

**PROJECT DESCRIPTION**  
FOR THE  
**SANTA MARGARITA QUARRY EXTENSION**  
State Mine ID# 91-40-0003

Prepared For:

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**April 17, 2013**

## **1.0 Project Summary**

Hanson Aggregates Mid-Pacific ("Applicant") is applying for a modification to an existing Conditional Use Permit ("CUP") and Reclamation Plan Amendment ("RPA") for an extension of the existing quarry operations near Santa Margarita, California in San Luis Obispo County. The site is known as the Santa Margarita Quarry, CA State Mine ID # 91-40-0003. The quarry provides high quality construction aggregates to the San Luis Obispo County market, as well as outside markets in the surrounding counties.

The Santa Margarita Quarry Extension ("Project") would extend the productive life of the quarry by adding approximately 33 acres of adjacent land to the current permitted boundary for a total of area of approximately 193 acres.

Development of the adjacent aggregate resources will add approximately 21,500,000 tons of reserves and extend the life of the quarry by an additional 38 years. No change in production capability or intensity is proposed beyond currently permitted levels.

### **1.1 Project Location**

The Santa Margarita Quarry is located entirely within San Luis Obispo County, California and is situated three miles northeast of the town of Santa Margarita. The site address is 16815 El Camino Real, Santa Margarita, CA 93453. (See Figure 1.)

### **1.2 Site History**

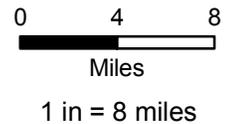
Mining began at the Santa Margarita Quarry in the early 1920's. Material from the quarry was initially utilized by the Southern Pacific Rail Road (SP) for rail ballast. At the time that mining began or shortly after, SP also constructed a rail line that went directly to the quarry allowing efficient loading and transportation of the aggregate. The rail line has since been removed and material is now shipped to end users by truck. SP Milling, a subsidiary of SP, began operating the site and supplying local construction projects with aggregates. In 1981 a Reclamation Plan was approved for the site. Hanson Aggregates purchased the site in the 1997 and continues to operate the Quarry.



### Santa Margarita Quarry Regional Location

Figure 1

- Cities
- Highways
- Counties



Date: April 2012  
Source: ESRI

### **1.3 Existing Land Uses**

Existing land uses at the Project site are primarily surface mining operations and asphalt production. The northern portion of the Project site is known as the Upper Area, as described in more detail below. The Upper Area currently features an active hard-rock quarry, and primary and secondary aggregate processing facilities which crush, screen, wash and sort aggregate products for use or sale. The Lower Area of the site includes two Hot Mix Asphalt (HMA) plants, access roads, stockpiles, silt ponds and a concrete and asphalt recycling facility. The two asphalt plants and recycling facility operate under independent land-use permits separate from the use permit for mining, however are encompassed within the approved Reclamation Plan boundary. All disturbed areas of the Project area associated with the existing and extended quarry operations will be incorporated into the proposed 193 acre Reclamation Plan Amendment (RPA) Area.

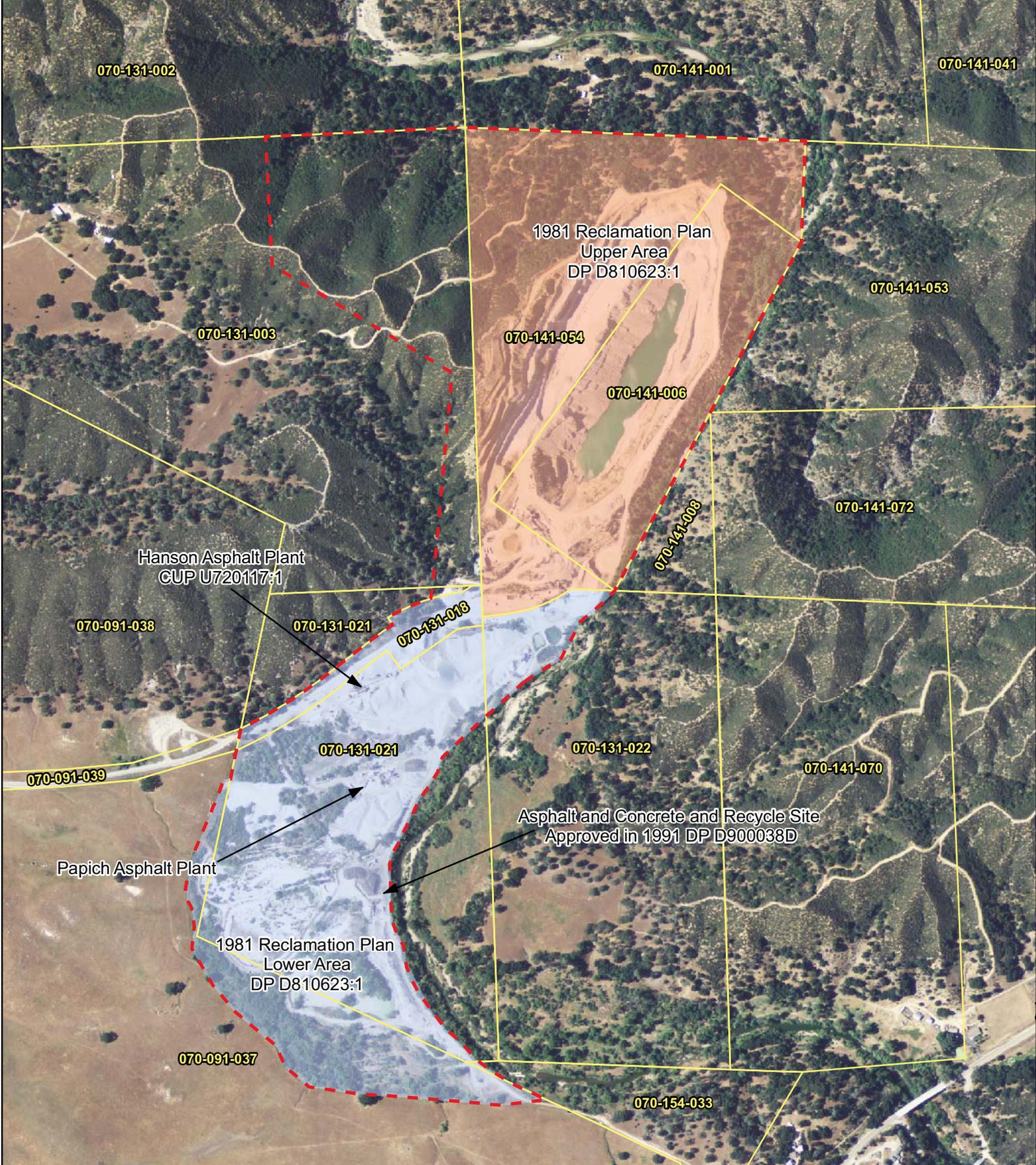
Land uses immediately surrounding the Project area are predominantly occupied by grazing land and unoccupied upland areas with a few scattered residences and other industrial uses. The Salinas River flows through the property on the east and north sides of the Project area, creating a natural border around the site on the east and north sides. Land use to the east and west of the Project is primarily cattle grazing and open space. Land south of the site includes sporadic residential dwellings, Highway 58, annual crop production and cattle grazing.

### **1.4 Existing Land Entitlements**

The current land-use entitlements governing the site consist of conditional use permits granted by San Luis Obispo County, vested mining entitlements arising from the quarry's early commencement date, and a reclamation plan approved pursuant to the Surface Mining and Reclamation Act (Pub. Resources Code, § 2710 *et seq.*) ("SMARA").

In September of 1981, the County granted a Conditional Use Permit that authorized an extension of surface mining operations into a 44-acre area, identified as APN 701-141-054. At this time, mining operations already were ongoing within the remainder of the site (mainly APN 701-141-006 and APN 070-131-021). The County recognizes the pre-existing areas as vested, and accordingly, no use permit has been required for mining operations to continue in those areas. Currently, maximum annual production from the quarry is limited by the use permit to 700,000 tons per year and a maximum of 294 truckloads per day.

