
**SAN DIEGO GAS & ELECTRIC COMPANY
EAST COUNTY SUBSTATION PROJECT
OLD HIGHWAY 80 – CARRIZO GORGE ROAD REROUTE
BIOLOGICAL AND JURISDICTIONAL DRAINAGES
IMPACT SUMMARY REPORT**

JUNE 2011

PREPARED BY:



PREPARED FOR:



1 – INTRODUCTION

The Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for San Diego Gas & Electric Company's (SDG&E) East County (ECO) Substation Project (Proposed Project) was released by the California Public Utilities Commission (CPUC) and Bureau of Land Management (BLM) on December 24, 2010. SDG&E later conducted biological and jurisdictional drainage surveys along both sides of a portion of Old Highway 80 and Carrizo Gorge Road for the potential reroute of a two-mile segment of the 138 kilovolt (kV) transmission line that traverses BLM-managed land, as described in the Old Highway 80 – Carrizo Gorge Road Reroute Biological Resources and Jurisdictional Drainages Surveys Summary Report that was submitted to the CPUC and BLM on May 25, 2011. A reroute of this segment of the transmission line is being analyzed to avoid potential impacts to cultural resources in the proposed Jacumba National Register District. Since the Old Highway 80 – Carrizo Gorge Road Reroute Biological Resources and Jurisdictional Drainages Surveys Summary Report was submitted, SDG&E has developed a preliminary design for the rerouted segment of the 138 kV transmission line. This preliminary design would contain most of the construction activities, equipment, and personnel to the existing Old Highway 80 and Carrizo Gorge roadways and disturbed road shoulders in an underground configuration. Temporary work areas are generally limited to the right-of-way (ROW) along Old Highway 80 and Carrizo Gorge Road, which varies slightly, but extends approximately 30 feet from either side of the edge of the road shoulder. This document describes the anticipated impacts to the resources identified during the biological and jurisdictional drainage surveys along Old Highway 80 and Carrizo Gorge Road (Old Highway 80 – Carrizo Gorge Road Reroute) and compares them to the impacts identified for the corresponding segment of the originally proposed overhead 138 kV transmission line that would be removed (overhead BLM segment).

2 – PRELIMINARY IMPACT COMPARISON

This section summarizes the anticipated temporary and permanent impacts to vegetation communities, jurisdictional drainages, and rare plant species that would result from construction of the Old Highway 80 – Carrizo Gorge Road Reroute and compares them to the impacts identified for the corresponding overhead BLM segment. Impacts to vegetation communities and jurisdictional drainages are considered to be temporary where resources would be impacted by construction of the 138 kV transmission line, but would be restored following construction. Temporary impacts are associated with temporary work areas and trenching of the underground alignment. Permanent impacts associated with construction of the Old Highway 80 underground segment would result from the installation of underground concrete vaults and a future riser pole. For the overhead BLM segment, permanent impacts would result from the construction of permanent maintenance pads around poles, as well as for access roads and associated grading. All impacts to rare plant species would be considered permanent. Table 1: Resource Impacts Comparison provides a comparison of the temporary and permanent impacts to vegetation communities, California Department of Fish and Game (CDFG)- and United States Army Corps of Engineers (USACE)-jurisdictional drainages, and rare plant species resulting from construction of the overhead BLM segment and the Old Highway 80 – Carrizo Gorge Road Reroute.

Table 1: Resource Impacts Comparison

Impacted Resource		Temporary Impacts (acres)		Permanent Impacts (acres)		Total (acres)	
		Overhead BLM Segment	Old Highway 80 – Carrizo Gorge Road Reroute	Overhead BLM Segment	Old Highway 80 – Carrizo Gorge Road Reroute	Overhead BLM Segment	Old Highway 80 – Carrizo Gorge Road Reroute
Vegetation Communities	Juniper woodland	0.00	0.19	0.70	0.30	0.70	0.49
	Mixed desert scrub	0.00	0.37	2.30	0.82	2.30	1.19
Jurisdictional Drainages	CDFG	0.06	0.01	0.02	0.01	0.08	0.02
	USACE	0.03	0.002	0.01	0.01	0.04	0.012
Rare Plants¹	Sticky geraea	0	0	2	0	2	0
	Slender-leaf ipomopsis	0	0	5	0	5	0

¹ Impacts to rare plant species are provided for individual plants, rather than in acres.

