# Southern California Edison SBCRP A.12-10-018

# DATA REQUEST SET A1210018 SBCRP-CPUC Deficiency Ltr-SCE-01

To: CPUC Prepared by: Kim Koeppen Title: Project Manager Dated: 12/07/2012

## **Question 01:**

# DEFICIENCIES IN THE SANTA BARBARA COUNTY RELIABILITY PROJECT PROPONENT'S ENVIRONMENTAL ASSESSMENT

## Chapter 1.0, Purpose and Need

Section 1.2, Project Need, provides system capacity in megavolt amperes (MVAs) as opposed to megawatts (MWs). The Energy Division requests that SCE submit details about system capacity and the proposed increase in capacity in MWs.

## **Chapter 3.0, Project Description**

In general, the Energy Division's overarching comment is that a greater level of detail is needed with respect to specific project components. In order to accurately describe and assess the entire proposed project footprint and area of disturbance, the Energy Division requests geographic information system (GIS) data layers for all components, including:

- existing components;
- replacement components, including currently proposed locations;
- components that would be removed but not replaced;
- components that would be left in place and/or idled;
- existing access and spur roads;
- proposed modifications to access and spur roads;
- proposed locations of new access and spur roads;
- location of new right-of-way (ROW) to be acquired;
- accessor's parcel numbers (APNs) for new and existing ROW;
- preliminary locations of marker balls to be installed; and
- locations of laydown/work areas.

All components should have unique identification numbers to match GIS database information and details for transmission structures should include specifics regarding the type of pole (e.g., wood, steel, etc.) or tower (e.g., lattice, single-circuit, double-circuit, etc.) for both existing and proposed structures. More detail regarding specific deficiencies and information required is described below.

New Right-of-Way

Section 3.1.2.5, Segment 3B, describes an approximately 2,500-foot section of Segment 3B that would be moved from the current ROW and constructed in new ROW; however, the location of the current and new ROW and the locations of the existing and proposed structures are not identified. In addition, specific APNs should be provided.

#### Components to be Replaced or Idled and/or Left in Place

Section 3.1.2.6, Segment 4, discusses the replacement of 70 LSTs (and other components) with 63 TSPs (predominantly). The footnote on page 3-28 states that there are three sets of subtransmission structures, only one set of which would be replaced; however, the discussion states that 5,700 feet of double-circuit 954 ACSR would be installed. Further, Figure 4.1-8 depicts a visual simulation from SR-150 showing the replacement of two sets of single-circuit structures with one set of double-circuit TSP structures. As a result, the discussion in Chapter 3 and the visual simulation in Chapter 4 appear to conflict. In order to clarify, the exact locations of structures to be replaced or idled should be identified.

#### Access and Spur Roads

Section 3.1.2.10, Access and Spur Roads, describes a network of 120 miles of existing dirt access roads and states that "[r]ehabilitation and/or upgrades to existing access and spur roads and construction of new spur roads *may* be required" (emphasis added). In addition, Section 3.2.3.1, Access and Spur Roads, describes 25 miles of roads requiring minor restoration work, 5 miles requiring more extensive rehabilitation, and 4 miles of new spur roads that would be constructed. However, Figure 3.1-5b depicts the preliminary locations of nearly 40 mechanically stabilized embankments, indicating extensive rehabilitation and/or upgrades. In addition, approximately 70 permanent turnarounds would be required for spur roads that are more than 500 feet long; however, the locations are not provided. Although access roads are shown in the Biological Technical Report, Appendix A - Vegetation Maps, it is unclear whether these maps depict all access roads that would be used during construction. More specific information about the locations of access and spur roads should be provided in order to more accurately estimate disturbance.

#### **Helicopters**

Page 3-56 concludes that helicopters would likely not be used for tower or pole assembly, but Section 3.2.3.10, Helicopter Use, states that helicopters would be used to support various other construction activities in areas where access is limited. Considering the required road rehabilitation and general terrain in portions of the project area, assumptions about helicopter use should be clarified and a more detailed description of helicopter construction should be provided. In addition, page 3-44 describes SCE's expectation that the Federal Aviation Administration will determine that marker balls would be required on approximately 42 spans. Section 3.2.3.14, Installation of Marker Balls, states that installation by crane would likely be infeasible in areas where marker ball installation. Considering the terrain along various segments, the Energy Division requests that SCE identify the preliminary spans that could require marker ball installation.

