

CHAPTER 2.0

PROJECT DESCRIPTION

Information identified in this chapter regarding the proposed Wistaria Ranch Solar Energy Center is based on technical studies, mapping, the 17 Conditional Use Permit (CUP) applications submitted to the Imperial County Planning & Development Services Department (ICPDSD) by Wistaria Ranch Solar, LLC (hereafter, “WRS” or “Applicant”), and information provided by the Applicant. Land disturbance acreages, equipment, schedule, mileage, and workforce information is based on the most up-to-date engineering available from the Applicant and generally represent conservative estimates.

2.1 INTRODUCTION

This chapter of the Environmental Impact Report (EIR) defines key terms relevant to understanding the spatial arrangement of the Wistaria Ranch Solar Energy Center (“proposed Project” or “Project”) and surrounding lands. It also describes features and components of the proposed Project. Construction, operation and decommissioning are described along with discretionary actions and approvals.

The Wistaria Ranch Solar Energy Center (i.e. proposed Project or Project) is a renewable energy project employing photovoltaic (PV) or concentrated photovoltaic (CPV) technology. The Applicant has filed 17 CUP applications (13-0036 thru 13-0052) to develop up to 17 individual solar projects or clusters of multiple solar projects on 32 parcels totaling approximately 2,793 acres (i.e. Phased CUP Scenario). Alternatively, the Project could be built out in its entirety (i.e. all 17 CUPs, Full Build-out Scenario) at one time. Each CUP is approximately 20 megawatts (MW) while the entire Project (if built-out at once) is anticipated to generate 250 MW. The ultimate energy output is dependent on several variables, including off-take arrangements and the evolving efficiency of PV and CPV panels. As a result, the Project could generate more or less than 250 MW. However, the Project would not disturb more than 2,793 acres.

All CUPs are anticipated to use the existing generation interconnection (Gen-Tie) line that extends from the solar field site parcels through the Mount Signal Solar Farm Project to the Imperial Solar Energy Center South (ISECS) switchyard. The CUPs are anticipated to use a single Project switchyard common to all CUPs. Alternatively, each CUP may independently construct a 230 kilovolt (kV) step-up transformer and switchyard. Collector lines located within the 32 solar field site parcels (plus two parcels that are not included within the solar fields for this Project) will aggregate the electricity from all of the solar fields and convey it to the Gen-Tie line. Eight towers will be added to the Mount Signal Solar Farm Project segment of the Gen-Tie to accommodate co-location of the Project’s lines with the Mount Signal Solar Farm Project Gen-Tie line.

In addition to the structures associated with the solar field, such as PV and/or CPV panels, inverters, transformers, Power Conversion System (PCS) enclosures, etc., the Project design would include an Operations and Maintenance (O&M) building or buildings, and a type of energy storage facility that could accommodate a variety of evolving energy storage technologies within each CUP (13-0036 thru 13-0052). The Project would also include additional auxiliary facilities such as raw water/fire water storage, treated water storage, water filtration buildings and equipment, equipment control buildings, Onsite Wastewater Treatment System (OWTS) and parking. The Project will include electric line crossings and vehicular crossings of Imperial Irrigation District (IID) facilities (which may include infrastructure improvements such as a culvert widening) and County facilities as shown on the Access Point and Electric Flow diagram for each CUP (refer to **Figures 2.0-6 thru 2.0-22**; and sub-section 2.1.4). The electric line crossings would be either overhead or underground. If the crossings are constructed underground, either trenching or horizontal directional drilling may be required to place the electric or water lines under existing IID and County facilities.

