

2.3.4 Dark Sky Ordinance

In addition to the policies regarding dark skies contained in the COS Element of the General Plan, the County of San Diego County of San Diego Outdoor Lighting Ordinance (Division 9, sections 59.101-59.115 of the San Diego County Zoning Ordinance) seeks to control undesirable light rays emitted into the night sky in order to reduce detrimental effects on astronomical research. Zone A, defined as the area within a 15-mile radius centered on the Palomar Observatory and within a 15-mile radius centered on the Mount Laguna Observatory, has specific light emission restrictions. The unincorporated portions of San Diego County not within Zone A fall within Zone B, are subject to lesser restrictions. Outdoor lighting, such as security or parking lot lighting must be fully shielded within Zone B.

The Project site is located more than 15 miles from the Palomar and Mount Laguna Observatories, and is, therefore, within Outdoor Lighting Ordinance Zone B.

3.0 VISUAL ENVIRONMENT OF THE PROJECT

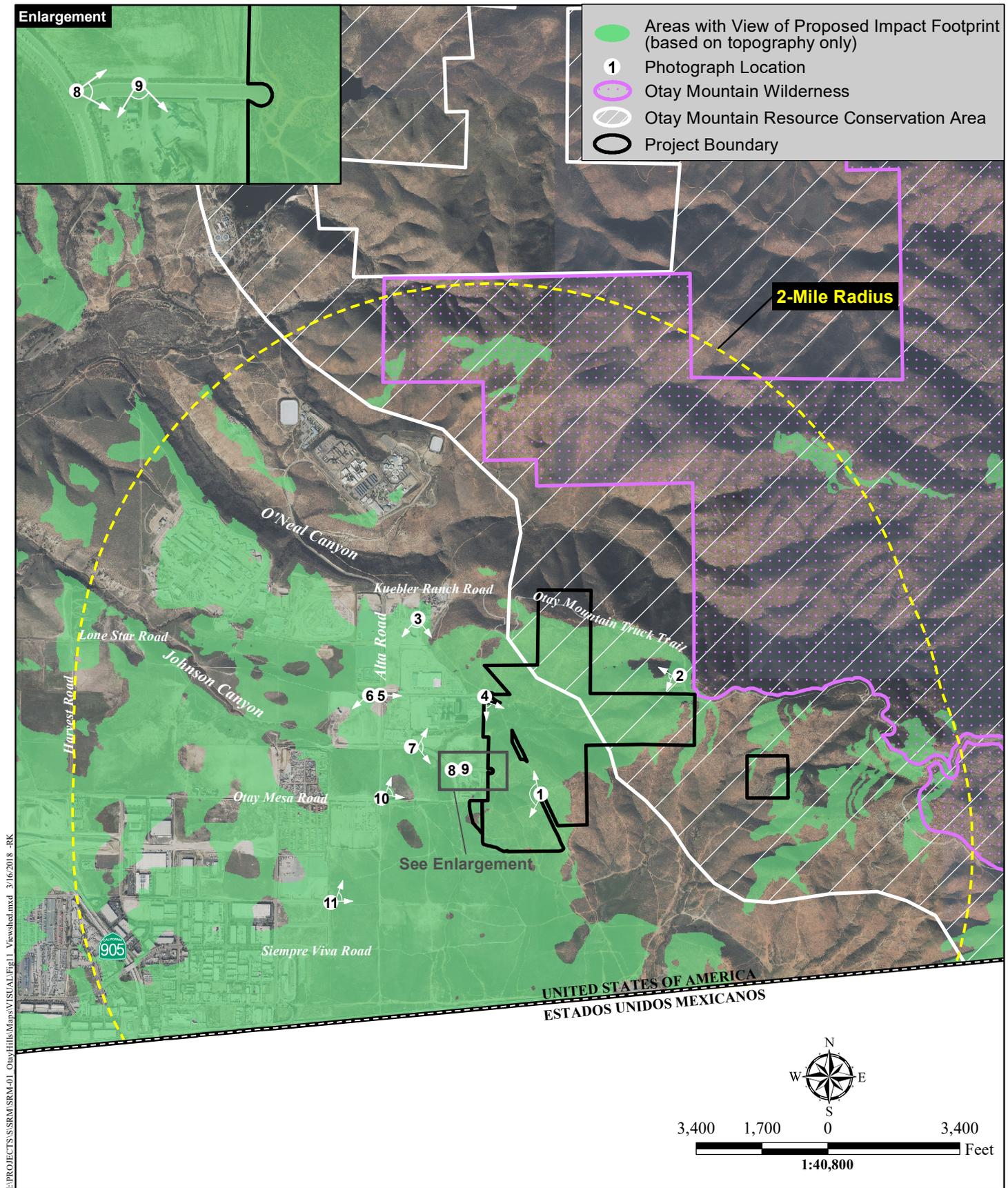
This section addresses the existing setting and visual conditions in the area and includes photographs of the site. This section also includes a discussion of the Project viewshed, as well as the numbers of viewers in the area, and the location, type and frequency of views. The existing visual and landform setting is based on an analysis of photographs, topographic mapping, aerial photographs, reference document reviews, and documented on- and off-site land uses, as well as site reconnaissance.

3.1 Project Setting

3.1.1 Topography

The Project site is located within the western foothills of the San Ysidro Mountains. The topography east of the Project site is varied and includes many steep slopes, canyons and peaks. The peaks within the San Ysidro Mountain range vary in height from 1,020 feet above mean sea level (AMSL; within the Project site, as described above), to 3,566 feet AMSL at Otay Mountain, approximately 3.5 miles northeast of the Project site. Several canyons are located between these peaks; most of the canyons in the vicinity of the Project site drain into the Otay River Valley, to the north and west of the Project site, while some drain southward into the Tijuana River.

The topography surrounding the Project site to the west is relatively flat, with some gentle variations between 600 feet AMSL at the western edge of the Project impact footprint, and 500 feet AMSL approximately 3.0 miles west of the Project at Brown Field Airport. The most significant topographic variation in the vicinity occurs within and because of the canyon drainages (Johnson and O'Neal canyons) northwest of the Project site. These drainages have incised the plateaus upon which some development is located. The topography in the vicinity of these canyons drops from 700 feet AMSL (at the County East Mesa Detention Facility) and 600 feet AMSL (at the Donovan Correctional Facility) to approximately 300 feet AMSL within the Otay River Valley. The valley walls of Johnson and O'Neal Canyons and the San Ysidro Mountain foothills are visually prominent land forms and areas of scenic beauty discussed in the EOMSP (County 2015). The



Photograph Locations/Viewshed Map

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Urban Design Policies of the EOMSP include the preservation of these land forms, which are visible from circulation element roads, including Alta Road and (Old) Otay Mesa Road.

The topography of the Project site and the surrounding area is illustrated in Figures 10 (depicting Project contours) and 3, providing elevational context, respectively. Figure 11 depicts the Project site on an aerial with surrounding mountainous areas clearly visible.

Several peaks and canyons, including one large canyon, exist within the Project site boundaries. One large canyon flows via an unnamed drainage westward through the Project site, bisecting the northern half of the Project impact footprint and turning southward just beyond the Project boundary. This canyon has a minimum elevation of approximately 650 feet AMSL within the Project site. A second canyon, located in the southeastern portion of the Project impact footprint, contains the lowest elevation of the 110-acre impact footprint, approximately 620 feet AMSL. The slopes of this canyon rise to the highest point within the Project impact footprint, at 820 feet AMSL. A neighboring peak to the east is the highest point within the Project site, rising to approximately 1,020 feet AMSL. These peaks are part of the San Ysidro Mountains bordering the Project impact footprint to the north and east.

3.1.2 Existing Land Uses

Figure 3 illustrates the land uses within the Project site and the surrounding area. The immediate setting of the Project site mainly consists of undeveloped land and industrial uses. The closest development to the Project site consists of the Calpine plant and Vulcan Materials plants located immediately west of the impact footprint. The land adjacent to the remainder of the impact footprint is either graded and vacant or undeveloped. The area between the power plant and batch plant has been graded and is currently vacant. The remaining undeveloped lands are covered with low-growing grasses, while some scattered trees, near the topographic low spots and bordering the power plant property, provide dark green accents within the views of this area.

Areas immediately south of the Project consist of undeveloped land and farther to the south are industrial portions of Tijuana, Mexico. Starting approximately 0.5 mile west and southwest of the Project site and spreading westward, are industrial developments consisting of large boxy buildings and automobile and/or equipment yards. Two prison facilities, the R.J. Donovan Correctional Facility and the County East Mesa Detention Facility, are located approximately 1.5 miles north of the Project impact footprint. Two airports, Brown Field and Tijuana International Airport are in the vicinity; Brown Field is a general aviation airport in the City of San Diego approximately 3 miles west of the Project impact footprint, and Tijuana International Airport is in Tijuana, Mexico, approximately 2.5 miles to the southwest. The buildings making up the various industrial and (excluding towers) prison developments in the area are boxy, white, and up to three-story buildings with few windows, and are surrounded by surface parking lots. A few trees are planted within and around the parking lots; however, the buildings, automobiles and other vehicles are visually prominent within these areas. Undeveloped lots scattered between the various facilities generally support low-growing grassy plants that are brown most of the year, and green in the spring.

The international border between the U.S. and Mexico is located approximately 0.5 mile south of the Project impact footprint. The border is visible from slightly more elevated points in the Project

area (refer to View 2 on Figure 12, *Representative Views A*, discussed below) as a line beyond which industrial and residential portions of Tijuana are visible.

The San Ysidro Mountains lie north and east of the Project impact footprint. The mountains and foothills are largely undeveloped. A few roads, such as the Otay Mountain Truck Trail and some dirt trails cross these mountains, which are largely overlaid by a San Diego County RCA for Biologically Sensitive lands. The Otay Mountain Cooperative Land and Wildlife Management Area and the Bureau of Land Management (BLM) Otay Mountain Wilderness Area, National Wilderness Preservation System land also overlay areas east of the Project impact footprint. The Otay Mountain Truck Trail provides access to the BLM Otay Mountain Wilderness Area, portions of which are located within one mile from the Project impact footprint to the east. Portions of these mountains and their foothills are visible in each of the figures provided in this section.