Also in September of 1981, the County approved a reclamation plan covering the site. The 1981 reclamation plan designated an approximate 85-acre Upper Area, which is used mainly for extraction and processing of construction aggregates. The 1981 reclamation plan also designated a Lower Area consisting of prior mining and processing areas, asphalt production, drainage facilities as well as undisturbed areas. In 2005, the County granted an administrative amendment to the 1981 Reclamation Plan which allowed steeper final slopes within the quarry, which added reserves while retaining the existing reclamation goals for the site. See Figure 2 for an overview of approved entitlements.



## SANTA MARGARITA QUARRY EXTENSION ENTITLEMENT OVERVIEW

Figure 2

- 1981 Reclamation Plan Upper Area
- 1981 Reclamation Plan Lower Area
- Proposed Project Boundary
- SLO County Assessors Parcels



1 inch = 700 feet

## **1.5 Project Objectives**

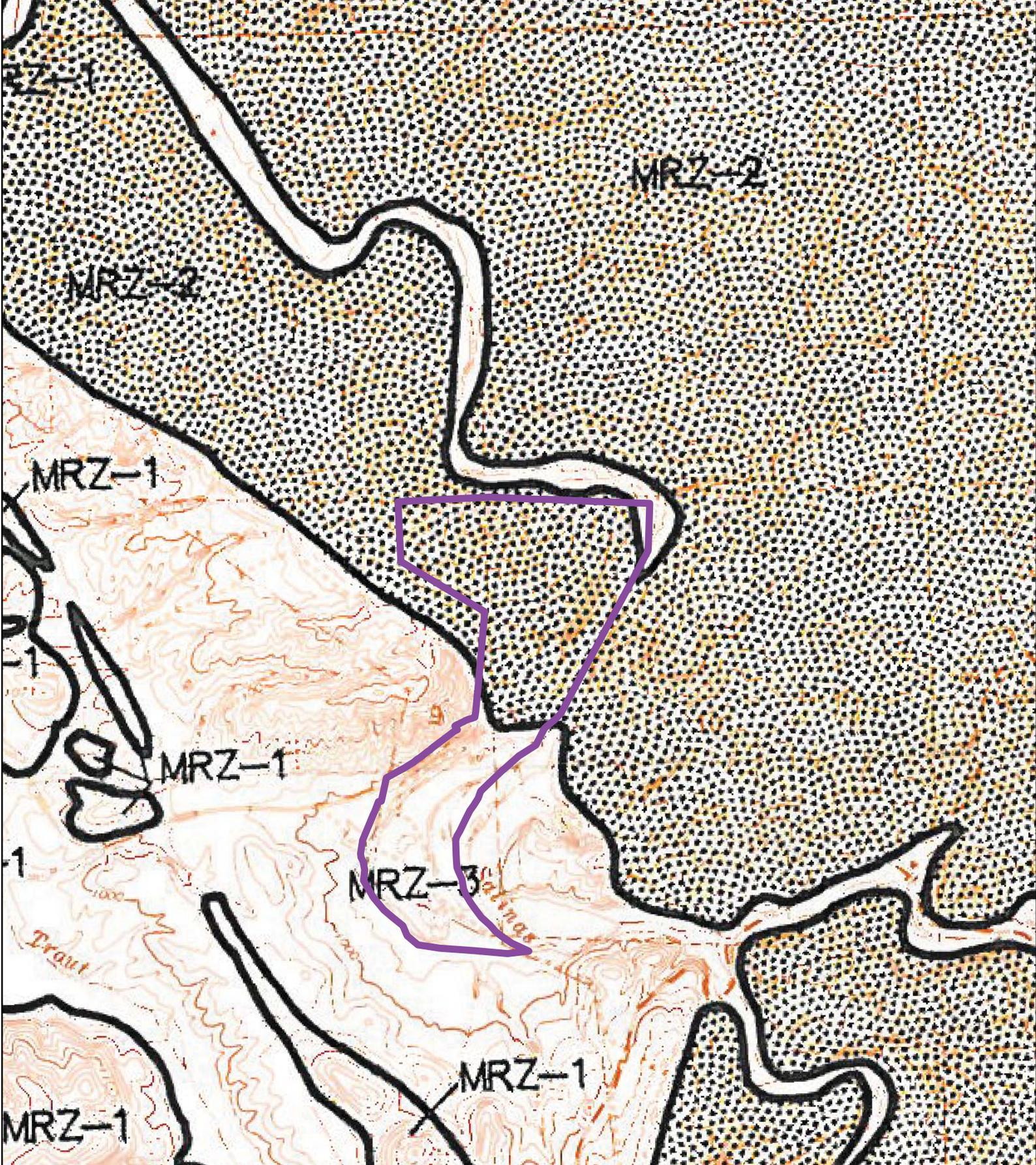
Project objectives include the following:

1. Extend the life of an existing hard-rock quarry by adding additional reserves. The extension will allow continued production of high quality construction aggregate materials to meet market demand. Associated goals include:
  - a. Add an additional 21,500,000 tons of reserves to the permitted resources and extend the life of the mining operation until 2070, subject to fluctuations in market demand. If additional time is required to complete material extraction beyond the proposed 2070 end date the Applicant shall apply for an extension at that time.
  - b. Continue to provide a local source of construction aggregates for the region.
  - c. Reclaim mined land to water storage, open-space and grazing uses.
2. Minimize impacts to sensitive natural resources and minimize aesthetic impacts through site design and concurrent reclamation.
3. Decrease visual impacts of the operation through a new mine plan.
4. Continue to provide high paying jobs for quarry employees through the extension of the quarry.

## **1.6 Aggregate Resource**

The California Geological Survey (“CGS”) determined in 2006 that California’s 50-year demand for construction material totals more than 13 billion tons. Of this, only approximately 4 billion tons of material is currently permitted for extraction. CGS also analyzed demand for material in specific “production-consumption” (“P-C”) regions of the state. The Project will be able to serve the San Luis Obispo-Santa Barbara P-C region, including the counties of: San Luis Obispo, Santa Barbara, Monterey and Kern. According to CGS, the San Luis Obispo- Santa Barbara P-C Region has a 50-year demand of 243 million tons (“Mtons”) and only 77 Mtons (or 32%) of permitted aggregate reserves.

The Upper Area of the Project where the quarry is located is classified by the California Department of Conservation (DOC) as MRZ-2 for Portland Cement Concrete (PCC) grade aggregate while the Lower Area is classified as MRZ-3. The DOC defines MRZ-2 as: "Areas classified MRZ-2 for PCC grade aggregate contain resources that are either proven PCC grade or highly probable to be PCC grade." Special Report 162 prepared by the DOC in 1989 discusses the property involved in the Project. Figure 3 illustrates the location of the quarry in relation to the MRZ-2 classified lands.



**SANTA MARGARITA QUARRY EXTENSION  
MINERAL RESOURCE CLASSIFICATION**

Figure 3

 Proposed Project Boundary



0 750 1,500  
Feet

1 inch = 1,500 feet

Date: January 2013  
 MRZ CLASSIFICATION: DOC SR 162, 1989  
 MRZ-1: Little likelihood of containing significant deposits of PCC-grade aggregate  
 MRZ-2: High likelihood that significant deposits of PCC-grade aggregate exists  
 MRZ-3: Areas that contain aggregate deposits, the significance of which cannot be evaluated from available data

## **1.7 Employment**

The Project would allow for continued employment of existing staff for an additional 38 years . Currently there are 15 full-time positions at the quarry. These positions are necessary to complete tasks associated with mining and processing activities: environmental compliance, safety, sales, management, and administrative tasks. In addition, the Project would also indirectly support employment in related industries such as construction and maintenance of existing infrastructure. No change in the number of employees involved in the operation is proposed under this Project

