

APPENDIX R

Proposed Project Revisions

MEMORANDUM

To: Geoff Fallon, BayWa
From: Candice Disney Magnus, Project Manager; Josh Saunders, AICP, Visual Resources/Aesthetics; Adam Poll, Air Quality/Greenhouse Gas Emissions/Energy; Callie Amoaku, Biological Resources; Matt DeCarlo, Archaeologist, Cultural Resources/Tribal Cultural Resources; Glenna McMahon, PE, Hazards and Hazardous Materials; Mark Storm, INCE Bd. Cert., Noise & Vibration; Sarah Siren, Paleontologist, Paleontological Resources; Trey Driscoll, PG No. 8511, CHG No. 936, Hydrology and Water Quality/Utilities and Service Systems.
Subject: Proposed Project Revisions Technical Memorandum (JVR Energy Park Project)
Date: June 2021
Attachment A: Biological Resources Analysis for Revised Proposed Project

The JVR Energy Park Project (Proposed Project) is a proposed solar energy generation and storage facility. The Draft Environmental Impact Report (EIR) for the JVR Energy Park Project analyzed a proposed solar facility which covered approximately 643 acres of the 1,356-acre Project site. Subsequent to public review of the Draft EIR, the Proposed Project's area of disturbance was reduced from 643 acres to 626 acres as a result of minor changes to the Project area, as described below. The area of disturbance includes approximately 623 acres within the Major Use Permit (MUP) boundary and approximately 3 acres of temporary disturbance outside of the MUP boundary for a water main realignment. Less than 1 acre of the water main realignment will take place outside of the MUP boundary analyzed in the Draft Environmental Impact Report (Draft EIR); the remainder will take place within the MUP boundary as presented in the Draft EIR. A full description of the proposed solar facility is provided in Chapter 1 of the Final EIR, including the project components, construction, operation, and decommissioning.

The minor changes to the Proposed Project include increased setbacks along Old Highway 80 and adjacent to the Jacumba Community Park, and realignment of an existing water main. These minor changes are described in more detail below and are shown on Figure 1. This memorandum summarizes the potential environmental effects attributed to the realignment of the existing water main and the reduction in the MUP boundary for the Proposed Project.

The increased setbacks and water main realignment are described further below and are shown in Figure 1, Project Components.

Proposed Project Revisions

- **Revised Major Use Permit Boundary:** As a result of the increased setbacks described below, the size of the Major Use Permit area has been reduced from 643 acres to 623 acres.
- **Increased Setbacks from Old Highway 80:** Along Old Highway 80, the Proposed Project fence line on both sides of the roadway has been set back further to provide a larger buffer between the roadway and the Proposed Project. The fence line along the north side of Old Highway 80 will be 70 feet from the Project property line to the fence line (110 feet from the edge of the pavement on Old Highway 80 to the fence line), providing a buffer to the north that is 52 feet more than described in the Draft EIR. The fence line along the south side of Old Highway 80 will be 140 feet from the Project property line to the fence line (175

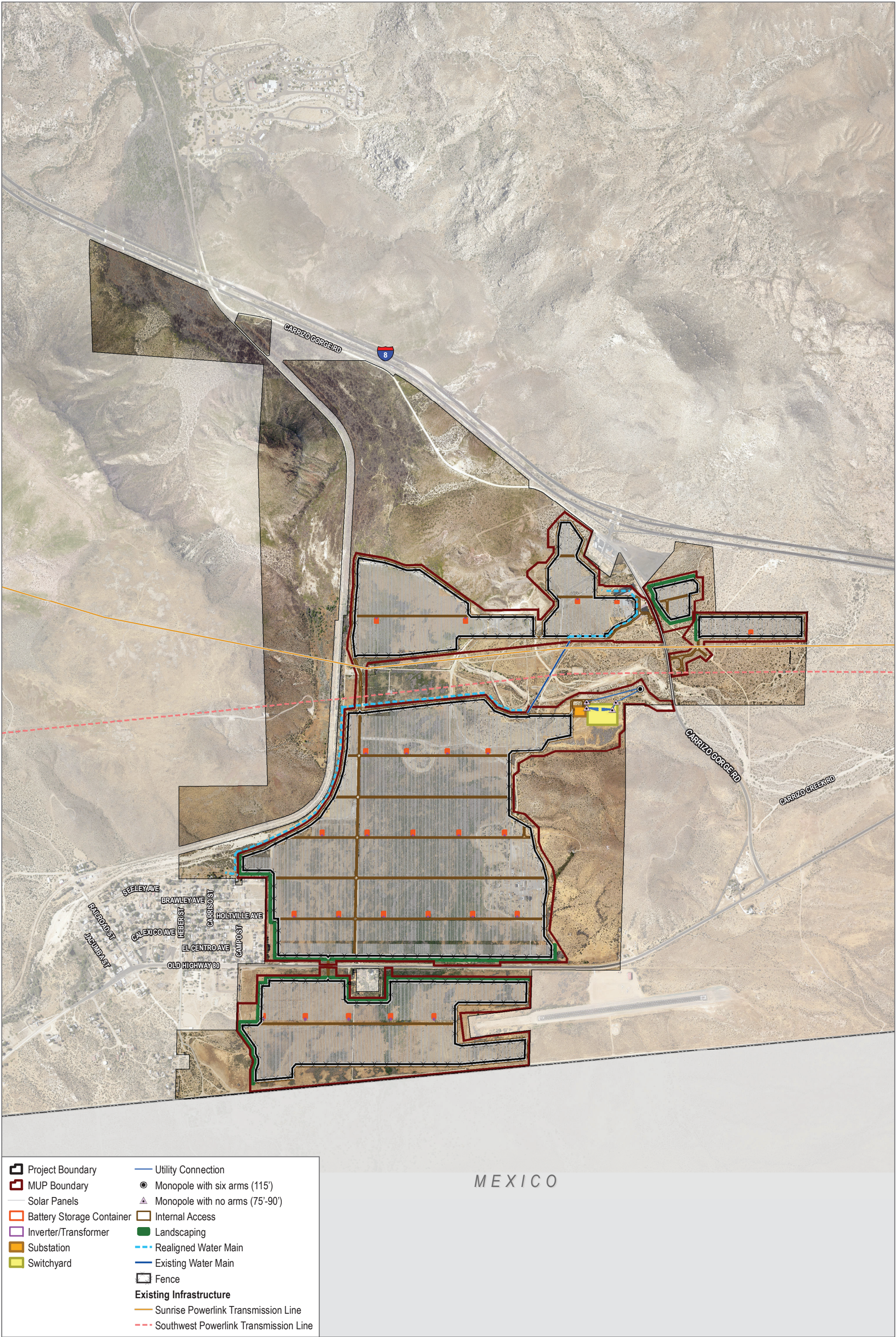
to 180 feet from the edge of pavement on Old Highway 80 to the fence line), providing a buffer to the south that is 122 feet more than described in the Draft EIR.