The EIR reflects a conservative analysis of Project impacts under both the Phased CUP Scenario and the Full Build-out Scenario under various timeframes (i.e. near-term and long-term) and assuming a variety of technologies. For example, the visual impact analysis analyzes the impacts of the larger of the two solar panel technologies (CPV); the noise analysis analyzes the impacts of the noisiest of energy storage

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technologies; the air quality analysis analyzes the impacts of a near-term development scenario with construction equipment that does not have clean air technologies that will be required in the future; and the traffic analysis examines the impacts of a development scenario towards the end of the ten year period where background traffic levels will be greater than a near-term scenario. Accordingly, while the Project Objectives require a flexible entitlement, the Project Description consistently and accurately accounts for the differences in technology and development scenarios in a manner that conservatively reflects the Project impacts rather than underestimating them.

2.1.1 PROJECT BACKGROUND

In March 2012, the Applicant began performing environmental studies to support the Project's CEQA process. On August 5, 2013, the Applicant submitted 17 CUP applications (CUP 13-0036 thru CUP 13-0052) for the proposed Wistaria Ranch Solar Energy Center. Subsequently, the Applicant filed 17 Variance requests (V 13-0002 thru V-13-0018) to allow Gen-Tie structures to be up to 140 feet in height. This EIR is being prepared to analyze the potential environmental impacts of the proposed Project (in its entirety (the "Full Build-out Scenario") as well as the 17 individual CUPs as stand-alone solar fields constructed over the course of the ten year period permitted for construction ("Phased CUP Scenario") and fulfill the requirements of the California Environmental Quality Act (CEQA).

2.1.2 SITE LOCATION

From a regional perspective as depicted in **Figure 2.0-1**, the solar field site parcels are approximately six miles southwest of the City of El Centro, California and five-and-a-half miles directly west of Calexico, California. More specifically, the 32 individual solar field site parcels are within the area south of Interstate 8 (I-8), east of Pulliam Road, and north of the All American Canal in southwestern unincorporated Imperial County. As shown in **Figure 2.0-2**, the solar field site parcels are located in three clusters (northern, central and southern) of privately owned agricultural land. The Project area is generally bounded by Wahl Road on the north, Brockman and Rockwood Roads on the west, the U.S./Mexico border on the south, and Ferrell and Corda Roads on the east. The geographic center of the solar field site parcels and Electric Collector Line Corridor roughly corresponds with 32° 41' 48" North and 115° 37' 00" West, at an elevation of 13 feet below sea level. The Gen-Tie component of the Project generally starts to the east of Rockwood Road, north of Anza Road and extends due west to Pulliam Road then aligns south as it connects to the ISECS Project.

