

6. Comparison of Alternatives

This section describes the CEQA requirements related to alternatives, the process used to develop the alternatives to the proposed Santa Margarita Quarry Expansion Project, and identification of its significant and unavoidable effects (EIR Section 6.1). EIR Sections 6.2 through 6.4 provide the analysis of the alternatives that were considered in addition to the Proposed Project, including the Reduced Acreage Alternative (Alternative 1), the Enhanced Reclamation Alternative (Alternative 2), and the No Project Alternative (Alternative 3). EIR Section 6.5 presents those alternatives to the Proposed Project that were considered but not carried forward for full analysis, and EIR Section 6.6 provides a comparison of the alternatives that were carried forward for evaluation in this EIR, including identification of the environmentally superior alternative.

6.1 Introduction

An important aspect of EIR preparation is the identification and assessment of reasonable alternatives that have the potential to avoid or minimize the significant effects of a proposed project. The State CEQA Guidelines require consideration of the “No Project Alternative” (Section 15126.6(e)) and selection of a range of reasonable alternatives (Section 15126.6(d)). The EIR must adequately assess these alternatives to allow for a meaningful evaluation, analysis, and comparison with a proposed project for consideration by decision makers. The State CEQA Guidelines (Section 15126.6(a)) specify that:

An EIR shall describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR need not consider alternatives that are infeasible.

In order to comply with CEQA’s requirements, each alternative that has been suggested or developed for the Proposed Project has been evaluated in three ways:

- Does the alternative accomplish all or most of the basic project objectives?
- Is the alternative potentially feasible (from economic, environmental, legal, social, technological standpoints)?
- Does the alternative avoid or substantially lessen any significant effects of the proposed project (including consideration of whether the alternative itself could create significant effects potentially greater than those of the proposed project)?

State CEQA Guidelines Section 15364 defines feasibility as:

. . . capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

The alternatives screening analysis is largely governed by what CEQA terms the “rule of reason,” meaning that the analysis should remain focused, not on every possible eventuality, but rather on the alternatives necessary to permit a reasoned choice. Furthermore, of the alternatives identified, the EIR is expected to fully analyze those alternatives that are potentially feasible, while still meeting most of a project’s objectives.

According to the State CEQA Guidelines (Section 15126.6(f)(1)), among the factors that may be taken into account when addressing the potential feasibility of alternatives include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and a proponent's control over alternative sites in determining the range of alternatives to be evaluated in the EIR. However, no one of these factors establishes a fixed limit on the scope of reasonable alternatives.

6.1.1 Project Objectives

State CEQA Guidelines Section 15126.6(a) requires consideration of "a range of reasonable alternatives" to a project, or to the location of a project, that could accomplish "most of the basic objectives of the project" and "avoid or substantially lessen one or more of the significant effects."

The Applicant's stated objectives are presented in EIR Section 2.3, Project Objectives. As also outlined in EIR Section 2.3, the County has determined that the basic objectives of the Proposed Project are as follows:

Concrete grade aggregate, consisting of crushed granitic rock used in Portland Cement Concrete-grade and Asphaltic Concrete pavement, is particularly important for road building and maintenance and other construction. Both the State of California (Busch and Miller, 2011) and the County, through its Conservation and Open Space Element (COSE) (County of San Luis Obispo, 2010) recognize the important role of aggregate minerals in supporting construction and economic growth within the region. The basic purpose of the proposed quarry expansion is to contribute towards fulfillment of that role.

Goals identified by the County relative to the extraction and use of mineral resources are found in the COSE and include: MN 1 (Conservation and development of significant mineral deposits will be a high priority, but will be balanced with other County general plan goals and policies); MN 2 (Significant mineral resources will be protected from land uses that threaten their availability for future mining); and, MN 3 (Balance mining of mineral resources with sensitive natural resources and existing adjacent uses) (County of San Luis Obispo, 2010). The following objectives of the Proposed Project embody these goals from the COSE:

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

The determination of whether to eliminate or retain alternatives in this EIR was based on the alternative's ability to meet these objectives, keeping in mind the lead agency requirement to consider alternatives "capable of substantially reducing or eliminating any significant environmental effects, even if these alternatives substantially impede the attainment of the project objectives, and are more costly."

6.1.2 Significant Effects of the Project

A key CEQA requirement for an alternative is that it must have the potential to "avoid or substantially lessen any of the significant effects of the project" (State CEQA Guidelines Section 16126.6(a)). If an alternative is identified that clearly does not have the potential to provide an overall environmental advantage as compared to a project (or project component), it is usually eliminated from further con-

sideration. The significant environmental effects of the Proposed Project are defined in the Executive Summary, Impact Summary Table for Class I (significant and unavoidable impacts). The significant and unavoidable impacts include the following:

- **Impact NS-1: Generate noise levels in excess of County standards or result in a substantial temporary or permanent increase in ambient noise levels.** The County's Noise Element Policy 3.3.5(b) states that noise levels in vacant lands shall be reduced to meet the noise level standards provided in EIR Table 4.11-5, unless the County determines that the vacant land is not likely to be developed with a noise sensitive land use and thus can waive the policy. The results of the modeling described in EIR Section 4.11.4 (Noise and Vibration, Assessment Methodology) indicate that noise levels generated by quarry (e.g. excavation) operations have the potential to exceed the noise level standards in EIR Table 4.11-5 at vacant lands near the Proposed RPA area. Furthermore, it is likely that some of the vacant land near the Proposed RPA area will be developed in the future. Consequently, the noise impacts associated with the Proposed Project's excavation on surrounding vacant lands would conflict with Noise Element Policy 3.3.5 (b). This potential impact would be significant and unavoidable (Class I).

In addition to the above, the measurement of existing noise conditions indicates that traffic noise levels 100 feet from the centerline of three of 12 roadways segments used for quarry operations and evaluated for this EIR currently exceed the 65 dB Ldn/CNEL threshold for residential receptors. All three of these segments are located along U.S. Highway 101. Future noise levels along these three road segments with the Proposed Project at peak operation would not increase by more than one (1) dB Ldn relative to conditions without the Proposed Project, which is a change that would not be perceptible. However, in the remaining nine road segments, implementation of the Proposed Project could increase future noise levels by an additional 3 dB Ldn relative to conditions existing without the Proposed Project (see EIR Table 4.11-8). Although this change would be barely perceptible and is below the five (5) dB threshold at which a community response could be expected, it would increase noise levels to 66 dB Ldn along El Camino Real south of Santa Barbara Road and along State Route 58 between Murphy Avenue and Pinal Avenue, which are above the County's 65 dB Ldn/CNEL threshold (see EIR Table 4.11-8). At these noise levels, it would also become increasingly difficult to maintain interior noise levels at or below the 45 dB Ldn/CNEL interior space threshold. It is not possible to mitigate these impacts by rerouting quarry-related truck traffic because travel along these routes is required to reach U.S. Highway 101. It is also not feasible to construct noise barriers because many sensitive receptors are located adjacent to the roadways. The implementation of Mitigation Measure NS-1 (Truck noise reduction equipment and notification) would ensure that noise level increases are minimized; however, this measure may not reduce the noise levels to the 65 dB Ldn/CNEL threshold. Therefore potential traffic noise impacts along some segments of State Route 58 and El Camino Real due to operation of the Proposed Project would be significant and unavoidable (Class I).

6.1.3 Alternatives Screening

Alternatives suggested during the scoping process included an alternative that was located away from agricultural resources (County of San Luis Obispo Department of Agriculture/Weights and Measures [see EIR Executive Summary Section ES.5]). The range of alternatives considered in the screening analysis for this EIR includes project alternatives identified by the County and the EIR preparers as a result of independent review of the Proposed Project.