## Vegetation Removal

In Table 3.4-1a and 3.4-1b approximate disturbance acres are reported by three general project feature types (substations, subtransmission, and telecommunications), but not by vegetation type or a generalized vegetation removal type (e.g., mowing, brush-hogging, brush trimming, etc.). In Chapter 4, Figures 4.4-1a, b, and c show vegetation types within 500-feet of all project areas but does not depict specific disturbance areas. Although structure pad locations and laydown/work areas and other disturbance would be refined during final engineering, a preliminary estimate showing an approximation of habitat types that would be disturbed, such as an estimate of grassland vs. shrubland vs. woodland vs. wetland (e.g., 20% of disturbance would be in grasslands, 70% in shrublands, and 5% in woodlands, etc.) should be provided.

In addition, Tables 3.2-6a and 3.2-6b list the number of trees that were trimmed along Segment on 3A (12 trees) and the number of trees that would be trimmed along Segment 3B and 4 (530 trees); however, it is unclear whether the numbers include tree removal. Further information is required to distinguish between tree trimming as required under General Order-95-D and tree removal.

## Applicant Proposed Measures

Applicant Proposed Measure AQ-1 states, "Graded and/or excavated in active areas of the construction site shall be monitored by *(indicate by whom)* at least weekly for dust stabilization" (emphasis added). The Energy Division requests that SCE specify the responsible party.

# **Chapter 4.0, Environmental Impact Assessment**

# 4.3 Air Quality

Section 4.3.4.1 provides the methodology for the air calculations for Segment 3A; however, Section 4.3.4.2 does not include a description of the methodology for air calculations for the balance of the project nor does it reference Appendix F. The Energy Division requests that SCE confirm that Appendix F includes calculations for the "balance of the project" in addition to Section 3A and define the methodology for air calculations for the balance of the project.

### 4.4, Biological Resources

Section 4.4.2 lists features that could be considered jurisdictional (i.e., by USACE and other agencies), but Section 4.4.5 (page 4-151) states that surveys still need to be conducted and that impacts on jurisdictional features are likely but that implementation of BMPs and compliance with any state or federal permit conditions would result in less than significant impacts. The Energy Division requests that SCE provide GIS data showing a more detailed characterization of wetlands and waterbodies in the project area. In addition, more specifics regarding BMPs and how they would reduce impacts should be included.

# **Response to Question 01:**

# SBCRP - Deficiency Letter Response

No.	Question	No./Response
1.	Chapter 1.0, Purpose and	1. Please note, the Megavolt- ampere (MVA) is a unit that denotes the
	Need	combination of real and reactive power. The Megawatt is a unit that
	Section 1.2, Project Need,	denotes only real power. With the assumption of a power factor (ratio of
	provides system capacity in	real to reactive power) of 0.99, the MW value would be slightly lower
	megavolt amperes (MVAs)	than the MVA value. Below, SCE has provided edits to Chapter 1 of the
	as opposed to megawatts (MWs). The Energy Division	PEA with the requested MW information:
	requests that SCE submit	PEA Pages 1-4 – 1-5 (starting with the last paragraph on page 1-4
	details about system	and continuing through the second full paragraph on page 1-5):
	capacity and the proposed	
	increase in capacity in	In the event of a simultaneous outage on the Goleta-Santa Clara No. 1
	MWs.	220 kV Transmission Line and Goleta-Santa Clara No. 2 220 kV
		Transmission Line, load served by the Goleta 220/66 kV Substation
		would be immediately dropped. If the Goleta-Santa Clara No. 1 220 kV
		Transmission Line and Goleta-Santa Clara No. 2 220 kV Transmission
		Line do not reenergize, SCE's system operators would begin utilizing the 66 kV tie lines to pick up load in the Goleta System. However, the
		2012 projected peak demand for the ENA served by Goleta Substation
		is <u>approximately 265 MVA 264 MW</u> and the existing back-up 66 kV
		facilities would not have adequate capacity to serve the entire load if
		needed during emergency conditions.3 The three existing back-up 66
		kV subtransmission tie lines collectively have a maximum operating limit
		of <u>approximately 124 MVA 124 MW</u> under normal operating conditions.
		However, two of these 66 kV subtransmission lines also serve load in
		the Santa Clara System, which reduces their capacity to serve the ENA
		if needed. As a result, for prolonged outages, only <u>approximately</u> <del>100</del> MVA <u>100 MW</u> of load in the ENA can be supported from these 66 kV
		lines in an emergency situation. <sup>4</sup> Accordingly, SCE projects that
		approximately 165 MVA 164 MW of peak load would be dropped and
		rotating outages would occur in the ENA.
		In order to minimize the potential for prolonged customer outages due to
		a natural disaster or other events affecting the 220 kV transmission
		system in this area, SCE determined in 1998 that reconductoring to
		increase the capacity of two of the three existing 66 kV subtransmission
		tie-lines that connect the Santa Clara 66 kV Subtransmission System and Goleta 66 kV Subtransmission System would address the existing
		limitation in redundant service for the ENA. <sup>5</sup> Based on the forecasted
		2012 peak load and considering existing operating procedures, this
		reconductoring and capacity increase of the 66 kV subtransmission lines
		would increase the electrical power delivered to the ENA by
		approximately 80 MW (from approximately 100 MVA100 MW to
		approximately 180 MW 180 MW) during a prolonged outage of both 220
		kV transmission lines. This system work would enable SCE to serve a
		majority of the load in the ENA and decrease the amount of load that
2.	Chapter 2.0 Project	otherwise would be dropped.
Ζ.	Chapter 3.0, Project Description	<b>2</b> SCE is providing a CD with the requested information in a geodatabase. Please note that for many SCE projects, such information
	In general, the Energy	is not always available at the PEA stage in light of the fact that final
	Division's overarching	engineering typically remains to be done. However, given that much of