## **2.0 SANTA MARGARITA QUARRY EXTENSION AREA**

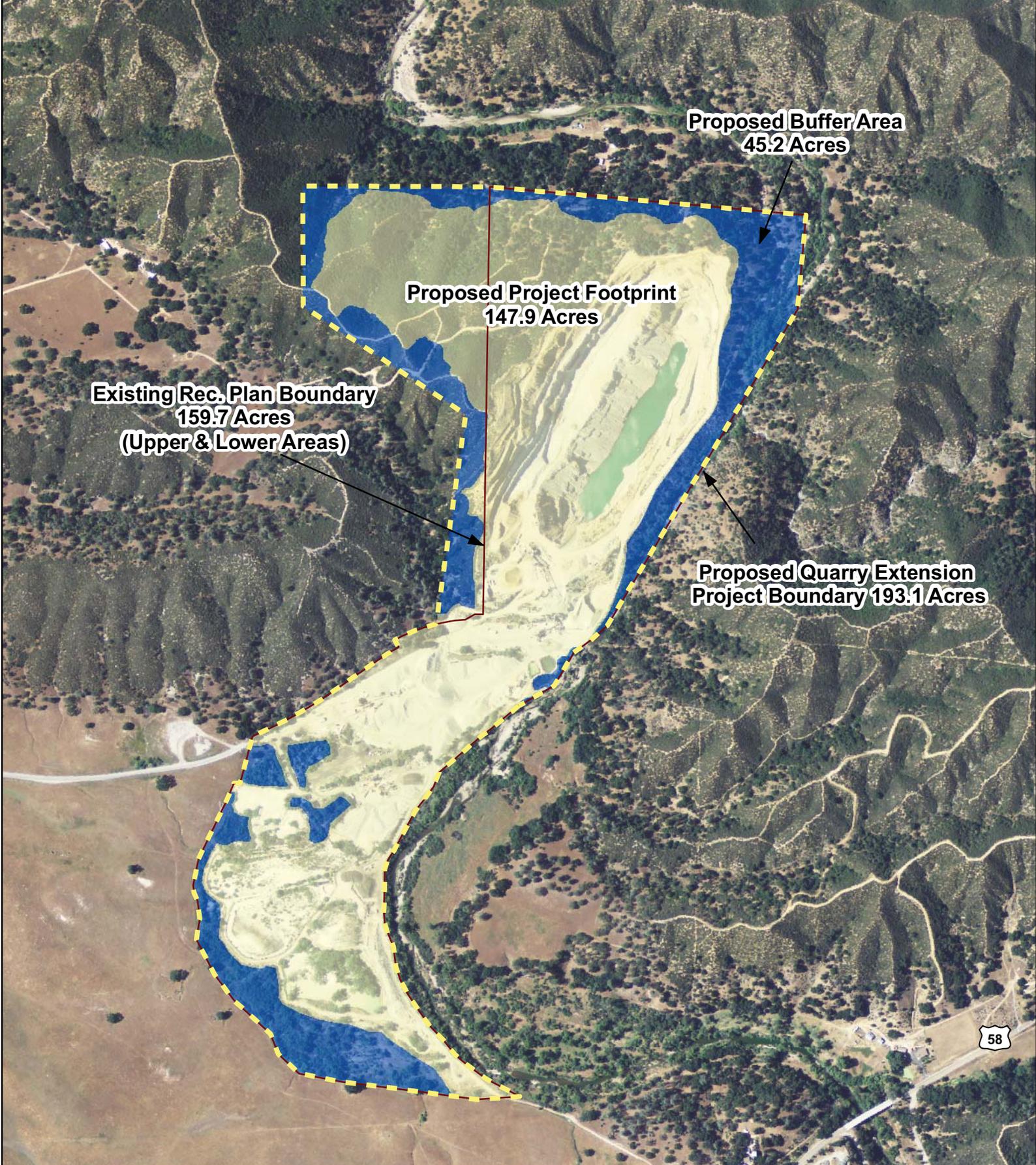
### **2.1 Project Scope**

The Project would add an additional 38 years to the life of the quarry and an additional 33 acres to the quarry and reclamation plan boundary, for a total Project area of approximately 193 acres. (See Figure 4.) With the approval of the extension, the Project would add an additional 21,500,000 tons of aggregate reserves.

The Project does not propose any increase in annual production limits or any intensification of the existing operations. The duration of the quarry's life assumes an average annual production of 565,500 tons; however an annual maximum of 700,000 tons extracted from the quarry is currently permitted. Shipments of material from the site may exceed annual production limits if it can be demonstrated that sales are from material mined in previous years. Quarrying and aggregate processing would continue as currently entitled. In total, the Project would add an additional 21,500,000 tons of aggregate reserves to the quarry to be mined at the maximum level of 700,000 tons per year. Actual annual production levels and the duration of the Project will depend on market demand, however will not exceed maximum permitted levels. No termination date currently applies to the quarry operation, and none is proposed. The proposed extension area's 38 years of life is estimated based on average operations for the purposes of analyzing cumulative impacts.

### **2.2 Quantity and Quality of Quarry Reserves**

Extraction occurs in Cretaceous granitic rocks at the southeast end of a ridge bordering the east side of the Santa Margarita Valley. The quality and quantity of the aggregate reserves have been verified by geological drilling, volumetric calculations, and material tests. The data finds that total volumes gained from the proposed mine extension are approximately 21,500,000 tons of reserves and 1,601,000 tons of overburden at a maximum depth of mining of 880 feet above mean sea level ("AMSL"). Core samples confirm that the reserves possess the chemical and physical properties to meet both Caltrans and ASTM AB (Aggregate Base) and PCC (Portland Cement Concrete) specifications as well as Caltrans AC (Asphaltic Concrete) specifications.



**Proposed Buffer Area  
45.2 Acres**

**Proposed Project Footprint  
147.9 Acres**

**Existing Rec. Plan Boundary  
159.7 Acres  
(Upper & Lower Areas)**

**Proposed Quarry Extension  
Project Boundary 193.1 Acres**



**SANTA MARGARITA QUARRY EXTENSION  
PROJECT FOOTPRINT**

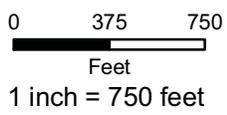


Figure 4

- Proposed Quarry Extension Project Boundary
- 1981 Rec. Plan Boundary
- Proposed Buffer Area
- Proposed Footprint Area



Date: March 2013  
Existing Quarry Boundary: Hanson  
Aerial: 2012 USDA

## 2.3 Project Property

### 2.3.1 Assessor Parcel Numbers and Ownership

The Project is located on eight (8) separate Assessors Parcels (APNs) that are owned by Mission Lakes LLC, DKF LLC, Santa Margarita Ranch LLC, Major Domo LLC, and Kaiser Sand and Gravel, and leased as necessary by Hanson Aggregates. (See Figure 5) Kaiser Sand and Gravel was acquired by Hanson Aggregates in 1992. The table below provides parcel details:

Table 1-Assessor's Parcels

APN	TOTAL ACRES	ACRES IN PROJECT AREA	OWNER	SAN LUIS OBISPO COUNTY LAND USE CATEGORY	SAN LUIS OBISPO COMBINING DESIGNATION	EXTENSION AREA PARCEL
<b>Upper Area Parcels</b>						
070-131-003	205.79	33.22	Mission Lakes LLC.	RL (Rural Lands)	EX1 (Extractive Resource Area)	Yes
070-141-054	50.16	50.16	Mission Lakes LLC.	RL (Rural Lands)	EX1 (Extractive Resource Area)	No
070-141-006	35.85	35.85	Mission Lakes LLC.	RL (Rural Lands)	EX1 (Extractive Resource Area)	No
<b>Lower Area Parcels</b>						
070-131-022	78.67	5.34	Kaiser Sand and Gravel	RL (Rural Lands)	EX1 (Extractive Resource Area)	No
070-141-054	50.16	50.16	Mission Lakes LLC.	RL (Rural Lands)	EX1 (Extractive Resource Area)	No
070-121-021	73.38	46.77	Kaiser Sand and Gravel	RL (Rural Lands)	FH (Flood Hazard) & No Designation	No
070-091-037	1,708.78	16.22	Major Domo LLC.	AG (Agriculture)	FH (Flood Hazard) & No Designation	No
070-154-033	17.35	0.1	Kaiser Sand and Gravel	RL (Rural Lands)	FH (Flood Hazard) & No Designation	No
070-131-018	5.43	5.43	Santa Margarita Ranch LLC.	RL (Rural Lands)	FH (Flood Hazard)	No

### 2.3.2 General Plan & Combining Designation

The proposed Project lies within an area of San Luis Obispo County that is designated Rural Lands "RL" and Agricultural "AG" under Title 22 of the San Luis Obispo County Code. The proposed quarry extension area lies entirely on lands classified as Rural Lands.