Area maps were reviewed to identify public recreation areas located within the immediate vicinity of the Project. Besides the trails already mentioned, the closest mapped facilities include the Lower Otay County Park and the Otay County Open Space Preserve within approximately 2.5 miles to the north of the Project impact footprint. These two San Diego County facilities are located within the Otay River Valley.

Five private residential uses are located within 2 miles of the Project impact footprint. These properties include facilities for animals such as horses and sheep, multiple usable and derelict vehicles, as well as some trees and scattered outbuildings. Three private residential farms/ranches are located on Old Otay Mesa Road, approximately 1.3 miles west of the Project impact footprint. The fourth residence is located between the two existing prison facilities, accessed via a dirt road (Kuebler Ranch Road) off of Alta Road before Alta Road reaches the County East Mesa Detention facility (the former Kuebler residential ranch currently supports a commercial R & F Metal, Inc.). The fifth house is located between the two prison facilities, accessed via a dirt road off of Alta Road before Alta Road reaches the County East Mesa Detention facility. Relatively small in scale and separated by large areas of open space, these uses do not form dominant elements within the landscape. The structural uses contribute some level of variation in pattern elements (line and color) through such common features as rows of trees edging a roadway or a small copse of trees associated with the dwelling that can be notable in this otherwise very horizontal and xeric landscape.

The Project site is currently undeveloped, with the exception of a few dirt roads that transect it. Due to the Project's location near the international border, the site is frequently patrolled by the U.S. Border Patrol. A 120-foot SDG&E easement with power lines extends diagonally through the Project site. In addition to the power line right-of-way, four SDG&E utility towers are clustered at the northern extent of the Project property. A 20-foot wide natural gas pipeline easement that was formerly within or parallel to the noted SDG&E easement has been relocated, and now extends generally parallel to and within the western and southern boundaries.

3.1.3 Vegetation

The Project site contains Diegan coastal sage scrub (including disturbed) and non-native grassland. Other types of on-site native vegetation, present in smaller areas within the Project site, include native grassland, cismontane alkali marsh, chaparral scrub, chamise chaparral, and southern mixed



View 1: View westward from Project slopes. (2017)



View 2: View westward from Otay Mountain Truck Trail. (2005)

Representative Views A

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chaparral. Areas of disturbed habitat and developed land (mainly dirt roads) also occur within the site. The Diegan coastal sage scrub existing within the flatter portion of the Project site is visually similar to and not easily distinguishable from the vegetation on the surrounding hillsides. This plant community is composed of generally low-growing shrubs and grasses that are tan, brown, rust red, and light green most of the year. Orange, yellow, and pink flowers are visible in the spring; although the flowers individually are small, when flowering en masse the flower colors create visible patches that shade a hillside. Some larger and darker colored shrubs such as toyon and laurel sumac also grow within the coastal sage scrub area; these shrubs, sparsely scattered among the vegetation on site and in the surrounding hillsides, create darker patches on the northern facing slopes. The non-native grassland contains mainly low-growing grasses that are brown most of the year and produce yellow and white flowers and green foliage in the spring.

3.2 Representative and Typical Views

Figure 11 identifies the location of each photograph taken to illustrate the general Project setting, and views of the Project site and surrounding area. It also places the location relative to County RCA and proposed Project open space. Two types of views provide context for the existing conditions discussion. The figures start with two views from generally undeveloped areas to the east. Considered “representative” views, they illustrate types of views that may be obtained from areas east of the Project. Views from the east are generally restricted based on existing topographic variation (see the areas highlighted in green versus those that are not on Figure 11). They are not considered “typical” because they are viewed only by individuals accessing this backcountry area (largely prohibited from access from points west) and therefore have relatively small viewership. Similarly, the view from the old Kuebler Ranch property (taken from the driveway, the closest location to the Project with the most open view toward it) depicts a potential view that illustrates general principles of visibility but is not considered “typical” due to low viewership. Finally, an unlikely but potential future view is addressed through a view east and south of a street terminus and “looking behind” an existing facility to an area that is not open to the public. Again, it is not considered “typical” as it is not accessible and the number of individuals who could see the view is considered very low. The remainder of the views are generally located westerly of the site, along public paved roads, and are identified as “typical” given their ease of access and relatively large number of viewers along these roads. These latter views include the areas with the most open views toward the Project based on topography.

Together, these views illustrate the existing visual character of the eastern mesa. These photographs illustrate the dominance, scale, diversity and continuity, as well as the varying amounts of vividness and unity of the area surrounding the Project, and establish the baseline visual environment against which the Proposed Project can be evaluated.

The photograph for View 1, Figure 12 was taken from the dirt access road abutting the future Project mining area. It represents a future closest view to the Project mining area from the east. The general area currently contains a number of dirt roads and paths. This area is expected to be less accessible if the Project is approved as a substantial amount of acreage east of the Project (approximately 329 acres) would be in open-space set aside. This panorama represents a view currently available to SDG&E employees, Border Patrol staff, and a limited number of off-road vehicle users (as access to this area is generally posted for no trespass and/or gated off from points west). As such, it is not considered “typical” but is illustrative of the type of expansive views from

the San Ysidro foothills and mountains. These views become even broader and more expansive (although less distinct) as the viewer is sited further to the east.

The view shows existing on-site land uses and the land uses north and west of the site. To the north, the abutting power plant at the northern extent of the Project is prominent in this view; the Donovan prison facility is visible to the right (northwest) of the power plant. Local roads are also visible, as is the nearby auto auction yard and other more distant development in Otay Mesa. The SDG&E power lines that edge developable portions of the Project are visible, as is the U.S.-Mexico international border at the left (southern) edge of the view, beyond which the industrial and residential areas of Tijuana are visible.

View 2 (Figure 12) was taken from the Otay Mountain Truck Trail. When this photograph was taken in 2005, access into the hills could be gained from Alta Road. In 2017, access from the west from south of Otay Mesa Road to approximately the George F. Bailey Detention Center is either gated, posted for “No Trespass,” or both, and low levels of traffic may be even lower (access is available from the north from Jamul Valley from the Pio Pico RV Resort approximately 3 miles east of Otay Lakes [as the bird flies] and from Dulzura approximately 9 miles to the east [again, as the bird flies]). As a result, the photograph has not been updated. It has been retained for context, however, as it is still indicative of views that could pertain to a small number of users approaching the mesa from the east and continuing this far to the west.

As shown on Figure 11, most of the mountainous area to the north and east of the viewpoint does not have visibility toward the site. View 2 represents the most encompassing view from the road to the site. The photograph illustrates a portion of the Project proposed for permanent biological preserve (the hillside to the left of the picture and the draw down toward the mesa, or basically the bottom third and left-hand two-thirds of the photograph), just north of the Project’s easternmost extent into the hills. View 2 shows the dense development of Tijuana, Mexico, and the grading associated with primarily industrial and commercial development west of the Project impact footprint. The views include the hills within/adjacent to the Project impact footprint as a dominant element in the foreground view. Long-reaching views over the flat mesa areas to the west are illustrated. The location of the neighboring power plant is visible (refer to View 1 in Figure 12 for power plant scale), as are other industrial developments in the surrounding area. The automobiles in the nearby auction yard are reflective and draw the viewer’s attention. Straight lines created by area roadways also are visible in the background.

View 3 (Figure 13, *Representative Views B*) illustrates existing uses in the Project vicinity. This view is from the former Kuebler ranch, currently containing a commercial/industrial establishment and Alta Café restaurant. The view is from the access road to the restaurant, just south of the parking lot. This view shows the Otay Mesa Detention Center just south of a graded pad, the Calpine power plant beyond that on the left side of the photograph, and the Pio Pico Energy Center on the right side of the photograph. Mesa area south of these areas shows as generally developed in this photograph and from this vantage point. Project property is located east of the Calpine facility.

View 4 (Figure 13) is taken from the eastern terminus of Calzada de la Fuente and the northeast edge of the Calpine power plant fence line, looking south-southwest onto Project property. The Calpine fence is visible, as are three transmission tower bases near the viewer. The SDG&E access



View 3: View southward toward construction/grading in Project vicinity from parking access road to lot of Alta Cafe (old Kuebler Ranch). (2017)



View 4: View southerly along Calpine fence line from eastern terminus of Calzada de la Fuente. (2017)

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Representative Views B

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road is visible in the center of the photograph. Access to the Project property or open space beyond is not available from this viewpoint; it is both gated and posted for no access.

View 5 (Figure 14 *Typical Views A*) looks directly east at the Pio Pico Energy Center at the southwest corner of Calzada de la Fuente and Alta Road. The photograph looks east along Calzada de la Fuente. This street ends by dead ending into Project property. Existing uses accessed from this road include the Pio Pico Energy Center and the Calpine Energy Center (Calpine power plant) both on the south side of the road, and the CCA Otay Mesa Detention Facility on the north side of the road.

View 6 (Figure 14) was taken directly across Alta Road from the Pio Pico facility. Looking southwesterly over the fully fenced parcel, it has been graded, has a graveled surface, substantial drainage improvements along its northern boundary, lighting and a Quonset hut installed on site. Lacking structures as a whole, the impression is industrial in nature. Looking away from the site, this view does not include Project property, but illustrates a typical type of lot on the mesa.

View 7, Figure 15, *Typical Views B*, illustrates a view of the Project site from Paseo de la Fuente and De la Fuente Court, approximately 0.15 mile east of Alta Road and 0.25 mile north of Otay Mesa Road. It represents a typical view of the site from areas to the west, and from the road accessing adjacent industrial areas to the north and east. The Calpine power plant, Vulcan Materials Plant, and associated roadways and landscaping are the dominant features within this view. Paseo de La Fuente and De la Fuente Court are lined with sidewalks, low-lying, flowering shrubs and street trees (e.g., Mexican fan palms), which provide visual contrast to the earth-toned facilities and the San Ysidro Mountains in the background.