2.1.3 OWNERSHIP

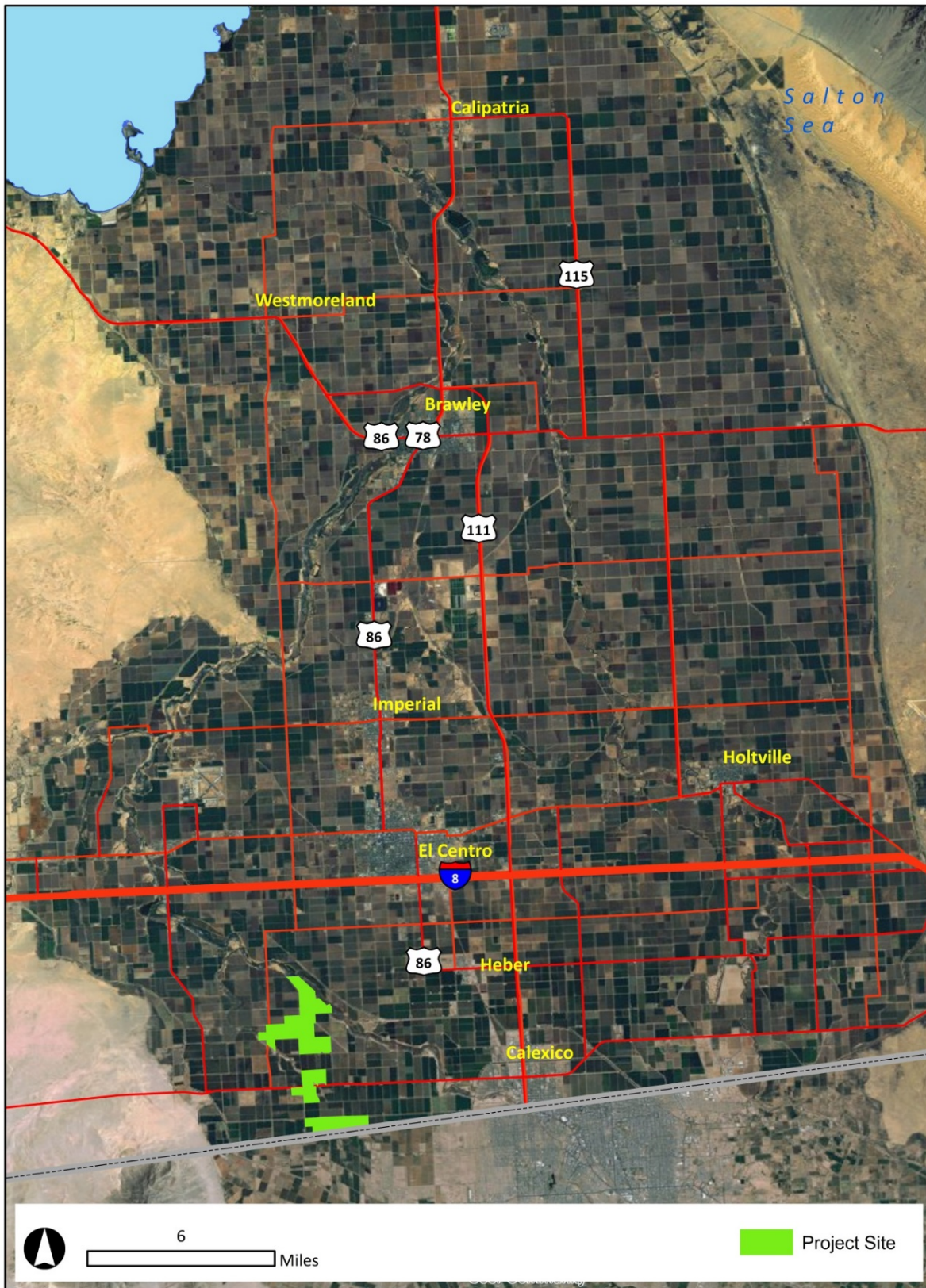
The proposed Project is located on privately owned agricultural land. The 32 parcels that comprise the Project in its entirety, as well as the 17 individual CUPs (13-0036 thru 13-0052), are currently owned by 12 separate landowners/landowner groups. WRS has agreements in place with the entities that control the offsite lands required for the Electric Collector Line Corridor as well as the Gen-Tie. **Figure 2.0-3** shows the configuration of the parcels.

2.1.4 WISTARIA RANCH SOLAR ENERGY CENTER CHARACTERISTICS

A. EXISTING USES AND FEATURES

The solar field component of the Project consists of agricultural lands currently in field crop production. Crops include, but are not limited to, alfalfa, bermudagrass, and sudangrass. A network of IID canals and drains are located within and along the perimeter of the solar field site parcels. Several paved rural roads and State Route (SR-) 98 align through the CUPs. Agricultural fields also surround the perimeter of the solar field site parcels. Dirt roads are located along the margins and also cross the parcels. The adjacent properties are approximately the same elevation as the solar fields with the exception of parcels in the northeast portion of the northern CUP cluster (CUPs 13-0043, 13-0046, and 13-0047) which abut the 35 foot deep incised flood channel of the New River.

