

### **3.15 MINERAL RESOURCES**

This section describes existing mineral resources and analyzes the potential for the Project to result in the loss of availability of a known mineral resource that is valuable regionally or statewide, or of a locally important delineated mineral resource recovery site. A mineral is a naturally occurring chemical element or compound formed from inorganic processes (not biological in origin), with a definite chemical composition and orderly crystal structure. Examples of minerals include metals, rock, sand, petroleum products, and geothermal resources. Mineral deposits are important to many industries, including construction, transportation, and chemical processing. Due to their importance for construction purposes, the value of mineral deposits is enhanced by their close proximity to urban areas; however, mineral deposits are endangered by the same urbanization that enhances their value. The non-renewable characteristic of mineral deposits necessitates the careful and efficient development of mineral resources to prevent the unnecessary waste of these deposits due to exploitation and/or conflicts caused by land use decisions and urbanization.

#### **3.15.1 Environmental Setting**

##### **3.15.1.1 Regional Setting**

There are a wide variety of mineral resources found in the County, although relatively few minerals are currently extracted commercially. Quarries and mines in the San Luis Obispo area produce basaltic stone for masonry, “red rock” for road base and surfacing, and cinnabar, an ore of mercury. Petroleum, natural gas, mercury, gypsum, sand and gravel, construction stone, and clay are also produced in the County. The primary factor in the production of sand, gravel, and stone is local demand, and this activity is directly related to growth trends and construction needs (County of San Luis Obispo 2010; City of San Luis Obispo 2006).

The San Luis Obispo-Santa Barbara Production-Consumption Region is defined by the California Department of Conservation as the 2,062 square miles in western San Luis Obispo and Santa Barbara counties in which significant aggregate resources and active operations exist (California Department of Conservation 2017b). Within the San Luis Obispo-Santa Barbara Production-Consumption Region, mining sites are currently

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permitted for approximately 75 million tons of extraction, and there are an estimated total of 10.7 billion tons of these resources present within the County. These resources cover an estimated 40,895 acres. These estimates take into account existing land uses that preclude mineral extraction (California Geological Survey 2011). The majority of extraction sites are in the northern portion of the County.

#### 3.15.1.2 Local Setting

The City has no active aggregate operations within its jurisdiction, and no quarry or mine operations are pending reactivation or initiation (California Geological Survey 2011; City of San Luis Obispo 2006). A petroleum company's request in the 1980s to explore City-owned land in the Lopez Lake area was denied based on the environmental qualities of the area. Since that time, no other such requests have been received (City of San Luis Obispo 2006).

There are very few active mining sites in the San Luis Obispo area surrounding the Project site. The Alberti Ranch Red Rock Quarry, located approximately 3.5 miles north of the Project, is permitted for 5 acres of disturbance and mining for shale production. The Mainini Home Pit, located approximately 6.5 miles northwest of the Project, is permitted for mineral production but is considered idle as of 2017. The Beecham Red Rock Pit is located approximately seven miles west near Los Osos (California Department of Conservation 2017).

#### 3.15.1.3 Project Site

A 5.5-acre permitted red rock quarry is located in the northwestern portion of the Project site (see Figure 2-2). The quarry is known to have been mined for red rock as early as 1936. The quarry is permitted under the Surface Mining and Reclamation Act (SMARA; Mine ID; 91-40-0024) and has an associated reclamation plan and performance bond in place with the County (California Department of Conservation 2017a). Under the SMARA permit, the red rock quarry has no set limit to its approved production amount either annually or gross; rather, the production limits are set by the permitted area boundaries, which means the SMARA permit would expire once the boundaries of the permitted mine area are reached. As of December 2017, approximately 0.5 acres of the quarry have been reclaimed in accordance with the quarry's approved reclamation plan; no areas are currently undergoing reclamation. Mining continued within the remaining portions of the

quarry, and in 2017, two acres of the quarry were disturbed for mining purposes. The quarry is also currently used for concrete and asphalt recycling, temporary stockpiling, and a construction office. Historically, the property was also mined for chromium during World War II, though precise locations are unknown and these operations ceased following the end of the war (FirstCarbon Solutions and Chattel, Inc. 2017). To date, up to five acres of the permitted quarry area continue to be disturbed for mining and construction equipment and materials staging purposes, while approximately 0.5 acre has been reclaimed in accordance with the approved reclamation plan with the County (California Department of Conservation 2017a).



*The 5.5-acre permitted red rock quarry located within the Project site is also permitted to store soil and aggregate along with construction equipment.*

The onsite quarry, including the current ancillary construction activities, are permitted and monitored annually by the County, most recently in December 2017. The County recognizes the quarry as the Froom Ranch Pit, but the quarry is not currently acknowledged in the County General Plan or specifically in the California Department of Conservation’s designated San Luis Obispo-Santa Barbara Production-Consumption Region; however, the Froom Ranch Pit is included in the proposed Mining Designation Amendments for the Conservation and Open Space Element of the County’s General Plan. These proposed amendments include the Project site as an Energy and Extractive Area combining designation (EX) and would include a Mining Disclosure Rezone area of 0.25 mile around the quarry (see Section 3.15.2, *Regulatory Setting*, for more information). These proposed amendments are currently in draft form.

