SECTION 2.0
PROJECT DESCRIPTION

2.1 LOCATION AND BOUNDARIES

The proposed Las Pilitas Quarry surface mine and related disturbance areas would occupy approximately 41 acres of a 234-acre property located approximately three miles northeast of Santa Margarita on the north side of State Route 58 just east of the Salinas River. Access to the property is directly from SR 58, which is a two-lane state highway extending from US Highway 101 (four miles to the west) to the easterly county line. Figures 2-1 and 2-2 show the project location and vicinity.

The property is located at 6660 Calf Canyon Road (SR 58), and includes Assessor's Parcel Numbers (APN) 070-141-070 (78 acres) and 071 (156 acres).

The project site is within Section 10, Township 29 South, Range 13 East, Mt. Diablo Base and Meridian, on the Santa Margarita CA 7.5 minute USGS quadrangle. Specifically, it includes:

- APN 070-141-070: E/2 of the SW/4 of Section 10
- APN 070-141-071: W/2 of the SE/4, NE/4 of the SE/4, and SE/4 of the NE/4 of Section 10

The approximate center of the proposed quarry site within the property is located at: 35°24'53.5"N and 120°33'55.5"W.

The property is within the County's Las Pilitas Planning Area and is designated as Rural Lands (San Luis Obispo County 2010). The quarry site is also covered by the EX1 Energy and Extractive Resource Combining Designation (San Luis Obispo County 2009). The land in and around the property consists of vacant steep hillsides (slopes typically over 50 percent) supporting natural vegetation, and flatter areas along drainages (slopes typically less than 10 percent) containing rural residences with grazing and similar ranch uses. Two residences, a barn and storage sheds are located in the flat southern portion of the property, which is also used for limited cattle grazing. These uses will remain on the project site whether or not this project is approved. The Coastal Branch of the California Aqueduct was constructed across the southern portion of the property north of SR 58 in the late 1990s. This 54-inch buried water pipeline delivers water from the California State Water Project to communities in San Luis Obispo and Santa Barbara Counties. Rural residences are located south of the central and southwestern portions of the property and along Parkhill Road to the southeast of the property. The Santa Margarita Quarry of Hanson Aggregates (Heidelberg Cement Co.) is located to the west and northwest of the property.

More information regarding the project vicinity and surrounding lands is in Section 3.0, Environmental Setting; and a specific discussion of Land Use is in Section 4.16 of this EIR.

2.2 PROJECT OBJECTIVES

Section 1.3 of this EIR presents a more detailed discussion of the project objectives along with an introductory background discussion of the aggregate industry and how the project relates to the identified objectives. As a brief summary of that discussion, the objectives are presented in the following points:

A. Develop significant mineral deposits in a manner that protects sensitive natural resources and existing adjacent uses, and is consistent with other County general plan goals and policies.

B. Protect significant mineral resources from land uses that threaten their availability for future mining.

C. Develop known concrete-grade aggregate reserves in the local production-consumption region in accordance with previous planning and coordination with the California Department of Water Resources, state policy, the County EX1 Combining Designation, and applicable regulations.

D. Provide an additional source of aggregate material in the local production-consumption region, with a permitted production of up to 500,000 tons/year for approximately 30 years, consistent with state policy, the County EX1 Combining Designation and applicable regulations, and in a manner that supports independent contractor and other local use groups.

E. Contribute towards increased recycling of construction and demolition debris to help achieve an overall goal of 75 percent recycling for this type of waste material.

F. Locate a concrete-grade aggregate quarry as near as practicable to use areas in the San Luis Obispo-Santa Barbara Production-Consumption region, and with minimal reliance on local streets to gain highway and freeway access.

2.3 PROJECT CHARACTERISTICS

2.3.1 Overall Description

The applicant is requesting a 25- to 58-year timeframe for the mining operation and phased reclamation of the mined site, with a maximum annual production of 500,000 tons, a portion of which will be recycled asphalt and Portland cement concrete. The project will result in the disturbance of approximately 41 acres on two parcels that total approximately 234 acres in size. The proposed project is located at 6660 Calf Canyon Way (north side of SR 58), east of the Salinas River Bridge and approximately 0.25 mile west of the Parkhill Road intersection, and approximately three miles east of the community of Santa Margarita. The site is in the

Las Pilitas planning area, within the Rural Lands category and the Energy Extractive 1 Combining Designation Overlay.