Five alternatives were originally considered in addition to the "No Project Alternative," which is required by the State CEQA Guidelines. Of the alternatives considered, three were found to be either infeasible, would not meet the basic objectives of the Proposed Project, or would not reduce the significant effects

of the Proposed Project. Therefore, these alternatives eliminated from further consideration, as addressed in Section 6.5 (Alternatives Considered but Not Carried Forward for Analysis). These alternatives include a Reduced Rate of Extraction Alternative, Extending the Pit Downward Alternative, and an Alternative Location. Two alternatives, the Reduced Acreage Alternative (Alternative 1) and the Enhanced Reclamation Alternative (Alternative 2), were retained in addition to the No Project Alternative (Alternative 3).

6.2 Reduced Acreage Alternative (Alternative 1)

The Reduced Acreage Alternative modifies the Proposed Project by reducing the total acreage to be disturbed, thus reducing impacts to biological resources, including disturbances to oak woodlands, and providing additional buffer areas to portions of the Salinas River along the northern boundary of the Proposed Project site. This alternative would reduce the amount of aggregate available for sale and would shorten the operational life of the Proposed Project.

The Reduced Acreage Alternative would retain Phase I and Phase II of the Proposed Project expansion but would eliminate Phases III and IV, see Figure 2.5-4. Eliminating Phases III and IV of the proposed expansion would subtract out the use of approximately 23 acres of the proposed excavation area and reduce the estimated life of the Proposed Project by about 27 years, thereby beginning the reclamation process approximately 27 years early. Eliminating Phases III and IV of the quarry would reduce the production of the Proposed Project by over 14,200,000 tons which represents more than one-third of the Proposed Project's aggregate production. This alternative would not require altering the processing equipment or infrastructure installed during Phase II but would eliminate the need to relocate the primary crusher and conveyor as potentially required for Phases III and IV.

Project Objectives. The Reduced Acreage Alternative would partially meet the Proposed Project's objectives because it would extend the life of the existing hard-rock quarry by adding additional reserves. However, this alternative would reduce the Proposed Project's contribution to meeting future aggregate demand to support construction and economic growth by approximately one-third.

Feasibility. The Reduced Acreage Alternative would be expected to be technically feasible because it would retain the expansion and operation plans for Phases I and II as proposed by the Applicant. The economic feasibility of this alternative is unknown at this time.

Environmental Effects. The primary impacts associated with this alternative that would be reduced in comparison to the Proposed Project include aesthetics, biological resources, air quality, GHG emissions, noise and vibration, and noise and vibration.

- **Aesthetics and Visual Resources.** Under this alternative the total surface area of exposed rock associated with the quarry, in comparison the Proposed Project, would be reduced by approximately 23 acres, thereby decreasing the final "scar" of the quarry to roughly 10 acres, or approximately 70 percent. However, as indicated in EIR Section 4.1 (Aesthetics and Visual Resources), impacts associated with the Proposed Project would be less than significant, and the exposed rock associated with this alternative would still occur. Therefore, this alternative would not reduce the overall severity of the Proposed Project's visual effect, but would reduce its spatial extent. In comparison to the Proposed Project, this net reduction would be considered beneficial, although long-term impacts would still be considered to be less than significant impacts (Class III).
- **Air Quality and GHG Emissions.** The Reduced Acreage Alternative would allow for continued quarry operations for an estimated 32 years. During this period, air quality and GHG emission impacts would be identical to the Proposed Project, as outlined in EIR Sections 4.4 (Air Quality) and 4.5 (Greenhouse

Gas Emissions), and would remain less than significant (Class III) or less than significant with mitigation incorporated (Class II). As such, this alternative would not decrease the severity of air quality and GHG emissions impacts, but only reduce the period of time over which they would occur. However, in comparison to the Proposed Project, the 27-year reduction in these emissions would be considered a net benefit.

- **Biological Resources.** This alternative would reduce ground disturbances affecting biological resources as compared to the Proposed Project. Direct impacts associated with the loss of native habitat would be reduced by 23 acres. However, this alternative would still require the elimination of approximately 10 acres native habitat. As with the Proposed Project, the impacts associated with this loss of this habitat can be mitigated to less than significant (Class II) with application of Mitigation Measure BIO-1.1 (Compensate for permanent impacts to vegetation). However, the reduction in loss of native habitat under this alternative would be considered a net benefit in comparison to the Proposed Project.

Under the Reduced Acreage Alternative, excavation within the 10-acre expansion area, and continued operation of the quarry would result in the exact same direct and indirect disturbances to biological resources that would occur under the Proposed Project. As with the Proposed Project, all of these impacts can be reduced to less than significant (Class II) with implementation of Mitigation Measures BIO-1.2 through BIO-3.11. Consequently, the Reduced Acreage Alternative would not reduce the number or severity of any impacts associated with the Proposed Project; it would only reduce the spatial extent and timeframes under which these impacts would occur. This reduction, however, would be considered a net benefit in comparison to the Proposed Project.

- **Noise and Vibration.** The noise and vibration effects of implementing the Reduced Acreage Alternative would be identical to the Proposed Project for the next 32 years because its operational activities would be the same. As addressed in EIR Section 4.11 (Noise and Vibration), this alternative would therefore result in significant and unavoidable noise impacts as indicated in EIR Section 6.1.2 (Significant Effects of the Project), above. Consequently, this alternative would not reduce the number or severity of any noise and vibration impacts associated with the Proposed Project. Impacts would remain either significant and unavoidable (Class I), or less than significant (Class III). However, the shortened duration of these impacts (32 years), in comparison to the Proposed Project (59 years), would be considered beneficial.
- **Transportation and Circulation.** Under the Reduced Acreage Alternative operation of existing quarry would continue for an estimated 32 years. During this period, no changes to the quarry's average or peak production throughputs would occur, and associated truck volumes would remain the same as under the Proposed Project. As such, the direct and indirect impacts to transportation and circulation under this alternative would be identical to the Proposed Project, as outlined in EIR Section 4.14; impacts would remain less than significant or less than significant with mitigation incorporated (Class II and III). In comparison to the Proposed Project, however, these impacts would be eliminated an estimated 27 years earlier, which would be considered a net benefit.

In comparison to the Proposed Project, the Reduced Acreage Alternative would be anticipated to result in a commensurate reduction in the time needed for final reclamation. However, the same types of activities would still be required and result in the same severity of impacts. Consequently, this alternative would not reduce the number or intensity of any of the impacts associated with the Proposed Project during proposed Phase V. No impacts or less than significant impacts (Class III) would occur. However, the shortened duration of these impacts would be considered a net benefit in comparison to the Proposed Project.

The Reduced Acreage Alternative would reduce the Proposed Project's aggregate production by over 14,200,000 tons, which represents more than one-third of its planned production. This reduction would occur after 32 years of continued quarry operation, and could cause future aggregate demand over the remaining 27 years of the Proposed Project's lifetime to be either imported from outside of the County, or otherwise replaced by a new quarry within the County. Either of these scenarios would be expected to generate the same types of impacts as described for the No Project Alternative, as described in EIR Section 6.2, including potentially significant and unavoidable impacts (Class I). Additionally, the importation of aggregate materials from outside of the County would conflict with the COSE by reducing the economic benefits of producing and selling aggregate materials within the County.

6.3 Enhanced Reclamation Alternative (Alternative 2)

The Enhanced Reclamation Alternative would retain the Proposed Project's expansion plan and operations. It would incorporate expansion of the quarry into Phases I through IV, including the estimated total amount of aggregate production. However, the Enhanced Reclamation Alternative would revise the design of the Proposed RPA to:

- Enhance the biological function of the site after the operational phase of the Proposed Project is complete; and
- Reduce the visual impacts of the quarry by treating the exposed rock surfaces visible from State Route 58.