### **3.15.2 Regulatory Setting**

State and local laws, regulations, plans, or guidelines that are potentially applicable to the Project are summarized below.

#### 3.15.2.1 State

##### Surface Mining and Reclamation Act (SMARA)

SMARA is the primary regulator of onshore surface mining in the state. It delegates specific regulatory authority to local jurisdictions. The Act requires the State Geologist (California Geological Survey) to identify and classify all mineral deposits in the state based on their local, regional, and state significance. Local jurisdictions are required to enact specific procedures to guide mineral conservation and extraction at specific sites, and to incorporate mineral resource management policies into their general plans, as well as address mine waste management, closure, site cleanup, and restoration requirements. Specifically, Section 3712 of the State's Mine Reclamation Statutes and Regulations require that all mine waste be handled and disposed of consistent with the State Water Resources Control Board mine waste disposal regulations in Article 1, Subchapter 1, Chapter 7 of Title 27 of the California Code of Regulations. A key concern of state legislators in enacting SMARA was addressing the loss of mineral production sites as a result of development practices that might preclude future extraction.

##### *Mineral Resource Zones*

SMARA Sections 2761(a) and (b) and 2790 provide for a mineral lands inventory process termed Classification-Designation. The California Geological Survey and the California State Mining and Geology Board are the state agencies responsible for administering this process. The primary objective of the process is to provide local agencies, such as cities and counties, with information on the location, need, and importance of minerals within their respective jurisdictions. It is also the intent of this process, through the adoption of general plan mineral resource management policies, that this information be considered in future local land use planning decisions.

Areas are classified on the basis of geologic factors, without regard for existing land use and land ownership for each Production-Consumption Region. The mineral resource areas within the San Luis Obispo-Santa Barbara Production-Consumption Region are categorized into one of four Mineral Resource Zones (MRZs), described below (California Department of Conservation 1989).

- **MRZ-1:** A Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.

- **MRZ-2:** A Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or a likelihood of their presence and development should be controlled.
- **MRZ-3:** A Mineral Resource Zone where the significance of mineral deposits cannot be determined from the available data.
- **MRZ-4:** A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.

#### 3.15.2.2 Local

##### City of San Luis Obispo Zoning Ordinance

The City Municipal Code, Title 17 Zoning Regulations, establishes allowable uses by zoning district within the City. As the Project would be subject to City Municipal Code upon annexation, these Zoning Regulations would apply to the Project site, including Section 17.10.020.F Prohibited Uses, which prohibits mineral extraction and commercial mining in all zones.

##### County of San Luis Obispo General Plan

The County General Plan designates mineral resources within the EX Area combining designation in the Framework for Planning (Inland) (i.e., the County's Land Use Element equivalent). Mineral resources are also addressed in the County's Conservation and Open Space Element. Combining designations identify areas with characteristics that are either of public value or are hazardous to the public. The special location, terrain, man-made features, plants or animals of these areas create a need for more careful project review to protect those characteristics, or to protect public health, safety and welfare. EX combining designations are established to recognize the importance of continuing availability of mineral and energy resources by avoiding land use decisions that may inhibit the continuing viability of energy and extractive operations and result in unnecessary or premature termination of the use of such resources. The EX combining designation is intended to:

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1. Identify areas where mineral or petroleum extraction occurs, is proposed to occur, or where petroleum or mineral reserves of statewide significance exist, as defined by the State Geologist.
2. Protect existing extraction areas so that land uses incompatible with continuing extraction activities will not be developed on adjacent properties.
3. Protect existing energy production areas and regional production facilities so that incompatible uses will not be developed on adjacent properties such that the energy production facilities may become dangerous or detrimental to public health and safety.
4. Protect energy production areas from encroaching urban development or other incompatible land uses that may hinder their continued operation.

The existing onsite quarry, or Froom Ranch Pit, is not currently identified by the County's General Plan as a specific mapped mineral resource and is not within an EX combining designation.

#### *Draft EX Combining Designations Amendments*

The County is currently updating the EX combining designations and has included the Froom Ranch Pit as a part of this proposed amendment. The proposed update would incorporate recent updates by the California Mining and Geology Board. These proposed amendments adjust boundary maps of regionally significant Mineral Resource Areas, EX designated areas, and Mining Disclosure Zones (MDZ) throughout the County. For EX designated areas, the proposed amendments also include a MDZ combining designation, which would apply to a 0.25 mile buffer around legally established mining activities that is intended to serve as a means of notification and public disclosure for landowners and the general public within the vicinity of the mine. The proposed amendments would designate the Froom Ranch Pit within the EX combining designation and apply a 0.25 mile MDZ to the site. While a portion of the Project site would be designated MDZ under the County's draft amendments, there are no proposed specific restrictions for this designation. The proposed amendments are expected to be reviewed and adopted by the County Board of Supervisors in spring 2020 (Cody Scheel, San Luis Obispo County Planner 2019).