2.0 VEGETATION COMMUNITIES

Two distinct vegetation communities—mixed desert scrub and juniper woodland—would be impacted by both the Old Highway 80 – Carrizo Gorge Road Reroute and the overhead BLM segment. As shown in Table 1: Resource Impacts Comparison, temporary impacts to both vegetation communities would be increased as a result of the construction required to underground the Old Highway 80 – Carrizo Gorge Road Reroute, as compared to the overhead alignment. Construction of the Old Highway 80 – Carrizo Gorge Road Reroute would result in approximately 0.19 acre of temporary impacts to juniper woodland and approximately 0.37 acre of temporary impacts to mixed desert scrub. No temporary impacts to these vegetation communities would result from construction of the overhead BLM segment, as all resulting impacts would be permanent. Permanent impacts resulting from construction of the Old Highway 80 – Carrizo Gorge Road Reroute would be reduced as a result of the underground configuration because no permanent maintenance pads would be required. Permanent impacts to juniper woodland associated with construction of the overhead BLM segment would be approximately 0.70 acre, compared to the approximately 0.30 acre of permanent impacts associated with construction of the Old Highway 80 – Carrizo Gorge Road Reroute. Similarly, permanent impacts to mixed desert scrub associated with construction of the overhead BLM segment would be approximately 2.30 acres, compared to the approximately 0.82 acre of permanent impacts associated with construction of the Old Highway 80 – Carrizo Gorge Road Reroute. Attachment A: Old Highway 80 - Carrizo Gorge Road Reroute - Impact Summary Map depicts the impacts to these vegetation communities that would result from the Old Highway 80 – Carrizo Gorge Road Reroute.

2.1 JURISDICTIONAL DRAINAGES

Temporary impacts to both CDFG- and USACE-jurisdictional drainages would be fewer for the Old Highway 80 – Carrizo Gorge Road Reroute than for the overhead BLM segment because trenching activities required to install the conduit and underground cables would primarily occur within the existing roadway and road shoulder. More specifically, construction of the overhead BLM segment would result in approximately 0.06 acre of temporary impacts to CDFG-jurisdictional drainages, compared to 0.01 acre of temporary impacts resulting from construction of the Old Highway 80 – Carrizo Gorge Road Reroute. Likewise, construction of the overhead BLM segment would result in approximately 0.03 acre of temporary impacts to USACE-jurisdictional drainages, whereas construction of the Old Highway 80 – Carrizo Gorge Road Reroute would result in approximately 0.002 acre of temporary impacts to USACE-jurisdictional drainages.