The goals of the Enhanced Reclamation Alternative would be to:

- Encourage wildlife to use the bottom of the excavation pit as wetland habitat and provide wildlife pathways to this area. Because the bottom of the excavation pit will be seasonally inundated, there is an opportunity to create seasonal wetland habitat and to allow for its use by reducing the slope sides or providing other wildlife pathways.
- Render the mine's exposed rock surfaces visible from State Route 58 to match the colors with the existing surrounding color palette. By selecting appropriate colors and applying them to the rock, the vertical surfaces can be rendered substantially less dominant in the landscape.

The Proposed RPA would be revised to establish final benches on all sides of the perimeter of the quarry except for the northwestern cut face during Phase I. During this phase, the Enhanced Reclamation Alternative would therefore alter the eastern perimeter of the quarry footprint to allow for increased wildlife use and enhanced biological functions of the reclaimed excavation pit after the quarry is reclaimed. The following revisions to the Proposed RPA would be made:

- **Biological Resources.** The revised RPA would grade the quarry's Lower Area of the excavation pit to mirror the plans approved in 1981 Reclamation Plan while providing for proper drainage of the site. The Lower Area would be graded to direct runoff away from the Salinas River. Because this area would contain seasonal water, the Enhanced Reclamation Alternative would require this area be used to create seasonal wetland habitat using improved seed mixes. Creation of seasonal wetland habitat within the bottom of the excavation pit would increase the overall habitat functions and values of the reclaimed area. This could be achieved by incorporating species such as cattails (*Typha sp.*) within the shallows of the excavation pit and willows (*Salix sp.*) or cottonwood (*Populus sp.*) around the edge of the water. This enhanced habitat may attract species such as yellow-headed blackbird (*Xanthocephalus xanthocephalus*) and tri-colored blackbird (*Agelaius tricolor*), both special-status species, who prefer freshwater wetlands with dense emergent vegetation and are known to occur in the area.

The addition of the riparian tree species along the fringes could also attract a large number of the riparian songbirds known to occur within the riparian corridor of the Salinas River.

In addition to enhancing the wetland habitat, the Enhanced Reclamation Alternative would improve wildlife access to this habitat. The benches proposed for construction during Phase I would consist of a series of 25-foot-wide horizontal benches at 50-foot vertical intervals. The bench face angle along the north, northeast and east sides of the excavation pit would be 60 degrees. The bench face angle to the northwest and west would be 70 degrees. These slopes would receive growth medium and a bulldozer would track-walk the finished slopes vertically to roughen the surface. Benches would receive 24 inches of growth medium and be seeded. In order to enhance use of the seasonable wetland habitat, the alternative would reduce the severity of the slope along the north, northeast and east sides or include additional benches for wildlife pathways. A reduction in the final slopes of the excavation pit faces would likely provide for easier access to the water source at the bottom of the excavation pit. A reduction of the northeast and east sides of the excavation pit to a slope of 45 degrees and the northwest and west slopes to 55 degrees would be more amenable to wildlife access and usage. The reduction on the steepness of the slopes is also likely to reduce overall erosion allow for more successful recruitment of seeded and/or naturally recruiting vegetation.

- **Aesthetics and Visual Resources.** As part of site reclamation, rock surfaces exposed by mining and visible from State Route 58 would be stained or treated to reduce their visual contrast with vegetated areas and natural undisturbed rock in the vicinity. The Applicant would consult with the County to determine the extent of rock surfaces requiring treatment. In consultation with the County and subject to County approval, the Applicant would identify a palette of suitable colors to apply to the exposed visible rock surfaces to reduce their visual contrast and to blend with the more muted colors of surrounding undisturbed areas. The material to be applied would be permanent and would neither require maintenance nor pose a risk to the public or to biological resources.

In addition to the above, implementation of the Proposed RPA, as revised, would be required to comply with all County APCD rules and regulations for the application of stains or other materials to exposed rock surfaces to ensure that potential air quality impacts are minimized to the maximum extent feasible.

Project Objectives. The Enhanced Reclamation Alternative would meet the basic project objectives because it would retain the Proposed Project's expansion plan and operation and, therefore, would contribute to meeting future aggregate demand and support construction and economic growth. Furthermore, the Enhanced Reclamation Alternative would go further toward attaining the County's goal to develop mineral deposits in a manner that protects sensitive natural resources.

Feasibility. The Enhanced Reclamation Alternative would be feasible because it would not change the expansion and operational plans of the Proposed Project. The economic feasibility of this alternative is unknown at this time.

Environmental Effects. As indicated above, in comparison to the Proposed Project, the Enhanced Reclamation Alternative would primarily affect biological resources and aesthetics and visual resources, as addressed below.

- **Biological Resources.** Under the Proposed Project, final reclamation of the expanded quarry would create 193.1 acres of open space uses, including: riparian woodland (1.8 acres); exposed bedrock (17.3 acres); seasonal water (32.6 acres); buffer (45.2 acres); chaparral (81.1 acres); oak woodland (12 acres); and access roads (3.1 acres). As addressed in EIR Section 4.6 (Biological Resources), implementation of the Proposed Project would not result in any direct or indirect significant and unavoidable impacts. The same mitigation measures as recommended for the Proposed Project would apply to the

Enhanced Reclamation Alternative because its expansion area and on-going quarry operation would be identical to, and thus result in, the same short and long-term impacts (Class II and III).

Implementation of the Enhanced Reclamation Alternative, would, however, replace a portion of the Proposed RPA's seasonal water use with seasonal wetland habitat (see Figure 2.6-2). Although the exact acreage of this habitat cannot be reasonably predicted at this level of analysis, the addition of the seasonal wetland habitat would be expected to increase the Proposed RPA area's overall habitat function and value following final reclamation. In addition, this alternative's modifications to the Proposed Project's final site re-contouring would be expected to improve wildlife movement, reduce potential erosion, and promote the successful establishment of seeded areas as well as the recruitment of naturally re-vegetated areas. Consequently, the Enhanced Reclamation Alternative would be anticipated to result in enhanced long-term benefits in comparison to the Proposed Project, even though it would not reduce or eliminate any of the impacts associated with the Proposed Project.

- **Aesthetics and Visual Resources.** Figure 6-1 shows the anticipated final area of exposed rock that would exist at the conclusion of the Proposed Project prior to reclamation. As proposed by the Applicant, reclamation would be undertaken to establish vegetation on the flat bench surfaces. No treatment is proposed for vertical rock surfaces. Visually, this would result in regularly spaced striations of darker color across the rock face, but would leave the vertical exposed rock surfaces unaltered. This is illustrated in Figure 6-2.

Enhanced visual reclamation would require treating vertical exposed rock surfaces visible from State Route 58. By selecting appropriate colors and applying them to the rock, the vertical surfaces can be rendered substantially less dominant in the landscape. While it is not known what suitable surface treatment materials might be available commercially when reclamation of this area occurs, existing materials could adequately restore scarred rock features to a more natural appearing condition. One such product is Permeon, a varnish developed by Arizona State University. The sprayed material is absorbed into rock surfaces where it reacts with the rock to accelerate natural oxidation and restore natural rock colors in a short time. The effect is to greatly reduce the contrast of mine-exposed rock surfaces relative to their surroundings. Permeon can be mixed in a wide range of natural shades and is a permanent one-time spray application. Examples of the use of Permeon are shown in Figures 6-3 and 6-4.

Implementation of the Enhanced Reclamation Alternative would not change any operational components of the Proposed Project or its expansion area and, therefore, would not reduce the severity, or eliminate any of its direct or indirect impacts (Class III). Treatment of the exposed rock surfaces would, however, in the short term, further minimize visual contrast associated with the quarry's exposed rock surfaces, and thus would be considered beneficial in comparison to the Proposed RPA's landscaping treatment.

The Enhanced Reclamation Alternative would not be expected to change the number or severity of any other impacts associated with the Proposed Project because the resulting changes to final reclamation activities that would occur would be relatively minor. However, this alternative's potential to improve site drainage and reduce onsite erosion could benefit surface water quality. This benefit would not, though, be expected to reduce the severity of Impact HYD1 to less than significant, as addressed in EIR Section 4.15 (Surface Water Quality and Supply), and Mitigation Measure HYD-1.1 (Prepare and Implement Site-Specific SWPPP) would still be required (Class II).