Despite these EX combining designation amendments and designation of the Froom Ranch Pit, the Draft FRSP is being evaluated under the City's regulatory framework in anticipation of annexation of the site. The City and County have coordinated on this issue and have agreed that the proposed EX combining designation amendments would not apply to the Project site in the event of an annexation.

### **3.15.3 Environmental Impact Analysis**

#### 3.15.3.1 Thresholds of Significance

With respect to mineral resources, applicable sections of Appendix G of the CEQA Guidelines provide that a project would have a significant impact on the environment if it would:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;
- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

#### 3.15.3.2 Impact Assessment Methodology

This section evaluates the impact of the Project on the availability of significant mineral resources within the region and state. Regional importance of the onsite quarry was determined by reviewing proposed amendments to the County EX combining designation, as well as associated boundary maps. Production levels for concrete aggregate in the San Luis Obispo-Santa Barbara Production-Consumption Region were determined by the Mineral Land Classification Update published by California Geological Survey. Production and capacity levels of the onsite quarry were determined using SMARA Permit Annual Reports for 2018. Permitted land uses within the City were determined using the City's Zoning Ordinance.

#### 3.15.3.3 Project Impacts and Mitigation Measures

Impacts to mineral resources associated with the Project are summarized in Table 3.15-1 below.

**Table 3.15-1. Summary of Project Impacts**

Mineral Resources Impacts	Mitigation Measures	Residual Significance
MN-1. Project implementation would result in the loss of the existing onsite red rock quarry (Froom Ranch Pit)	None required	Less than Significant

**Impact MN-1            Project implementation would result in the loss of the existing onsite red rock quarry (Froom Ranch Pit) (Less than Significant).**

Current operations at the onsite quarry are limited to asphalt and concrete recycling and stockpiling, though the SMARA permit is active and approximately five acres of unreclaimed area remains available for red rock mining. Although the quarry has historically mined red rock for use in regional construction projects, it is not planned to be utilized for further production. Despite general cessation of red rock production, the quarry is included in the County mining designation amendments because the owner continues to hold an active SMARA permit, reclamation plan, and performance bond, and currently uses the 5.5-acre quarry area for aggregate recycling and construction storage activities.

The Project would reclaim the existing quarry site consistent with the SMARA permit reclamation plan (including grooming and reseeding the area with pasture mix) and then develop up to 130 units of medium-high density multi-family housing within the Madonna Froom Ranch area of the site. Reclamation would occur during Phase 1 of Project construction and, consistent with the quarry’s reclamation plan (County of San Luis Obispo 1980), would include removal of excess materials and waste, recontouring, topsoil replacement, and hydroseeding with native grasses and fertilizers. Reclamation would be financed by the independently held performance bond that guarantees funds would be available.

Proposed annexation of the quarry site into the City would result in the prohibition of continued mining activities, consistent with the City’s Zoning Ordinance. Although the quarry is considered a mineral resource by the state and County, mining is not allowed within the City and the quarry would no longer be usable for mineral production. When the mine closes and the reclamation plan is completed, the quarry would no longer be subject to ongoing permitting or regulation by the state and would not be subject to the mineral resources policies of the County.



The impact of the Project on available resources within the region and state would be minimal. There is no current or expected future red rock production from the 5.5-acre quarry, and further mining would be prohibited under the Project following annexation to the City. Available acreage for onsite mineral production is 0.01 percent of the 40,895 acres available within the Production-Consumption Region for this resource, which is a nominal loss of mineral production to local and state needs. There are also local sources of red rock, including the Alberti Ranch Red Rock Quarry and the Beecham Red Rock Pit, that would continue to produce this particular mineral to meet local and regional demand. This nominal reduction in available acreage for red rock extraction that would result from the Project would be *less than significant*.

#### 3.15.3.4 Cumulative Impacts

The Project would not result in effects that, when considered in combination with the impacts of nearby regional projects, would be considered significant. The City does not allow mineral resource extraction and there are no other proximate active mines identified for future annexation into the City. Therefore, there are no projects within the City that are expected to further reduce currently available supplies. The County's proposed mining designation amendments would adjust EX combining designations to reflect state-designated regionally significant mineral resources and would help prevent closure and elimination of these sites. The County's Infrastructure and Facilities Capital Improvement Plan does not indicate expectation of any projects that would impact availability of mineral resources or mineral resource recovery sites. Therefore, the Project is not expected to result in significant cumulative impacts to mineral resources or mineral resource recovery sites. Potential cumulative impacts would be *less than significant*.