prior to commencement of			commencement of construction activities. Mitigation for	
construction of extraction operation support facilities or			disturbed wetland shall occur as follows:	
extraction operations. Mitigation for disturbed wetland shall				
occur as follows:			Prior to the clearing of habitat and commencement of	
			construction activities for the No Project/Existing Plan	
Prior to the clearing of habitat and commencement of			Alternative, the applicant shall either: (1) purchase wetland	
construction of extraction operation support facilities or			habitat credits or (2) identify (and acquire, if necessary)	
extraction operations for the Proposed Project, the applicant			appropriate habitat within the County and prepare a wetland	
shall either: (1) purchase wetland habitat credits, (2) identify			restoration plan. The wetland restoration plan would require	
(and acquire, if necessary) appropriate habitat within the			written approval from the Corps, CDFW, and County. In	
County and prepare a wetland restoration plan, or (3)			addition, a bond shall be provided to the County prior to	
identify and provide alternative mitigation acceptable to the			habitat clearing and commencement of construction of	
County, the Corps, RWQCB, and CDFW. Such alternative			extraction operation support facilities or extraction	
mitigation could include financial or in-kind contributions to			operations to cover 120 percent of any restoration plan	
a larger restoration or enhancement project. The wetland			implementation costs. A biological open space easement	
restoration plan would require written approval from the			shall be placed over all areas used for wetland mitigation	
Corps, RWQCB, CDFW, and County. In addition, a bond			and an endowment provided for management in perpetuity.	
shall be provided to the County prior to habitat clearing and			This shall be in addition to the biological open space	
commencement of construction of extraction operation			proposed for areas preserved on site and its associated endowment.	
support facilities or extraction operations to cover 120 percent of any restoration plan implementation costs. A			endownient.	
biological open space easement shall be placed over all				
areas used for wetland mitigation and an endowment				
provided for management in perpetuity. This shall be in				
addition to the biological open space proposed for areas				
preserved on site and its associated endowment.				
Impact BI-4: Implementation of the Proposed Project	Impact BI-4: Same as Proposed Project	Impact BI-4: Same as Proposed Project	Impact BI-4: Refer to Impact BI-1 under the No	Under the No Project Alternative, no
would result in removal of 0.5 acre of native grassland.	Impact B1 4. Same as 110posed 110ject	Impact B1 4. Sume us 110posed 110ject	Project/Existing Plan Alternative.	impacts to native grassland would occur.
Mitigation Measure M-BI-4: Mitigation for removal of	Mitigation Measure M-BI-4: Same as Proposed Project	Mitigation Measure M-BI-4: Same as Proposed Project	Mitigation Measure M-BI-4: Mitigation for impacts to	
0.5 acre of native grassland shall occur at a 2:1 ratio through	g	g	native grassland shall occur at a 2:1 ratio through	
preservation of 0.7 acre of native grassland within the			preservation of native grassland within the Project site	
Project site and off-site acquisition of 0.3 acre of suitable			and/or off-site acquisition of suitable habitat prior to	
habitat prior to commencement of construction of extraction			commencement of construction activities for the No	
operation support facilities or extraction operations.			Project/Existing Plan Alternative.	

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	C(cont.)	
		Project-level Impacts 4.3 Biological Resources (cont.)		
Riparian Habitat and Other Sensitive Natural Communities	(cont)	4.5 Diological Resources (cont.)		
Impact BI-5: Implementation of the Proposed Project would result in removal of 66.7 acres of Diegan coastal sage scrub (including disturbed).	Impact BI-5: Same as Proposed Project	Impact BI-5: Same as Proposed Project	Impact BI-5: Refer to Impact BI-1 under the No Project/Existing Plan Alternative.	Under the No Project Alternative, no impacts to Diegan coastal sage scrub would occur.
Mitigation Measure M-BI-5: Mitigation for removal of 66.7 acres of Diegan coastal sage scrub (including disturbed) shall be mitigated at a 1.5:1 ratio through preservation of 100.1 acres of Diegan coastal sage scrub (including disturbed) within the Project site.	Mitigation Measure M-BI-5: Same as Proposed Project	Mitigation Measure M-BI-5: Same as Proposed Project	Mitigation Measure M-BI-5 : Mitigation for direct impacts to Diegan coastal sage scrub (including disturbed) shall be mitigated at a 1.5:1 ratio through preservation of Diegan coastal sage scrub (including disturbed) within the Project site.	
In addition, the indirect noise impact to 20.6 acres of potential CAGN habitat (Diegan coastal sage scrub [including disturbed]) as a result of Proposed Project implementation (refer to Impact BI-23) shall be mitigated at a 1:1 ratio through preservation of an additional 20.6 acres of Diegan coastal sage scrub (including disturbed) within the Project site (refer to Mitigation Measure M-BI-23).			In addition, the indirect noise impact to potential CAGN habitat (Diegan coastal sage scrub [including disturbed]) as a result of implementation of the No Project/Existing Plan Alternative (refer to Impact BI-23) shall be mitigated at a 1:1 ratio through preservation of additional Diegan coastal sage scrub (including disturbed) within the Project site (refer to Mitigation Measure M-BI-23).	
Therefore, required preservation of Diegan coastal sage scrub (including disturbed) shall total 120.7 acres within the Project site prior to commencement of construction of extraction operation support facilities or extraction operations.			Required preservation of Diegan coastal sage scrub (including disturbed) shall occur prior to commencement of construction activities for the No Project/Existing Plan Alternative.	
Impact BI-6 : Implementation of the Proposed Project would result in removal of 31.1 acres of non-native grassland.	Impact BI-6: Same as Proposed Project	Impact BI-6: Same as Proposed Project	Impact BI-6: Refer to Impact BI-1 under the No Project/Existing Plan Alternative. Mitigation Measure M-BI-6: Mitigation for impacts to	Under the No Project Alternative, no impacts to non-native grassland would occur.
Mitigation Measure M-BI-6: Mitigation for removal of 31.1 acres of non-native grassland shall occur at a 1:1 ratio through preservation of 16.1 acres of non-native grassland on site and 15.0 acres of grassland at an off-site location or through purchase of credits at an approved conservation bank consistent with the Burrowing Owl Strategy.	Mitigation Measure M-BI-6: Same as Proposed Project	Mitigation Measure M-BI-6: Same as Proposed Project	non-native grassland shall occur at a 1:1 ratio through preservation of non-native grassland on site and off site or through purchase of credits at an approved conservation bank consistent with the Burrowing Owl Strategy.	

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICAN	Γ (cont.)	
		Project-level Impacts 4.3 Biological Resources (cont.)		
Riparian Habitat and Other Sensitive Natural Communities	(cont.)	4.5 Diological Resources (cont.)		
Impact BI-7 : Implementation of the Proposed Project would result in removal of 0.44 acre of Corps jurisdictional areas.	Impact BI-7: Same as Proposed Project	Impact BI-7: Same as Proposed Project	Impact BI-7: No specific development plan exists for the No Project/Existing Plan Alternative. Therefore, specific impacts to jurisdictional areas are not available for this alternative.	Under the No Project Alternative, no impacts to Corps jurisdictional areas would occur.
Mitigation Measure M-BI-7: Fill of 0.21 acre of Corps jurisdictional cismontane alkali marsh, 0.01 acre of disturbed wetland, and 0.06 acre of tamarisk scrub shall be mitigated at 1:1 and 3:1 ratios according to M-BI-1, M-BI-2, and M-BI-3. Impacts to 0.16 acre of Corps jurisdictional non-vegetated Waters of the U.S. shall be mitigated at a 1:1 ratio or alternative mitigation acceptable to the County and resource agencies prior to commencement of construction of extraction operations support facilities or extraction operations. Prior to commencement of construction of extraction operations support facilities or extraction operations for the Proposed Project, the Project applicant shall either (1) purchase Waters of the U.S. credits, (2) identify (and acquire, if necessary) appropriate habitat within the County and prepare a wetland/waters restoration plan for creation/enhancement, or (3) identify and provide alternative mitigation acceptable to the County, the Corps, RWQCB, and CDFW. Such alternative mitigation could include financial or in-kind contributions to a larger restoration or enhancement project. The wetland restoration plan would require written approval from the Corps, RWQCB, CDFW and County. In addition, a bond shall be provided to the County to cover 120 percent of any revegetation costs prior to commencement of construction of extraction operations support facilities or extraction operations. A biological open space easement shall be placed over all areas used for wetland mitigation and an endowment provided for management in perpetuity in addition to the biological open space proposed for areas	Mitigation Measure M-BI-7: Same as Proposed Project	Mitigation Measure M-BI-7: Same as Proposed Project	Mitigation Measure M-BI-7: Impacts to Corps jurisdictional cismontane alkali marsh, disturbed wetland, and tamarisk scrub shall be mitigated at 1:1 and 3:1 ratios as described in M-BI-1, M-BI-2, and M-BI-3. Impacts to Corps jurisdictional non-vegetated Waters of the U.S. shall be mitigated at a 1:1 ratio in consultation with the County and resource agencies prior to commencement of construction activities for the No Project/Existing Plan Alternative. Prior to commencement of construction activities for the No Project/Existing Plan Alternative, the Project applicant shall either (1) purchase Waters of the U.S. credits or (2) identify (and acquire, if necessary) appropriate habitat within the County and prepare a wetland restoration plan for creation/enhancement. The wetland/waters restoration plan would require written approval from the Corps, RWQCB, CDFW and County. In addition, a bond shall be provided to the County to cover 120 percent of any revegetation costs prior to commencement of construction of extraction operation support facilities or extraction operations. A biological open space easement shall be placed over all areas used for wetland mitigation and an endowment provided for management in perpetuity in addition to the biological open space proposed for areas preserved within the Project site and associated endowment.	
preserved within the Project site and associated endowment. Impact BI-8: Implementation of the Proposed Project would result in removal of 0.49 acre of RWQCB	Impact BI-8: Same as Proposed Project	Impact BI-8: Same as Proposed Project	Impact BI-8: Refer to Impact BI-7 under the No Project/Existing Plan Alternative.	Under the No Project Alternative, no impacts to RWQCB jurisdictional
jurisdictional areas.			Troject Existing Final Final Fin	areas would occur.
Mitigation Measure M-BI-8: Removal of 0.21 acre of RWQCB jurisdictional cismontane alkali marsh, 0.01 acre of disturbed wetland, and 0.06 acre of tamarisk scrub shall be mitigated at 1:1 and 3:1 ratios according to M-BI-1, M-BI-2, and M-BI-3. Impacts to 0.21 acre of RWQCB jurisdictional streambed, pond, and intermittent pond shall be mitigated at a 1:1 ratio (including the mitigation already provided by M-BI-7) or alternative mitigation acceptable to the County and resource agencies prior to commencement of construction of extraction operation support facilities or extraction operations.	Mitigation Measure M-BI-8: Same as Proposed Project	Mitigation Measure M-BI-8: Same as Proposed Project	Mitigation Measure M-BI-8: Impacts to RWQCB jurisdictional cismontane alkali marsh, disturbed wetland, and tamarisk scrub shall be mitigated at 1:1 and 3:1 ratios according to M-BI-1, M-BI-2, and M-BI-3. Impacts to RWQCB jurisdictional streambed, pond, and intermittent pond shall be mitigated at a 1:1 ratio (including mitigation already provided by M-BI-7) in consultation with the County and resource agencies prior to commencement of construction activities for the No Project/Existing Plan Alternative.	