The General Plan Land Use Element in Title 22 states that the RL Land Use Category is designated to encourage and maintain low-density development and non-agricultural uses on larger parcels. Such lands may be used, among other things, for

mining and quarry operations". Mining and quarry activities are allowed on lands designated RL, subject to the County's surface mining ordinance. The General Plan's AG designation is designed to recognize and retain commercial agriculture as a desirable land use and as a major segment of the county's economic base. However the plan also states that AG land designation will support conversion of agricultural lands to other uses only when such conversion would be appropriate or because the continuing agricultural productivity of a specific site is infeasible. The existing 16.22 acres of existing AG conversion area was approved in 1981 and will not be expanded. Upon completion of reclamation the land will be returned to open space suitable for agricultural uses.

The proposed Project site is classified by San Luis Obispo County combining designation as an EX1-Extractive Resource Area as well as FH - Flood Hazard.

The Extractive Resource Area (EX1) combining designation is used to identify areas of the county which the California Department of Conservation's Division of Mines and Geology has classified as containing or being highly likely to contain significant mineral deposits. The purpose of this combining designation is to protect existing resource extraction operations and undeveloped geologic resources from encroachment by incompatible land uses that could hinder resource extraction. In addition, "Framework for Planning - Inland Portion, Part I," of the Land Use Element, contains guidelines which call for proposed land use category amendments to give priority to maintaining land use categories which allow and are compatible with resource extraction (County Code 22.14.050). The EX1 combining designation allows mining subject to the County's surface mining ordinance.

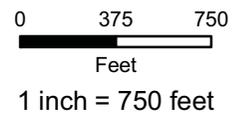
Flood Hazard (FH) designation is applied to flood-prone areas identified through review of available data from various federal, state, or local agencies. Also includes flood elevations of existing lakes and reservoirs. Areas of the Project site designated as FH lie along the banks of the Salinas River and cover areas currently used by the existing mining operation.

The Project does not propose any changes to the current General Plan or Combining Designation of parcels included in the quarry extension.



**SANTA MARGARITA QUARRY EXTENSION  
ASSESSORS PARCELS**

Figure 5



- Proposed Project Boundary
- Assessors Parcels

Date: January 2013  
Assessors Parcels: SLO County/Wallace Survey  
Aerial: 2012 USDA

## 2.4 Quarry Operations and Facilities

### 2.4.1 Site Access

Primary access to the Santa Margarita Quarry is from a private roadway which intersects with El Camino Real approximately 1.8 miles north of the Highway 58 – El Camino Real intersection. The access road runs east to west, and is approximately 1.5 miles in length. The total length from the quarry entrance to El Camino Real is paved and allows for two way traffic.

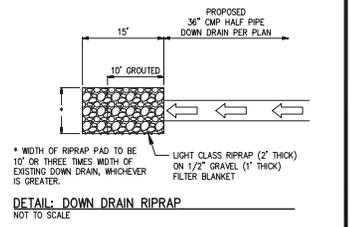
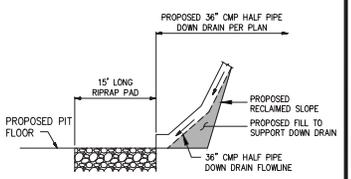
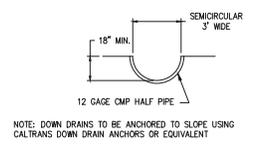
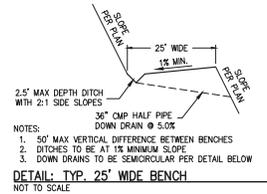
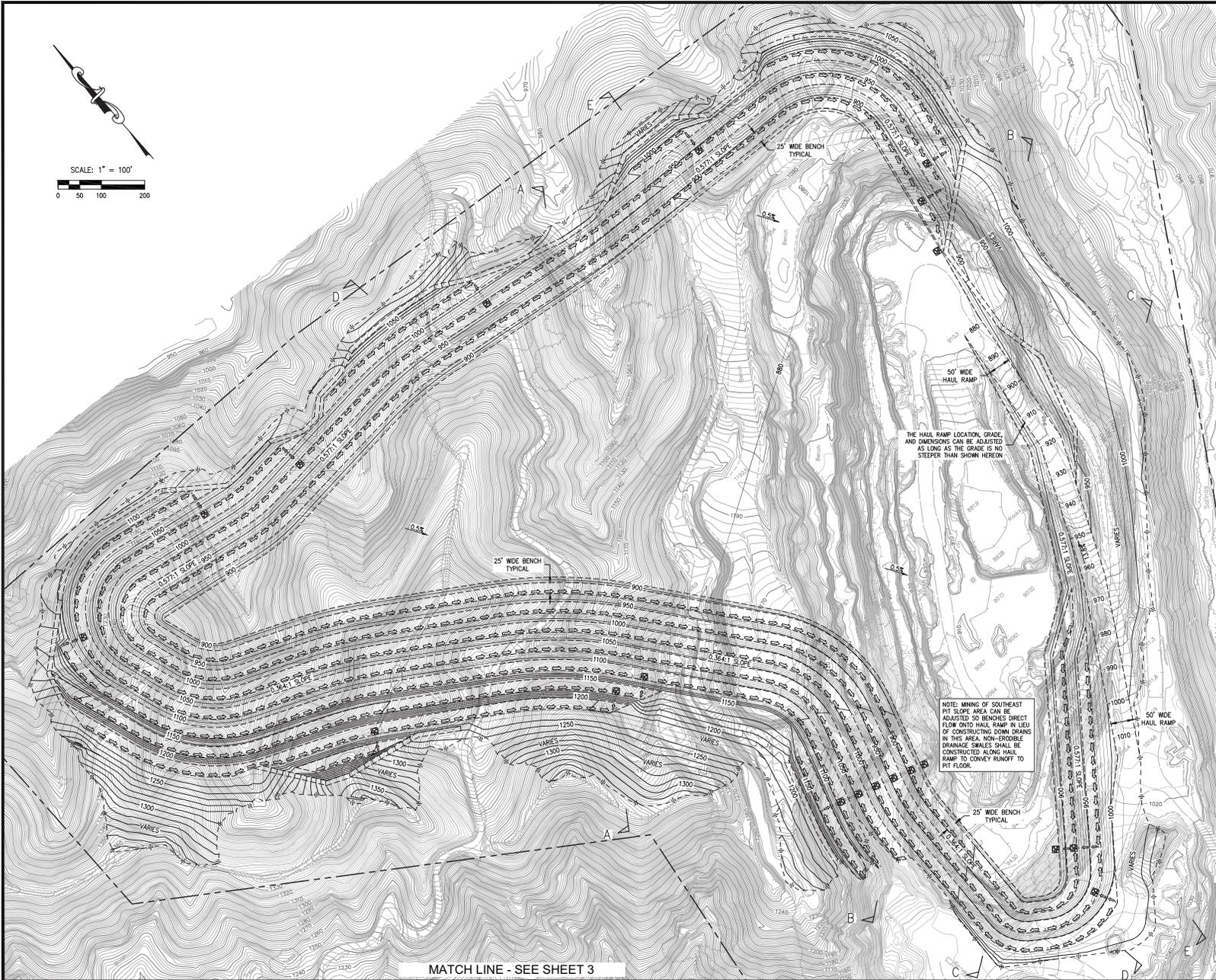
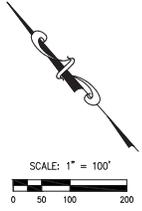
### 2.4.2 Quarry Design

The hard granitic rock found at the Santa Margarita Quarry is mined in a stair-step fashion. Native rock is drilled and blasted and then systematically removed leaving a series of mine benches. In general benched slopes will have 25 foot.-wide benches every 50 feet. of vertical rise. Golder and Associates has prepared, slope design recommendations outlined for the extraction area based on the specific geology of the site and the specific zones in which extraction is to occur , shown in the table below.