- **Increased Setback from Jacumba Community Park:** Adjacent to the Jacumba Community Park, the Proposed Project fence line has been set back further to provide a larger buffer between the park and the Proposed Project. The fence line adjacent to the park will be 300 feet from the Project property line to the fence line.

Water Main Realignment

There is an existing approximate 9,000-foot water main that provides potable water to commercial uses on Carrizo Gorge Road, which crosses the Project site. The water main is operated by the Jacumba Valley Ranch Water Company (formerly Ketchum Ranch Water Company) under permit from the County of San Diego Department of Health. The existing water main runs from the Jacumba Valley Ranch Water Company Well located on the west side of the site to a water storage tank on the eastern portion of the site. A separate water main diverges to the north prior to reaching the water storage tanks on the eastern portion of the site and runs to the two gas stations located on Carrizo Gorge Road, adjacent to the Project site near Interstate 8.

After consultation with the Jacumba Valley Ranch Water Company, it has been determined that the existing water main is inconsistent with the Proposed Project design. Accordingly, a portion of the existing water main will be rerouted around the Project site outside of the MUP boundary to connect the Jacumba Valley Ranch Water Company connections north of the Project site. The new alignment would be approximately 9,500 feet long and would partially be routed outside the MUP boundary as shown in Figure 1. (Less than 1 acre of the water main realignment will be outside of the MUP boundary analyzed in the Draft EIR but within areas previously surveyed.) The new alignment would tie in to the southern and northern ends of the existing water main that crosses the SDG&E transmission line easement. No work would occur within the SDG&E transmission line easement. The remainder of the existing water main would be abandoned in place. The new water main alignment would be cleared of vegetation. The water main would be installed using a trencher that would dig an approximate 18-inch-wide trench to a depth of 3.8 feet. After the water main is installed, the trench would be backfilled and seeded. The water main realignment would not increase or modify the use of the well or groundwater production by the Jacumba Valley Ranch Water Company. The well and the water main will continue to be owned and operated by the Jacumba Valley Ranch Water Company.



SOURCE: Kimley-Horn 2021; SANGIS 2017, 2021

Memorandum

Subject: Proposed Project Revisions (JVR Energy Park)

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1 Aesthetics

Section 2.1, Aesthetics, and the Visual Resources Report (Appendix B) in the Final EIR have been updated to include the revisions to the Proposed Project, as described above. Realignment of the water main would not result in substantially increased aesthetic impacts because it would be installed in close proximity to the Proposed Project's fence line and would be backfilled and seeded after construction. The increased setbacks would reduce the Proposed Project's potentially significant impacts to aesthetic and visual resources, but not to less than significant.