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	Γ (cont.)	
		Project-level Impacts		
D' ' HI' A LOA C 'Y NA LO	(()	4.3 Biological Resources (cont.)		
Riparian Habitat and Other Sensitive Natural Communities Impact BI-9: Implementation of the Proposed Project	Impact BI-9: Same as Proposed Project	Impact BI-9: Same as Proposed Project	Impact BI-9: Refer to Impact BI-7 under the No	Under the No Project Alternative, no
would result in removal of 0.53 acre of CDFW jurisdictional areas.	Impact bi-9. Same as Proposed Project	Impact 61-9. Same as Proposed Project	Project/Existing Plan Alternative.	impacts to CDFW jurisdictional areas would occur.
Mitigation Measure M-BI-9: Removal of 0.27 acre of CDFW jurisdictional cismontane alkali marsh, 0.01 acre of disturbed wetland, and 0.06 acre of tamarisk scrub shall be mitigated at 1:1 and 3:1 ratios according to M-BI-1, M-BI-2, and M-BI-3. Impacts to 0.19 acre of CDFW jurisdictional streambed and pond shall be mitigated at a 1:1 ratio (including the mitigation already provided by M-BI-7 and M-BI-8) or alternative mitigation acceptable to the County and resource agencies prior to commencement of construction of extraction operation support facilities or extraction operations.	Mitigation Measure M-BI-9: Same as Proposed Project	Mitigation Measure M-BI-9: Same as Proposed Project	Mitigation Measure M-BI-9: Impacts to CDFW jurisdictional cismontane alkali marsh, disturbed wetland, and tamarisk scrub shall be mitigated at 1:1 and 3:1 ratios according to M-BI-1, M-BI-2, and M-BI-3. Impacts to CDFW jurisdictional streambed and pond shall be mitigated at a 1:1 ratio (including the mitigation already provided by M-BI-7 and M-BI-8) in consultation with the County and resource agencies prior to commencement of construction activities for the No Project/Existing Plan Alternative.	
Impact BI-10: Implementation of the Proposed Project could result in indirect impacts associated with human access into adjacent open space that will be dedicated to the County to protect sensitive habitats.	Impact BI-10: Same as Proposed Project	Impact BI-10: Same as Proposed Project	Impact BI-10: No specific development plan exists for the No Project/Existing Plan Alternative. Therefore, specific indirect impacts associated with human access into adjacent open space are not available for this alternative.	Under the No Project Alternative, no indirect impacts associated with human access would occur.
Mitigation Measure M-BI-10: Temporary construction staking or fencing shall be erected under the supervision of a qualified biologist at or outside the edge of the impact areas where they interface with natural areas to address indirect impacts associated with human access into adjacent open space that will be dedicated to the County to protect sensitive habitats. This fencing shall be erected prior to commencement of brushing or grading activities or extraction activities and shall demarcate areas where human and equipment access and disturbance from grading are prohibited. Upon placement of the permanent boundary fence following initial brush clearing, monitoring adjacent to project open space may cease. Staging areas shall be restricted to approved impact areas only. In addition, the Project applicant shall dedicate 304.6 acres (including 133.1 acres as mitigation for removal of sensitive vegetation communities associated with the Proposed Project as well as an additional 166.8 acres in excess of the required amount to meet mitigation obligations for impacts to QCB habitat) of biological open space on site for impacts resulting from the Proposed Project prior to the clearing of habitat and commencement of construction	Mitigation Measure M-BI-10: Same as Proposed Project	Mitigation Measure M-BI-10: Same as Proposed Project	Mitigation Measure M-BI-10: Temporary construction staking or fencing shall be erected under the supervision of a qualified biologist at or outside the edge of the impact areas where they interface with natural areas. This fencing shall be erected prior to commencement of brushing or grading activities and shall demarcate areas where human and equipment access and disturbance from grading are prohibited. Upon placement of the permanent boundary fence, monitoring adjacent to project open space may cease. Staging areas shall be restricted to approved impact areas only. In addition, biological open space on site shall be dedicated for impacts resulting from the No Project/Existing Plan Alternative prior to the clearing of habitat and commencement of development. The biological open space shall be managed by a conservation entity (to be approved by the County and resource agencies prior to commencement of habitat clearing and construction of extraction operation support facilities or extraction	
habitat and commencement of construction of extraction operations support facilities or extraction operations. The biological open space shall be managed by a conservation entity (to be approved by the County and resource agencies prior to commencement of habitat clearing and construction of extraction operation support facilities or extraction operations) that would be responsible for implementing a Resource Management Plan (RMP). An RMP shall be prepared that clearly describes biological open space management. The RMP includes stewardship measures, including but not limited to, fencing and signs			operations) that would be responsible for implementing an RMP. An RMP shall be prepared that clearly describes biological open space management. The RMP includes stewardship measures, including but not limited to, fencing and signs upkeep, trespass restriction and debris removal. The applicant shall offer evidence to the County and resource agencies that an endowment has been provided to the conservation entity to manage the land in perpetuity. This endowment amount shall be determined through the use of a PAR or similar method.	

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES						
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative		
	SIGNIFICANT IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT (cont.)					
		Project-level Impacts 4.3 Biological Resources (cont.)				
Riparian Habitat and Other Sensitive Natural Communities	(cont.)	4.5 Diological Resources (cont.)				
Mitigation Measure M-BI-10 (cont.)	(60,00)					
upkeep, trespass restriction and debris removal. The applicant shall offer evidence to the County and resource agencies that an endowment has been provided to the conservation entity to manage the land in perpetuity. This endowment amount shall be determined through the use of Property Analysis Record (PAR) or similar method. Pets/domestic animals and unauthorized Proposed Project personnel shall not be allowed within the biological open space. As part of the RMP, permanent signage shall be posted every 500 feet along western and southern boundaries and on both sides of the portion of Otay Truck Trail that traverses the open space, and at locations of any unauthorized trails entering the open space. All signs shall be corrosion-resistant (e.g., steel), measure at minimum 12 by 18 inches in size, be posted on a metal post at least 3 feet above ground level and provide notice in both English and Spanish that the area is restricted. The signs shall state the following: Sensitive Environmental Resources Area Restricted by Easement Entry without express written permission from the County of San Diego is prohibited. To report a violation or for more information about easement restrictions and exceptions contact the County of San Diego, Department of Planning & Development Services Ref. PDS2004-3300-04-004 Phone Number: (858) 694-2960			Pets/domestic animals and unauthorized No Project/Existing Plan Alternative personnel shall not be allowed within the biological open space. As part of the RMP, permanent signage shall be posted every 500 feet along western and southern boundaries and on both sides of the portion of Otay Truck Trail that traverses the open space, and at locations of any unauthorized trails entering the open space. All signs shall be corrosion-resistant (e.g., steel), measure at minimum 12 by 18 inches in size, be posted on a metal post at least 3 feet above ground level, and provide notice in both English and Spanish that the area is restricted.			