View 8, Figure 15, depicts a view looking east from the intersection of Paseo de la Fuente and Access Road, which provides access to the Vulcan Materials Plant and graded pad on the north side of the road, approximately 0.4 mile east of Alta Road and 0.15 mile north of Otay Mesa Road. The mix of industrial/modified uses and open space on this part of the mesa is clear. The Vulcan Materials Plant is more clearly visible along the right side of this view than in Typical View 7, and the eastern half of the power plant is visible along the left side of the view. Again, the Access Road, sidewalks and landscaping are dominant in the foreground, while the foothills and San Ysidro Mountains draw the eye easterly and up. The highest mountains from this viewpoint are skylined in the distance and the undeveloped nature of those high features is notable in contrast with the hardscape and somewhat industrial elements visible in this view. The tall transmission towers and their right-of-way that bisects the closest hill approximately mid-point are also visible.

View 9, Figure 16, *Typical Views C*, is a view into the Vulcan Materials Company plant located just west of the Project. Taken looking southeasterly from Access Road, this photograph shows the geometric towers, concrete processing equipment, and some storage structures of the facility, which range in color from light yellow to muted gray; as well as the low surrounding walls and streetscape. The lowest foothills of the San Ysidro Mountains within the Proposed Project site are visible east of the batch plant.

View 10, Figure 16, is from the intersection of Alta Road and the terminus of Otay Mesa Road, approximately 0.5 mile to the west of the Project impact footprint. This represents clear eastward views of the visual environment of the site and the surrounding area. Undeveloped land, transected

by dirt roads and vegetated by grasses and low-lying shrubs, is visible in the foreground of the view. The closest points of the Project site are also the lowest. Located within a canyon, the western Project boundary is not visible from this point. The San Ysidro Mountains provide a background for eastward views. This picture provides the most direct and clear views toward the entirety of the Project site relative to existing views. Traffic volumes along the segment of Otay Mesa Road to Alta are noted as 9,065 ADT. As noted, Otay Mesa Road ends at this point, and Alta Road provides northerly access to the commercial businesses at Kuebler Ranch, the prison facilities, and the power plant. The bulk of the traffic at this intersection, therefore, presumably consists of workers at the power plants; Vulcan materials plant; and prison and detention facilities and other businesses; visitors to the prisons; and patrons of the restaurant at Kuebler Ranch (when open). These motorists are not highly sensitive viewers, as they generally would not be recreational viewers, although their expectations of a scenic eastward view and knowledge of the area may be high due to their familiarity with the area.

View 11, Figure 17, *Typical Views D*, was taken from the eastern terminus of Airway Road, just north of Enrico Fermi Place and east of Enrico Fermi Drive, a little more than 0.8 mile southwest of the Project. This figure depicts the impressive effect that the flat mesa grasslands combined with the abrupt hills can have. Although development is visible, this view primarily emphasizes undeveloped elements in order to provide counterpoint to activities in the immediate vicinity of the Project. Views toward the Project and foothills are similar to View 17; however, the flat foreground areas are more dominant in views from this area. The forms of the surrounding foothills and their elevation behind the Project property are silhouetted in the background.

3.3 Project Viewshed

A viewshed is an analytical tool to aid in identification of views that could be affected by a project site. A viewshed is comprised of all the surface areas visible from an observer's viewpoint. The limits of a viewshed are defined as the visual limits of the views located from the Proposed Project. The viewshed also includes the locations of viewers likely to be affected by visual changes brought about by Project features. Due to the generally flat and gently varying topography west of the Project impact footprint, views within approximately two miles of the Project impact footprint were included in the Project viewshed analysis. The viewshed for the Project, determined using these criteria, is shown in Figure 11. The viewshed was delineated through computer-aided and field-verified analysis of the topography on site and in the surrounding area.

As shown on Figure 11, the Project would be visible mainly from points west and south. Otay Mesa Road is aligned such that drivers traveling eastward have a view of the most visible hill in the southern portion of the Project as well as the higher slopes behind. Otay Mesa Road is classified as a Major Road with bike lanes from its eastern junction with Otay Mesa Road/SR 905 to its terminus. An average of approximately 8,784 vehicles travel Otay Mesa Road on the four segments east of SR 125, with most drivers that travel to its eastern terminus at Alta Road turning left onto Alta Road (Darnell & Associates 2017). On opening day in 2019 with Project Phases 1 and 2 both assumed, ADT is projected to be approximately 12,067 vehicles on Otay Mesa Road east of Enrico Fermi Drive (Darnell & Associates 2017). Drivers east of SR 125 would have more open views of the Project site. However, several factors reduce the likelihood that the Project would comprise clear or long-term visual elements for these viewers. These features include: (1) the volume of traffic on Otay Mesa Road that demands the driver's attention; (2) distance from the Project which



View 5: Looking due east along Calzada de la Fuente and at Pio Pico Energy Center from Alta Road. (2017)



View 6: View southwesterly of lot west of Pio Pico Energy Center on Alta Road. (2017)

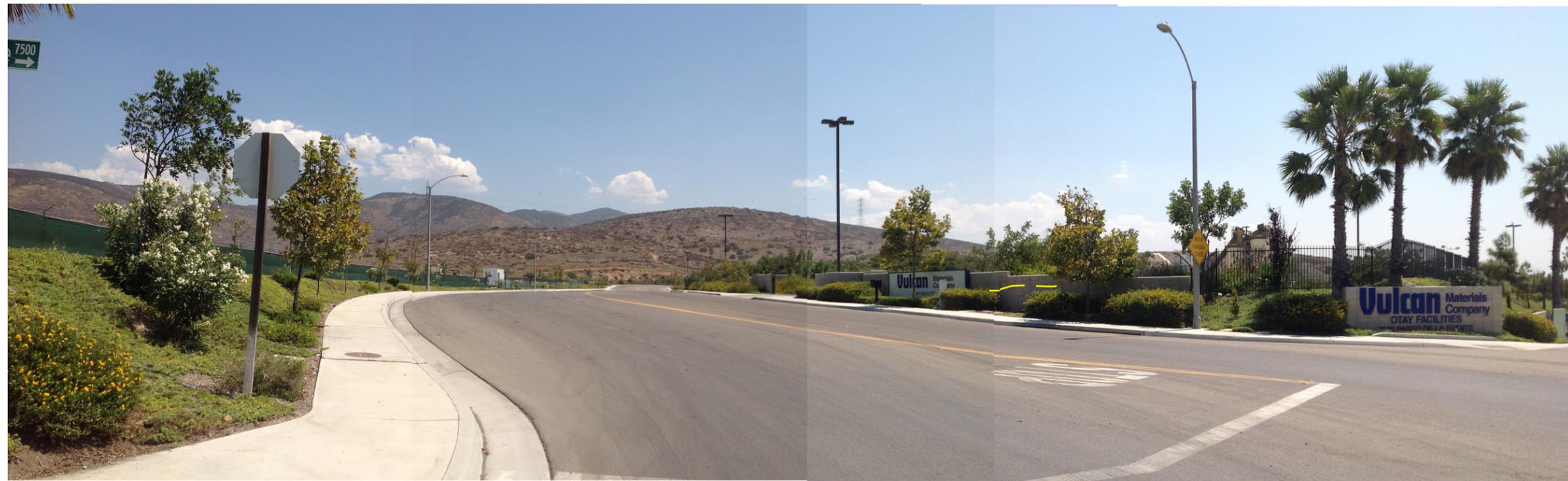
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Typical Views A

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View 7: Looking southeasterly along Paseo de la Fuente from intersection with De la Fuente Court to Calpine Otay Power Plant and San Ysidro foothills/mountains. (2017)



View 8: Looking easterly along Access Road at intersection. (2017)

Typical Views B

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View 9: View of Vulcan Materials plant from adjacent Access Road, looking southeasterly. (2017)



View 10: View northeast toward San Ysidro foothills/mountains from the eastern terminus of Otay Mesa Road at Alta Road. (2011; unchanged from Calpine to south end of photo in 2017)

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Typical Views C

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View 11: View northeast toward the Project and San Ysidro foothills/mountains from the eastern terminus of Airway Road. (2011; unchanged from Calpine Power Plant to south end of photo in 2017)

Typical Views D

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visually (a) mutes individual features of the landscape, and (b) results in the Project site being only one element in the larger regional landscape; and (3) rolling topography that occasionally blocks views from Otay Mesa Road/SR 905 both east- and westward, and north- and southward. Drivers stopping at the end of Otay Mesa Road to turn left and continue on Alta Road (the closest “through” north-south trending paved road adjacent to most mesa development), on the other hand, would have a clear northeasterly view to the Project, which at its closest point is approximately 0.5 mile northeast of the end of Otay Mesa Road (see Typical View 10, Figure 16, and the simulation, discussed below).

The topographic conditions noted above limit visibility to the Project impact footprint from the undeveloped areas of the San Ysidro Mountains north and east of the Project. The Otay Mountain Truck Trail, a gravel-paved road sometimes used for recreational purposes, transects the San Ysidro Mountains in a generally east-west direction, and has a section located northeast of the Project site; visibility of the Project site from this road is discussed below. The Project site is not visible from locally significant canyons; slopes along the southern edge of the Otay River Valley and the slopes of Johnson and O’Neal canyons block views to the Project site from these areas. Areas north of the Otay River with potential to view the Project site due to elevation are more than seven miles away, muting visibility of any Project features.

4.0 EXISTING VISUAL RESOURCES AND VIEWER RESPONSE

4.1 Existing Visual Character

4.1.1 Visual Character

Visual character is descriptive and non-evaluative, which means it is based on defined attributes that are neither good nor bad in themselves. A change in visual character cannot be described as having good or bad attributes until it is compared with the viewer response to that change. If there is public preference for the established visual character of a regional landscape and a resistance to or a preference for a project that would change or contrast with that character, then changes in the visual character can be evaluated.

The existing visual environment surrounding the Project site is topographically composed of a large, flat mesa area and the foothills and ridgelines of the San Ysidro Mountains. The large, flat mesa areas transition via the lower foothills into the San Ysidro Mountains. The hills and canyons among which the Project site is located provide some continuity between the mesa and the mountains. Due to the vast scale of these dominant geographical features, the Project site appears relatively small, encompassing a portion of the lowest hills at the base of the mountains and the edge of the mesa, particularly when viewed from the mesa west of the site.

