APPENDIX B

Visual Resources Report

DRAFT

Visual Resources Report for the Campo Wind Project

with Boulder Brush Facilities

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County of San Diego

Planning and Development Services

PDS2016-SP-16-002

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
Tribe	Campo Band of Diegueño Mission Indians
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
County	County of San Diego
I	Interstate
kV	kilovolt
LCU	Landscape Character Unit
MW	megawatt
Project	Campo Wind Project with Boulder Brush Facilities
Reservation	Campo Indian Reservation
SR	State Route

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1 INTRODUCTION

1.1 Purpose of the Visual Resources Report

This Visual Resources Report discusses potential impacts to visual resources resulting from implementation of the Campo Wind Project with Boulder Brush Facilities (Project). The analysis is based on the review of existing resources; applicable laws, regulations, guidelines, and the location and physical characteristics of Project components.

Although the County of San Diego (County) as Lead Agency is analyzing the Project as a single project, the County's land use jurisdiction for the Project is limited to the portions of the Project Site that are on private lands (Boulder Brush Facilities). The Bureau of Indian Affairs (BIA) has jurisdiction over the Campo Wind Project on the Campo Band of Diegueno Mission Indians Reservation (Reservation) and has prepared an Environmental Impact Statement (EIS) to evaluate the impacts of the Project under the National Environmental Policy Act (NEPA). This analysis relies on the analysis in the EIS and summarizes it where appropriate.

1.2 Key Issues

Adverse effects typically associated with development include the loss of natural vegetation, removal of natural features with aesthetic value, modification of terrain (e.g., alteration of topography through grading), and/or the introduction of contrasting elements within the existing landscape setting. The loss or degradation of significant visual features or views and the introduction of features that would significantly contrast with the visual character of an area or with the existing elements of form, line, color, or texture can be considered significant adverse visual effects. The effects and elements of the Project that could potentially result in significant visual quality impacts include the following:

Campo Wind Facilities

- Introduction of 60 wind turbines, a collector substation, an O&M facility, meteorological (MET) towers, a temporary laydown yard, a temporary batch plant and an approximately 5 mile-long segment of an approximately 8 mile-long overhead 230 kilovolt (kV) generator tie (gen-tie) line supported by approximately 42 steel poles (up to 150 feet tall each) on primarily undeveloped lands. These components and others including access roads would be located north and south of Interstate 8 (I-8) within the Campo Corridor.
- Visibility of 586-foot-tall (as measured from ground to blade-tip at its highest point) wind turbines, gen-tie line, and other Project components from I-8, Old Highway 80, SR-94 and local roads, On-Reservation residents, Off-Reservation residents in the Boulevard and Campo areas, trails and state and local scenic highways. I-8 is an eligible state scenic

highway from SR-67 to the eastern San Diego County border and SR-94 is an eligible state scenic highway from SR-125 east to I-8 near Jacumba. Within the Project Vicinity, I-8, SR-94, and Old Highway 80 are included within the County Scenic Highway System.

- Contrasts in scale, mass, form, color, and movement between Project wind turbines, wind turbines on the Tule Wind Project site and Kumeyaay Wind turbines atop the Tecate Divide, rural residential development, and primarily undeveloped hill and valley terrain in the Boulevard, Campo, and On-Reservation areas.
- Wind turbine lighting required by the Federal Aviation Administration (FAA).

Boulder Brush Facilities

- Introduction of an approximately 3.5-mile-long segment of the approximately 8-mile-long overhead 230 kV gen-tie line supported by approximately 32 steel poles (up to 150 feet tall each), a high-voltage substation, a 500 kV switchyard, a paved access road (up to 30 feet in width) to the high-voltage substation and switchyard from the Boulder Brush Facilities site entrance, and gen-tie line pole access roads (approximately 16 feet wide and decomposed granite). An approximately 1-mile off-site segment of Ribbonwood Road from the Opalocka Road/Ribbonwood Road intersection to the Boulder Brush Facilities site entrance off Ribbonwood Road would also be improved. This existing, unpaved roadway segment ranges from 12 feet wide to 40 feet wide and would be widened up to 30 feet and paved. These Project components would be located on private lands located north of I-8 in the Boulevard Subregional Group Area and McCain Valley.

1.3 Principal Viewpoints to be Covered

Principal viewpoints to be covered in this analysis consist of off-site public viewing locations such as I-8, SR-94 and other local roads. More specifically, principal viewpoints used to assess the potential visual changes associated with the Project were established at locations including I-8 (eastbound and westbound), SR-94 (eastbound and westbound), Church Road, Tierra del Sol Road, Tierra Real Lane, and Ribbonwood Road. Of the twelve viewpoints identified and analyzed in this visual resources report, nine (KOP 1 through 9) are focused on elements of the Campo Wind Facilities. The remaining three viewpoints (i.e., KOPs 10, 11, and 12) were established on I-8, Opalocka Road, and McCain Valley Road and focus on the Boulder Brush Facilities.

2 PROJECT DESCRIPTION

The Project consists of both the Campo Wind Facilities that would be located on land leased (Campo Lease) from the Campo Band of Diegueno Mission Indians (Tribe) within the Reservation Boundary and the Boulder Brush Facilities that would be located on adjacent land leased from a private landowner within the Boulder Brush Boundary (Private Lease). Collectively, the entire land within both Reservation Boundary and Boulder Brush Boundary comprise the Project Area (see Figure 1, Project Location). Throughout this document, the term "On-Reservation" refers to anything within the Reservation Boundary while the term "Off-Reservation" refers to anything outside of the Reservation Boundary.

The Campo Wind Facilities, which would consist of 60 wind turbines and associated infrastructure, would be located within a corridor of approximately 2,200 acres of land (Campo Corridor) within the approximately 16,000 acres of Reservation land inside the Reservation Boundary. The Boulder Brush Facilities, which would consist of a portion of the Project generation transmission line and related facilities to connect energy generated by the Project to the existing San Diego Gas & Electric Company (SDG&E) Sunrise Powerlink, would be located within a corridor of approximately 320 acres of land (Boulder Brush Corridor) within the approximately 2,000 acres of Private Lease land inside the Boulder Brush Boundary adjacent to the northeast portion of the Reservation. These Private Lease lands are under the land use and permitting jurisdiction of the County. Collectively, the Campo Corridor and the Boulder Brush Corridor comprise the approximately 2,520-acre Project Site. Project disturbances associated with the construction of the Campo Wind Facilities within the Campo Corridor are expected to be approximately 800 acres while Project disturbances associated with the construction of the Boulder Brush Facilities within the Boulder Brush Corridor are expected to be approximately 130 acres.

The layout of Project components within the Reservation Boundary and within the Boulder Brush Boundary is depicted on Figure 2, Project Layout.

The Boulder Brush Facilities would require a Major Use Permit (MUP) from the County.

The BIA is the lead agency for the Project under the NEPA and has prepared an EIS for the Project.

The Project as a whole would consist of the development, financing, construction, operation, maintenance and, ultimately the decommissioning of a renewable wind energy generation project consisting of 60 wind turbines, three permanent MET towers, six temporary MET towers, a temporary concrete batch plant for use during construction, a temporary equipment staging and parking area for use during construction, an operations and maintenance (O&M) facility, water collection and septic systems, access roads, an electrical collection and communications system, an approximately 8.5-mile-long generation transmission (gen-tie) line, a collector substation, a

high-voltage substation, and a switchyard to interconnect the Project to the existing SDG&E Sunrise Powerlink. The Project is anticipated to operate for the term of the Campo Lease and any renewal extension (approximately 30 years, at minimum), after which it would be decommissioned, except for the SDG&E-owned and operated switchyard and connection lines to Sunrise Powerlink, which would not be decommissioned.

The Project Area is located in southeastern San Diego County, approximately 60 miles east of San Diego, California, near the unincorporated communities of Campo, Boulevard, and Live Oak Springs. Figure 1 depicts the regional location of the Project Site, and includes a vicinity map of the Reservation Boundary and Boulder Brush Boundary. The Reservation includes lands both north and south of I-8 along the Tecate Divide, extending from the southern boundary of the Manzanita Indian Reservation to the north, and south to approximately 0.25 miles north of the U.S. international border with Mexico. Land within the Boulder Brush Boundary is located north of I-8 and encompasses the northernmost extent of the Boulevard Subregional Group Area, a community-level planning area within the larger Mountain Empire Subregional Plan Area that itself is a regional component of the County General Plan.

2.1 Project Components

This section provides an overview of the Project components. Further description of Project components is provided in Chapter 1, Project Description, Location, and Environmental Setting, of the Environmental Impact Report (EIR).

2.1.1 Boulder Brush Facilities

The Boulder Brush Facilities include the following primary components:

- An approximately 3.5-mile-long segment of the approximately 8-mile-long overhead 230 kV gen-tie line supported by approximately 32 non-specular tubular steel poles. Each gen-tie pole would be up to 150 feet tall and would be light grey in color (see Figure 3, Transmission Line Pole Structure Example).
- A fenced, high-voltage substation consisting of transformers, bays, and other equipment and facilities including a control house and a parking area for utility vehicles (see Figure 4, Typical Substation Design). In addition, three 10,000-gallon water tanks dedicated for firefighting purposes would be installed near the high-voltage substation. Most high-voltage substation equipment would feature a low-reflectivity and would be grey in color. Outdoor nighttime lighting at the high-voltage substation would be hooded, directed downward, and turned off when not required. Some of the perimeter lighting would remain on all night for safety purposes, though shielded and directed towards accesses or signs.

- A fenced 500 kV switchyard (located adjacent to the proposed high-voltage substation) and connection to the existing SDG&E Sunrise Powerlink. The switchyard would feature a ring bus design with three 500 kV breakers, a control house, and a fenced-in graveled area. Switchyard components would feature a low-reflectivity and would be grey in color. Figure 5, Switchyard Layout, shows a typical switchyard layout.
- A connection to the existing SDG&E Sunrise Powerlink that would be made through incoming and outgoing connection lines The connection would be constructed by SDG&E and would effectively route the power through the ring bus to the existing transmission line with the support of several 150-foot high tubular steel poles. Figure 6, SDG&E Connection Schematic, depicts the proposed connection from the switchyard to the existing Sunrise Powerlink.
- A paved access road (up to 30 feet in width) to the high-voltage substation and switchyard from the Boulder Brush Facilities site entrance, and gen-tie line pole access roads (approximately16 feet wide and surfaced with decomposed granite). An approximately 1-mile off-site segment of Ribbonwood Road from the Opalocka Road/Ribbonwood Road intersection to the Boulder Brush Facilities site entrance off Ribbonwood Road would also be widened up to 30 feet (where necessary) and paved.

2.1.2 Campo Wind Facilities

The Campo Wind Facilities include the following primary components:

- Up to 60 wind turbines, rated up to 4.2 MW in nameplate capacity per turbine and constructed of multiple tubular steel tower sections. All proposed turbines would be three-bladed, upwind, horizontal-axis wind turbines. The total height of wind turbines (highest point) would be approximately 586 feet high and wind turbines would be white in color. An estimated 60% to 65% of the turbines would be designated for lighting with medium-intensity, dual red or white synchronously flashing lights for nighttime use and daytime use, if needed.
- An approximately 5-mile-long segment of the gen-tie line supported by tubular steel and light grey support poles, fiber-optic ground wire attachment for lightning protection and internal communications. This segment (i.e., the On-Reservation gen-tie line) would be constructed from the collector substation to the Reservation Boundary and includes the crossing of I-8. The height of the steel poles would be up to a maximum of 150 feet.
- A collector substation enclosed by an 8-foot-tall chain-link fence with locked gates. Transformer, switching and other equipment at the substation would be grey in color and the tallest equipment would be up to approximately 25 feet tall. Provided for safety and

security purposes, motion sensitive lighting at the collector substation would be hooded and directed downward.

- An O&M facility that would include a parking and equipment storage area and a pre-engineered structure. Permanent outdoor nighttime lighting for operations would be kept to the minimum required for security and safety, and all lighting would be hooded, directed downward, and turned off when not required. Security fencing (6 feet tall) would be installed around the perimeter of the O&M facility. As shown on Figure 2, the O&M facility would be located within one of the two temporary central staging areas within the Campo Corridor on the Reservation (see Figure 2).
- Up to three permanent MET towers to monitor and record weather conditions and to perform power performance testing of the wind turbines. The height of the un-guyed, self-supporting, lattice structures MET towers would be approximately 374 feet. Towers would be enclosed within an approximately 50-foot by 50-foot perimeter area enclosed by an 8-foot-tall chain-link fence with locked gates. Lighting for the MET towers would consist of marker lighting pursuant to FAA requirements, and would employ strobed, minimum-intensity lights.
- Up to six, temporary MET towers would also be erected within the Campo Corridor atop targeted wind turbine locations (after site grading but prior to the erection of those wind turbines) to collect turbine site-specific wind data. The approximately 374-feet high, guyed-lattice towers MET towers would be equipped with applicable FAA-compliant marking and lighting. Temporary MET towers would be removed prior to the erection of the turbines and upon collecting sufficient, site-specific wind data.
- Existing network of On-Reservation permanent roads would be used to access the Campo Wind Facilities during construction (were feasible). Additional roads would be constructed on the Reservation to provide access and circulation (see Figure 7). Approximately 15 miles of existing roads would need to be temporarily widened during construction and would be reduced to approximately 24 feet after construction.
- Temporary facilities including an approximately 3.7-acre concrete batch plant and temporary staging areas. The concrete batch plant would consist of a mixing plant, areas for aggregate and sand stockpiles, driveways, truck load-out area, and turnaround(s). The batch plant would be located just off an access road (see Figure 2). Two central temporary staging areas within the Campo Corridor on the Reservation would be established for construction-management facilities, materials and equipment storage, and worker parking. Lastly, each turbine would require a 100 foot by 200 foot temporary staging area for the assembly of the turbine components and to erect each turbine.

2.2 Project Construction

Construction of the Project is anticipated to occur over approximately 14 months. Construction equipment would consist of standard construction equipment such as graders, bulldozers, excavators, trenchers, backhoes, cranes, forklifts, delivery trucks (including concrete), semi-trucks, pick-up trucks, and sport utility vehicles. Campo Wind Facilities construction would generally occur within the hours of 7:00 a.m. to 7:00 p.m. Some delivery activity at nighttime to accommodate requirements by California Department of Transportation (Caltrans) and/or the California Highway Patrol (CHP) is expected. When activities on the Reservation must occur at night, all Project lighting (e.g., staging areas, equipment storage sites, roadway) would be directed downward and away from natural vegetation communities. Boulder Brush Facilities construction activities would occur during the County's allowable hours of operation (i.e., 7:00 a.m. to 7:00 p.m.), 6 days per week (Monday through Saturday), but may involve extended hours, as needed, to complete certain construction activities and/or during emergencies or as approved by the County.

2.3 Operations and Maintenance

The Campo Wind Facilities would be operated by Terra-Gen Development Company LLC (Terra-Gen or Developer) and the Boulder Brush Facilities would be operated by the Boulder Brush Developer in accordance with an operating plan, which would be tailored to meet the requirements of all Project agreements, permitting requirements, and prudent industry practices. All turbines, Electrical Collection and Communication System cables, substations, and transmission lines would be operated in a safe manner according to standard industry procedures. The Developer and the turbine supplier would control, monitor, operate, and maintain the Campo Wind Facilities by means of a SCADA system and regularly scheduled on-site inspections. Approximately 10 to 12 O&M staff would be employed at a time throughout the life of Project. Hours of operation would be from 7:00 a.m. to 4:00 p.m. with at least one on-call emergency staff at all times. Major holidays would lessen staff to only three full-time personnel.

Gen-tie line and substation inspections would occur weekly and consists of visual inspection of batteries, charger, backup generator breaker, etc. A line patrol would be conducted monthly with binoculars for the first year. After the first year of the line and substation install, all fasteners and equipment would be re-torqued. After the first year, re-torque would be conducted approximately every 5 years.

2.4 Land Use Designations and Zoning

The Boulder Brush Boundary is located within the Boulevard Subregional Planning Area, which is part of the larger Mountain Empire Subregional Plan Area. The Boulevard Subregional Planning

Area land use map (County of San Diego 2017a) identifies the Land Use Designation as Rural Lands 80 (RL-80), which establishes a maximum density of 1 unit per 80 gross acres. The Boulder Brush Boundary is zoned General Rural (S92) which allows for residential uses, civic uses, essential services (fire protection and law enforcement services), and agricultural uses by right (County of San Diego 1999). See Figure 9, General Plan Land Use Designations and Zoning. Land within the Boulder Brush Boundary is recognized as being in an area with high wind resources (see County's Wind Resources Map: Wind Energy Ordinance).

The Campo Land Use Plan Land Designation Map identifies the Campo Corridor as designated for Wilderness, Commercial, Residential, Industrial, and Civic uses. The Eastern San Diego County Resource Management Plan designates the Boulder Brush Boundary as part of the McCain Valley Recreation Management Zone.

2.5 Regulatory Framework

Federal

Federal Aviation Administration

FAA Advisory Circular 70/7460-1L with Change 2 states "any temporary or permanent structure, including all appurtenances, that exceeds an overall height of 200 feet above ground level (AGL) should be marked or lighted" (FAA 2016). The tallest structures proposed on the Project Site (wind turbines measured from base to blade tip) would be over 200 feet and therefore would require the installation of obstruction lighting atop wind turbine nacelles. Not all Project wind turbines would be lighted. Both temporary and permanent MET towers greater than 200 feet AGL would also be installed on the Reservation.

Chapter 13 of FAA Advisory Circular 70/7460-1L with Change 2 is dedicated to marking and lighting wind turbine farms. Wind turbine farms are defined as wind turbine developments containing three or more turbines of heights over 200 feet aboveground level. Chapter 13.5, Lighting Standards, contains the following general standards established for wind turbine farm lighting:

- In most cases, not all wind turbine units within a wind turbine farm need to be lighted. Obstruction lights should be placed along the perimeter of the wind turbine farm so that there are no unlit separations or gaps more than 1/2 statute mile (sm) (804 m). Wind turbines within a grid or cluster should not have an unlighted separation or gap of more than 1 sm (1.6 km) across the interior of a grid or cluster of turbines. (Night wind turbine obstruction lighting should consist of the preferred FAA L-864 aviation red flashing, strobe, or pulsed obstruction lights. Studies have shown that red lights provide the most conspicuity to pilots.

- Daytime lighting of wind turbine farms is not required.
- Light fixtures should be placed as high as possible on the turbine nacelle, so they are visible by a pilot approaching from any direction.
- For linear turbine configurations, lights should be placed on each turbine positioned at each end of the line or string of turbines. Lights should also be placed along the line of turbines so that there is no more than a 1/2-sm (2,640-foot (805-m)) gap between the lighted turbines. In the event the gap between lights on the last segment of turbines is significantly short, it may be appropriate to move the lights on the turbine string back toward the starting point to present a well-balanced string of lights. High concentrations of lights shall be avoided.

The following standards established in Chapter 13.6, Wind Turbines Above 499 Feet, are applicable to wind turbines above 499 feet but below 699 feet:

- In addition to the lighting standards established in Chapter 13.5, the top of the turbine's nacelle should be equipped with a second L-864 flashing red light.
- The two obstruction lights should be arranged horizontally, positioned on opposite sides of the nacelle, visible to a pilot approaching from any direction, and flash simultaneously. This lighting configuration ensures the turbines in this size category are always lighted.
- In the event one of the two obstruction lights fails, no light failure notification is required; however, the light should be restored to service as soon as possible.
- All turbines within this size category should be illuminated, regardless of their location within a wind turbine farm, and should be configured to flash simultaneously with the other turbines in the same farm. This requirement ensures the pilots operating at 500 feet AGL have sufficient warning that a wind turbine obstruction may be within their flight path.

The following standard established in Chapter 13.8, Lighting of Wind Turbines During Construction Phase, is applicable to the Campo Win Facilities:

- To ensure proper conspicuity of turbines at night during construction, all turbines should be lighted with temporary lighting once they reach a height of 200 feet (61 m) or greater until the permanent lighting configuration is turned on. As the structure's height continues to increase, the temporary lighting should be relocated to the structure's uppermost height. The temporary lighting may be turned off for short periods if they interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An L-810 steady burning red light shall be used to light the structure during the construction phase, if the permanent L-864 flashing-red lights are not in place. If power is not available, turbines should be lighted with a self-contained, solar-

powered, LED, steady-burning red light that meets the photometric requirements of an FAA L-810 lighting system. The lights should be positioned to ensure a pilot has an unobstructed view of at least one light at each level. Using a NOTAM (D) to justify not lighting the turbines until the entire project is completed is prohibited.

State

State regulations are applicable to the Boulder Brush Facilities that are proposed to be located on private land within the County. State regulations are not applicable to the Reservation.

California Scenic Highway System

Created by the California State Legislature in 1963, the California Scenic Highway Program includes highways designated by the California Department of Transportation (Caltrans) as scenic. The purpose of the program is to protect the scenic beauty of California highways and adjacent corridors through conservation and land use regulation. For a highway to be included in the program, it must first be nominated by the city or county where it is located (Caltrans 2008).

There are five officially designated scenic highways in San Diego County: State Route (SR) 163 (from the north to the south boundary of Balboa Park); SR-75 (from Imperial Beach city limits to Avenida del Sol in the city of Coronado, and the Coronado Bridge); SR-125 (from SR-94 to SR-8); SR-78 (from the west to east boundary of Anza-Borrego Desert State Park); and SR-52 (through Mission Trails Regional Park from near Santo Road to near Mast Boulevard) (Caltrans 2018).

There are no officially designated state scenic highways in the Project Vicinity. The Project Vicinity includes the Project Area (i.e., the land within both the Reservation Boundary and Boulder Brush Boundary) plus surrounding areas. The nearest scenic highway, I-8, is an eligible state scenic highway from SR-67 to the eastern San Diego County border (Caltrans 2018). I-8 bisects the Reservation at and to the east and west of the Tecate Divide for a distance of approximately 2.6 miles. At its closest location, I-8 is located approximately 1.3 miles southwest of the Boulder Brush Boundary (see Figure 1). Also, SR-94 is an eligible state scenic highway from SR-125 east to I-8 near Jacumba (Caltrans 2018). SR-94 bisects the central portion of the Reservation and at its closest location, SR-94 is located approximately 2.9 miles south of the Boulder Brush Boundary (see Figure 1).

California State Historic Routes

Old Highway 80 is a designated California State Historic Route. In 2006, the state legislature granted this designation in recognition of the highway's "outstanding natural, cultural, historic, and scenic qualities." This designation does not influence the "future planning or development of adjacent public and private properties" (Assembly Concurrent Resolution 123) (State of California Legislature 2006). South of I-8, Old Highway 80 traverses the Reservation east–west.

Local

Local regulations are applicable to the Boulder Brush Facilities. Local regulations are not applicable to the Reservation.

San Diego County General Plan

The San Diego County General Plan, through elements established to address the various issues related to planning and development, provides guidance for the protection of visual resources. Select policies within the Land Use Element, Mobility Element, and Conservation and Open Space Element of the General Plan (County of San Diego 2011a) address the protection of existing visual character and quality of areas and contain general direction regarding the minimization of adverse impacts to visual resources. Policies from the remaining elements of the San Diego County General Plan are not considered applicable since they do not concern the protection of visual resources.

The following goals and policies of the Land Use (LU), Mobility (M), and Conservation and Open Space (COS) Elements concern the preservation of visual and scenic resources (County of San Diego 2011a) and are applicable to the Project:

- **Goal LU-2: Maintenance of the County's Rural Character.** Conservation and enhancement of the unincorporated County's varied communities, rural setting, and character.
    - **Policy LU-2.8: Mitigation of Development Impacts.** Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, vibrations, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.
    - **Policy LU-2.9: Maintaining Rural Character.** Consider level of service criteria, in accordance with Policy M-2.1, to determine whether adding lanes to a Mobility Element road would adversely impact the rural character of a community or cause significant environmental impacts. In those instances, consider other options to mitigate LOS [level of service] where appropriate.
- **Goal LU-6: Development – Environmental Balance.** A built environment in balance with the natural environment, scarce resources, natural hazards, and the unique local character of individual communities.
    - **Policy LU-6.6: Integration of Natural Features into Project Design.** Require incorporation of natural features (including mature oaks, indigenous trees, and rock formations) into proposed development and require avoidance of sensitive environmental resources.

- **Policy LU-6.9: Development Conformance with Topography.** Require development to conform to the natural topography to limit grading; incorporate and not significantly alter the dominant physical characteristics of a site; and to utilize natural drainage and topography in conveying stormwater to the maximum extent practicable.
- **Policy LU-10.2: Development – Environmental Resource Relationship.** Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character, and avoid sensitive or intact environmental resources and hazard areas.
- **Policy LU-11.2: Compatibility with Community Character.** Require that commercial, office, and industrial development be located, scaled, and designed to be compatible with the unique character of the community.
- **Policy LU-12.4: Planning for Compatibility.** Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas. Require context sensitive Mobility Element road design that is compatible with community character and minimizes visual and environmental impacts; for Mobility Element roads identified in Table M-4, an LOS D or better may not be achieved.
- **Policy M-4.5: Context Sensitive Road Design.** Design and construct roads that are compatible with the local terrain and the uses, scale and pattern of the surrounding development. Provide wildlife crossings in road design and construction where it would minimize impacts in wildlife corridors.
- **Policy COS-11.1: Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.
- **Policy COS-11.2: Scenic Resource Connections**. Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.
- **Policy COS-11.3: Development Siting and Design.** Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:
  - Creative site planning;
  - Integration of natural features into the project;

- Appropriate scale, materials, and design to complement the surrounding natural landscape;
- Minimal disturbance of topography;
- Clustering of development so as to preserve a balance of open space vistas, natural features, and community character; and
- Creation of contiguous open space networks.

- **Policy COS-11.7: Underground Utilities.** Require new development to place utilities underground and encourage "undergrounding" in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.
- **Policy COS-12.1: Hillside and Ridgeline Development Density.** Protect undeveloped ridgelines and steep hillsides by maintaining semi-rural or rural designations on these areas.
- **Policy COS-12.2: Development Location on Ridges.** Require development to preserve the physical features by being located down and away from ridgelines so that structures are not silhouetted against the sky.
- **Policy COS-13.1: Restrict Light and Glare.** Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.
- **Policy COS-13.2: Palomar and Mount Laguna.** Minimize, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.

In addition to goals and policies, the General Plan Conservation and Open Space Element establishes a County Scenic Highway System that is composed of scenic corridors that includes County roads, state routes, and interstate freeways. Within the Project Vicinity, I-8, SR-94, and Old Highway 80 are included within the County Scenic Highway System (County of San Diego 2011a). While the County does not have established protection measures for lands within the viewshed of a County Scenic Highway System, consideration of scenic vistas in the County's guidelines for determining significance for visual resources includes focal or panoramic vistas from roads included in the County Scenic Highway System. Therefore, the County Scenic Highway System is relevant to the Project and is considered in this report.

Mountain Empire Subregional Plan

The Boulder Brush Corridor is located within the Mountain Empire Subregion of the County. The Mountain Empire Subregional Plan (County of San Diego 2011b) contains policies that concern the protection of visual resources and thus, are applicable to the Boulder Brush Facilities. The following goals, policies and recommendations established in the subregional plan are relevant to the Boulder Brush Facilities:

- **Land Use – General Goal (Policy and Recommendation 1):** The landforms of the Subregion are an important environmental resource that should be respected in new development. Hillside grading shall be minimized and designed to blend in with the existing natural contours.
- **Land Use – General Goal (Policy and Recommendation 2):** New industrial development should be clean, non-polluting, and complementary to a rural area.
- **Land Use – General Goal (Policy and Recommendation 5):** New industrial development should consider all views into the property from public streets, adjacent properties, and residences on nearby hills.
- **Conservation – Environmental Resources (Policy and Recommendation 4):** The dark night sky is a significant resource for the Subregion and appropriate steps shall be taken to preserve it.
- **Conservation – Environmental Resources (Policy and Recommendation 6):** Development shall not adversely affect the habitat of sensitive plant and wildlife species or those areas of significant scenic value.

The Mountain Empire Subregional Plan area does not have established design guidelines.

Boulevard Community Plan

The Mountain Empire Subregion is further separated into distinct community planning areas and lands within the Boulder Brush Boundary are located in the Boulevard Community Plan area (County of San Diego 2011c). Policies of the Boulevard Community Plan that concern visual resources and are relevant to the Boulder Brush Facilities including the following:

- **Policy LU 1.1.2:** Encourage development to protect the quality and quantity of ground and surface water resources, air quality, dark skies, visual resources, and low ambient noise levels, as well as retain and protect the existing natural and historic features characteristic of the community's landscape and natural environment.

- **Policy LU 1.1.3:** Encourage development to respectfully incorporate existing topography and landforms, watersheds, riparian areas, oaks, and other native vegetation and wildlife, ridgelines, historic and cultural resources, views, and sustainability design factors.
- **Policy LU 1.1.4:** Require commercial and public development along scenic and historic routes to apply designs standards that will blend the development in with the terrain and rustic south western nature of the community character, while keeping outdoor lighting to an absolute and well shielded minimum.
- **Policy LU 3.1.1:** Encourage development to preserve dark skies with reduced lighting and increased shielding requirements.
- **Policy LU 6.1.1:** Require commercial, industrial development and large-scale energy generation projects to mitigate adverse impacts to the rural community character, charm, quiet ambiance and life-style, or the natural resources, wildlife, and dark skies of Boulevard, if feasible, in accordance with the California Environmental Quality Act.
- **Policy LU 6.1.2:** Encourage commercial, industrial development and large scale energy generation projects to create and maintain adequate buffers between residential areas and incompatible activities that create heavy traffic, noise, infrasonic vibrations, lighting, odors, dust and unsightly views and impacts to groundwater quality and quantity.
- **Policy LU 6.1.3:** Encourage commercial, industrial development and large-scale energy generation projects to provide buffers from public roads, adjacent and surrounding properties and residences, recreational areas, and trails.

The Boulevard Community Plan area does not have established design guidelines.

Boulevard Community Trails and Pathways Plan

According to the Boulevard Community Trails and Pathways Plan (County of San Diego 2009a), a community pathway is proposed on Ribbonwood Road and a community trail is proposed on a private road that extends north of Ribbonwood Road to the east of the Reservation and north of I-8. South of I-8 there are four proposed community trails that traverse or border the Reservation. While these trails are proposed, they typically traverse private lands for which the County has yet to acquire public ROW to establish public use trails. The nearest community pathways and trails to the Reservation Boundary and Boulder Brush Boundary include:

- Proposed Ribbonwood Road Pathway (parallels Ribbonwood Road from I-8 north and is located east of the Reservation; approximately 2.2 miles in length)
- Proposed Ribbonwood Trail (extends from the terminus of the proposed Ribbonwood Road Pathway north across the Boulder Brush Boundary in the McCain Valley; approximately

4.4 miles in length and the Off-Reservation gen-tie line alignment would span the proposed trail alignment).

- Proposed San Diego & Arizona Eastern Railway Trail (parallels the San Diego & Arizona Eastern Railway ROW that is bordered by the Reservation; approximately 13 miles in length)
- Proposed Tierra Del Sol Trail (follows Tierra Del Sol Road and terminates the southeastern corner of the Reservation; approximately 4.8 miles in length)
- Proposed Shockey Truck Trail (parallels Tierra Del Sol Road which parallels the southern boundary of the Reservation; approximately 2.9 miles in length)
- Proposed Shockey Loop Trail (extends north and west from the Shockey Truck Trail across two areas of the Reservation; approximately 2.55 miles in length)

Campo/Lake Morena Community Trails and Pathways Plan

The nearest community pathway and trails identified in the Campo/Lake Morena Community Trails and Pathways Plan (County of San Diego 2009b) are located south of the I-8 and west of the Reservation. These pathways and trails include:

- Proposed San Diego & Arizona Eastern Road Trail;
- Proposed SR-94 Pathway;
- Proposed Shockey Truck Trail/San Diego & Arizona Eastern Railroad Connector Trail;
- Proposed Shockey Truck Trail Pathway; and
- Proposed Shockey Truck Trail.

San Diego Light Pollution Code

The Light Pollution Code was developed by the County's Department of Planning & Development Services and Department of Public Works in cooperation with lighting engineers, astronomers, and land use planners from San Diego Gas & Electric and Palomar and Mount Laguna Observatories, and local planning and sponsor groups to address and minimize the impact of new sources of light pollution on nighttime views.

For purposes of lighting requirements, the Light Pollution Code separates the unincorporated portion of San Diego County into two zones: Zone A and Zone B. Zone A includes all unincorporated lands located within a 15-mile radius of the Palomar or the Mount Laguna Observatories, and Zone B includes all areas not included in Zone A. Section 59.105 of the Light Pollution Code includes general lighting requirements applicable to all unincorporated lands in

San Diego County, and Section 59.106 includes shielding requirements per fixture by lighting type (i.e., outdoor lighting used for outdoor sales, eating areas, or advertisements (Class I); security lighting (Class II); and decorative lighting (Class III)) and according to location (Zone A or B).

The Light Pollution Code is not applicable to development on the Reservation. However, for full disclosure and with consideration of the Boulder Brush Facilities, the Mount Laguna Observatory is located within 15 miles of the Project Site. Therefore, the Project Site is located in Zone A (San Diego County Code of Regulatory Ordinances, Title 5, Chapter 2, Light Pollution).

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3 VISUAL ENVIRONMENT OF THE PROJECT

3.1 Project Setting

3.1.1 Reservation Boundary

Lands within the Reservation Boundary include moderate to steep terrain atop a semiarid plateau, which is adjacent to the Laguna Mountains on the west and slopes descending to valleys to the east. Consisting of largely undeveloped high desert rolling hills, the Project Vicinity lies within a transitional region between the California Peninsular Ranges physiographic province (to the west) and the westernmost reach of the Colorado Desert (to the east).

Lands within the Reservation Boundary (see Figure 2) support a variety of habitat types and vegetation communities. For example, the valley terrain on the Reservation is dominated by coast live oak woodland, nonnative grassland, and southern willow scrub vegetation. Despite the diversity of vegetation within valleys, chamise chaparral and mixed chaparral that populate hilly and mountainous terrain dominate the area. Additionally, red shank chaparral, big sagebrush scrub, and upper Sonoran subshrub scrub are distributed throughout the Reservation. Various large rock outcrops of light-colored boulders are also scattered throughout the Reservation and are regularly distributed along ridgelines.

Existing On-Reservation development includes the Kumeyaay Wind Project, the Golden Acorn Casino and Travel Center, rural residences, Tribal facilities, and paved and dirt access roads. The Kumeyaay Wind Project is located On-Reservation, just north of I-8. This development consists of 25 regularly spaced wind turbines installed atop the Tecate Divide and a nearby electrical substation located north of I-8 and off Williams Road. Located immediately south of I-8 and west of the Tecate Divide, the Golden Acorn Casino and Travel Center occupies an approximately 40-acre site that includes separate large surface parking lots for passenger vehicles and semi-trailer trucks and a tall, single-story peach and off-white colored building (approximately 40 feet high) featuring an attached travel center/filling station. A tall, LED advertisement sign for the casino is installed to the south of I-8 and Caltrans ROW. A single, modern wind turbine is installed near the casino's eastern semi-trailer truck surface parking lot.

Rural residences are scattered throughout the Reservation, both north and south of I-8, but tend to be concentrated within narrow valleys along Campo Road/SR-94 and Church Road. In addition to residences, several Tribal facilities including a two-story education center, single-story church, and a health center housed in a tan concrete-masonry unity and red-tiled roof structure are located off Church Road to the north of SR-94.

3.1.2 Boulder Brush Boundary

Terrain within the Boulder Brush Boundary ranges from valley bottoms and oak tree and shrub-lined drainages in the western, central, and southern portions of McCain Valley and generally near Tule Creek, to shrub and small to house-sized boulder-, scrub-, and chaparral-covered hills in the northern and eastern areas. Elevations within the Boulder Brush Boundary range from approximately 3,280 feet AMSL to approximately 4,120 feet AMSL. Photographs depicting existing features within the Boulder Brush Boundary comprise Figure 10, Existing Conditions: Boulder Brush Boundary.

The majority of the private lands within the Boulder Brush Boundary are covered with scrubby shrubs and, occasionally, trees in moderate to dense stands and clusters. For example, montane buckwheat scrub consisting of generally low and mounded, green to greyish shrubs with small, seasonal white to rust-colored flower clusters is generally distributed throughout the approximately 2,000-acre area, with the exception of the herb, annual, and grass species on the wildflower field (field/pasture) mapped areas in the lower elevation on the western portions of the Boulder Brush Boundary. Soft and woody shrubs of the big sagebrush scrub community are common in central and southern portions of the Boulder Brush Boundary. Chaparral communities are commonplace throughout the central, southern, and eastern portions and consist of various low and tall shrubs. Small to house-sized granitic boulders are interspersed with low and tall chamise on rocky-sloped areas. Existing vegetation and boulder outcrops are depicted in Photos A, B and C on Figure 10.

In addition to the scrub and chaparral communities described above, riparian forest, willow, and coast live oak woodland occurs in limited areas within the Boulder Brush Boundary. For example, tall and mature oak trees regularly dot the extents of the Tule Creek floodplain and are coupled with an understory of grasses; pockets of bare ground; and small, scattered shrubs and boulders.