Table S-1 (cont.)					
	SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative	
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	(cont.)		
		Project-level Impacts	(cont.)		
		4.3 Biological Resources (cont.)			
Riparian Habitat and Other Sensitive Natural Communities	(cont.)	8 /			
Impact BI-11: Implementation of the Proposed Project could result in indirect impacts associated with the colonization and spread of invasive plant species into open	Impact BI-11: Same as Proposed Project	Impact BI-11: Same as Proposed Project	Impact BI-11: No specific development plan exists for the No Project/Existing Plan Alternative. Therefore, specific impacts indirect impacts associated with the colonization	Under the No Project Alternative, no indirect impacts associated the colonization and spread of invasive plants species into open space would	
space.			and spread of invasive plant species into open space are not available for this alternative.		
Mitigation Measure M-BI-11: To avoid the colonization and spread of invasive plant species into open space, the biological open space shall be actively monitored, maintained, and managed in accordance with the RMP. The RMP (discussed in M-BI-10, above) shall ensure, for example, that access is restricted and invasive plant species are monitored and controlled. Upon completion of the Proposed Project, final grading to establish the final landform, application of topsoil resources, and revegetation with native species (Seed Mix A) will occur for slope areas according to the Otay Hills Project Revegetation Plan. The Project description already includes restoration of slopes adjacent to proposed open space with a native plant biological buffer to help prevent the spread of any invasive plant species into open space. A hydroseed mix (Seed Mix B) incorporating only native species shall be used following extraction activities for all slope areas that are a biological buffer adjacent to open	Mitigation Measure M-BI-11: Same as Proposed Project	Mitigation Measure M-BI-11: Same as Proposed Project	Mitigation Measure M-BI-11: To avoid the colonization and spread of invasive plant species into open space, the biological open space shall be actively monitored, maintained, and managed in accordance with an RMP. The RMP (discussed in M-BI-10, above) shall ensure, for example, that access is restricted and invasive plant species are monitored and controlled. Upon completion of the No Project/Existing Plan Alternative, final grading to establish the final landform, application of topsoil resources, and revegetation with native species will occur for slope areas. A revegetation plan shall be submitted to the County for approval prior to issuance of any clearing or grading permit.	occur.	
space. Weed control shall be provided for these areas					
according to the Otay Hills Project Revegetation Plan.					
Special Status Species					
Impact BI-12: Approximately 30 individuals of Otay tarplant (<i>Deinandra conjugens</i>) would be removed by the Proposed Project. The Project also would result in impacts to 105.5 acres of Otay tarplant critical habitat and 16.69 acres of potential Otay tarplant habitat.	Impact BI-12: Same as Proposed Project	Impact BI-12: Same as Proposed Project	Impact BI-12: No specific development plan exists for the No Project/Existing Plan Alternative. Therefore, specific impacts to sensitive plant species or potential habitat are not available for this alternative. Mitigation Measure M-BI-12: Removal of Otay tarplant	Under the No Project Alternative, no impacts to Otay tarplant or its critical habitat would occur.	
Mitigation Measure M-BI-12: Removal of 105.5 acres of Otay tarplant critical habitat shall be mitigated with preservation of 93.8 acres of Otay tarplant critical habitat within the study area. Removal of 16.69 acres of suitable habitat and 30 individual plants are being mitigated through preservation of 6.58 acres of suitable habitat which includes preservation of 510 (94 percent) of the Otay tarplant individuals. In addition, seeds will be collected from the Otay tarplant in the impact area and spread within suitable habitat in the proposed open space prior to Phase 2a.	Mitigation Measure M-BI-12: Same as Proposed Project	Mitigation Measure M-BI-12: Same as Proposed Project	within the Project site shall be mitigated at a ratio in accordance with Section 86.507 of the BMO, which requires that "in-kind preservation shall be required at a 1:1 to 3:1 ratio (of listed or County List A or B plant species) depending on the sensitivity of the species and population size." Removal of Otay tarplant critical habitat shall be mitigated with preservation of Otay tarplant critical habitat within the study area.		

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES					
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative	
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	Cont.)		
Project-level Impacts					
		4.3 Biological Resources (cont.)			
Special Status Species (cont.)		1			
Impact BI-13 : Approximately 120 individuals of variegated dudleya (<i>Dudleya variegate</i>) would be removed by the Proposed Project. The Proposed Project also would remove 13.06 acres of potential variegated dudleya habitat.	Impact BI-13: Same as Proposed Project	Impact BI-13: Same as Proposed Project	Impact BI-13 : Refer to Impact BI-12 under the No Project/Existing Plan Alternative.	Under the No Project Alternative, no impacts to variegated dudleya or its critical habitat would occur.	
Mitigation Measure M-BI-13: Removal of 120 of 4,987 individuals of variegated dudleya shall be mitigated by preservation of 4,867 individuals in accordance with Section 86.507 of the BMO. Removal of 13.06 acres of suitable habitat are being mitigated through preservation of 48.65 acres of suitable habitat. Additionally, the variegated dudleya in the impact area will be salvaged by collecting the soil crust in the area where the 120 dudleya were observed and translocating to the proposed open space prior to Phase 2b.	Mitigation Measure M-BI-13: Same as Proposed Project	Mitigation Measure M-BI-13: Same as Proposed Project	Mitigation Measure M-BI-13: Removal of variegated dudleya shall be mitigated at a 7.3:1 ratio in accordance with Section 86.507 of the BMO. Preservation of individuals in excess of the 80 percent requirement can be counted towards meeting this mitigation obligation.		
Impact BI-14: Approximately 1,214 individuals of San Diego goldenstar (<i>Bloomeria [Muilla] clevelandii</i>) would be removed by the Proposed Project. The Proposed Project also would remove 13.06 acres of potential San Diego goldenstar habitat. Mitigation Measure M-BI-14: Removal of 1,214	Impact BI-14: Same as Proposed Project Mitigation Measure M-BI-14: Same as Proposed Project	Impact BI-14: Same as Proposed Project Mitigation Measure M-BI-14: Same as Proposed Project	Impact BI-14: Refer to Impact BI-12 under the No Project/Existing Plan Alternative. Mitigation Measure M-BI-14: Removal of San Diego goldenstar shall be mitigated at a 1:1 ratio in accordance with Section 86.507 of the BMO. Mitigation shall consist of salvage of the San Diego goldenstar and relocation of these	Under the No Project Alternative, no impacts to San Diego goldenstar or its critical habitat would occur.	
individuals of San Diego goldenstar shall be mitigated by translocation of the impacted individuals to an appropriate on-site location. The goldenstar translocation would be subject to a Otay Hills Project Translocation Plan. Proof of recordation of an open space easement on site shall be required prior to commencement of habitat clearing and construction of extraction operation support facilities or extraction operations. The San Diego goldenstar component of the Otay Hills Project Translocation Plan (Appendix C of HELIX 2018b) shall be implemented as follows: All San Diego goldenstar corms that are located within each phase shall be translocated prior to implementation of mining activities within that phase.			individuals to areas of appropriate habitat on and/or off the Project site, as well as: (1) either planting an additional San Diego goldenstar or (2) acquiring habitat off site supporting San Diego goldenstar. The goldenstar translocation would be subject to a San Diego Goldenstar Restoration Plan. Approval of the San Diego Goldenstar Restoration Plan by the County and proof of recordation of an open space easement on site and off site (if appropriate) shall be required prior to commencement of habitat clearing and construction of extraction operation support facilities or extraction operations. The San Diego Goldenstar		
 Phase 1 – at least 400 corms Phase 2a – at least 813 corms Phase 2b – at least 1 corm Removal of 13.06 acres of suitable habitat are being mitigated through preservation of 69.46 acres of suitable habitat. The Project would preserve 11,174 individuals (90.2 percent of the population on the Project site and five of the six primary populations) of San Diego goldenstar. 			Restoration shall be implemented within one year of habitat clearing and commencement of construction of the alternative.		

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	(cont.)	
		Project-level Impacts 4.3 Biological Resources (cont.)		
Special Status Species (cont.)		4.5 biological Resources (cont.)		
Impact BI-15: Approximately 196 individuals of San	Impact BI-15: Same as Proposed Project	Impact BI-15: Same as Proposed Project	Impact BI-15: Refer to Impact BI-12 under the No	Under the No Project Alternative, no
Diego barrel cactus (<i>Ferocactus viridescens</i>) would be removed by the Proposed Project.	Impact BY 10. Suite as 11oposed 11oject	Impact 22 Te. Sainte as Froposed Froject	Project/Existing Plan Alternative.	impacts to San Diego barrel cactus would occur.
 Mitigation Measure M-BI-15: Removal of 196 of 362 individuals of San Diego barrel cactus shall be mitigated at a 2:1 ratio in accordance with Section 86.507 of the BMO. Mitigation shall consist of salvage of the 196 San Diego barrel cactus impacted on and off site and relocation of these individuals to areas of suitable habitat within the Project site, as well as planting of an additional 196 San Diego barrel cactus on site consistent with the Otay Hills Project Translocation Plan (Appendix C of HELIX 2018b). Mitigation for San Diego barrel cactus shall be implemented by phase as follows: Prior to Phase 2a, 44 individuals of San Diego barrel cactus shall be translocated to the open space and an additional 44 individuals shall be planted. Prior to Phase 2b, 18 individuals of San Diego barrel cactus shall be translocated to the open space and an additional 18 individuals shall be planted. Prior to Phase 2c, 134 individuals of San Diego barrel cactus shall be translocated to the open space and an additional 134 individuals shall be planted. Prior to Phase 2c, 134 individuals of San Diego barrel cactus shall be translocated to the open space and an additional 134 individuals shall be planted. Proof of recordation of the open space easement within the Project site, and implementation of the barrel cactus component of the Otay Hills Project Translocation Plan shall be required prior to commencement of construction of extraction operations. The barrel cactus component of the Otay Hills Project Translocation Plan shall be implemented within one year of commencement of construction of extraction operation support facilities or extraction operations support facilities or extraction operations support facilities or extraction operation support facilities or extraction operations. 	Mitigation Measure M-BI-15: Same as Proposed Project	Mitigation Measure M-BI-15: Same as Proposed Project	Mitigation Measure M-BI-15: Removal of San Diego barrel cactus shall be mitigated at a 2:1 ratio in accordance with Section 86.507 of the BMO. Mitigation shall consist of salvage of San Diego barrel cactus impacted on and off site and relocation of these individuals to areas of suitable habitat within the Project site, as well as (1) planting of additional San Diego barrel cactus on site or (2) off-site acquisition of habitat supporting San Diego barrel cactus. A Barrel Cactus Translocation Plan shall be prepared and submitted to the County for review and approval. Approval of the Barrel Cactus Translocation Plan, proof of recordation of the open space easement within the study area, and implementation of the Barrel Cactus Translocation Plan shall be required prior to commencement of construction. The Barrel Cactus Translocation Plan shall be implemented within one year of commencement of construction. Off-site mitigation (if chosen) shall be met prior to commencement of habitat clearing or construction. The applicant shall (1) purchase off-site credits from an approved conservation bank or (2) acquire appropriate habitat within the County, dedicate the land as open space and prepare an RMP to be approved by the County, USFWS and CDFW. An endowment for off-site mitigation land also shall be provided for management in perpetuity.	
Impact BI-16 : Approximately 142 individuals of San Diego marsh-elder (<i>Iva hayesiana</i>) would be removed by	Impact BI-16: Same as Proposed Project	Impact BI-16: Same as Proposed Project	Impact BI-16: Refer to Impact BI-12 under the No Project/Existing Plan Alternative.	Under the No Project Alternative, no impacts to San Diego marsh-elder
the Proposed Project. Mitigation Measure M-BI-16: Removal of 142 of 290 individuals of San Diego marsh-elder shall be mitigated at a 2:1 ratio in accordance with Section 86.507 of the BMO. Mitigation shall include planting of 284 San Diego marsh-elder individuals in appropriate habitat within the proposed biological open space. The applicant shall fund implementation of an RMP that includes measures to protect and enhance the preserved or created populations.	Mitigation Measure M-BI-16: Same as Proposed Project	Mitigation Measure M-BI-16: Same as Proposed Project	Mitigation Measure M-BI-16: Removal of San Diego marsh-elder shall be mitigated at a 2:1 ratio in accordance with Section 86.507 of the BMO. Mitigation shall include either (1) planting San Diego marsh-elder individuals within the proposed wetland mitigation area for the No Project/Existing Plan Alternative or (2) acquisition and preservation of individuals at an off-site location. The applicant shall fund implementation of an RMP that includes measures to protect and enhance the preserved or created populations.	would occur.