Although an overall view encompassing the dominant topographic features generally dwarfs the on-ground elements such as vegetation, buildings, roads, and vehicles, these smaller details create diversity in the area, providing variety in form, color, texture and line. For example, the dirt roads and paths transecting the hills within the Project site and surrounding hillsides show some of the red, white, and light brown coloring of the underlying soil, but are not dominant elements. The texture of the land is predominantly smooth, although some smaller scale scattered patches of rough rock outcroppings are visible. The color and texture of the soil, however, generally is hidden

beneath vegetative cover. In the overall view, the forms of the existing vegetation are indistinct and not dominant but tend to blend together. Some patches of round, asymmetrical, short shrubs are scattered on the hillsides, interspersed with amorphous low-growing plants; low-growing grasses cover the flat, lower undeveloped areas of the mesa and foothills. Some taller, more densely spaced vegetation is growing near the Calpine power plant and in other patches on the mesa near the Project site.

Heavy industrial uses are sited immediately west-northwest and west of the Proposed Project, as shown on Figure 3. These are the Calpine and Vulcan facilities. The Calpine power plant on the lot abutting the northwestern portion of the Project site is dominated by large, geometric structures between approximately 26 feet and 130 feet high. These structures include exhaust stacks, water storage tanks, buildings, and ancillary equipment that are generally earth toned or metallic in color. The heat recovery steam generator(s), (RSGs) are 160 feet in height. An approximately 9-foot-tall earth-toned fence surrounds the power plant site. Although smaller in scale than the topography to the east, the power plant nonetheless is a dominant element in any views toward the Project site, due to the relatively large vertical scale of the power plant structures and their clearly engineered nature (see View 1 [Figure 12]), View 7 [Figure 15], and View 10 [Figure 16]). West of this is the smaller Pio Pico Energy Center, with similar but less dominant features (see View 5, Figure 14).

Immediately west-southwest of the Project is another heavy industrial site, the Vulcan Materials Plant (shown in Views 8 and 9 Figures 15 and 16, respectively), which has separate concrete and asphalt components on the site. The batching components within the Vulcan facility are structurally similar to the power plant structures, comprised of geometric towers, concrete processing equipment, and storage structures that range in color from yellow to muted gray. The equipment and structures are located within the center of the site, while the periphery is graveled and/or earthen to facilitate earth-moving vehicles. The only structures existing on the Project site are the tall SDG&E power lines with complex, geometric latticework. These structures are regularly spaced, providing a sparse but even and ordered texture. The lines within them are straight and are mostly vertical, with some horizontal and diagonal elements within the latticework providing a complex texture. These structures are dark and metallic but are not a dominant feature in the view.

These facilities add a dominant diverse note to an otherwise open view. The verticality of the power plant towers and structure massing, as well as uniform streetscaping in an area otherwise “natural” in habitat, are notably different in form, line and color from the hillsides.

The industrial areas further west also support street-trees and other landscaping. There is no dominant vegetation visible among the vegetation or between vegetative types, rather the lines within the vegetation are broken, diffused, simple, soft, amorphous and diverse.

The vegetation provides the dominant color in views of the mesa and mountains, and mostly includes tans, browns, and yellows for most of the year, and gray-green with some areas of color in the spring time or following rain. The vegetation on the slopes of the mountains transitions to taller, darker shrubs. Some smaller-scale patches of green, including very dark green, are also visible, particularly within the more formalized landscaping on developed properties, such as near the power plant. The muted colors of the on-site vegetation are light, and generally continuous

with the browns and tans of the vegetation in the natural hillsides and the lighter tans of the grassy flat areas of the mesa.

The industrial buildings dispersed across the flat portions of the mesa are interspersed with a large number and variety of vehicles, particularly within the auto auction yard. The industrial buildings on the mesa generally are low (less than three stories high), sprawling buildings surrounded by parking lots. Landscape planting and streetscape trees provide some dark green color that offsets the mostly white, gray, and neutral colored buildings. The natural vegetation in these areas is visually unobtrusive and has been replaced by industrial development and expansive graded areas where industrial development is proposed (see View 3, Figure 13, and View 6, Figure 14).

4.1.2 Visual Quality

Visual quality is evaluated by identifying the vividness, intactness and unity present in the viewshed. This approach to evaluating visual quality can help identify specific methods for mitigating adverse impacts that may occur as a result of a Project. The three criteria for evaluating visual quality can be defined as follows:

- *Unity* is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components in the landscape.
- *Intactness* is the visual integrity of the natural and man-made landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.
- *Vividness* is the visual power or memorability of landscape components as they combine in distinctive visual patterns.

The undeveloped areas within and surrounding the Project site have high visual unity, due to the visual coherence of the limited visual components (e.g., the low-growing vegetation). When combined with the structures and landscaping immediately abutting industrial facilities, however, high levels of unity and intactness are lost. The power plants and Vulcan batch plant provide vivid visual notes that vary from the natural landscape in color, scale and line. Their presence tends to emphasize the industrial lines and color of the transmission line route crossing the property where both are in the same view.

The visual unity of the industrial areas further west of the site is moderately high; although the buildings generally adhere to the local design guidelines and therefore are visually similar to each other, the trees and landscaped areas, where present, contrast with the buildings, parking lots, and vehicles.

These developed areas are not designed to integrate with the grassland areas, nor the mountains, and where the developed and undeveloped areas converge at the border of the Project site, the components visually contrast with each other, and diversity is higher. The coherence of these components, and therefore the visual unity, of the area is low to moderately low, depending on the viewer's location and which of the above elements are in his view.

The undeveloped areas in the vicinity generally exhibit moderate visual continuity, with moderate topographic diversity as the flat mesa areas transition into the foothills and canyons of the San Ysidro Mountains to the east with gradual changes in scale. Dirt roads and trails crossing the area can be highly visible. Some trees and shrubs are present, and tend to highlight the rolling, monotone nature of the grassy areas. Accordingly, there is moderate variation in line, form, color or texture. The mountains have high visual intactness; they are free from buildings or other developed aspects that would otherwise distract from their visual dominance. The power lines that extend through the Project site, as well as most other structures noted above, are tall when in the foreground of a view, but visually dwarfed by the dominant hills from most vantage points within the viewshed. The industrial uses west of Alta Road, though visually composed of diverse elements, are also highly intact; Otay Mesa has design guidelines that regulate the look and character of the buildings and landscape treatments. Though directly bordering each other, the distinct change from undeveloped to developed visual environments tends to heighten the visually intact character of each within itself. Overall, a moderate to moderately high level of intactness is assessed.

The expansive undeveloped grassland areas can be memorable as open space at the base of the San Ysidro Mountains. The San Ysidro Mountains and foothills are visually dominant and memorable. In contrast, the developed areas have low visual vividness; excluding the notable forms of the power plants, the buildings are neither unique nor memorable, and taken together they do not comprise a distinctive space. Generally, the openness of the landscape allows a viewer in many portions of the viewshed to observe these disparate elements at the same time. The visual combination of the low vividness of the developed areas, the moderate vividness of the grasslands, and the high vividness of the abutting mountain range results in a moderate level of vividness for the Project site.

Taken together, the low to moderately low unity, moderate to moderately high intactness, and moderate level of vividness, combine to suggest that the Project site has moderate visual quality.

4.2 Viewer Response

Viewer response is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by Project implementation.

Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. For the Proposed Project, viewer sensitivity has been identified based on the analysts' experience in similar settings and County planning documents (i.e., General Plan and EOMSP).

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of the view, the speed at which the viewer moves, and position of the viewer.

Viewer awareness: A viewer's response is also affected by the degree to which he/she is receptive to the visual details, character, and quality of the surround landscape. A viewer's ability to perceive the landscape is affected by his/her activity. A viewer on vacation in San Diego County would probably take pleasure in looking at the landscape, and an individual may be strongly attached to the view from his home, but a local County resident commuting to work may not "register" those same visual resources on a daily basis.

4.2.1 Viewer Groups and Sensitivity, Exposure and Awareness

4.2.1.1 Motorists

Existing viewers of the Proposed Project site/vicinity are mainly motorists on local streets and workers and visitors to local businesses, industrial operations, and nearby correctional/detention facilities. The existing and projected numbers of motorists on local roadway segments near the Project site are detailed in the Project's Traffic Impact Study (Darnell & Associates, Inc. 2017). The most traveled roadways within the Project viewshed include the east-west trending Otay Mesa Road and Siempre Viva Road, and the north-south trending Alta Road. Generally, the traffic volumes are lower on Otay Mesa Road and Siempre Viva Road near the Project site than along segments further west. Existing roadways such as Enrico Fermi Drive, Sanyo Avenue and Airway Road, located southeast of the Project site, are lesser traveled roads. Specific to roads with views toward the Project, the segment of Otay Mesa Road between Enrico Fermi Drive and Alta Road, the segment of Alta Road between Calzada de la Fuente and Otay Mesa Road, and Calzada de la Fuente, carry average daily traffic (ADT) of up to approximately 9,065, 7,913, and 1,196 respectively (Darnell & Associates, Inc. 2017).

Excluding the few residents driving toward their homes, or few recreational motorists driving toward the Otay Mountain Truck Trail (see discussion below for both viewer groups), motorists accessing the automobile/equipment yards, prisons, detention center, mining area, or construction projects in the vicinity are expected to be focused on getting to their destinations rather than driving these roads for aesthetic purposes. Especially for those driving to access their regular place of employment, viewers would already be conditioned to expect construction activities and large-scale ground disturbance as part of their existing daily view. Sensitivity to an additional construction project is anticipated to be relatively low.

Motorists' *sensitivity* overall is mixed. Motorists on roadways within the Project vicinity are likely to be regular visitors to the area with their attention primarily focused on their respective destinations. While motorists may be appreciative of the views available from these roadways – particularly to the east where views of the mountains are more pronounced – they generally are not seeking a recreational experience or scenic views while using these roadways and their sensitivity would be low to moderate. Recreational motorists on the Otay Mountain Truck Trail would have moderate to high sensitivity, as they are expected to be generally more sensitive to modifications to the existing setting, particularly any change from a more to less "natural" experience. Border patrol agents or maintenance workers along the SDG&E transmission facilities, while focused on the access road and (potentially) the views from area dirt roadways, are not be considered as having the same sensitivity as recreational motorists. Accordingly, sensitivity of existing viewers in the area is moderate to moderately high.