Major Stages and Phasing

The proposed project would be implemented in two overall stages including the following components:

- **Initial Stage:** Consists of installing a truck scale, portable office, access road construction and landscaping. The production of aggregate material would start with removing and stockpiling overburden for future reclamation use, and excavating, processing and stockpiling of decomposed granite (DG) and granite rock. This initial extraction would occur towards the center of the site, extending towards the north and northeast. Processing of excavated material will be done by portable crushing and screening equipment as needed. According to the applicant, this phase could yield up to 500,000 tons of material annually and last approximately 5 years. The annual rate establishes a yearly maximum for the life of the project. For example, if the maximum rate of production is maintained at 500,000 tons per year for the duration of the project, then the useful life of the aggregate quarry will be about 25 years.
- **Ongoing Operational Stage:** Consists of continued excavation, processing and stockpiling of DG and granitic rock at the same annual rate (maximum of 500,000 tons/year). In addition, this stage of operations would include the recycling of concrete and asphalt within the maximum annual production rate of 500,000 tons/year. Rock and recycled material would be processed by portable equipment. Reclamation would proceed as the benches of the mine are excavated and established. The eastern slope, visible to eastbound traffic on SR 58, would be the first area to be reclaimed. Mining would continue to the north and west, behind the ridge located to the west of the entrance. As mining progresses through the next phase of the project, reclamation would start within one year of excavation within that area.

A summary of each of the mining phases is presented below in Table 2-1, and Figures 2-3 and 2-4 show the general location for excavation and reclamation within each phase. The remaining Figures (2-5 through 2-11) show the grading upon completion of each phase and the final site configuration after reclamation activities. Grading plans for all of the phases are provided in Appendix B.

The numerical information in Table 2-1 is drawn from the original project application, and is an approximation of the anticipated mine volumes, reclamation areas, and estimated time periods. The figures illustrate the fact that the initial phases of mining activity (1A and 1B) are designed to provide access into the central portion of the quarry. After that stage is complete, the operational stage will include an extension of mining to the north and

TABLE 2-1
SUMMARY OF PROPOSED MINE PHASING

Phase	Description	Mined Volume (Cubic Yards)	Reclamation Area (Acres)	Approx. Time (Years)
Start	Construct access road, scale house, stockpile areas, related facilities	0 (cut and fill to establish grades for access road)	0	0.5
1A	Benches into slopes north and northeast of scale house, to reach main quarry area, preserve southeastern ridge	472,353	0	2–5 years
1B	Continue north with benches and start benches to the west behind the southwest ridge	721,979	1 (adjacent to southeastern ridge)	3.5–7 years
2A	Benches into slopes to north and northwest, establish main quarry detention pond	653,564	1.7 acres (along western limit)	3–7 years
2B	Continue mining towards the north and east, increasing size of main detention pond as quarry grows	445,532	0.7 acres (along western limit)	2–5 years
3A	Main quarry, extending benches into slopes towards north and northeast, to reach existing ridgeline	1,641,601	11.6 acres (along slopes as final elevations established)	8–19 years
3B	Main quarry to north limits, Establish final benches	1,289,092	14.1 acres (along slopes as final elevations established)	6–15 years
Final		0	17 acres (restore/ revegetate flat areas)	1
Totals		5,224,121	46.1	25-58

northwest to establish drainage and the location for the main quarry detention basin (2A and 2B). The major portion of the quarry activity, with more than half of the total mined volume, would occur in the last two phases (3A and 3B). The table also illustrates the phased reclamation approach, which involves revegetating final slopes as they are created along the perimeter of the mine. The current estimate of the area of disturbance for the project is 41 acres, slightly smaller than the reclamation area estimated in the application. The actual figures may change slightly based on refinements in the project design and in response to market demand that influences the rate of mining, but these differences would not substantially change the overall design or the evaluation of project effects in this EIR.