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	C (cont.)	
		Project-level Impacts		
4.3 Biological Resources (cont.)				
Special Status Species (cont.)				
Impact BI-17: Five locations where Quino checkerspot	Impact BI-17: Same as Proposed Project	Impact BI-17: Same as Proposed Project	Impact BI-17 : No specific development plan exists for the	Under the No Project Alternative, no
butterfly (Euphydryas editha quino; QCB) were observed			No Project/Existing Plan Alternative. Therefore, specific	impacts to QCB or its critical habitat
would be impacted by the Proposed Project. The Project			impacts to sensitive animal species or critical/potential	would occur.
would also impact 104.9 acres of QCB occupied habitat. In			habitat are not available for this alternative.	
addition, 97.8 acres of QCB critical habitat would be			NO. 4	
impacted within the Project site. The Proposed Project also			Mitigation Measure M-BI-17: Removal of five locations	
would remove 3 moderate host plant locations totaling			where QCB were observed, QCB occupied habitat and QCB	
approximately 13,752 dwarf plantain individuals, which represents one percent of the dwarf plantain on the Project			critical habitat shall be mitigated by preservation locations where QCB were observed and by preservation of biological	
			open space within the Project site. If the QCB is not covered	
site.			under the MSCP at the time of Project approval, effects on	
Mitigation Measure M-BI-17: Removal of five locations	Mitigation Measure M-BI-17: Same as Proposed Project	Mitigation Measure M-BI-17: Same as Proposed Project	the species shall be subject to review and approval by the	
where QCB were observed, 104.9 acres of QCB occupied	Whitgation weasure M-D1-17. Same as 110 posed 110 jeet	Whitgation Weasure W-D1-17. Same as 1 toposed 1 toject	USFWS as part of the Section 7 or 10(a) consultation	
habitat, and 97.8 acres of QCB critical habitat shall be			process.	
mitigated by preservation of 52 locations where QCB were			processi	
observed and by preservation of 304.6 acres of biological				
open space within the Project site, of which 303.5 acres are				
considered occupied by the QCB and 304.4 acres are QCB				
critical habitat. Funding for long-term management of an				
additional 61 acres within the AMA that also supports QCB				
host plants, QCB locations, and occupied QCB habitat will				
be provided by the Project. If the QCB is not covered under				
the MSCP at the time of Project approval, effects on the				
species shall be subject to review and approval by the				
USFWS as part of the Section 7 or 10(a) consultation				
process.	I (DI 10 C D ID)	I ANI 10 C D ID '	T ADIAO D.C. A ADIAO D.A.A.	II I d N D ' c Alc c'
Impact BI-18: One pair of CAGN that was	Impact BI-18: Same as Proposed Project	Impact BI-18: Same as Proposed Project	Impact BI-18: Refer to Impact BI-17 under the No	Under the No Project Alternative, no
observed/detected would be impacted by the Proposed Project. The Project would also impact 66.7 acres of CAGN			Project/Existing Plan Alternative.	impacts to CAGN or its critical habitat would occur.
habitat (Diegan coastal sage scrub [including disturbed]. In			Mitigation Measure M-BI-18: Removal of CAGN and	would occur.
addition, implementation 77.1 acres of CAGN critical			CAGN critical habitat shall be mitigated through	
habitat would be removed within the Project site.			preservation of pairs and CAGN habitat on site. Prior to	
marian would be removed within the Project Site.			Project implementation, preconstruction surveys to	
Mitigation Measure M-BI-18: Removal of one pair of	Mitigation Measure M-BI-18: Same as Proposed Project	Mitigation Measure M-BI-18: Same as Proposed Project	demonstrate CAGN absence from the development footprint	
CAGN, 66.7 acres of CAGN habitat, and 77.1 acres of	g		shall be required pursuant to USFWS protocol if clearing	
CAGN critical habitat shall be mitigated through			occurs during the breeding season (March 15 to August 15).	
preservation of four pairs and 218.9 acres of CAGN habitat				
on site, of which 185.0 acres are CAGN critical habitat.				
Prior to Project implementation, preconstruction surveys to				
demonstrate CAGN absence from the development footprint				
shall be required pursuant to USFWS protocol if clearing				
occurs during the breeding season (March 15 to August 15).				

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES						
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative		
SIGNIFICANT IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT (cont.)						
		Project-level Impacts 4.3 Biological Resources (cont.)				
Special Status Species (cont.)		4.5 Diological resources (cone)				
Impact BI-19: One location where burrowing owl was observed would be removed by the Proposed Project. In addition, the Project would impact 31.1 acres of non-native grassland and 0.5 acre of native grassland, which are burrowing owl habitats.	Impact BI-19: Same as Proposed Project	Impact BI-19: Same as Proposed Project	Impact BI-19: Refer to Impact BI-17 under the No Project/Existing Plan Alternative. Mitigation Measure M-BI-19: Removal of one location where a burrowing owl was observed in 2001 shall be	Under the No Project Alternative, no impacts to burrowing owl would occur.		
Mitigation Measure M-BI-19: Removal of one location where a burrowing owl was observed in 2001 shall be mitigated by conducting a preconstruction survey before habitat clearing in each Project phase consistent with the Strategy for Mitigating Impacts to Burrowing Owls in the Unincorporated County. If a burrowing owl(s) is sighted within the development footprint, the resource agencies and County shall immediately be notified to determine the appropriate steps to take. If, for example, an active burrow is present, impacts to this species may be minimized by the active or passive translocation of the owl, outside of the breeding season or once the young have fledged, to a suitable area on the Project site that supports nesting and foraging habitat. A Burrowing Owl Translocation Plan, which may include installation of a minimum of two artificial burrows for every burrow impacted, would be prepared and submitted to the resource agencies and County for review and approval in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012).	Mitigation Measure M-BI-19: Same as Proposed Project	Mitigation Measure M-BI-19: Same as Proposed Project	mitigated by conducting a preconstruction survey before habitat clearing in each Project phase consistent with the Strategy for Mitigating Impacts to Burrowing Owls in the Unincorporated County. If a burrowing owl(s) is sighted within the development footprint, the resource agencies and County shall immediately be notified to determine the appropriate steps to take. If, for example, an active burrow is present, impacts to this species may be minimized by the active or passive translocation of the owl, outside of the breeding season or once the young have fledged, to a suitable area on the Project site that supports nesting and foraging habitat. A Burrowing Owl Translocation Plan, which may include installation of a minimum of two artificial burrows for every burrow impacted, would be prepared and submitted to the resource agencies and County for review and approval in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012).			
Removal of burrowing owl habitat shall be mitigated by preservation of 16.1 acres of non-native grassland on site and 15.0 acres of grassland at an off-site location or through purchase of credits at an approved conservation bank consistent with the Burrowing Owl Strategy (see Mitigation Measure M-BI-6), as well as preservation of 0.7 acre of native grassland within the Project site and off-site acquisition of 0.3 acre of suitable habitat (see Mitigation Measure M-BI-4).			Removal of burrowing owl habitat shall be mitigated by preservation of Diegan coastal sage scrub (see Mitigation Measure M-BI-6), as well as preservation of native grassland within the Project site and off-site acquisition of suitable habitat (see Mitigation Measure M-BI-4).			
Impact BI-20: Approximately 98.7 acres of foraging habitat (native grassland, Diegan coastal sage scrub [including disturbed] and non-native grassland) for golden eagles (as well as other raptors) would be removed by implementation of the Proposed Project.	Impact BI-20: Same as Proposed Project	Impact BI-20: Same as Proposed Project	Impact BI-20: Refer to Impact BI-17 under the No Project/Existing Plan Alternative. Mitigation Measure M-BI-20: Removal of foraging habitat for golden eagles and other raptors shall be mitigated by preservation of grasslands and Diegan coastal sage scrub	Under the No Project Alternative, no impacts to golden eagle would occur.		
Mitigation Measure M-BI-20: Removal of approximately 98.7 acres of foraging habitat for golden eagles and other raptors shall be mitigated by preservation of grasslands and Diegan coastal sage scrub (see Mitigation Measures M-BI-4 through M-BI-6).	Mitigation Measure M-BI-20: Same as Proposed Project	Mitigation Measure M-BI-20: Same as Proposed Project	(see Mitigation Measures M-BI-4 through M-BI-6).			