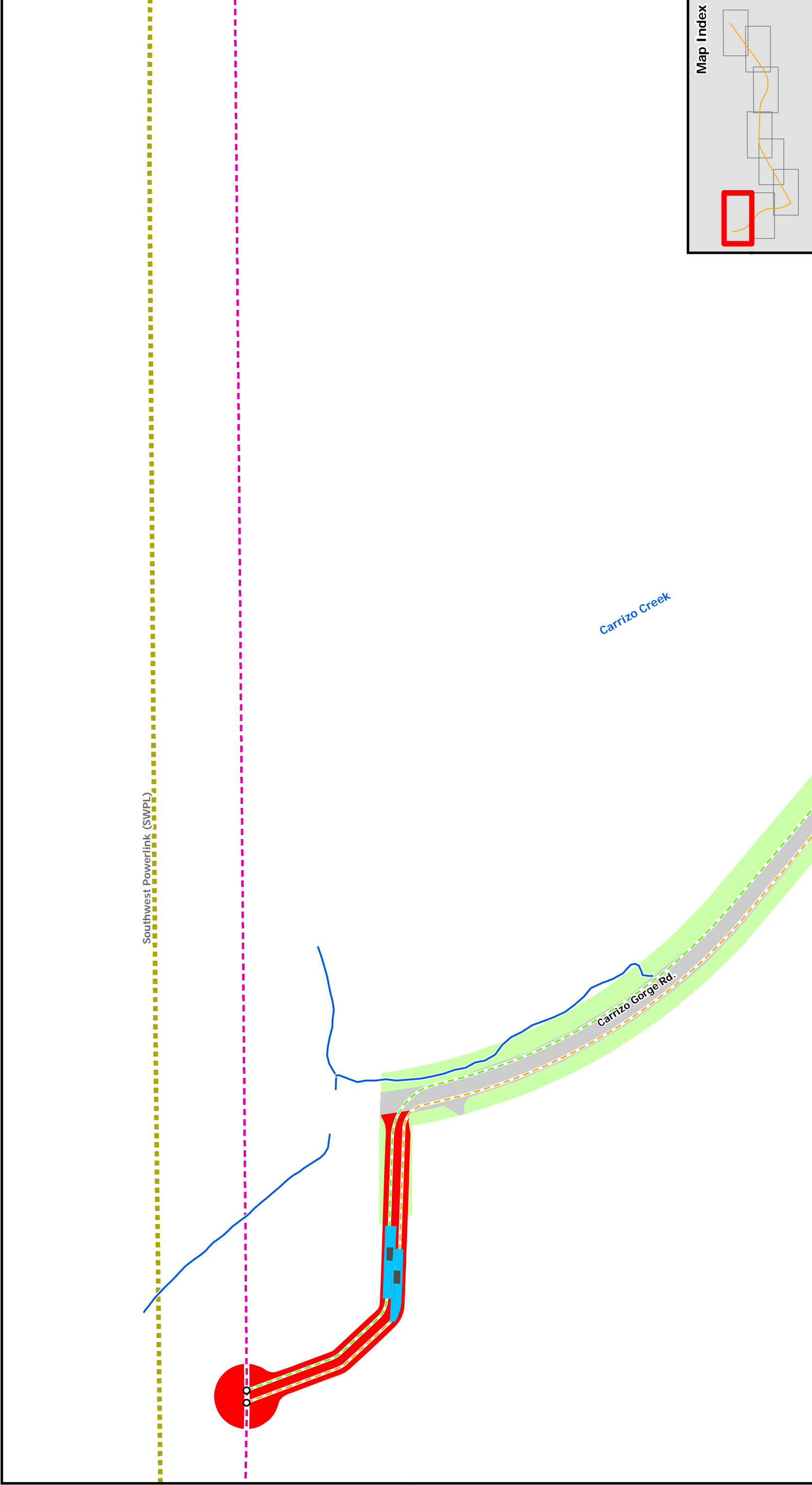
Permanent impacts to CDFG-jurisdictional drainages for the overhead BLM segment would total approximately 0.02 acre, compared to approximately 0.01 acre for the Old Highway 80 – Carrizo Gorge Road Reroute. Permanent impacts to USACE-jurisdictional drainages resulting from both the overhead BLM segment and Old Highway 80 – Carrizo Gorge Road Reroute would total approximately 0.01 acre, as shown in Table 1: Resource Impacts Comparison. Therefore, permanent impacts to CDFG-jurisdictional drainages would be greater for the overhead BLM segment due to the construction of permanent maintenance pads, access roads, and associated grading, whereas permanent impacts to USACE-jurisdictional drainages would be the same for

both segments.. The locations of these impacts are depicted in Attachment A: Old Highway 80 - Carrizo Gorge Road Reroute - Impact Summary Map.

2.2 RARE PLANT SPECIES

Two rare plant species—Palmer’s grappling hook (*Harpagonella palmeri*) and slender-leaved ipomopsis (*Ipomopsis tenuifolia*)—were identified within the Old Highway 80 – Carrizo Gorge Road Reroute survey area. However, none of the rare plant individuals identified would be impacted by construction of the Old Highway 80 – Carrizo Gorge Road Reroute because none are located within the temporary or permanent disturbance areas. In comparison, seven rare plant individuals, including two sticky geraea (*Geraea viscida*) plants and five slender-leaf ipomopsis plants, would be impacted by construction of the overhead BLM segment, as shown in Table 1: Resource Impacts Comparison.