2 Air Quality

Section 2.2, Air Quality, and the Air Quality Technical Report (Appendix C) of the Final EIR have been updated to include the Proposed Project revisions described above. The water main realignment, a portion of which will occur outside of the MUP boundary analyzed in the Draft EIR, was input into the air quality model used to analyze the Proposed Project's air quality impacts. The model output for the Proposed Project as a whole was unchanged except for cancer risks, which will increase from 2.93 to 2.97 in one million without application of toxics-best available control technology (T-BACT). As discussed in the Draft EIR, with implementation of mitigation measure **M-AQ-1**, the Proposed Project would require the use of Tier 4 Final construction equipment, which is considered T-BACT, and the County's significance threshold would be 10 in 1 million. Accordingly, the Proposed Project's impacts related to cancer risk remain less than significant with the Project revisions. Additionally, the increased setbacks would not change the analysis of the Proposed Project's potential air quality impacts, as disclosed in the Draft EIR.

3 Biological Resources

While Section 2.3, Biological Resources, and the Biological Resources Technical Report (Appendix D) in the Final EIR have not been updated for the Proposed Project revisions described above, this memorandum analyzes how the Project area revisions would alter the impact analyses disclosed in the Draft EIR. The increased setbacks would result in a decrease of impacts to vegetation communities and land covers. The increased setback would primarily reduce impacts to fallow agriculture, with minimal decreases in impacts to sensitive vegetation communities. Further, the water main realignment outside of the MUP boundary as analyzed in the Draft EIR (i.e., less than 1 acre) would not impact additional special status plants or wildlife species, or any jurisdictional wetlands and/or riparian habitats. Refer to Attachment A to this appendix. The water main realignment also would not impact the wildlife movement analysis in the Draft EIR as the water main would be underground and the disturbed area would be back filled and hydroseeded. Accordingly, the Draft EIR's analysis of a 643-acre Project provides a more conservative analysis than if Section 2.3 and Appendix D were updated to include the Project area modifications and, as such, no changes to the Draft EIR Section 2.3, Biological Resources and Appendix D regarding the revised Proposed Project, are required.

Finally, while the revised MUP boundary and installation of the water main would result in an overall reduction of impacts to vegetation communities and land covers, the original proposed open space easement has not been reduced and will remain at the original 435 acres described in the Draft EIR and the Conceptual Resource Management Plan (Appendix to the Biological Resources Report in the Final EIR).

4 Cultural Resources/Tribal Cultural Resources

Sections 2.4, Cultural Resources, and 2.11, Tribal Cultural Resources and the Cultural Resources Report (Appendix E) of the Final EIR have been updated to include the revisions to the Proposed Project, as described above.

Dudek conducted a complete survey and archaeological evaluation of the Proposed Project including a records search, pedestrian survey, archaeological testing, and resource significance evaluations for the Cultural Resources Report (Appendix E to the Draft EIR). The Cultural Resources Report in the Draft EIR analyzed the 643-acre Proposed Project's area of direct impact (ADI) as explained further below. This Report is sufficient to analyze the revisions to the Proposed Project because (1) the revised Proposed Project has a reduced area of impact as compared to the Proposed Project analyzed in the Draft EIR, which would reduce the potential impacts to cultural and tribal cultural resources, and (2) the portion of the water main realignment that would occur outside the MUP boundary analyzed in the Draft EIR (i.e., less than 1 acre) is immediately adjacent to the MUP boundary and was part of the area previously surveyed, as described below.

Dudek conducted a records search of files obtained from the South Coastal Information Center (SCIC) for the Project Area and a 0.5-mile buffer surrounding the Project Area in November 2017. The SCIC records search identified 143 cultural resources previously recorded within the 0.5-miles of the Project Area, 24 of which are within the Project ADI. Three of these resources intersect the alignment of the proposed water main relocation: CA-SDI-7056, CA-SDI-11686, and CA-SDI-19904. The records search revealed that CA-SDI-11686 had been previously evaluated and did not contain significant subsurface deposits. CA-SDI-7056 and CA-SDI-19904 had not been previously evaluated.

An intensive pedestrian survey was completed in July and August 2018 and February and December 2019 for the JVR Project. The pedestrian survey was conducted in less than 15-meter intervals; however, actual survey transect spacing depended on ground visibility. To assure that any minor changes to the site plan would fall within the survey boundary, Dudek conducted pedestrian surveys 100 feet beyond the MUP. Additional acreage was also surveyed by Dudek to accommodate a previously proposed larger MUP. The proposed water main alignment is located within these areas previously surveyed by Dudek. Dudek did not identify any additional cultural resources within the water main relocation alignment other than the three resources identified in the records search: CA-SDI-7056, CA-SDI-11686, and CA-SDI-19904.

The Proposed Project analyzed in the Draft EIR already intersected the three resources identified in the water main realignment and, as such, the Draft EIR includes an analysis of potential significant environmental effects as a result of impacts to these resources. As detailed in the Draft EIR and Cultural Resources Report, CA-SDI-11686 was previously evaluated and found to not contain significant subsurface deposits. Further, Dudek conducted significance evaluation testing at CA-SDI-7056 and CA-SDI-19904 and did not identify significant subsurface deposits. Further testing has a low potential to produce significant buried deposits or culturally sensitive material. Dudek recommended both CA-SDI-7056 and CA-SDI-19904 as not eligible for listing on the CRHR and not significant under CEQA.