Source: Hanson Heidelberg Cement Group, 2012.

Figure 6-1
Benches and Slopes Visible from State Route 58 at Conclusion of Mining



Source: Hanson Heidelberg Cement Group, 2012.

Figure 6-2
Post-reclamation View from State Route 58 with
Revegetated Horizontal Bench Surfaces



Exposed rock on slope visible at center of photograph.



Exposed rock after treatment with Permeon.

Source: Soil-Tech, Inc., 2013.

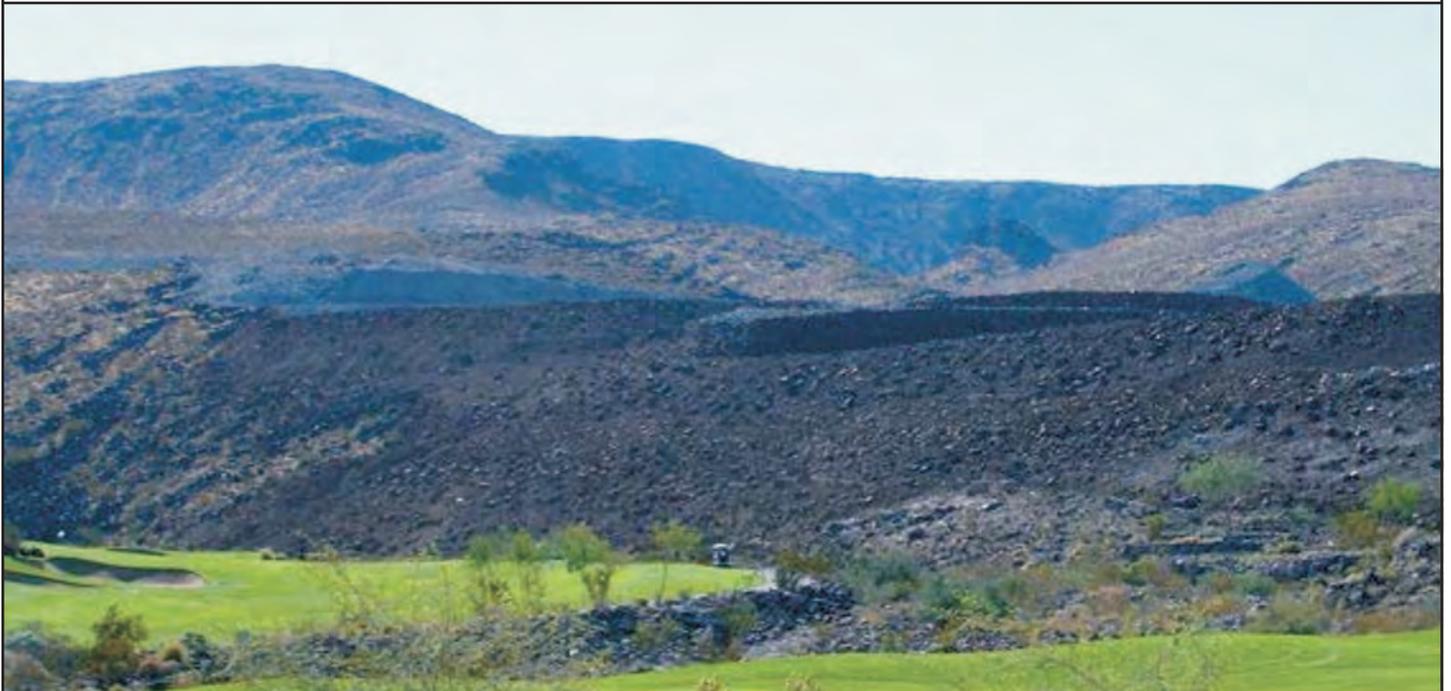
Figure 6-3



Before and After Images of Rock Staining on a Hill Slope



Exposed rock fill slopes contrast with surrounding landscape.



Exposed rock after treatment.

Source: Soil-Tech, Inc., 2013.

Figure 6-4



Before and After Images of Rock Staining of a Filled Slope

6.4 No Project Alternative (Alternative 3)

Section 15126.6(e) of the State CEQA Guidelines requires an EIR to consider a No Project Alternative. The analysis of the No Project Alternative must discuss the existing conditions at the time the Notice of Preparation was published (June 20, 2013), as well as “what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services” (State CEQA Guidelines Section 15126.6(e)(2)). The requirements also specify that “If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this ‘no project’ consequence should be discussed” (State CEQA Guidelines Section 15126.6 (e)(3)(B)).

Under the No Project Alternative, the Santa Margarita Quarry would continue to operate under its existing conditions. The quarry’s existing entitlements and approved reclamation plan are described in EIR Section 2.4.2 (Existing Entitlements and Approved Reclamation Plan) and would not change under the No Project Alternative. The 1981 Reclamation Plan would remain in place.¹ Under the facility’s existing entitlements the quarry may produce up to 700,000 tons of crushed aggregate and granite per year and load a maximum of 294 trucks (e.g., round-trip truck trips) per day. It is estimated that approximately 11.7 million tons of entitled mining reserves remain under the quarry’s existing CUP. The 1981 Reclamation Plan estimated the life of operation of the quarry at 40 years. However, in 2005, the County granted an administrative amendment to the 1981 Reclamation Plan which allowed for steeper final slopes within the quarry, which added reserves while retaining the existing reclamation goals for the site. Phase I of the Proposed Project overlaps with the boundaries of the 1981 Reclamation Plan area. The Applicant has estimated the work period of Phase I would be approximately 19 years. Figure 2.5-1 of the Project Description provides the boundaries of the existing quarry and its related 1981 Reclamation Plan and Figure 2.5-2 provides a map of the existing facilities and features associated with the quarry. These facilities would remain in their current state under the No Project Alternative.

Project Objectives. The objectives of the Proposed Project would remain unfulfilled under the No Project Alternative. This means that the contribution of the Proposed Project toward the important role of aggregate materials in supporting construction and economic growth within the County would be limited to the quarry’s existing aggregate entitlements; there would be no continuation of the production of high grade aggregate materials in the future.

Feasibility. The No Project Alternative would be a feasible alternative because it would retain the current operating parameters of the existing quarry.

Environmental Effects. There are two main ways the local future aggregate demand could be met if the No Project Alternative is selected instead of the Proposed Project:

1. **Development of other aggregate mine projects in San Luis Obispo County.** Given the 50-year projection of construction aggregate needs for the San Luis Obispo-Santa Barbara production and consumption region through the year 2060 (see EIR Section 2.2, Overview of Aggregate Demand), it is possible that other aggregate mining projects would be proposed within the County. If this occurs, the impacts would likely be greater than those of the Proposed Project as they would not benefit from use of existing infrastructure (e.g., existing access roads and processing facilities). See the discussion presented in EIR Section 6.5.3, Alternative Location, for an overview of nearby alternative locations for aggregate mines.

¹ The 1981 Reclamation Plan is available at <http://www.slocounty.ca.gov/Assets/PL/environmental/Hanson+Aggregates/Reclamation+Plan/Att+G--+1981+RP+Application.pdf>.

2. **Development of aggregate mine projects outside the County.** If the County determines that development of the Proposed Project is not appropriate, the local future aggregate demand could be satisfied by importing these resources from outside the County. If this occurs, the impacts would likely be greater than the Proposed Project because they would not benefit from use of existing infrastructure and would require further truck travel to arrive at locations within the County.