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	(cont.)	
		Project-level Impacts 4.3 Biological Resources (cont.)		
Special Status Species (cont.)		4.5 Biological Resources (cont.)		
Impact BI-21: The Proposed Project would directly impact potential habitat of or locations where the following sensitive animal species were observed or detected: coast horned lizard, coastal whiptail (including on the off-site Otay Crossings Commerce Park parcel), southern California rufous-crowned sparrow, loggerhead shrike, grasshopper sparrow, California horned lark, and San Diego black-tailed jackrabbit. In addition, although not observed on site (or within the off-site parcel), Belding's orange-throated whiptail is assumed to be present within the Project site and	Impact BI-21: Same as Proposed Project	Impact BI-21: Same as Proposed Project	Impact BI-21: Refer to Impact BI-17 under the No Project/Existing Plan Alternative. Mitigation Measure M-BI-21: Implementation of Mitigation Measures M-BI-4 through M-BI-6, M-BI-10, and M-BI-11 shall mitigate impacts to coast horned lizard, coastal whiptail, southern California rufous-crowned sparrow, loggerhead shrike, grasshopper sparrow, California horned lark, San Diego black-tailed jackrabbit, Belding's orange-throated whiptail, red-diamond rattlesnake, Bell's	Under the No Project Alternative, no impacts to these species or their potential habitat would occur.
impacts to this species are anticipated.			sage sparrow, turkey vulture, northern harrier, barn owl, and	
Mitigation Measure M-BI-21: Implementation of Mitigation Measures M-BI-4 through M-BI-6, M-BI-10, and M-BI-11 shall mitigate impacts to coast horned lizard, coastal whiptail, southern California rufous-crowned sparrow, loggerhead shrike, grasshopper sparrow, California horned lark, San Diego black-tailed jackrabbit, Belding's orange-throated whiptail, red-diamond rattlesnake, Bell's sage sparrow, turkey vulture, northern harrier, barn owl and southern mule deer habitat.	Mitigation Measure M-BI-21: Same as Proposed Project	Mitigation Measure M-BI-21: Same as Proposed Project	southern mule deer habitat.	
Impact BI-22: Some animals such as snakes and mammals may get into the excavated quarry pit, and due to its steep sides, may not be able to exit. In addition, some animals, including burrowing owls, are known to use open pipes, culverts, excavated holes or other burrow-like structures and may be attracted to the development footprint where they could be injured or killed. Such impacts from the Project would be significant to these sensitive animals.	Impact BI-22: Same as Proposed Project	Impact BI-22: Same as Proposed Project	Impact BI-22: Refer to Impact BI-17 under the No Project/Existing Plan Alternative. Mitigation Measure M-BI-22: Impacts from potential entrapment in the development footprint and injury or death to sensitive animal species shall be mitigated according to applicable measures.	Under the No Project Alternative, no impacts to these species would occur.
Mitigation Measure M-BI-22: Impacts from potential entrapment in the development footprint and injury or death to sensitive animal species shall be mitigated by the following measures: Deterrent measures may include, but are not limited to, ensuring that the ends of all pipes and culverts are	Mitigation Measure M-BI-22: Same as Proposed Project	Mitigation Measure M-BI-22: Same as Proposed Project		
 covered when they are not being used, and covering rubble piles, dirt piles, ditches and berms that occur within the development footprint when they are not being regularly disturbed by quarry activities. Ponds and pits containing water shall be fenced or otherwise surrounded/covered to prevent wildlife access. Fencing shall be secured at the ground or buried to prevent animals digging underneath and shall be wrapped around the base with a durable finer mesh material to prevent small mammal, reptile and amphibian entry. 				

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES					
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative	
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	cont.)		
Project-level Impacts					
4.3 Biological Resources (cont.)					
Special Status Species (cont.)					
M-BI-22 (cont.)					
Potential solutions to prevent trapped wildlife within					
ponds, pits or trenches shall be implemented and may					
include, but are not limited to, attaching textured liner					
material to create escape ramps, or depending on the					
configuration of the trapping hazard, earthen ramps,					
floating rafts or ladders may be appropriate solutions.					
During the initial clearing of each phase, the biological					
monitor will check implementation of nuisance					
minimization measures and conduct regular searches for					
wildlife in these areas. During regular plant operation, the					
project proponent will be responsible for attractive					
nuisance minimization measures, with annual compliance					
checks by a biological monitor.	Locating of D. In.;	In the second of	Truncat DI 22 Co. d. d. l. l. l. l.	II I d NI D ' d Ald d'	
Impact BI-23: Construction-related noise may impact	Impact BI-23: Same as Proposed Project	Impact BI-23: Same as Proposed Project	Impact BI-23 : Construction-related noise may impact nesting CAGN, as well as other species that use coastal sage	Under the No Project Alternative, no indirect impacts to CAGN would	
nesting CAGN, as well as other species that use coastal sage scrub on site, within an area such that construction noise at			scrub on site, within an area such that construction noise at	occur.	
the nest exceeds 60 dBA L _{EQ} . In addition, indirect noise			the nest exceeds 60 dBA L _{EQ} . In addition, indirect noise	occur.	
impacts to 20.6 acres of potential CAGN habitat (Diegan			impacts to potential CAGN habitat (Diegan coastal sage		
coastal sage scrub [including disturbed]) would occur as a			scrub [including disturbed]) would occur as a result of the		
result of the Proposed Project.			No Project/Existing Plan Alternative.		
Mitigation Measure M-BI-23: Indirect impacts to 20.6	Mitigation Measure M-BI-23: Same as Proposed Project	Mitigation Measure M-BI-23: Same as Proposed Project	Mitigation Measure M-BI-23: Indirect impacts to CAGN		
acres of CAGN habitat (Diegan coastal sage scrub	Witigation Measure M DI 25. Same as Proposed Project	Miligation Measure M D1 25. Same as Froposed Froject	habitat (Diegan coastal sage scrub [including disturbed])		
[including disturbed]) from noise shall be mitigated through			from noise shall be mitigated through the preservation		
the preservation of 20.6 acres of Diegan coastal sage scrub			Diegan coastal sage scrub on site at a 1:1 ratio (included		
on site (included within the 218.9 acres to be preserved			within the acres to be preserved under Mitigation Measure		
under Mitigation Measure M-BI-18).			M-BI-18).		
Direct noise-related impacts to sensitive nesting species,			Direct noise-related impacts to sensitive nesting species,		
such as the CAGN, tree-nesting raptors, or ground-nesting			such as the CAGN, tree-nesting raptors, or ground-nesting		
raptors, would be mitigated by conducting a preconstruction			raptors, would be mitigated by conducting a preconstruction		
survey to demonstrate absence of such species from areas			survey to demonstrate absence of such species from areas		
where effects resulting from construction noise could be			where effects resulting from construction noise could be		
significant. Tree-nesting raptor absence from the 500 foot			significant. Tree-nesting raptor absence from the 500 foot		
buffer shall be required if habitat clearing is to occur during			buffer shall be required if habitat clearing is to occur during		
the tree-nesting raptor breeding season (January 15 to			the tree-nesting raptor breeding season (January 15 to July		
July 15). A preconstruction survey of the 900 foot buffer			15). A preconstruction survey of the 900 foot buffer shall be		
shall be required if habitat clearing is to occur during the			required if habitat clearing is to occur during the ground-		
ground-nesting raptor breeding season (February 1 to			nesting raptor breeding season (February 1 to July 15).		
July 15).					

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES					
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative	
SIGNIFICANT IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT (cont.)					
		Project-level Impacts			
Consider Consider (cont.)		4.3 Biological Resources (cont.)			
Special Status Species (cont.) M-BI-23 (cont.) In addition, the following measures shall be required to minimize potential adverse noise effects to CAGN and its habitat:					
No jaw crusher shall be operated within 350 feet of the closest property line or biological open space boundary.					
No screen shall be operated within 165 feet of the closest property line or biological open space boundary.					
No vertical crusher shall be operated within 85 feet of the closest property line or biological open space boundary.					
All cone crushers used in the aggregate crushing process shall be shielded with noise controls. The barriers shall start at ground level and extend to at least a minimum of one-foot higher than the direct line of sight between any portion of the shielded equipment and any suitable habitat areas to the east of the Project site.					
 All vertical crushers used in the aggregate crushing process shall be shielded with noise control barriers. The barriers shall extend to the ground or at least two feet below the crusher if it is an elevated unit and extend to at least a minimum of one-foot higher than the direct line of sight between any portion of the shielded equipment and any suitable habitat areas to the east of the site. All aggregate screens shall use synthetic screen elements (note this does not apply to recycled materials, which may utilize steel screens). 					