Accordingly, the revisions to the Proposed Project would result in impacts that are equal to or less than those presented in the Draft EIR and will not change any significance determinations in Sections 2.4, Cultural Resources, and 2.11, Tribal Cultural Resources and the Cultural Resources Report (Appendix E). However, these sections in the Final EIR have been updated to reflect the new ADI.

5 Hazards and Hazardous Materials

Section 2.6, Hazards and Hazardous Materials of the Final EIR has been updated to include the revisions to the Proposed Project. No hazards were identified in the area where the water main realignment and increased setbacks are proposed. The Glare Study prepared by POWER Engineers was also updated to include an analysis of the reduced size of the Proposed Project (See Appendix A to Appendix B, Visual Resources Report in the Final EIR). In addition, a Jacumba Airport Land Use Compatibility Plan Technical Memorandum was prepared by Kimley Horn (Appendix T in the Final EIR). In sum, the revisions to the Proposed Project would result in impacts that are equal to or less than those presented in the Draft EIR and will not change any significance determinations in the Section.

6 Noise and Vibration

Section 2.9, Noise, and Acoustical Assessment Report (Appendix M) in the Final EIR have been updated to include the revisions to the Proposed Project. As detailed below, the additional construction required for the water main relocation outside of the MUP boundary as analyzed in the Draft EIR would not change the analyses in Section 2.9. Further, the increased setbacks for the revised Proposed Project would result in impacts that are equal to or less than those presented in the Draft EIR and will not change any significance determinations in Section 2.9 and Appendix M. Accordingly, the impact analyses would not change as a result of the Proposed Project modifications.

6.1 Construction Noise

The proposed water main realignment traverses the Project site generally between a terminus near the northern end of the MUP boundary located just south of existing offsite commercially zoned property and a terminus at the northern end of Campo Street north of Seeley Avenue in Jacumba Hot Springs, CA. These existing water main endpoints represent where noise from its construction activity would be nearest to occupied properties and thus establishes a need to exhibit compliance with Section 36.409 of the County of San Diego Ordinance.

The water main realignment would involve a set of construction equipment comparable to those associated with “Underground Work (Trenching)” and “Underground Work (back-filling)” as appearing in Section 3.3.2 of the Proposed Project’s Acoustical Assessment Report (Appendix M of the Draft EIR). Aggregate noise levels from these two construction activities were predicted at source-to-receptor distances of 50 feet, 83 feet, and 300 feet and appear in Table 7 of the AAR. The predicted construction noise levels for each of these two activities is less than 74 dBA 8-hour Leq at a distance of 83 feet and thus compliant with the County’s threshold of 75 dBA 8-hour Leq limit. Since the water main realignment involves similar noise emission levels due to trenching and backfilling work, and because the nearest occupied properties appear to be no less than approximately 80 feet from each of the previously introduced endpoints of the water main, the water main realignment would comply with the County’s 8-hour Leq threshold and result in a less than significant impact.

Where actual conditions are different from these predictions (i.e., should the water main relocation activities potentially occur closer to an occupied property, or overlap in schedule or otherwise occur concurrently with other nearby Project construction processes), the Proposed Project would have the potential to exceed the 8-hour Leq County threshold at the Proposed Project boundary and cause an impact that may be potentially significant. Under such a scenario, relevant portions of mitigation measure **M-NOI-3** (e.g., subsection “b” and its duration-dependent screening distances with respect to underground work) as detailed in Section 5 of the Acoustical Assessment Report

(Appendix M of the EIR) would apply to ensure the water main realignment in the vicinity of its endpoints near the closest occupied properties is compliant with the County's 75 dBA 8-hour Leq value. As discussed in the Draft EIR, with implementation of this mitigation measure, the potential construction noise impact would be reduced to less than significant.

6.2 Construction Vibration

At approximately 80 feet, the nearest potential distance between operating construction equipment for the water main relocation and an offsite sensitive receptor position (e.g., occupied residence), the predicted ground-borne vibration velocity level from a trenching machine or other expected heavy equipment, conservatively assumed for this analysis to be comparable to that of a large bulldozer (PPV_{equip}) would be 0.01 inches per second peak particle velocity (PPV) and thus compliant with the Federal Transit Administration (FTA) guideline threshold as adopted by the County of San Diego and discussed in Section 4 of the Acoustical Assessment Report (Appendix M to the EIR). This finding is based on a reference vibration velocity level (PPV_{ref}) of 0.089 inches per second PPV for the bulldozer at a reference source-to-receptor distance of 25 feet (FTA 2006), and using these quantities as inputs in the following expression for estimating PPV at the nearest vibration-sensitive receptor:

$$PPV_{equip} = PPV_{ref} * (25/D)^{1.5}$$

Where D is the distance (in feet) between the vibration-producing equipment and the sensitive receptor.

By complying with this County-adopted standard, vibration from operating conventional construction equipment associated with the water main relocation would be considered a less than significant impact.