Impact Analysis. Development of new aggregate mining project with the County would be highly likely to result in a substantially great number of indirect and direct impacts to the Proposed Project primarily because any such new development would not only require surface disturbance of the total acreage of the proposed expansion area, but also new surface disturbances associated with the land (e.g., acreage) needed for support facilities, such as office buildings, product washing and crushing facilities, etc. (see EIR Figure 2.5-3 and Table 2.5-2 for examples of the types of facilities that would be required in addition to the excavation area itself). Direct and indirect effects of a new facility would be reasonably predicted to include aesthetics, air quality, greenhouse gas emissions, biological resources, noise and vibration, transportation and circulation, and water quality and supply. Other potential impacts that could occur principally involve conflicts with: agricultural resources and other existing land uses; cultural and paleontological resources; geology, soils and mineral resources; and, hazards and hazardous materials. Although it would be speculative to forecast the severity of these impacts, based upon the conclusions of this EIR, it is reasonably forecast that the net increase in total ground disturbance associated with a new quarry would result in impacts greater than those associated with the Proposed Project, and could also result in more than one significant and unavoidable impact, particularly as related to aesthetics, air quality, and transportation and circulation, noise and vibration, and cumulative effects, as demonstrated in the impact conclusions of the Draft EIR prepared for the proposed Oster/Las Pilitas Quarry (URS Corporation, 2013).

Future reliance on the production of high quality aggregate material from other existing quarry's within or outside of the County would require additional truck mileage to import such materials to construction sites. This added mileage would result in increased air quality and GHG emissions both locally and regionally, which could exceed adopted rules, thresholds and policies. Under this circumstance, impacts would be significant and unavoidable, and, therefore, would not meet CEQA's intended purpose for the evaluation of alternatives, which is to reduce one or more of a project's significant adverse effects. The Proposed Project, as outlined in EIR Sections 4.4 (Air Quality) and 4.5 (Greenhouse Gas Emissions), would not generate significant and unavoidable impacts associated with air quality and GHG emissions. Additionally, as noted in EIR Section 2.2 (Overview of Aggregate Demand), there is an estimated 68 percent deficit in the regional demand for aggregate materials over the next 42-year period (based on 2006 projections). Consequently, it is reasonably foreseeable that imports that would need to come from greater distances away from the County, which would further exacerbate impacts related to truck-related emissions, both locally and regionally. The importation of aggregate materials from outside of the County would also conflict with the COSE by reducing the economic benefits of producing and selling such materials within the County.

6.5 Alternatives Considered but Not Carried Forward for Analysis

6.5.1 Reduced Extraction Rate Alternative

The Reduced Extraction Rate Alternative assumes that proposed expansion of the existing quarry is approved; however, the annual production rate would be reduced. For the purposes of this analysis, the production rate has been set at the quarry's throughput rate for 2012, which was approximately 450,000 tons. The proposed expansion plan and operational elements other than the extraction rate would not

change under this alternative. However, because the extraction rate would be reduced to 450,000 tons annually, the operating life of the quarry would be extended by up to 11 years.

Project Objectives. The Reduced Extraction Rate Alternative would partially meet the project objectives because it would still contribute to meeting future aggregate demand and support construction and economic growth. However, because the rate of extraction would be reduced, this alternative would contribute less to the Proposed Project's objectives and may reduce the annual supply of local aggregate as future needs increase.

Feasibility. The Reduced Extraction Rate Alternative would be potentially feasible because it would not change the other operational parameters of the Proposed Project. However, the economic feasibility of the Reduced Extraction Rate Alternative is unknown at this time.

Environmental Effects. The operation of aggregate quarries is highly variable and contingent on market demand. Reducing the extraction rate would not necessarily reduce the impacts of the quarry on any individual day because the short-term operating parameters would not be revised. As such, the hours of operation, daily truck trips, and associated noise, traffic and emissions would be expected to remain the same. Although the reduced rate of extraction may reduce the annual impacts of the Proposed Project, these impacts would likely be moved elsewhere in the County or outside of its boundaries as the demand for aggregate in San Luis Obispo and the Santa Barbara market areas that are served by the quarry would not be reduced. The use of aggregate from other mines would result in impacts similar to or greater than the Proposed Project depending on the distance to other aggregate mines and whether they already existed or would require development of new mining and processing facilities.

Because the Reduced Extraction Rate Alternative would not reduce the acreage of the proposed expansion area, this alternative would not reduce the eventual extent of the impacts to biological or cultural resources that are associated with ground disturbance. By reducing the extraction rate, this alternative would extend the life of the existing quarry, and therefore delay the initiation of final reclamation.

Conclusion. The Reduced Extraction Rate would only partially meet the project objectives and would not reduce or eliminate any of the adverse impacts of the Proposed Project. As such, this alternative was not analyzed in detail.

6.5.2 Deeper Extraction within Existing Excavation Pit Alternative

The Deeper Extraction within Existing Excavation Pit Alternative would retain the existing boundaries of the 1981 Reclamation Plan, as shown in Figure 2.5-1, but would allow the Applicant to proceed with deeper excavation. The goal of this alternative would be to extract the same amount of aggregate as the Proposed Project without enlarging the quarry footprint. In order to do this, the Applicant would need to either use steeper slopes or excavate within a smaller footprint.

Project Objectives. If the Deeper Extraction within Existing Excavation Pit Alternative was feasible, it would potentially achieve the basic objectives of the Proposed Project as it would allow the Applicant to extract additional aggregate to contribute to meeting future aggregate demand and support construction and economic growth. However, because deeper extraction is not feasible (see below), it would not contribute to project objectives, and would reduce the supply of local aggregate when compared with the Proposed Project.

Feasibility. In 2005, the County granted the quarry an administrative amendment to the 1981 Reclamation Plan which allowed for steeper final slopes within the quarry and added reserves while retaining the goals of the 1981 Reclamation Plan. Further increasing the reserves within the existing excavation pit to a level similar to the Proposed Project would require extremely steep and unsafe nearly vertical slopes, and would require mining operations to occur in a progressively smaller excavation pit floor.

If the quarry were to extend deeper, it would also require dewatering once it reached the groundwater table. Depth to groundwater was estimated to be approximately 50 feet below ground surface, although this level varies throughout the quarry area (EnviroMINE, 2012). From an operational perspective, dewatering would result in difficult or infeasible operating conditions. Runoff and groundwater already collect in the bottom of the excavation pit and submerge the quarry floor during winter months (EnviroMINE, 2012). If the quarry were to extend deeper, it would be expected that this groundwater inflow would increase and require extensive dewatering for continued mining to occur. This would be technically difficult, result in unsafe conditions in addition to the steep slopes, and would likely increase the operational cost of the quarry.

Environmental Effects. The environmental impacts of the Deeper Extraction within the Existing Excavation Pit Alternative would be substantially similar to the Proposed Project because it would not alter the facility's existing entitlements; therefore, annual aggregate extraction limits, truck tips, and operating hours would not change. Because the alternative would be limited to the existing excavation pit, the footprint of the quarry would not change and impacts would be substantially similar to existing conditions.

Conclusion. The Deeper Extraction within the Existing Excavation Pit Alternative was eliminated because it would not be technically feasible for the reasons described above.

6.5.3 Alternative Locations

Scoping comments on the EIR suggested consideration of an alternative location that would not result in impacts to agricultural lands. Two of the parcels associated with the Proposed Project that are designated as Agriculture (APNs 070-121-021 and 070-091-037) are not part of the proposed expansion area. Within the proposed expansion area, approximately 0.3 acre is identified as grazing land. While the loss of agriculture land from the Proposed Project is small, the EIR preparers considered potential nearby alternative sites as part of the alternatives analysis process.

In April 2012, the County released a Draft EIR for the proposed Oster/Las Pilitas Quarry. The proposed Oster/Las Pilitas Quarry would be located within a 234-acre parcel on the north side of State Route 58, east of the Salinas River. The Oster/Las Pilitas Quarry property boundary is less than 1,000 feet from the Proposed Project property.