Table 2-Geotechnical Recommendations

Sector	Granite Type	Bench Configuration	Bench Height (ft)	Catch Bench Width (ft)	Bench Face Angle (°)	Design Inter-Ramp Slope Angle (°)
All	Weathered	Single	Varies	10 min	1.25(H):1(V)	Varies with height
Northwest and West	Fresh	Single	50	25	70 <sup>1</sup>	49
North, Northeast, and East	Fresh	Single	50	25	60	43

Golder and Associates' geotechnical analysis verifies that the proposed final slope will have a minimum slope stability static factor of safety ("FOS") that is suitable for the proposed end use. The Quarry design is shown in Figure 6.



THE HAUL RAMP LOCATION, GRADE, AND DIMENSIONS CAN BE ADJUSTED AS LONG AS THE GRADE IS NO STEEPER THAN SHOWN HEREON

NOTE: MINING OF SOUTHEAST PIT SLOPE AREA CAN BE ADJUSTED SO BENCHES DIRECT FLOW ONTO HAUL RAMP IN LIEU OF CONSTRUCTING DOWN DRAINS IN THIS AREA. NON-ERODIBLE GRAZEABLE SLOPES SHALL BE CONSTRUCTED ALONG HAUL RAMP TO CONVEY RUNOFF TO PIT FLOOR.

MATCH LINE - SEE SHEET 3

<b>RECORD DRAWINGS</b>		DATE:
PROJECT NUMBER AND SHEET NUMBER	DATE:	
PROJECT NAME AND SHEET NUMBER	DATE:	
PROJECT NUMBER AND SHEET NUMBER	DATE:	
PROJECT NUMBER AND SHEET NUMBER	DATE:	
<b>CHANG CONSULTANTS</b>		
GRADING PLANS FOR		
<b>SANTA MARGARITA QUARRY</b>		
<b>GRADING PLAN</b>		
Design/Drawn	County Plan Checker	APPROVED FOR COUNTY REQUIREMENTS
Job No.	County W.D. No.	Development Services Engineer
California Coordinates	County Post Miles	County Road No.
		Sheet <b>2</b> of <b>6</b>

### 2.4.3 Quarry Phasing

Quarry phasing is provided to give a general indication of how mineral extraction will progress throughout the duration of the Project. In general, mineral extraction after Project approval will occur in four (4) phases, as shown in Figure 7. The timing of each phase is dependent upon market demand and conditions encountered in the field. Completion of resource extraction in each phase may not be finished prior to moving into other phases of the site and phases will overlap as necessary to maximize the efficiency of the operation. Each phase will include vegetation removal, topsoil salvaging, overburden stripping, resource extraction and reclamation. Concurrent reclamation will occur where practicable on benches that have achieved final contours.

The initial phase of mining is within the current pit footprint and is identified as Phase I. Mining in Phase I would be a continuation of current operations and would continue until resources are depleted in this Phase. Mining in Phase II is anticipated to begin immediately following Project approval, and will last for approximately 31 years. As with all phases of mining, Phase I and II will occur concurrently until the resources in Phase I are depleted; which is estimated to be the year 2031. After 2031, Phase II will progress and overlap into Phase III as needed. Phase III and IV will follow as resources are depleted and the active mining area progresses to the northwest. Final reclamation of the Project area will be completed in Phase IV and during a Final Reclamation phase. The Final Reclamation phase involves completing grading of the Lower Area for drainage purposes, reclamation grading work, revegetation, and monitoring to ensure compliance with the approved Reclamation Plan. It is anticipated that all four phases of mining and final reclamation will be completed in approximately 64 years.

Table 3- Mine Phasing

Mining Phase	Est. Period (Years)	Est. Duration @ Avg. Annual Production (565,500 Tons)	Acreage	Total Production (Tons)	Overburden Removal (Tons)
Phase I	2013 to 2031	19	38.8	10,509,407	1,000
Phase II	2015 to 2045	31	13.3	8,374,201	584,300
Phase III	2041 to 2061	21	11.7	8,947,765	525,800
Phase VI	2056 to 2071	16	10.9	5,299,941	489,900
Final Reclamation	2072 to 2076	5			
<b>Totals</b>			74.7	33,131,314	1,601,000



**SANTA MARGARITA QUARRY EXTENSION PHASING**

Figure 7

 Proposed Project Boundary  
 Proposed Grading Contours

 Phase I  
 Phase II  
 Phase III  
 Phase IV  
 Final Reclamation Phase



0      325      650  
 Feet  
 1 inch = 650 feet

#### **2.4.4 Overburden Removal and Placement**

Overburden removal is necessary to access hard rock reserves at the quarry. The proposed quarry extension will generate approximately 1,601,000 tons of overburden for full development. Overburden generated during the mining process will be utilized for reclamation of the quarry. Overburden (weathered bedrock) will be stripped from the mine extension area using traditional earthmoving equipment as needed to expose bedrock located beneath the weathered granite. Removal of overburden will be completed only as mining progresses and additional bedrock is required to meet production demands. Overburden utilized for reclamation will be stored within the Project boundary until final placement. In most cases, overburden will be stored in the northeast corner of the quarry.

#### **2.4.5 Blasting**

Drilling and blasting is required to fracture and loosen “in-situ” rock. All blasting operations will follow current practices utilized at the active quarry. Currently, blasting is required to be completed approximately twice per month and occurs between 11:00 AM and 1:00 PM, as needed. Each blast yields approximately 13,000 Cubic Yards (CY) of fractured rock. Prior to blasting, an air rotary drill is used to bore 30' deep holes into the granite. The holes are then loaded with ANFO (ammonium nitrate and fuel oil) or similar, cast boosters, detonation cord, and initiators. The shot is detonated by a certified blaster. A licensed blasting contractor is retained to complete all blasting-related activities in compliance with applicable regulations of the San Luis Obispo County Sheriff's Department, federal MSHA (Mine Safety and Health Administration), Cal-OHSA (California Division of Occupational Safety and Health), the Department of Homeland Security, and the ATF (Bureau of Alcohol, Tobacco, Firearms, and Explosives). There will be no on-site storage of explosives. Explosives will be transported to the Quarry for each day of blasting as required by a licensed and permitted explosives delivery contractor.

#### **2.4.6 Primary and Secondary Crushing Facilities**

All primary and secondary aggregate processing equipment currently operating at the site is expected to remain. The primary processing plant is located near the southern limits of the quarry face and is permitted by the APCD to crush a maximum of 500 tons of aggregate per hour (TPH). From the primary crushing plant material is conveyed directly to the secondary processing plant for further crushing, washing and screening. The secondary plant is permitted to crush and process 350 TPH at maximum production.

In addition to existing processing equipment, an overland conveyor and primary crushing system would be constructed within the pit as mining progresses. The conveyor would stretch approximately 3,000 feet at final build out and run from the existing plant to approximately the center of Phase III. At the end of the conveyor, a primary crusher will be required to reduce the size of the shot rock so that it can be transported using the overland conveyor system. The location of the conveyor system and crusher will be adjusted and extended as mining progresses. Once operational the conveyor system would transport the majority of the mined rock to the processing

plant, and will reduce the need for off-road trucks. See Figure 8 for the proposed location of the conveyor system.