6.3 Operation Noise

With its components installed underground, the operating water main would not contribute meaningfully to the above-surface Proposed Project aggregate operation noise as studied in the Acoustical Assessment Report (Appendix M to the EIR). Hence, water main operation noise impact would be considered less than significant.

6.4 Operation Vibration

With its components installed underground, vibration emission from the operating water main would not cause a perceptible increase to ambient ground-borne vibration level as received by the nearest occupied buildings and their occupants. Hence, water main operation vibration impact would be considered less than significant.

7. Paleontological Resources

Section 2.10, Paleontological Resources, of the Final EIR has been updated to include the revisions to the Proposed Project. The Proposed Project changes would decrease the Proposed Project's ADI as a result of increased setbacks, which would reduce the potential impacts to paleontological resources. Less than 1 acre of the water main realignment would take place outside of the MUP boundary as analyzed in the Draft EIR. However, Dudek reviewed the mapping for this area and the water main realignment would be located in an area mapped as having "low" paleontological resource potential. As discussed in the Draft EIR, since some areas along the western boundary are mapped as "high" and "moderate" potential, impacts to paleontological resources during construction of the Project

would remain potentially significant (**Impact PR-1**) and the mitigation measure required in the Draft EIR for a Paleontological Resources Monitoring Program (**M-PR-1**) would still be implemented as part of the revised Proposed Project. Accordingly, the analysis of the Project's impacts to paleontological resources in the Draft EIR remains accurate. However, Section 2.10, Paleontological Resources, of the Final EIR has been updated to reflect the new ADI.

8. Energy

Section 3.1.2, Energy, of the Final EIR has been updated to include the revisions to the Proposed Project, including the increased setbacks and the water main realignment. As discussed in Section 3.1.2 of the Final EIR, the water main realignment would slightly increase energy demand during Project construction—e.g., 0.1% increase in hours of equipment use. However, the slight increase will not change any significance determinations in Section 3.1.2. Accordingly, the revised Proposed Project's impacts related to energy would remain less than significant.

9 Greenhouse Gas Emissions

Section 3.1.3, Greenhouse Gas Emissions, and the Greenhouse Gas Emissions Report (Appendix P) of the Final EIR have been updated to include the Proposed Project revisions, including the increased setbacks and the water main realignment. As discussed in Section 3.1.3 of the Final EIR, the water main realignment would slightly increase greenhouse gas emissions during Project construction. However, the increased setbacks would slightly reduce both the Proposed Project's area of disturbance and anticipated greenhouse gas emissions. Accordingly, the revised Proposed Project's impacts related to greenhouse gas emissions would remain less than significant.

10 Hydrology and Water Quality and Utilities and Service Systems

Sections 2.7, Hydrology and Water Quality, and 3.1.8, Utilities and Service Systems in the Final EIR have been updated to include the Proposed Project revisions, including the increased setbacks and the water main realignment. In addition, a new appendix has been included in the Groundwater Resources Investigation Report (Appendix J) which discusses construction water demand. As shown in the new appendix to the Groundwater Resources Investigation Report, the water main realignment will require an additional 0.15-acre feet of water during construction. However, the increased setbacks would reduce the construction water demand by 1-acre feet. Accordingly, the revised Proposed Project's impacts related to groundwater production would remain less than significant.

11 Other Environmental Impacts

For sections in Chapter 2 of the Final EIR not described above (Geology, Soils, and Seismicity; Wildfire) the revisions to the Proposed Project (increased setbacks and water main realignment) would reduce the development footprint overall and would result in impacts that are equal to or less than those presented in the Draft EIR. This will not change any significance determinations in these two sections of Chapter 2. Section 2.8 Mineral Resources has been updated to account for the reduction in size of the Proposed Project and the water main realignment and will not change the significance determinations in this section.

Memorandum

Subject: Proposed Project Revisions (JVR Energy Park)

For sections in Chapter 3 of the Final EIR not described above (Agricultural Resources, Land Use and Planning, Parks and Recreation, Public Services, Transportation, and Population and Housing) the revisions to the Proposed Project (increased setbacks and water main realignment) would reduce the development footprint overall and would result in impacts that are equal to or less than those presented in the Draft EIR. This will not change any significance determinations in these sections of Chapter 3.

Attachment A
*Biological Resources
Analysis*

MEMORANDUM

To: Geoff Fallon, BayWa
From: Callie Amoaku, Dudek
Subject: Biological Resource Analysis for Revised Proposed Project (JVR Energy Park)
Date: June 2021
cc: Candice Magnus, Dudek
Attachment(s): Figures 1-3

This memorandum summarizes the effect the reduction in the Proposed Project's size has on potential impacts to biological resources analyzed in the Draft EIR. The proposed solar facility would cover approximately 623 acres of the Project site (the previous MUP boundary covered 643 acres). In addition, realignment of an existing water main would result in an additional three acres of disturbance outside of the revised MUP boundary. Less than one acre of the water main realignment will take place outside of the MUP boundary analyzed in the Draft Environmental Impact Report (Draft EIR); the remainder will take place within the MUP boundary as presented in the Draft EIR.