comment is that a greater level of detail is needed with respect to specific project components. In order to accurately describe and assess the entire proposed project footprint and area of disturbance, the Energy Division requests geographic information system (GIS) data layers for all components, including:

- a) existing components;
- b) replacement components, including currently proposed locations;
- c) components that would be removed but not replaced;
- components that would be left in place and/or idled;
- e) existing access and spur roads:
- f) proposed modifications to access and spur roads;
- g) proposed locations of new access and spur roads;
- h) location of new right-of-way (ROW) to be acquired;
- accessor's parcel numbers (APNs) for new and existing ROW;
- j) preliminary locations of marker balls to be installed; and
- k) locations of laydown/work areas.

All components should have unique identification numbers to match GIS database information and details for transmission structures should include specifics regarding the type the work on this project has been completed and therefore such information is currently available, SCE is providing this information in the geodatabase.

For Item k), work area locations are being provided in the geodatabase as the proposed TSP construction sites. In addition for your reference we have provided an additional figure showing a typical TSP construction site which includes the laydown/work area (please refer to the attachment titled "Typical Access Road Exhibit").

For Item j), information is also provided in the geodatabase identifying 13 66 kV spans SCE believes that the FAA would determine need to be marked.

A separate figure that identifies all 42 spans discussed in the PEA which would be higher than 200 feet AGL is being prepared and will be submitted at a later date. As stated in the PEA, 29 of those spans are collocated in the same corridor with 220 kV spans. The figure(s) identifying those 42 spans will include the 13 spans that are not located within a collocated corridor and for which location data has been provided as part of the geodatabase. Please also refer to SCE's response to Question 6b.