Limited visible development occurs and no structures are present in the southern, western, or eastern portions of lands comprising the Boulder Brush Boundary. There are also disturbed areas caused by off-highway vehicles.

The northern portion of the Boulder Brush Boundary is traversed in a general southeast to northwest alignment by the 500 kV Sunrise Powerlink transmission line. Three approximately 170-foot-tall geometric lattice steel towers (CPUC and BLM 2008) are located in the northernmost portion of the Project Area. Two of the towers are located entirely within the Boundary Brush Boundary and the third is partially within the Boundary Brush Boundary. Metal post and wire fencing and signage posted on an approximately 5-foot-tall tubular steel gate installed at the northern terminus of Ribbonwood Road notes that “Off Road Activity [is] Prohibited.” Photographs of existing fencing and signage is captured in Photos B and D on Figure 10.

3.2 Surrounding Area

Land bordering the Project Area includes a mix of privately owned lands, public agency lands managed by the BLM, and Tribal lands of the Manzanita Band of Diegueno Mission Indians and the La Posta Band of Diegueno Mission Indians. The surrounding area, which includes the communities of Boulevard, Manzanita, and Live Oak Springs, can be characterized as a predominantly rural landscape featuring large-lot ranches and single-family homes with a mixture of recreational opportunities and areas of undeveloped lands. Recent renewable energy projects have resulted in a change to the physical setting that includes major infrastructure elements, such as wind turbines, transmission towers, and other related components, which are described below. I-8 bisects the Project Area through the Reservation. Photographs of the surrounding area are provided on Figure 11, Existing Conditions: Surrounding Area.

Renewable energy projects in the surrounding area include the 500 kV Sunrise Powerlink, the Tule Wind Project, and the Kumeyaay Wind Project. The SDG&E Sunrise Powerlink runs through the north end of the Project Site and is supported by large steel lattice towers that dot the landscape. The Tule Wind project, which includes 57 wind turbines ranging from 328 feet to 492 feet in height, surrounds the Boulder Brush Boundary, spanning from the northwest through the southeast. The Kumeyaay Wind Project lies approximately 1.5 miles to the west/southwest of the Boulder Brush Boundary, just north of I-8. Circular areas of disturbance linked by dirt access roads associated with existing turbines of the Tule Wind and Kumeyaay Wind Project are visible on the aerial base map of Figure 2. The character of existing turbines is is illustrated in Figure 11 (see Photos A through D).

As discussed previously, the surrounding area includes the communities of Boulevard, Manzanita, and Live Oak Springs. Old Highway 80 runs through these communities and functions as the main street. Single-family residences and limited commercial businesses line Old Highway 80 from Boulevard north through Manzanita to Live Oak Springs. Large lot rural residential properties are located to the south of the Boulder Brush Boundary and these areas are typically characterized by single-family residences surrounded by areas of cleared vegetation and native scrub vegetation. Photos B and C on Figure 11 capture the character of existing residential properties near the Boulder Brush Boundary.

Lands surrounding the Boulder Brush Boundary include privately owned property, public lands managed by the BLM and Tribal lands. The BLM lands are identified in the Eastern San Diego County Resource Management Plan as the McCain Valley Recreation Management Zone. Most of the Tule Wind turbines are located on BLM lands identified in the Eastern San Diego County Resource Management Plan as "Lands Available for Wind Energy Development (BLM 2008). As part of the greater Boulevard/Jacumba Destination Special Recreation Management Area, the McCain Valley Recreation Management Zone is managed to support multi-recreational activities,

including hiking, camping, off-highway-vehicle riding, hunting, and horseback riding (BLM 2008). The McCain Valley Recreation Management Zone is also identified as a limited off-highway-vehicle management area where off-highway-vehicle use is restricted at certain times, in certain areas, and/or to certain vehicular use (BLM 2008). The Lark Canyon OHV Area staging area is accessible off McCain Valley Road and is located 2.5 miles east of the Reservation's eastern boundary. Numerous narrow dirt trails for motorcycles and ATVs less than 40 inches wide branch and extend to the north, west, and south of the staging area; traverse nearby slopes and ridges; and connect to several loop trails that traverse the local ridge and valley terrain (DesertUSA 2019). According to the BLM, in Fiscal Year 2019 (i.e., October 1, 2018 to October 30, 2019), approximately 4,500 persons visited the OHV Area (A. Williams, personal communication, November 15, 2019). With the exception of the OHV Area and campgrounds, BLM lands are largely unprogrammed (i.e., formal trails and trailheads are not provided). Regarding the Upper and Lower Lark Canyon Campgrounds that are adjacent to the OHV area and accessible of McCain Valley Road, approximately 283 persons visited/used campgrounds in Fiscal Year 2019 (A. Williams, personal communication, November 15, 2019). The existing character of the Upper Lark Canyon Campground and adjacent development is captured in Photo D on Figure 11.

Within the McCain Valley Recreation Management Zone and to the east of the Project Site, BLM lands comprise the In-Ko-Pah Mountains Area of Critical Environmental Concern. Areas of Critical Environmental Concern are established to provide protection for relevant and important values, including special-status species, wildlife, scenic values, and significant cultural resources values (BLM 2008). The In-Ko-Pah Mountains Area of Critical Environmental Concern is specifically managed for biological and cultural values (BLM 2008). The Carrizo Gorge Wilderness is located approximately 2 miles east of the most northern portion of the Project Site. Use of wilderness areas is defined in the United States Code (USC) under the Wilderness Act of 1964 (16 USC 1131–1136), and certain uses, including temporary roads, motorized vehicles and other forms of mechanical transport, and structures or installation, are prohibited. Hiking and camping are permitted in the Carrizo Gorge Wilderness (BLM 2008).

Scenic Vistas

Although there are no designated scenic vistas or lookouts on the Reservation or in the Project Vicinity, the local landscape is bordered by mountainous terrain that may provide opportunities for elevated scenic views. Specifically, the In-Ko-Pah Mountains, Cuyamaca Mountains, and Laguna Mountains are located to the west; the In-Ko-Pah Mountains and Tierra Blanca Mountains are located to the north; and the In-Ko-Pah and Jacumba Mountains are located to the east. Prominent peaks in these ranges include Monument Peak (Laguna Mountains; 11.3 miles northwest of the Reservation), Sombrero Peak (Tierra Blanca Mountains; 7 miles north of the Reservation), and Mount Tule (In-Ko-Pah Mountains; 5 miles east of the Reservation). With the

exception of the Monument Peak Trail (an approximately 2.8-mile-long, moderately trafficked trail on U.S. Forest Service lands accessible off Sunrise Highway), trails to these peaks are assumed to experience a low volume of foot traffic relative to other more popular trails (i.e. Laguna Mountain) due to their remote locations, and lack of formal trailheads, staging areas, and information signage on nearby roads. At Monument Peak, McCain Valley and the Project Site are screened in the views available to trail-based recreationists by intervening mountainous terrain to the southeast on Tribal lands of the Ewiiaapaayp Band of Kumeyaay Indians. Despite the assumed low volume of recreationists accessing Sombrero Peak and Mount Tule, views to McCain Valley and the Project Site are available from these locations.

In regard to public roads, long and broad views toward the McCain Valley area and distant mountainous terrain in California and Mexico (including unnamed peaks) are available from I-8. However, these views are typically interrupted by road cuts (i.e., an engineered cut through terrain for purposes of road construction) and generally rising terrain located north of the interstate. Scenic views of local valleys and nearby chaparral and boulder covered terrain are also available from SR-94 on the Reservation and occasionally, from Old Highway 80, McCain Valley Road, and Ribbonwood Road.

Scenic Highways

While state and local regulations pertaining to scenic highways are not applicable to Tribal lands and the Reservation, they are applicable to private lands traversed by the Boulder Brush Facilities.

There are no official state designated highways in the Project viewshed. However, the majority of I-8 through San Diego County (including the segment east of the Tecate Divide to the San Diego/Imperial County border) and SR-94 (from SR-125 east to I-8 near Jacumba) are eligible state scenic highways and are components of the County Scenic Highway System (Caltrans 2018; County of San Diego 2011a). The On-Reservation gen-tie line spans I-8 near the Tecate Divide and the nearest segment of the Off-Reservation gen-tie line is located approximately 2 miles north of I-8. The interstate also bisects the Reservation (see Figure 2) and the closest Project wind turbines within the Campo Corridor are located within 500 feet and 800 feet, respectively, of I-8. Near the Tecate Divide, the interstate is located approximately 1.15 mile southwest of the Boulder Brush Boundary.

Views to the north from the interstate near the Reservation are limited in length by mountain terrain that tends to rise abruptly to the north of the interstate; views to the south are typically long and occasionally extend to distant mountain terrain in Mexico. Views to the Boulder Brush Boundary from I-8 are limited and generally obstructed by rising terrain including road cuts located to the north between the Tecate Divide and McCain Valley Road.

From SR-79 in Pine Valley and I-8 in Jacumba, Old Highway 80 is included on the County Scenic Highway System (County of San Diego 2011a). This segment of the highway traverses the Reservation and would be spanned by the On-Reservation gen-tie line (see Figure 2). Project wind turbines within the Campo Corridor would also be visible from the highway as it traverses the Reservation. The Off-Reservation gen-tie line (and generally, private lands within the Boulder Brush Boundary) would be screened from view of highway motorists by intervening terrain and vegetation.

Recreation Areas

Please refer to the beginning of this section (Section 3.2), which includes a discussion of the recreational opportunities available on BLM-managed lands located to the east of the Reservation in the McCain Valley area.

While local regulations pertaining to scenic views available from state and local trail systems are not applicable to the Reservation, state and local trail systems are discussed in regard to the Reservation for purposes of disclosure in this EIR. No state trail systems are located near the Reservation. The nearest segment of the California Riding and Hiking Trail is located west of SR-79 and in Cuyamaca Rancho State Park, more than 18 miles northwest of the Reservation. Trail segments between Pine Valley and Mt. Laguna are visually separated from the Reservation and McCain Valley by the Laguna and Cuyamaca Mountains.

Two proposed trail facilities identified in the Boulevard Community Trails and Pathways Plan (County of San Diego 2005) are located north of I-8. Users of these trails would be provided views to the Boulder Brush Facilities and proposed wind turbines on the Reservation. Located on Ribbonwood Road, the Ribbonwood Road Pathway would extend north from the I-8 underpass for approximately 2 miles. Land uses adjacent to this segment of Ribbonwood Road include the U.S. Customs and Border Protection Boulevard Station (located approximately 0.15 miles north of I-8); scattered rural residential development; and primarily vacant, desert-shrub and occasionally oak-tree-dotted, undeveloped land. The Ribbonwood Road Trail would extend north from the Ribbonwood Road Pathway and traverse existing dirt access roads and Lost Valley Road for approximately 4.4 miles. The trail alignment (and existing access roads) traverses the majority of the Boulder Brush Boundary from north to south, and joins McCain Valley Road near the northeastern corner of the Project Site. The northernmost section of the Ribbonwood Road Pathway is located 1.1 mile east of the Reservation Boundary and the Ribbonwood Road Trail (primarily located within the Boulder Brush Boundary) is spanned by the Off-Reservation gen-tie line alignment.

Several trail alignments in the Boulevard Community Trails and Pathways Plan are depicted as crossing the southern portion of the Reservation. These facilities include the San Diego & Arizona

Eastern Railway Trail, Shockley Truck Trail, and Shockley Loop Trail. The Tribe is not required to dedicate ROW to the County for public trail use or provide public access across the Reservation via recreational trails. Therefore, the County has no land use authority to create or manage trails that traverse the Reservation. Despite this issue, those trails crossing the Reservation are identified for informational purposes only.

Several proposed trails and pathway identified in the Campo/Lake Morena Community Trails and Pathways Plan are located west of the Reservation. At this time, public ROW has not established for the trail alignments. Due to proximity and the height of proposed wind turbines within the Reservation Boundary, future users of these trails would be provided views to Campo Wind Facilities. Nearby proposed trails and pathways include the Shockey Truck Trail Trail/San Diego & Arizona Eastern Connector Trail, Shockey Truck Trail Pathway, SR-94 Pathway, and San Diego & Arizona Eastern Rail Road Trail.

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4 VIEWER RESPONSE TO EXISTING VISUAL RESOURCES

4.1 Visual Resources

The existing visual environment of the Project Site and in the surrounding area are described in Section 3, Visual Environment of the Project. This section describes potential viewers and possible viewer response to the Project.

4.2 Viewer Groups, Exposure, and Sensitivity

Viewer response to changes in the visual landscape is based on a combination of factors:

- Individual viewers or groups affected by exposure to a project (viewer groups)
- Viewer concern about noticeable changes to the view (viewer sensitivity)
- Frequency and duration of views (viewer exposure)
- Type of activity in which individuals are engaged when viewing the landscape (viewer awareness)

The primary viewer groups provided views to the Project Site consist of motorists (interstate, state highway, and local roads), residents, and recreationists.

Regarding visual sensitivity of viewer groups, areas seen and used by large numbers of people are potentially more sensitive than moderately or scantly visited locations. In addition, viewers with longer-duration views are generally considered to have a higher sensitivity to change to visual resources compared to viewer groups passing through an area and provided fleeting or short-duration views of the surrounding landscape.

Motorists

Motorists would represent the largest viewer group by volume provided views to the Project Site. Included in this group are east- and westbound motorists on I-8, SR-94 and Old Highway 80. Each of these facilities traverses the Reservation. In 2016, I-8 and SR-94, and Old Highway 80 experienced annual average daily traffic (AADT) of approximately 12,450 vehicles, 1,050 vehicles, and 700 vehicles (Caltrans 2018a, 2018b, SANDAG 2018).

In addition to I-8 and highways, numerous local roads located to the east and west of the Reservation offer motorists potential views extending to higher elevation ridges on the Reservation where Project wind turbines are proposed. Depending on specific location, motorists would be provided short-term duration, obscured to clear views to Project facilities. The expectation of motorists for scenic views would be moderate and tempered by the presence

of existing wind turbines of the Kumeyaay Wind Project and Tule Wind Project. Due to the short-term duration of view exposure and presence of existing wind turbine development in the landscape, viewer sensitivity within this group is considered moderate.

Residents

Scattered rural residential development is located in unincorporated County of San Diego communities to the east and west of the Reservation. These communities include Campo (southwest of the Reservation) and Live Oak Springs, Tierra Del Sol, and Boulevard which are located to the east and southeast of the Reservation. In addition, approximately 60 rural residences are located north of I-8 and along Ribbonwood Road on private lands. Scattered rural residences are also located On-Reservation but are generally concentrated off Church Road, Old Highway 80 and SR-94.

Depending on proximity, residents within the Project Vicinity may have direct, unobscured views to Campo Wind Facilities and/or Boulder Brush Facilities. However, views to Campo Wind Facilities and Boulder Brush Facilities from residential land uses in the Project Vicinity would occasionally be obstructed (fully or partially) by intermediate vegetation, landscaping or development. Due to the generally long-term duration of views (where available) and high awareness of visual change in the environment, the viewer sensitivity of residents is considered high.

Recreationists

Recreation areas and facilities are located to the east and west, northeast and northwest of the Project Area. For example, public lands managed by the BLM in the McCain Valley are located north and east of the Boulder Brush Boundary and proposed trails identified in the Boulevard and Lake Morena/Campground Community Trails and Pathways Plans, are located in the Project Vicinity. As previously discussed in Section 3.2, Surrounding Area, proposed trails and pathways traverse the Boulder Brush Boundary and the Reservation. Recreational opportunities including backpacking, camping, OHV use, geologic and nature study, photography, and hiking are available on public lands and along recreational facilities in the surrounding area. Recreationists on public lands in the McCain Valley managed by BLM and future users of proposed trails and pathways identified in local trails and pathway plans would be provided clear to partially obscured views to Project facilities including Campo Wind Facilities and Boulder Brush Facilities. The duration of available views would be temporary and relatively short (i.e., view exposure would coincide with duration of recreating in the McCain Valley area), and viewer sensitivity is considered moderate to high for campers, rock climbers and trail-based recreationists including hikers and equestrian riders. However, due to their greater speed of travel, focus on trails, and generally reduced viewer awareness while actively recreating, OHV users are considered to have low viewer sensitivity.

5 VISUAL IMPACT ASSESSMENT

5.1 Methodology

5.1.1 Site Observations

For this visual resources report, visual fieldwork was conducted in the Project Vicinity on July 20, 2018. Winds were mild, and local conditions were sunny and clear. Digital photographs were taken with a location-services-enabled iPhone 6s to photodocument the characteristics of the Project Vicinity. Photographs were also taken to capture views from public vantage points to the Project Site, and for use as baseline images in visual simulations. Photographs were primarily taken from public roads in the Project Vicinity at On- and Off-Reservation locations.

5.1.2 Project Viewshed

The Project viewshed is defined by the presence of steep mountainous terrain to the northwest, north, and northeast more moderate hilly and valley terrain to the east and west of the Reservation, and by the scale of proposed wind turbines (approximately 586 feet tall from tower base to fully extended blade tip) within the Campo Corridor. Project wind turbines within the Campo Corridor are concentrated in linear strings on higher-elevation slopes and ridges (see Figure 2). Relative to the Campo Wind Facilities, the Boulder Brush Facilities would have a noticeably smaller viewshed due to the scale of the tallest components (i.e., 150-foot tall gen-tie poles). A topographic viewshed of the Project is presented in Figure 12, Modeled Topographic Viewshed Analysis: Campo Wind Facilities. The figure illustrates the approximate viewshed of the Project and is solely based on topography in the Project Vicinity and the height of Project wind turbines within the Campo Corridor. The figure represents the potential extent of the available views to prominent Campo Wind Facilities (i.e., wind turbines) in the Project Vicinity and is representative of the worst-case scenario regarding Project visibility. The potential extent of available views to prominent components of the Boulder Brush Facilities, gen-tie poles, is illustrated in Figure 13, Modeled Topographic Viewshed Analysis: Boulder Brush Facilities. Potential screening effects at specific locations or viewpoints due to vegetation and/or structures are not considered or reflected in Figures 12 and 13.

Generally, the presence of hill and valley terrain bordered by mountains and ridges within the Project Vicinity creates opportunities for elevated vantage points and occasionally, long and broad views from peaks and public roads. The Project Vicinity is bound by the Laguna Mountains to the west and the distant In-Ko-Pah and Jacumba Mountains to the east and north.

Due to the presence of prominent ridgelines, hills and mountains, and typically low desert shrub vegetation, vertical elements including existing wind turbines and transmission line support structures

that extend above the horizon line are visible from long distances. In these instances and in clear visual conditions, motorists and recreationists may be able to readily discern silhouetted wind turbines that extend above the horizon line for distances approaching 5 miles or greater. Vertical features that do not extend above the horizon line are generally not visually prominent and are better able to blend into the landscape. This blending ability is increased with similar colors and/or semi-transparent, latticed forms and lines.

Existing development in the viewshed includes wind turbines (Kumeyaay Wind Project and Tule Wind Project), I-8, state highways and local roads, rural residences, high-voltage transmission infrastructure and electrical substations, limited commercial, health, institutional and casino development, and ranch lands. Abandoned homes and structures are also located in the Project viewshed. As depicted on Figures 12 and 13, views to the Project from more distant locations to the east of the Project Site are not available. More specifically, views to the Project Site from locations to the east and north of the Jacumba Valley are obscured by the In-Ko-Pah and Jacumba Mountains. Terrain to the north (In-Ko-Pah Mountains) and northeast (Laguna Mountains) defines the topographical extent of the viewshed to these areas. A 10-mile-radius area on the Reservation is depicted in Figure 12 as it presents a reasonable limit to the depiction of the viewshed. Views in excess of 10 miles are generally considered distant and specific visual elements located 10 miles or greater away would be difficult to discern clearly.

The mapped viewsheds approximate the potential area for views to Project facilities and more specific, wind turbines within the Campo Corridor and gen-tie poles within the Boulder Brush Corridor. Modeled viewshed analyses are limited to a 10-mile radius areas centered on the Reservation Boundary and Boulder Brush Boundary. Modeled Viewshed Analyses are presented on Figures 12 and 13.

Varying levels of visibility to the Project occurs within the modeled viewsheds. For example, Project facilities would be most visible when viewed by a stationary viewer located immediately adjacent to the Project Site, and with no intervening screening elements. On the other hand, the lowest level of Project visibility would occur where (1) Project facilities would be entirely screened from view; (2) the viewer is located 10 miles or greater from the Project Site; and (3) the Project Site is partially to fully screened by intervening elements. If the viewer is traveling at a high rate of speed (such as an interstate of state route motorist) and is located far from the Project Site, visibility may also be reduced. Lastly, others variables including orientation of the viewer to Project facilities, atmospheric conditions, wind-blown dust or pollution, and/or lighting conditions may affect the visibility to Project facilities within the viewshed.

5.1.3 Key Observation Points

Analyzing all the views in which the proposed project would be seen is not feasible. Key observation points (KOPs) were selected as representative vantage points in the landscape that offer sensitive receptors views to the Project Site. A total of twelve KOPs were selected from which to evaluate changes to existing views, visual character, and visual quality resulting from implementation of the Project. As shown on Figure 14, nine KOPs were selected for the Campo Wind Facilities. Three KOPs were selected for the Boulder Brush Facilities (see Figure 15). The KOPs are representative of views to the Project Site from public roads in the Project Vicinity. Lastly and consistent with County requirements, the KOPs were selected because they would clearly illustrate the visual effects of the various Project components.

Although KOPs were not established on private property (neither CEQA nor County Guidelines for Determining Significance and Report Format and Content Requirements – Visual Resources (County of San Diego 2007) specifically protect private views), KOPs are representative of viewing angles and distances available to residences in the Project Vicinity. KOPs were not established on mountain trails or peaks in the surrounding area because these areas are assumed to receive relatively low use. In addition, the selection of public roads as KOPs is appropriate because motorists represent the largest viewer group in the Project viewshed. While KOPs were not located within the Lark Canyon OHV area or lesser trafficked recreation lands near the Boulder Brush Boundary due to the relatively low use, KOP 12 (McCain Valley Road) is located on BLM-administered lands and approximately within 1 mile of the proposed switchyard and high-voltage substation. In addition, a publically-curated online trail forum/application identifies McCain Valley Road as a moderately trafficked (and publically reviewed) OHV trail (alltrails.com 2019). Thus, OHV use of McCain Valley Road is assumed for purposes of this analysis. Also, visual simulations were not prepared from the OHV area or lesser trafficked recreation lands near the Boulder Brush Boundary; however, potential aesthetics impacts to the views of public land recreationists are assessed in this report (see Section 5.3).

The locations of selected KOPs from which to analyze the visual effects of the Campo Wind Facilities are shown in Figure 14. Figure 15 identities the location of KOPs that were selected to analyze the visual effects of the Boulder Brush Facilities. KOP number, location, and view orientation to Project components is listed below in Table 1, Key Observation Points.

Table 1
Key Observation Points

KOP #	Location	View Orientation to Project Components	Project Components Visible[1]
1	Eastbound I-8 (Off-Reservation)	E/SE	Campo Wind Facilities
2	SR-94 at western Reservation Boundary	E	Campo Wind Facilities
3	Church Road/BIA Road 10 (On-Reservation)	N/NW	Campo Wind Facilities
4	Church Road/BIA Road 10 (On-Reservation)	S/SW	Campo Wind Facilities
5	SR-94 at Live Oaks Springs Road (Off-Reservation)	W/NW	Campo Wind Facilities
6	Tierra Del Sol Road (Off-Reservation)	N/NW	Campo Wind Facilities
7	Tierra Real Lane (Off-Reservation)	W/SW	Campo Wind Facilities
8	I-8 near Tecate Divide (Off-Reservation)	NW	Campo Wind Facilities
9	Ribbonwood Road (Off-Reservation)	W	Campo Wind Facilities
10	Westbound I-8 (Off-Reservation)	NE	Boulder Brush, and Campo Wind Facilities
11	Opalocka Road (Off-Reservation)	N	Boulder Brush, and Campo Wind Facilities
12	McCain Valley Road (Off-Reservation)	S/SE	Boulder Brush Facilities

Notes:
Visibility as presented in visual simulation. The information presented in this column is not intended to imply that views from a particular KOP is limited to only the angle and orientation present at KOPs presented in Figures 16-27.

While KOPs were not specifically located on private property or recreation lands, Section 5.3, Determination of Significance, considers non-motorist viewer groups and where applicable, evaluates potential impacts to the views of these groups.

5.1.4 Visual Simulations

Photographs from public vantage points to the Project Site serve as the baseline image for 3D simulations of the Campo Wind Facilities and Boulder Brush Facilities. Visual simulations were created to depict the anticipated visual change and characteristics associated with the Campo Wind Facilities and Boulder Brush Facilities. Using available topography or digital elevation maps, a 3D surface was created for the existing terrain and then imported into 3D Studio Max. This 3D surface was used to camera-match the baseline photographs to the terrain model. 3D models were created for all Campo Wind Facilities and Boulder Brush Facilities that would be visible from the selected KOPs. These 3D models were then merged into the 3D scene at their finished grade elevations. Lighting was added to the scene to match the time of day the photographs were taken and to cast realistic shadows. Each view was rendered into a high-resolution photograph from the selected KOPs taken by Dudek. The final product depicts a photorealistic before-and-after simulation of the Project Site with Campo

Wind Facilities and/or Boulder Brush Facilities. Upon completion of the visual simulations, the existing setting photographs were compared to the "with Project" conditions to analyze potential impacts to existing visual character and quality. Where visible, Campo Wind Facilities and Boulder Brush Facilities are evaluated from the selected KOPs and visual simulations are used as a tool to analyze Project effects to existing views from scenic vistas and highways, public vantage points, visual character and quality, and applicable policies and regulations.

5.1.5 Visual Assessment

Visual character is qualitatively described by four primary components: form, line, color, and texture. Projects that create a high level of contrast with existing visual character are more likely to generate significant visual impacts due to visual incompatibility. Conversely, projects that create a low level of contrast with existing visual character are less likely to generate significant visual impacts due to inherent visual compatibility. Campo Wind Facilities and Boulder Brush Facilities and related physical effects to the landscape are evaluated on this basis for impact analysis purposes. The visual assessment includes a descriptive inventory of existing landscape conditions as viewed from KOPs and an analysis of visual change associated with project implementation. The existing visual conditions, and anticipated changes to visual character and quality associated with proposed development as viewed from the selected KOPs is provided below.

5.2 KOP Assessment

5.2.1 KOP 1 – Existing Conditions

Orientation

KOP 1 is located on eastbound I-8 and is situated approximately 0.7 mile west of the Reservation and 0.8 mile west of Crestwood Road. The KOP is situated at an elevation of 4,175 feet AMSL and is oriented to the east-southeast generally along the I-8 corridor. Consistent vehicular traffic passes this location daily. While only one existing three-blade rotor wind turbine is visible in the east/southeast oriented view captured at KOP 1 (the wind turbine is installed at the Golden Acorn Casino's eastern parking lot), the tower and/or blades of approximately 20 additional existing wind turbines atop the Tecate Divide to the north of the interstate are visible to motorists at KOP 1. The landscape to the southeast consists of rugged shrub and boulder-covered hill and valley terrain that supports scattered rural residential development and ranches. Undeveloped lands are also located to the southeast of KOP 1. In addition, electrical lines supported by thin and tall wood and steel poles traverse the landscape south of the interstate. As shown in Figure 16, Key Observation Point 1, the view extends to the hazy and greyish silhouette of low, distant mountains in Mexico.

Changes to Visual Character and Quality

A visual simulation of the Campo Wind Facilities as experienced from KOP 1 is included in Figure 16. As illustrated on the figure, Project wind turbines south of the interstate and atop the Tecate Divide would be visible and would mark the eastern horizon. At KOP 1, Project wind turbines in the westward view would be over 3 miles away but due to their tall scale and distinct massing, the features would be prominent, distinct, and silhouetted against the sky. Still, Project turbines to the west would display scale and massing comparable to the existing wind turbine installed at the Golden Acorn Casino parking lot. Further, given the presence of existing wind turbines atop the Tecate Divide (not depicted in Figure 16), wind turbines are familiar features in the landscape at and near KOP 1. In addition to the string of five Project wind turbines to the west atop the Tecate Divide, motorists would be provided views to strings of On-Reservation wind turbines to the south and southwest (see Figure 16). The nearest Project wind turbines to the south of the interstate would be located approximately 1.5 mile away. While the view included in Figure 16 is somewhat limited due to the constraints of a static photograph, proposed wind turbines in addition to those depicted in the visual simulation would be visible to motorists at KOP 1.

At KOP 1, implementation of the Project would result in moderate line and color contrasts due to the Campo Wind Facilities. Project wind turbines would be widely distributed and would be installed atop several visible ridges on the Reservation. However, the wind turbines would display a similar tall, three-blade rotor form and massing as the existing visible wind turbine in the landscape. The vividness and intactness of the landscape would be noticeably reduced due to increased line and color contrasts, and the wide distribution of visible wind turbines. Further, the clustering of overlapping lines associated with Project wind turbines would reduce the existing unity of the landscape located south of I-8.

5.2.2 KOP 2 – Existing Conditions

Orientation

KOP 2 is located on eastbound SR-94 and is situated just within (i.e., approximately 330 feet from) the western Reservation Boundary. Located at an elevation of approximately 3,140 feet AMSL, KOP 2 looks eastward along the curving SR-94 corridor to a chaparral and boulder covered ridge (see Figure 17, Key Observation Point 2). According to Caltrans, ADT on the segment of SR-94 between Buckman Springs Road (4.8 miles west of KOP 2) and Live Oaks Springs Road (3.1 miles east of KOP 2) is approximately 1,050 (Caltrans 2018b). As illustrated in the existing conditions photograph (see Figure 17), the asphalt surface of SR-94 creates a winding line that disappears behind foreground terrain and vegetation and then cuts an ascending, diagonal line in the distance. In addition to the highway, visible development includes simple post and rail fencing, highway

signage, a single distribution line and wood poles, and a dirt road. The length of the view is short, extending approximately 1.2 miles east to the visible ridgeline. The existing Kumeyaay Wind Project turbines are not visible from KOP 2.

Changes to Visual Character and Quality

As shown in the Figure 17 visual simulation, the tall form (approximately 586 feet to fully extended blade tip) and distinct Y-shaped mass of blades and towers of proposed wind turbines associated with the Campo Wind Facilities would dominate the eastward view at KOP 2. In addition to proposed wind turbines that would tower over the nearby ridgeline, other proposed wind turbines to the east and southeast would be visible and silhouetted against the sky. While proposed wind turbines would not block scenic resources from view, the presence of large vertical structures and the regular movement of blades would degrade existing visual quality by reducing the intactness of the landscape. Existing unity would also be negatively affected as the proposed height of wind turbines would be highlighted by their ridgetop location. The introduction of visually prominent wind turbines in the middle ground distance (i.e., between 0.5 and 5 miles) of KOP 2 would create strong form and line contrasts that would be heightened due to the shielding of local existing wind turbine development from viewers at this KOP.

5.2.3 KOP 3 – Existing Conditions

Orientation

KOP 3 is located approximately 575 feet north of SR-94 and looks northwest from northbound Church Road towards the On-Reservation Campo Education Center (see Figure 18, Key Observation Point 3). Located at an elevation of approximately 3,300 feet AMSL, KOP 3 is situated in a narrow valley that occurs between one of several parallel On-Reservation north-side ridges. The northwestward view offered at KOP 3 is representative of views available to Church Road motorists as it winds through the narrow valley landscape between SR-94 to the south and Old Highway 80 to the north. In addition to the tan-red tones displayed by the administration center buildings, an existing greyish single-story structure is visible along Church Road and an electrical distribution line supported by thin wood poles spans the road. While not visible in the KOP 3 existing conditions photograph, residences and additional Tribal facilities including a small church and health center housed in a tan, concrete masonry unit structure are located to the north and northeast of KOP 3.

As experienced from KOP 3, the local terrain falls west of Church Road and is partially cleared and/or thinned of vegetation. Several large trees with dense, green crowns are located west and north of the education center. Oak trees are also present along the Church Road corridor. In the

distance, the local terrain rises and forms a series of mounded hills that are covered with chaparral vegetation intermixed with light-colored boulders. Existing Kumeyaay Wind Project turbines are not visible from KOP 3.

Changes to Visual Character and Quality

As illustrated in the Figure 18 Visual Simulation, several Project wind turbines would be installed on the nearby ridge to the northwest. The nearest Project wind turbine would be located approximately 0.50 mile from KOP 3 and each successive wind turbine along the ridge would be spaced approximately 950 feet apart. Due to the scale of Project wind turbines, their prominent ridgeline location, and the low angle view offered at KOP 3, Project wind turbines would dominate the view and create strong form, line, and color contrast with existing elements in the landscape. As Church Road motorists proceed to the north, Project wind turbines would remain visible and would line the north–south ridgelines that generally parallel the road for approximately 1.6 miles. Similar to anticipated effects to visual quality at KOP 2, existing intactness and unity at KOP 3 would be noticeably reduced. Silhouetted wind turbines would disrupt the existing visual order created by relatively low-profile development that is visually submissive to natural elements (i.e., terrain and vegetation) in the landscape. Lastly, due to their scale and distinct massing, Project wind turbines would exceed the scale and massing of existing development visible from KOP 3 and would not blend with existing landforms and land cover patterns.

5.2.4 KOP 4 – Existing Conditions

Orientation

KOP 4 is located in the same location as KOP 3 however; the KOP 4 view is oriented to the west/southwest. From KOP 4 (see Figure 19, Key Observation Point 4), the view encompasses Church Road and the Church Road/SR-94 intersection and extends across a shrub and oak tree dotted valley landscape bordered by a low, chaparral and boulder covered ridgeline. Visible vegetation includes gold hued grasses, drab toned desert shrubs, and smooth, dark green toned chaparral shrubs and oak trees. Two lightly colored, single-story structures are visible on the valley terrain to the south but these elements are easily overlooked due to their low-profile and low, simple lines. Kumeyaay Wind Project wind turbines are not visible from this KOP.

Changes to Visual Character and Quality

As depicted in the Figure 19 Visual Simulation, seven Project wind turbines would be introduced and visible atop the ridgeline to the southwest. In addition, the blades of two Project wind turbines installed west of the ridgeline would be silhouetted. Located south of SR-94, the nearest Project wind turbine in the southwestward view at KOP 4 would be located approximately 0.5 mile away.

Due to a similar distance between receptors and Project wind turbines, the prominent ridgeline location of Project wind turbines, and the lower elevation of Church Road relative to nearby ridgelines, similar visual contrast and effects to existing visual quality as described above for KOP 3 would occur at KOP 4.

5.2.5 KOP 5 – Existing Conditions

Orientation

KOP 5 is located on westbound SR-94 at the SR-94/Live Oak Springs intersection, approximately 0.6 mile from the western Reservation Boundary. As shown in Figure 20, Key Observation Point 5, the view from KOP 5 is to the west from the highway across private ranchlands located within a narrow valley (i.e., Hill Valley). Further, the KOP 5 view across the low valley terrain and toward a low, east-facing slope along the eastern Reservation Boundary that has been noticeably thinned of vegetation in lower elevation areas. In the foreground, a north–south line of light green trees in the narrow valley notes the presence of a local drainage. Higher elevation areas (i.e., areas beyond the visible line between cleared and natural vegetation) on the east-facing slope are covered with dense chaparral vegetation and dotted with light colored boulders. Intermittent vehicular traffic passes this KOP each day and Kumeyaay Wind Project wind turbines are not visible from KOP 5.

Changes to Visual Character and Quality

A visual simulation of the Project as experienced from KOP 5 is presented in Figure 20. As viewed from KOP 5, Project wind turbines would dominate the westward view and attract the attention of passing motorists. The available westward view at KOP 5 is brief and the regular presence of oak trees along the SR-94 corridor typically limits opportunities for long westward views. However, as illustrated in Figure 20, Project wind turbines would tower over the ridgeline and be distinct at KOP 5. The nearest Project wind turbine depicted in Figure 20 would be located approximately 0.8 mile away and the visible string of Project wind turbines would be setback 600 feet or greater from the Reservation Boundary. Due to the low view angle offered at KOP 5 and because Project wind turbines would be setback from the visible ridgeline, ground disturbance and vegetation clearance around the base of Project wind turbines (and lightly colored lines of access roads) would be screened from view.

As experienced at KOP 5, Project wind turbines would not block or otherwise screen scenic resources from view. However, the introduction of prominent vertical structures and moving blades would diminish the existing visual quality displayed by the lightly developed hill and valley landscape. In addition to reduced intactness, existing unity would be negatively affected by the tall scale of Project wind turbines and their ridgetop location. The introduction of visually prominent Project wind turbines in the middle ground of KOP 5 would create strong form and line contrasts.