1 Impacts to Vegetation Communities

The Proposed Project was revised to include increased setbacks along Old Highway 80 and Jacumba Community Park. The Proposed Project also now includes the realignment of an existing water main. The new water main alignment would be approximately 9,500 feet long and would be routed outside the project MUP boundary as shown on Figure 1.

Table 1 summarizes the impacts to vegetation communities caused by the revised MUP area and water main acreage compared with the original MUP impacts presented in the Draft EIR and the overall net reduction in impacts.

Table 1.

Summary of Permanent Project Impacts on Vegetation Communities and Land Covers

Vegetation Community or Land Cover	Revised MUP and Water Main (Acres)	Original MUP (Acres)	Net Reduction (Acres)
Sensitive Vegetation Communities and Land Covers			
*Big sagebrush scrub	—	—	—
*Desert saltbush scrub	49.06	50.39	0.80
*Desert sink scrub	—	—	—
*Disturbed freshwater marsh	—	—	—
*Mesquite bosque	2.64	2.64	0
*Sonoran mixed woody scrub	—	—	—
*Sonoran mixed woody and succulent scrub	72.66	72.85	0.03
*Tamarisk scrub	1.11	1.11	0

Table 1.

Summary of Permanent Project Impacts on Vegetation Communities and Land Covers

Vegetation Community or Land Cover	Revised MUP and Water Main (Acres)	Original MUP (Acres)	Net Reduction (Acres)
<i>Sensitive vegetation communities and land covers subtotal</i>	126.16	126.99	0.83
Non-Sensitive Land Covers			
Disturbed habitat	27.10	27.27	0.17
Fallow agriculture	451.74	467.63	15.89
Urban/developed	21.12	21.24	0.12
<i>Non-sensitive land covers subtotal</i>	499.96	516.14	16.18
Total^a	626.12	643.13	17.01

An asterisk (*) marks land cover types for which the County of San Diego requires mitigation.

^a May not sum due to rounding.

2 Impacts to Special-Status Species

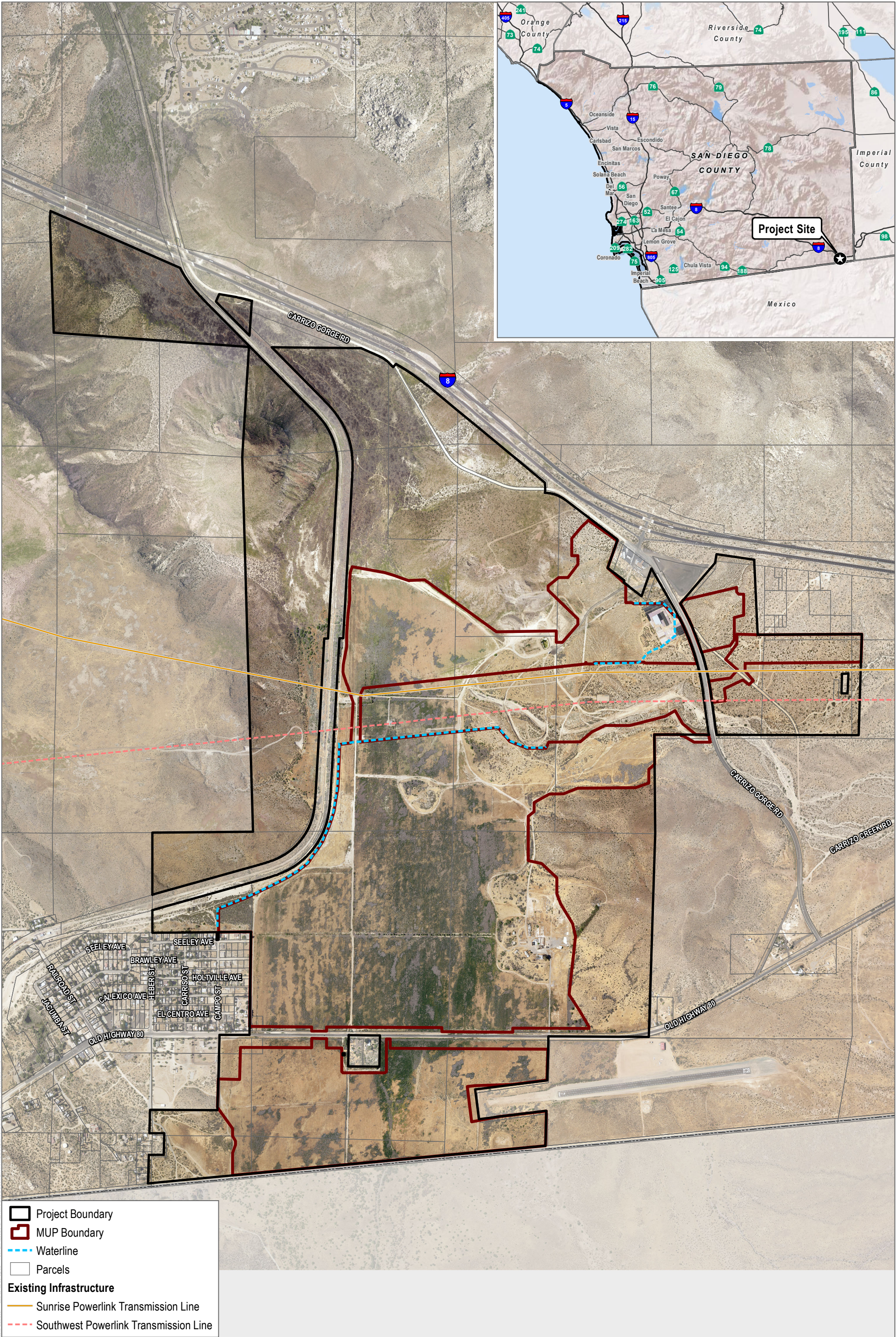
The revised MUP boundary will result in an overall reduction of impacts to habitat for special-status wildlife species; however, the habitat preservation acreage in mitigation measure **M-BIO-3** has not changed and 435 acres will be placed under a biological open space easement.