	of pole (e.g., wood, steel, etc.) or tower (e.g., lattice, single-circuit, double-circuit, etc.) for both existing and proposed structures. More detail regarding specific deficiencies and information required is described below.	
3.	New Right-of-Way Section 3.1.2.5, Segment 3B, describes an approximately 2,500-foot section of Segment 3B that would be moved from the current ROW and constructed in new ROW; however, the location of the current and new ROW and the locations of the existing and proposed structures are not identified. In addition, specific APNs should be provided.	3. Please refer to the enclosed CD with the geodatabase. This includes data where the new ROW in Segment 3B would be located.
4.	Components to be Replaced or Idled and/or Left in Place Section 3.1.2.6, Segment 4, discusses the replacement of 70 LSTs (and other components) with 63 TSPs (predominantly). The footnote on page 3-28 states that there are three sets of subtransmission structures, only one set of which would be replaced; however, the discussion states that 5,700 feet of double-circuit 954 ACSR would be installed. Further, Figure 4.1-8 depicts a visual simulation from SR-150 showing the replacement of two sets of single-circuit structures with one set of double-circuit TSP structures. As a result, the discussion in Chapter 3 and the visual simulation in Chapter 4 appear to conflict. In order to clarify, the exact locations of structures to be replaced or idled should be identified.	<ul> <li>4. Figure 4.1-3i (Regional Landscape Context and Substation Photographs – 18. SR-150 looking northeast (Segment 4)</li> <li>*Simulation Viewpoint) and Figure 4.1-8's "Existing View" photo show three towers. In fact, there are now only two sets of towers at this location.</li> <li>In October 2012, a 3<sup>rd</sup> tower (M6-T4 of the idle Santa Clara-San Marcos 66 kV Subtransmission Line) located south of these towers was removed. As discussed during the September 2012 site visit with E&amp;E and as disclosed in PEA Chapter 6, Table 6.1-1, this separate and unrelated activity was completed to address an emergent maintenance issue due to an exposed tower footing and associated concerns regarding the potential that the tower may fall. The "Existing View" photo used in the visual Simulation" (or "to be" configuration) in Figure 4.1-8 was simulated based on the site conditions that existed at the time of preparation of the PEA and the PTC application. However, as noted above that third tower was removed in October prior to the application actually being filed. The "to be" simulation shows the 220 kV towers to the north and the new double circuit TSPs to the south. The "to-be" (e.g. Visual Simulation) photo in the PEA is accurate and the "Existing View" photos (to replace PEA Figures 4.1-3i and the "Existing View" photo in Figure 4.1-8) have been updated and included as part of this response as "Revised Figure 4.1-3i" and "Revised Figure 4.1-8" to reflect the current field conditions.</li> <li>Below is a visual representation of that portion of Segment 4 before and after removal of the tower, and as finally constructed. Note, due to the site's geotechnical characteristics, the new TSPs will need to be constructed in the alignment of the north circuit, as shown on the Visual Simulation Figure 4.1-8 in the PEA.</li> </ul>

	Line Arrangement Prior to M6-T4 Removal         SC-Ojai-SB         SC-Ojai-SB         Alignment Prior to the SBCRP Filing         SC-Ojai-SB         SC-Casitas-Carp (new)         SC-Ojai-Stall         Green Remove
5. Access and Spur Roads Section 3.1.2.10, Access an Spur Roads, describes a network of 120 miles of existing dirt access roads and states that "[r] ehabilitation and/or upgrades to existing access and spur roads and construction of new spur roads <i>may</i> be required" (emphasis added). In addition, Section 3.2.3.1, Access and Spur Roads, describes 25 miles of roads requiring minor restoration work, 5 miles requiring more extensive rehabilitation, and 4 miles new spur roads that would be constructed. However, Figure 3.1-5b depicts the preliminary locations of nearly 40 mechanically stabilized embankments, indicating extensive	<ul> <li>existing access and spur roads and new spur roads, proposed modifications to access and spur roads and turnaround/work pad areas.</li> <li>It should be noted that the stated 120 miles of access roads accounts for all access roads in all Segments of the project, i.e., 1, 2, 3A, 3B and 4. Approximately 30 miles of access roads will be used for construction in Segments 3B and 4 where all of the access and spur road work is proposed.</li> <li>The 5 miles of access and spur roads requiring more extensive rehabilitation is a general, yet conservative estimate based on the road conditions found earlier in the year and is an aggregate of a number of locations sprinkled throughout Segments 3B and 4. About 10 of the estimated 40 sites with mechanically stabilized embankments are located within these 5 miles of roads. The remaining approximately 30 sites are primarily associated with the construction of new work pad/turnaround areas and modifications to existing spur roads</li> </ul>
rehabilitation and/or upgrades. In addition, approximately 70 permanent turnarounds would be required for spur	Also, please see the attached diagram "Typical Access Road Exhibit" displaying a typical construction area for a TSP, which includes the turnaround and laydown/work areas.