5.2.6 KOP 6 – Existing Conditions

Orientation

KOP 6 is located off Tierra del Sol Road, approximately 0.15 mile south of Shasta Way, on unincorporated County lands in the Boulevard Subregional Group Area. As depicted in the existing conditions photograph on Figure 21, Key Observation Point 6, the view offered at KOP 6 looks north-northwestward across a series of slightly rolling chaparral-covered hills to prominent On-Reservation rocky ridges and darker, somewhat subdued ridgelines in the Project Vicinity. For example, the Tecate Divide is indistinct in the northward view but is marked by existing wind turbines of the Kumeyaay Wind Project. While faint and located low in the landscape relative to wind turbines of the Kumeyaay Wind Project, the existing wind turbine installed at the Golden Acorn Casino eastern parking lot creates a thin, white line and is visible from KOP 6. Distant mountain terrain including the In-Ko-Pah Mountains and Laguna Mountains is visible and creates rugged, dark forms in the distance (see Figure 21).

Changes to Visual Character and Quality

A visual simulation of the Project as viewed from KOP 6 is included on Figure 21. Project wind turbines along the ridgeline would be located approximately 2.5 miles or greater from viewers at KOP 6. Although sited on prominent ridgelines, the vertical lines displayed by the Project wind turbines would be somewhat faint in the landscape due to distance from KOP 6. Still, the tall form of Project wind turbines would be apparent and portions of blades and towers would be silhouetted against the sky. Further, silhouetted components of Project wind turbines would rise above the rugged ridgeline of background mountain terrain and interrupt existing views to these features. While existing wind turbine development is detectable in the view, the Kumeyaay Wind Project is located approximately 2.9 miles from KOP 6 and Kumeyaay wind turbines are shorter than Project wind turbines. In addition, the existing Kumeyaay wind turbines tend to be viewed against the backdrop of dark mountain terrain, and are not generally silhouetted. Due to a taller, more distinct scale and form, Project wind turbines would create moderate form and line contrast. Also, the introduction of Project wind turbines would interrupt the remaining openness in the view and specifically, the open, unencumbered qualities of the existing view to the northwest. Lastly, vividness and intactness would be reduced due to the wide distribution of Project wind turbines and their visually prominent location atop ridgelines.

5.2.7 KOP 7 – Existing Conditions

Orientation

KOP 7 is located at the intersection of Tierra Real Lane and Tierra Real Road, near scattered rural residential development in the Tierra del Sol neighborhood (located in the Boulevard Subregional Group Area). Located approximately 1.6 miles southwest of KOP 6, KOP 7 is a remote location accessible from the south by dirt roads off Tierra del Sol Road. KOP 7 is representative of views offered to a limited number of scattered residents in the immediate area. The westward view looks down Tierra Real Lane and across private, primarily undeveloped ranchlands (see Figure 22, Key Observation Point 7). The dense, chaparral-covered terrain of the southern portion of the Reservation is located approximately 1 mile away. Limited development is visible in the view and primarily consists of the tan, graded dirt surface of Tierra Real Lane, aged metal fencing in the foreground, and cylindrical metal silos on private property to the southwest. The view offered at KOP 7 is long and stretches to dark ridgelines of mountains in Mexico (i.e., 11.8 miles to the southwest) and the broad, mounded form of Hauser Mountain (i.e., 12.3 miles to the west). No existing Kumeyaay Wind Project wind turbines are visible from this KOP.

Changes to Visual Character and Quality

As illustrated in Figure 22 (see visual simulation), the introduction of Project wind turbines to the southern area of the Reservation would create strong form, line, and color contrasts. Bold and visually prominent wind turbines would be located as close as 1.3 miles from KOP 7 and several linear groups of wind turbines installed atop ridgelines would be visible. The tall and lightly colored Project wind turbines would interrupt the available westward view at KOP 7. The existing openness of the landscape would be noticeably interrupted. Prominent mountain terrain in the background would remain visible but Project wind turbines would attract attention away from these existing focal features. At KOP 7, viewers are located over 5.3 miles from existing wind turbines on the Tecate Divide and due to intervening terrain, existing wind turbines are not visible in northward views. Due to the screening of existing wind turbines in views, anticipated effects to visual character and quality as a result of Project turbines would be heightened at KOP 7.

5.2.8 KOP 8 – Existing Conditions

Orientation

KOP 8 is located off the westbound lanes of I-8, approximately 0.35 mile from the Tecate Divide and the On-Reservation Live Oak Trail/Manzanita Road interstate underpass. The view looks northwest along the I-8 corridor towards existing wind turbines of the Kumeyaay Wind Project

and atop the Tecate Divide (see Figure 23, Key Observation Point 8). According to Caltrans, ADT on I-8 near the Tecate Divide is approximately 12,450 (Caltrans 2018a).

As viewed from KOP 8, the local terrain generally falls east of the interstate and is densely covered with olive colored chaparral shrubs. Boulder outcrops are visible on slopes and ridges to the north. With the exception of distant mountains that are framed by mounded terrain and the extents of the KOP 8 photograph, the view is short and is limited to the foreground. The towers and/or blades of approximately 15 wind turbines are visible at KOP 8 and the prominence of these features increases as motorists proceed westward toward the Tecate Divide summit. Lastly, as shown in the photograph, the westbound travel lanes are located at a lower elevation that the eastbound travel lanes and are separated by metallic highway guardrail and shrub-dotted slope (see Figure 23).

Changes to Visual Character and Quality

A visual simulation of the Project as experienced at KOP 8 is included on Figure 23. The visual simulation captures the proposed interstate crossing of the 230 kV On-Reservation gen-tie line that would be supported by steel poles up to 150 feet tall each. Multiple conductor wires would be installed on the same poles and would span the interstate. The nearest poles of the proposed On-Reservation gen-tie line would be setback approximately 150 feet from I-8. Silhouetted segments of conductor wires would attract attention due to color contrast with the sky. Portions of thin steel poles would also be silhouetted against the sky. The regular spacing of poles and the stringing of conductor wires from south to north would attract attention at KOP 8. In addition to the overhead gen-tie crossing of the interstate, five new wind turbines are proposed atop a topographical ridge located south of I-8. As depicted on Figure 2, five wind turbines in a general north-south alignment would line the low, undulating ridge to the west/southwest of KOP 8. Similar to existing wind turbines atop the Tecate Divide and visible to westbound I-8 motorists (see Figure 23), the new wind turbines would be visually prominent.

At KOP 8, mobile viewers would tend to follow the gen-tie line alignment as it spans the interstate and proceeds to the north towards McCain Valley. Despite the proximity of motorists to the proposed On-Reservation gen-tie line and the visibility of poles and conductor wires, existing wind turbines atop the Tecate Divide and new turbines proposed south of the interstate would briefly dominate the westward and eastward views. While proposed On-Reservation gen-tie line poles would be visually submissive, Project wind turbines would be bold features in the interstate landscape. Resulting form and line contrasts associated with the gen-tie line poles would be moderately low but the introduction of dark, horizontal and silhouetted lines (i.e., conductor wires) would create moderate line and color contrast. Form and scale contrasts associated with Project wind turbines would be heightened at KOP 8 due to the proximity of wind turbines to the interstate and their elevated location atop a topographical ridge. While effects to vividness and intactness

associated with the gen-tie line would be tempered by existing wind development in the foreground, Project wind turbines would result in reduced intactness in the visual landscape to the south of the interstate.

5.2.9 KOP 9 – Existing Conditions

Orientation

KOP 9 is located off the dirt segment of Ribbonwood Road, approximately 0.85 mile north of Opalocka Road, on unincorporated County of San Diego lands. Situated approximately 1.1 mile east of the Reservation Boundary, KOP 9 looks west across a visibly modified McCain Valley landscape to the primarily horizontal ridgeline of the Tecate Divide. Fencing and low, grey-green shrubs dominate the immediate foreground of the view and the seemingly smooth, tan surface of cleared areas near visible structures creates noticeable color contrast with adjacent green tones. Single-story rural residential development is detectable in the view and structures display light colors and rectangular forms with simple, pitched roofs. Scattered oak trees dot the residential property. Further to the west, the boulder and chaparral covered ridgeline is developed with wind turbines of the Kumemaay Wind Project. The vertical lines and distinct three blade rotors of wind turbines are visible but tend to be washed out and are somewhat faint as viewed from KOP 9 (see Figure 24, Key Observation Point 9).

Changes to Visual Character and Quality

A visual simulation of the Project as viewed from KOP 9 is included on Figure 24. This simulation shows Project wind turbines in the northeastern portion of the Reservation Boundary and the Off-Reservation gen-tie line in the southernmost portion of the Boulder Brush Corridor. Due to a taller scale, the introduction of wind turbines to the northeastern corner of the Reservation would create moderately strong form and line contrasts. While Project wind turbines would display a similar y-shaped massing as existing wind turbines, Project wind turbines would be noticeably taller and display a more distinct form. In addition, due to their prominent vertical scale, Project wind turbines would attract attention. Combined with silhouetted segments of several conductor wires of On- and Off-Reservation gen-tie lines, the Project would interrupt the remaining openness of the northwestward view. Lastly, noticeable scale and line contrasts associated with Project facilities would result in degraded visual quality.

5.2.10 KOP 10 – Existing Conditions

Orientation

KOP 10 is situated on westbound I-8, approximately 0.4 mile southeast of the Tecate Divide and 1.9 miles from the SR-94/Campo/Boulevard exit (Exit 65). The view from the KOP encompasses an approximately 0.25-mile-long viewing window to the McCain Valley area that is created by falling terrain to the east and north of westbound lanes. As shown in Figure 25, Key Observation Point 10, the available view extends to the eastern horizon distant that is created by rugged terrain of the In-Ko-Pah Mountains and a low ridge in McCain Valley. Situated at an elevation of approximately 4,095 feet amsl, KOP 10 is located 1.3 miles southwest of the southwestern corner of the Boulder Brush Boundary (see Figure 15). Assuming a travel speed of 70 miles per hour, views to the McCain Valley from the viewing window represented by KOP 10 are available to westbound motorists for approximately 13 seconds. Due to the presence of interstate median vegetation, similar views to eastbound motorists are available for a shorter duration (approximately 9 seconds).

The KOP 10 view encompasses rolling terrain that is densely to moderately covered with low woody shrubs. Several lines of tall oak trees following drainages are visible and interrupt the otherwise consistent coverage of low woody shrubs. Gaps between vegetation and grading activities on mounded to flat terrain approximately 0.3-mile away contribute light-tan coloring to the landscape. Several outcrops of granitic boulders mark the terrain with their lightly colored piles. A single residential structure is visible on low terrain in the foreground (i.e., 0 to 0.5 miles) and is easily overlooked in the wide view. The rolling terrain eventually rises and creates a slightly undulating horizon line that is dotted by the dark to light silhouettes of tall and thin towers, each topped with three rotating blades. As experienced from KOP 10, the heights of visible wind turbines of the existing Tule Wind project (located 3 miles or more away) vary but their silhouettes are prominent on the horizon. Wind turbines and exposed soils resulting from grading activities in the foreground reduce the intactness of the view; however, these same features increase overall memorability through the creation of a diverse visual pattern of undisturbed terrain covered with native vegetation juxtaposed with visible disturbance and wind energy development.

Changes to Visual Character and Quality

A visual simulation of the Project as viewed from KOP 10 is included on Figure 25. This simulation shows eight Project wind turbines in the northeastern portion of the Campo Corridor and the Off-Reservation gen-tie line within the Boulder Brush Corridor. The simulation also includes the On-Reservation gen-tie line in the northeastern portion of the Campo Corridor. At Key View 10, construction of wind turbines in McCain Valley would result in moderate line and color contrasts. Although the line displayed by Project wind turbines would appear wider and more

pronounced than the comparatively faint lines of the existing Tule Wind turbines, new turbines would exhibit a similar tall tower and three-blade rotor form. As such, perceptible form contrasts would be low. Due to proximity, the white finish of Project wind turbines would be heightened compared to the dull silhouette of more distant wind turbines on the eastern horizon. The visibility of On-Reservation gen-tie poles, line, and the parallel access road would increase with proximity to the interstate. The On-Reservation gen-tie line would create regular and lightly colored vertical lines in the landscape (horizontal gen-tie lines are also visible along the closest segment of the alignment). Further and along with Project wind turbines, the On-Reservation gen-tie line would reduce the existing unity and intactness of the McCain Valley landscape.

In regards to the Off-Reservation gen-tie line within the Boulder Brush Corridor, the thin, vertical lines of steel poles are detectable in the visual simulation (see Figure 25) but would be difficult to detect in the mobile views available at KOP 10. Gen-tie poles and access roads would be located more than 1.3 miles from KOP 10, would be low in the landscape and would be viewed against the dark vegetation covering McCain Valley topography. Due to distance, gen-tie poles and access roads within the Boulder Brush Boundary would not be visually prominent and would not attract the attention of passing interstate motorists. Also, at KOP 10, the high-voltage substation and switchyard would be approximately 4.6 miles away and would not be visible due to intervening topography within the Boulder Brush Boundary that would block the facilities from view.

5.2.11 KOP 11 – Existing Conditions

Orientation

KOP 11 is located on westbound Opalocka Road, approximately 150 feet west of Ribbonwood Road near its transition from paved to dirt road. Located 1 mile south of the Boulder Brush Boundary, KOP 11 is oriented to the north towards the McCain Valley and Boulder Brush Boundary. As shown in Figure 26, Key Observation Point 11, the KOP looks across the eastern portion of a residential property (single-story residential and storage structures on the western portion of the property are not visible in Figure 26) in McCain Valley that is abutted on the south by Opalocka Road and Ribbonwood Road to the east. The straight, lightly colored band of soil bordered by short post-and-wire fencing in the foreground marks Ribbonwood Road in the photograph. In addition to sagebrush vegetation that transitions to dense grass, oak trees dot the foreground landscape. An electrical distribution line traverses the area in a general east/west alignment and is supported by thin wood poles. The distribution line is backscreened by various tones of green vegetation and rolling McCain Valley terrain and as such, wood poles and distribution line are somewhat difficult to detect in Figure 26. Tall and lightly colored wind turbines irregularly line the rocky ridgeline to the northeast and north (the closest wind turbine in the KOP 11 photograph is located 1.75 miles away), and the visual prominence of these features

decreases with distance from KOP 11. Lastly, the rugged and darkly colored terrain of the In-Ko-Pah Mountains are visible approximately 8 miles to the north-northeast.

Changes to Visual Character and Quality

A visual simulation of the Project as viewed from KOP 11 is included on Figure 26. This simulation shows eight Project wind turbines in the northeastern portion of the Campo Corridor (located in the "left" portion of the simulation) and the Off-Reservation gen-tie line in the Boulder Brush Corridor. A short-segment of the On-Reservation gen-tie line is visible and climbs the rocky terrain near the Project wind turbines. While the Project wind turbines would be visible and silhouetted against the background sky, their introduction to the visual landscape would produce relatively low contrast relative to existing conditions that includes ridgeline wind turbines. Project wind turbines would be tall and produce a prominent and distinct form however; from the particularly angle at KOP 11, they would be pushed to the western extents of the view (i.e., the "left" portion of the simulation) and would not be distributed across the Boulder Brush Boundary. Project wind turbines would attract attention yet passing motorists would tend to look beyond the wind turbines to distant mountains and follow the falling ridgelines in a scanning manner from left to right. The poles and conductor of the Project gen-tie line are visible as faint and thin lines that are particularly masked by tall trees on residential properties.

As viewed from KOP 11, the Off-Reservation gen-tie line is relatively low in the landscape is not visually prominent or particularly noticeable. Located over approximately 1.4 miles away, support poles of the Off-Reservation gen-tie would be distant and partially obscured by intervening vegetation on residential properties between KOP 11 and the Boulder Brush Boundary. The upper portion of 150-foot high tubular steel poles and lines would be taller than the intervening vegetation; however, the majority of gen-tie poles and lines would not be silhouetted. Rather, these elements would be viewed in the context of dark valley vegetation and boulders that, along with distance, would diminish the visibility and prominence of gen-tie poles and lines from KOP 11. At KOP 11, the proposed high-voltage substation and switchyard would be blocked from view by intervening topography within the Boulder Brush Boundary.

5.2.12 KOP 12 – Existing Conditions

Orientation

Key View 12 is located on east/southbound McCain Valley Road, approximately 5 miles north of KOP 11 and the paved extents of Ribbonwood Road. Key View 12 is located on BLM-managed lands and is approximately 0.45 miles from the Boulder Brush Boundary. View orientation is to the southeast along McCain Valley Road, and as depicted in Figure 27, Key Observation Point 12,

extends to the southeast towards the dense shrub covered valley and boulder strewn ridges of McCain Valley. Wide and rectangular Thumb Rock and the dark, pyramidal peak of Mount Tule is visible to the southeast of KOP 12. The KOP is situated on McCain Valley Road and looks across dense shrub-covered topography that gradually rises to the east towards a series of low and mounded, rocky ridges. As viewed from KOP 12, groups of wind turbines are clustered atop ridges and other elevated terrain. An electrical transmission line supported by tall, rust-color poles parallels McCain Valley Road. A geometric lattice steel tower and horizontal transmission lines of the existing Sunrise Powerlink are visible on a ridge to the southeast. Additional lattice steel towers of the existing Sunrise Powerlink are present in the landscape but are obscured from view by intervening boulder covered topography and distance. Lastly, several lattice steel towers of the existing Sunrise Powerlink cross between KOP 12 and the undulating, boulder-strewn hills to th southeast; however, the tower are located relatively low in the landscape. The lattice steel components of the towers makes them highly transparent such that viewers are generally able to see "through" the towers and to backing vegetation and topography.

Changes to Visual Character and Quality

The KOP 12 simulation (see Figure 27, Key Observation Point 12), shows the 500 kV switchyard and connection to existing SDG&E Sunrise Powerlink, adjacent high-voltage substation and segment of the Off-Reservation gen-tie within the Boulder Brush Corridor. As depicted in the simulation, both the SDG&E Sunrise Powerlink connection (i.e., two sets of three vertical poles within the existing transmission corridor) and the Off-Reservation gen-tie line would be installed relatively low in the landscape. While constructed of tubular steel, gen-tie and Sunrise Powerlink connection poles would be difficult to detect in the view due to distance and small scale relative to existing wind turbines and rust-colored transmission line poles in the foreground. Gen-tie and connection poles and lines would also be viewed against backing vegetation and topography and would not create particularly strong line or color contrasts.

From KOP 12, the high-voltage switchyard and substation would be located approximately 0.90 mile away and would be experienced as a concentrated collection of greyish vertical lines of varying heights. The grey color of infrastructure and the assortment of poles and hardware would create moderately low color contrast when viewed against the green-brown and white of existing vegetation and boulders. Grading and unvegetated manufactured slopes at the high-voltage substation and switchyard would produce noticeable color and texture contrasts that would reduce existing intactness of the shrub-covered valley topography. While Boulder Brush Facilities components would be visible at KOP 12, they would not be visually prominent or dominant.

5.3 Determination of Significance

5.3.1 Criteria

The criteria used to assess the significance of visual impacts from the Project were derived from the County of San Diego's Guidelines for Determining Significance and Report Format and Content Requirements – Visual Resources (County of San Diego 2007).

A project is considered to have a significant impact if it proposes any of the following, absent specific evidence to the contrary:

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.

In addition, the County of San Diego's Guidelines for Determining Significance and Report Format and Content Requirements – Dark Skies and Glare (County of San Diego 2009) was used to assess the significance of visual impacts resulting from the Project. As such, the Project is considered to have a significant impact if it proposes any of the following, absent specific evidence to the contrary:

1. The project will install outdoor light fixtures that do not conform to the lamp type and shielding requirements described in Section 59.105 (Requirements for Lamp Source and

Shielding) and are not otherwise exempted pursuant Section 59.108 or Section 59.109 of the San Diego County Light Pollution Code.

2. The project will operate Class I or Class III outdoor lighting between 11:00 p.m. and sunrise that is not otherwise exempted pursuant Section 59.108 or Section 59.109 of the San Diego County Light Pollution Code.
3. The project will generate light trespass that exceeds 0.2 foot-candles measured 5 feet onto the adjacent property.
4. The project will install highly reflective building materials, including but not limited to reflective glass and high-gloss surface color that will create daytime glare and be visible from roadways, pedestrian walkways, or areas frequently used for outdoor activities on adjacent properties.
5. The project does not conform to applicable Federal, State or local statute or regulation related to dark skies or glare, including but not limited to the San Diego County Light Pollution Code.

To identify the impacts associated with the Campo Wind Facilities and the Boulder Brush Facilities, distinct analyses for each is provided below. For example, under the heading Boulder Brush Facilities, only those components of the Boulder Brush Facilities are analyzed in accordance with County thresholds. Similarly, under the heading Campo Wind Facilities, only the Campo Wind Facilities are analyzed. In addition, the anticipated impacts of the Boulder Brush Facilities and the Campo Wind Facilities are identified with a distinct alpha or numeric designator for clarity. For example, impacts of the Boulder Brush Facilities are identified with a number (i.e., Impact AE-1, AE-2, AE-3, etc.) and impacts of the Campo Wind Facilities are identified with a letter (i.e., Impact AE-A, AE-B, AE-C, etc.). Mitigation measures follow a similar format. Please note that the County cannot enforce mitigation measures on the Reservation and mitigation measures for the Campo Wind Facilities are recommendations identified in the Campo Wind Facilities Environmental Impact Statement.

5.3.2 Assessment

5.3.2.1 Threshold 1

Would 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?

Boulder Brush Facilities

Existing Visual Setting

According to the Boulevard Community Plan, outside of the rural village area, Boulevard is characterized by "large lot single family residences," "large and small ranches," and "undeveloped meadows, extensive open spaces and ridgelines" (County of San Diego 2011e). Located north of I-8, the McCain Valley portion of the Boulevard area includes scattered single-story residences, ranches, and undeveloped lands within an undulating hill and valley landscape. As further described in Section 3.1, above, undeveloped lands are generally covered with low, scrubby shrubs and, occasionally, mature trees in moderate to dense stands and clusters. For example, lines of dark leafed trees regularly dot the extents of the Tule Creek floodplain are coupled with an understory of grasses; pockets of bare ground; and small, scattered shrubs and boulders. In addition to native vegetation, mature landscape trees are also installed on residential properties to the south of the Boulder Brush Boundary.

Lands surrounding the Boulder Brush Boundary include private property, Tribal lands, and public lands managed by the BLM. In addition to undeveloped shrub-covered lands that also include rock-strewn ridges and oak-lined drainages, Tribal and public lands are developed with existing wind turbine development. Specifically, 25 wind turbines are located on higher elevation Campo tribal lands approximately 1.35 miles to the southwest of the Boulder Brush Boundary and wind turbines of the Tule Wind project are on public lands located adjacent to the Boulder Brush Boundary.

The Kumeyaay Wind Project is located on the Campo Band of Diegueño Mission Indians Reservation, just north of I-8 and to the west of the Boulder Brush Boundary. Twenty-five regularly spaced wind turbines installed atop the Tecate Divide and an associated electrical substation is located north of I-8, off Williams Road and approximately 0.60 mile west of the Tecate Divide. For nearby interstate motorists, the existing wind turbines dominant northward views on the approach to Tecate Divide. While the existing substation is blocked from view by intervening terrain and mature oak, pine, and other trees, the tall, visually prominent wind turbines are visible throughout the McCain Valley and other locations outside of Boulevard's rural village area. A single modern wind turbine is also installed south of the interstate and near the eastern parking lot at the Golden Acorn Casino. East of Boulder Brush Boundary, fifty-seven wind turbines of the Tule Wind project are scattered in the eastern and northern extent of McCain Valley, generally along the unpaved alignment of McCain Valley Road. Although the southernmost Tule Wind project wind turbine is located more than 3 miles north of I-8, the white and tall, tubular steel towers and rotating three-blade rotors are intermittently visible along I-8 through the Boulevard area.

In addition to wind turbines, electrical substations (SDG&E Boulevard and Tule Wind project collector), lattice steel towers supporting Sunrise Powerlink, and weathered steel poles supporting the Tule Wind project gen-tie line are existing features in the local landscape that contribute to existing visual character and quality of the northern Boulevard area landscape.

Theme, Style, Size, Massing, Scale, Color, and Building Materials

Of the 11 visual elements included in the thresholds for visual character and/or quality, theme, style, size, massing, scale, color, and building materials are particularly relevant to the Boulder Brush Facilities. Setbacks, density, coverage, and architecture are more applicable to traditional residential and commercial development. Since the Boulder Brush Facilities would include a gen-tie line, high-voltage substation, switchyard and access roads, setbacks, density, coverage, and architecture are not assessed herein. In addition, neither the Mountain Empire Subregional Plan nor the Boulevard Community Plan include design guidelines. Therefore, consistency with design guidelines is not analyzed.

Theme and Style

As proposed, the Boulder Brush Facilities would include the construction and operation of a gen-tie line, a high-voltage substation, switchyard, and various access roads. This assortment of components would be situated on undeveloped private lands located north of I-8 in the McCain Valley. The valley is located in the northern portion of the Boulevard Subregional Group area.

The existing theme and style of the established visual character of the Boulevard subregion is informed by the Boulevard Community Plan. Specifically, the Community Plan's discussion of community theme includes the area's "existing natural and historic features", the natural terrain and "rustic south western nature" and "rustic rural character" (County of San Diego 2011c). Further, the lands within the Boulder Brush Boundary and surrounding areas in the Boulevard Community Plan area is defined by large-lot residential development, undeveloped meadows, and chaparral-covered hillsides. For example, the undeveloped portion of the Project Site on private lands consists of oak-tree-lined meadows, boulder outcrops, and chaparral-covered hillsides. The traditional rural pattern of development characterized by large-lot single-family residences and large and small ranches is evident on properties to the immediate south of the Boulder Brush Boundary and on several Ribbonwood Road–adjacent properties. A private, 22-lot estate residential development is also located south of the Boulder Brush Boundary off Opalocka Road and Ribbonwood Road.

Development other than rural residences and ranches occurs west, north, and east of the Boulder Brush Boundary, and consists of large-scale (and visually prominent) wind turbines and high-voltage electrical transmission lines including the Sunrise Powerlink, as discussed above under

existing visual setting. A 30-acre U.S. Customs and Border Protection facility is also located to the south of the Boulder Brush Boundary.

Visual simulations of the Boulder Brush Facilities are included on Figures 25, 26, and 27 of this report. As shown on Figures 25 and 26, while the proposed gen-tie within the Boulder Brush Corridor would be installed across an undeveloped site (i.e., the Boulder Brush Boundary), existing wind development and electrical distribution infrastructure is visible in the surrounding landscape. For example, existing ridgeline wind turbines are perched above the McCain Valley and as experienced from I-8, new gen-tie poles and lines within the Boulder Brush Boundary would be difficult to detect (see Figure 25). In addition to gen-tie lines, the thin and light-colored gen-tie poles within the Boulder Brush Corridor would be located approximately 1.6 miles from motorists at KOP 10. Due to distance, the apparent scale of 150-foot tall poles would be reduced as viewed from I-8 and would produce weak contrast with the surrounding landscape. At Opalocka Road (i.e., KOP 11), an electrical distribution infrastructure is installed in the foreground and visually prominent wind turbines line the easterly ridge above McCain Valley. As at KOP 10, new gen-tie poles would be relatively distant (approximately 1.8 miles) from viewers at KOP 11 and would be difficult to detect in the landscape. After exiting the Tribal lands to the west of the Boulder Brush Boundary, the gen-tie crosses the landscape in a west-east alignment prior to proceeding north towards the high-voltage substation. Light colored gen-tie poles and lines would be backed by the typical dark green color of valley vegetation; however, poles and lines would produce weak color and line contrast. As experienced from KOP 11, the bulk of gen-tie poles would be reduced by distance and the presence of backing vegetation and terrain.

Located in the narrow, northernmost portion of the Project Site, the high-voltage substation and switchyard would be constructed approximately 230 feet south of the Sunrise Powerlink transmission line alignment. The high-voltage substation and switchyard in the Boulder Brush Corridor would be situated on undeveloped lands that are surrounded to the east, north and west by existing wind turbines of the Tule Wind project. While the high-voltage substation and switchyard would not be visible from I-8, Opalocka Road, or other public, County-maintained roads in the Boulevard Community Plan area, they would be visible from BLM-managed public lands and a dirt segment of McCain Valley Road located on BLM-managed lands. As demonstrated in the visual simulation prepared from McCain Valley Road (i.e., KOP 12), the view consists of densely vegetated and undeveloped terrain that is located adjacent to lands on which visually prominent, vertical structures have been installed. Existing lattice steel towers, tubular steel poles supporting electrical lines, and tall wind turbines dot the landscape surrounding the northernmost portion of the Project Site (see Figure 27). Gen-tie poles and other infrastructure installed at the high-voltage substation and switchyard would be experienced as a collection of indistinct forms at KOP 12. More so than high-voltage substation and switchyard components, color and line contrasts associated with vegetation removal, grading, and the construction of light-

colored manufactured slopes would be noticeable at KOP 12 (see Figure 27). However, the visual effects of grading would occur in a landscape that has been visibly altered by existing wind turbine and electrical transmission line development that, in the case of wind turbines, has created similar visual effects at the ground plane. Further, the visual effects of grading at the high-voltage substation and switchyard would be somewhat diminished by the presence of existing wing turbines and electrical transmission poles that are dominant features in the landscape.

In summary, historically the visual theme and style of the Boulder Brush Boundary and surrounding area has been defined by traditional rural patterns of development, undeveloped meadows, and hillsides covered with natural vegetation and boulder outcroppings. In more recent years, wind energy and transmission line development has altered the viewshed and introduced elements which contrast with the traditional rural patterns. While the proposed Boulder Brush Facilities would introduce additional infrastructure elements that would contrast with the traditional theme and style of the Boulevard Community Plan area, Off-Reservation gen-tie poles and lines would be indistinct in views available from the majority of public roads including Ribbonwood Road and Opalocka Road. In addition, the high-voltage substation and switchyard would not be visible from public roads in the community plan area and would be blocked from view of residences in the surrounding area. Due to being located in the narrow, northernmost portion of the Boulevard Community Planning Area, the switchyard and high-voltage substation are visually separated from the remainder of the community planning area and would be experienced from public BLM-managed lands where wind energy and transmission line development currently exists and dominates views and existing visual character. Therefore, for the reasons discussed above, the proposed Boulder Brush Facilities would not substantially contrast with the traditional theme and style of the Boulevard Community Plan area.

Size, Scale, and Massing

Approximately 3.5 miles in length, the Off-Reservation gen-tie line would be supported by approximately 32 regularly spaced steel poles that would be a maximum of 150 feet tall each. The proposed Off-Reservation gen-tie line is included in visual simulations prepared from I-8 and Opalocka Road (KOPs 10 and 11; see Figures 25 and 26). As viewed from these locations, the size and scale of gen-tie poles in the Boulder Brush Corridor would be indistinct and these features would not attract the attention of motorists. While taller and visually prominent wind turbines and lattice steel towers are present on Tribal and BLM-managed public lands to the west and east of the Boulder Brush Boundary, the Off-Reservation gen-tie line poles would be taller than existing distribution utility poles, rural residences, water tanks, and other traditional rural structures in the Boulevard Community Plan area. In addition, a high-voltage substation and switchyard are proposed in the northeastern corner of the Project Site, a loop-in of the existing Sunrise Powerlink transmission line would also be constructed near the proposed switchyard. A visual simulation of

the switchyard, high-voltage substation, loop-in, and associated vegetation removal and grading effects, is included as Figure 27 to this report.

As depicted in Figure 27, the switchyard and substation facilities would be constructed in a lower elevation area situated between nearby boulder-strewn hills to the north and south. The 6.9-acre fenced-in footprint switchyard would include numerous vertical components, including an approximately 1,000 feet of 500kV transmission line in-coming and out-going legs connecting the switchyard to the Sunrise Powerlink, three 500 kV breakers and a single-story control house that would be located in a fenced-in graveled yard. The 1.6-acre fenced in footprint high-voltage substation would include vertical bays, racks, transformers, breakers, and a control house and parking area. Three 10,000-gallon water tanks dedicated for firefighting purposes would also be installed at the high-voltage substation footprint. Including site grading and clearing associated with fuel modification zones, the combined total disturbance area proposed for the high-voltage substation and switchyard would be approximately 18.5 acres. As demonstrated in Figure 27, the size, scale, and massing of proposed substation, switchyard and interconnection infrastructure would produce visible contrast with the characteristic vegetation and topography of the northern McCain Valley area. The introduction of a concentrated collection of poles, bays, and vertical lines would be highlighted by the removal of vegetation and smooth surface of manufactured slopes and related areas of disturbance. Although the size, scale and massing of substation and switchyard infrastructure would contrast with the existing undeveloped character of the Boulder Brush Boundary, taller and larger existing steel features are visually prominent in the surrounding landscape. The high-voltage substation and switchyard facilities are proposed on undeveloped lands bordered by the Sunrise Powerlink to the immediate north and BLM-administered lands developed with wind turbines of the Tule Wind Project to the east, north, and west. As experienced from McCain Valley Road and nearby public lands, these visually prominent features display greater size, scale and massing than the proposed infrastructure at the high-voltage substation and switchyard. In addition, the visual experience of McCain Valley Road motorists at KOP 12 also includes the Tule Wind Project substation. Located off McCain Valley Road and approximately 4 miles to the southeast of KOP 12 the Tule Wind Project substation includes vertical components, including metallic racks and bays, a single-story O&M facility, and an approximately 50-foot-tall, 138 kV pull-off structure. Due to the distance, the presence of taller and larger wind turbine and electrical infrastructure in the surrounding area and along the McCain Valley Road corridor, and the relatively low siting of the high-voltage substation and switchyard in the landscape relative to KOP 12, the size, scale, and massing of the high-voltage substation and switchyard would subdued and would create weak color and line contrasts. .

Color and Building Materials

The Off-Reservation gen-tie would be supported by non-specular, tubular steel poles that would be light grey in color. . As demonstrated in the visual simulations prepared from KOP 10 and 11,

the color and steel material of gen-tie poles and lines would be obscured and would produce weak color contrasts when viewed from distances greater than 1 mile (see Figures 25 and 26). While contrasts would be clearer when viewed from closer distances, close range viewing opportunities are infrequent from public roads and residential properties in the Boulevard Community Plan area. Similarly, access roads through the Boulder Brush Boundary would produce color contrasts with adjacent areas of undisturbed vegetation; however, weak to no color contrasts associated with these features would be detectable outside of the Boulder Brush Boundary. Regarding the switchyard and high-voltage substation, metallic hardware and steel components would be the primary elements within the facility footprints. Facility elements would typically display a light grey color that, when viewed from public vantage points in the surrounding area, would result in relatively weak color contrasts that would not be visually prominent or striking. The most apparent visual change associated with the proposed widening and paving of Ribbonwood Road north of Opalocka Road would be color-based. More specifically, the installation of a greyish asphalt-concrete surface in place of the existing dirt road surface would create moderately low color contrast (see Figure 27). While the darker, linear extension of Ribbonwood Road would be perceptible, the presence of existing paved roads in the immediate area would reduce the severity of visual effects and overall color and material contrasts. In addition, proposed improvements would be experienced primarily by a small volume of daily viewers consisting of residents on properties located off Ribbonwood Road (i.e., north of Opalocka Road). Lastly, improvements are proposed to an existing roadway that has itself created existing (and visible) linear disturbance in the local landscape.

Summary

Historically, the visual theme and style of the Boulder Brush Boundary and surrounding area has been defined by traditional rural patterns of development and natural settings. In more recent years, wind energy and transmission line development has altered the landscape and introduced elements which contrast with the traditional rural and natural patterns. The proposed Off-Reservation gen-tie line, high-voltage substation and switchyard would be experienced in the context of the existing development, including the Kumeyaay Wind project and Tule Wind project. Compared to existing energy related development, the Bounder Brush Facilities would be noticeably smaller (or similar) in size, scale, and massing. The Boulder Brush Facilities would also display similar colors and be constructed of similar materials as existing infrastructure development. Therefore, the Boulder Brush Facilities would not substantially detract from or contrast with the existing visual character or quality through conflicts with important visual elements of the area. Impacts would be **less than significant**.

Campo Wind Facilities

On-Reservation development is clustered amongst large swaths of undeveloped land. This includes the Golden Acorn Casino, wind turbines, transmission and distribution electrical lines, rural residences, tribal facilities, and paved and dirt access roads. Undeveloped meadows, oak-dotted valleys and chaparral-covered hillsides with occasional outcrops of boulders also contribute to the visual character of the Reservation. Although the existing character of the Reservation is partially defined by patterns of traditional rural development and landscape features, wind turbines and transmission and distribution electrical lines also contribute to the existing setting of the Reservation and surrounding Boulevard area. Wind turbines and electrical lines were previously described above in the discussion pertaining to the Boulder Brush Facilities.

A discussion of potential conflicts between the Campo Wind Facilities and important visual elements of development in the area is provided below.

Theme, Style, Size, Massing, Scale, Color, and Building Materials

Of the 11 visual elements included in the threshold for visual character and/or quality, theme, style, size, massing, scale, color, and building materials are particularly relevant to the Campo Wind Facilities. Since the Campo Wind Facilities would primarily be a wind turbine development with ancillary facilities including a collector substation and MET towers, setbacks, density, coverage, and architecture are not specifically assessed herein.

Theme and Style

The Campo Wind Facilities include the construction and operation of up to 60 wind turbines, an underground electrical collection system, a collector substation, an O&M facility, a temporary staging and parking area, a temporary batch plant, temporary and permanent MET towers, water collection and septic systems and various access roads. This assortment of components would be distributed in a generally linear organization on the Reservation. The Project layout including the Campo Wind Facilities is depicted on Figure 2.