For most projections used throughout this EIR, a production rate equivalent to the maximum annual production of 500,000 tons/year is assumed. If this production rate were maintained for the life of the quarry, then its useful lifetime would be 25 years. Given the range of estimates for the duration of the project in Table 2-1, the actual production rate could be less than this value and if the project lasted 58 years the average annual rate would be just under 200,000 tons per year. For example, if recycling of pavement material significantly displaces the need for new aggregate, then the production rate of new aggregate may be less than 500,000 tons per year. In that event, the lifetime of the project could extend beyond the numbers identified in Table 2-1.

Operational Details

The proposed mining operation would commence with clearing of vegetation and topsoil overburden from the area of excavation for later use. The aggregate material will then be removed by a wheel loader, hydraulic excavator and/or bulldozer for sorting by size and stockpiled for sale. Material would be loaded by a front end loader for the smaller material while large rocks would be loaded with a hydraulic excavator. Trucks would proceed to a scale for weighing and ticketing before leaving the site.

In the event that the source material becomes too consolidated to be ripped by heavy equipment, the aggregate material will be loosened by blasting. This process includes drilling a pattern of holes into the source material and adding explosives into the holes for detonation. Typically, blasting would be expected up to 20 times per year during daylight hours. A blasting notification program would be developed by the applicant to inform the County and neighboring property owners before such events. All blasting would be performed by a California Licensed blaster.

After rock material is freed from the quarry face, it will be brought down from the mine for sizing, sorting and stockpiled for processing. This processing would use diesel-powered portable equipment brought on to the site as needed depending on market demand. Such equipment typically operates under the Portable Equipment Registration Program of the California Air Resources Board. It is anticipated that processing equipment would be brought to the site and used four times per year, with a maximum use of four weeks per quarterly event, up to 100 days per year. Products will include rip rap and crushed rock of various sizes. A portion of the high quality material will be sorted for use in the manufacturing of building materials and sold for specialty applications, including aggregate for AC pavement. The remainder of the material would be sold for commercial applications that do not require high quality specifications (e.g., road base).

Operations and sales would take place between the hours of 6:00 a.m. and 5:00 p.m. Monday through Friday, which is approximately 250 days per year (excluding weekends and common holidays). During early morning hours (6:00 a.m. to 7:00 a.m.), activities would be limited to

daily start-up activities and maintenance. There would be no blasting, operation of heavy earth moving equipment, rock processing, loading, or similar noisy activities during the early morning period.

Reclamation and Revegetation

Reclamation of the site would consist of slope preparation and revegetation to return to the mined areas to ranching and grazing uses. As the mining of designated areas is completed and operations have moved on from one bench to the next, the slope of the completed areas will be contoured as appropriate for revegetation. Finished slopes will be no greater than 1.5:1 ratio (1.5 feet horizontal for every 1 foot of vertical drop) with a 25-foot wide bench every 50 vertical feet. The overall average slope would be 2:1. Benches would be sloped back into the hill with a swale at the bottom of the slope to control any stormwater runoff or debris that may roll downslope. Stockpiled overburden soils excavated from the site would be applied to the finished slopes to be reclaimed. The slopes would then be replanted with native vegetation prior to the rainy season to prevent erosion. Upon completion of the mining project, suitable flat areas would be returned to ranching and grazing uses.

Recycling

Asphalt and concrete debris from construction sites would be brought to the site for recycling. Material will be inspected and weighed, then unloaded into appropriate stockpiles for temporary storage before re-sale. All materials accepted for recycling will be required to be free of oil, plastics, steel pipe, wood, or any other waste, and may not contain soluble pollutants in excess of water quality objectives (defined as "Type A" inert debris in 14 CCR 17381(k)(1)). The material would be processed by the same portable crushing and screening equipment that is used in the processing of the mined materials. The recycled material would be stockpiled for public sale and reuse. Management of this recycled solid waste is subject to regulation by the California Department of Resource Recovery and Recycling (CalRecycle). The State of California encourages such recycling by providing a simplified permitting system requiring only Notification to the Enforcement Agency (EA) for processing and recycling up to 1,500 tons per day of this type of material (that is, inert debris Type A only. See 14 CCR 17381.1, 17381.2 and 17383). Other requirements for this type of operation are set forth in in 14 CCR 17381.1(2) (e), and include, but are not limited to, the following:

- Less than six months storage allowed for non-processed material
- Less than 18 months storage allowed for processed material
- Residual material shall be less than 10 percent by weight of the amount of debris received, calculated on a monthly basis
- Maximum amount of stored material is limited to 30 days times the daily acceptance amount

- Residual material must be removed every 48 hours (or other time approved by Enforcement Agency)
- Operations Plan must be filed along with Notification
- Applicant is responsible for recordkeeping to document all weights and other items
- Enforcement Agency (CalRecycle for San Luis Obispo County) must perform inspections

The County of San Luis Obispo also has requirements applicable to this recycling activity, which include use of appropriate visual screening, and limits on the heights of storage piles.

The project does not propose asphalt production, or nighttime activities requiring nighttime lighting. In addition, the project does not include the storage of fuel on-site. Grading and loading equipment used on-site would be fueled by service trucks.

2.3.2 Equipment Inventory

Based on the operational description above, the following list presents an estimate of the heavy equipment that will be used in the project:

- Wheeled loader (2)
- Excavator (1)
- Bulldozer (1)
- Portable drill rig (1)
- Portable rock crushing plant (1)
- Water truck (1)
- Street sweeper (1)

The bulldozer and excavator would be used to free and move material from the quarry, particularly after periodic blasting events. If material is loose and easily accessible, then wheeled loaders may also be used in the excavation process. The need for blasting will depend on both on the nature of rock material as it is encountered an on the market demand and rate of production at the quarry. Based on the maximum production of 500,000 tons per year, it is anticipated that blasting will occur approximately one to two times per month (up to 20 times per year).

A wheeled loader would be used to move material in and out of stockpiles and for loading material into trucks for transport.

2.3.3 Trip Generation and Truck Traffic

The estimate of the average project trip generation by trip and vehicle types is summarized as follows:

- Employee trips: 10 trips/day
- Truck trips: 198 trips/day (aggregate deliveries)
  75 trips/day (net increase for recycled materials)
- Total truck trips: 273 trips/day

The truck trip estimate assumes an average aggregate truck load of 20.2 tons, maximum production of 500,000 tons per year, and delivery operations for 250 days per year. This gives an average of 99 truck loads per day, or 198 truck trips per day. Variations from this average number may be expected due to differences in production rates that would be caused by changing market demand, differences in loading trucks, and operating more or fewer days per year. These variations could lead to a smaller or larger number of daily truck trips. For example, keeping the other assumptions constant and increasing the truck loading to 22 tons, reduces the average daily truck trips to 182 (instead of 198).

Commencing with phase two (approximately five years after mining starts) the importation of PCC and AC pavement for recycling would tend to increase the number of daily truck trips. Assuming the maximum permit limit of 1,500 tons/day of recyclable material, and again assuming 20 tons per truck, leads to a theoretical increase of 75 truck loads or 150 truck trips per day. This maximum number, however, assumes that all of the recycling trucks leave the site empty after delivering material to be recycled. This is highly unlikely, since most pavement recycling operations involve discrete projects. For most of these projects, pavement to be recycled is removed from a roadway, taken to a center to be crushed and processed, and then returned to the same roadway for use in new pavement. Thus, many of the recycling trucks leaving the quarry site would be carrying recycled and/or new aggregate material to be used in the same paving project that generated material to be recycled. These backhauls of recycled material would displace truck trips associated with hauling fresh aggregate to the roadway site. The applicant believes that all of the pavement recycling operation would involve this type of specific roadway recycling, and there would be no net increase in truck traffic. This position is consistent with the operations of other pavement recycling facilities in the region and is common practice. There is, however, no specific standard or requirement that guarantees this practice. For a conservative or reasonable worst case assumption, this EIR will use a 50 percent backhauling assumption – that is, it is assumed that the delivery and use of up to 1,500 tons of recycled material per day at the quarry site will result in 75 additional truck trips per day.