The revised MUP boundary does not change the number of special-status plants impacted by the project (loss of 1 pygmy lotus (*Acmispon haydonii*) and 21 sticky geraea (*Geraea viscida*)).

The revised MUP boundary will not change the analysis to wildlife movement or corridors.

3 Mitigation

The revised Proposed Project would result in an overall reduction of impacts to vegetation communities and landcovers and as a result, the required mitigation. However, the original proposed open space easement has not been reduced and will remain at the original 435 acres described in the Draft EIR and Conceptual Resource Management Plan (RMP).



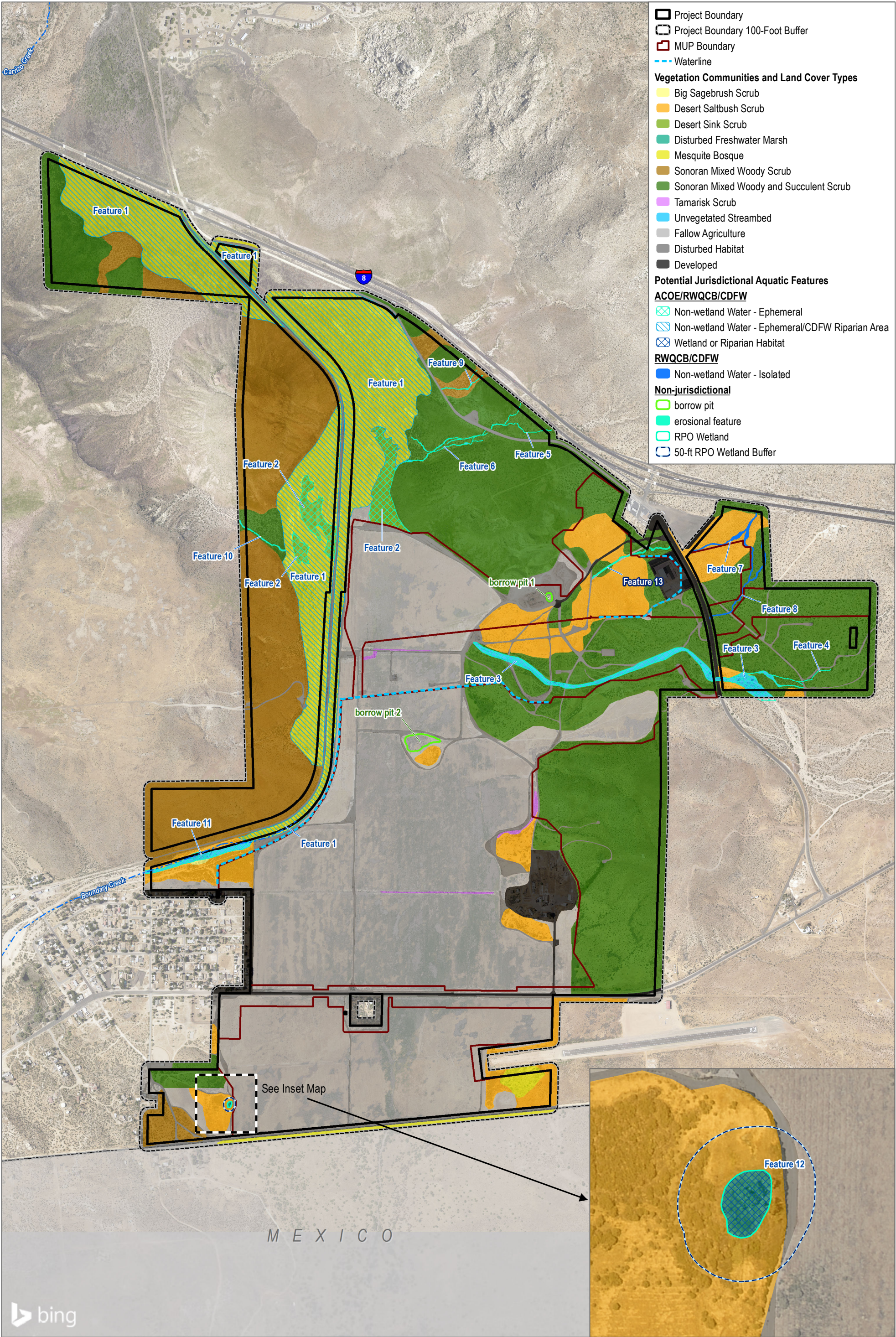
SOURCE: Kimley-Horn 2021; SANGIS 2017, 2021