The existing theme and style of the Reservation's visual setting is largely informed by oak-tree-lined meadows, boulder outcrops, and chaparral-covered hillsides. Pockets of rural development are also located on the Reservation. For example, residences and tribal facilities are clustered within the central portions of the Reservation, along Church Road/BIA Road 10, and along SR-94. In addition to natural elements and rural development, high-voltage electrical transmission lines and large and visually prominent wind turbines are located on the Reservation. Specifically, wind turbines are located along the I-8 atop or near the Tecate Divide, and in the northern and

eastern extents of McCain Valley in the Project Vicinity. Wind turbines are visually prominent features within the landscape.

As proposed, most wind turbines would be installed in the central and southern areas of the Reservation. As shown on Figure 1, these areas currently do not support wind turbines. The introduction of Project wind turbines in the central and south areas of the Reservation would be apparent and would create visible contrast with the predominant theme and style of the existing visual environment of the Reservation. South of I-8, the visual environment is predominantly informed by scattered rural residences, tribal governmental facilities, and natural vegetation and topography. Visual simulations of Project wind turbines in the central and southern portions of the Reservation are included on Figures 17 thorough 20 (KOPs 2 through 5) and Figure 22 (KOP 7).

While existing wind turbines are generally concentrated On-Reservation and on BLM-administered lands north of I-8, their tall and prominent form creates a wide viewshed. Due to their proposed size, scale and massing, proposed wind turbines would also have a large viewshed that would extend to most of the Boulevard subregion. As depicted on Figure 12, the modeled viewshed for the Campo Wind Facilities encompasses the segment of Old Highway 80 through the Reservation, higher elevation ridges in the central and southern portions of the Reservation, and locations outside of the Boulevard rural village area. Existing wind turbines in the Project Vicinity are captured in in Figures 16 (KOP 1), 21 (KOP 6), 23 (KOP 8), and 24 (KOP 9). As demonstrated in the existing conditions photographs from these KOPs, wind turbines are visually prominent in the existing visual setting of the Project Vicinity. The existing visual setting of tall contrasting infrastructure elements created by wind turbines on the Tecate Divide, at the Golden Acorn Casino, and atop ridges to the north and east of McCain Valley would be replicated by the placement of Project wind turbines atop ridges and/or higher elevation terrain across the Reservation. In addition, up to three permanent MET towers would be sited atop prominent terrain on the Reservation. Up to six temporary MET towers would be sited at specific turbine locations for a short time prior to erecting the turbines. While existing wind turbines are present in the landscape, the wide distribution of visually prominent wind turbines on the Reservation and south of I-8 would contrast with the predominant theme and style of the area that is exemplified by oak-tree-lined meadows, boulder outcrops, chaparral-covered hillsides and pockets of rural development.

While less visually prominent, non-wind turbine project components would generally be sited on hillsides and ridges on the Reservation. For example, the centrally located collector substation yard would be located west of BIA Road 10 and immediately east of a ridge that would be topped with Project wind turbines. The proposed underground collection system and access roads would be constructed off existing roads to provide access between Project wind turbines and poles supporting the On-Reservation gen-tie line. In addition, an O&M facility that includes an O&M building, parking and an equipment storage area may be constructed near the base of sloping terrain

along the eastern Reservation Boundary. Due to the potential southern location on the Reservation, the O&M facility may have limited visibility.

Alternatively, the O&M facility may be constructed off Old Highway 80 and near the Golden Acorn Casino. Specifically, the Project laydown yard would be located approximately 0.20 mile west of the casino's eastern parking and 0.15 miles east of an existing 0.65-acre On-Reservation electrical substation. Similar to the existing substation, the O&M facility would be located adjacent to the highway, would be surrounded by perimeter fencing, and would feature vertical components that would be visible from the highway. In addition, the O&M facility would be constructed off Williams Road and near Live Oak Springs Resort. The resort currently features an assortment of A-frame and rectangular buildings and displays a developed character. While the O&M facility would be visible from Old Highway 80, these facilities would not substantially contrast with existing substation, casino, and Live Oak Springs Resort. Therefore, significant contrast with the predominant theme and style of the Reservation due to the introduction of the Old Highway 80 O&M facility would not occur.

Size, Scale, and Massing

As proposed, up to 60 approximately 374-foot-tall towers topped with three-blade rotors would be installed On-Reservation. Turbine towers would be a tapered tubular steel structure manufactured in three to six sections, depending on height. The rotor diameter (i.e., the diameter of the circle swept by the blades) would be approximately 460 feet, and each blade would be approximately 230 feet long. Total height of each wind turbine would be approximately 586 feet. Turbine towers would display a simple, vertical and subtly narrowing form from base to nacelle height. Rotors would exhibit a long, Y-shaped form that would continually rotate at variable speeds.

As previously stated, the surrounding area is characterized by rural residential development, including large-lot single-family residences and ranches, undeveloped meadows and hillsides, open spaces, and boulder- and shrub-covered ridgelines. In addition, wind turbines are installed atop the Tecate Divide (i.e., Kumeyaay Wind Project) and in the northern and eastern extent of McCain Valley (i.e., Tule Wind Project). Also, a single modern wind turbine comparable in scale to existing wind turbines of the Tule Wind Project is installed within a cleared area adjacent to the Golden Acorn Casino's eastern truck stop parking lot. As viewed from eastbound I-8, the existing wind turbine towers over the nearby casino building and is noticeably taller than wind turbines of the Kumeyaay Wind Project installed atop the Tecate Divide.

From adjacent ground level to fully extended blade tip, Project wind turbines (approximately 586 feet tall) would display greater scale than existing On-Reservation development and would produce a distinct y-shaped massing. Although scale and mass conflicts between residential

structures, tribal facilities, and Project wind turbines would be strong, overall contrasts would be moderated by the presence of existing wind turbines in the landscape. A total of 25 wind turbines are installed atop the Tecate Divide within the Reservation Boundary, and 57 wind turbines (approximately 438 feet tall each) are installed on ridgelines and other high-elevation terrain to the northwest, north, and east of the Boulder Brush Boundary. Although existing and proposed wind turbine towers would display a similar simple vertical and subtly narrowing form from base to nacelle height, and rotors exhibit a long, Y-shaped form that rotate at variable speeds, the scale of Project wind turbines would be greater than existing wind turbines. In addition, Project wind turbines would be located atop visually prominent ridgelines across the Reservation. Installation atop visually prominent terrain would emphasize the scale of Project wind turbines and would these features would dominate views in the central and southern portion of the Reservation and westward views from the Tierra del Sol area of Boulevard. See Figures 17 (KOP 2), Figures 18 and 19 (KOP 3 and KOP 4), Figure 20 (KOP 5), and Figure 22 (KOP 7). Therefore, due to the anticipated size and scale disparity between proposed wind turbines in the central and southern portions of the Reservation and existing On- and Off-Reservation scattered development in these areas (and size/scale contrast with existing wind turbines atop the Tecate Divide), Campo Wind Facilities wind turbines would substantially contrast with the size, scale massing of existing On- and Off-Reservation development. Impacts would be **potentially significant** (**Impact AE-A**).

The Campo Wind Facilities also include a collector substation, O&M facility, and temporary and permanent MET towers. The collector substation would be located within a fenced yard, and the transformer and switching equipment would be approximately 25 feet tall. The O&M building would be an approximately 50-foot by 100-foot rectangular, single-story (approximately 18 feet high from finished floor to roof eave), pre-engineered metal buildings with a slightly pitched roof. Both temporary and permanent MET towers would be up to approximately 374 feet tall. The permanent MET towers would be free-standing, tapered, lattice steel structures while the temporary MET towers would be guyed, lattice steel structures.

In addition to existing wind turbines at or near the Tecate Divide and in the McCain Valley area, other development in the Project Area also includes the Golden Acorn Casino and Travel Center, scattered residential development and tribal facilities, electrical substations, and electrical distribution and transmission lines. The Golden Acorn Casino consists of a wide, approximately 40-foot-tall structure located south of I-8 and off Old Highway 80. An existing electrical substation is located north of Old Highway 80 and near the casino's eastern parking lot. Located off Old Highway 80 and just outside of the Reservation Boundary, Live Oaks Springs Resort is comprised of an A-frame main office and several rectangular, single story buildings. Scattered residential structures are also located near the A-frame resort building. Rural residences in the area are typically one to two story structures that display a rectangular form and feature slightly pitched roofs. Buildings of similar one- to two-story scale and

rectangular form are also present along the Old Highway 80 commercial corridor through the nearby rural village area of Boulevard. The collector substation would include components and elements of comparable size and scale to existing substations along Old Highway 80 both On- and Off-Reservation. The O&M building would display a scale and mass comparable to that of existing residential, commercial, and tribal facilities in the Project Vicinity. The size and scale of temporary and permanent MET towers would be comparable to that of existing wind turbines included in the Kumeyaay Wind Project. Therefore, the size, scale, and massing of the on-site substation, O&M buildings, and MET towers would be consistent with existing similar development in the Project Vicinity. Impacts would be **less than significant**.

Color and Building Materials

Consistent with FAA regulations, all proposed turbine components would be painted or finished using low-reflectivity, neutral white or light grey colors similar to the color and finish of adjacent wind turbines on the Kumeyaay Wind Project and Tule Wind Project. The proposed pre-engineered metal O&M building would be painted with a low-reflectivity, greyish or light-tan finish, and components at the collector substation would predominantly display metallic, greyish tones. Rust-colored steel or tubular steel poles would support the proposed On-Reservation gen-tie line. MET towers would be constructed of greyish lattice steel. While not a color or finish applied to Campo Wind Facilities components, construction of access roads and creation of fuel modification zones around each turbine pad would produce thin, linear bands and circular areas of tan-colored disturbance.

The majority of the Project Site is covered with scrubby shrubs, trees (occasionally) in moderate to dense stands and clusters, and granitic boulder outcrops. Earth-tone colors are prevalent on the Project Site and consist of seasonally golden/green grasses of meadows; blueish to seasonally vibrant green foliage of sagebrush, the dark green crowns of oak trees; and the light tans displayed by denuded areas, patches of exposed soil, trails, and boulders. Vegetation on rural residential properties display a similar earth-tone palette; however, residential properties tend to include larger expanses of tan due to vegetation removal practices, grazing areas, and creation of fuel modification zones. In addition, facilities, residences, sheds, corrals, and aboveground storage tanks in the surrounding area are often painted with earth-tone colors, as well as white and grey.

While not commonly displayed on the Project Site or in the surrounding area, white is a recurring color and is a distinct feature of existing wind turbine development in the Project Vicinity. Further, lightly colored (i.e., tan, light grey, and white) buildings are visible north of I-8 on the approach to the Project Site via Ribbonwood Road, and lightly colored residential and commercial buildings are constructed along the Old Highway 80 corridor. In addition, white fencing and walls are present at the entrance to the Rancho Ribbonwood Private Estates development and residential and commercial structures in the Project Vicinity are typically constructed of wood or feature a stucco-clad exterior.

While not commonplace, concrete masonry unit and pre-fabricated steel/miscellaneous metal buildings are present along Ribbonwood Road (e.g., U.S. Customs and Border Protection facility, storage structures on private property), on Old Highway 80 (e.g., Boulevard Substation and Caltrans Boulevard facility), and along McCain Valley Road (e.g., Tule Wind Project O&M facility). While the color and building materials used for the Campo Wind Facilities are not commonly display in the natural landscape setting, the colors and building materials would be similar to existing wind turbine development and other facilities located north of I-8 and along the Old Highway 80 corridor in the Boulevard area. Impacts would be **less than significant**.

Entire Project (Campo Wind Project with Boulder Brush Facilities)

Historically the visual theme and style of the Boulder Brush Boundary and surrounding area has been defined by traditional rural patterns of development and natural landscapes. On the Reservation, development is clustered amongst large swaths of undeveloped land. Undeveloped meadows, oak-dotted valleys and chaparral-covered hillsides with occasional outcrops of boulders also contribute the visual character of the Project Area.

In more recent years, wind energy and transmission line development has altered the viewshed and introduced elements which contrast with the traditional rural patterns. This existing infrastructure includes high-voltage transmission lines traversing the northern portion of the Boulder Brush Boundary and the Kumeyaay Wind Project and Tule Wind Project on adjacent lands. The existing wind turbines associated with these projects are visible throughout the Project Vicinity. The Boulder Brush Facilities would display comparable (or reduced) size, scale, massing, color, and materials when compared to components of these existing wind projects that include tall wind turbines and gen-tie lines, electrical substations and O&M facilities and permanent access roads. Visual simulations of the Boulder Brush Facilities as viewed from I-8, Opalocka Road and McCain Valley Road are presented on Figures 25 through 27. Due to the existing infrastructure development in the Project vicinity, the proposed 3.5 mile gen-tie line on private lands, collector substation and switchyard, and access roads would not substantially detract from or contrast with the existing visual character or quality through conflicts with important visual elements of the area.

Campo Wind Facilities wind turbines that would be located south of I-8 (wind turbines are also proposed north of I-8) would be located atop visually prominent ridgelines. Due to their prominent locations, the scale of Project wind turbines would be emphasized and these features would dominate views from the central and southern portion of the Reservation and in westward views from the Tierra del Sol area of Boulevard. While wind turbine development is present in the Project Vicinity, distance and the presence of intervening terrain blocks or diminishes the contribution of existing wind turbines to the visual character of the central and southern portions of the Reservation and the Tierra del Sol area of Boulevard. Therefore, due to the anticipated size and scale disparity between proposed wind

turbines in the central and southern portions of the Reservation and existing scattered development in these areas, Project wind turbines would substantially contrast with existing visual character. Impacts would be **potentially significant** (**Impact AE-A**).

5.3.2.2 Threshold 2

Would the project 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?

Boulder Brush Facilities

There are no designated landmarks or historic resources present within the Boulder Brush Boundary.

In the Project Vicinity, the Boulevard area has been historically characterized by large-lot single-family residences, large and small ranches, undeveloped meadows, extensive open spaces, and ridgelines. Private lands within the Bounder Brush Boundary are in the northern portion of the Boulevard Subregional Group area. The private lands are primarily undeveloped, dotted with rock outcroppings of various size, and covered with native vegetation communities including chaparral and coast live oak woodland. While existing wind turbines are installed on BLM-managed lands to the immediate east, north, and northwest of the Boulder Brush Boundary (see Figure 2), the lack of development within the Boulder Brush Boundary generally creates an openness in the landscape that is detectable via somewhat narrow viewing corridors. According to the Boulevard Community Plan, openness or open space is one of several features contributing to the valued visual character of the area. The value of open space and rock outcroppings as notable community attributes is further reinforced by reference to Boulevard being known for "vast scenic vistas," "oak-filled valleys," and "boulder outcroppings" in the Community Plan (County of San Diego 2011e).

The Boulder Brush Facilities include an Off-Reservation gen-tie line, a high-voltage substation, switchyard, and various access roads. Approximately 3.5 miles long and supported by 38 150-foot-tall steel poles, the Off-Reservation gen-tie line would extend east from the adjacent Reservation Boundary, spanning the Tule Creek corridor, and proceed to the north atop rugged, west-facing slopes to the proposed high-voltage substation. As previously stated, the private lands traversed by the Boulder Brush Facilities are primarily undeveloped and the southern and central portions including the Tule Creek corridor are relatively wide compared to the northern extent. The lack of development along the corridor and the presence of distant and rugged In-Ko-Pah Mountains to the northwest create opportunities for broad scenic views. The introduction of vertical features on private lands as a result of the Project would affect existing views. However, proposed steel poles that would support the Off-Reservation gen-tie line would be installed

immediately west and east of Tule Creek and would be relatively low in the landscape as viewed from outside of the Boulder Brush Boundary. For example, when viewed from public vantage points in the surrounding area including I-8, Opalocka Road, and McCain Valley Road (see Figures 25, 26, and 27), proposed poles would be experienced as a series of distant, thin lines in the landscape and would not substantially change the visual character or image of the area. As demonstrated in the visual simulations, the steel poles and gen-tie lines would typically be viewed against dark mountain and hill terrain which would reduce the visual prominence of the proposed gen-tie. However, the stringing of multiple strands of conductor wires between poles would occasionally be viewed against the sky. From locations including the northerly extension of Ribbonwood Road (see KOP 9, Figure 24), the resulting line and color contrast created by conductor wires within the Boulder Brush Corridor silhouetted against the sky would interrupt the remaining openness of views across the Boulder Brush Boundary and detract from available vistas. While the majority of the KOP 9 is focused on components of the Campo Wind Facilities, a short segment of the gen-tie on private land is included.

In addition to the alteration of the remaining open characteristics of the landscape within the Boulder Brush Boundary, construction of the Boulder Brush Facilities would result in impacts to oak woodland vegetation. As stated in the Community Plan, the value of open space, oak vegetation and rock outcroppings as notable community attributes is reinforced by reference to Boulevard being known for “vast scenic vistas”, “oak-filled valleys”, and “boulder strewn outcroppings”. However, the Boulder Brush Facilities would result in less than 1 acre of permanent impacts to oak woodland vegetation (approximately 4.5 acres of oak woodland would be temporarily impacted; see Appendix D) and the visual effects of oak woodland impacts would be difficult to detect from public viewing locations outside of the Boulder Brush Boundary. While oak woodland impacts would not be significant from public vantage point perspective, the proposed Off-Reservation gen-tie line would impact notable landscape features that contribute to the valued visual character of the Boulevard area (e.g. openness). As such, the visual character impacts of the gen-tie line would be **potentially significant** (**Impact AE-1**).

Both the high-voltage substation and switchyard would be developed in the northernmost portion of the Boulder Brush Boundary, in an area that coincides with the narrow, northern extent of the Boulevard Subregional Group area. This portion of the subregional group area is visually isolated from most of the Boulevard area. In addition, this area is generally obscured from public view by surrounding hilly terrain and as such, the effects of construction activities would not experience by residents or motorists within the Boulevard Community Plan area. Also, the high-voltage substation and switchyard would be located adjacent to the existing Sunrise Powerlink with the nearest steel lattice tower supporting the 500kV transmission line installed approximately 230 feet north of the switchyard site (see Figure 2). Furthermore, existing Tule Wind project wind turbines

are located on BLM-administered lands to the west, north, and east of the proposed switchyard and high-voltage substation. Specifically, the closest existing wind turbines to the proposed switchyard site is approximately 0.60 mile to the south and northeast, 0.50 mile to the north, and 0.50 mile to the west.

Due to the factors described above, the high-voltage substation and switchyard sites and immediate surrounding private lands within the Boulder Brush Boundary do not generally display the valued "openness" present in other landscapes of the Boulevard area such as along the Tule Creek corridor. While construction and operation of the facilities would permanently alter the existing undeveloped character of the switchyard and high-voltage substation sites, visual effects would not entail the removal of particularly open landscape characteristics as viewed from regularly trafficked public vantages points (i.e., McCain Valley Road) in the area. The switchyard and high-voltage substation sites are visible from lesser trafficked public lands in the surrounding area yet as viewed from these public vantage points, existing wind turbines (and related ground disturbance), access roads, and transmission lines are common features in the landscape. Development of the facilities would entail the removal of rock outcroppings; however, numerous outcroppings are located in the surrounding area and the switchyard and high-voltage substation sites are relatively remote. As such, the visual effect of removing several rock outcroppings would be lessened by the existing frequency of similar outcroppings in the surrounding area and by the remote location of the switchyard and high-voltage substation sites. As such, impacts from the switchyard and substation would be **less than significant**.

Campo Wind Facilities

The existing character of the Reservation is described above in Section 3.1.1, Reservation Boundary. In addition, features and notable community attributes that contribute to the valued visual character of the Boulevard area are described above under the Boulder Brush Facilities heading.

In addition to Boulevard, the Reservation is bordered on the west and south by the Campo/Lake Morena Subregional Group area. Similar to the Boulevard Subregional Group Area, the Campo/Lake Morena Subregional Group Area identifies natural areas as important features and notable attributes of the local community character. Specifically, the Campo/Lake Morena Community references "open spaces, long views, rugged natural ridgelines, night skies, and oak and chaparral woodlands" as notable attributes of the Campo/Lake Morena community (County of San Diego 2016).

Following the clearing of vegetation and grading at each turbine base, a permanent turbine foundation would be constructed and crane pads would be installed. Clearing and grading associated with the construction of crane pads would create visible form, line, and color contrasts where visible to local receptors (ridgeline locations may somewhat screen select crane pad

locations from view). The pads would be constructed to support cranes that are instrumental in the erection of wind turbines components (i.e., towers, nacelles, and rotors). Cranes would be on site (and would be visible from the surrounding area) during turbine assembly and installation and the presence of tall cranes and the relatively slow rise of wind turbine tower sections and other components from hillsides and ridgelines would introduce massing and vertical scale to the Project Site. These components would tower over the immediate area and would create strong form, line, and color contrast with the characteristic landscape (see Figure 17, KOP 2; Figures 18 and 19, KOP 3 and KOP 4; Figure 20, KOP 5; and Figure 22, KOP 7). Due to their vertical scale, cranes and wind turbine components would be visible throughout the Reservation and Project Vicinity. During the wind turbine assembly and installation period, the hillsides and ridgelines within the Campo Corridor would begin to take on similar vertical and visually prominent attributes as the Kumeyaay Wind Project atop the Tecate Divide. While wind turbines along the I-8 corridor would be viewed in the context of the Kumeyaay Wind Project, the existing wind turbine at the Golden Acorn Casino, and Tule Wind project, the introduction of Project wind turbines to the central and southern areas of the Reservation would produce strong contrast and would dominate views. In addition, visual effects would be heightened at locations such as Church Road, SR-94 and local roads in the Tierra del Sol area where existing wind turbines are not typically visible due to landform or vegetation screening or are significantly diminished due to distance.

While Project wind turbines would be visually prominent when viewed from On- and Off-Reservation vantage points, the Campo Corridor would also be altered by construction of less visually prominent components of the Campo Wind Facilities. However, these components would largely be screened from most public receptors and as such, the viewshed of visual effects would be limited. For example, the underground electrical collection system, collector substation, O&M facility and temporary facilities (i.e., batch plant and laydown yard) would be located in the central or southern areas of the Reservation. Construction activities associated with these components would generally be outside of the viewshed of the largest viewer group in the Project Vicinity (i.e., I-8 motorists). However, construction activities and resulting visual effects would be experienced by On-Reservation residents, and Old Highway 80, SR-94, and Church Road motorists. Views to the temporary batch plant, temporary laydown yard, and O&M facility identified in the southeastern portion of the Reservation (see Figure 2) would also be available to limited Off-Reservation viewers in the Tierra del Sol area of Boulevard (i.e., east of the Reservation Boundary).

Once operational, up to 60 wind turbines (approximately 586 feet tall each) with long rotating blades would line ridges on the Reservation to the north and south of I-8. Campo Wind Facilities and ancillary facilities would display comparable massing and form as existing wind turbine development in the Project Vicinity. As previously stated, 25 wind turbines of the Kumeyaay Wind

Project operate in a generally southeast-northwest alignment atop the Tecate Divide, one modern wind turbine is installed at the Golden Acorn Casino, and 57 wind turbines are located on BLM-administered public lands located to the northeast and east of the Reservation Boundary. The Kumeyaay Wind Project and Golden Acorn Casino are located On-Reservation.

As viewed from I-8 and segments of Old Highway 80 near the Golden Acorn Casino, proposed On-Reservation wind turbines would be viewed alongside existing wind turbines development. In these instances, Project wind turbines would be viewed in the context of the Project Vicinity landscape that has been noticeably altered by existing wind turbine and electrical transmission line development. However, from Church Road and SR-94, and from On- and Off-Reservation vantage points south SR-94, existing wind turbines along the I-8 corridor and on the Tule Wind project site are obstructed or occasionally masked from view and their presence in the visual landscape is distant and/or indistinct. For example, as viewed from Church Road and SR-94, existing wind development is not generally visible in existing views and implementation of the Campo Wind Facilities would transform the undeveloped chaparral- and rock-outcrop-covered character of On-Reservation hillsides to an active wind energy development. See Figures 17 through 20 (KOP 2 through 5) and Figure 22 (KOP 7). Further and as viewed from these locations, the installation of proposed wind turbines would alter the existing openness of the landscape and degrade the quality of existing views to rugged natural ridgeline. Landscape "openness" and rugged natural ridgelines are features and notable attributes that contribute to the existing visual character of the Reservation and the valued visual character of the Boulevard and Campo/Lake Morena areas. Because development of the Campo Wind Facilities would remove and/or alter these features and attributes, impacts would be **potentially significant** (**Impact AE-B**).

Entire Project (Campo Wind Project with Boulder Brush Facilities)

The installation of both the Campo Wind Facilities and Boulder Brush Facilities would alter the existing (or remaining) openness of the landscape and quality of existing views. The Project would also result in the removal of rock outcrops and oak trees. Landscape "openness," rugged natural ridgelines, rock outcrops and oak trees are features and notable attributes that contribute to the existing visual character of Reservation and the valued visual character of the Boulevard area. The severity of visual change and impacts to existing visual character would be most pronounced in locations where existing wind turbines are screened or obscured from view. As such, impacts associated with the Project would be potentially significant (Impact AE-1 and Impact AE-B).

5.3.2.3 Threshold 3

Would 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?***
- ***A recreational area?***

Boulder Brush Facilities

Public Roads

Interstate 8

Rising terrain to the north of I-8 and generally to the west of Ribbonwood Road would effectively screen most components of the Boulder Brush Facilities from view of east- and west-bound interstate motorists. Views to gen-tie line poles (approximately 150 foot tall each) within the Boulder Brush Boundary would generally be screened from view by higher, intervening terrain to north of the interstate including mounded road cuts. Where brief views to the McCain Valley area are available such as at KOP 10, gen-tie poles and line within the Boulder Brush Corridor would be distant The nearest pole would be setback over 1.6 miles from I-8 and would be viewed as low and thin lines in the landscape (see Figure 25). As experienced from east and west-bound I-8, the form and line displayed by gen-tie line poles and conductor wires in the Boulder Brush Corridor would generally be indistinct in the view. As demonstrated in Figure 25, existing Tule Wind project wind turbines perched atop the ridgeline to the east of the Boulder Brush Boundary, and existing wind turbines atop the Tecate Divide, would continue to attract the attention of motorists near KOP 10 such that gen-tie poles and lines on the Boulder Brush Boundary would not be focused on by interstate travelers.

The high-voltage substation and switchyard sites are located greater than 4.5 miles from I-8 at KOP 10. Due to distance and the location of the proposed facilities in relation to the brief viewing location available at KOP 10, the high-voltage substation and switchyard would not be visible to interstate motorists.

Because the gen-tie within the Boulder Brush Boundary would be distant, low in the landscape, and would not be visually prominent, and because the high-voltage substation and switchyard

would not be visible, effects to existing focal or panoramic vistas from I-8 associated with the Boulder Brush Facilities would be **less than significant**.

Ribbonwood Road

Proposed gen-tie poles and lines within the Boulder Brush Boundary would be visible to northbound motorists on Ribbonwood Road. Specifically, gen-tie poles and lines in the Boulder Brush Corridor would be visible at the pronounced westerly turn where Ribbonwood Road transitions to Opalocka Road. A visual simulation of the Boulder Brush Facilities (and wind turbines of the Campo Wind Facilities) is included on Figure 25. At KOP 11 and as demonstrated in the visual simulation, the form and line of proposed poles would be experienced as distant and low lines in the landscape. In addition, the collection of lines strung between proposed steel poles would be faint and difficult to clearly see. At KOP 11, the closest poles would be 1.75 miles to the north. As motorists travel west of KOP 11, scattered oak trees in the foreground would occasionally block the gen-tie line poles from view and further diminished view effects associated with the feature.

Closer proximity views to the gen-tie line within the Boulder Brush Corridor may be available to motorists on the northerly unpaved extension of Ribbonwood Road to the north of Opalocka Road. This segment of Ribbonwood Road is predominantly used by private residents to access residential properties and is typically situated at a lower elevation than that of Opalocka Road (see Figure 26). As experienced from the northerly extension of Ribbonwood Road (see KOP 9, Figure 24), the conductor wires within the Boulder Brush Corridor would be briefly silhouetted against the background sky and the stringing of these features would interrupt the remaining openness in northwest views across the Boulder Brush Boundary. Where viewed against the sky, the resulting contrast in dark and light color would attract the attention of motorists and detract from the quality of the existing view. While a relatively short segment of the gen-tie within the Boulder Brush Corridor would be silhouetted as viewed from Ribbonwood Road , impacts to existing wide views across the Boulder Brush Boundary would be **potentially significant** (**Impact AE-2**).

Due to distance and intervening terrain, the proposed switchyard and high-voltage substation would not be clearly visible to Ribbonwood Road motorists. A visual simulation of the Boulder Brush Facilities as viewed from Opalocka Road has been included as Figure 26. Similar to visual screening of the facilities associated with an intervening ridgeline, the switchyard and high-voltage substation would not be clearly visible from Ribbonwood Road. Therefore, impacts to focal or panoramic vistas from Ribbonwood Road due to the switchyard and high-voltage substation would be **less than significant**.

Proposed improvements to Ribbonwood Road would consist of paving and where needed, widening of an existing road. Because the visual effects of paving and widening would be experienced at the ground level and would follow the alignment of an existing road, the color and line displayed by the paved road would create weak visual contrast. Further, the paved road would not include vertical elements that would obstruct or impede existing views from Ribbonwood Road. Therefore, impacts to focal or panoramic vistas from Ribbonwood Road due to road improvements would be **less than significant**.

McCain Valley Road

Views to the Boulder Brush Facilities would be available to southbound motorists over a continuous, approximately 2-mile-long segment of McCain Valley Road to the northwest and north of the Boulder Brush Boundary. McCain Valley Road is depicted on Figure 2 and an existing view from the road is shown on Figure 27. Existing southward views from this segment of McCain Valley Road are long and occasionally extend through the McCain Valley and to distant mountains in Mexico. While existing transmission lines, and wind turbines are visually prominent, the view towards McCain Valley retains some openness that is visible between "gaps" of wind turbines and transmission structures. Lastly, the available view is particularly long from the elevated segment of McCain Valley Road located west of Manzanita Cottonwood Road.

The Off-Reservation gen-tie line spans the Tule Creek corridor and would be detectable from McCain Valley Road but the form and line of conductor wires and steel poles would be somewhat indistinct in available views. The proposed crossing would be located more than 3.6 miles from motorists on McCain Valley Road and conductor wires would be viewed against a backdrop of dark and distant terrain. In addition, motorists' perception of the 150-foot-high scale of steel poles would be reduced by distance and the elevated viewing angle available from McCain Valley Road. However, the northerly segment of the Off-Reservation gen-tie line would be installed atop sloping terrain in a generally straight alignment (see Figure 2). From east and westbound McCain Valley Road, the line of proposed poles and conductor wires would be visible beyond visually prominent steel lattice towers and existing silhouetted conductor wires in the foreground and existing wind turbines installed off the road. While present in the landscape, proposed Off-Reservation gen-tie poles and conductor wires would not be visually prominent. See KOP 12, Figure 27 that includes a short segment of the gen-tie as it interconnects to the high-voltage substation. As demonstrated in the KOP 12 visual simulation, the Off-Reservation gen-tie line would be experienced in a viewshed that has been noticeably modified by existing transmission line and wind turbine development. Because views from McCain Valley Road include taller and visually prominent vertical structures, and because the gen-tie alignment would be experienced as faint and distance lines, the Off-Reservation gen-tie line would not substantially impact a focal or panoramic vista available from McCain Valley Road. Impacts would be **less than significant**.

In addition to the Off-Reservation gen-tie line, the high-voltage substation and switchyard would be visible from a segment of McCain Valley Road on BLM-managed public lands. Available views to the facilities would not be continuous and would be broken by intervening terrain. From the west and north of Lost Valley Road, the available view to the high-voltage substation and switchyard area is short (i.e., limited to the foreground) and consists of the characteristic terrain and vegetation of the area. Therefore, due to its short length, the available view from McCain Valley Road to the high-voltage substation and switchyard does not display focal or panoramic vista qualities. From the north (i.e., west of Manzanita Cottonwood Road), the high-voltage substation and switchyard would be visible from McCain Valley Road. However, the high-voltage substation and switchyard would be surrounded on three sides by existing wind turbines of the Tule Wind project and spanned by the Sunrise Powerlink (see Figure 2). The presence of the existing wind turbines and transmission infrastructure is also demonstrated in Figure 26. While construction of the switchyard and high-voltage substation would require vegetation removal, grading and the creation of manufactured slopes (the visual effects of these activities are highlighted in Figure 27), the color contrast would not substantially impede the available southeasterly view to Mount Tule. Given the proximity of visually prominent features, and the distance between the proposed facilities and motorists, the introduction of the switchyard and high-voltage substation would not substantially impact a focal or panoramic vista available from McCain Valley Road. Impacts would be **less than significant**.

Trails

Ribbonwood Road Pathway and Ribbonwood Trail are proposed facilities identified in the Boulevard Community Trails and Pathways Plan (County of San Diego 2005a), a component of the adopted County Community Trails Master Plan. Public right-of-ways have not been established and the proposed trails have not been constructed as of 2019. However, these trails, if developed, would offer trail users views of and across the McCain Valley landscape. Thus, views to the Boulder Brush Facilities and Campo Wind Facilities would be available to future users of the Ribbonwood Road pathway and trail. However, as these users are not a part of the baseline condition and the pathway and trail are not existing facilities, a significance determination in regards to potential impacts to focal or panoramic vistas from these facilities is not required. An assessment of potential impacts to views from these future facilities is provided below for disclosure purposes only.

Aligned on Ribbonwood Road, the proposed Ribbonwood Road Pathway would extend north from the I-8 underpass for approximately 2 miles at which point it would transition to the proposed Ribbonwood Road Trail. The Ribbonwood Road Trail would traverse existing dirt access roads and Lost Valley Road for approximately 4.4 miles. The proposed trail alignment traverses a private

dirt access road within the Boulder Brush Boundary from north to south and would connect to McCain Valley Road near the northeastern corner of the Project Site.

The proposed Ribbonwood Road Trail alignment generally bisects the Boulder Brush Boundary from south to north. Existing wind turbines of the Tule Wind project and Kumeyaay Wind project are visible from the potential future pathway and trail alignments yet the perception of their scale as viewed from Ribbonwood Road is reduced by distance. More specifically, existing wind turbines are setback approximately 0.90 mile or greater from most of the Ribbonwood Road Trail alignment (greater setbacks are provided from the potential future pathway alignment) and Boulder Brush Facilities would be located immediately adjacent to the segments of the proposed trail. Due to proximity, components of the Boulder Brush Facilities adjacent to the proposed trail segment across the private lands would dominate views and be focal features in the landscape.

Scenic Highway

There are no official state designated highways in the viewshed of the Project which includes the Boulder Brush Facilities. Two eligible state scenic highways, I-8 and SR-94 (both of which are also included in the County Scenic Highway System), are located in the Project Area and both roadways traverse the Reservation (see Figure 3). Impacts to views from I-8 are described under "Public Roads," above.

The nearest Boulder Brush Facilities component, an Off-Reservation gen-tie line pole, would be located over 2.7 miles from the nearest segment of Old Highway 80 which is included in the County Scenic Highway System. At its intersection with Old Highway 80, SR-94 is located over 3.75 miles from the nearest component of the Boulder Brush Facilities. Due to the presence of intervening terrain and vegetation, the Boulder Brush Facilities within the Boulder Brush Corridor would be blocked from view of SR-94 and Old Highway 80 motorists. Therefore, Boulder Brush Facilities would not obstruct, interrupt, or detract from existing views from SR-94 and Old Highway 80 and no impacts to focal or panoramic vistas would occur.

Recreational Areas

The Lark Canyon OHV Area is located on BLM-administered lands, off McCain Valley Road, to the east of the Boulder Brush Boundary. In addition to motorcycle and ATV trails, a staging area and an upper and lower campground are available and located off McCain Valley Road. Both the staging area (approximately 1.65 mile east of the nearest Off-Reservation gen-tie line pole) and the campgrounds (approximately 1.3 miles east of the nearest Off-Reservation gen-tie line pole) are buffered from the Boulder Brush Facilities by a rocky, rugged ridge that is developed with wind turbines of the Tule Wind project. The intervening ridge with existing wind turbines to the west of the Lark Canyon staging

area and campgrounds limits the length of westward views and would block the Off-Reservation gen-tie line poles and conductor wires from view of recreationists at the staging area and campgrounds. As such, the Off-Reservation gen-tie line poles are not visible from the staging area and Upper and Lower Lark Canyon campgrounds. However, OHV trails extend west of the staging area and west of the intervening ridge and offer westerly views extending to the Tecate Divide. Therefore, views to the Off-Reservation gen-tie line would be available to trail users.