The *exposure* of existing motorists on local roadways depends on the roadway on which they are traveling, and in which direction. For example, motorists on roadways closest to the Project site, including Paseo de la Fuente, Alta Road, Enrico Fermi Drive and the eastern extent of Otay Mesa Road, potentially have high exposure when in the viewshed, on segments where easterly views are not obscured by existing structures, and when driving with views toward the Project; their exposure is moderately high. Existing local roadways southwest of the Project site extend between buildings and developed lots, and provide few views of the undeveloped areas within and near the Project impact footprint; motorists on these roads have low exposure to the Project.

Although drivers passing through the area are expected to note Project-related changes to the existing visual environment, their primary focus is expected to be on speed of travel, interaction with other drivers on the road, and reaching their destination. This, combined with both the relatively short duration of exposure time and the number of competing visual elements in the expansive viewshed, is expected to lessen the importance of specific view elements for this group of viewers. Speed and traffic conditions would comprise an element of distraction from passenger views as well, but it generally would be less than for the driver. In these cases, passengers within the vehicle could be more focused on and have a greater awareness of the surrounding viewscape. The *awareness* of motorists' on local roadways would be moderate.

Motorists using the Otay Mountain Truck Trail also would have moderate awareness of views that include the Project. While they may be aware of the available views, unless stopped at an overlook point they presumably would be focused on the rugged roadway. The reader is referred to additional discussion below under Recreationalists.

4.2.1.2 Recreationalists

There are no public parks in the vicinity of the Project site. The closest mapped recreational parks include the Lower Otay Lakes County Park, located approximately 2.3 miles northwest of the Project impact footprint, and the Otay County Open Space Preserve, located less than a mile northerly of the Project impact footprint. These two San Diego County facilities are located within the Otay River Valley. Due to their distance from the project site and intervening topography, these canyons do not provide views to the Project/.

Panoramic views of Otay Mesa are available from parts of Otay Mountain Truck Trail. The Otay Mountain Truck Trail is a graded, gravel-paved roadway used mainly by U.S. Border Patrol agents. Mountain bikers and off-road vehicle motorists also use this road. It provides access to and across the BLM land neighboring the Project impact footprint and the wildlife conservation area at Otay Mountain, designated as federally protected Wilderness Area. Recreational users of this road (motorists, bicyclists and hikers) have high *sensitivity*, as they generally are seeking a scenic recreational experience. As a result, they are expected to be sensitive to Proposed Project modifications to the existing setting, as well as, potentially, any change from a more to less “natural” experience within their sight lines.

While the speed of travel of recreationalists on the Otay Mountain Truck Trail often is slow, necessitated by the unpaved and winding condition of the road, viewer *exposure* from this roadway is low, due to the low number of users, the intervening topography which blocks many potential views to the Project, and the few overlook areas available on the roadway.

Hikers and bicyclists using the Otay Mountain Truck Trail would have moderate *awareness* of the surrounding area and the available views, including those that encompass the Project. These recreationalists would have a longer duration of time to view the surrounding area than motorists; however, because the surrounding area is a mix of undeveloped and developing areas with obvious large-scale construction activities, hikers and bicyclists also may not be highly aware of changes to the existing environment.

A multi-purpose trail is located along the north side of Calzada de la Fuente, turning north along the property boundary of the CCA Otay Mesa Detention Center northwest of the Project. Pedestrians, equestrians and bicyclists may use the trail, although a sidewalk is present along Calzada de la Fuente. These viewers, though low in number, could have a higher sensitivity to the visual environment, as they could be seeking a recreational experience. Nonetheless, such viewers, when present, are expected to be focused on the open, undeveloped areas north and east of the Project site. They would not be expected to look southerly for open space recreational views due to the presence of the existing power plant. As depicted on the EOMSP Land Use Plan, the trail heads northerly from Calzada de la Fuente to O'Neal Canyon, located at lower elevations than the mesa hills, and dropping down into the Otay River Valley to the northwest.

Similarly, dirt roads used primarily by off-road vehicle drivers leading toward Johnson Canyon are located over one mile west of the Alta Road/Calzada de la Fuente intersection (in the vicinity of the Harvest Road and Lone Star Road intersection). No formal trail is located here, and user numbers are unknown, but expected to be low. Their focus (besides vehicle management) would be expected to be on descent into Johnson Canyon, away from (and downslope from) the Proposed Project site. For vehicles exiting the canyon, these viewers would have a broad viewscape incorporating numerous built elements, including structures closer to them, as well as the intervening major industrial visual element of the power plant. Sensitivity of these potential viewers to the site, therefore, also would be low. Potential use of these tracks is not addressed in further detail.

4.2.1.3 Residents

As discussed above, several private residences are located within two miles of the Project impact footprint. Residential viewers are usually sensitive to changes in views from their homes as they are very familiar with these views and have the potential to view them for long periods.

Residential viewers are expected to have moderately high *sensitivity*, due to their familiarity with the area and their concern for the composition of the view from their homes. The highly varied nature of the surrounding environment surrounding these residences, composed of both undeveloped natural areas and dominant industrial areas between the site and these residential viewers, would reduce residential viewers' sensitivity to change.

Residents are expected to be extremely aware of changes associated with Proposed Project improvements. Additionally, since the surrounding area is a mix of developed and undeveloped areas, residential viewers may not have a high expectation for extensive views of undeveloped or highly vivid areas that would attract prolonged attention. Thus, residents' *awareness* is moderately high.

While the group of residents within the Project viewshed is small, these viewers have high *exposure* to views of the surrounding area due to their long-term, stationary views and would be aware of changes in their vicinity. Each of the residential properties within two miles of the Project impact footprint, however, would have obscured views toward the site that are either partially or entirely blocked by small hills, buildings, and/or vegetation.

Based on the EOMSP Land Use Plan, area identified for future for Rural Residential (20-acre lot) uses on the EOMSP is shown for the Project area, as well as small areas to the north and south. As such, it could be expected that a small number of potential future residential viewers could be located in the area identified. As shown on EIR Figure 2-1, *Proposed Specific Plan Amendment*, however, the Project would re-designate parcels within the impact footprint to a Mixed Industrial category, eliminating potential for residential lots following reclamation in this industrial part of the County. Other areas would be re-designated Conservation/Limited Use. In the northern area, additional land located between the Project and the existing detention center was granted in open space to the California Department of Fish and Wildlife in 2009, effectively eliminating potential for large-lot residential within the EOMSP area in this location. This area is also under the G Designator overlay zone, which applies Sensitive Resource Area regulations to further protect sensitive resources. In the south there are two small portions of future Rural Residential identified in locales immediately south of the Proposed Project and east of future U.S. Port of Entry near the border. Both of the areas are bordered on the east by identified Landfill Initiative and are located within Landfill Buffer Overlay. No homes are currently located in these areas, and no further discussion is provided under existing conditions.

4.2.1.4 Other Private Viewers

Views may be possible from the industrial facilities within Otay Mesa, especially from buildings and lots on the eastern edge of the developed areas. However, few of these buildings have windows, and views from these areas generally would be industrial in nature, including parking lots and sparse landscaping in the foreground. The viewers in this area are not considered sensitive and are not further included as a viewer group in this analysis.

5.0 VISUAL IMPACT ASSESSMENT

5.1 Guidelines for Determining Significance

The following significance guidelines are taken from the County 2007 Guidelines for Determining Significance and Report Format and Content Requirements, which guide the evaluation of whether a significant impact to visual resources would occur as a result of Project implementation. A Project would generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary. Conversely, if a Project does not propose any of the following, it would generally not be considered to have a significant effect on visual resources, absent specific evidence of such an effect.

1. The Project would introduce features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style,

setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.), or by being inconsistent with applicable design guidelines.

2. The Project would result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings.
3. The Project would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from:
 - a public road,
 - a trail within an adopted County or State trail system,
 - a scenic vista or highway, or
 - a recreational area.
4. The Project would not comply with applicable goals, policies or requirements of an applicable County Community Plan, Subregional Plan, or Historic District's Zoning.

Additionally, a Project may contribute to a significant adverse cumulative effect even if the Project itself does not cause a significant adverse impact. Thus, potential cumulative impacts also must be evaluated for the first three guidelines.

5.2 **Key View**

The criteria consulted for key view identification included the following considerations:

- Type of viewers and their sensitivity and exposure – simulations generally are prepared using views available to the public rather than privately available views due to access issues and the generally higher viewer exposure (a greater number of viewers makes the view more sensitive)
- Scenic status of local roadways and recreation areas where highly sensitive viewers may be present
- The amount of time (duration) and/or number of times observers are exposed to the view
- Breadth of the view – a more encompassing viewpoint generally provides a more realistic representation of commonly available views, and often includes multiple elements rather than focusing on a specific criterion
- Depth of the view – a short distance may provide detailed views of one element, while an increased distance both includes more elements and makes them appear smaller and less detailed, although visibility may be affected by atmospheric conditions such as fog, smog, etc.

Based on these considerations and consultation between the visual analysis team, the Project proponent, and County staff, the key view selected for simulation was from the intersection of Otay Mesa Road and Alta Road.

This view is representative of public views visible to motorists travelling eastbound on Otay Mesa Road and includes typical visual features of the undeveloped landscape, the transition from mesa to mountains, and scattered industrial development in the immediate vicinity of that transition. It demonstrates the quality and character of the existing setting as being an area in transition toward increased industrial development, but with substantial visual importance still allocated to the natural setting. This location represents a broad public vista and a readily available view due to the traffic stop at the intersection (Typical View 10, Figure 16). It would provide the clearest views to the site for the greatest number of viewers with the greatest range of visual expectations (e.g., motorists at this location could be associated with any number of activities and therefore have the widest level of sensitivity), and, because of the stop sign, also would provide for more than lateral exposure to the site. Assuming continuation of existing visual conditions and no construction of intervening uses under the EOMSP, it provides the full breadth of the view available to the site during the full 22 years of phased activity along these slopes. The Project-related change to this key view is depicted and discussed below in Figure 24, *Visual Simulation of View Eastward from Otay Mesa Road Terminus at Alta Road*, which simulates the Project following reclamation of the slopes up through complete closure. Changes to character and quality, viewer response and resulting visual impact are addressed in Sections 5.3 through 5.6, below.