FIGURE 1
Project Location
JVR Energy Park Project

Memorandum

Subject: Biological Resources Analysis for Revised Proposed Project (JVR Energy Park)

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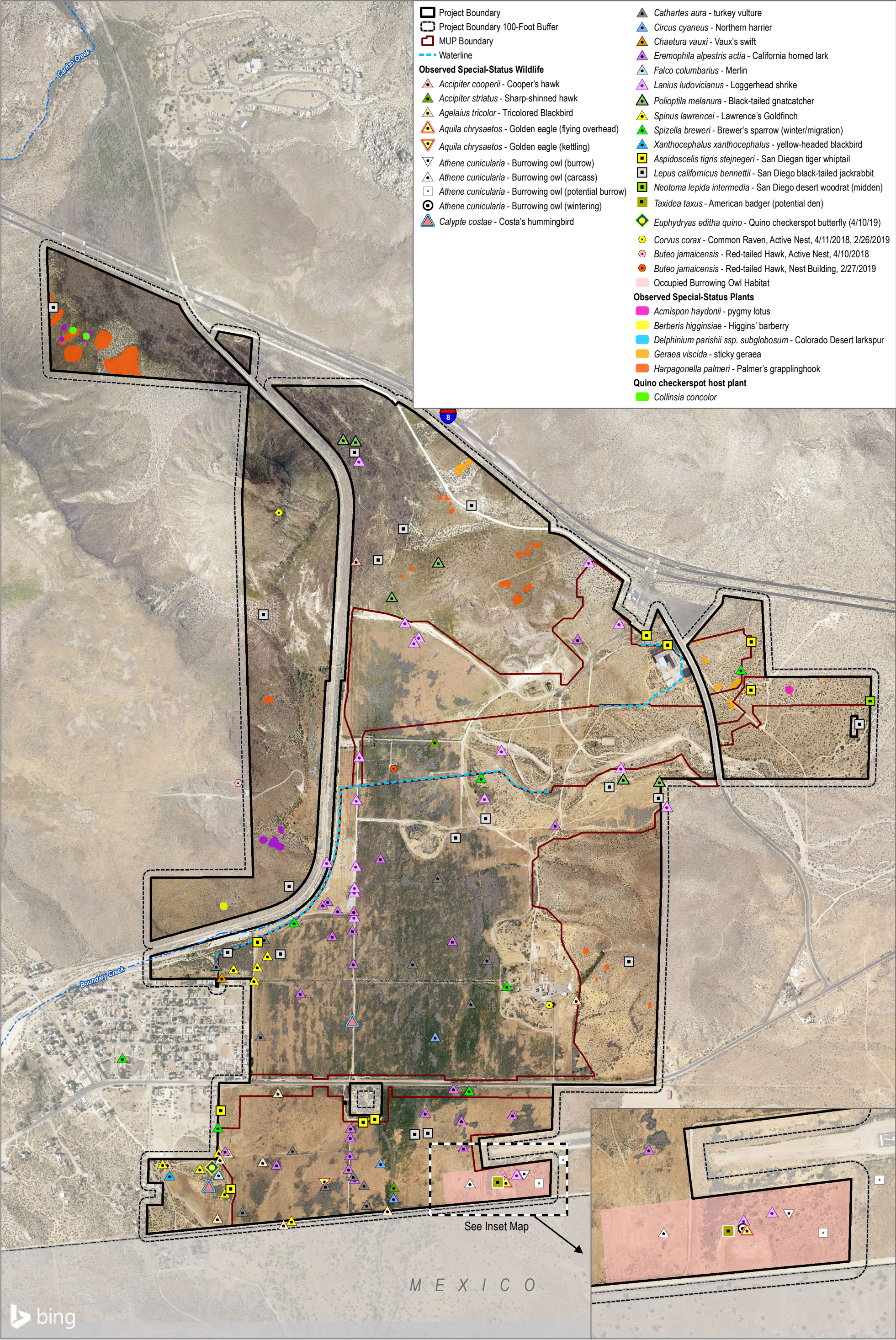
SOURCE: Kimley-Horn 2021; SANGIS 2017, 2021

FIGURE 2
Vegetation and Jurisdictional Resources
JVR Energy Park Project

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SOURCE: Kimley-Horn 2021; SANGIS 2017, 2021

FIGURE 3
Special-Status Wildlife and Plants
JVR Energy Park Project

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