The Off-Reservation gen-tie would be experienced by OHV users on motorcycles/dirt bikes and ATVs. According to the BLM, in Fiscal Year 2019 (i.e., October 1, 2018 to October 30, 2019), approximately 4,500 persons visited the OHV Area (A. Williams, personal communication, November 15, 2019). As stated in Section 4.2, users of the OHV area are considered to have low viewer sensitivity due to their focus on the trail and higher speed of travel while actively recreating. In addition, viewer sensitivity and expectations of these users is reduced by the presence of existing wind turbines and electrical transmission lines in the McCain Valley landscape. As viewed from the OHV area and more specifically, trails extending west from the McCain Valley Road-adjacent staging area, the nearest gen-tie poles within the Boulder Brush Boundary would be located 0.80 miles away and near the base of a west-facing slope. Because OHV users would typically experience the proposed gen-tie line from higher elevation vantage points and from 0.80 mile (or further) away, the vertical poles and horizontal lines of the Off-Reservation gen-tie would not substantially obstruct or impede upon available westerly views that include existing wind turbines on the Tecate Divide. Therefore, focal or panoramic vista impacts to OHV users of the Lark Canyon OHV Area due to the Off-Reservation gen-tie would be **less than significant**.

Due to distance and intervening terrain, the proposed switchyard and high-voltage substation would not be clearly visible or visually prominent to users of the Lark Canyon OHV Area. Further, these facilities would be constructed at the base of a low slope and would not include features that would substantial alter or obstruct existing views from OHV area trails. The Upper and Lower Lark Canyon campgrounds are located at the base of an east-facing slope that blocks the Boundary Brush Boundary from view. Due to intervening terrain and distance (the campgrounds are located over two miles away from the proposed switchyard and high-voltage substation sites), the proposed switchyard and high-voltage substation would not be visible from the Upper and Lower Lark Canyon campgrounds. Therefore, impacts would be **less than significant.**

Campo Wind Facilities

Public Roads

Interstate 8

Once constructed, components of the Campo Wind Facilities that would be visible from I-8 include proposed wind turbines and the On-reservation gen-tie line. As illustrated on Figure 2, Project wind turbines would be installed On-Reservation north and south of I-8. Due to their proposed height and location on ridges or higher elevation terrains, wind turbines installed on the Reservation and south of the interstate would prominent in the views of east and westbound motorists generally between Crestwood Summit on the west and SR-94/Ribbonwood Road on the east. The remaining Campo Wind Facilities on the Reservation (i.e., a temporary batch plant and laydown yard, O&M facility, and collector substation) would typically be blocked from view of motorists by intervening terrain.

As viewed from westbound I-8 on the approach to the Tecate Divide, Project wind turbines and the On-Reservation gen-tie line would be viewed in the context of 25 existing wind turbines of the Kumeyaay Wind Project located to the north of the interstate. In addition, one wind turbine is installed at the Golden Acorn Casino. However, Project wind turbines would be over 200 feet taller than existing wind turbines and would display a stronger form and line and (south of the interstate) atop an undeveloped ridgeline. As experienced from eastbound motorists near the Tecate Divide, the available view to the west is somewhat shortened in length by a ridge (i.e., the Tecate Divide) and is occasionally blocked by mounded median terrain. Still, the addition of visually prominent wind turbines atop a prominent ridge would impede existing easterly and westerly views and wind turbines would be focal points in the landscape to the south of I-8. As such, impacts would be **potentially significant (Impact AE-C)**.

In addition to new wind turbines, the proposed I-8 crossing by the On-Reservation gen-tie line would be visible to motorists (see Figure 23, KOP 8). Upon passing the Tecate Divide, westbound motorists are provided long views across the Reservation that stretch to distant terrain in Mexico. Where these views occur, the proposed On-Reservation gen-tie line would roughly parallel the interstate. The On-Reservation gen-tie line would generally be setback between approximately 400 feet and 1,600 feet south of I-8. While the presence of steel poles and conductor wires running roughly parallel to the interstate would interrupt available southward views, the duration of exposure to particularly long views to the south is brief. Further, these views are generally located peripherally to motorists and passengers. In addition, an interstate advertisement billboard, wooden poles supporting distribution lines, and the existing wind turbine installed at the Golden Acorn Casino eastern parking lot are present to the south of the interstate and between the Tecate Divide and

Williams Road. Located south of the interstate, these existing features contribute vertical elements that tend to interrupt the existing view.

Project wind turbines would be visible to eastbound interstate motorists on the approach to the Golden Acorn Casino from the west. As experienced from the interstate, northward views available to I-8 motorists are generally shortened in length by the rising, hilly terrain of the local landscape. Therefore, from approximately Crestwood Summit east to the Tecate Divide, northward views available to eastbound I-8 motorists are typically short in length and are not considered focal of panoramic vistas.

Lastly, between Old Highway 80 and Crestwood Summit (approximately 0.95 miles), the southward views available to westbound interstate motorists are generally long and extend to distant mountain terrain located more than 20 miles away in Mexico. An existing view from eastbound I-8, and a visual simulation of the Campo Wind Facilities, is included in Figure 16. As demonstrated in Figure 16, views from this segment of the interstate are scenic and look across the densely vegetated hill and valley terrain of the Reservation and Campo/Lake Morena area. Upon completion of the Campo Wind Facilities, the existing southward views would be interrupted by Project wind turbines installed atop parallel north–south ridgelines in the western extent of the Reservation (see Figure 16 visual simulation). Up to approximately 60 wind turbines may be installed south of the interstate on the Reservation. As viewed from KOP 1, the nearest Project wind turbines in these parallel rows would be located approximately 1.5 miles away (see Figure 16). While more proximate ridgelines and terrain in the foreground occasionally create limits to view length, an unnamed, distant, dark and pyramidal peak is a focal feature in the southern landscape and may attract the attention of passing I-8 motorists. While the duration of the available view is relatively short, Project wind turbines would interrupt the available southward view and degrade the existing open characteristics of the landscape. As such, impacts would be **potentially significant (Impact AE-C)**.

Old Highway 80

Somewhat clear and long, southward and westward views from Old Highway 80 to Project wind turbines would occasionally be offered to motorists near the Golden Acorn Casino. Off-Reservation, views to Project turbines would be available to highway motorists generally west of Tierra Heights Road and east of Live Oak Springs Road (a distance of approximately 1 mile). The proposed On-Reservation gen-tie line also spans Old Highway 80 west of Williams Road. Lastly, the O&M facility and a temporary concrete batch plant and laydown yard are proposed off Old Highway 80 near the Golden Acorn Casino and Williams Road and would be visible to passing motorists. An alternative location for the O&M facility, and temporary concrete batch plant and laydown is also identified in the southeast area of the Reservation (see Figure 2). The alternative

location is not visible to Old Highway 80 motorists. In addition, both the batch plant and laydown yard would be temporary facilities and would not be permanent visual elements in the landscape.

Where visible, Project wind turbines would be situated atop On-Reservation ridges. As experienced from Old Highway 80, proposed wind turbines would not typically block focal features such as distant mountain terrain from view; however, their tall form and distinct massing would substantially reduce the quality of available views through noticeable reduction in landscape intactness. The installation of wind turbines and poles of the On-Reservation gen-tie line to the west and east of BIA Road 10/Church Road would interrupt the existing long and relatively open southward views from eastbound Old Highway 80. While the duration of view exposure to wind turbines and On-Reservation gen-tie line poles would be brief, the prominence and distribution of these features in the landscape would diminish the quality of the existing long and scenic views. Off-Reservation and as viewed from westbound Old Highway 80, Project wind turbines would be located on ridgelines greater than 1.5 miles from passing motorists. In addition, between Tierra Real Heights Road and Live Oak Springs Road, westward and southwestward views from Old Highway 80 are occasionally limited in length by tall landscape trees installed on private property or oak trees and large manzanita shrubs that occasionally parallel the highway in the foreground. Where views from Old Highway 80 are unencumbered by foreground vegetation and distribution line infrastructure, the local hill and valley landscape appears intact and is scenic. Distant, prominent peaks in Mexico are also occasionally visible from the highway. While the duration of these available views is brief, westward views are currently free of particularly prominent vertical structures. As such, the introduction of up to 60 ridgeline wind turbines to the south of I-8 would noticeably diminish the quality of existing open views available to westbound Old Highway 80 motorists generally between Tierra Real Heights Road and Live Oak Springs Road. As such, impacts to focal or panoramic vistas from Old Highway 80 would be **potentially significant** (**Impact AE-C**).

The On-Reservation gen-tie line crossing of Old Highway 80, O&M facility, and temporary laydown yard and temporary concrete batch plant yards would be visible to Old Highway 80 motorists. However, the views available to highway motorists near these Campo Wind Facilities components are shortened in length by elevated terrain to the immediate north and south and as such, panoramic views do not typically occur. In addition, these components would be viewed in the context of existing wind turbines (i.e., wind turbines of the Kumeyaay Wind Project and the single wind turbine installed at the Golden Acorn Casino) that are located in the foreground of the highway. Based on these factors, impacts to focal or panoramic vistas experienced from Old Highway 80 associated with non-wind turbine components of the Campo Wind Facilities (i.e., On-Reservation gen-tie line, O&M facility, and temporary laydown yard and concrete batch plant) would be **less than significant**.

SR-94

Off-Reservation, views available to motorists from westbound SR-94 are typically shortened in length by the regular presence of oak trees adjacent to the highway. Where oak trees are not present or are less numerous/dense such as briefly at Live Oak Springs Road, views broaden to reveal grass covered and oak dotted valleys and chaparral and boulder covered hills. The Project wind turbines would be visible to westbound SR-94 motorists; however, available views are generally short in length and limited to the foreground. For example, as illustrated on Figure 20 (KOP 5), Project wind turbines would tower over the nearby ridge and dominate the view from SR-94. While Project wind turbines would be visually prominent at KOP 5 and would create substantial contrast in the landscape, the short and narrow view available at this location is not a focal or panoramic vista. No significant or particularly unique scenic features are present and the presence of oaks flanking the valley minimize opportunities for wide, panoramic views.

On-Reservation, available views from SR-94 are similarly short and limited in length by the various north–south ridges that traverse the Reservation. Although situated on Church Road, Figure 19 (KOP 4) illustrates the regular occurrence of ridges and hills on the Reservation that effectively limit opportunities for long and broad views from SR-94. Off-Reservation, regular north–south ridges on the Reservation limit the length of eastward views available from eastbound SR-94. As illustrated on Figure 17 (KOP 2), Project wind turbines would be visually prominent atop the visible ridgeline and would dominate views from SR-94. While the eastward view encompasses the characteristic vegetation and terrain on the Reservation and in the Project Area, the landscape generally lacks a focal feature. In addition, the visible ridgeline to the east and similar limiting landforms to the north and south shorten the length of the available view. Thus, the view offered to motorists at KOP 2 is not a focal or panoramic vista. Based on the analysis presented above for the Campo Wind Facilities, impacts to focal or panoramic vistas experienced from SR-94 would be **less than significant**.

Ribbonwood Road

Project wind turbines and a segment of the proposed On-Reservation gen-tie line would be visible to Ribbonwood Road motorists generally between I-8 and the southern Boulder Brush Boundary (see Figure 2). From Ribbonwood Road, the smaller scale of gen-tie line poles (approximately 150 feet tall each) relative to the scale of wind turbines would result in a more limited viewshed for these features. Specifically, proposed gen-tie line poles and conductor wires that would roughly parallel Manzanita Road would be intermittently visible in northwestward views from northbound Ribbonwood Road between I-8 and Opalocka Road. North of Opalocka Road, the visibility of the On-Reservation gen-tie line could increase due to the lower elevation of dirt segment of

Ribbonwood Road. However, westward and northwestward views from the dirt segment of Ribbonwood Road are occasionally blocked by landscape trees planted on private properties.

Between I-8 and Opalocka Road, Project wind turbines at the Tecate Divide and west of the Tecate Divide would be viewed in the context of existing wind turbines of the Kumeyaay Wind Project. While Project wind turbines would be noticeably taller and more distinct due to larger components (i.e., towers and blades), westward views from Ribbonwood Road towards the Tecate Divide have been noticeably modified by existing wind turbine development. Project wind turbines and the On-Reservation gen-tie line would be sited near existing wind turbines and located a similar (or greater) distance from motorists. Further, these Campo Wind Facilities components would generally be viewed in line with existing wind turbine development. As such, Project turbines installed atop and west of the Tecate Divide and the On-Reservation gen-tie line would not substantially interrupt or detract from westward views available to Ribbonwood Road motorists. As shown in the KOP 9 visual simulation (see Figure 24), the available westward view is short in length and ridgetop wind turbines (and the On-Reservation gen-tie line) would not block or otherwise interrupt a focal feature from view.

At the Ribbonwood Road/Opalocka Road intersection and along Opalocka Road, views offered to the north and northwest are somewhat long and stretch to dark, distant terrain of the In-Ko-Pah Mountains. At these locations, wind turbines would be the primary visible component of the Campo Wind Facilities and ridgetop wind turbines would be viewed in line with a prominent peak of the In-Ko-Pah Mountain range. While existing wind turbines of the Kumeyaay Wind project and Tule Wind project are present in the landscape, these elements are located at the extents of the McCain Valley and atop prominent ridges in the area. At the intersection of Ribbonwood Road and Opalocka Road, existing wind turbines of the Tule Wind Project are visible to the north. However, as these structures are located approximately 5.6 miles away to the north, they are slightly indistinct and are viewed against the backdrop of dark mountain terrain. As shown on Figure 2, up to eight Project wind turbines may be installed on a low rocky located as close as 1.7 miles northwest of Opalocka Road. The introduction of tall and lightly colored wind turbines that, as viewed from the intersection of Ribbonwood Road and Opalocka Road, would be silhouetted against the sky would interrupt and detract from the remaining openness of the existing northwardly and northwestwardly views that stretch across the McCain Valley landscape. Due to the placement of the Project wind turbines in the landscape and their 586-foot-tall scale, impacts to focal or panoramic vistas experienced from Ribbonwood Road would be **potentially significant** (**Impact AE-C**).

McCain Valley Road

Views to Project wind turbines and the On-Reservation gen-tie line crossing of I-8 would be visible to motorists on the paved segment of McCain Valley Road. This segment of McCain Valley Road

extends north from I-8 for approximately 2.1 miles and is located 3.1 miles east of the Reservation Boundary. Other Campo Wind Facilities including the collector substation, O&M facility, temporary laydown yard, and a temporary batch plant would be blocked from view of McCain Valley Road motorists by intervening terrain and vegetation.

As experienced from the County-segment of McCain Valley Road, Project wind turbines installed north of I-8 on the Reservation would be intermittently visible in westward views. The closest Project wind turbine to McCain Valley Road motorists would be more than 3.6 miles away. In westward views, the silhouettes of distant wind turbines would be noticeable but experienced in the context of the 25 existing wind turbines installed north of I-8 and atop the Tecate Divide and wind turbines of the Tule Wind Project. While Project wind turbines would be taller than existing wind turbines, the Kumeyaay Wind Project and Tule Wind Project have noticeably altered the quality of distant views from McCain Valley Road to the Tecate Divide. Therefore, the introduction of Project wind turbines on distant ridges in westward views would not substantially interrupt or degrade the quality of existing available views from the County-segment of McCain Valley Road.

From the unpaved segment of McCain Valley Road (i.e., the segment located on BLM-administered lands), westward views to Campo Wind Facilities would be blocked by intervening ridges for a distance of approximately 5.5 miles. Specifically, the alignment of McCain Valley Road roughly parallels a rugged, north–south ridge that is within approximately 0.40 miles (or closer) and is partially developed with modern wind turbines of the Tule Wind Project. Further north and west of this ridge, Project wind turbines installed atop and near the Tecate Divide would be visible in southwestwardly and southwardly views from McCain Valley Road. Views to Project wind turbines would generally be available from the segment of McCain Valley Road located north of the Project Area (see Figure 2). While numerous wind turbines of the Tule Wind Project are visible and both the Sunrise Powerlink and Tule Wind Project gen-tie line roughly parallel the road, visual "gaps" between steel lattice towers and poles in the foreground offer opportunities for long, scenic views. Specifically, southward views available from this segment of McCain Valley Road are occasionally unencumbered and extend across descending chaparral covered slopes to the Tule Creek corridor and pyramidal peaks located south of I-8.

Due to the elevated vantage point offered along this particular segment of McCain Valley Road and visual "gaps" between existing wind turbine electrical transmission infrastructure, the southward view is occasionally unencumbered and long, stretching into Mexico. While the introduction of Project wind turbines in the northeastern corner of the Reservation would not reduce the length of the available view (wind turbines would be located over 3.25 miles away), the clustering of up to eight tall wind turbines on a low ridge would partially block a pyramidal peak (Boundary Peak) from view. The duration of feature blockage would be brief; however, Project wind turbines would interrupt and detract from the available openness of the southwardly view

toward Tule Creek corridor and distant mountain terrain. Given the remaining openness of the southerly view and the interruption of this open quality due to proposed wind turbines on the Project Site, scenic vista impacts would be **potentially significant** (**Impact AE-C**).

Trails

If public right-of-way is established and the trail facilities are developed, views to Project wind turbines, On-Reservation gen-tie line, and the O&M facility on the Reservation would be available to future users of trails identified in the Boulevard and Campo/Lake Morena Community Trails and Pathways Plans.

Regarding the Boulevard Community Trails and Pathways Plan, Campo Wind Facilities would be visible from the potential future alignments of the Ribbonwood Road Pathway and Ribbonwood Road Trail (both located north of I-8). In addition, components of the Campo Wind Facilities that would be in the central and southern portion of the Reservation would be visible from several future trails, including the San Diego & Arizona Eastern Railway Trail, Tierra del Sol Trail, Shockey Truck Trail, and Shockey Loop Trail. Each of these trails is identified as a proposed facility in the Boulevard Community Trails and Pathways Plan Map (County of San Diego 2009a). However, because the County has no land use jurisdiction over the Campo Wind Facilities and Reservation, this section does not analyze potential impacts to future views that may be established on segments of the San Diego & Arizona Eastern Railway Trail and the Shockey Loop Trail that are shown on the Boulevard Community Trails and Pathways Plan as traversing the Reservation. Instead, the analysis below focuses on those segments of trail alignments located Off-Reservation and off private roads.

As previously stated, the Ribbonwood Road Pathway and Ribbonwood Road Trail are potential future trail alignments. While views to the Campo Wind Facilities would be available to future users of the pathway and trail if developed, a significance determination in regards to potential impacts to focal or panoramic vistas from these facilities is not required since these users are not part of the baseline condition and the pathway and trail are not existing facilities. However, an assessment of potential impacts to views from these future facilities is provided for disclosure purposes only. Because the Ribbonwood Road Pathway and Ribbonwood Road Trail alignments parallel/overlie Ribbonwood Road, effects to views associated with the introduction of components of the Campo Wind Facilities would generally be similar as discussed above for Ribbonwood Road.

Located in the southern portion of the Boulevard Subregional Group Area, the San Diego & Arizona Eastern Railway Trail, Tierra del Sol Trail, Shockey Truck Trail, and Shockey Loop Trail offer trail users westward views across the Tierra del Sol area and the Reservation. Each of these trails is identified as a proposed facility on the Boulevard Community Trails and Pathways Plan (County of

San Diego 2009a). The potential future San Diego & Arizona Eastern Railway Trail follows an inactive largely east–west railway corridor that passes between the Tecate Divide and Rattlesnake Mountain and extends approximately 3.2 miles west to the Reservation Boundary. At Tierra Real Lane (approximately 0.85 mile east of the Reservation Boundary), the potential future San Diego & Arizona Eastern Railway Trail alignment is situated atop a slightly elevated berm. Due to the elevated vantage point, westward views available to trail users of the remaining segment on County lands are generally unencumbered by tall, foreground elements. However, a low ridge on the Reservation limits the length of the available westward view. Project wind turbines and the O&M facility, temporary laydown yard and concrete batch plant in the southeastern portion of the Reservation would be located as close as 0.35 mile from the proposed trail. As viewed from the potential future trail, Project wind turbines would dominate views. However, the short westward view is neither a focal nor a panoramic vista. Similarly, northwestward views from the non-private road segment of the potential future Tierra del Sol Trail (essentially a 1-mile, east–west segment of paved Tierra del Sol Road) are shortened by north–south ridges in the central and southern portion of the Reservation. Project wind turbines in the central and southern areas of the Reservation would be visible from the potential future trail; however, the generally short in length northwestward views are not considered focal or panoramic vistas.

The potential future Shockey Truck Trail and potential future Shockey Loop Trail are primarily east–west alignments located along the southern Reservation Boundary. The potential future Shockey Truck Trail is located on an approximately 20-foot-wide dirt road (i.e., Tierra del Sol Road) and northward views towards the Reservation are typically short in length due to the presence of series of parallel north–south ridges. Intervening canyons situated between ridges occasionally lengthen views from the trail alignment, but these landforms tend to support tall oak trees that block or otherwise limit the northward views. In addition, an existing 500 kV transmission line supported by tall lattice steel towers (i.e., Southwest Powerlink) parallels the proposed trail alignment to the immediate north. While tall and prominent wind turbines would be visible to future users of the trail, the short length of the available northward views and the presence of the Southwest Powerlink reduce opportunities for focal or panoramic northward views.

An approximately 1.3-mile-long segment of the potential future Shockey Loop Trail is located on County jurisdictional lands and is accessible from the south via a narrow trail off the proposed Shockey Truck Trail. Partially located atop north–south ridges, the County segment of the potential future trail offers long and open views to the west, north, and east. Project wind turbines on the Reservation would be installed within 0.15 mile of the potential future trail alignment and atop ridges surrounding the trail on three sides. Given the proximity of tall, visually prominent wind turbines and the general lack of comparable vertical features in the immediate area, the installation of On-Reservation wind turbines would substantially interrupt and diminish the quality of future public views from the potential future trail.

Trails and pathways identified in the Campo/Lake Morena Community Trails and Pathways Plan from which future users would be offered views that include components of the Campo Wind Facilities include the San Diego & Arizona Eastern Road Trail, SR-94 Pathway, Shockey Truck Trail/San Diego & Arizona Eastern Railroad Connector Trail, Shockey Truck Trail Pathway, and Shockey Truck Trail. Each of these facilities is identified as a proposed facility in the Campo/Lake Morena Community Trails and Pathways Plan.

Similar to the potential future San Diego & Arizona Eastern Railway Trail, the potential future San Diego & Arizona Eastern Railroad Trail is situated atop the defunct railway corridor and extends west from the Reservation Boundary. From the segment of the potential future trail located west of the Reservation and east of La Posta Road, the railway corridor encircles a narrow valley and track is aligned at the base of an east-facing slope or between parallel north–south ridges. While scenic and encompassing the characteristic rugged and rocky terrain of the Project Vicinity, available westward views are short and generally limited to the foreground distance. Up to fifteen Project wind turbines in the western portion of the Reservation and north of SR-94 would be installed atop a ridge located within 1.2 miles of future trail users. While Project wind turbines would dominate westward views from the east-facing slope segment of the trail, the presence of several north–south ridges limit opportunities for long, panoramic views. As such, the westward view is neither a focal nor panoramic vista.

Because the potential future SR-94 Pathway alignment parallels/overlies SR-94, effects to potential future pathways associated with the introduction of Campo Wind Facilities would be similar as discussed above for SR-94.

Most views offered to future users of north–south segments of the potential future Shockey Truck Trail Trail/San Diego & Arizona Eastern Railroad Connector Trail are shortened in length by nearby ridges on the Reservation. However, a short east–west segment of the alignment is in a narrow canyon situated east of Shockey Truck Trail and west of the Reservation Boundary. The eastward view from this potential future trail segment is enclosed and somewhat elongated by canyon walls. Due to the descending terrain of canyon walls, the westward view becomes a focal point in the landscape. The introduction of Project wind turbines approximately 1 mile away and atop the elevated terrain would substantially interrupt the existing focal feature in the westward view and result in diminished visual quality along the approximately 1,000-foot-long east–west segment of the potential future trail.

Future eastward views from the potential future Shockey Truck Trail Pathway (parallel to the eastward extension of Shockey Truck Trail off SR-94) are similar to those available to motorists on SR-94. As previously mentioned, the available views from SR-94 are shortened in length by nearby north–south ridges. While eastward views from the potential future pathway contain scenic

qualities, opportunities for focal or panoramic vistas are generally limited due to the proximity of nearby ridges. As with other potential future trails, views from the potential future pathway would be altered by the introduction of tall and visually prominent wind turbines on the Reservation. Further, Project wind turbines would diminish the existing quality of eastward views that encompass rugged and occasionally rocky, chaparral covered terrain.

Lastly, the potential future Shockey Truck Trail is a north–south alignment situated between parallel north–south ridges located east of the Reservation Boundary. While north–south views through narrow valleys are somewhat long, eastward views to the Reservation are extremely shortened in length by abruptly rising terrain to the east. Project wind turbines in the southwestern corner of the Reservation would be visible from the potential future Shockey Truck Trail but would not substantially interrupt or degrade the quality of north–south views through the narrow canyon landscape. Due to the limitations imposed on views by nearby north–south ridges, panoramic vistas are not typically available from the potential future Shockey Truck Trail.

Scenic Highway

Two eligible state scenic highways, I-8 and SR-94 (both of which are also included in the County Scenic Highway System), traverse the Reservation. In addition, Old Highway 80 traverses the Reservation and is included in the County Scenic Highway System. Impacts to views from I-8, SR-94, and Old Highway 80 are described above under "Public Roads."

Recreational Areas

In addition to Project wind turbines installed on and east and west of the Tecate Divide, the On-Reservation gen-tie line north of I-8 would be visible to users of the Lark Canyon OHV Area. The trails within the OHV Area are used primarily by motorcycles and ATVs. While the OHV area includes a staging area and two campgrounds, westward views available to visitors at these distinct locations are limited to the foreground (i.e., within 0 to 0.5 miles) by a prominent north–south ridgeline located to the west. As previously stated above for the Boulder Brush Facilities, OHV trail users are not generally considered particularly sensitive viewers due to their focus on the trail and higher speed of travel. In addition, and due to the closer proximity of existing Tule Wind Project wind turbines to the trail and Kumeyaay Wind Project wind turbines atop the Tecate Divide, the sensitivity of OHV trail users to visual changes in the landscape is considered low. Therefore, impacts to focal or panoramic vistas offered on trails at the Lark Canyon OHV area would be less than significant.

Entire Project (Campo Wind Project with Boulder Brush Facilities)

Due to the visibility of the Project and the proximity to public roads in the surrounding area, and the availability of open and unencumbered views of the landscape from these roadways, introduction of the Project would substantially interrupt or degrade existing focal or panoramic vistas. Specifically, the Project would substantially interrupt or degrade existing focal or panoramic vistas available from I-8, Ribbonwood Road, McCain Valley Road, and Old Highway 80. Impacts would be potentially significant (**Impact AE-2 and Impact AE-C**).

If the trails and pathways of the Boulevard and Campo/Lake Morena Community Trails and Pathways Plan discussed above are developed, Project components including wind turbines, On- and Off-reservation gen-tie line poles and conductor wires, access roads and the On-Reservation O&M facility would be visible from numerous potential future County trails in the Project Vicinity. However, each of the local trails and pathway identified in the Boulder Brush Facilities and Campo Wind Facilities discussions above are potential future facilities at this time.. Because future users of the potential future pathways and trails are not a part of the baseline condition and the trails and pathways are not existing recreation facilities, a significance determination in regards to potential impacts to focal or panoramic vistas from potential future trails and pathways is not required. Instead, the general effects to visual quality and views associated with visible components of the Boulder Brush Facilities and Campo Wind Facilities were disclosed above.

Project impacts to existing focal and panoramic vistas from state and local scenic highways in the Project viewshed were determined to potentially significant from I-8 and Old Highway 80 (**Impact AE-C** and **Impact AE-2**). I-8 is an eligible state scenic highway and both I-8 and Old Highway 80 are included in the County Scenic Highway System. Impacts to SR-94, an eligible state highway and included in the County Scenic Highway System, were determined to be less than significant due to the general lack of focal and panoramic vistas from SR-94. Project impacts to focal and panoramic vistas available from the nearest recreation area, the Lark Canyon OHV Area, were determined to be **less than significant**.

5.3.2.4 Threshold 4

Would the project not comply with applicable goals, policies or requirements of an applicable County Community Plan, Subregional Plan, or Historic District's Zoning?

The Boulder Brush Facilities are proposed on private lands under the land use jurisdiction of the County; thus, they are subject to County's applicable Subregional and community plans, and zoning. Specifically, the Boulder Brush Facilities are located within the Mountain Empire Subregional Plan and Boulevard Community Plan areas. Detailed consistency analyses with

the Mountain Empire Subregional Plan and the Boulevard Community Plan are provided below in Tables 2 and 3, respectively. The Boulder Brush Boundary is not located within a historic district and therefore, consistency with Historic District Zoning is not applicable and is not further discussed.

County Subregional and community plans are not applicable to the Campo Wind Facilities and the Reservation, as the County has no land use jurisdiction over tribal lands. The Reservation is also not subject to County zoning requirements. The Tribe and the Reservation are subject to federal and Tribal law. The Reservation is not under the jurisdiction of the State of California or the County. The Tribe's land use and environmental regulations include the Campo Environmental Protection Agency (CEPA) statutes, the Campo Band of Diegueño Mission Indians Land Use Code (Land Use Code), and the Campo Band of Diegueño Mission Indians Land Use Plan (Land Use Plan).

Project (Campo Wind Project with Boulder Brush Facilities)

The BIA has jurisdiction over the Campo Wind Facilities and has prepared an EIS to evaluate those effects under NEPA. Generally, the EIS analysis finds the Campo Wind Facilities would be consistent with all applicable regulations. The Campo Wind Facilities are subject to federal and Tribal law. The Reservation is not under the jurisdiction of the State of California or the County. The Tribe's land use and environmental regulations include the Campo Environmental Protection Agency (CEPA) statutes, the Land Use Code, and the Land Use Plan. The analysis and conclusions contained in the EIS are hereby incorporated by reference in this analysis.

The Campo Wind Facilities are located within four different land use designations per the Campo Band of Diegueño Mission Indians Land Use Plan. Renewable energy projects are expressly allowed in all land use categories if reviewed and approved by the Tribe's General Council, as was the lease. The Project would not conflict with an applicable Tribal land use regulation.

As described above, the Boulder Brush Facilities are located within the Mountain Empire Subregional Plan and Boulevard Community Plan areas. Applicable policies of these plans are listed below in Tables 2 and 3 and include the minimization of hillside grading and effects to existing topography, complimentary development in rural areas, preservation of night skies and scenic areas, and maintenance of existing community character. As demonstrated in Tables 2 and 3, the Boulder Brush Facilities would be consistent with the relevant goals and policies of the Mountain Empire Subregional Plan and Boulevard Community Plan.

Therefore, with MUP approval for the Boulder Brush Facilities by the County, the Project would not conflict with an applicable goals, policies or requirements of an applicable Community, Subregional, or Land Use Plan or Historic District's Zoning. Therefore, impacts associated with conflicts with an applicable land use plan or policy would be less than significant.Boulder Brush Facilities

Relevant goals and policies of the Mountain Empire Subregional Plan and Boulevard Community Plan are listed below in Tables 2 and 3. A consistency analysis for the Boulder Brush Facilties is provided for each applicable goal and policy. As demonstrated in the tables below, the Boulder Brush Facilities would be consistent with applicable goals and policies of the Mountain Empire Subregional Plan and Boulevard Community Plan. Therefore, impacts would be less than significant.

Campo Wind Facilities

As previously stated, the County Subregional and community plans are not applicable to the Campo Wind Facilities and the Reservation, as the County has no land use jurisdiction over tribal lands. The Reservation is also not subject to County zoning requirements. The Campo Wind Facilities would not conflict with an applicable Tribal land use regulation. These standards are defined in Section 6 (7) of the Campo Land Use Plan. Table 4, Campo Land Use Plan Consistency Analysis for Campo Wind Facilities, discusses the Campo Wind Facilities' consistency with each standard. Additionally, as discussed in Table 4, the Project would be consistent with all other applicable Tribal Regulations. As such, impacts would be **less than significant**.

Table 2
Mountain Empire Subregional Plan Consistency Analysis for Boulder Brush Facilities

Policy and Recommendation	Project Consistency with Policy
2. Land Use – General Goal **(Policy and Recommendation 1)** The landforms of the Subregion are an important environmental resource that should be respected in new development. Hillside grading shall be minimized and designed to blend in with the existing natural contours.	**Consistent.** The northern portion of lands within the Boulder Brush Boundary that would be traversed by the Off-Reservation gen-tie line includes slopes and ridgelines. Site grading would be required to construct the Boulder Brush Facilities, including the gen-tie line, high voltage substation, switchyard, and access roads. Hillside grading would be limited to that needed for Boulder Brush Facilities components and would be designed to conform to existing contours to the extent feasible..
2. Land Use – Industrial Goal **(Policy and Recommendation 2)** New industrial development should be clean, non-polluting, and complementary to a rural area.	**Consistent.** The Project would deliver renewable energy and is inherently clean and non-polluting. The Boulder Brush Facilities include a portion of the gen-tie line and access roads, the switchyard and substation. An electrical transmission line is not considered an industrial use under the County's zoning and therefore, the goal would not apply to the gen-tie line and access roads. The switchyard and high-voltage substation are proposed on undeveloped sites that are covered with shrubs and adjacent to a boulder-strewn ridgeline. While the Boulder Brush Boundary and surrounding lands have been historically of rural character, the switchyard and high-voltage substation sites are currently transected by the Sunrise Powerlink transmission line and wind turbines exist on adjacent BLM lands.

Table 2
Mountain Empire Subregional Plan Consistency Analysis for Boulder Brush Facilities

Policy and Recommendation	Project Consistency with Policy
2. Land Use – Industrial Goal **(Policy and Recommendation 5)** New industrial development should consider all views into the property from public streets, adjacent properties, and residences on nearby hills.	**Consistent.** The Boulder Brush Facilities include a portion of the gen-tie line, associated access roads, a switchyard and high-voltage substation. The electrical transmission line is not considered an industrial use under the County's zoning. However, an analysis of the visual impacts of the Boulder Brush Facilities on public streets and adjacent properties is included in this Visual Resources Report. In regards to the Boulder Brush Facilities, impacts to existing views are assessed from I-8, Opalocka Road, Ribbonwood Road, and McCain Valley Road. Thus, views were considered for the Boulder Brush Facilities.
6. Conservation – Environmental Resources **(Policy and Recommendation 4)** The dark night sky is a significant resource for the Subregion and appropriate steps shall be taken to preserve it.	**Consistent.** Lighting installed on private lands for Boulder Brush Facilities would be hooded, directed downwards, and turned off when not required. Some of the perimeter lighting installed at the high-voltage substation would remain on all night for safety purposes, though shielded and directed towards accesses or signs. Metallic equipment at the high-voltage substation and switchyard (Boulder Brush Facilities) would feature a low-reflectivity finish to minimize glare. Lighting for the Boulder Brush Facilities would be fully compliant with the County's Light Pollution Code. No lights would be installed on gen-tie line poles within the Boulder Brush Boundary.
6. Conservation – Environmental Resources **(Policy and Recommendation 5)** Development shall not adversely affect the habitat of sensitive plant and wildlife species or those areas of significant scenic value.	**Consistent.** Regarding significant scenic value, the Boulder Brush Facilities have been designed to minimize impacts to the scenic value of the area to the extent practicable. Visual simulations for the Boulder Brush Facilities were prepared and are included on Figures 25, 26, and 27. As demonstrated on the figures, the proposed gen-tie line would generally appear as faint, vertical lines in the landscape. The proposed switchyard and high-voltage substation would create noticeable color contrast; however, the facilities would be viewed in the context of visually prominent wind turbines and electrical transmission infrastructure (see Figure 27). Also and as shown on Figure 27, the scenic value of the vicinity has been altered by the existing Sunrise Power link and Tule Wind Project turbines on adjacent lands. This Visual Resources Report found that that the impacts of the Boulder Brush Facilities to the visual character would be less than significant.