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
	SIGNIFICANT IMPACTS	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	(cont.)	
		Project-level Impacts 4.3 Biological Resources (cont.)		
Special Status Species (cont.)		ne Biologicui Rossources (conti)		
Mitigation Measure M-BI-23 (cont.)				
All sound attenuation fence/walls shall be solid and				
constructed of masonry, wood, plastic, fiberglass, steel or				
a combination of those materials, with no cracks or gaps,				
through or below the wall. (Conveyor belting is an				
excellent noise shielding material to allow a flexible barrier or provide lower skirts.) 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 surface density of at least 3.5 pounds				
per square foot. 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 one-inch thick or				
better wood, solid-sheet metal of at least 18-gauge metal, or an exterior-grade solid-core steel door with				
prefabricated door jambs.				
prefabilicated door jamos.				
• If a cone crusher is used in the Asphaltic Concrete Plant,				
it shall be shielded with a barrier as described above in				
the fourth bulleted item.				
If a portable plant is used for occasional processing of				
recycled materials, the unit shall only be used in the area				
south of the main plant. The unit shall never be positioned				
closer than 500 feet to the eastern or southern excavation boundary or the southern boundary of the normal				
equipment areas to control additional noise impacts to the				
east.				
Impact BI-24: Implementation of the Proposed Project	Impact BI-24: Same as Proposed Project	Impact BI-24: Same as Proposed Project	Impact BI-24: Implementation of the No Project/Existing	Under the No Project Alternative, no
would significantly impact four narrow endemic species:		- "	Plan Alternative could significantly impact four narrow	impacts to narrow endemic species
Otay tarplant, variegated dudleya, QCB and burrowing owl.			endemic species: Otay tarplant, variegated dudleya, QCB	would occur.
		And the second of the second o	and burrowing owl.	
Mitigation Measure M-BI-24: Removal of Otay tarplant,	Mitigation Measure M-BI-24: Same as Proposed Project	Mitigation Measure M-BI-24: Same as Proposed Project	Mitigation Magazana M DI 24: Investo to Oters to 1	
variegated dudleya, QCB and burrowing owl shall be mitigated through implementation of Mitigation Measures			Mitigation Measure M-BI-24: Impacts to Otay tarplant, variegated dudleya, QCB and burrowing owl shall be	
M-BI-12, M-BI-13, M-BI-17 and M-BI-19, respectively.			mitigated through implementation of Mitigation Measures	
1.2. 1.2, in Di 10, in Di 17 and in Di 17, respectively.			M-BI-12, M-BI-13, M-BI-17 and M-BI-19, respectively.	
			, , , , , , , , , , , , , , , , , , , ,	

		Table S-1 (cont.)				
	SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES					
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative		
	SIGNIFICANT IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT (cont.)					
		Project-level Impacts				
		4.3 Biological Resources (cont.)				
Special Status Species (cont.)	T ANY ANY OF THE STATE OF THE S	T (DIAF G D ID)	The state of the s	Transfer of the state of		
Impact BI-25 : Implementation of the Proposed Project could potentially result in the killing of migratory birds or destruction of active bird nests and/or eggs.	Impact BI-25: Same as Proposed Project	Impact BI-25: Same as Proposed Project	Impact BI-25: Implementation of the No Project/Existing Plan Alternative could potentially result in the killing of migratory birds or destruction of active bird nests and/or	Under the No Project Alternative, no impacts to breeding birds would occur.		
Mitigation Management DI 25: In order to avoid notantial	Mitigation Massura M PI 25: Same as Proposed Project	Mitigatian Massura M DI 25: Sama as Branasad Braigat	eggs.			
Mitigation Measure M-BI-25: In order to avoid potential killing of migratory birds or destruction of active bird nests	Mitigation Measure M-BI-25: Same as Proposed Project	Mitigation Measure M-BI-25: Same as Proposed Project	Mitigation Measure M-BI-22: Same as Proposed Project			
and/or eggs, and to ensure compliance with FGC Sections			Witigation Weasure W-D1-22. Same as 1 toposed 1 toject			
3500-3516, clearing of native vegetation shall occur outside						
of the breeding season of most avian species (February 1						
through September 15). Clearing during the breeding season						
of FGC-protected species could occur if it is determined that						
no nesting birds (or birds displaying breeding or nesting						
behavior) are present immediately prior to clearing. A pre-						
construction survey shall be conducted three days prior to						
clearing or grading activities to determine if breeding or						
nesting avian species occur within impact areas.		14.6 % 18				
		4.4 Cultural Resources				
Cultural Resources	I 4 CD 1 C D ID : 4	Toward CD 1 C D 1D 1	Turned CD 1 Till 1 4 4 11 11 1 1 1	NT : 4 1 1 11		
Impact CR-1 : There is potential that brushing and grading by the Project could result in significant direct impacts to	Impact CR-1: Same as Proposed Project	Impact CR-1: Same as Proposed Project	Impact CR-1 : There is potential that brushing and grading for the No Project/Existing Plan Alternative could result in	No impacts to cultural resources would occur under the No Project Alternative.		
the two archaeological sites (SDI-10,298 and			significant direct impacts to any or all of the four significant	occur under the No Froject Atternative.		
SDI-10,297/H) located within the grading and brushing			identified cultural resources located within the 105-acre			
envelope of the 105-acre Project impact footprint.			surveyed impact footprint, as well as other potential cultural			
			resources located outside of the 105-acre surveyed impact			
Mitigation Measure M-CR-1a: All earth-disturbing activities that affects areas in native soils within the Major	Mitigation Measure M-CR-1a: Same as Proposed Project	Mitigation Measure M-CR-1a: Same as Proposed Project	footprint.			
Use Permit footprint shall be monitored by one or more			Mitigation Measure M-CR-1a: All brushing and grading			
archaeologists and Kumeyaay Native American monitors, as			that affects areas in the upper five feet of soil within the			
dictated by the size of the grading operation. All utility			410-acre Project site shall be monitored by one or more			
excavations, road grading, or brush removal must be			archaeologists, as dictated by the size of the grading			
coordinated with the archaeological monitor(s) and			operation. All utility excavations, road grading, or brush			
Kumeyaay Native American monitor(s). Any known			removal must be coordinated with the archaeological			
resources must be intensively monitored during any earth			monitor. Should any resources be encountered during the			
disturbing activities to ensure that any important features,			monitoring of the brushing and grading that were not			
isolates, or deposits are either recorded and collected or			previously recorded, Project activities shall be temporarily			
evaluated. Should any resources be encountered during the			halted or redirected to another area while the nature of the			
monitoring of the earth disturbing activities that were not previously recorded, the earth disturbing activities shall be			discovery is evaluated. Any resources that may be encountered shall be tested to determine their significance.			
temporarily halted or redirected to another area while the			If the testing demonstrates that a resource is significant, then			
nature of the discovery is evaluated. Any resources that may			a data recovery program shall be implemented.			
be encountered shall be evaluated to determine their			a data 1960 (of program of an oc implemented.			
significance. If the evaluation demonstrates that a resource						
is significant, then a data recovery program shall be						
implemented.						