	roads that are more than 500 feet long; however, the locations are not provided. Although access roads are shown in the Biological Technical Report, Appendix A - Vegetation Maps, it is unclear whether these maps depict all access roads that would be used during construction. More specific information about the locations of access and spur roads should be provided in order to more accurately estimate disturbance.	Please note that all information regarding access and spur road design provided is based on preliminary analyses and may be subject to change during final engineering.
6a.	Helicopters Page 3-56 concludes that helicopters would likely not be used for tower or pole assembly, but Section 3.2.3.10, Helicopter Use, states that helicopters would be used to support various other construction activities in areas where access is limited. Considering the required road rehabilitation and general terrain in portions of the project area, assumptions about helicopter use should be clarified and a more detailed description of helicopter construction should be provided.	<ul> <li>6a. Construction of TSPs by helicopter was not the method captured in the construction analysis of the PEA project description. Labor, materials and equipment to install TSPs was analyzed based on ground construction. Please refer to the following sections of the PEA for "other construction activities" for helicopter usage:</li> <li>3.14 Project Operation and Maintenance</li> <li>3.2.3.2 Structure Site Preparation</li> <li>3.2.3.10 Helicopter Use</li> <li>3.2.3.14 Installation of Marker Balls</li> </ul>
6b.	In addition, page 3-44 describes SCE's expectation that the Federal Aviation Administration will determine that marker balls would be required on approximately 42 spans. Section 3.2.3.14, Installation of Marker Balls, states that installation by crane would likely be infeasible in areas where marker balls would be required and assumes that helicopters would be used for marker ball installation. Considering the terrain along various segments, the Energy	<ul> <li>6b. Data has been included in the geodatabase in response to question number 2 above that includes information regarding 13 of the 66 kV spans (located in segment 4) where SCE anticipates that the FAA will determine that marker balls should be installed. With respect to the remaining 29 spans, as stated in the PEA, it is not yet known how the FAA would suggest SCE proceed because those 29 spans are collocated in the same corridor with 26 spans of 220 kV subtransmission infrastructure that are also taller than 200' AGL. In this collocated corridor, approximately 20 of the 220 kV spans are taller than the collocated 66 kV spans.</li> <li>At this time, SCE has not determined or been informed by the FAA as to whether the 220 kV transmission line route spans in the collocated corridor would have to be marked in addition to, or instead of, nearby 66 kV subtransmission line route spans. SCE will submit all relevant information, including Form 7460, regarding the entire 66 kV subtransmission line route to the FAA, and would seek the FAA's recommendation as to a marking plan for any and all line routes within</li> </ul>

	Division requests that SCE identify the preliminary spans that could require marker ball installation.	<ul> <li>the corridor where the Project would be constructed. Pending the FAA's input, SCE has prepared the PEA to include analyses of the potential impacts associated with installation of marker balls on the approximately 42 66 kV subtransmission line route spans, including the 13 for which data is being provided as part of this response. If the FAA determines that modifications to the 220 kV components should be made instead of, or in addition to, the marking of the 66 kV line route spans, it is anticipated that the additional marking would only generate incremental, but not significant, environmental impacts beyond those analyzed in the PEA.</li> <li>As stated above, a figure showing all 42 spans, including the 29 spans in the collocated corridor and the 13 spans that are not in the collocated corridor, will be provided at a later date.</li> </ul>				
7a	Vegetation Removal In Table 3.4-1a and 3.4-1b approximate disturbance acres are reported by three	<ul><li>7a. The requested information is provided in the table below:</li><li>NOTE - All data provided in this table are based on planning level</li></ul>				
	general project feature types (substations, subtransmission, and telecommunications), but	assumptions and may change based on any of the following: the completion of preliminary and final engineering; any updates and/or changes in project scope; any updates and/or changes to the project description; and any changes to existing field conditions and/or the identification of yet unknown field conditions.				
	not by vegetation type or a generalized vegetation removal type (e.g., mowing,	identification of yet unknown field conditions. Estimate of Impacts to Vegetation Types				
	brush-hogging, brush trimming, etc.). In Chapter 4, Figures 4.4-1a, b, and c	Vegetation Type	Percentage of Approximate Impacts			
	show vegetation types within 500-feet of all project	Non-native	41.4%			
	areas but does not depict specific disturbance areas. Although structure pad	Chaparral	32.8%			
	locations and laydown/work areas and other disturbance	Woodland	11.0%			
	would be refined during final engineering, a preliminary	Scrub	10.2%			
	estimate showing an approximation of habitat	Grassland	4.6%			
	types that would be disturbed, such as an estimate of grassland vs. shrubland vs. woodland vs. wetland (e.g., 20% of disturbance would be in grasslands, 70% in shrublands, and 5% in woodlands, etc.) should be provided.					
7b.	In addition, Tables 3.2-6a and 3.2-6b list the number of trees that were trimmed along Segment on 3A (12 trees) and the number of trees that would be trimmed along Segment 3B and 4	<b>7b.</b> No tree removals occurred during construction of Segment 3A. The estimate of 530 trees affected within Segments 3B and 4 could include up to approximately 35 to 50 grove trees that may require removal to increase turning radii at grove road intersections. Removal and trimming is required for vehicle access only or where grove trees were planted too close horizontally to existing structures and where non-grove tree branch overhead and side				