#### **2.4.7 Support Facilities**

Continued operations at the site will include the following existing facilities:

1. 10,000 gallon above ground diesel tank
2. Three portable buildings for the scale-house and office
3. Portable restrooms.
4. Maintenance shop
5. 70' truck scales

#### **2.4.8 Storm Water and Erosion Control**

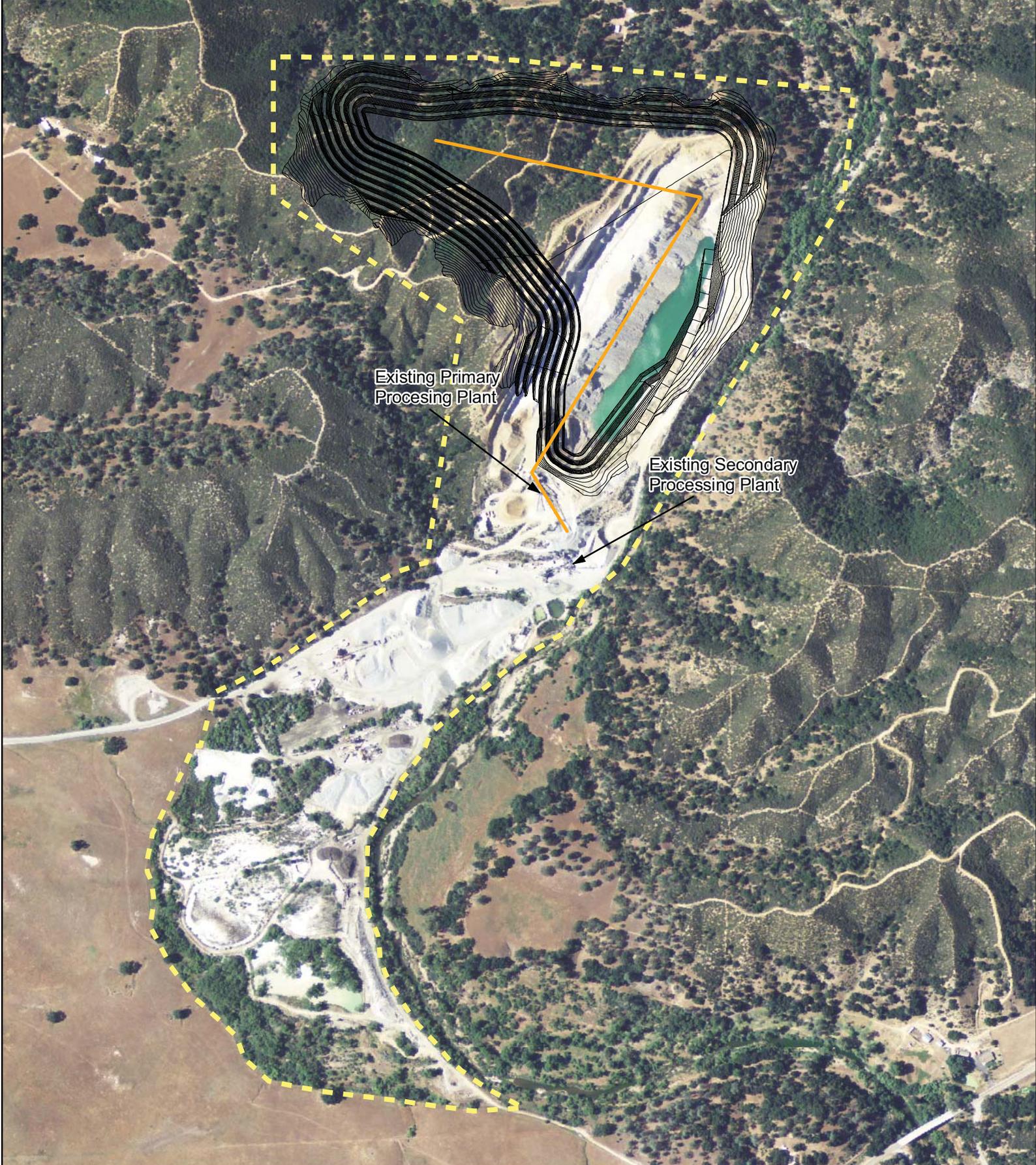
The Santa Margarita Quarry is designed to control surface runoff to protect surrounding land and water resources in accordance with the federal Clean Water Act and other applicable local, state and federal requirements. All Quarry operations comply with the National Pollutant Discharge Elimination System (“NPDES”) General Permit associated with industrial activities. Best Management Practices (“BMPs”) are implemented in accordance with a Water Quality Management Plan (“WQMP”) and Storm Water Pollution Prevention Plan (“SWPPP”). Drainage and erosion controls apply at all stages of operation and reclamation and are designed to exceed the 20-year storm event.

#### **2.4.9 Operating Hours**

The site is open 260 days per year. Typical operating hours, as permitted by the County, are 7:00 a.m. to 8:00 p.m. Monday through Friday with the following exceptions:

- Rock sales may operate for a maximum of 16 hours of each 24 hours beginning and ending at 6:00 a.m. for up to 80 days per year for a public agency contract.
- Rock sales may start operations at 5:00 a.m. for 70 days/year for the general public.
- Secondary plant can operate from 5:00 AM to 7:00 AM between 6/15-9/15.

No changes to the operating hours listed above are proposed.



**SANTA MARGARITA QUARRY EXTENSION  
PROPOSED CONVEYOR ALIGNMENT**

Figure 8

- Proposed Conveyor Alignment
- Proposed Project Boundary
- Proposed Pit Topo

0 325 650  
Feet  
1 inch = 650 feet



Date: January 2013  
Proposed Pit: Chang Consulting  
Aerial: 2012 USDA

## **2.4.10 Site Security and Safety**

Public health and safety will be protected in accordance with local, state and federal standards. During the Project lifetime, public access will be controlled by gates on the access roads within the Project boundaries. These gates will be locked during non-operating hours. In addition, appropriate signage will be posted around the perimeter of the quarry and Project boundary adjacent to undeveloped lands. MSHA and Cal-OSHA rules, regulations, and standards will be employed to protect both the public and on-site employees.

Lighting is installed at the primary and secondary crushing stations. Generally, pole-mounted sodium, metal halide, or fluorescent lighting is employed. Such lighting minimizes energy use, and in combination with cut-offs, reduces light pollution. All lighting fixtures are shielded and directed downward to prevent light pollution. No new lighting is proposed, quarry operations will utilize existing lighting.