Coltural Resources (cont.) Mitigation Measure M-CR-1b. Significant cultural resources (cont.) Mitigation Measure M-CR-1b. Same as Proposed Project destinated and a recovery program. Carding at these sites shall be intensively monitored by the designated archaeological monitor and Kuneyaay Native American monitor to ensure that any important afficiants, soloates, or deposits are either recorded and collected, or exacusted. Should any resources be encountered during the monitoring of the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded and collected, or exacusted. Should any resources be encountered during the monitoring of the humbing and gradial subtiles of the monitoring of the brushing and produced to another area while the monitoring of the humbing and gradial subtiles of the seriously recorded and produced to another area of the humbing and gradial subtiles for these resources. Native American representatives shall be contacted to participate in the mitigation program. Cultural materials re	Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES					
Cultural Resources (cont.) Cultural Resources (cont.) Mitigation Measure M-CR-Ib: Significant cultural resource sites SDI-10,2997. It shall be subject to a data recovery program. Earth disturbing activities at these sites shall be intensively monitored by the designated archaeological monitor or ensure that any important features, solates, or deposits are either recorded and collected, or evaluated. Should any resources be encountered during the monitoring of the earth disturbing activities while the nature of the discovery is evaluated. The archaeological monitor to ensure that any important features, solates, or deposits are either recorded and collected, or exavated. Should any resources be encountered during the nonitoring of the brushing and grading which were not previously recorded, the earth disturbing activities while the nature of the discovery is evaluated. The archaeological monitor is consultation with the Kumpaya Native. American monitor shall determine the excavation methods, laboratory analyses and special studies for these resources. Cultural materials recovered from the Project shall be contacted to a nother area while the nature of the discovery is evaluated. The archaeological monitor is consultation with the Kumpaya Native. American monitor shall determine the excavation methods, laboratory analyses and special studies for these resources. Cultural materials recovered from the Project shall be contacted to participate in the intigation program. Cultural materials recovered from the Project shall be placed in permanent of storage at a curation facility, or reputriated to a title of appropriate cultural affinity. The description of the control facility of a culturally affiliated Tribal curration facility or a report of the cultural participate in the intigation program. Cultural materials recovered from the Project shall be placed in permanent program and activation of the Director of PDS that all archaeological materials recovered during the significance testing and data recovery progre	Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative No Project/Existing Plan Alternative	No Project Alternative		
Cultural Resources (cont.) Mitigation Measure M-CR-1b: Significant cultural resources isso SD-10,298 and SD-10,29	SIGNIFICANT IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT (cont.)					
Mitigation Measure M-CR-1b: Significant cultural resource sites \$D1-10.298 and \$D1-10.29741 shall be subject to a data recovery program. Earth disturbring activities at these sites shall be intensively monitored by the designated archaeological monitor and Kumeyany Native American monitor to ensure that any important features, isolates, or deposits are either recorded and collected, or excavated. Should any resources be encountered during the monitoring of the earth disturbing activities which were not previously recorded, the earth disturbing activities shall be intensively monitored by the designated archaeological monitor and Kumeyany Native American monitor to ensure that any important features, isolates, or deposits are either recorded and collected, or excavated. Should any resources be encountered during the monitoring of the bearth disturbing activities shall be intensively monitored by the designated archaeological monitor and kumeyany Native American proceeded, the earth disturbing activities shall be intensively monitored by the designated archaeological monitor and kumeyany Native American proceeded in the control of the earth disturbing activities which were not previously recorded, the earth disturbing activities shall be monitoring of the beatth disturbing activities shall be encountered during the monitoring of the team of the designated of the encountered during the monitoring of the beautiful and the emporarily halted or redirected to another area while the nature of the discovery is evaluated. The archaeological monitor shall determine executation methods, laboratory analyses and special studies for these resources. Native American representatives shall be contacted to participate in the mitigation program. Cultural materials recovered from the Project shall be placed in permanent stronge at a curation facility or repatriated to a tribe of appropriate culturally affiliated Tribal curation facility, or repatriated to a tribe of appropriate cultural affinity. In this propose of the control of			Project-level Impacts			
Mitigation Measure M-CR-1b: Significant cultural resource sites \$D1-0.298 and \$D1-0.297H shall be subject to a data recovery program. Earth disturbing activities at these sites shall be intensively monitored by the designated archaeological monitor to ensure that any important features, solates, or deposits are either recorded and collected, or evaluated. Should any resources be encountered during the monitoring of the barth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth disturbing activities which were not previously recorded, the earth descovery is evaluated. The archaeological monitor in consultation with the Kumeyasy Native American reposite the action would be temporarily halted or redirected to another area while the nature of the discovery is evaluated. The archaeological monitor shall determine the excavation methods, laboratory analyses and special studies for these resources. American monitor shall determine the excavation methods, laboratory analyses and special studies for these resources. Native American repose efforts that Deplaced in permanent storage at a curation facility, or repartiated to a tribe of appropriate cultural affinity. The dependent of the discovery is evaluated. The archaeological monitor shall determine the excavation methods, laboratory analyses and special studies for these resources. Native American repose of the project shall be placed in permanent storage at a curation facility, or repartiated to a tribe of appropriate cultural affinity. The description of the discovery is evaluated. The archaeological monitor of the project shall be placed to a culturally affiliated Tribal curation facility, or repartiated to a tribe of appropriate cultural affinity. The description of the discovery			Cultural Resources (cont.)			
resource sites SDI-10.298 and SDI-10.297/H shall be subject to a data necewory programs. Tarth disturbing activities at these sites shall be intensively monitored by the designated are recovery programs. Tarth disturbing and the state of t						
proponent shall enter into a Secured Agreement with the County of San Diego PDS, secured by a letter of credit, bond, or cash of 150 percent of the estimated costs associated with the curation of archaeological materials recovered during both the significance testing and data recovery phases, and a percent cash deposit not to exceed \$30,000. A cost estimate shall be submitted and approved by the Director of PDS for the cost of curation that includes the processing of the archaeological material in perpetuity as determined by the Project Archaeologist in	Mitigation Measure M-CR-1b: Significant cultural resource sites SDI-10,298 and SDI-10,297/H shall be subject to a data recovery program. Earth disturbing activities at these sites shall be intensively monitored by the designated archaeological monitor and Kumeyaay Native American monitor to ensure that any important features, isolates, or deposits are either recorded and collected, or evaluated. Should any resources be encountered during the monitoring of the earth disturbing activities which were not previously recorded, the earth disturbing activities shall be temporarily halted or redirected to another area while the nature of the discovery is evaluated. The archaeological monitor in consultation with the Kumeyaay Native American monitor shall determine the excavation methods, laboratory analyses and special studies for these resources. Cultural materials recovered from the Project shall be placed in permanent storage at a curation facility or a culturally affiliated Tribal curation facility, or repatriated to		resource sites, if there are any to be impacted, shall be subject to a data recovery program. Grading at these is shall be intensively monitored by the designated archaeological monitor to ensure that any important features, isolates, or deposits are either recorded and collected, or excavated. Should any resources be encountered during the monitoring of the brushing and grading which were not previously recorded, the action would be temporarily halted or redirected to another ar while the nature of the discovery is evaluated. The archaeological monitor shall determine excavation met laboratory analyses and special studies for these resour Native American representatives shall be contacted to participate in the mitigation program. Cultural material recovered from the Project shall be placed in permaner storage at a curation facility or a culturally affiliated Tr curation facility. Because several sites are characterize habitation locations, samples of the collections may be curated in lieu of the entire collection. Project propone shall perform one of two options to ensure proper cural (1) Evidence must be provided to the satisfaction of the Director of PDS that all archaeological materials recoved during the significance testing and data recovery phase monitoring have been curated at a San Diego facility the meets federal standards per 36 Code of Federal Regula (CFR) Part 79, and therefore, would be professionally curated and made available to other archaeological/researchers for further study; or (2) Proproponent shall enter into a Secured by a letter of credit bond, or cash for 150 percent of the estimated costs associated with the curation of archaeological material recovered during both the significance testing and data recovery phases, and a percent cash deposit not to exce \$30,000. A cost estimate shall be submitted and approve by the Director of PDS for the cost of curation that incithe processing of the archaeological material perpetuity as determined by the Project Archaeological material perpetuity a	d d d d des tion in		
			perpetuity as determined by the Project Archaeologist			

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
SIGNIFICANT IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT (cont.)				
		Project-level Impacts 4.5 Noise		
Construction Noise Impacts		4.5 INDISE		
Construction noise impacts would be less than significant because there are no property lines with existing residences and no NSLUs within proximity of the Project site.	Same as Proposed Project	Same as Proposed Project	Impact N-1: Construction noise levels associated with the No Project/Existing Plan Alternative would be substantially greater than those associated with the Proposed Project due to the more intensive development (including residences, industrial facilities, and associated infrastructure) that would occur under this alternative when compared to the Proposed Project. In addition, while there are currently no NSLUs in the vicinity of the Project site, rural residences developed under the No Project/Existing Plan Alternative would be exposed to construction noise from subsequent construction activities under this alternative, if construction is phased and the residential uses are developed first. Therefore, potentially significant noise impacts during construction would occur under this alternative. Proposed land uses under the No Project/Existing Plan Alternative would go through discretionary review, establishing mitigation measures required for any significant	No impacts associated with noise would occur under the No Project Alternative.
Non-construction Noise Impacts			noise impacts.	
Impact N-2: Non-transportation noise sources generated on site by the Project may exceed 75 dBA at the property boundary and may create noise impacts of 45 dBA L _{EQ} (which would be significant to rural residences) as far as 385 feet from the boundary of the extraction areas. Therefore, if noise levels exceed 75 dBA or if residences were to be developed within 385 feet of the Project impact footprint, noise impacts from the Project would be significant.	Impact N-2: Same as Proposed Project	Impact N-2: Same as Proposed Project	Impact N-3: Based on the potential proximity of Mixed Industrial land uses to Rural Residential land uses under the No Project/Existing Plan Alternative, non-transportation-related operational impacts associated with noise would be potentially significant. Proposed land uses under the No Project/Existing Plan Alternative would go through discretionary review, establishing mitigation measures required for any significant noise impacts.	No impacts associated with noise would occur under the No Project Alternative.
 Mitigation Measure M-N-2: Operational noise sources from extraction operations shall not exceed the one-hour limit of 75 dBA at the property line. The following measures shall be implemented to reduce noise levels: a. No jaw crusher shall be operated closer than 350 feet from the closest property line or habitat location. b. No screen shall be operated closer than 165 feet from the closest property line or habitat location. c. No vertical crusher shall be operated closer than 85 feet from the closest property line or habitat location. d. All cone crushers used in the aggregate crushing process shall be shielded with noise control barriers: the barriers shall start at ground level and extend to at least a minimum of one foot higher than the direct line of sight between any portion of the shielded equipment and suitable habitat areas to the east of the site or other potential noise-sensitive receptors. Noise control barriers can either be mounted to the equipment, or some combination of the two, depending on what is required for appropriate noise control. 	Mitigation Measure M-N-2: Same as Proposed Project	Mitigation Measure M-N-2: Same as Proposed Project	noise impacts.	

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
	SIGNIFICANT IMPACTS I	MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT	(cont.)	
		Project-level Impacts 4.5 Noise (cont.)		
Non-construction Noise Impacts (cont.)		` ,		
Mitigation Measure M-N-2 (cont.) e. All vertical crushers used in the aggregate crushing process shall be shielded with noise control barriers: the barriers shall extend to the ground or at least 2 feet below the crusher if it is an elevated unit and extend to at least a minimum of 1 foot higher than the direct line of sight between any portion of the shielded equipment and suitable habitat areas to the east of the site or other potential noise-sensitive receptors. Noise control barriers can either be mounted to the equipment or ground-mounted separate from the equipment, or some combination of the two, depending on what is required for appropriate noise control.				
f. All aggregate screens shall use synthetic screen elements (note this does not apply to recycled materials which may utilize steel screens).				
g. Excavation within 72-feet of the property line requires a temporary 10-foot high noise control barrier. The barrier must extend beyond the operational locations to break the line of sight for any location on the NSLU within 72-feet of the equipment operations.				
h. All sound attenuation fence/walls should be solid and constructed of masonry, wood, plastic, fiberglass, steel, or a combination of those materials, with no cracks or gaps, through or below the wall. Project Note: (conveyor belting is an excellent noise shielding material to allow a flexible barrier or provide lower skirts). Any seams or cracks must be filled or caulked. If wood is used, it can be tongue-and-groove and must be at least 1-inch total thickness or have a surface density of at least 3½ pounds per square foot. 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 1-inch thick or better wood, solid-sheet metal of at least 18-gauge metal, or an exterior-grade solid-core steel door with prefabricated door jambs.				
i. If a cone crusher is used in the Asphaltic Concrete Plant it shall be shielded with a barrier as described above in item e.				
j. If a portable plant is used for occasional processing of recycled materials the unit shall only be used in the area south of the main plant. The unit shall never be positioned closer than 500-feet to the eastern or southern excavation boundary or the southern boundary of the normal equipment areas to control additional noise impacts to the east.				