	(530 trees); however, it is unclear whether the numbers include tree removal. Further information is required to distinguish between tree trimming as required under General Order-95-D and tree removal.	clearance along access roads is required. Radial clearances of trees to conductors are inspected and maintained by SCE's Vegetation Management Department. A native tree and oak tree inventory is planned to be completed in the near future to determine if any native trees or protected oaks would be impacted by the Project activities. If it is determined that impacts to native trees may need to be trimmed or removed, the Project would obtain the applicable permits and would adhere to any measures prescribed therein. SCE will provide the results of the tree inventory when the report is completed in early 2013.
8.	Chapter 4.0, Environmental Impact Assessment 4.3 Air Quality	8. The air calculations for the balance of the Project were conducted using a methodology identical to the methodology used for the air calculations for the work previously conducted in Segment 3A; this methodology is described in Section 4.3.4.1 under the subheading "Methodology." Tables 4.3-3 and 4.3-4 present the summary of estimated Project construction emissions for the work previously conducted in Segment 3A and work associated with the balance of the
	Section 4.3.4.1 provides the methodology for the air calculations for Segment 3A; however, Section 4.3.4.2 does not include a description of the methodology for air calculations for the balance of the project nor does it reference Appendix F. The Energy Division requests that SCE confirm that Appendix F includes calculations for the "balance of the project" in addition to Section 3A and define the methodology for air calculations for the balance of the project.	Project, respectively. Appendix F includes calculations for both the balance of the Project and for work previously conducted in Segment 3A.
9.	<i>4.4, Biological Resources</i> Section 4.4.2 lists features that could be considered jurisdictional (i.e., by USACE and other agencies), but Section 4.4.5 (page 4-151) states that surveys still need to be conducted and that impacts on jurisdictional features are likely but that implementation of BMPs and compliance with any state or federal permit conditions would result in less than significant impacts. The Energy	<ul> <li>9. At this time, the jurisdictional delineation of impacts to waterways and associated GIS mapping is scheduled to begin in February/March 2013. A full assessment of potential temporary and permanent impacts will require completion of project engineering prior to submittal of permit applications.</li> <li>Preliminary reconnaissance in 2011 and 2012 has determined that impacts to State and federal jurisdictional waterways for construction and long-term access will be limited to the area associated with six ephemeral drainages and one bridge location on Rincon Creek. The ephemeral drainages may require the installation or replacement of culverts to establish access for construction and post-construction transmission access.</li> <li>The existing bridge location over Rincon Creek is too narrow to accommodate construction equipment and will require temporary widening. There are currently no identified water resources associated</li> </ul>

Division requests that SCE provide GIS data showing a more detailed characterization of wetlands and waterbodies in the project area. In addition, more specifics regarding BMPs and how they would reduce impacts should be included. with transmission pads, crib walls, lay-down areas or pulling sites at this time.

Data identifying potentially jurisdictional waterways within the Project ROW has been included in the geodatabase provided on the CD referenced in the responses above.

The table below summarizes the 7 locations with potential waterway impacts.

Based on a conversation with USACE on November 6, 2012, Project waterways are assumed to be under USACE jurisdiction.

Location	Water Crossing	Latitude	Longtitude		Preliminary Assessment: Potential CDFG impact	Ū	Action Needed
b/w 89-90	existing culvert, ephemer al wash	278680	3808015	Yes	Yes	4	replace culvert, wide crossing
b/w 116-115	Vedder 2, existing culvert, ephemer al wash	271857	3812148	Yes	Yes	4	replace culvert, wider crossing
b/w 116-117	Vedder 1, existing culvert, ephemer al wash	271636	3812299	Yes	Yes	4	replace culvert, wider crossing
b/w 116-117	Vedder 1b, existing culvert, ephemer al wash	271636	3812299	Yes	Yes	1	replace culvert, wider crossing
access to 120-125	ephemer al or seasonal wash	269876	3813523	Yes	Yes	4	additional informatior required from project engineering
b/w 61-62 Los Sauces Creek	ephemer al wash	278737	3806743	Yes	Yes	3B	replace culvert, wider crossing
off 150 to access 73-75 Rincon Creek	narrow bridge on private property	274676	3808754	Yes	Yes	3B	may require temporary to permanent widening for construction/access

Waste Management and Materials Pollution Controls BMPs.