The Oster/Las Pilitas Quarry Draft EIR considered seven potential alternative sites within the County's Extractive Resource Area Combining Designation, which the Proposed Project would operate under. Many of the alternative locations were surrounded by few sensitive receptors and were not likely to be highly visible from nearby highways. However, because these locations were not part of an existing quarry site, they would have greater ground disturbance and construction-related impacts when compared to the Proposed Project. This is because the Proposed Project would use the quarry's existing infrastructure, thereby eliminating the need for construction-related activities that would be required for similar sized mining operation at a new site. Because the Proposed Project has already disturbed approximately 100 acres, it would produce more crushed rock per acre of new surface disturbance than any new project. As such, none of the alternative locations would significantly reduce impacts in com-

parison to the Proposed Project, and therefore were not carried forward for further analysis. A summary of each potential new quarry site is provided below.

- **Southwest Portion of El Pomar Planning Area.** This alternative location would have few impacts related to aesthetics and blasting noise because there are very few residential and/or sensitive land uses nearby. However, the site would require upgrading and improving access, which would result in additional ground disturbance. Further, the site would require use of State Route 229, which is a narrow highway that does not carry a large traffic volume. As such, quarry operations at this location would increase traffic impacts locally and regionally. Biological effects would likely be similar to those associated with the Proposed Project's expansion area, but would not have the advantage of using existing infrastructure to reduce the operational impacts of the quarry; therefore, operational impacts would be greater overall.
- **Northeast of the Proposed Las Pilitas Quarry in the Las Pilitas Planning Area.** This alternative location would have few impacts related to aesthetics and blasting noise because there are few residential and/or sensitive land uses nearby. However, the site would require an upgraded crossing of the Coastal Branch of the California Aqueduct and new construction of State Route 58 to provide an adequate truck turning radius. The construction impacts of these features would not occur at the Proposed Project site, which would use existing site access. This alternative location would result in greater noise and traffic effects along State Route 58 and through Santa Margarita, which would not occur under the Proposed Project. Biological effects would likely be similar to those associated with the Proposed Project's expansion area, but it would not have the advantage of using existing infrastructure to reduce operational impacts of the quarry; therefore, operational impacts would be greater overall.
- **East of State Route 229 and West of State Route 58 in the Las Pilitas Planning Area.** This alternative would have few impacts related to aesthetics but would require either a new roadway intersection with State Route 58, or a new road crossing of the Coastal Branch of the California Aqueduct to connect to State Route 229. This alternative location would result in greater noise and traffic effects along State Route 58 and through Santa Margarita in comparison to the Proposed Project. The Coastal Branch of the California Aqueduct crosses portions of this property and thus would require a buffer area. Biological effects would likely be similar to those associated with the Proposed Project's expansion area, but it would not have the advantage of using existing infrastructure to reduce operational impacts of the quarry; therefore, operational impacts would be greater overall.
- **Southwest of State Route 58 in the Las Pilitas Planning Area.** This alternative would have few aesthetic impacts but would require road construction to connect with State Route 58, which would result in increased ground disturbance compared with the Proposed Project. This alternative location would also result in increased noise and traffic effects along State Route 58 and through Santa Margarita, which would not occur under the Proposed Project. Biological effects would likely be similar to those associated with the Proposed Project's expansion area, but it would not have the advantage of using existing infrastructure to reduce operational impacts of the quarry; therefore, operational impacts would be greater overall.
- **South of State Route 58 and North of Parkhill Road in the Las Pilitas Planning Area.** This alternative would have few aesthetic impacts along State Route 58, but would impact the residents along Parkhill Road. This location is immediately north of, and overlaps with, land designated as Residential Rural and thus would potentially increase impacts to this sensitive land use. This alternative location would also result in increased noise and traffic effects along State Route 58 and through Santa Margarita in

comparison with the Proposed Project. Biological effects would likely be similar to those associated with the Proposed Project's expansion area but would not have the advantage of using existing infrastructure to reduce operational impacts of the quarry; therefore, operation impacts would be greater overall.

- **Eastern Area of Parkhill Road in the Las Pilitas Planning Area.** This alternative location would result in few impacts related to aesthetics and noise because there are few sensitive receptors nearby. However, this alternative location is isolated, and would require the construction of new access roads through rural areas. This alternative location would also result in increased noise and traffic effects along State Route 58 and through Santa Margarita in comparison with the Proposed Project. Biological effects would likely be similar to those associated with the Proposed Project's expansion area but would not have the advantage of using existing infrastructure to reduce operational impacts of the quarry; therefore, operational impacts would be greater overall.
- **Seven Oaks Way in the Las Pilitas Planning Area.** This alternative location would result in few impacts related to aesthetics and noise because there are few sensitive receptors nearby. However, this location is also isolated and would require the construction of new access roads through rural areas, and increase traffic volumes along Parkhill Road and Seven Oaks Way. This alternative location would result in increased noise and traffic effects along State Route 58 and through Santa Margarita in comparison to the Proposed Project. Additionally, most of this alternative location is designated Agriculture, and thus would increase impacts associated with agriculture resources. Biological effects would likely be similar to those associated with the Proposed Project's expansion area, but would not have the advantage of using existing infrastructure to reduce operational impacts of the quarry; therefore, operational impacts would be greater overall.

Project Objectives. A quarry built at an alternative location would potentially achieve the basic objectives of the Proposed Project as it would allow the Applicant to extract additional aggregate to contribute to meeting future aggregate demand and support construction and economic growth.

Feasibility. The feasibility of an alternative location would depend on a number of factors such as site availability, adequate water supply, and appropriate access to the site. At this time, the feasibility of the alternative sites identified is unknown.

Environmental Effects. As noted above, the alternative locations identified above are not part of an existing quarry site and would require the construction and installation of entirely new mining equipment and associated buildings for operation. Because of this, they would result in substantially greater ground disturbances to produce the equivalent amount of crushed rock when compared to the Proposed Project, which would use existing infrastructure and, therefore, substantially reduce the impacts related to new construction and equipment installation, including impacts to air quality and GHG emissions. As such, none of the alternative locations would significantly reduce adverse impacts, and thus were not carried forward for further analysis.

Conclusion. Because the alternative locations would not substantially reduce any of the significant and unavoidable impacts associated with the Proposed Project, they were eliminated from further consideration.

6.6 Environmentally Superior Alternative

Sections 6.2 through 6.4 describe and evaluate the three alternatives to the Proposed Project that are considered in this EIR. Table 6.6-1, located at the end of this section, provides a comparison of these alternatives as they relate to the severity of those adverse impacts that could potentially be reduced if one of them were to be implemented in lieu of the Proposed Project.

Based upon the alternatives comparison contained in Table 6.6-1, and consistent with State CEQA Guidelines Section 15126.6(d) and (e)(2), the County has identified the environmentally superior alternative associated with the Proposed Project. CEQA requires the following for alternatives analysis and comparison:

The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. (State CEQA Guidelines Section 15126.6(d))

If the environmentally superior alternative is the No Project Alternative, CEQA requires the identification of an environmentally superior alternative among the other alternatives evaluated (State CEQA Guidelines Section 15126.6(e)(2)).

Based on the analysis presented in EIR Sections 6.2 through 6.4 and summarized in Table 6.6-1, as well as the impact analysis for the Proposed Project presented in Chapter 4 of this EIR, the Reduced Acreage Alternative (Alternative 1) would result in the greatest number of environmental benefits of all of the alternatives evaluated due to the shortened duration of the quarry's operational lifetime (27 years in comparison to 59 years for the Proposed Project and the Enhanced Reclamation Alternative [Alternative 2]). Although this alternative would not lessen or eliminate any of the impacts associated with the Proposed Project, the reduced operational life of the quarry would cause the impacts associated with air quality, biological resources, GHG emissions, noise and vibration, and transportation and circulation to cease 32 years earlier than either the Proposed Project or the Enhanced Reclamation Alternative (Alternative 2), which would, in total time elapsed, represent an approximate 54 percent decrease in the duration of all impacts. The Proposed Project's one significant and unavoidable impact (Impact NS-1 [Implementation of the Proposed Project would generate noise levels in excess of County standards or would result in a substantial temporary or permanent increase in ambient noise levels]) would still occur.