## **2.5 Utilities**

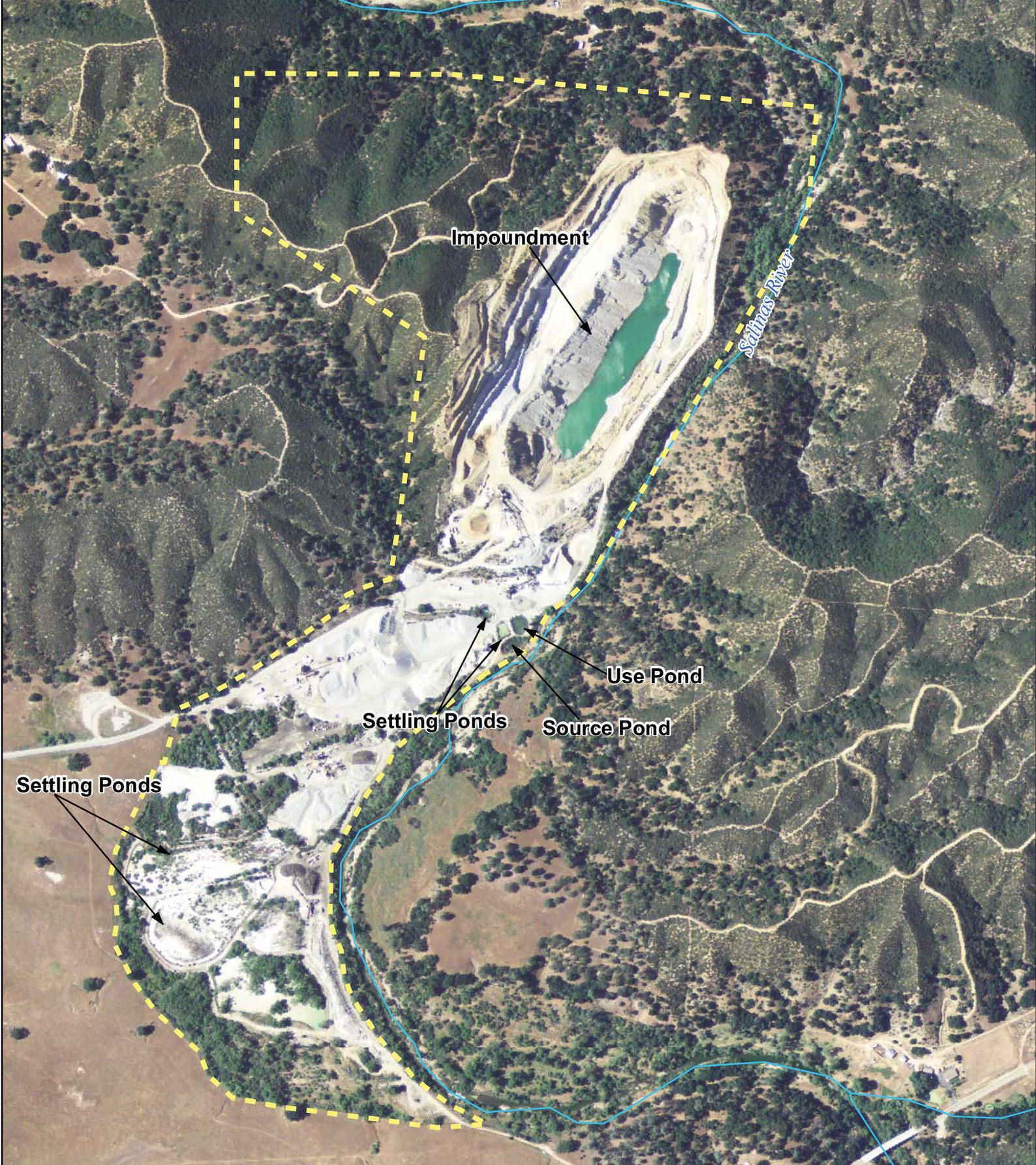
### **2.5.1 Water**

Water is required for material washing and dust suppression at the Project site. Currently, operations at the site require approximately 361 Acre Feet per Year (AFY) of water for aggregate processing and dust suppression. At full development, the Project will require an additional 2.8 AFY of water for dust suppression; water requirements for material processing will remain unchanged from the current levels. After Project approval, the quarry would require a total of 363.8 AFY for material washing and dust suppression.

Water is currently supplied for operations at the Project site from a 10 acre managed impoundment located within the Quarry and the Use Pond located along the Salinas River. No groundwater wells are proposed to be utilized to supply water for the Project. The Project proposes to continue to utilize the impoundment and Use Pond to supply water for the needs of the Project. See Figure 9 for the location of the impoundment and Use Pond.

#### Dust Suppression Water:

Current water requirements for dust suppression are approximately 55 AFY, under the proposed Project this requirement would increase to 57.8 AFY. Currently the majority of the water for dust suppression is supplied from the 10 acre managed impoundment located within the Quarry. Water within the impoundment is collected from runoff and direct rainfall. By the late fall, water in the impoundment typically dries up due to the lack of rainfall. During the majority of the year, water is pumped out of the impoundment for dust suppression. During periods when the impoundment is dry, supplemental water for dust suppression is pumped from the Use Pond that is along the Salinas River. Total volumes of water pumped from the impoundment are approximately 50 AFY and the remaining 5 AFY are pumped from the Use Pond. Additional water required for dust suppression for the proposed quarry extension will be supplied from the Use Pond.



**SANTA MARGARITA QUARRY EXTENSION  
WATER SUPPLY**

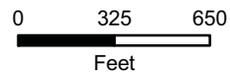


Figure 9



1 inch = 650 feet

- Proposed Project Boundary
- Salinas River

Date: January 2013  
 Aerial: 2012 USDA  
 Salinas River: SLO County

### Wash Water for Aggregate Processing:

Current operations require 306 AFY of water for the processing of aggregates. No change to the volume of water required for processing aggregates is proposed. Water utilized in the processing of aggregates is supplied from the Use Pond that is recharged from the Source Pond. Surface water from the Salinas River flows into the Source Pond and is pumped out of the pond to the Use Pond where it is then piped into the secondary processing plant. Water utilized for aggregate processing is cycled through the secondary processing plant where clays and silts become suspended in the water. The sediment laden water is pumped from the processing plant to a series of sediment ponds where the sediment is allowed to settle out. Of the 306 AFY circulated through the processing plant, it is estimated that only 10% of the water is consumed during the process; the remaining 90% is retained in the sediment ponds. Water usage depends on the amount of production and percentage of material that requires washing. Mining and material production volumes will vary year-to-year as market demand increases or decreases.

#### **2.5.2 Sewage Disposal**

One septic tank exists on-site and is utilized by the portable office buildings. All other areas of the Project utilize portable restrooms. The portable restrooms are serviced at appropriate intervals.

#### **2.5.3 Drinking Water**

Drinking water for the Santa Margarita Quarry extension will continue to be provided by a vendor, as it is currently.

#### **2.5.4 Power**

The quarry requires electrical power provided by PG&E through an existing overhead distribution line that enters the site near the front gate. No upgrades to the power line would be required to satisfy the needs of the Project.

### **2.6 Equipment and Fuel**

Conventional earth moving equipment is used to extract material from the Santa Margarita Quarry. Typical equipment includes front-end loaders, dozers, off-road haul trucks, rock drills and water trucks. Table 4 below identifies the expected maximum amount of equipment that will be operating at the quarry. Usage in the table is identified as a percentage of time that the equipment is operating relative to the hours that the site is open.

Table 4-Typical Rolling Stock Equipment

No	Make	Type/Model	Purpose	Usage
2	Cat	988 Front End Loaders	Primary mining loaders	90%
2	Cat	980 Front End Loaders	Loading customer trucks or transport to HMA Plant	90%
2	Cat	773 Haul Trucks	Transport material from pit to primary crusher	90%
1	Cat	D9 Track Dozer	Strip overburden and push shot rock	75%
1	Cat	235 Excavator	Maintenance	5%
2	Peterbilt	4,000 Gallon Water Trucks	Dust Suppression	75%
1	Cat	226 B Skid-Steer Loader	Plant Maintenance	5%
1	Cat	14 G Motor Grader	Road Maintenance	5%

*\*Usage of 773 Haul trucks would be reduced to approximately 50% after the overland conveyor system is installed*

Equipment is fueled on-site utilizing a 10,000 gallon above ground diesel tank. A Spill Prevention, Control and Countermeasures (“SPCC”) Plan guides reporting, control and cleanup activities in the event of a spill at the site.

### **3.0 SANTA MARGARITA QUARRY RECLAMATION PLAN**

The Applicant is seeking an amendment to the approved Reclamation Plan to specify reclamation measures and performance standards for the quarry expansion area, as well as areas within the approved quarry boundary. SMARA and County Code require a reclamation plan for all surface mining operations. Reclamation plans are developed to meet various performance standards for the protection of wildlife habitat, revegetation, recontouring, and erosion control, as well as to eliminate or reduce residual public health and safety hazards and minimize environmental impacts. The reclamation plan covers the proposed quarry, as described in Section 2.0 above. The total Reclamation Plan area covers approximately 193 acres, however only 148 acres are proposed to require reclamation activities to achieve the proposed end use for the site, the remaining 45 acres will act as buffer areas for the mining operation.

Reclamation describes the process of preparing mined lands for alternative post-mining land uses, and removing residual mining hazards. Within proposed Project area, reclamation would occur after the completion of extractive operations, and generally consists of grading, resoiling, revegetation, and monitoring until reclamation performance standards are met. Figure 10 provides and illustrates the final reclaimed landform that will exist after mining and reclamation are complete.