Table 3
Boulevard Community Plan Consistency Analysis for Boulder Brush Facilities

Policy and Recommendation	Project Consistency with Policy
Policy LU 1.1.2: Encourage development to protect the quality and quantity of ground and surface water resources, air quality, dark skies, visual resources, and low ambient noise levels, as well as retain and protect the existing natural and historic features characteristic of the community's landscape and natural environment.	**Consistent.** The Boulder Brush Facilities have been designed to protect the quality and quantity of existing natural and historic features characteristic of the community's landscape and natural environment to the extent practicable. Off-Reservation gen-tie poles and conductor wires would primarily be viewed against the backdrop of existing and proposed wind turbines installed atop and near the Tecate Divide and would not entail the introduction of new or particularly prominent structures to existing westward views. Lighting installed within the Boulder Brush Boundary would be hooded, directed downwards, and turned off when not required. Some perimeter lighting would remain on all night for safety purposes, though shielded and directed towards accesses or signs. Metallic equipment at the high-voltage substation and switchyard would feature a low-reflectivity finish to minimize glare. Lighting for the Boulder Brush Facilities would be fully compliant with the County's Light Pollution Code. Potential impacts to dark skies and visual resources are analyzed and disclosed within this report (see Section 5.3.2.5).
Policy LU 1.1.3: Encourage development to respectfully incorporate existing topography and landforms, watersheds, riparian areas, oaks, and other native vegetation and wildlife, ridgelines, historic and cultural resources, views, and sustainability design factors.	**Consistent.** The Boulder Brush Facilities have been designed to minimize impacts to existing topography, landforms, and views to the extent practicable. For example, the Off-Reservation gen-tie line would be located off prominent ridgelines within the Boulder Brush Boundary. This Visual Resources Report includes an assessment of impacts to visual character and quality from public roads and trails. Specifically, impacts to existing views associated with the Boulder Brush Facilities are assessed from I-8, Opalocka Road, Ribbonwood Road, McCain Valley Road, and proposed trails identified in the Boulevard Community Trails and Pathways Plan (see Section 5.3.2.3). Visual simulations of the Boulder Brush Facilities as viewed from I-8, Opalocka Road, and McCain Valley Road are included as Figures 25, 26, and 27.
Policy LU 1.1.4: Require commercial and public development along scenic and historic routes to apply designs standards that will blend the development in with the terrain and rustic south western nature of the community character, while keeping outdoor lighting to an absolute and well shielded minimum.	**Consistent.** The Boulder Brush Facilities are not considered a commercial or public development. The Boulder Brush Facilities are located over 1.6 miles north of an eligible state scenic highway segment of I-8 that is also included in the County's Scenic Highway System. As assessed in Section 5.3.2.3, Off-Reservation gen-tie line poles and would be viewed as low (relative to existing wind turbines) and thin lines in the landscape (see Figure 25). Further, views to the Off-Reservation gen-tie line would be offered along discontinuous stretches of east- and westbound I-8 between the Tecate Divide and Ribbonwood Road. The form and line of gen-tie line poles and conductor wires would generally be indistinct and would not be visually prominent in the broken views offered from the interstate. Boulder Brush Facilities would not be visible from SR-94 (eligible state scenic highway and included on County Scenic Highway

Table 3
Boulevard Community Plan Consistency Analysis for Boulder Brush Facilities

Policy and Recommendation	Project Consistency with Policy
	System) or Old Highway 80. Old Highway 80 is also included on the County's Scenic Highway System. Additionally, outdoor lighting installed at the high-voltage substation and switchyard would be hooded, directed downwards, turned off when not required, and kept to a minimum required for safety purposes. Some of the perimeter lighting at the high-voltage substation would remain on all night for safety purposes, though shielded and directed towards accesses or signs.
Policy LU 3.1.1: Encourage development to preserve dark skies with reduced lighting and increased shielding requirements	**Consistent.** Please refer to the consistency analysis for Policy LU 1.1.4, above.
Policy LU 6.1.1: Require commercial, industrial development and large-scale energy generation projects to mitigate adverse impacts to the rural community character, charm, quiet ambiance and life-style, or the natural resources, wildlife, and dark skies of Boulevard, if feasible, in accordance with the California Environmental Quality Act.	**Consistent.** The Boulder Brush Facilities include a portion of the Project's gen-tie line. As proposed, the 230 kV Off-Reservation gen-tie line would be approximately 3.5 miles long and supported by steel poles (maximum 150 feet tall each). The Off-Reservation gen-tie line would deliver power generated by a proposed wind energy generation project on the adjacent Reservation (i.e., Campo Wind Facilities) to a high-voltage substation within the Boulder Brush Boundary. Impacts associated with the Boulder Brush Facilities have been evaluated in accordance with CEQA. While the Project Vicinity has been historically of rural character, there has been a recent increase in renewable energy development in the region. The Boulder Brush Facilities would be located in proximity to existing turbines, including the Kumeyaay Wind Project and the Tule Wind Project, the Sunrise Powerlink, and Tule Wind gen-tie line. The installation of permanent lighting within the Boulder Brush Boundary would generally be limited to security lighting at the high-voltage substation and switchyard. All outdoor lighting would be hooded, directed downwards, turned off when not required, and kept to a minimum for safety purposes. Some perimeter lighting would remain on all night for safety purposes, though shielded and directed towards accesses or signs. All lighting installed on private lands would be fully compliant with the lamp type and shielding requirements of the County Light Pollution Code.
Policy LU 6.1.2: Encourage commercial, industrial development and large scale energy generation projects to create and maintain adequate buffers between residential areas and incompatible activities that create heavy traffic, noise, infrasonic vibrations, lighting, odors, dust and unsightly views and impacts to groundwater quality and quantity	**Consistent.** Please refer to the consistency analysis for Policy LU 6.1.1, above.

Table 3
Boulevard Community Plan Consistency Analysis for Boulder Brush Facilities

Policy and Recommendation	Project Consistency with Policy
Policy LU 6.1.3: Encourage commercial, industrial development and large-scale energy generation projects to provide buffers from public roads, adjacent and surrounding properties and residences, recreational areas, and trails.	**Consistent.** Buffers would be provided from public roads, surrounding properties, recreational areas, and trails. The Boulder Brush Facilities would comply with the setback regulations as indicated in the County's Municipal Code – Development Regulations Section 4800.

Table 4
Campo Land Use Plan Consistency Analysis for Campo Wind Facilities

Campo Land Use Regulations	
Policy	*Consistency with Policy*
Section 4. Policies, Goals, and Objectives of Land Use	
4.3 Retention of Wilderness Areas. A balanced land use plan will include preservation of certain areas of the Reservation as wilderness, for aesthetic reasons as well as environmental considerations.	**Consistent.** The Project avoids most of the designated wilderness area to the maximum extent feasible. While the Project would result in impacts within the designated wilderness area, the disturbance area would be approximately 800 acres, less than half the possible lease lands area, and the lease itself limits the number of turbines that can be installed. The disturbance area is minimized to the extent feasible avoiding both resources and unnecessary expenditure.
Section 5. Specific Actions to Reach Objectives	
5.1 Tribally Controlled Development. The specific intent of the Campo Band is that all development and projects on the Reservation shall be under the total and complete control of the Campo Band. The Campo Band and Muht Hei may initiate projects or development, propose land use designations or changes in land use designations, and seek involvement of outside suppliers, vendors, and/or operators. Leases or subleases for development or activities on the Reservation shall be initiated, developed, and approved only by the Campo Band and/or its entities and the Bureau of Indian Affairs. All outside suppliers, vendors, and/or operators shall function under the direction of the Campo Band and/ or its entities. The Campo Band and Muht Hei may involve CEPA in development projects as appropriate, when the proposed use may potentially impact the environment of the Reservation. Such involvement may include, but not be limited to, the development of regulations and procedures including permitting for submittal to the General Council to address environmental concerns raised by the development, the review of development applications and submittals, and the monitoring of operation and closure activities.	**Consistent.** While development of the Project would be undertaken by a private developer, development would be completed consistent with a Resourced Development Plan to be approved by the Tribe and the BIA as part of the lease.

Table 4
Campo Land Use Plan Consistency Analysis for Campo Wind Facilities

Campo Land Use Regulations	
Policy	*Consistency with Policy*
5.2 Continuous Wilderness area (North to South). The Campo Band has set aside a portion of the Reservation for preservation as a wilderness area to protect the native vegetation and wildlife habitat. No development is to take place in this area; it is to remain in its natural state to the maximum extent feasible.	**Consistent.** Development of the Campo Wind Facilities would avoid most of the designated wilderness area to the maximum extent feasible. While development of the Campo Wind Facilities would result in impacts within the designated wilderness area, the lease itself limits the number of turbines that can be installed within the wilderness area. The disturbance area is minimized to the extent feasible, avoiding both resources and unnecessary expenditure.
Section 7. Campo Renewable Energy Zones	
7.1 (a) Five-Percent Standard Analysis. The CREZ shall not adversely impact the land use designation of any district by more than five percent (5%) without completion of a detailed impact analysis and approval of the General Council. This is a threshold impact analysis (to determine if the 5% standard is exceeded. The analysis shall cover the categories defined in the National Environmental Policy Act (NEPA) and its implementing regulations, but will use standards defined by the Band in this Plan. The Executive Committee may assign the impact analysis to CEPA, an independent, qualified consulting firm or rely upon an existing impact analysis completed within the last three (3) years that was prepared by either CEPA or a consulting firm, so long as the analysis satisfies the CREZ criteria set forth in this Section (7) of this Plan.	**Consistent.** The Project EIS involves a detailed impact analysis pursuant to NEPA and its implementing regulations, as well as the standards defined by the Tribe in the Campo Land Use Plan.
7.2 (b) Impact to Receptors Analysis. The CREZ must include an analysis of impacts to receptors (homes, businesses, offices, clinics, etc.) for safety, noise and visual impacts prior to any permanent development. The Executive Committee will determine if this analysis shall be conducted exclusively by CEPA or by a consultant pursuant to the NEPA. If a consultant completes this analysis, then the NEPA will govern the compliance process. In that event,, CEPA will review and advise the Executive Committee as to any conflicts or omissions in the analysis that do not comply with tribal regulatory standards and the CEPA review, to the greatest extent possible, will be conducted concurrently with the work of the consultant so as to avoid delays in completion of the NEPA process and designation of the CREZ.	**Consistent.** The Project EIS includes analysis of impacts to receptors (i.e., homes, businesses, offices, clinics, etc.) for safety, noise and visual impacts prior to any permanent development, pursuant to NEPA. The Project will be developed in accordance with the Resource Development Plan approved by the BIA as part of the lease approval process. It should also be noted that this Visual Resources Report includes an assessment of visual impacts associated with the Project.
7.3 CREZ Permitted Uses. The CREZ may be used for commercial wind, solar, geothermal, hydrological and other types of renewable energy generation that exploit existing energy resources not created by combustion, chemical or radioactive sources and that leverage market opportunities	**Consistent.** Development of the Project would result in a large-scale renewable wind energy facility and associated equipment.

Table 4
Campo Land Use Plan Consistency Analysis for Campo Wind Facilities

Campo Land Use Regulations	
Policy	*Consistency with Policy*
associated with the renewable energy sector for the benefit of the Band. The CREZ may include, without limitation, overhead and underground electrical distribution, collection, transmission and communications lines, electric transformers, electric substations, energy storage facilities, telecommunications equipment, and power generation facilities for the transmission of electrical energy, including, without limitation, the electrical energy generated by any wind turbines or solar panels; roads and crane pads; meteorological towers, wind and solar measurement equipment; control buildings, maintenance yards, and related facilities and equipment; and, any other undertakings or activities reasonably necessary, useful or appropriate to accomplish development of renewable energy resources and renewable energy business enterprises that may be developed in connection therewith.	

5.3.2.5 Light and Glare

1. ***Would the project install outdoor light fixtures that do not conform to the lamp type and shielding requirements described in Section 59.105 (Requirements for Lamp Source and Shielding) and are not otherwise exempted pursuant Section 59.108 or Section 59.109 of the San Diego County Light Pollution Code?***
2. ***Would the project operate Class I or Class III outdoor lighting between 11:00 p.m. and sunrise that is not otherwise exempted pursuant Section 59.108 or Section 59.109 of the San Diego County Light Pollution Code?***
3. ***Would the project generate light trespass that exceeds 0.2 foot-candles measured five feet onto the adjacent property?***
4. ***Would the project install highly reflective building materials, including but not limited to reflective glass and high-gloss surface color that will create daytime glare and be visible from roadways, pedestrian walkways or areas frequently used for outdoor activities on adjacent properties?***
5. ***Would the project conform to applicable Federal, State or local statute or regulation related to dark skies or glare, including but not limited to the San Diego County Light Pollution Code?***

Project (Campo Wind Project with Boulder Brush Facilities)

Construction of the Project is anticipated to last approximately 14 months. Construction activities would generally occur during daylight hours at least 6 days per week, but may involve extended hours, as needed, to complete certain construction activities and/or during emergencies or as approved by the County (i.e., for Boulder Brush Facilities construction). For the majority of the construction phase, night construction lighting would not be required. However, during emergencies, tasks requiring extended hours and/or construction during late fall and winter months, the lack of adequate natural light may dictate that portable lighting sources be used at specific construction sites. While On-Reservation development is not subject to County land use jurisdiction and local policies are not applicable, both the Boulevard and Campo/Lake Morena areas contain limited sources of night lighting. The Boulevard and Campo/Lake Morena Community Plans also contain policies that encourage development proposals to preserve the dark-sky environment. It should be noted that FAA obstruction lighting is installed on existing wind turbines on the Tecate Divide and on BLM-administered lands in the McCain Valley (i.e., wind turbines of the Tule Wind Project). These red-flashing lights operate during evening, night, and early morning hours.

The use of night construction lighting during the anticipated 14-month construction period would be limited. For most non-emergency tasks, construction activities would be conducted during daylight hours. When required, portable construction night lighting would temporarily illuminate construction areas and would be focused onto the area of active construction. Potential temporary effects to dark skies would be further reduced through compliance with the County's Light Pollution Code (i.e., for Boulder Brush Facilities construction). In these instances, portable night lighting used during construction would be fully compliant with the lamp type and shielding requirements for Class II lighting as established by Section 51.204 of the County Light Pollution Code. Specifically, lighting would be fully shielded and directed downward to minimize opportunities for unnecessary sky glow and light trespass. Temporary lighting used on the Reservation would also be hooded and directed down to minimize the unnecessary illumination of dark skies.

Due to the anticipated limited frequency of night construction lighting use, through the use of hooded and downward directed lighting, and compliance with the lamp type and shielding requirements of the County Light Pollution Code (i.e., for Boulder Brush Facilities), short-term construction lighting impacts would be **less than significant**.

Non-wind turbine lighting installed within the Boulder Brush Boundary and On-Reservation would be kept to the minimum required for security and safety, and all lighting would be hooded and directed downward. Downcast lighting would be installed around the perimeter of the collector substation, O&M facility, high voltage substation, and switchyard for safety and security and would be motion sensitive rather than steady burning. During evening, night, and morning hours,

simultaneously flashing beacons installed atop Project wind turbines and MET towers would be visible throughout the viewshed. The presence of existing wind turbine development and associated obstruction lighting atop the Tecate Divide (i.e., the 25-wind turbine Kumeyaay Wind Project) and public lands to the east (the 57-wind turbine Tule Wind Project) has altered the night environment in the area. However, Project wind turbines would be located south of I-8 where prominent night lighting is not generally installed. For example, very few (if any) particularly bright and obtrusive sources of night lighting operate in the rural residential community of Tierra Del Sol (located east of the Reservation Boundary and southeast of SR-94). Due to the visibility of simultaneously flashing red obstruction lights and the general lack of bright night lighting installed On- and Off-Reservation south of I-8, and because obstruction lighting would not conform to the lamp type and shielding requirement of the County Light Pollution Code, the operation of FAA- obstruction lighting would adversely affect existing night views in the surrounding area. Impacts would be **potentially significant** (**Impact AE-D**).

Boulder Brush Facilities

For construction lighting, please refer to the Entire Project (Campo Wind Project with Boulder Brush Facilities) construction lighting discussion, above. As stated therein, lighting impacts during construction of the Boulder Brush Facilities would be **less than significant**.

Permanent source of lighting would be limited to fixtures installed at the high-voltage substation and potentially, at the adjacent switchyard. No lighting would be installed on Off-Reservation gen-tie line poles. Outdoor night lighting at the high voltage substation would be kept to the minimum required for security and safety, and all lighting would be hooded and directed downward. Some perimeter lighting installed at the high-voltage substation would remain on all night for safety purposes. These sources would be shielded and directed towards accesses or signs. The limited sources of lighting installed within the Boulder Brush Boundary would be hooded, directed downward and would be fully compliant with the County's Light Pollution Code. The high-voltage substation would also be surrounded on three sides by BLM-administered lands developed with wind turbines topped with FAA obstruction lighting. Due to the existing sources of night lighting in the immediate area, the distance between the high-voltage substation and the nearest residential receptor (nearly three miles), and through compliance with the Light Pollution Code, lighting installed at the high-voltage substation and switchyard would not adversely affect night views. In addition, the Boulder Brush Facilities would not install Class I lighting (i.e., outdoor lighting for outdoor sales, eating, vehicle fueling (or repair) areas) or Class III lighting (i.e., decorative effects lighting). Therefore, impacts would be **less than significant**.

Campo Wind Facilities

For construction lighting, please refer to the Entire Project (Campo Wind Project with Boulder Brush Facilities) construction lighting discussion, above. As stated therein, lighting impacts during construction of Campo Wind Facilities would be **less than significant**.

Outdoor lighting would be installed at the collector substation and the O&M facility. Proposed night lighting at the collector substation would be kept to the minimum required to ensure adequate lighting for O&M staff to perform as-needed and/or emergency maintenance. Lighting would be installed at the O&M facility site near the parking area and on the O&M building exterior for safety/illumination purposes. Downcast lighting would be installed around the perimeter of the O&M facility for safety and security and would be motion sensitive rather than steady burning. The total amount of proposed non-wind turbine and MET tower-related lighting to be installed on the Reservation would be relatively low. Further, all facility lighting would be hooded, directed downward, and turned off when not required. While the night sky environment near the proposed O&M facility off Old Highway 80 has been altered by nearby Live Oak Springs Resort development, the Golden Acorn Casino, and wind turbines, existing sources of night lighting are limited near the alternative O&M facility in the southeastern corner of the Reservation. However, through implementation of lighting controls (i.e., hooded and downward directed lighting at the collector substation and downcast, motion sensitive lighting at the O&M facility) and turning off lighting when not in use, impacts associated with night lighting at the collector substation and O&M facility would be **less than significant**.

Project wind turbines and temporary and permanent MET towers would exceed a height of 200 feet aboveground level and therefore, marking and lighting of these components would be required to ensure the safety of aircraft pilots and the efficient use of navigable airspace. The Developer would develop a lighting plan in accordance with FAA standards and submit the plan to the FAA for approval. While the FAA has the final authority to review and approve lighting plans for wind projects (FAA determines the number, location, and type of lighting to be installed atop wind turbines), installation of single or double lamp fixtures with red or white cover lenses and adjustable rate flashing beacons (or steady burning lights) is assumed. The obstruction lighting would be top-mounted well above the surface of the nacelle (and near the top of the MET towers) to enhance visibility. The flashing beacons would be synchronized to clearly define the limits of the periphery of Project wind turbine and MET tower development. In addition to obstruction lighting, a low-voltage, shielded light on a motion sensor would be installed at the entrance door to each Project wind turbine at the base of the turbine tower for security purposes

During evening, night, and morning hours, simultaneously flashing beacons installed atop Project wind turbines and MET towers would be visible throughout the Project viewshed. The presence

of existing wind turbine development and associated obstruction lighting atop the Tecate Divide (i.e., the 25-wind turbine Kumeyaay Wind Project) and public lands to the east (the 57-wind turbine Tule Wind Project) has altered the night environment in the area. However, Project wind turbines would be located south of I-8 where existing prominent night lighting is generally not installed. For example, very few (if any) particularly bright and obtrusive sources of night lighting operate in the rural residential community of Tierra Del Sol (located east of the Reservation and southeast of SR-94). Due to the visibility of simultaneously flashing red obstruction lights and the general lack of bright night lighting installed On- and Off-Reservation to the south of I-8, the operation of FAA obstruction lighting would adversely affect existing night views in the surrounding area. Impacts would be **potentially significant** (**Impact AE-D**).

Glare

Project (Campo Wind Project with Boulder Brush Facilities)

Consistent with FAA rules established in Advisory Circular 70/7460-1L: Obstruction Marking and Lighting, all turbine components (including towers, nacelles, and rotors) would be painted or finished using low-reflectivity, neutral white or light grey colors (FAA 2016). The majority of equipment at the collector substation (Campo Wind Facilities), high-voltage substation and switchyard (Boulder Brush Facilities) would feature a low-reflectivity finish to minimize glare. In addition, collector substation and high-voltage substation equipment would feature dull, non-sheen-colored insulators that would be used to minimize visibility. The pre-engineered metal O&M buildings located On-Reservation would be painted with a low-reflectivity, greyish or light tan finish to minimize potential for glare and color contrast. The overhead On-Reservation and Off-Reservation gen-tie lines would be supported by tubular steel poles. Chain-link fencing (6 feet tall and topped with an additional 2 feet of security wire) would be installed around the perimeter of the collector substation and O&M facility (Campo Wind Facilities) and at the high-voltage substation and switchyard (Boulder Brush Facilities).

The finish and color of the wind turbines, collector substation and O&M facility (Campo Wind Facilities) and the high-voltage substation and switchyard (Boulder Brush Facilities) would be selected to generally match that of wind turbines, substations, and O&M facilities of nearby wind projects. Painting or low-reflectivity finishes would also be incorporated to minimize glare and visibility. In addition, the collector substation and O&M facility, and the high-voltage substation and switchyard, would be partially screened from view of nearby occupied On- and Off-Reservation residential properties by intervening vegetation and terrain. Tubular steel poles supporting transmission lines are not typically considered to be highly reflective. Lastly, all outdoor night and building exterior lighting would be hooded, directed downward, and turned off when not required. As discussed above, Project components and associated operational lighting

would not produce substantial glare that would adversely affect day or nighttime views in the area. Therefore, potential glare impacts would be **less than significant**.

Boulder Brush Facilities

Please refer to the Entire Project (Campo Wind Project with Boulder Brush Facilities) section above that details the use of low-reflectivity finishes or dull colors on the proposed Off-Reservation gen-tie line and equipment at the high-voltage substation and switchyard. In addition, Off-Reservation gen-tie line conductor wires would be non-specular and all outdoor night and building exterior lighting installed at the high-voltage substation and potentially, at the switchyard, would be hooded, directed downward, and turned off when not required. As such, potential glare impacts generated by components of the Boulder Brush Facilities would be **less than significant**.

Campo Wind Facilities

Please refer to the Entire Project (Campo Wind Project with Boulder Brush Facilities) section above that details the use of low-reflectivity finishes or dull colors on the proposed wind turbines, On-Reservation gen-tie line, and equipment at the collector substation and O&M facilities. In addition, On-Reservation gen-tie line conductor wires would be non-specular and all outdoor night and building exterior lighting installed at the collector substation would be hooded, directed downward, and turned off when not required. At the O&M facility, lighting would be installed near the parking area and on the O&M building exterior for safety and general illumination purposes. Downcast lighting would be installed around the perimeter of the O&M facility would be motion sensitive rather than steady burning. As such, potential glare impact generated by the Campo Wind Facilities would be **less than significant**.

5.4 Cumulative Impacts

Pursuant to CEQA Guidelines Sections 15130 and 15355, this section analyzes the significance of the Project's visual impact on a cumulative level. According to CEQA Guidelines Section 15335(b), the cumulative impact from several projects is the change in the environment that would result from the incremental impacts of a project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant impacts taking place over a period of time. The cumulative impacts analysis presented herein is based on the potential impacts of the Project when added to impacts from other projects near the Project Site.

5.4.1 Methodology

For purposes of this cumulative impact analysis, cumulative visual impacts are evaluated for the period of construction and for the post-construction (operation) period of the Project. From east of the Tecate Divide and west of the San Diego/Imperial County border, the I-8 viewshed serves as the physical boundary for determining cumulative visual effects. This viewshed encompasses the Project viewshed as described in Section 5.1.2, Project Viewshed, and the more distant landscape of the Jacumba Valley. This composite viewshed was determined to be an appropriate cumulative boundary based on the geographic extent of the Project's visual impacts and the presence of similar projects in the Project Vicinity. In addition, the composite viewshed encompasses projects that would result impacts of similar severity as the Project, and that have the potential to contribute to changing visual character along the I-8 corridor and other local roads traversing the Boulevard and Jacumba areas.

As previously stated, an individual project may contribute to cumulative impacts when the project's incremental impacts are added to other closely related past, present, and reasonably foreseeable future projects. The term "reasonably foreseeable" refers to projects that federal, state, and local agency representatives have knowledge of from pre-application meetings or the formal application process. For the Project, ten (10) projects have been identified within the cumulative study area; these consist of wind and solar energy generation developments, substation and battery storage facilities, and transmission line projects that include components similar to that of the Project.

5.4.2 Reasonably Foreseeable Projects

The following projects have been identified as reasonably foreseeable within the temporal and spatial limits established for this cumulative impact analysis. Cumulative projects considered in the analysis are depicted on Figure 28, Cumulative Projects.

Tule Wind Project (Constructed; Phase II Approved)

Phase I of the Tule Wind project is complete, and commercial operations of the approximately 186 MW project began in approximately September 2017. Phase I consists of 57 wind turbines, an underground electrical collection system linking the wind turbines to the collector substation, a 5-acre collector substation site and adjacent 5-acre O&M facility site and MET towers. In addition, Phase I includes dirt access roads and a 138-kV transmission line that delivers power from the collector substation to the rebuilt SDG&E Boulevard Substation.

In October 2016, Avangrid Renewables received approval from the California State Lands Commission to construct Phase II of the Tule Wind Project. Phase II would consist of an additional 24 wind turbines constructed in the area that would generate approximate 69 MW. The wind turbines of Phase II would be located atop a ridgeline west of Phase I on both state lands and tribal

lands of the Ewiiaapaayp Band of Kumeyaay Indians. Seven wind turbines would be sited on lands managed by the California State Lands Commission and 17 would be constructed on tribal lands. Construction of Phase II is likely to take between 6 months to 1 year, and would employ between 100 and 200 works per day during the peak construction period.

East County Substation Project (Constructed)

The East County (ECO) Substation project consisted of an interconnection hub for renewable generation along SDG&E's existing Southwest Powerlink 500 kV transmission line. In addition to accommodating the region's planned renewable generation, the project also provided a second source for the southeastern 69 kV transmission system to avoid the vulnerability of common structure outages to increase the reliability of electrical service for Boulevard, Jacumba, and surrounding communities. The project offers interconnection capability at three voltage levels (500 kV, 230 kV, and 138 kV) to provide renewable generators the option to connect at a voltage level that is appropriately sized for their project.

The ECO Substation project includes the following major components:

- A 500/230/138 kV substation in southeastern San Diego County
- A short loop-in to the Southwest Powerlink transmission line
- A 138 kV transmission line, approximately 13.3 miles in length, running between the ECO Substation and the rebuilt Boulevard Substation
- A rebuilt Boulevard Substation

Jacumba Solar (Constructed)

The 20 MW solar facility covers approximately 108 acres and is located 3 miles east of Jacumba. The solar facility uses photovoltaic fixed-tilt-rack electric generation system technology to produce solar energy at the utility scale, including inverters, and includes an on-site substation and a battery storage facility capable of storing approximately 10 MW of energy.

Torrey Wind Project (Proposed)

The Torrey Wind Project would involve construction, operation and maintenance of approximately 30 wind turbines (rated up to 4.2 MW each), an underground electrical collection system, a high-voltage substation, a 500 kV switchyard, an operations and maintenance (O&M) facility and associated parking areas, a temporary staging area, a batch plant, MET towers, various access roads, and off-site improvements. The Torrey Wind Project is proposed within the same private

lands as the Boulder Brush Boundary. The Torrey Wind project and the Boulder Brush Facilities propose to use the same switchyard and high-voltage substation facilities.

Off-site improvements would include widening and paving a segment of Ribbonwood Road from Opalocka Road to the site's primary entrance (for details see Section 1.2.1(C), Access Roads, of the EIR). This improvement is the same improvement analyzed above for the Boulder Brush Facilities and if approved, would be utilized by both the Torrey Wind Project and the Boulder Brush Facilities. Off-site roadway improvements would total approximately 3.6 acres. Decommissioning would occur at the end of the Project's useful life cycle, estimated as at least 30 years from the commercial operations date.

Construction of the Torrey Wind project is anticipated to last approximately 9 months.

JVR Energy Park Project (Proposed)

The JVR Energy Park Project would consist of approximately 680 acres of solar energy production and battery storage development on 1,345 acres of privately owned property located immediately east of rural residential development in the unincorporated community of Jacumba. The proposed project would produce up to 90 MW of alternating current (AC) generating capacity, and would consist of approximately 300,000 photovoltaic modules fitted on single-axis solar trackers. In addition to the panels and direct current (DC) to AC conversion equipment (i.e., inverter and transformer units), the JVR Energy Park Project would include an on-site collector substation, a 138 kV overhead and underground transmission line, and an up to 25 MW battery energy storage system.

Rugged Solar Project (Proposed)

As proposed, the Rugged Solar Project would include construction and operation of a 74 MW solar energy system on an approximately 765-acre site located in the McCain Valley. Most of the site is located west of McCain Valley Road and includes the central, northwest, and southern subareas. A smaller portion of the site is east of McCain Valley Road and comprises the eastern subarea. In addition to solar panels and inverter and transformer units, the Rugged Solar Project would include an on-site collector substation, a 138 kV overhead and underground transmission line, and an approximately 20 MW battery energy storage system.

Energia Sierra Juarez Wind Project I (Phase I Constructed)

This project consists of 400 MW of wind generation. Phase I (just north of the town of La Rumorosa in Mexico) generates approximately 100 MW of energy with 45 to 52 turbines. A point of interconnection (ESJ US; see below) is also constructed with the ECO Substation.

Energia Sierra Juarez U.S. Transmission Major Use Permit (Constructed)

This project consists of less than 1 mile of 230 kV double-circuit power lines leading from the Mexican border north to the SDG&E ECO Substation.

Boulevard Solar (Proposed)

This project includes a Major Use Permit for construction and operation of a 60 MW solar energy system on an approximately 420-acre site located in the Tierra Del Sol area. The site is located approximately 1 mile east of the southeastern corner of the Reservation.

Boulevard Energy Storage (Proposed)

This project include a Minor Use Permit for construction and operation of a 100 MW energy storage facility within a single-story 25,000-square-foot battery storage building on a 2-acre site near the existing SDG&E Boulevard substation. The site is located off Old Highway 80, approximately 3 miles east of the Reservation.

5.4.3 Cumulative Impacts Analysis

In addition to existing wind turbine, electrical substation, and solar energy generation development, implementation of the Project and other foreseeable projects considered in the cumulative scenario would result in an increasingly modified landscape, diminished day and night views, and reduced visual quality. Contrasts in structure and facility scale, size, massing, color, and materials associated with cumulative projects with less intensely developed (and undeveloped) lands would be visible to a relatively large volume of viewers within the cumulative study area, including motorists on federal and state highways, local road motorists and recreationists, and rural and tribal communities. The cumulative impacts of identified projects from a given vantage point would ultimately be dependent on the vertical scale of components, proximity of observers to project components, and the presence (or lack) of intervening elements (terrain, structures, vegetation) to screen or obstruct specific components from view.

The number of completed and proposed wind and solar energy generation developments, electrical substations, and electrical transmission lines in the Boulevard and Jacumba areas, and specifically, with the I-8 viewshed, would entail viewshed-scale visual change. Further, the introduction of numerous prominent and bold structures and facilities would moderately to strongly contrast with the valued rural visual character of the local communities in the cumulative study area.

Existing development in the cumulative study area (defined as the Boulevard and Jacumba areas and the I-8 viewshed) primarily displays a rural residential and ranching/grazing character.

However, as noted in Section 3.2, the cumulative study area is also marked by interstate and local road development, regional electrical infrastructure and substations, and utility-scale solar and wind energy development. Regional electrical infrastructure and solar and wind development, including the Tule Wind and Kumeyaay Wind Projects and the Jacumba Solar Project, occur along the I-8 corridor, and power lines traverse the Jacumba and McCain Valley landscapes. With the exception of developed sites supporting wind, electrical transmission, solar energy, or substation facilities, landscapes throughout the cumulative study area generally display moderate to high intactness and unity. In these areas, rural residential, commercial, and public service development and other modifications have relatively unobtrusive characteristics and design features, and a consistency in scale, form, and theme. As a result, these traditional types of existing development are well integrated into the landscape and tend not to command the attention of receptors in the area.

Implementation of projects considered in the cumulative scenario would result in an increasingly modified landscape, diminished day and night views, and reduced visual quality. For example, in the McCain Valley, the development of more than 70 MW of solar energy infrastructure on approximately 765 acres of previous grazing lands located off McCain Valley Road (i.e., Rugged Solar) would combine with visible wind turbines of the Project and Tule Wind to introduce highly visible and bold features that would contrast with the existing form and colors in the hill and valley landscape. Along with Sunrise Powerlink poles and the Tule Wind Project substation and O&M facility, visually prominent wind turbines and solar panels would dominate and interrupt available views to local mountains and other scenic features.

Similarly, development of the Torrey Wind Project with introduction of up to 30 wind turbines in the McCain Valley would contribute bold and prominent forms with distinct Y-shaped massing to the visual landscape. Depending on the proximity of receptors to proposed turbine locations, these structures may dominate views. Also, additional wind turbines in the McCain Valley would interrupt existing long, scenic views across the valley from Ribbonwood Road and McCain Valley Road.

Although motorists on I-8 and public land recreationists in the McCain Valley area would not experience the visual effects, development of a primarily natural, undeveloped 420-acre site to 60 MW solar facility in the Tierra del Sol area of Boulevard would expand the footprint of solar development in the study area. In addition, development of the 60 MW Boulevard Solar Project would result in strong visual change and contrast with adjacent areas of intact vegetation and terrain. Further, development of the Boulevard Solar Project would modify the chaparral-covered, gently rolling terrain of the 420-acre site such that existing visual quality would be degraded and existing views available to local residents and motorists in the Tierra del Sol area would be substantially diminished.

Similar visual change would occur outside of the Boulevard area and is proposed in the Jacumba area. Although wind development is not proposed in the portion of the cumulative study area located near Jacumba north of the U.S./Mexico border, up to an additional 300 MW of wind turbine development may ultimately be constructed south of the border in the Sierra de Juarez Mountains. As with existing wind turbines of Phase I, proposed wind turbines of future phases would be constructed atop visually prominent mountain terrain and would be visible from Jacumba and I-8. In addition to their distinct massing and tall vertical form, proposed wind turbines of future phases may entail the addition of obstruction lights that would operate during evening and nighttime hours.

Within the United States, existing solar development (i.e., Jacumba Solar) and the proposed Jacumba Valley Ranch Solar Project would result in the introduction of hundreds of thousands of solar panels to the Jacumba Valley landscape. Solar panels and ancillary facilities would modify the existing landscape visible from I-8, Old Highway 80, the community of Jacumba and recreational lands in the surrounding area. Proposed immediately east of the community of Jacumba, the JVR Energy Park Project would introduce over 300,000 solar panels to approximately 680 acres of currently inactive agricultural lands located north and south of Old Highway 80. The Jacumba Solar and JVR Energy Park Project sites are located within 2.5 miles of each other, and along with the ECO Substation, have and would noticeably alter the local landscape and result in reduced visual quality and strong visual contrast with existing features in the landscape. In regards to the JVR Energy Park Project, reduced visual quality and strong contrast would be experienced from I-8, Old Highway 80 and local roads, recreational areas including public lands, mountain terrain, and Jacumba Community Park, and from private residences in Jacumba. Of these viewer groups, I-8 motorists would also experience the visual effects of the Project. Also, as the primary transportation corridor in the region, the other viewer groups listed above use I-8 and would experience the visual change associated with Project.

As proposed, implementation of the Project would result in significant adverse direct cumulative impacts on the visual environment. Implementation of design features and mitigation measures proposed for the Project would reduce anticipated visual contrast and view impacts to the extent feasible; however, due to the tall prominent form of wind turbines and the Project's large footprint and scale, prominent contrasting components (i.e., wind turbines) cannot be more successfully integrated into the landscape. Therefore, even with implementation of mitigation measures, the Project would result in **significant direct cumulative impacts** on the visual environment.

6 VISUAL MITIGATION AND DESIGN CONSIDERATIONS

Design Considerations

As proposed, all wind turbine components (towers, nacelles, and rotors) would be painted or finished using low-reflectivity, neutral white colors, and would match the color and finish of wind turbines of the existing Kumeyaay Wind Project and the Tule Wind Project. Further, proposed wind turbines would be partially located within the I-8 corridor landscape that is marked by existing wind turbines. Specifically, the Project Site and proposed wind turbines would be located adjacent to the existing Tule Wind Project (57 wind turbines) and the On-Reservation Kumeyaay Wind Project (25 wind turbines).

On the Reservation, setbacks and existing intervening landforms and vegetation would reduce the visibility of the single-story, pre-engineered structure O&M facility. In addition, the O&M facility installed of Old Highway 80 would be located on lower-lying terrain and would be painted with a low-reflectivity, greyish or light-tan finish. The O&M facility in the southeastern corner of the Reservation would have a limited viewshed due to the remote location of the site. Lastly, the color and building materials used for Project components would be consistent with existing colors, finishes, and building materials in development north of I-8 in the area surrounding the Project Site and commercial and industrial/public service development located along Old Highway 80.

Lighting installed at the Project Site (Boulder Brush Facilities) would be fully compliant with the County's Light Pollution Code, and Mountain Empire Subregional Plan and Boulevard Community Plan policies regarding the shielding of most outdoor lighting fixtures and minimization of unwanted light trespass onto adjacent properties.

Mitigation Measures

Boulder Brush Facilities

With the exception of effects to valued visual character (Threshold 2) and focal or panoramic vistas (Threshold 3), impacts of the Boulder Brush Facilities would be less than significant. No feasible mitigation has been identified for impacts to valued visual character and focal or panoramic vistas associated with the silhouetted segments of the Off-Reservation gen-tie. .

Campo Wind Facilities

M-AE-A through **M-AE-H** are recommended in the EIS and referenced herein, and would reduce impacts associated with visual resources to the extent feasible. These measures are recommended mitigation measures in the EIS for the On-Reservation Project components, subject to the BIA's ROD.