Views considered but not selected include views from nearby trails to the east of the Project site due to the low number of viewers, restricted public access to some of the trails, and lack of dominance in view due to being below the viewer (Representative Views 1 and 2, Figure 12). The typical views from Paseo de la Fuente and Access Road (Typical Views 7 and 8, Figure 15) were not selected because of the relatively low number of viewers and the assumption that viewers from these vantage points would be employees of the Proposed Project, the power plant, or the batch plant. All of these viewers would be focused on getting to work at an industrial plant and would not be expected to be highly sensitive to Project visual effects. The typical view from the terminus of Airway Road (Typical View 11, Figure 17) also was not selected because, although a public roadway with a moderate number of viewers, views from this location are similar to those from the intersection Otay Mesa Road and Alta Road, but would have fewer viewers and be sited at a greater distance from the Project site. Other typical views presented in this report are indicative of the existing conditions of the areas surrounding the Project site and are not representative of views to the Project site itself; thus, these views were not chosen as key views based on the criteria above. Refer to Figure 11 for the location of these views on an aerial photograph.

5.3 Assessment of Visual Character and Quality

This section addresses the proposed changes the Project may cause to the visual character and quality of the visual environment of the Project site and the Project viewshed, and the potential response of viewers to those changes.

The Proposed Project would be located in the sparsely populated, partially undeveloped EOMSP Subarea 2, with primarily industrial uses prevalent to the west and south, and primarily undeveloped BLM land to the east and north. The Project site exists within a larger view that

encompasses the mesa, industrial and commercial development, and the foothills and peaks of the San Ysidro Mountains. The most important visual elements currently include the disturbed grasslands between development and the mountains, and the San Ysidro Mountains themselves. An additional notable element in the current view toward the Project is the Calpine Power Plant. Each of these elements is depicted in Views 1 through 11 in Figures 18 through 23. These figures provide the representative or typical views described above in Section 3.2 of this report, but also schematically represent the Project impact footprint for reader reference). Please note that view identifications match those in Section 3.2, above, for ease of reference. Specific view reference numbers have not been changed to account for deletion of existing conditions views that are not included within the impact discussion (e.g., due to not being within line-of-sight toward the Project, or where the view normally would not be seen by the general public such as into Vulcan Materials).

The more focused Project impact footprint would be located in a developing portion of the mesa where it meets the foothills of the San Ysidro Mountains. The visual character and quality of the area largely draws from the visually distinctive flat mesa areas and the rolling topography of the mountains, and the diverse developed areas which provide additional variety in form, color, texture and line.

During operation of the Proposed Project, earthmoving and aggregate processing equipment and the soil and rock exposed on the slopes and pads of the impact footprint would change the patterns of the visual environment on and near the Project site. The final configuration of slopes and pads post-reclamation also result in changes to the existing visual patterns.

Project operations would be located above grade and visible for a number of years. More detailed information on phasing is presented in Section 2.1 of this report. In summary:

- Phase 1, site preparation, would last one year, would be located in the approximately 16.1-acre northernmost portion of the Project, and would include preparation of pads to support the processing plant and provision of site utilities. The processing plant includes a primary crusher, a HMA plant, an aggregate processing plant, a concrete ready mix plant and a recycling plant (see Figure 5).
- Phase 2, extraction to natural grade elevation, would be broken into three sub-phases (moving north to south) south of Phase 1, with activities anticipated to take 5, 6, and 11 years, respectively, for a total of 22 years.
- Phase 3, open pit extraction, would be located in the area of Phase 2, but would excavate down to approximately 525 feet below grade in four north to south overlapping phases, with backfilling beginning as excavation is complete within areas. Timing of the four phases is anticipated to be 3, 16, 18 and 31± years each, for a total of approximately 68 years. Equipment shown at the south end of Figure 5, including the recycling plant and primary crusher, is portable and would be relocated to the quarry floor as excavation progresses below grade.

- Phase 4, IDEFO (landfill) would complete (subsurface) backfilling within that would largely overlap with Phase 3, and then extend for approximately another 16 years following cessation of extraction efforts for final revegetation and monitoring.

5.3.1 Assessment of Visual Character

As discussed above, the Project impact footprint is located in a developing portion of the mesa where it meets the foothills of the San Ysidro Mountains. The visual character and quality of the area largely draws from the visually distinctive flat mesa areas and the rolling topography of the mountains, and the diverse developed areas which provide additional variety in form, color, texture and line. During operation of the Proposed Project, earthmoving and aggregate processing equipment and the soil and rock exposed on the slopes and pads of the impact footprint would change the patterns of the visual environment on and near the Project site. The final configuration of slopes and pads post-reclamation also result in changes to the existing visual patterns. These changes would be visible from public vantage points, such as Otay Mesa Road, Siempre Viva Road, nearby recreational trails, and Otay Mountain Truck Trail.

The equipment, which would be light in color, and the exposed soil, which would be lighter in color than the surrounding existing vegetation, would be visually dominant elements due to their high contrast with the existing visual environment. These incompatible elements would be notable on the eastern edge of the developed mesa areas, such as the points represented in the photographs. The inconsistency would become less noticeable as the viewer moves farther west. Where seen between buildings and/or distinguishable in the distance, the elements would not contrast as strongly with the industrial nature of the developed areas.

Additionally, the operational equipment and exposed soil in any specific area would be visible temporarily – the slopes would be revegetated as each phase is complete. Post reclamation (see the simulation, Figure 24), the equipment would be removed. Slope revegetation would reduce the visual contrast of the exposed soil with the surrounding area. The steep, rocky slopes with benches would support sparser vegetation than the existing vegetation, however, and the slopes would appear more manufactured in configuration. In accordance with the design measures included in the Reclamation Plan, exposed rock outcroppings would be stained and the proposed vegetation would be planted, which would provide some softening and screening. These design measures would lessen the dominance of the newly formed slopes such that they would not be visibly incompatible with the existing visual character.

The Proposed Project operation would not introduce visually different large-scale elements into the visual environment. Just to the north of the mining area, an approximately 16-acre parcel would contain the processing facilities schematically depicted in Figure 5 and described in Section 2.1, *Project Components*, above. Structures would generally be between 30 and 45 feet in height, with the tallest structures being up to 75 feet in height. The tallest silos would be associated with the hot mix asphalt area (mid-point on the structural lot). Others would be located at the northern extent of the structures lot as part of the concrete ready mix facility adjacent to the office. Both of these locations would be in the portion of the Project due east of the power plant. For viewers from the northwest and west, these would be dwarfed (and to some extent shielded) by the mass and height of structures and stacks at the power plant, which exceed 130 feet in height. They also

would be consistent with equipment at the batch site. The Project would not extend higher than the horizon line as mountains comprise the background.

The introduction of the Project facilities would not add contrast to the existing view as it would be sited immediately adjacent to, and largely “behind” the existing power plant. There would be some increase in vertical lines related to the silos, but the overall forms would be similar, although lower, than those existing. The Proposed Project would not change the existing dominance of the power plant.

The slopes that would be created by the Proposed Project would not break the horizon line in views of the Project site and surrounding area from the west. Additionally, the Proposed Project would be visibly smaller the further west the viewer is sited. Generally, while the Proposed Project impacts ultimately would encompass all 110 acres, the final slope configuration would not be out of scale with the surrounding area.

The Otay Mountain Truck Trail, from which westward views are available, is closer to the Project site than viewpoints west of the site. Although the equipment and structures of the site would be visible, above-ground elements of the neighboring power plant would be larger. Additionally, the Project impact footprint is lower in elevation than the truck trail, and the mesa that comprises the background in westward views would remain visibly dominant and is a much larger scale element than the Proposed Project. Therefore, the scale of the Project elements during operation and after reclamation would not be incompatible with the existing visual character.

The Proposed Project would introduce new elements – structures and equipment during the operation of the Project, and new, steeper slopes with benches – into both eastward and westward existing and future public views; creating more diversity. During Project operation, the lightly colored equipment and exposed soil would comprise new and contrasting elements of diversity, which would be incompatible with the hills and mesa areas immediately abutting the site. They would be more compatible, however, with the industrial areas to the west. They also would not be permanent.

While the entire program would take a substantial period of time (approximately 120 years), the disturbance areas would move within the site, and largely would be focused on extraction that would actually extend downward (to a depth of approximately 525 below grade) or to fill of those areas that had already been excavated. This means that after a less than 25 years, much of the activity would be below grade. As described above, these activities would not take place within a pristine visual environment. The site contains existing mining activities, and other industrial uses such the adjacent power plant. Additional heavy industrial uses (by others), are planned for lots south of the power plant and east of Alta Road, thereby screening Project activities. As described in Section 2.1, above, closer to the mine, perimeter planting would screen Project activities from Calzada de la Fuente, and 100-foot wide vegetation swaths would surround on-site structures or processing equipment areas.

Also as described in Section 2.1 of this report (and schematically shown on Table 2-2 of the EIR, the fill activities begin only a few years into the excavation program. As noted at the beginning of this discussion, the operational equipment and exposed soil in any specific area would be visible temporarily – the slopes would be revegetated and exposed raw rock would be stained as each

phase is complete. (As described in Section 2.1, reclamation would commence upon completion of each phase, with final reclamation including final grading of final land forms, removal of plant equipment, application of topsoil resources, and revegetation.) Overall, although the length of the Project exceeds that of a residential or commercial construction period, it also varies from such projects in that: (1) it would occur on an already disturbed site containing similar activities as part of the existing condition, and (2) construction activities would move around the site, creating more focused disturbance areas at any specific point in time. These result in the Project being a continuation and focused intensification of the existing condition, but not substantially different. In addition, such industrial uses are anticipated in this part of the County and are planned to cover an even larger portion of the immediate vicinity than they currently do. In and of itself, the length of time of the Project does not result in incompatibility with the existing visual environment. That visual environment is expected to remain and expand, continuing to be consistent with the Project.

The slopes, steeper than the existing slopes and with horizontal benches, would be the most visible part of the Proposed Project. The northern 16.1-acre parcel generally would be shielded from eastward looking views by the existing power plant, and where visible, would visually merge with existing components of that facility. This is not true for the slopes extending to the south. Cross sections have been prepared to illustrate proposed modifications to existing landform/grades (see Figures 7 through 9d. Following excavation and backfill phases shown on those figures, slopes would transition into existing surrounding slopes; the height of each would be broken by benches, or flat areas a minimum of 6 feet wide, located every 25 vertical feet for structural purposes. The top of the slopes would not be silhouetted, and the slopes would be rounded as a transition into the existing hillsides to provide continuity with the surrounding foothills. The hillsides and mountains in the background would remain undisturbed and visible within views from the west.