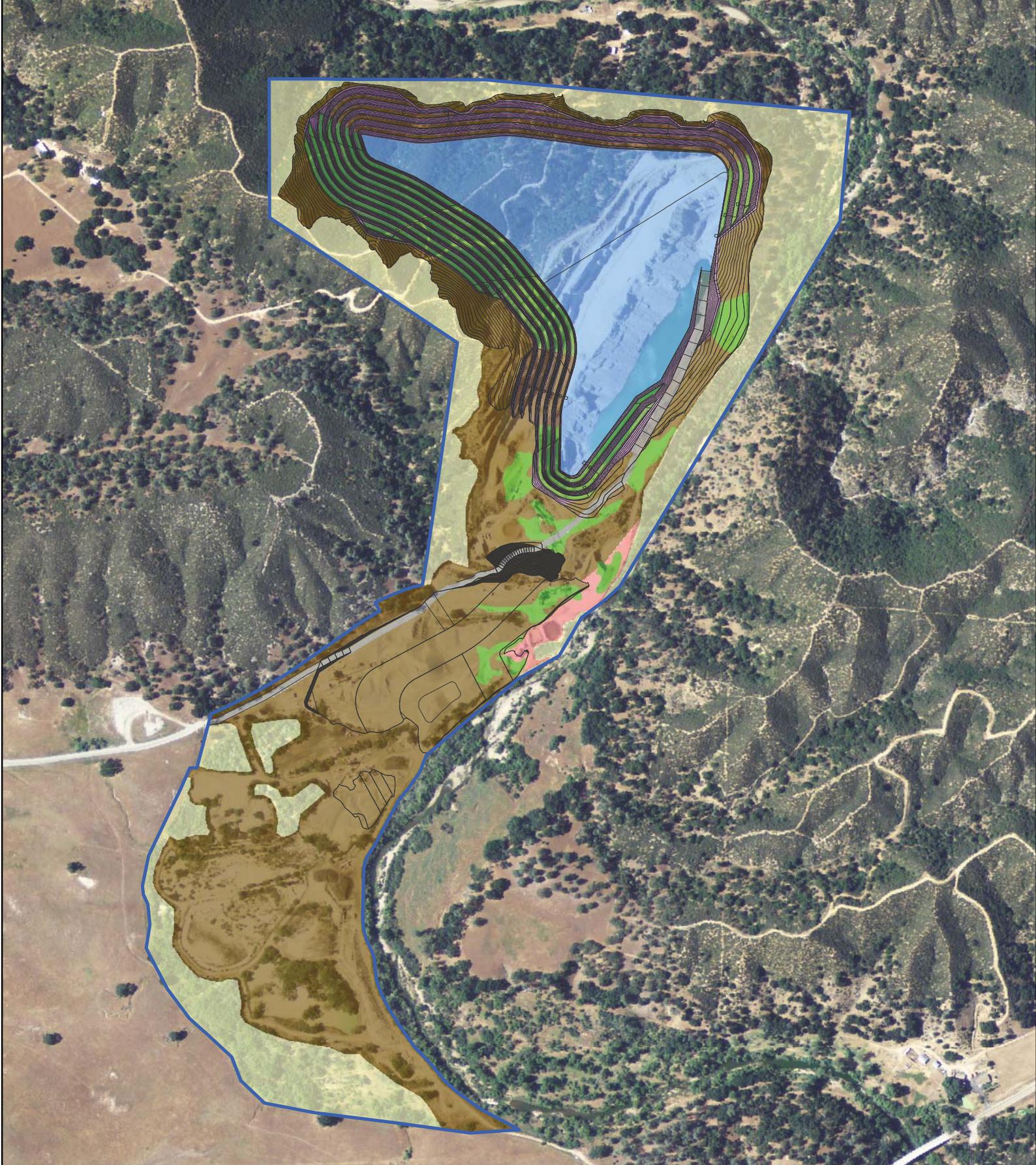
Mining activities will result in the creation a depression that is an average of 250 feet deep and a number of cut slopes with 25’ wide catch benches around the perimeter. Reclamation will adapt this landform to open-space including seasonal water storage, oak woodland habitat, riparian woodland habitat and chaparral vegetation.

The goals of reclamation are to:

1. Adapt mined areas to open space land uses.
2. Stabilize the soil so that erosion is controlled.
3. Revegetate mined lands to create a habitat allowing for the gradual invasion and establishment of native plant species from the surrounding undisturbed plant communities through natural successional processes.
4. Reduce the visual impacts of the quarry benches visible from the surrounding areas along Highway 58.
5. Maximize the recovery of mineral resources in a safe and efficient manner; and
6. Mitigate, by design, potential environmental impacts on the land that might otherwise be created by extraction.

All of these activities together will achieve the goals of the Reclamation Plan and leave the site suitable for the proposed final land uses. Plant species used will be capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer, and will include species representative of surrounding vegetative communities.

The Applicant will also, pursuant to SMARA and County Code, post revised financial assurances payable to the County and the State Department of Conservation in an amount sufficient to cover the cost of reclaiming disturbed portions of the quarry. These financial assurances are reviewed and updated annually.



# SANTA MARGARITA QUARRY EXTENSION RECLAMATION

Figure 10



Date: March 2013  
 Proposed Contours: Chang Consultants  
 Aerial: 2012 USDA

- Proposed Grading Contours
- Buffer Area
- Chaparral
- Oak Woodland
- Access Road
- Proposed Project Boundary
- Riparian Woodland
- Exposed Bedrock
- Seasonal Water



1 inch = 650 feet

Table 5 Project Summary

<b>General Site Information</b>	
Applicant	Hanson Aggregates
Property Owners	Mission Lakes LLC, Hanson Aggregates, Major Domo LLC & Santa Margarita Ranch LLC
Current Approved Reclamation Plan Area	159.7 Acres
Mining Extension Area	33.2 Acres
Total Reclamation Plan Amendment Area	193.1 Acres
Project APN's	Existing: 070-091-037, 070-121-021, , 070-131-018, 070-131-022, 070-141-006, 070-141-054, 070-154-033. Extension: 070-131-003
Elevation	1350' to 880' AMSL
General Plan Designation	Rural Lands (RL) & Agriculture (AG)
Combining Designation	Extractive Resource Area (EX1) & Flood Hazard (FH)
Williamson Act Contract	No
MRZ Designation	MRZ-2 & MRZ-3
Current Land Use	Hard Rock Mining/Processing and Open Space
<b>Mining</b>	
Extraction Area	75 Acres
Maximum Mining Depth	880' AMSL
Average Depth of Mining	250'
Mining Slopes	Northwest and West Sectors: 25' wide benches every 50' and a bench face angle of 70°. Slopes North, Northeast and East: 25' wide benches every 50' with a bench face angle of 60°.
Type of Minerals	Construction Aggregate (Granite)
Remaining Entitled Reserves	11,700,000 Tons
Reserves Gained from Mine Extension	21,500,000 Tons
Total Reserves	33,200,000 Tons
Average Annual Production	565,500 Tons
Maximum Annual Production	700,000 Tons
Average Daily Truck Trips	89 (Round Trips, Excluding Pick-Up Trucks)
Max Daily Truck Trips	294 (Round Trips, Excluding Pick-Up Trucks)
Commencement of Mining	Continuation of existing active operation
Estimated Duration of Mining	59 Years of Mining & 5 Years for Reclamation-Total 64 Years.
Anticipated Mine Depletion	2070
<b>Reclamation</b>	
Reclamation Area	193.1 Acres
Reclamation Slopes	42.5 acres with 25' wide benches spaced every 50' & 1.25:1 non-benched slopes on weathered rock
Reclamation Vegetation	Oak Woodland, Chaparral, Riparian
Duration of Reclamation	5 Years
Anticipated Completion of Reclamation	2076
Post Mining Land-Use	Open Space

## 5.0 REQUIRED APPROVALS, PERMITS, AND REVIEW

The discretionary agency actions for the proposed Project are as follows:

1. **San Luis Obispo County:** The Project requires County approval of: (1) the Quarry extension CUP application and associated CA Environmental Quality Act (CEQA) document; (2) the Quarry Reclamation Plan.
2. **California Department of Conservation, Office of Mine Reclamation (“OMR”):** SMARA requires OMR to review and comment on the Quarry Reclamation Plan.
3. **Regional Water Quality Control Board (“Regional Board”):** The Project requires revision and approval of the existing SWPPP for the Quarry and Processing Facilities by the Regional Board.
4. **State Water Resources Control Board (“State Board”):** The Spill Prevention and Control (SPCC) Plan requires approval by the State Board.
5. **San Luis Obispo County Air Pollution Control District (“Air District”):** The plant’s operational equipment requires Air District approval of permits.
6. **California Department of Fish and Game (“DFG”):** DFG will act as a trustee agency.