The Enhanced Reclamation Alternative (Alternative 2) would be preferential in comparison to either the Proposed Project or the Reduced Acreage Alternative (Alternative 1) for aesthetics and visual resources and biological resources, as explained in Table 6.6-1. However, as with Alternative 1, the Enhanced Reclamation Alternative would not reduce or eliminate any of the adverse impacts associated with the Proposed Project because none of the quarry's operational parameters would change.

Due to the anticipated future demand for high quality aggregate materials in the Santa Barbara-San Luis Obispo market region, as summarized in EIR Section 2.2 (Overview of Aggregate Market Demand), it is assumed that the No Project Alternative (Alternative 3) would result in the need to construct and operate a new quarry either within the County or at a location in relatively close proximity to it. Although it would be highly speculative to attempt the quantification of a new quarry's impacts, because such a facility would require the construction/installation of all new support facilities, structures and equipment, it has been reasonably assumed that these activities, in addition to mining itself, would cause

more impacts, both in terms of total number as well as severity, than either the Proposed Project or Alternatives 1 and 2. As such, the No Project Alternative would not be expected to reduce or eliminate any of the Proposed Project's adverse impacts.

Although implementation of the Reduced Acreage Alternative (Alternative 1) would be anticipated to result in the greatest number of environmental advantages in comparison to the Proposed Project or Alternatives 2 and 3, this alternative does pose two key disadvantages: (1) it could cause potential conflicts and inconsistencies with the County's adopted COSE; and, (2) it could ultimately trigger the need to either construct and operate a new quarry, or otherwise expand another existing quarry in an estimated 27 years.

As summarized in EIR Section 6.1.1 (Project Objectives), the adopted COSE acknowledges the importance of the County's concrete grade aggregate resources and recognizes the important role of aggregate minerals in supporting construction and economic growth. Goals identified by the County relative to the extraction and use of mineral resources contained in the COSE and include: MN 1 (Conservation and development of significant mineral deposits will be a high priority, but will be balanced with other County general plan goals and policies); MN 2 (Significant mineral resources will be protected from land uses that threaten their availability for future mining); and, MN 3 (Balance mining of mineral resources with sensitive natural resources and existing adjacent uses) (County of San Luis Obispo, 2010). If the County, therefore, were to determine that it was in the best interest of the environment to require the quarry to cease operation 32 years earlier than planned, the commensurate loss in aggregate production could be found to be inconsistent with the COSE; this inconsistency could, in turn, be considered to be a significant and unavoidable impact by decision makers.

In addition to the above, cessation of the quarry's operation 32 years early would reduce production of the Proposed Project by over 14,200,000 tons, which would represent more than one-third of the quarry's production capability. As a consequence, and consistent with the assumptions applied to the No Project Alternative, the elimination of this production could likely cause the need for development of a new quarry, which would be expected to result in a greater number of adverse impacts than either the Proposed Project or Alternative 2, as described for the No Project Alternative in Table 6.6-1. Alternatively, the loss of production could trigger the need to expand another existing quarry within the County, which would likely generate the same types of impacts as either the Proposed Project or Alternative 2.

In consideration of the disadvantages associated with the Reduced Acreage Alternative (Alternative 1), it has been determined that the Enhanced Reclamation Alternative (Alternative 2) is the environmentally superior alternative. Although Alternative 2 would not reduce or eliminate the Proposed Project's one significant and unavoidable impact related to noise, it would allow for the Proposed Project's full operational and production parameters to be achieved while also minimizing some post-reclamation impacts associated with aesthetics and visual resources and biological resources, as indicated in Table 6.6-1.

Table 6.6-1. Comparison of Alternatives

Environmental Resource	Impact Severity Compared to Proposed Project			
	Proposed Project	Reduced Acreage Alternative (Alternative 1)	Enhanced Reclamation Alternative (Alternative 2)	No Project Alternative (Alternative 3)
Aesthetics and Visual Resources: Create substantial offsite visual contrast.	Past and current quarry operations have resulted in vertical exposed rock surfaces that are partially visible offsite. The Proposed expansion area would not be visible offsite. At the conclusion of mining, the visible vertical rock surface that is visible from State Highway 58 and El Camino Real would be reduced in size and would be landscaped to minimize offsite visual contrast. Impacts would be less than significant (Class III).	Under Alternative 1 the total surface area of exposed vertical rock associated with the quarry would be reduced by approximately 23 acres, or approximately 70 percent, in comparison to the Proposed Project. However, the proposed expansion area would not be visible offsite and final reclamation would include landscaping to minimize visual contrast. Therefore, no change or reduction in offsite visual impacts would occur in comparison to the Proposed Project. Impacts would be less than significant (Class III).	Under Alternative 2, the Proposed RPA would be revised to require the vertical exposed rock surfaces created by past and current mining and visible from State Route 58 and El Camino Real to be stained or treated to reduce their offsite visual contrast. Under Alternative 2 short- and long term offsite visual contrast would still be considered less than significant (Class III); however, treatment of the exposed rock surfaces would further minimize offsite visual effects and thus would be considered to have greater benefits in comparison to the Proposed RPA's landscaping treatment.	Alternative 3 would likely require establishment of a new quarry, as outlined in EIR Section 6.4 (No Project Alternative). Development of a new quarry within or outside of the County could result in several adverse offsite visual impacts depending on its location. In comparison to the Proposed Project there would likely be a greater number of offsite visual impacts because its implementation would introduce effects associated with the excavation area itself, as well as effects related to processing facilities and equipment. Some offsite impacts could be significant and unavoidable (Class I) if a substantial portion of the quarry would be visible offsite, including designated Scenic Highways.
Air Quality: Create emissions that either violate or contribute to violations of air quality standards; emissions that affect sensitive receptors or create objectionable odors; emissions that obstruct or violate an adopted air quality plan.	The Proposed Project would not produce emissions that would substantially affect any air quality standards, sensitive receptors, or applicable air quality plans. Additionally, it would not create objectionable odors. All impacts would be less than significant (Class III) or none (No Impact).	Under Alternative 1 quarry operations would cease an estimated 32 years earlier than under the Proposed Project. This would eliminate approximately 27 years of the quarry's future emissions, although it would not reduce or eliminate any emissions until operational activities stop. During on-going operations impacts would remain the same as for the Proposed Project (Class III or No Impact); however, in comparison to the Proposed Project, the 27 year reduction in emissions would be considered a net benefit.	Under Alternative 2 no proposed operational activities would change in comparison to the Proposed Project. Reclamation would involve the application of a stain or other substance that could either be sprayed or otherwise contain some type of substance requiring emissions control. However, this alternative would be required to comply with all County APCD rules, regulations and standards. Therefore, under Alternative 2 there would be no reduction or elimination of the impacts associated with the Proposed Project (Class III and No Impact).	Alternative 3 would be expected to result in the establishment of a new quarry, as outlined in EIR Section 6.4 (No Project Alternative). Development of a new quarry within or outside of the County could result in several adverse air quality impacts, including significant and unavoidable impacts (Class I) if the extent of construction and operational activities is substantial. In comparison to the Proposed Project, Alternative 3 would be expected to generate additional impacts because its implementation would introduce air quality effects associated with excavation, as well as effects related to the installation of processing facilities and equipment, all of which would generate emissions and fugitive dust. Therefore, Alternative 3 would not be anticipated to reduce or eliminate any air quality impacts associated with the Proposed Project (Class III and No Impact).