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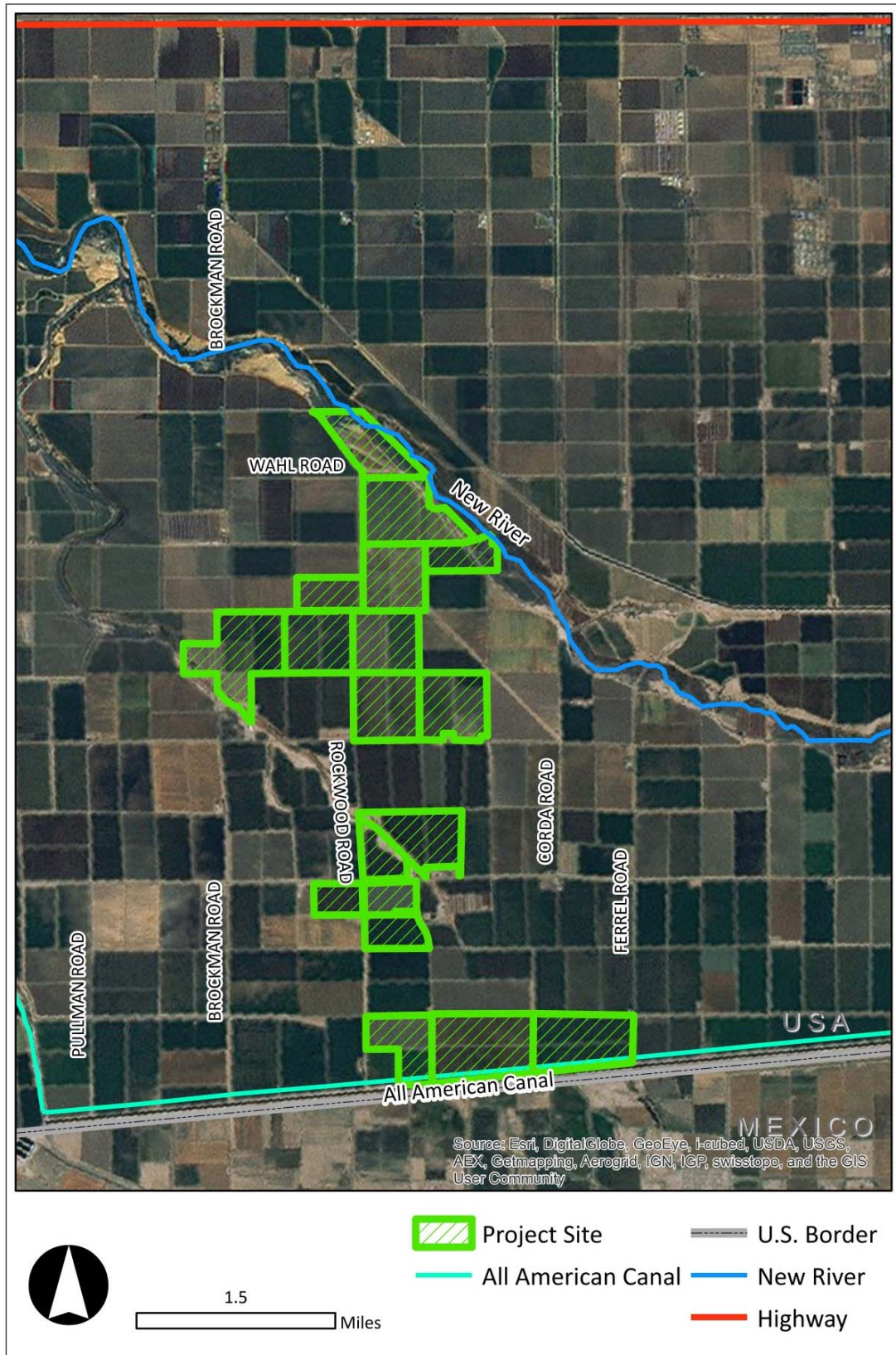


Source: ESRI, U.S. Department of Commerce Tiger/Line Shapefiles, WRS 2013.

FIGURE 2.0-1
REGIONAL LOCATION MAP

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**FIGURE 2.0-2
PROJECT VICINITY MAP**