M-AE-A **Temporary Screening.** If visible from nearby roads, residences, public gathering areas, recreational areas, or trails, stationary construction sites and staging areas and temporary staging areas shall be visually screened (to the extent feasible) using temporary screening fencing. Temporary screening fencing shall be of an appropriate design and color intended to compliment the surrounding area. Where practical, construction staging shall be screened with opaque fencing.

M-AE-B **Activity Limit/Signposting Guidelines.** No paint or permanent discoloring agents shall be applied to rocks or vegetation to indicate survey or construction activity limits.

M-AE-C **Minimization of Views of Graded Terrain.** Permanent access or spur roads shall be constructed at appropriate angles from the originating primary travel facilities to minimize extended in-line views of newly graded terrain, when feasible. Contour grading should be used where feasible to better blend graded surfaces with existing terrain.

M-AE-D **Revegetation of Disturbed Areas.** All graded roads and areas not required for ongoing operation, maintenance, or access shall be revegetated and/or returned to preconstruction conditions, as feasible.

M-AE-E **Minimization of Vegetation and Topsoil Removal.** To the extent feasible and wherever the limits of grading areas are adjacent to sensitive vegetation communities or other biological resources, the minimum amount of vegetation necessary for construction of structures and facilities shall be removed.

M-AE-F **Color Mitigation.** Substation components shall be painted Shadow Gray (or a similar dark gray color) from the BLM Standard Environmental Colors Chart CC-00 or equivalent. Color mitigation would not be required on facilities that are treated in accordance with safety and engineering concerns.

M-AE-G **Conductor Design Requirements.** All transmission line conductors are to be non-specular in design to reduce conductor visibility and visual contrast.

M-AE-H **FAA Approved Lighting.** The Developer would implement a lighting plan in accordance with current Federal Aviation Administration (FAA) standards. These lights would have the minimum number of flashes per minute and the briefest flash duration allowable per current FAA standards. The number of wind turbines that would be lit would be minimized to the extent allowable by the FAA.

7 SUMMARY OF PROJECT IMPACTS AND SIGNIFICANCE AND CONCLUSIONS

7.1 Threshold 1

Would 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?

Boulder Brush Facilities

Historically, the visual theme and style of the Boulder Brush Boundary and surrounding area has been defined by traditional rural patterns of development and natural settings. In more recent years, wind energy and transmission line development has altered the landscape and introduced elements which contrast with the traditional rural and natural patterns. The proposed Off-Reservation gen-tie line, high-voltage substation and switchyard would be experienced in the context of the existing development, including the Kumeyaay Wind Project and Tule Wind Project. Compared to existing energy related development, the Bounder Brush Facilities would be noticeably smaller (or similar) in size, scale, and massing. Further and as viewed from identified KOPs, the proposed gen-tie would create weak color contrast in the landscape (see Figures 25 and 26). Color contrasts associated with the development of the proposed switchyard and high-voltage substation would be noticeable when viewed in the context of the surrounding shrub-covered and boulder-strewn terrain of upper McCain Valley (see Figure 27). However, these visual effects would be viewed alongside similar disturbances and visually prominent wind turbine and electrical transmission infrastructure. The Boulder Brush Facilities would also display similar colors and be constructed of similar materials as existing infrastructure development. Therefore, the Boulder Brush Facilities would not substantially detract from or contrast with the existing visual character or quality through conflicts with important visual elements of the area. Impacts would be **less than significant**.

Campo Wind Facilities

Wind turbines of the Campo Wind Facilities that would be located south of I-8 (wind turbines are also proposed north of I-8) would be located atop visually prominent ridgelines. Due to their prominent locations, the scale of Project wind turbines would be emphasized and these features would dominate views from the central and southern portion of the Reservation and in westward views from the Tierra del Sol area of Boulevard. While wind turbine development is present in the Project Vicinity, distance and the presence of intervening terrain blocks or diminishes the

contribution of existing wind turbines to the visual character of the central and southern portions of the Reservation and the Tierra del Sol area of Boulevard. Therefore, due to the anticipated size and scale disparity between proposed wind turbines in the central and southern portions of the Reservation and existing scattered development in these areas (see KOPs 2, 3, 4, 5, and 7 (Figures 17 through 20 and 22)), Project wind turbines would substantially contrast with existing visual character. Impacts would be **potentially significant** (**Impact AE-A**).

With implementation of **M-AE-A** through **M-AE-H**, impacts to visual quality and/or quality would be reduced to the extent practicable but would remain **significant and unavoidable** (**Impact AE-A**).

Project (Campo Wind Project with Boulder Brush Facilities)

Impacts concerning the Boulder Brush Facilities would be less than significant. Impacts to visual quality and/or quality due to the Campo Wind Facilities would be reduced to the extent practicable with **M-AE-A** through **M-AE-H** but would remain **significant and unavoidable** (**Impact AE-A**).

7.2 Threshold 2

Would the project 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?

Boulder Brush Facilities

The scale and massing of the gen-tie line poles for the Off-Reservation gen-tie line would be noticeably shorter than existing wind turbines in the area (i.e., wind turbines of the Kumeyaay Wind Project and Tule Wind Project (see Figures 25 through 27). In addition, and as viewed from identified KOPs, the gen-tie line within the Boulder Brush Boundary would be viewed as a series of faint lines in the landscape. However, the installation of the gen-tie line within the Boulder Brush Corridor would result in the removal of boulders and permanent impact to less than 1-acre of oak woodland vegetation and. While limited boulder removal and oak woodland impacts would not substantially change existing visual character (and would not be prominent as viewed from public vantage points), installation of conductor wire between steel poles across the Tule Creek would interrupt the remaining openness of the landscape within the Boulder Brush Boundary as viewed from the northerly extension of Ribbonwood Road. Therefore, impacts associated with the gen-tie line would be **potentially significant.**

Installation of the high-voltage substation and switchyard would permanently alter the existing undeveloped character of the two sites, which are in the remote northern portion of the Boulder Brush Boundary. However, the high-voltage substation and switchyard would be located adjacent to the existing Sunrise Powerlink with the nearest steel lattice tower supporting the 500kV transmission line installed approximately 230 feet north of the switchyard site (see Figure 2). Furthermore, existing Tule Wind Project wind turbines are located on BLM-administered lands to the west, north, and east of the proposed switchyard and substation. Specifically, the closest existing wind turbines to the proposed switchyard site is approximately 0.60 mile to the south and northeast, 0.50 mile to the north, and 0.50 mile to the west. Existing rock outcroppings would be removed during construction; however, these elements are especially numerous in the surrounding area and removal would generally be unnoticeable due to the remote location of the high-voltage substation and switchyard sites. As such, impacts associated with substation and switchyard would be **less than significant**.

No mitigation measures have been identified to reduce the anticipated impacts of the Boulder Brush Facilities and more specifically, the removal of notable landscape features and substantial change in the remaining openness of the landscape. Impacts to landscape openness associated with silhouetted segments of the Off-Reservation gen-tie across the Tule Creek corridor would result in a significant visual impact to notable landscape features that contribute to the valued visual character of the Boulevard area. Impacts would be **significant and unavoidable** (**Impact AE-1**).

Campo Wind Facilities

The installation of the Campo Wind Facilities would alter the existing (or remaining) openness of the landscape and quality of existing views. The installation of wind turbines, gen-tie and facilities would also result in the removal of rock outcrops and oak trees. Landscape "openness," rugged natural ridgelines, rock outcrops and oak trees are features and notable attributes that contribute to the existing visual character of Reservation.

Once operational, up to 60 wind turbines (approximately 586 feet tall each) with long rotating blades would line ridges on the Reservation to the north and south of I-8. As viewed from I-8 and segments of Old Highway 80 near the Golden Acorn Casino, Project wind turbines on the Reservation would be viewed alongside existing wind turbine development on the Reservation. Twenty-five wind turbines of the Kumeyaay Wind Project are installed atop the Tecate Divide and a single wind turbine is installed near the eastern parking lot of the Golden Acorn Casino. Therefore, when viewed in the context of existing wind turbines, the visual effects of Project wind turbines would be somewhat moderated. However, as viewed from Church Road, SR-94, and On- and Off-Reservation vantage points south SR-94 (see KOP 6 (Figure 21) and KOP 10 (Figure 25)), existing wind turbines in the Project Vicinity are either screened from view by intervening terrain

and vegetation or are distant and occupy a small portion of the available view. Further, the installation of Project wind turbines as viewed from these locations would substantially alter the existing openness of the landscape and quality of existing views. As such, impacts would be **potentially significant** (**Impact AE-B**).

Even with implementation of **M-AE-A** through **M-AE-H** listed in Chapter 6, implementation of the Campo Wind Facilities would transform the undeveloped chaparral- and rock-outcrop-covered character of on-site hillsides to wind energy development and would entail the removal of rock outcroppings. Further, the installation of Project wind turbines as experienced from On- and Off-Reservation vantage points including Church Road, SR-94, and in general, the Tierra del Sol area of Boulevard, would substantially alter the existing openness of the landscape and quality of existing views As such, even with implementation of applicable mitigation measures, impacts to community character associated with the Campo Wind Facilities would be **significant and unavoidable** (**Impact AE-B**).

7.3 Threshold 3

Would 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?***
- ***A recreational area?***

Boulder Brush Facilities

With the exception of Ribbonwood Road, potential impacts to focal or panoramic vistas from public roads, state or local designated scenic highways, and recreation areas were determined to be **less than significant**.

As viewed from the northerly extension of Ribbonwood Road the stringing of conductor wires between poles across the Tule Creek corridor would interrupt the remaining openness in views across the Project Site to the northwest (see KOP 9, Figure 24 that shows a partial view to the silhouetted gen-tie line within the Boulder Brush Boundary). Supported by steel poles up to 150 feet tall each, a short segment of proposed conductor wires would be viewed against the background sky and against the distant In-Ko-Pah Mountains. Where viewed against the sky, the resulting contrast in dark and light color and visibility of multiple lines would attract the attention

of motorists and detract from the available view. While the volume of viewers on the particular segments of Ribbonwood Road and Opalocka Road is low and the duration of the view is brief, introduction of the Off-Reservation gen-tie line would interrupt the remaining openness of northwestward views across the Project Site from Ribbonwood Road and Opalocka Road. Therefore, impacts to Ribbonwood Road would be **potentially significant** (**Impact AE-2**).

Components of the Boulder Brush Facilities including the Off-Reservation gen-tie line poles and conductor wires, access roads, high-voltage substation and switchyard would be visible from the potential future alignment of the Ribbonwood Road Pathway and Ribbonwood Trail. Because future users of the potential future pathways and trails are not a viewer group represented in the baseline condition, a significance determination in regards to potential impacts to focal or panoramic vistas from potential future trails and pathways was not provided and is not required.

Impacts to focal or panoramic views from the northerly extension of Ribbonwood Road resulting from implementation of the Off-Reservation gen-tie line would be **significant and unavoidable** (**Impact AE-2**).

Impacts to scenic vistas associated with construction and operation of the proposed switchyard and high-voltage substation would be less than significant.

Campo Wind Facilities

Impacts to focal or panoramic vistas from I-8, Old Highway 80, Ribbonwood Road, and McCain Valley Road would be **potentially significant** (**Impact AE-C**). Impacts to all other locations (i.e., identified public roads, SR-94, and recreation areas) were determined to be **less than significant**.

Project components including On-Reservation gen-tie line poles and conductor wires, access roads, collector substation, an O&M facility and a temporary laydown areas and batch plant would be visible from potential future trails and pathways identified in the Boulevard and Campo/Lake Morena Community Trails and Pathways Plans. However, the trails and pathways identified in Section 5.3.2.3, Threshold 3 (see heading Campo Wind Facilities), are potential future facilities and as such, the general alignments currently receive no official or authorized recreational use. Because future users of the potential future pathways and trails are not a viewer group represented in the baseline condition and the facilities do not currently exist, a significance determination in regards to potential impacts to focal or panoramic vistas from potential future trails and pathways was not provided and is not required.

The installation of up to 60 wind turbines with FAA-obstruction lighting, as well as the On-Reservation gen-tie line, would substantially interrupt and /or degrade focal or panoramic vistas from I-8, Old

Highway 80, Ribbonwood Road, and McCain Valley Road. Even with implementation of **M-AE-A** through **M-AE-H**, impacts would be **significant and unavoidable** (**Impact AE-C**).

7.4 Threshold 4

Would the project not comply with applicable goals, policies or requirements of an applicable County Community Plan, Subregional Plan, or Historic District's Zoning?

Project (Campo Wind Project with Boulder Brush Facilities)

As shown in Tables 2 and 3, the Boulder Brush Facilities would be consistent with relevant goals and policies of the Mountain Empire Subregional Plan and the Boulevard Community Plan. Therefore, impacts would be **less than significant**.

The County Subregional and community plans are not applicable to the Campo Wind Facilities on the Reservation, as the County has no land use jurisdiction over tribal lands. The Reservation is also not subject to County zoning requirements. The Project would not conflict with an applicable Tribal land use regulations, as discussed in Table 4. As such, impacts would be **less than significant**.

7.5 Lighting and Glare

Boulder Brush Facilities

Lighting impacts during construction of the Boulder Brush Facilities would be **less than significant**.

Permanent sources of lighting associated with the Boulder Brush Facilities would be limited to outdoor fixtures installed at the high-voltage substation and potentially, at the switchyard. No lighting would be installed on support poles of the Off-Reservation gen-tie line. The limited sources of lighting installed within the northern portion of the Boulder Brush Boundary would be hooded, directed downward and would be fully compliant with the County's Light Pollution Code. Further, these lighting sources are distant from occupied residential properties under the jurisdiction of the County and as such, occupied residential properties would not be substantially affected by exterior lighting installed at the high-voltage substation and adjacent switchyard. Therefore, impacts would be **less than significant**.

Campo Wind Facilities

Lighting impacts during construction of the Campo Wind Facilities would be **less than significant**.

Non-wind turbine lighting installed on Project components On-Reservation would be kept to the minimum required for security and safety, and all lighting would be hooded and directed

downward to reduce potential for skyglow and light trespass onto adjacent properties. Through implementation of lighting controls (i.e., hooded and downward-directed lighting at the substation and downcast, motion-sensitive lighting at the O&M facility) and turning off lighting when not in use, night lighting at the collector substation and O&M facility would not substantially affect nighttime views. However, the operation of FAA obstruction lighting on Project wind turbines would adversely affect existing night views in the surrounding area. While obstruction lighting atop the wind turbines of the Kumeyaay Wind Project and Tule Wind Project is visible in the Project Vicinity, the wide distribution of Project wind turbines on the Reservation and particularly, in the central and southern portions of the Reservation, would entail the operation of obstruction lighting in closer proximity to occupied On- and Off-Reservation residential properties. As such, impacts would be **potentially significant** (**Impact AE-D**).

With implementation of the Campo Wind Facilities, additional red or white flashing lights would operate throughout the evening, night, and early morning hours. As with existing wind turbine development, obstruction lighting atop up to 60 wind turbines on the Reservation would adversely affect night views in the area and contribute to a reduced dark sky environment. Impacts would be potentially significant.

Due to their height of greater than 200 feet aboveground, Project wind turbines and MET towers would require marking and/or lighting to ensure the safety of aircraft pilots and navigable airspace. During evening, night, and morning hours, obstruction lighting installed on Project wind turbines and MET towers could be visible throughout the Project viewshed. Due to the visibility of simultaneously flashing obstruction lights and the general lack of bright night lighting installed On- and Off-Reservation to the south of I-8, obstruction lights would result in adverse effects to existing night views. A lighting plan based on final design would be prepared for the Campo Wind Facilities. The FAA would make the final determination regarding the number, location, and type of lighting to be installed atop wind turbines. Suitable and effective mitigation that would reduce the occurrence of obstruction lighting or their potential to impact existing nighttime views has not been identified and therefore, impacts would be **significant and unavoidable** (**Impact AE-D**).

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9 REPORT PREPARERS

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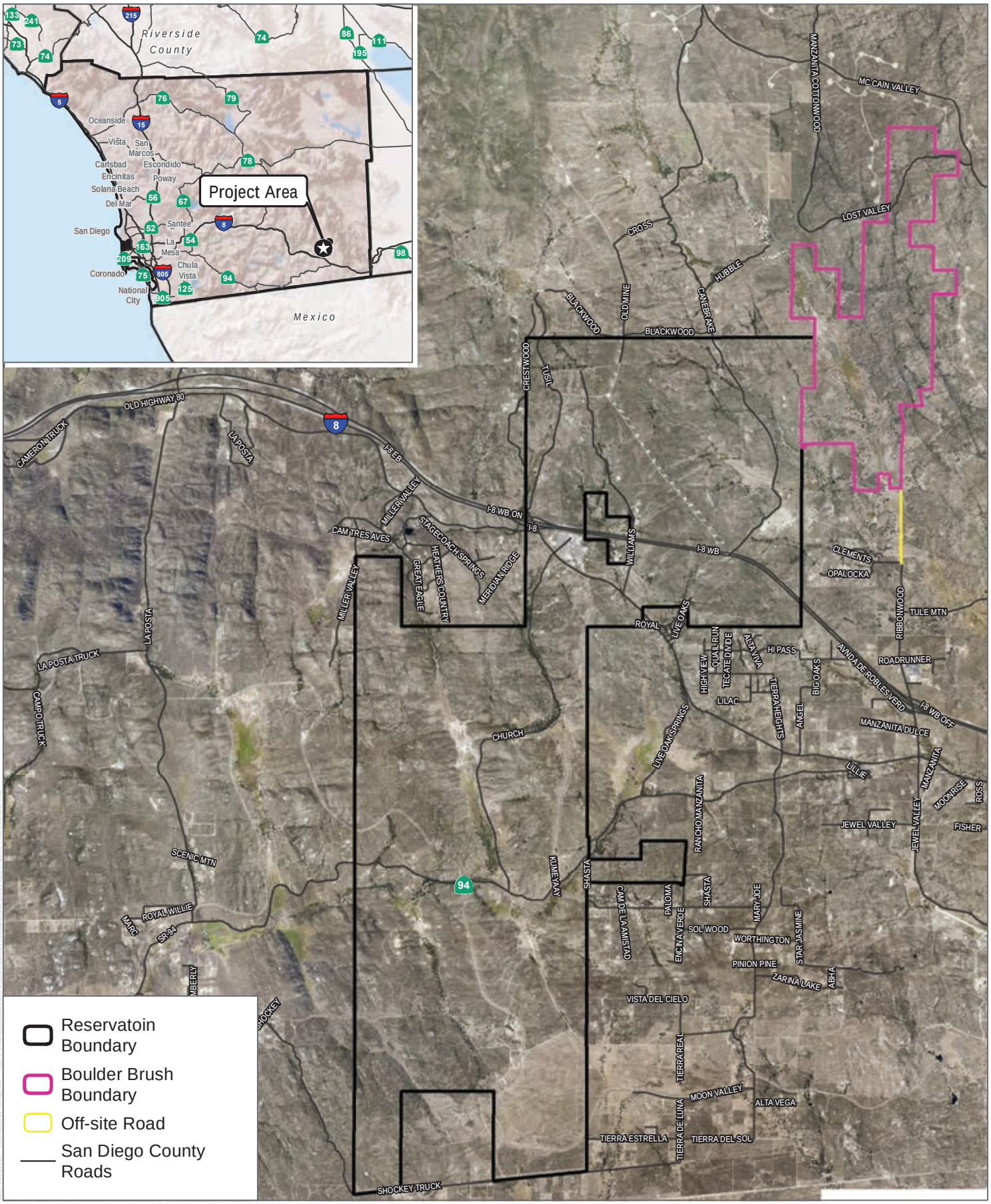

SOURCE: SANGIS 2017

DUDEK

0 3,450 6,900 Feet

FIGURE 1

Project Location

Campo Wind Project with Boulder Brush Facilities

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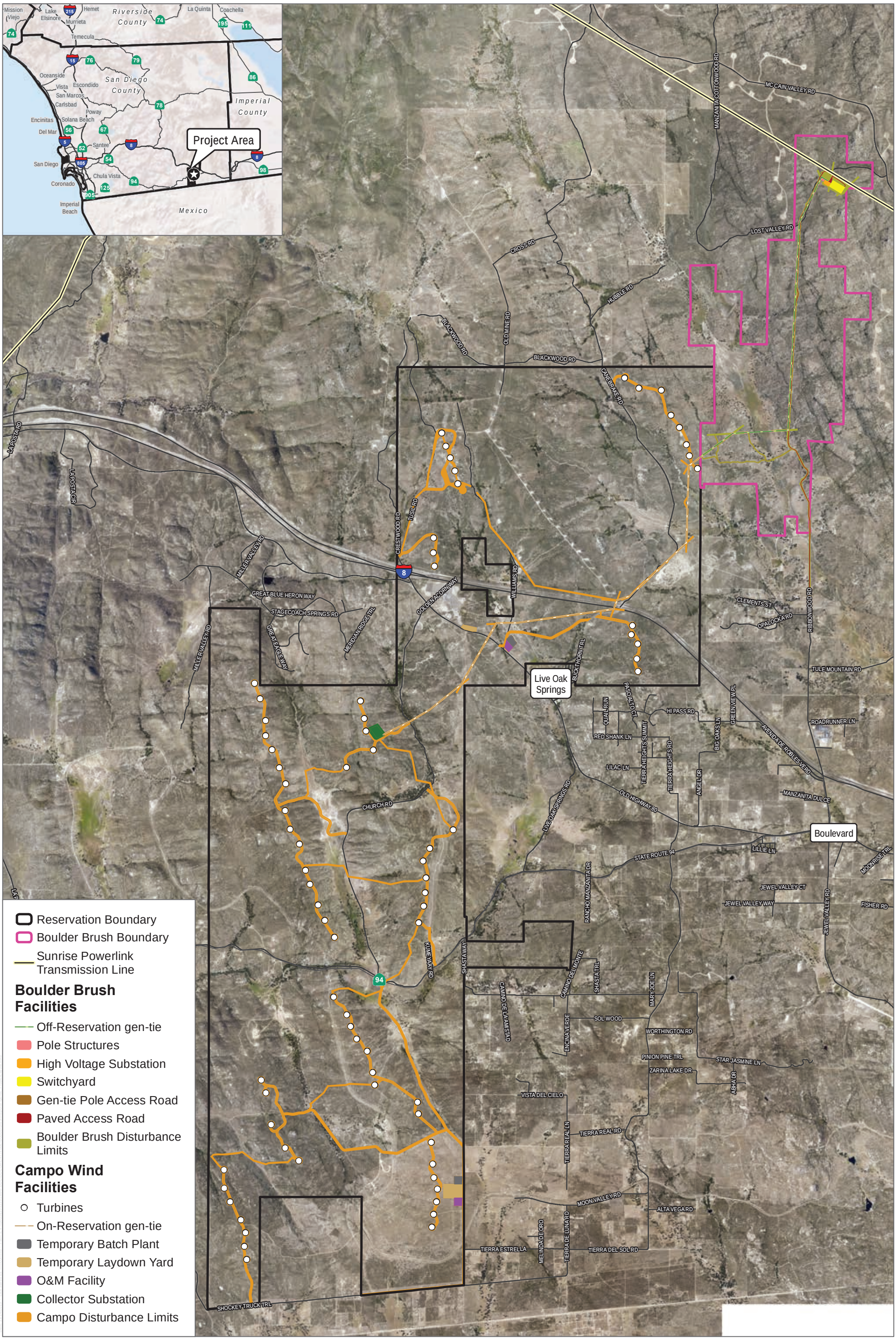

SOURCE: SANGIS 2017

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FIGURE 2

Project Layout

Campo Wind Project with Boulder Brush Facilities

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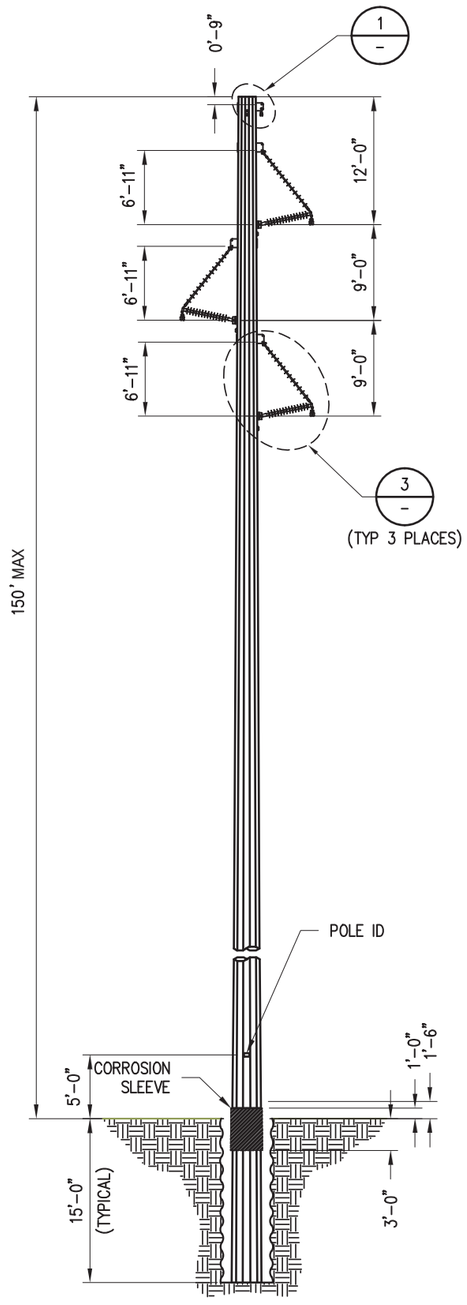

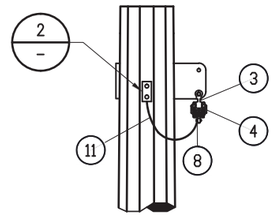

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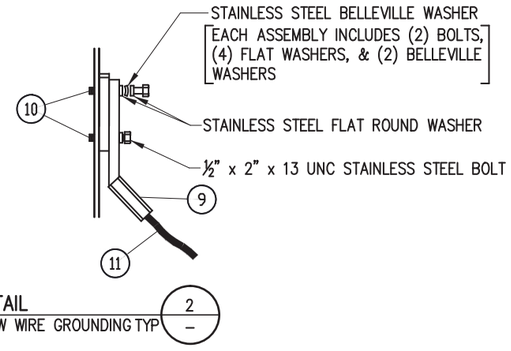
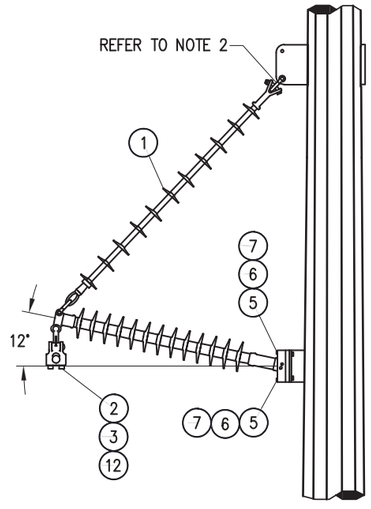


DETAIL
OPGW WIRE GROUNDING TYP 2



DETAIL
PHASE ATTACHMENT TYP 3

Note: Actual Engineered Pole Structure Dimensions may differ

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FIGURE 3
Transmission Line Pole Structure Example
Campo Wind Project with Boulder Brush Facilities

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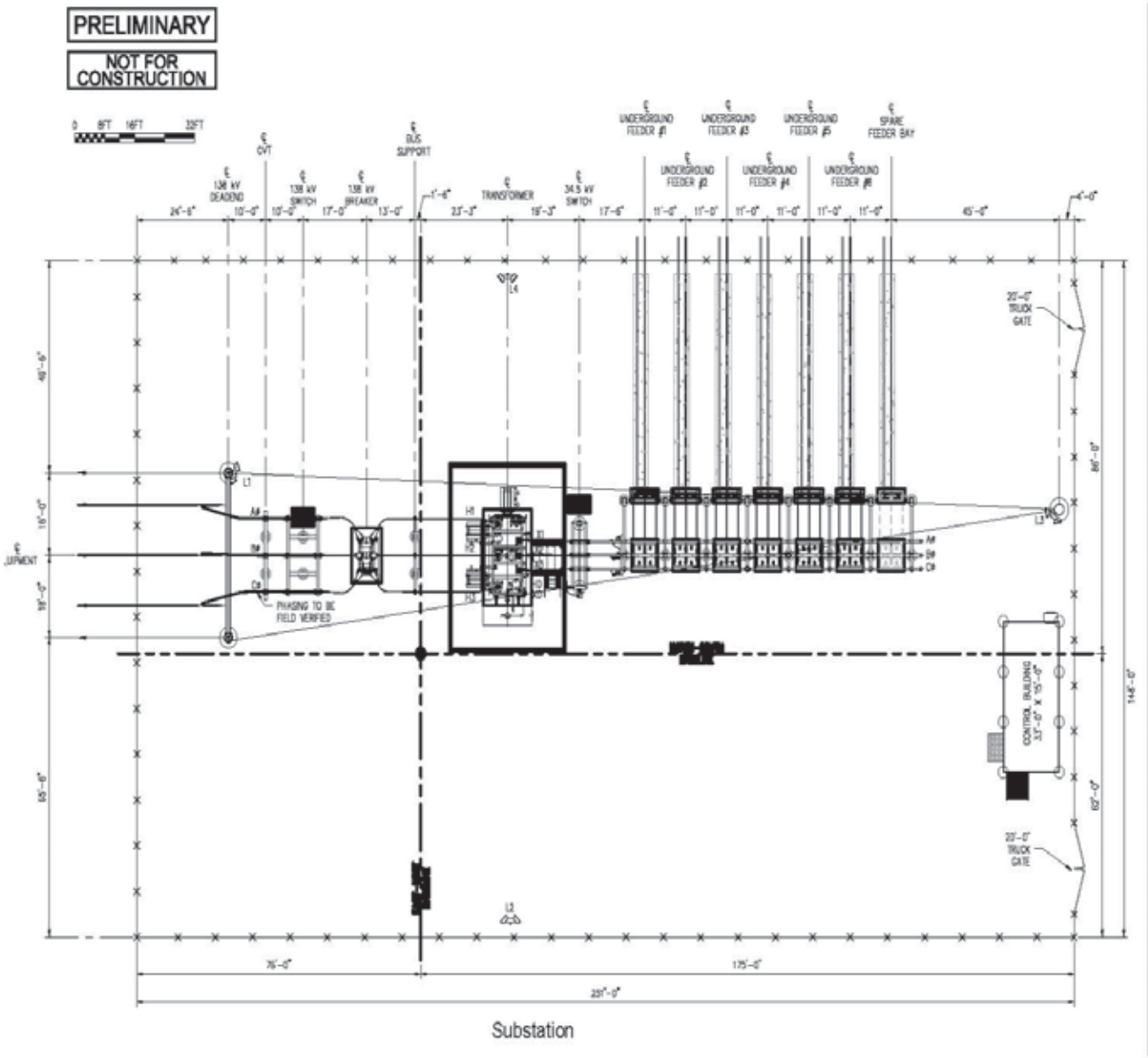

Note: Components and Dimensions for Project Collector Substation May Differ.

FIGURE 4

Typical Substation Design

Campo Wind Project with Boulder Brush Facilities

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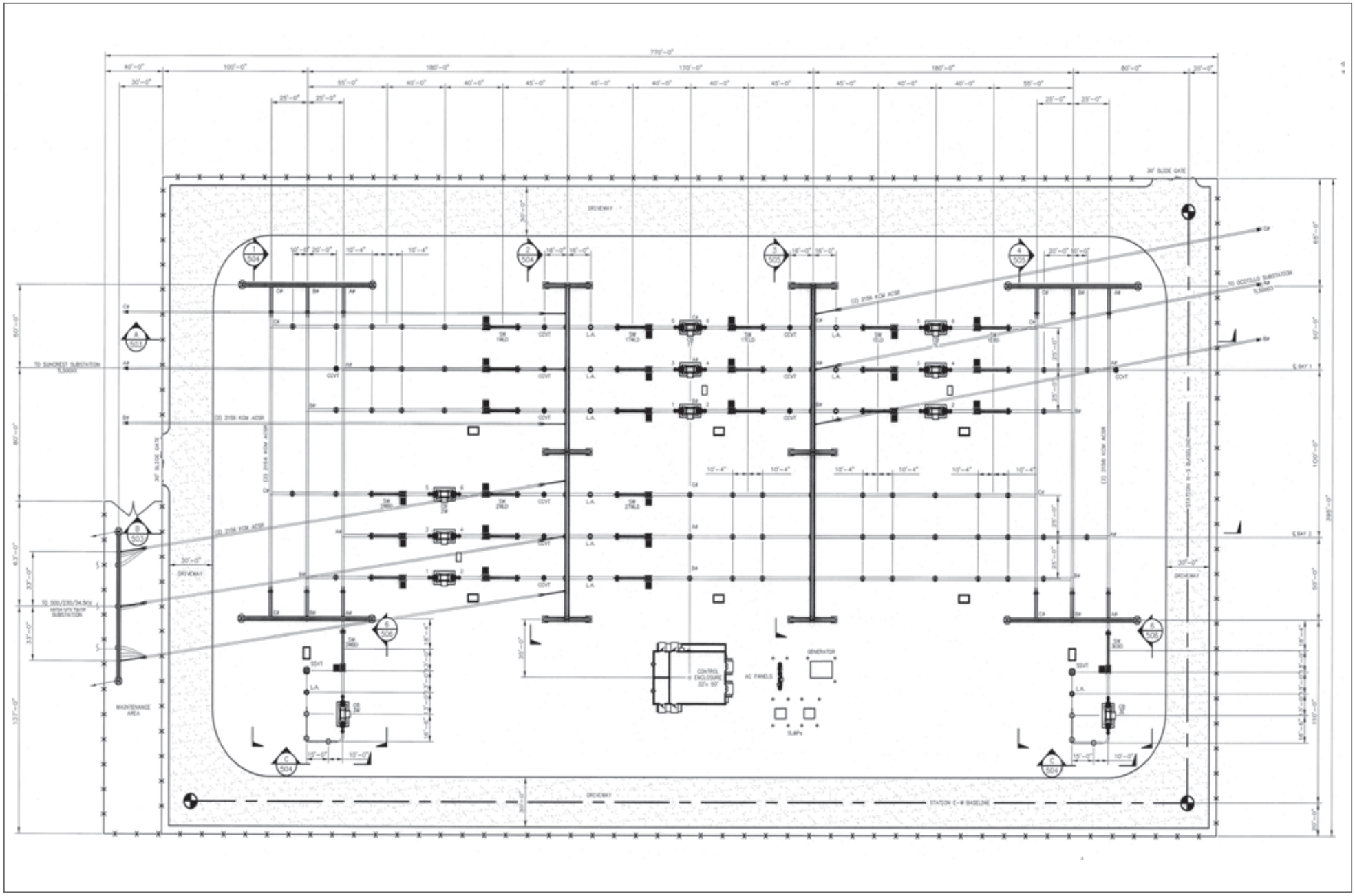

SOURCE: Beta Engineering 2019

FIGURE 5

Switchyard Layout

Campo Wind Project with Boulder Brush Facilities

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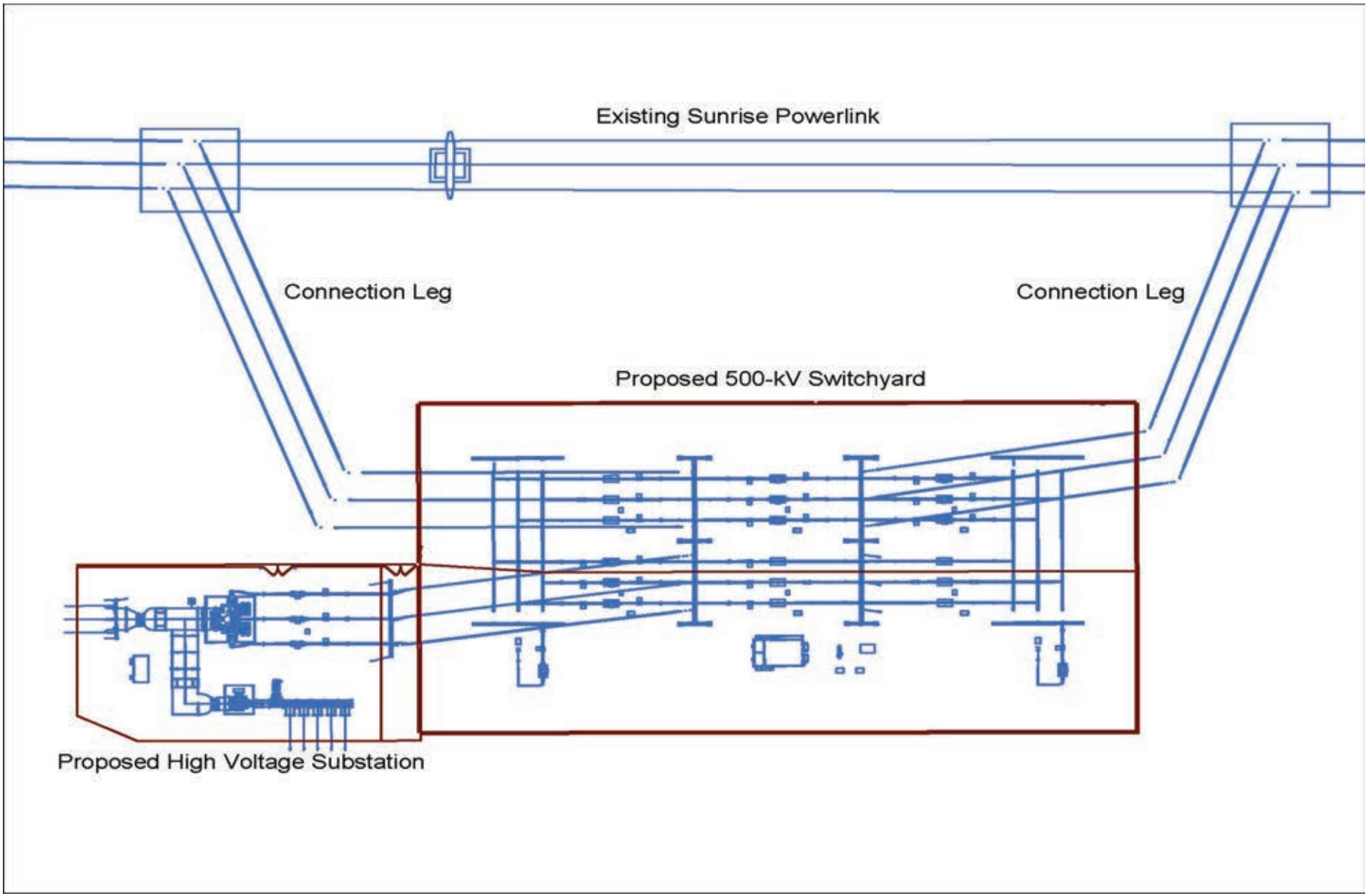