Post-reclamation, the slopes, while still distinguishable, would visually reference and be compatible with surrounding areas due to the similar vegetation and the staining of exposed rock. The Project impact footprint on these modified slopes would consist of similar types of elements to those that currently compose undisturbed parts of the view (i.e., sloping landforms and somewhat sparse vegetation). The diversity post-reclamation, therefore, would not be incompatible with the existing visual environment.

The visibility of the potential changes from points to the west of the Project site are represented in Figure 24, a photosimulation that depicts the Proposed Project landform configurations after Project operation and reclamation is complete. The “existing conditions” photograph was taken from the intersection of Otay Mesa Road and Alta Road. The existing signs and end-of-road barriers at this terminus of Otay Mesa Road are not shown in the photograph, although these would be foreground elements for drivers at this intersection unless the road is extended eastward. The foreground of the photograph is comprised of undeveloped lots vegetated with grasses and low-lying shrubs and dirt access roads. The power plant, batch plant and other nearby industrial development are visible in the middle ground of the photograph. The foothills and mountains within the San Ysidro mountain range compose the background of this photograph.

Traffic volumes on the segment of Otay Mesa Road, approximately 0.5 mile west of the Project site, are approximately 9,065 ADT. Otay Mesa Road ends at this point, and Alta Road provides northerly access to the commercial businesses at Kuebler Ranch, the prison facilities, and the power plant, as well as uses south of the Calzada de la Fuente. The bulk of the traffic at this

intersection, therefore, presumably consists of workers at the power plant, batch plant, and prison facilities; visitors to the prisons; and patrons of the restaurant at Kuebler Ranch (which is currently closed). These motorists are not highly sensitive viewers, as they generally would not be recreational viewers, although their expectations of a scenic eastward view and knowledge of the area may be high due to their familiarity with the area.

The simulation (Figure 24) depicts the Proposed Project's topographic configurations after all phases of the extraction operation and reclamation have been completed, and prior to any other use being placed on the parcel as the site is completely empty. In reality, it shows the modified slopes as they would appear following completing of reclamation activities following completion of Phase 2, far earlier in the Project's timeline. The low (in elevation) activities associated with below-grade excavation, refill, final pad preparation and ultimate revegetation of the pad, would be smaller in scale than the modified slopes, and consistent with trucks and machinery currently visible on the mesa (e.g., at Vulcan). The Project slopes (as represented) would be visible as lighter-colored areas between the flat mesa in the foreground and the mountains in the background. These slopes would be vegetated with species similar to those found in the surrounding area, and exposed rock outcroppings would be stained. The steep and rocky proposed slopes would support sparser vegetation than the surrounding area, however, and therefore are represented in the simulation as less densely vegetated areas. The bench areas also would be visible, as they would reflect light differently from the slopes. The benches are shown in the simulation as lighter-colored horizontal lines.

The Proposed Project would change the profile of some of the foothills whose gentle slopes currently provide a visual transition between the hills and the mesa; however, the long-distance views of the flat mesa areas would not be interrupted by the Proposed Project landform configurations.

5.3.2 Assessment of Visual Quality

The existing vividness of the Project impact footprint area currently is comprised of the undulating, flowing lines of the mountains and the expanse of the mesa area, and the contrast existing between them. The Project is located where the lowest hills provide a transition between the flat mesa and the high mountains.

During Project operation and where visible, the anticipated lightly colored equipment, the exposed tan soil without vegetation, and darker volcanic rock (where excavation actually reaches volcanic deposits), would be contrasting, and could be strongly contrasting, elements that would interrupt the continuity of the flowing lines between the mesa and the mountains. These elements would draw the viewer's eye and provide a distracting element from the overall visual composition of the area but would not substantially affect the overall vividness (level of memorability) based on the much larger size of background foothills and mountains, and their unaffected open space above the grading footprint.

From the east, the Proposed Project would cut away some of the slopes visible in westward views, such as from Otay Mountain Truck Trail, but the elements would be below the viewer, not in the foreground, and would not interrupt the vividness of the view toward the west, or the dominant background mesa.

From the west, the unity of the area is created by the vegetation that provides visual transitions between the mesa and the mountains, and the repeating, undulating lines of the hills as they rise toward the taller mountains in the east. The contrasting elements that would be introduced by the Proposed Project operations would remove portions of the vegetation within the Project impact footprint, damaging the visual order of the area through the introduction of wide expanses of exposed soil and rock. These changes would be smaller in scale than the dominant elements that comprise the visual composition of that area, and therefore would not degrade the overall unity of the area. The site reclamation would soften the contrast created by the exposed soil and would ensure that the Proposed Project slopes would be more compatible with the existing vegetation on the hillsides and pads abutting the Project site. The relative scale of the Proposed Project also would ensure that the overall unity within the larger visual landscape is not degraded.

As reclamation occurs by phase, operational contrast in any specific Project locale would be lessened due to the staining and vegetation required under the Reclamation Plan, although the slopes would still be noticeable. The smaller scale of the Proposed Project elements in relation to the mountains and mesa that comprise the vivid elements of the overall view would ensure that the Proposed Project post-reclamation would not impact the overall vividness of the area. Additionally, the Proposed Project elements would not interrupt views of the largest, silhouetted mountains; these would continue to provide the dominant background in eastward views of the area.

5.4 Assessment of Viewer Response

Viewer sensitivity can be affected by the viewer's perception of the Project's appropriateness within a landscape. As the primary above-ground components of the Project (i.e., aggregate extraction and processing equipment) would be largely obscured in easterly views from locations west of the Project by the existing adjacent power plant and would be similar to (or smaller than) the power plant and batching plant structures in scale and design, and would continue earth moving activities already occurring at the batch plant, most motorists on nearby roadways would be expected to demonstrate low sensitivity to additional structures and grading proposed as part of the Project. Other viewers, such as individuals on the way home, recreationalists accessing or on the Otay Mountain Truck Trail, and perhaps visitors to the prison facilities, could be more sensitive to Project changes, due to their interest in retention of existing conditions and potentially greater levels of exposure. The resulting visual impact of the Proposed Project is a combination of the proposed changes combined with anticipated viewer response, as discussed below relative to specific guidelines.

The Proposed Project would be located in the sparsely populated, partially undeveloped EOMSP Subarea 2, with primarily industrial uses prevalent to the west and south, and primarily undeveloped BLM land to the east and north. The Project site exists within a larger view that encompasses the mesa, industrial and commercial development, and the foothills and peaks of the San Ysidro Mountains. The most important visual elements currently include the disturbed grasslands between development and the mountains, and the San Ysidro Mountains themselves. An additional notable element in the current view toward the Project is the power plant. Each of these important elements is clearly depicted in Typical View 10, Figures 17 and 22.

As described above, the Proposed Project operations overall would occur for approximately 120 years. During this time, extraction and reclamation would occur concurrently, and areas not yet disturbed would continue to support existing vegetation. As described in more detail below, however, the most visible Project elements would not be dominant in area views for the entire operational period, because the longest excavation period would be mining below grade. As a result, visual effects would be most visible during the 22-year period during which excavation into the slopes edging the mesa east of Paseo de la Fuente would occur as part of Phase 2 (see Figures 16a through 16c).

Beyond slope cuts, and as discussed above in Section 5.3.1, *Assessment of Visual Character*, extraction operations would include multiple visible elements, including equipment, stockpiles of materials, and exposed soil. Generally, the equipment would be composed of geometric forms, smooth, metallic textures, and bold, regular lines. The color of the structures could be white, light gray, or tan, and may draw the eye due to their contrast with the earth-tones of the surrounding landscape. They also may contrast with structures at the neighboring power plant, which are painted in earth-tones. During operation, equipment and exposed soil and slopes would be visible almost anywhere within the Project impact footprint, and equipment and proposed structures would be visible to varying degrees from the surrounding area.

Although mining equipment can be substantial in size, it would be movable in the location of active cut operations, and much of the more long-term sited equipment would be located in the northernmost portion of the property. The main group of equipment would be placed within the northern pad area, just east of the power plant, and would be most visible from the eastern extents of Otay Mesa Road and Calzada de la Fuente, as well as Paseo de la Fuente, De la Fuente Court, and the Access Road southwest of the power plant, where they would be visually outweighed by the larger power plant facilities. They also may be visible from east-west trending roads further south, such as Siempre Viva, due to the flat topography of the mesa. These latter roads, however, are approximately one mile from the portion of the Project impact footprint where the equipment would be concentrated; consequently, the operational equipment would be smaller and less distinct in views from east-west trending roads south of Otay Mesa Road. This area would be largely obscured from some viewing locations to the west by the Calpine power plant and other built uses in this area. In the southern portion of the Project, the equipment would be subsurface and out of view of at-grade viewers for most of the Phase 3 activities.

The mechanical equipment would be interspersed with stockpiled materials extracted during Project operation. These stockpiles would be geometrically cone-shaped piles up to 35 feet high. The color of the exposed slope and pad areas where Project operation is ongoing also would be expected to vary from the weathered surface soil. This soil would be visible (particularly in areas not yet revegetated), and could contrast strongly with the vegetation and any visible red-toned topsoil in the surrounding areas.

In these areas of disturbance, the equipment, which could be light in color, and the exposed soil, which would be lighter in color than the surrounding existing vegetation, would constitute visually dominant elements due to their high contrast with the existing visual environment. These incompatible elements would be notable on the eastern edge of the developed mesa area. Following that anticipated 22-year Phase 2, equipment movement would still be visible during travel between the processing location and the recessed pit, and a possible conveyor belt extending from the

extraction area to the processing area at the north end, but actual mining activity and associated equipment in that area would be increasingly obscured as the pit grows deeper (ultimately up to 525 feet below surface). They would be more compatible, however, with the industrial areas to the west. They also would not be permanent.