In summary, the aggregate mine project is expected to generate, on average, 198 heavy truck trips per day for the purpose of delivering aggregate material from the property to regional job sites. Adding in the deliveries of concrete material to the project site for recycling, will increase this number of truck trips per day by 75. This number is likely to be high since the amount of backhauling may be more than the 50 percent assumed above. Thus, the estimate of the average daily truck trips for the entire project is 273. Employee trips, assuming from three to five employees making an average of two trips per day, would amount to 10 passenger vehicle trips per day.

It is also possible that for specific projects, these average numbers of trips per day may be exceeded for short periods. Up to 800 truck trips per day may be anticipated for a large project.

Trucks would enter the site from SR 58, and proceed along the paved access road to the processing and stockpile area for loading. The internal loop circulation system would lead trucks to the weigh scale before departing. Employee parking is designated adjacent to the scale house and office.

Under normal circumstances, aggregate hauling trucks are not expected to queue or park within the project site other than for the purpose of being loaded at the processing area and stopping at the scale house. In typical operations, the sales hours are publicized and delivery trucks are directed to remain outside the local community area when the quarry is closed. If it is necessary for rapid delivery of aggregate in conjunction with specific contracts, however, there are several areas within the project site that can accommodate short-term parking of trucks. In the early phases in completing Phase 1A, there will be some area in the vicinity of the scale house where about six trucks could be parked. In addition, the paved access road within the project site could accommodate another 20 trucks along the entrance lane. As Phase 1A is completed, the flatter areas around the scale house will be larger, and more trucks could be staged in this area.

2.3.4 Drainage Control

The project will alter the rate and condition of runoff water from the existing slopes of the property, and the project includes the design of three detention basins and one swale system that will collect and detain runoff to allow sediment to settle out before discharge. The pond system is designed to control up to a 50-year storm event and discharge at a 2-year event rate. For smaller storm events, the drainage swale has been designed to allow controlled runoff.

2.3.5 Water Consumption and Wastewater

Due to the type of rock product proposed, and the nature of the granitic material to be mined, the applicant is not proposing to wash any of the material that is processed. The primary use of water by the project will be for dust control. Exposed granitic surfaces in the quarry would

not generate much dust, but stockpiled soils and the action of mining equipment on quarry roads will require periodic watering to control dust. On a regular basis during dry weather, the water use for dust control will amount to about 4,000 gallons per day. The need for dust control will be minimized through paving the entire access road length within the property, up to and around the scale house. The use of dust control additives approved by the County Air Pollution Control District will help to minimize the volume of water necessary for this purpose in other areas. An existing well on the property near the Salinas River will supply water for dust control. When available, water would be pumped from the on-site detention ponds and used for this purpose.

As revegetation occurs in the reclamation phases, there will be additional water use to help establish new vegetation in some areas. SMARA regulations require that vegetation used for reclamation must be self-regenerating and sustainable without continued dependence on irrigation. Accordingly, irrigation for revegetation would be short-term, until growth is established. Because reclamation would be phased and occur concurrently with mining operations, the active reclamation area requiring short-term irrigation would be small relative to the size of the project and would change over time. The largest single revegetation area would be at the close of the project after mining has ceased, and would involve restoring the flat stockpile and operations area. The maximum irrigation water use estimated by the applicant is 1,000 gallons per day. An additional small amount of potable water will be used for the project employees. Irrigation and potable water would be obtained from an existing well on the property, located near the Salinas River (referenced as “Well A”). A new pipeline will be installed along the existing roadways on the property to connect the well to a new water tank atop the ridgeline preserved along the westerly edge of the quarry. The location of these proposed water facilities is shown in Figure 2-3.

The project design includes a new septic tank and leach field to serve on-site wastewater disposal needs associated with the proposed project. Appropriate percolation tests and design measures will be incorporated into the facility to minimize the potential for water pollution, in accordance with County requirements.

2.4 USES OF THE EIR

The County of San Luis Obispo Department of Planning and Building has prepared this EIR as the Lead Agency under the California Environmental Quality Act (CEQA). The EIR is an informational document to provide descriptions of the environmental effects of the proposed quarry. It may be used by the County decision makers, other agencies, and members of the public in reviewing and considering the project. Sections 1.2 and 1.4 provide more details regarding use of the EIR by the County and by other agencies with permit or review authority over the project.