FIGURE 6

SDG&E Connection Schematic

Campo Wind Project with Boulder Brush Facilities

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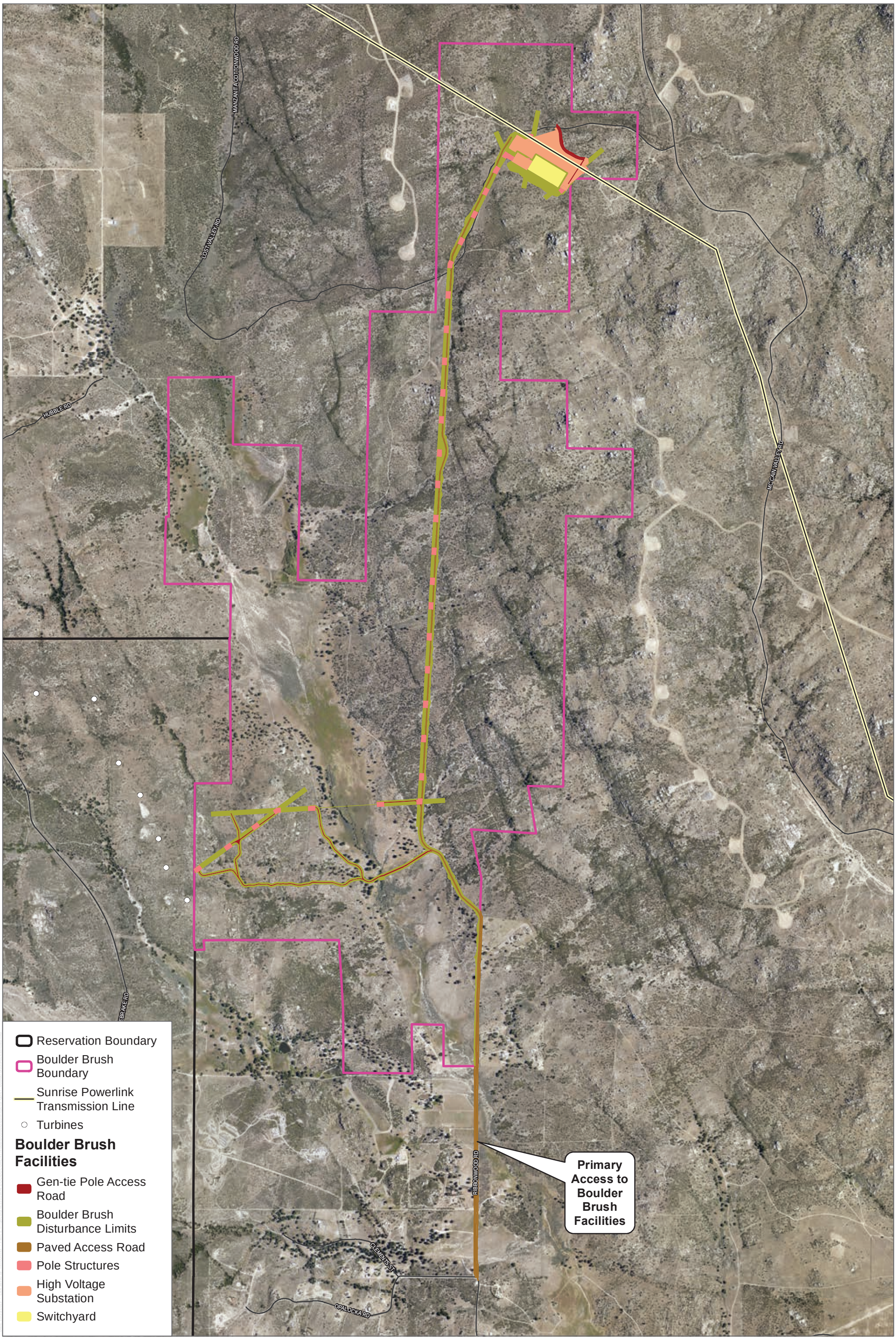

SOURCE: SANGIS 2017

DUDEK

0 750 1,500 Feet

FIGURE 7

Boulder Brush Access Roads

Campo Wind Project with Boulder Brush Facilities

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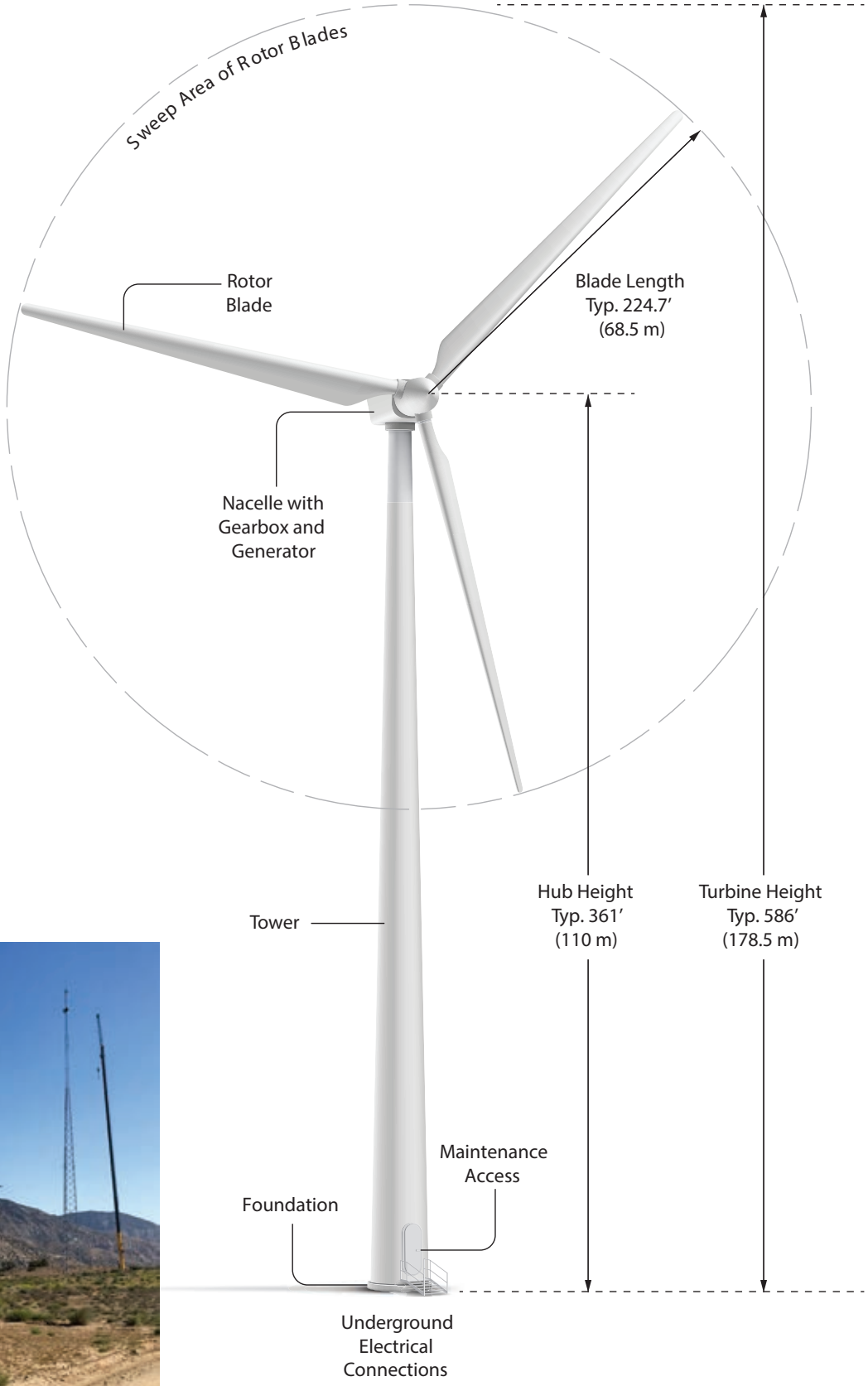

FIGURE 8

Typical Wind Turbine Specifications

Campo Wind Project with Boulder Brush Facilities

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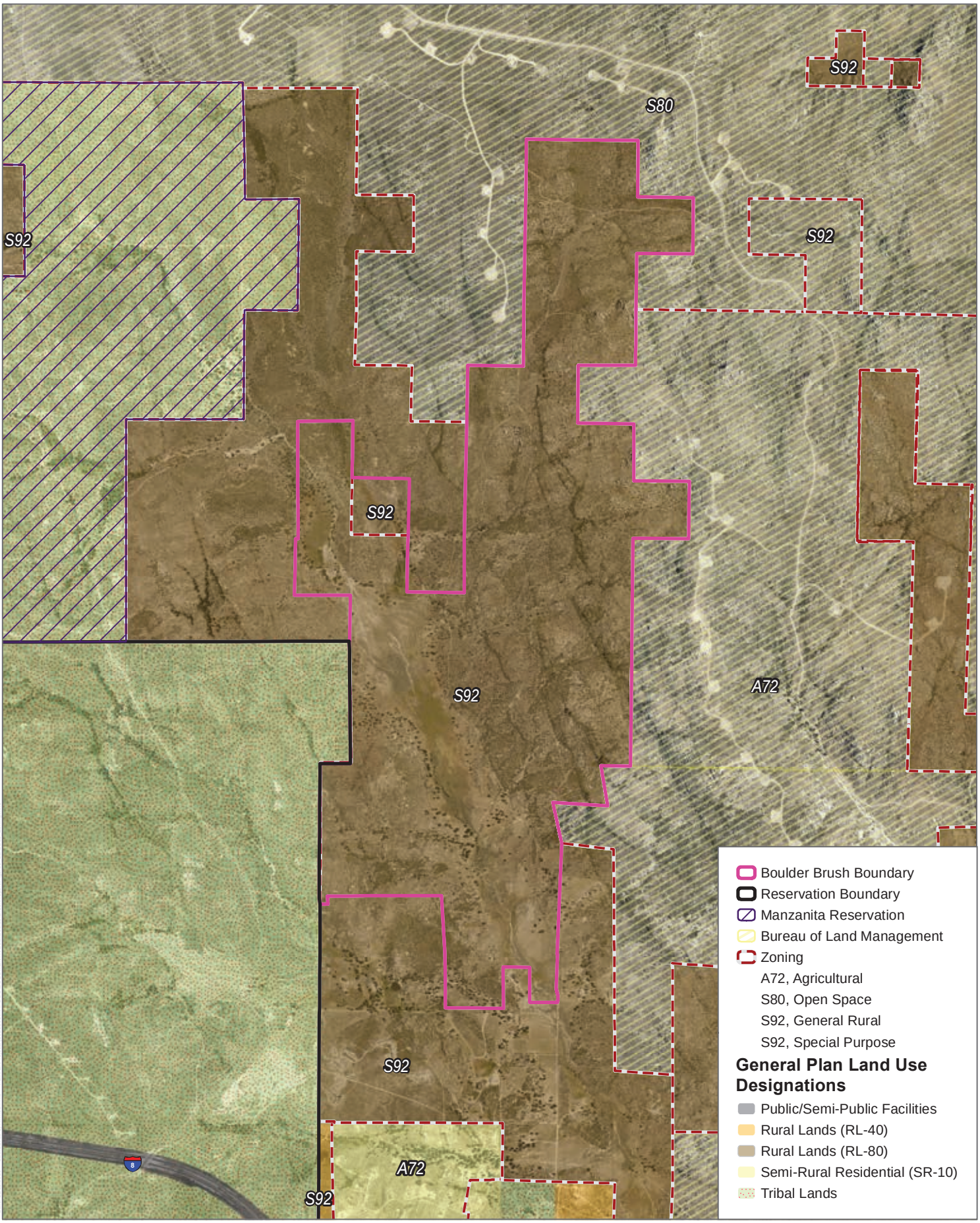

SOURCE: SanGIS 2017

DUDEK

0 1,800 3,600 Feet

FIGURE 9

General Plan Land Use Designations and Zoning

Campo Wind Project with Boulder Brush Facilities

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Photo A: View west from north-south trail across center of Boulder Brush Boundary toward Tule Creek floodplain

Photo B: View south from central portion of Boulder Brush Boundary to simple post and wire fencing

Photo C: View north from central- portion of Boulder Brush Boundary to boulder outcropping

Photo D: Existing site fencing and gate located in the southeastern corner of the Boulder Brush Boundary at the northern terminus of Ribbonwood Road

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FIGURE 10

Existing Conditions: Boulder Brush Boundary

Campo Wind Project with Boulder Brush Facilities

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Photo A: View east from McCain Valley Road to existing wind turbine and transmission line development

hoto B: View southwest from Ribbonwood Road to developed and undeveloped lands south of the Boulder Brush Boundary

Photo C: View east from Ribbonwood Road to rural residential property and wind turbine development

Photo D: View west from McCain Valley Road to Upper Lark Canyon Campground

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FIGURE 11

Existing Conditions: Surrounding Area

Campo Wind Project with Boulder Brush Facilities

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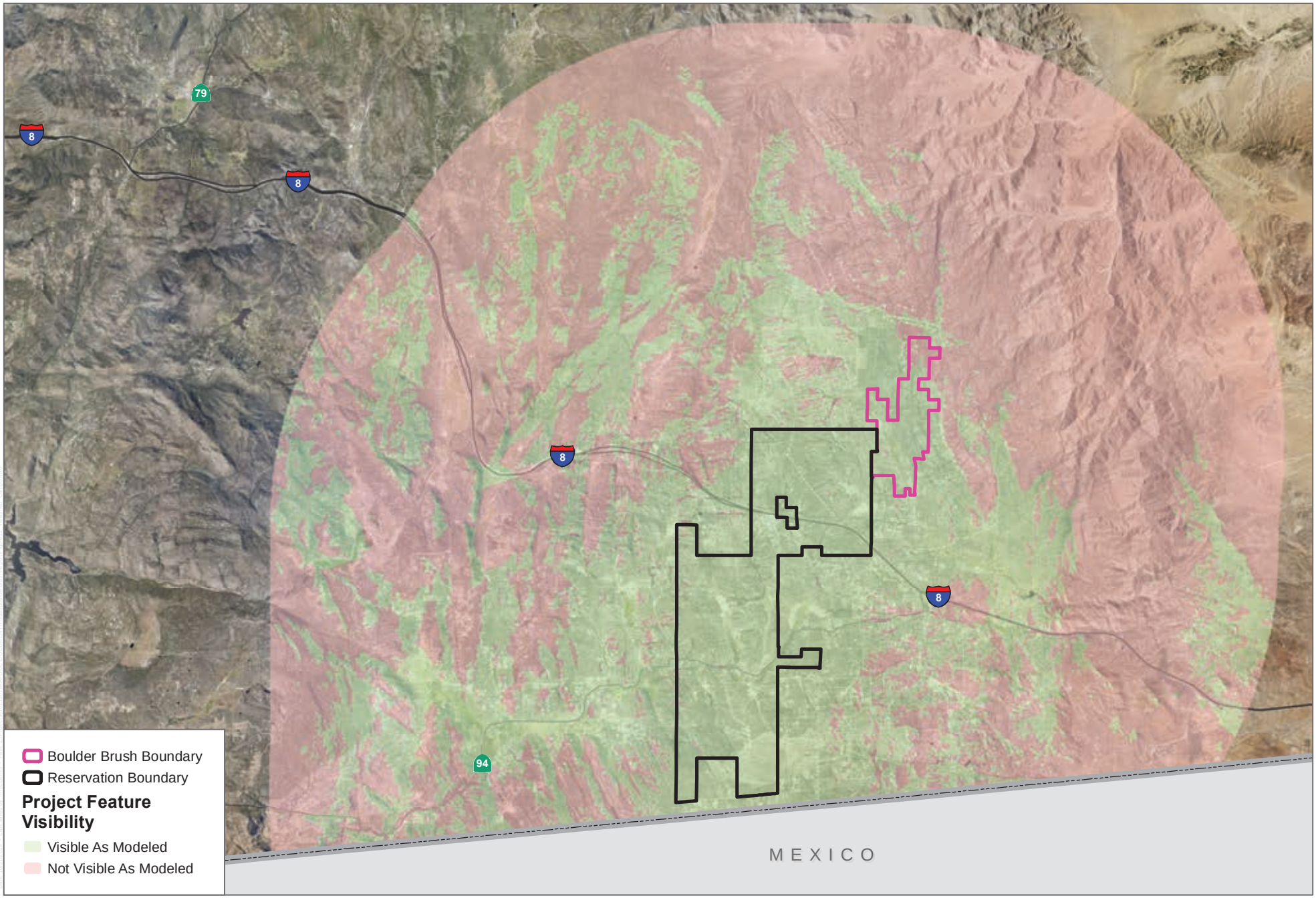

SOURCE: SANGIS 2017

Note: While not depicted on this figure, views to proposed wind turbines would be available in Mexico.
Ten-mile modeled viewshed based on terrain and height of tallest proposed component on the Project Site (i.e., wind turbines).

DUDEK

0 1.5 3 Miles

FIGURE 12

Modeled Topographic Viewshed Analysis: Campo Wind Facilities

Campo Wind Project with Boulder Brush Facilities

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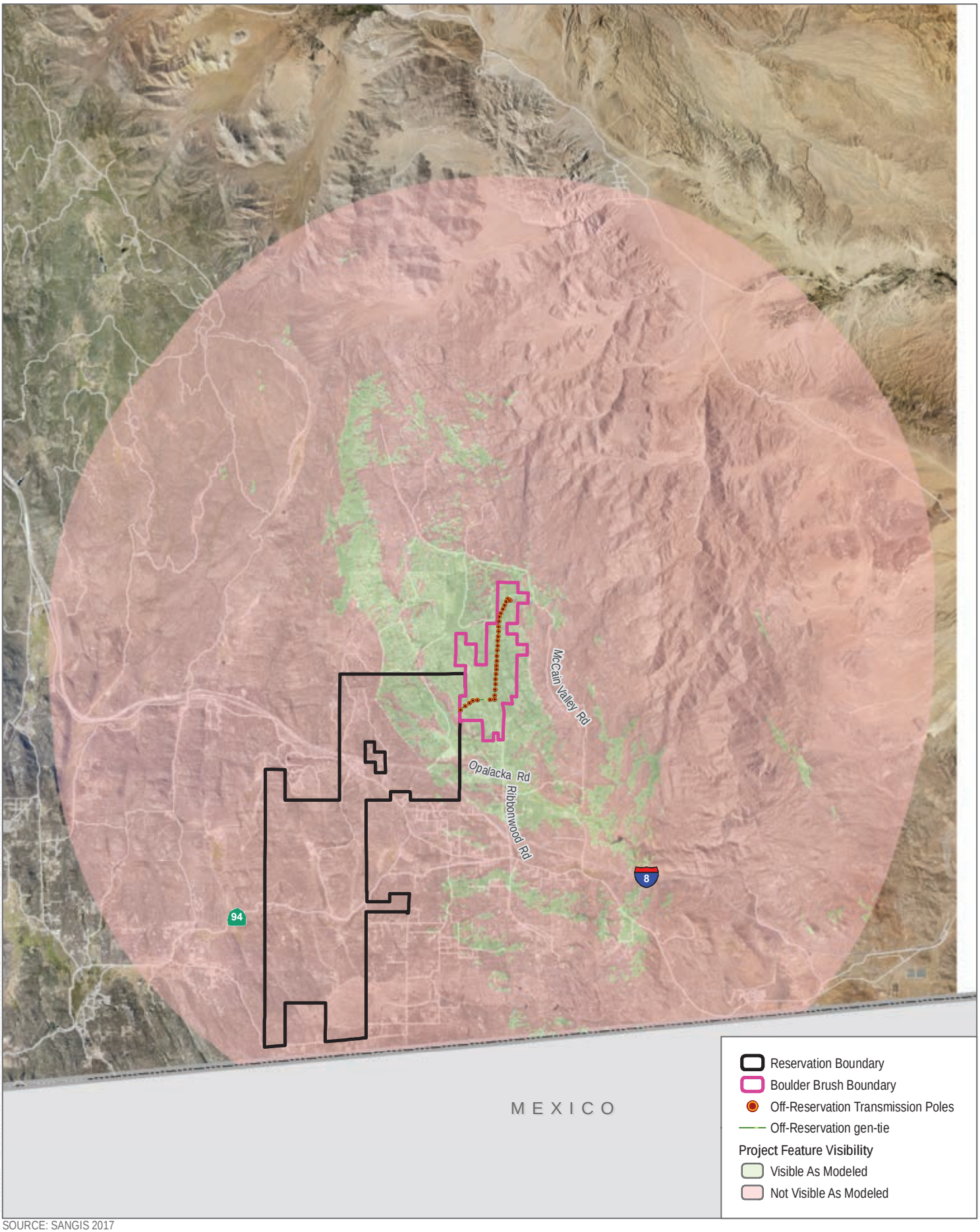

SOURCE: SANGIS 2017

NOTE: Ten-mile radius modeled viewshed analysis based on maximum height of gen-tie transmission poles (150 feet high)

FIGURE 13

Modeled Topographic Viewshed Analysis: Boulder Brush Facilities

Campo Wind Project with Boulder Brush Facilities

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0 8,000 16,000 Feet

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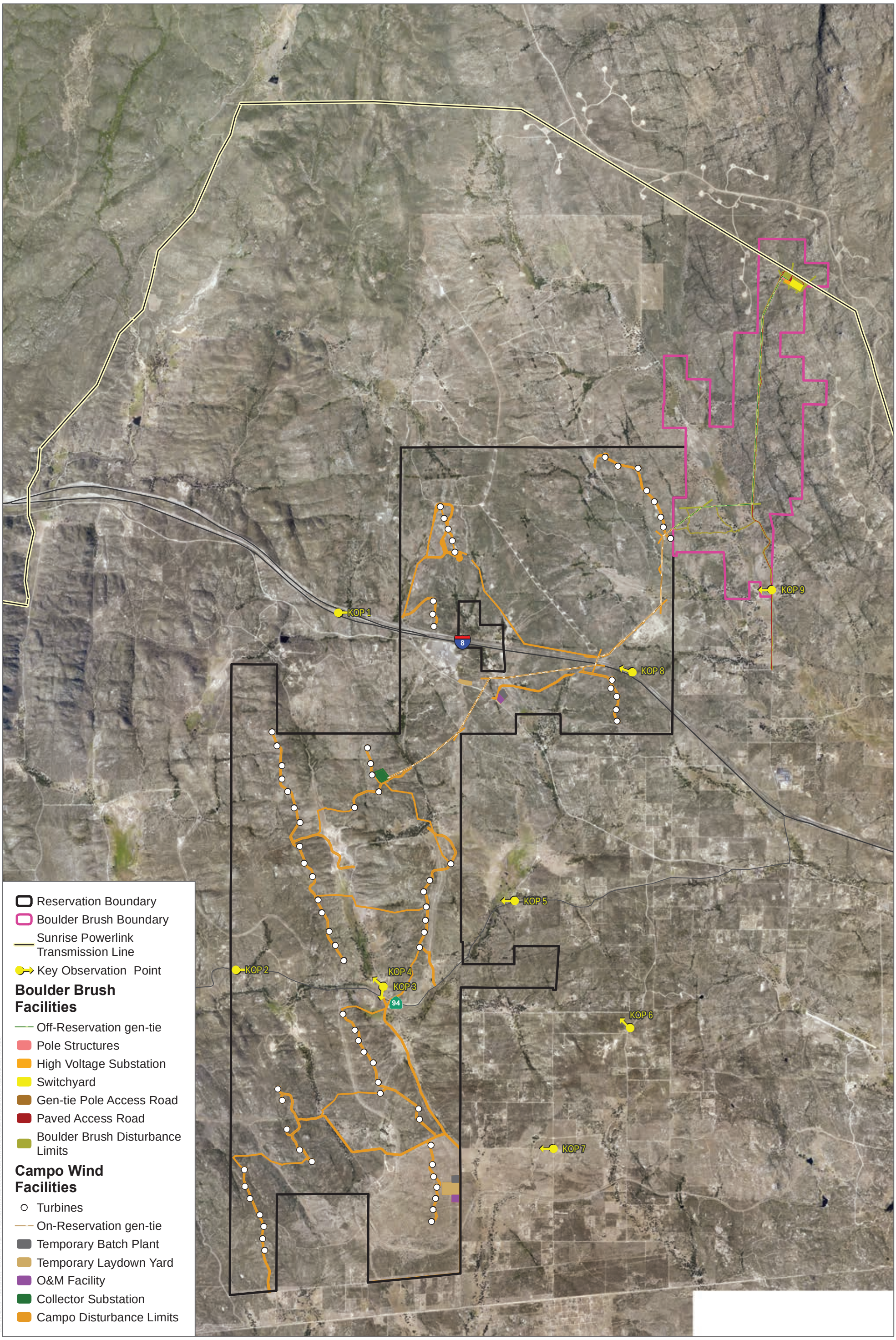

SOURCE: SANGIS 2017

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0 2,200 4,400 Feet

FIGURE 14

Key Observation Points - Campo Wind Project

Campo Wind Project with Boulder Brush Facilities

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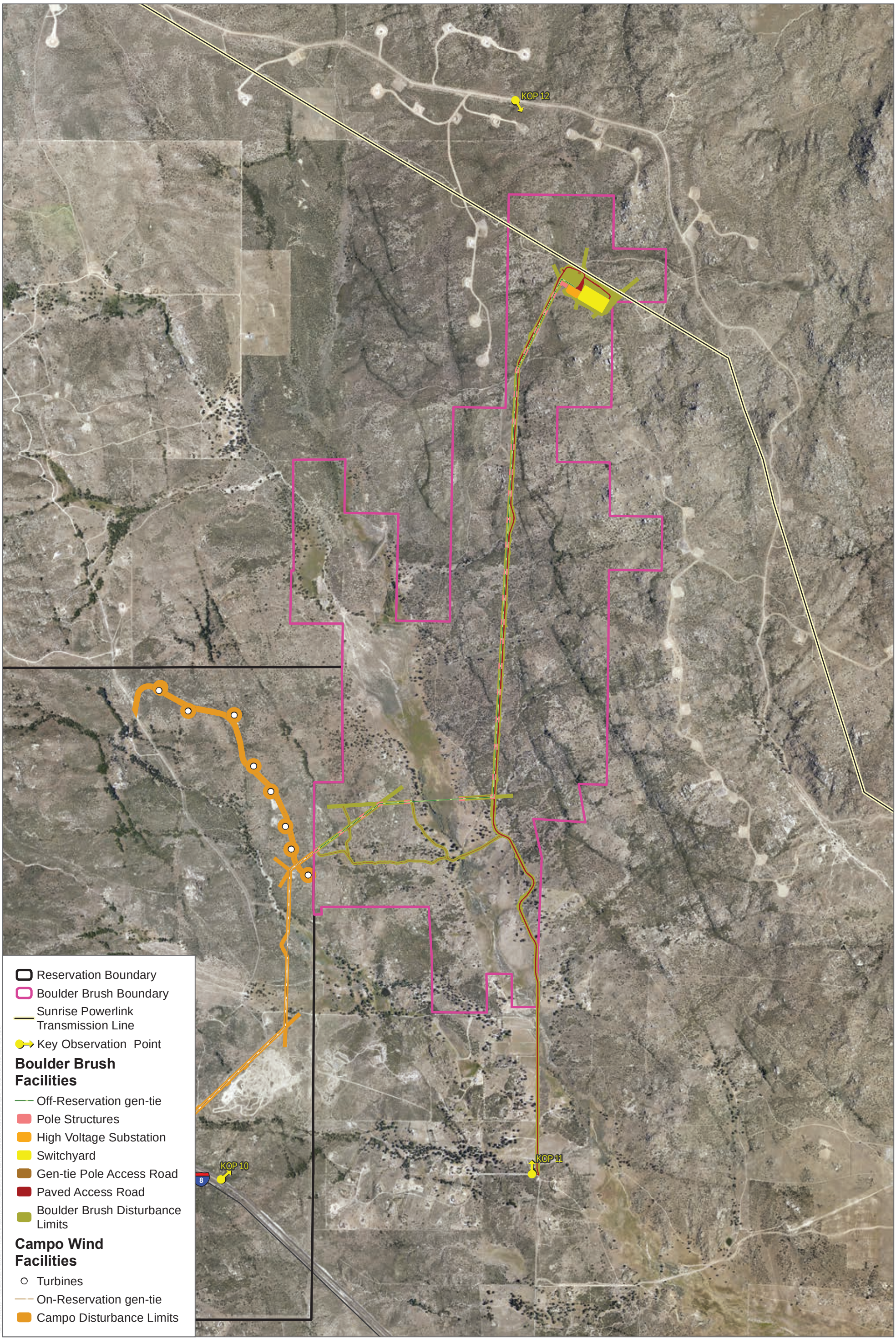

SOURCE: SANGIS 2017

DUDEK

0 950 1,900 Feet

FIGURE 15

Key Observation Points - Boulder Brush Facilities Project

Campo Wind Project with Boulder Brush Facilities

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Existing view looking east from Interstate 8 towards Golden Acorn Casino and existing wind development

Visual Simulation of Project (Campo Wind Facilities)

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FIGURE 16

Key Observation Point 1

Campo Wind Project with Boulder Brush Facilities

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Existing view looking east from SR-94 at western Reservation boundary towards Project Site

Visual Simulation of Project (Campo Wind Facilities)

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FIGURE 17

Key Observation Point 2

Campo Wind Project with Boulder Brush Facilities

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Existing view looking northwest from Church Road towards Campo Education Center

Visual Simulation of Project (Campo Wind Facilities)

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FIGURE 18

Key Observation Point 3

Campo Wind Project with Boulder Brush Facilities

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Existing view looking southwest from Church Road towards SR-94 and Project Site

Visual Simulation of Project (Campo Wind Facilities)

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FIGURE 19

Key Observation Point 4

Campo Wind Project with Boulder Brush Facilities

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Existing view looking west from SR-94 near Live Oak Springs Road towards Project Site

Visual Simulation of Project (Campo Wind Facilities)

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FIGURE 20

Key Observation Point 5

Campo Wind Project with Boulder Brush Facilities

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Existing view looking northwest from Tierra del Sol Road towards existing wind development and local terrrain

Visual Simulation of Project (Campo Wind Facilities)

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FIGURE 21

Key Observation Point 6

Campo Wind Project with Boulder Brush Facilities

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Existing view looking west from Tierra Real Lane towards Project Site

Visual Simulation of Project (Campo Wind Facilities)

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FIGURE 22

Key Observation Point 7

Campo Wind Project with Boulder Brush Facilities

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Existing view looking northwest from I-8 towards Tecate Divide and Kumeyaay Project Turbines

Visual Simulation of Project (Campo Wind Facilities)

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FIGURE 23

Key Observation Point 8

Campo Wind Project with Boulder Brush Facilities

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Existing view looking west from Ribbonwood Road across McCain Valley towards Tecate Divide

Visual Simulation of Project (Campo Wind Facilities and Boulder Brush Facilities)

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FIGURE 24

Key Observation Point 9

Campo Wind Project with Boulder Brush Facilities

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Existing view looking northeast from Interstate 8 to McCain Valley and existing wind turbine development

Visual Simulation of Project (Campo Wind Facilities and Boulder Brush Facilities)

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FIGURE 25

Key Observation Point 10

Campo Wind Project with Boulder Brush Facilities

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Existing view looking north from Opalocka Road across private property and wind turbine develeopment in McCain Valley

Visual Simulation of Project (Campo Wind Facilities and Boulder Brush Facilities)

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FIGURE 26

Key Observation Point 11

Campo Wind Project with Boulder Brush Facilities

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Existing view looking southeast from McCain Valley Road to McCain Valley and existing transmission and wind turbine development

Visual Simulation of Project (Boulder Brush Facilities)

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FIGURE 27

Key Observation Point 12

Campo Wind Project with Boulder Brush Facilities

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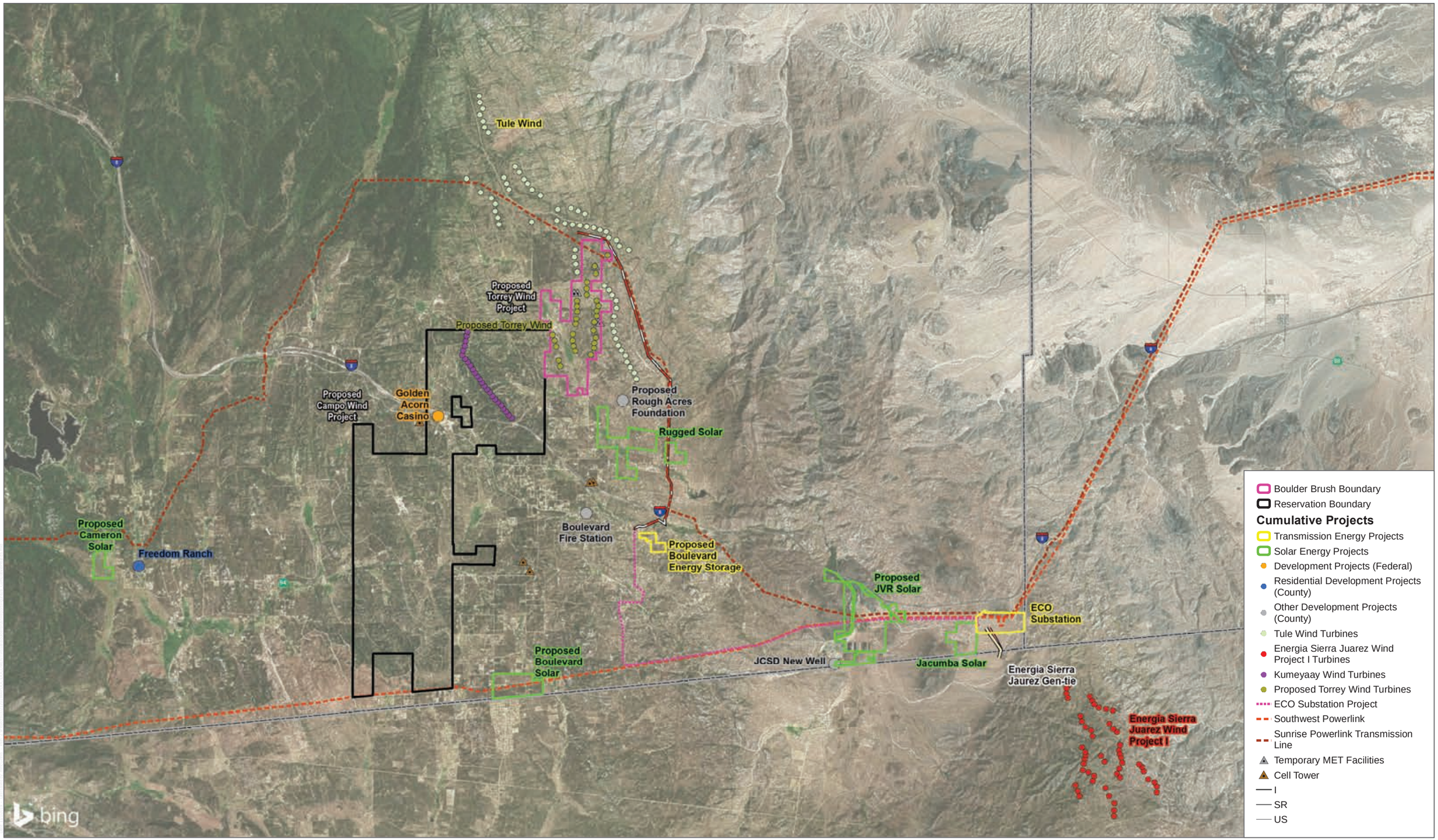

SOURCE: BING 2018; County of San Diego

DUDEK

0 5,500 11,000 Feet

FIGURE 28

Cumulative Projects

Campo Wind Project with Boulder Brush Facilities

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