Table 6.6-1. Comparison of Alternatives

Environmental Resource	Impact Severity Compared to Proposed Project			
	Proposed Project	Reduced Acreage Alternative (Alternative 1)	Enhanced Reclamation Alternative (Alternative 2)	No Project Alternative (Alternative 3)
Biological Resources: Cause the permanent loss of native vegetation/habitat; or impede wildlife movement and migration.	Under the Proposed Project all impacts to biological resources would be less than significant with mitigation incorporated (Class II). Implementation of Mitigation Measure BIO-1.1 would require the Applicant to compensate for the very long-term loss of vegetation/habitat in the proposed expansion area according to prescribed replacement ratios. Implementation of Mitigation Measures BIO- 2.1 and BIO-3.9 would require BMPs and surveys to protect and avoid wildlife.	Under Alternative 1 the proposed expansion area would be reduced by an estimated 70 percent, or 23 acres and operation of the quarry would cease 32 years earlier than the Proposed Project. However, implementation of Alternative 1 would still involve the long-term removal of 10 acres of vegetation/habitat, and continued operations would be identical to the Proposed Project. Therefore, Alternative 1 would not reduce or eliminate any adverse impacts in comparison to the Proposed Project (Class II); it would only reduce the spatial extent and timeframes under which these impacts would occur. These reductions would, however, be considered a net benefit in comparison to the Proposed Project.	Alternative 2 would redesign final reclamation of the quarry's Lower Area to create wetland habitat and reduce final slopes within the excavation pit to enhance wildlife movement. Alternative 2 would not reduce the total acreage of disturbance associated with the proposed expansion area, or change any other operational features of the Proposed Project, and therefore would not reduce or eliminate any of the Proposed Project impacts (Class II). However, due to Proposed RPA design changes Alternative 2 would be anticipated to result in enhanced long-term benefits in comparison to the Proposed Project.	Alternative 3 would likely require the establishment of a new quarry, as outlined in EIR Section 6.4 (No Project Alternative). Alternative 3 would be expected to create substantially greater impacts to biological resources because its implementation would require extensive ground disturbance associated with the excavation area itself, as well as for the installation/construction of processing facilities and equipment. Depending on its location, these disturbances could result in extremely long-term or permanent adverse impacts to sensitive biological resources which could be significant and unavoidable. Therefore, Alternative 3 would not be expected to reduce or eliminate any impacts to biological resources associated with the Proposed Project (Class II and Class III).
Greenhouse Gas Emissions: Generate GHG emissions that would significantly impact the environment.	The Proposed Project would not generate GHG emissions that exceed the County APCD's GHG threshold of significance for new stationary sources of 10,000 MTCO ₂ e per year. Impacts would be less than significant (Class III).	Alternative 1 would eliminate approximately 27 years of the quarry's future emissions, although it would not reduce or eliminate any emissions until operational activities stop. During on-going operations GHG impacts would remain the same as for the Proposed Project (Class III); however, in comparison to the Proposed Project, the 27-year reduction in emissions would be considered a net benefit.	On-going operations under Alternative 2 would be identical to the Proposed Project and thus GHG related impacts would be the same (Class III). During final reclamation rock staining or painting would not be expected to appreciably affect GHG emissions because their sources would be expected to be extremely similar to the other types of activities and sources associated with final reclamation. Therefore, Alternative 2 would not reduce or eliminate any GHG impacts associated with the Proposed Project (Class III).	As outlined in EIR Section 6.4 (No Project Alternative) implementation of Alternative 3 would be expected to require the establishment of a new quarry. Development of a new quarry site, in or outside of the County, would be expected to generate substantially greater GHG emissions than the Proposed Project because it would likely require the construction and/or installation of new processing facilities and equipment, as well as other support structures, all of which would generate GHG emissions. Depending on the size and design plan of a new quarry and its proposed operational parameters, GHG impacts could be significant and unavoidable. Therefore, Alternative 3 would not reduce or eliminate any GHG impacts associated with the Proposed Project (Class III).

Table 6.6-1. Comparison of Alternatives

Environmental Resource	Impact Severity Compared to Proposed Project			
	Proposed Project	Reduced Acreage Alternative (Alternative 1)	Enhanced Reclamation Alternative (Alternative 2)	No Project Alternative (Alternative 3)
Noise and Vibration: Generate noise levels that either exceed the County's adopted thresholds or substantially increase ambient noise levels.	Noise levels generated by operation of the Proposed Project have the potential to exceed the County's noise level standards within vacant lands adjacent to the Proposed RPA area. Truck traffic associated with the Proposed Project's peak operation would increase noise levels to 66 dB Ldn, which is above the County's 65 dB Ldn/CNEL threshold, along El Camino Real south of Santa Barbara Road and along State Route 58 between Murphy Avenue and Pinal Avenue. At these noise levels, it would become increasingly difficult to maintain interior noise levels at or below the County's 45 dB Ldn/CNEL interior space threshold. Impacts would be significant and unavoidable (Class I) with mitigation incorporated.	Alternative 1 would not change any operational parameters associated with the Proposed Project's peak operation; therefore, associated noise generated by peak production would continue to be significant and unavoidable (Class 1). Alternative 1 would, however, eliminate approximately 27 years of the quarry's operational lifetime and thus this impact would occur for 32 years instead of 59 years. Although this alternative would not eliminate or reduce any noise-related impacts associated with the Proposed Project (Class I and Class III), the shortened duration of these impacts in comparison to the Proposed Project would be considered beneficial.	Alternative 2 would not change any operational parameters associated with the Proposed Project's peak operation or duration of the quarry's operational lifetime; therefore, this alternative would not eliminate, reduce or shorten the duration of the Proposed Project's noise-related impacts (Class I and Class III).	Alternative 3 would be expected to result in the development of a new quarry within or outside of the County to meet future aggregate demand, as described in EIR Section 6.4 (No Project Alternative). Depending on the location of a new quarry, its surrounding land uses, and its truck access routes, potential noise and vibration impacts in comparison to the Proposed Project could be eliminated, reduced or substantially increased. Without site-specific knowledge of the new quarry site and its access it would be highly speculative to forecast the severity of related noise and vibration impacts. No impact determination can be reasonably made.
Transportation and Circulation: Cause roadway operations to degrade from an acceptable LOS to an unacceptable LOS; create roadway hazards or unsafe conditions; cause substantial roadway damage; prevent or impede emergency access; conflict with an adopted policies, plans, or programs supporting alternative transportation.	The Proposed Project would not result in any direct or indirect significant and unavoidable impacts related to transportation and circulation. All impacts would be less than significant (Class III) or less than significant with mitigation incorporated (Class II). Mitigation Measure TR-1 would require the Applicant to coordinate and implement El Camino Real improvements at the quarry access driveway to ensure consistency with the County's standard for deceleration and acceleration tapers for a rural driveway.	Under the Alternative 1 operation of Proposed Project would continue for an estimated 32 years. During this period, no changes to the quarry's average or peak production throughputs would occur, and associated truck volumes would remain the same as under the Proposed Project. Consequently Alternative 1 would not reduce or eliminate any of the Proposed Project's transportation and circulation impacts (Class II and Class III). In comparison to the Proposed Project, however, these impacts would be eliminated an estimated 27 years earlier, which would be considered a net benefit.	Alternative 2 would not change any operational parameters associated with the Proposed Project's peak or average operation or the duration of the quarry's operational lifetime; therefore, this alternative would not eliminate, reduce or shorten any of the Proposed Project's transportation and circulation impacts (Class II and Class III).	Alternative 3 would be expected to result in the establishment of a new quarry, as outlined in EIR Section 6.4 (No Project Alternative). Depending on the location of the quarry, direct, indirect and cumulative impacts related to transportation and circulation would be expected to be either similar to the Proposed Project, or potentially greater if site access is constrained or otherwise limited in terms of design capacity and existing conditions. Although it would be speculative to calibrate these impacts in their entirety, it is reasonably projected, based upon the conclusions of the proposed Oster/Las Pilitas Quarry Draft EIR that potential impacts under this alternative would not reduce or eliminate one or more of the Proposed Project's impacts