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES					
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative	
SIGNIFICANT IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT (cont.)					
		Project-level Impacts			
Impact TR-1: The Proposed Project, based on Opening	Impact TR-1: Same as Proposed Project	4.7 Transportation/Circulation Impact TR-1: Same as Proposed Project	Impact TR-1: The Traffic Impact Study (TIS) did not	Under the No Project Alternative, no	
Year Plus Project maximum production scenario, would have a significant direct impact to Otay Mesa Road.	impact 1K-1. Same as Proposed Project	Impact 1K-1. Same as Proposed Project	analyze the No Project/Existing Plan Alternative in detail; however, since the estimated average trips traffic (ADT) volumes for this alternative would be approximately five	Project-level traffic impacts would occur.	
Mitigation Measure M-TR-1: Within 180 days of MUP approval, the applicant shall re-stripe the segment of Otay Mesa Road between Alta Road and Enrico Fermi Drive to provide two lanes plus a continuous center turn lane, which will improve the level of service of the roadway to LOS D	Mitigation Measure M-TR-1: Same as Proposed Project	Mitigation Measure M-TR-1: Same as Proposed Project	times the anticipated ADT volumes for the Proposed Project, it anticipated that the associated Project-level traffic impacts would be significant and greater than the Proposed Project's impacts.		
			Mitigation Measure M-TR-1: Prior to issuance of building permits, the applicant shall re-stripe the segment of Otay Mesa Road between Sanyo Avenue and Enrico Fermi Drive to provide one 14-foot travel lane in each direction with a 12-foot center turn lane.		
			In addition, even though the TIS did not analyze this alternative in detail, it is assumed that additional mitigation measures beyond those required for the Proposed Project would be necessary to mitigate the significant traffic impacts likely to result from implementation of the No		
Impact TR-2: The Proposed Project, based on the Opening	Impact TR-2: Same as Proposed Project	Impact TR-2: Same as Proposed Project	Project/Existing Plan Alternative.		
Year 2019 plus Project maximum production scenario, would have a significant direct impact on the intersection at Otay Mesa Road and Alta Road	Impact 1K-2: Same as Proposed Project	Impact 1K-2: Same as Proposed Project			
Mitigation Measure M-TR-2: Within 180 days of MUP approval, the applicant shall install a traffic signal control at the intersection of Otay Mesa Road and Alta Road, which will improve the level of service to LOS B in the AM peak and LOS A in the PM peak hours.	Mitigation Measure M-TR-2: Same as Proposed Project	Mitigation Measure M-TR-2: Same as Proposed Project			
4.9 Land Use and Planning					
Land Use					
Impact LU-2 : Project implementation would result in a significant Project-level land use impact due to inconsistency with the County Noise Ordinance, related to Project-generated non-transportation noise in excess of 45 dBA L _{EQ} as far as 385 feet from the boundary of the Project impact footprint, which would be significant to potential future rural residences.	Impact LU-2: Same as Proposed Project	Impact LU-2: Same as Proposed Project	Since the No Project/Existing Plan Alternative would consist of implementation of the land use designations for the Project site delineated in the EOMSP, this alternative would, by definition, be consistent with all applicable plans, policies and ordinances. Accordingly, no impacts related to land use would result from implementation of the No Project/Existing Plan Alternative.	No impacts related to land use would result from implementation of the No Project Alternative.	
Mitigation Measure M-LU-2: Appropriate setbacks shall be required and/or noise barriers shall be constructed to meet the minimum requirements defined for Mitigation Measure M-N-2.	Mitigation Measure M-LU-2: Same as Proposed Project	Mitigation Measure M-LU-2: Same as Proposed Project			

Table S-1 (cont.) SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
SIGNIFICANT IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT (cont.) Project-level Impacts 4.13 Paleontological Resources				
Paleontological Resources		nie i diednological Resources		
Impact PR-1: The proposed excavation of the high sensitivity Tertiary Otay Formation and the marginal sensitivity Jurassic Santiago Peak Volcanics would result in potentially significant impacts to paleontological resources.	Impact PR-1: Same as Proposed Project	Impact PR-1: Same as Proposed Project	Impact PR-1: Depending of the specifics of developments associated with the No Project/Existing Plan Alternative, there is potential for significant impacts to paleontological resources, similar to those described for the Proposed Project.	No impacts to paleontological resources would occur under the No Project Alternative.
Mitigation Measure M-PR-1a: A qualified paleontologist shall be at the pre-construction meeting(s) to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques and safety issues. A qualified paleontologist is defined as an individual having an M.S. or Ph.D. degree in paleontology or geology who is familiar with paleontological procedures and techniques, is knowledgeable in the geology and paleontology of San Diego County, and who has worked as a paleontological mitigation project supervisor in the County for at least one year.	Mitigation Measure M-PR-1a: Same as Proposed Project	Mitigation Measure M-PR-1a: Same as Proposed Project	Mitigation Measure M-PR-1a: Same as Proposed Project	
Mitigation Measure M-PR-1b: A qualified paleontological monitor shall be on site on a full-time basis during the original cutting of previously undisturbed deposits of the Tertiary Otay Formation to inspect exposures for contained fossils. A qualified paleontological monitor is defined as an individual having experience in the collection and salvage of fossil materials.	Mitigation Measure M-PR-1b: Same as Proposed Project	Mitigation Measure M-PR-1b: Same as Proposed Project	Mitigation Measure M-PR-1b: Same as Proposed Project	
The qualified paleontological monitor shall work under the direction of a qualified paleontologist. If the qualified paleontologist or paleontological monitor ascertains that observed exposures of the Otay Formation are not fossilbearing, the qualified paleontologist shall have the authority to terminate the monitoring program. A Standard Monitor shall be on site during all original				
cutting of previously undisturbed deposits of the Jurassic Santiago Peak Volcanics to inspect exposures for contained fossils. A Standard Monitor is defined as any one person designated by the Applicant and given the responsibility of watching for fossils so that the project is in conformance with Section 87.430 of the Grading Ordinance.				
Mitigation Measure M-PR-1c: If fossils are discovered during monitoring of the Otay Formation, they shall be recovered by the qualified paleontologist or paleontological monitor. In most cases, fossil salvage can be completed in a short period of time, although some fossil specimens (such as a complete large mammal skeleton) may require an extended salvage period. In these instances, the paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for recovering small fossil remains, such as isolated mammal teeth, it may be necessary to set up a screen-washing operation on the recovery site.	Mitigation Measure M-PR-1c: Same as Proposed Project	Mitigation Measure M-PR-1c: Same as Proposed Project	Mitigation Measure M-PR-1c: Same as Proposed Project	

Table S-1 (cont.)				
SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES				
Proposed Project	Extraction to Natural Grade Alternative	Extraction to Varying Depth Alternative	No Project/Existing Plan Alternative	No Project Alternative
SIGNIFICANT IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT (cont.)				
Project-level Impacts				
4.13 Paleontological Resources (cont.)				
Paleontological Resources (cont.)				
Mitigation Measure M-PR-1c (cont.)				
If a fossil of greater than twelve inches in any dimension,				
including circumference, is encountered during excavation or grading of the Santiago Peak Volcanics, all excavation				
operations in the area where the fossil was found shall be				
suspended immediately, the PDS Permit Compliance				
Coordinator shall be notified, the Project Paleontologist				
shall assess the significance of the find and, if the fossil is				
significant, the Project Paleontologist shall oversee the				
salvage program, including salvaging, cleaning, and				
curating the fossil(s), and documenting the find (as outlined				
below).				
Mitigation Measure M-PR-1d: If any sub-surface bones	Mitigation Measure M-PR-1d: Same as Proposed Project	Mitigation Measure M-PR-1d: Same as Proposed Project.	Mitigation Measure M-PR-1d: Same as Proposed Project	
or other potential fossils are found anywhere within the				
Project impact footprint by construction personnel in the absence of a qualified paleontologist or paleontological				
monitor, the qualified paleontologist shall be notified				
immediately to assess their significance and make further				
recommendations.				
Mitigation Measure M-PR-1e: Fossil remains collected	Mitigation Measure M-PR-1e: Same as Proposed Project	Mitigation Measure M-PR-1e: Same as Proposed Project	Mitigation Measure M-PR-1e: Same as Proposed Project	
during monitoring and salvage shall be cleaned, repaired,				
sorted, and cataloged as part of the mitigation program.				
Mitigation Measure M-PR-1f: Prepared fossils, along	Mitigation Measure M-PR-1f: Same as Proposed Project	Mitigation Measure M-PR-1f: Same as Proposed Project	Mitigation Measure M-PR-1f: Same as Proposed Project	
with copies of all pertinent field notes, photos, and maps,				
shall be deposited (as a donation) in a scientific institution				
with permanent paleontological collections such as the San				
Diego Natural History Museum. Donation of the fossils shall be accompanied by financial support from the				
applicant for initial specimen storage.				
applicant for initial specificil storage.				
Mitigation Measure M-PR-1g: A final summary report	Mitigation Measure M-PR-1g: Same as Proposed Project	Mitigation Measure M-PR-1g: Same as Proposed Project	Mitigation Measure M-PR-1g: Same as Proposed Project	
outlining the results of the mitigation program shall be	- g	g	and the post of th	
prepared by a qualified paleontologist and submitted to the				
County of San Diego for concurrence. This report shall				
include discussions of the methods used, stratigraphic				
section(s) exposed, fossils collected, and significance of				
recovered fossils.				

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