The new visual elements associated with the Proposed Project – structures and equipment during the operation of the Project and new, steeper slopes with benches – into existing and future public views; creating more diversity. These elements would become less noticeable as the viewer moves farther west. Where seen between buildings and/or distinguishable in the distance, the elements would not contrast as strongly with the industrial nature of the developed areas.

The revegetation of manufactured slopes and staining of contrasting cut rock, and (ultimately) the reclamation of flat pad areas would occur as part of Project design and would be implemented during ongoing operations. As described above, the operational equipment and exposed soil in any specific area would not be visible for the life of the Project. As each phase is completed, the exposed slopes would be seeded according to the Reclamation Plan. In other words, Phase 2a would be vegetated as Phase 2b begins, with Phase 2a raw soil being visible for the anticipated five years of mining. As Phase 2b mining occurs, the Phase 2a revegetation would take hold, softening the effect of Phase 2a mining. Similarly, as the anticipated six-year Phase 2b is concluded, seeding would occur in that location, etc. The plant palette outlined in the Reclamation Plan is drawn from existing vegetation communities on the Project site and in the surrounding hillsides. The revegetation of the Project slopes during operation (after each phase) and of the pads post operation would somewhat soften the contrast of color between the exposed soil and the surrounding hills.

Mined slopes would transition into existing surrounding slopes; the height of each would be broken by benches, or flat areas a minimum of 6 feet wide, located every 25 vertical feet for structural purposes. Because the top of Project elevations would be below elevations to the north and east, the top of Project-modified slopes would not be silhouetted. Slopes would be rounded as a transition into the existing hillsides at the base and rim of cut as feasible to provide continuity with the surrounding foothills. The hillsides and mountains in the background would remain undisturbed and visible within views from the west.

5.5 Determination of Significance

5.5.1 Guideline 1: Detract from or contrast with existing visual character and/or quality by conflicting with important visual elements or the quality of the area, or by being inconsistent with applicable design guidelines

Visual Character During Operations

Figure 3 is an aerial that shows the impact footprint within the overall Project boundary, and highlights sample topographic elevations. The figure is included to provide general context regarding the portions of slopes modified relative to the unmodified and increasingly higher slopes to the east. The Proposed Project operation would not introduce visually different large-scale structural or equipment elements into the visual environment. Structures would generally be between 30 and 45 feet in height, with the tallest structures being silos associated with the ready

mix plant and the HMA plant, both of which would be up to 75 feet in height. The tallest silos would be associated with the HMA area (mid-point on the processing plant lot). Others would be located at the northern extent of the processing plant lot as part of the concrete ready mix facility adjacent to the office. Both of these locations would be in the portion of the Project due east of the power plant. The existing ground elevation in this area ranges from approximately 665 to 700 feet amsl, and the processing plant pad elevation would be approximately 676 to 690, approximately 20 feet lower than the terminus of Calzada de la Fuente at the northeast end of the Calpine power plant.

Views from the East and South

There are no existing paved public roads south of the site within the United States—all roads are dirt. Use of these roads is therefore generally expected to be extremely low, and often consisting of individuals focused on work rather than recreation (e.g., border patrol agents, or SDG&E maintenance personnel).

Westward views are available from the Otay Mountain Truck Trail, located east of the Project site. Although the equipment of the site would be visible, above-ground elements of the neighboring power plant would be larger. As described above, the Project equipment and buildings could be up to 75 feet in height, which would be partially screened from eastern viewpoints above the Project, and visually minimized both by the larger Calpine facility immediately to the west and by visual foreshortening that occurs when looking down upon a feature rather than seeing it at grade. Additionally, the open space areas preserved by the Project would intervene between the Project impact footprint and the viewer, and the mesa that comprises the background in westward views would remain visibly dominant and is a much larger scale element than the Proposed Project. Therefore, the scale of the Project elements would not be incompatible with the existing visual character from eastern vantage points.

Visual effects would be minimized from the south due to the slope cut extending north-south. Viewers located on dirt roads/trails to the south who look down upon the project could notice an increasingly more abrupt cut to the slope as excavation continues than occurs with the more gentle grade of the natural slope, but the impact would be in line of sight, and therefore not as noticeable as when viewed “face on” or perpendicularly. Limited potential future views associated with a potential residential lot outside of Project boundaries and within area identified for Rural Residential in the EOMSP could be located south of the Project during operations. The size of the lots (anticipated to be 20 acres per the EOMSP definition of Rural Residential lot size) would result in only one lot anticipated in this southern area and would allow the purchaser to orient the residence as desired.

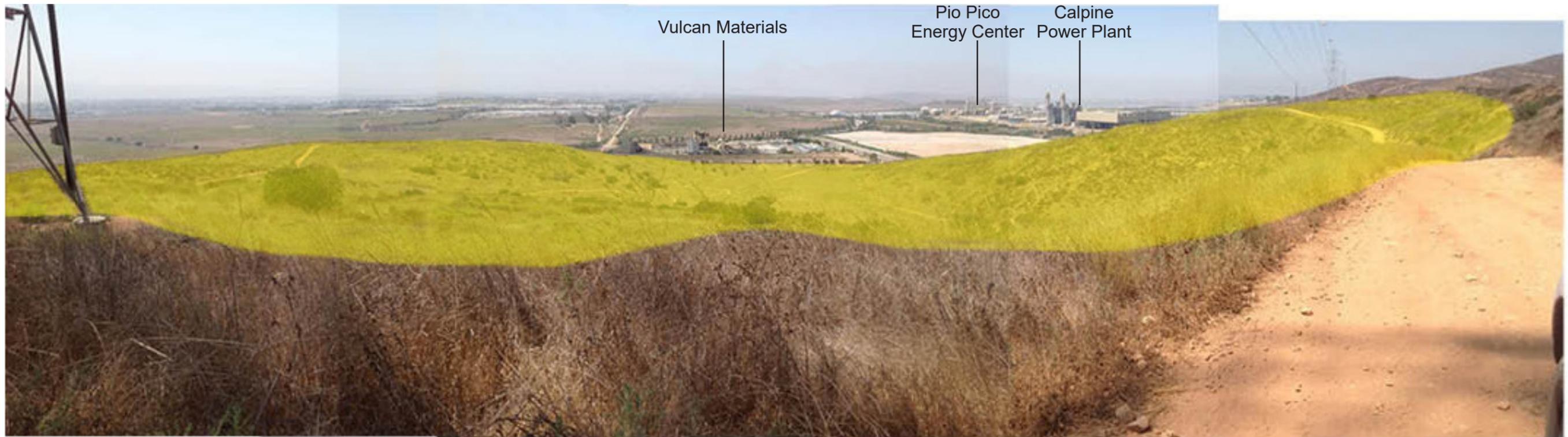
Views toward the Project footprint from the east are provided in Figure 18, *Representative Views A with Project Footprint*. The Proposed Project impact footprint (approximately 110 acres in all) is delineated on each photograph by a yellow dashed line or shaded area, except where the edge of the impact area would be obscured by topography or vegetation. No physical change would occur to the remainder of the 438-acre Project site, approximately 329 acres, would be placed in biological preserve prior to aggregate recovery operations.

View 1 is from the dirt access road abutting the more southerly portion of the Project. It represents a future closest view to the Project from an area crossed by dirt paths and access roads, including to the SDG&E transmission lines/towers and by current ORV activity. It also represents the worst-case view of greatest impact as the longest period of active mining (either through cutting into the slope or excavating below grade) would be visible, as would the immediately adjacent highest cut slope. The extent of the north-south cut along these western foothills could be most visible. The area highlighted on Figure 18 shows area that would be cut away.

The slopes westerly of, or in “front” of, the viewer would be mined and subject to Project impacts; and areas upslope from the 800 amsl elevation line would be retained in open space. The slopes generally west of the transmission line access road would be cut away to the approximate grade of other mesa heavy industrial uses (e.g., the existing visible Vulcan Plant, Calpine and Pio Pico power plants). Graded and disturbed area (similar to that currently part of the Vulcan Materials plant and adjacent uses) would extend easterly toward the view point, and some of the industrial features associated with the existing facilities would become more visible as the intervening slopes would be removed. Moving and visible excavation equipment also would be located on site (most visible to viewers farther east during initial cuts downward from this point), with potential views into the pit as excavation moves below grade in Phase 3. As the hill is cut away toward the more northern portion of the Project, the processing area of the site (again, similar to Vulcan in nature) would become visible just east of the Calpine power plant, in an area currently obscured by topography, and the Calpine eastern boundary could also become more visible, depending on the viewer’s location.

As noted, the area upslope from the vicinity of the access road/800 amsl topographic line would be retained in open space. This would be part of the approximately 329-acre Project fenced preserve area. Proximate views to the disturbance area are expected to be restricted to the immediate area of the access road, and to be viewed by a very restricted number of viewers (e.g., SDG&E maintenance personnel). This is because so many of the dirt trails and roads in these hills are blocked from westerly access, and much of the adjacent property would be placed into permanent, fenced, open space, with no access by the general public if the Project is approved. For viewers located on roads and trails east of the open space, westerly views toward the Project would be either blocked by intervening topography or would generally look over the Project to the valley floor due to their higher elevation combined with horizontal distance from the Project (i.e., the viewer would be unable to physically look down onto the site from an adjacent ridge line when they are set back from the impact footprint). Where visible, transmission towers would continue to provide vertical elements rising above the ground surface at the edge of disturbance, and any visible build or natural mesa elements would continue to be so. Visual impacts would be less than significant due to the very restricted number of viewers from this or similar viewpoints east of the Project.

View 2 (Figure 18) was taken from the Otay Mountain Truck Trail. When this photograph was taken in 2005, access into the hills could be gained from Alta Road to points east. As shown on Figure 11, most of the mountainous area to the north and east of the viewpoint does not have visibility to the site. The Project impact footprint is visible from three areas along this road; View 2 represents an encompassing view from the road to the site and more distant westerly landscape elements. The photograph illustrates a portion of the Project proposed for permanent biological preserve (the hillside on the left of the picture and the draw down toward the mesa), just north of



View 1: View westward from Project slopes. (2017)



View 2: View westward from Otay Mountain Truck Trail. (2005)

Representative Views A with Project Footprint

OTAY HILLS VISUAL/COMMUNITY CHARACTER ANALYSIS