**ATTACHMENT A: OLD HIGHWAY 80 - CARRIZO GORGE ROAD REROUTE - IMPACT
SUMMARY MAP**

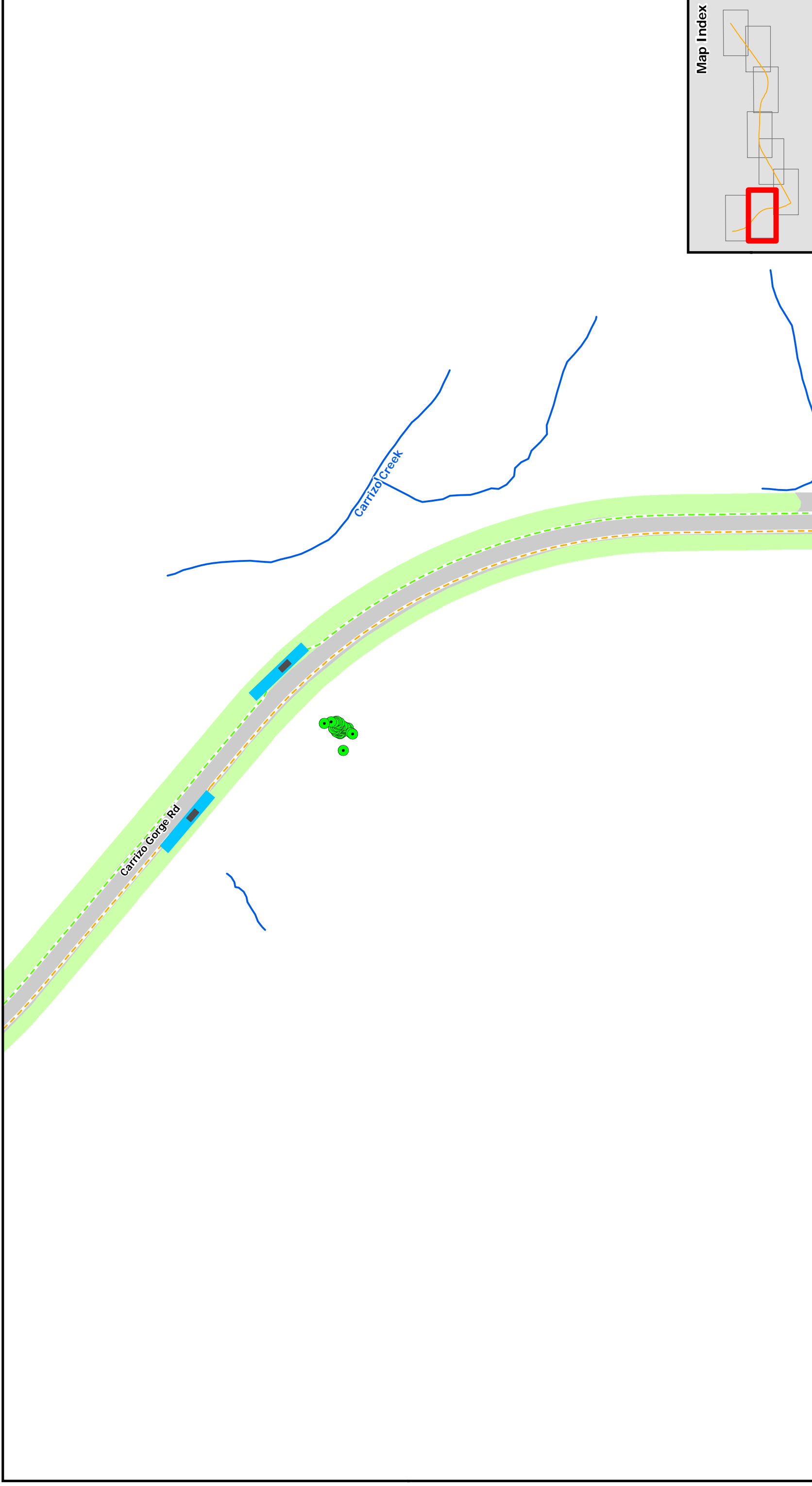


Attachment A: Old Highway 80 - Carrizo Gorge Road Reroute - Impact Summary Map 1 of 8

East County Substation Project

	Palmer's grappling hook		Juniper Woodland		Drainage		Vault
	Slender-leaved ipomopsis		Mixed Desert Scrub		Proposed Underground Alignment A		Jack-and-Bore Alignment
	Riser Pole		Residential/Developed		Proposed Underground Alignment B		Permanent Work Area
	Riser Pole (Future)		Road		Proposed 138 kV Line		Pull Site
					Existing Transmission Line		Temporary Construction Area
							Grading

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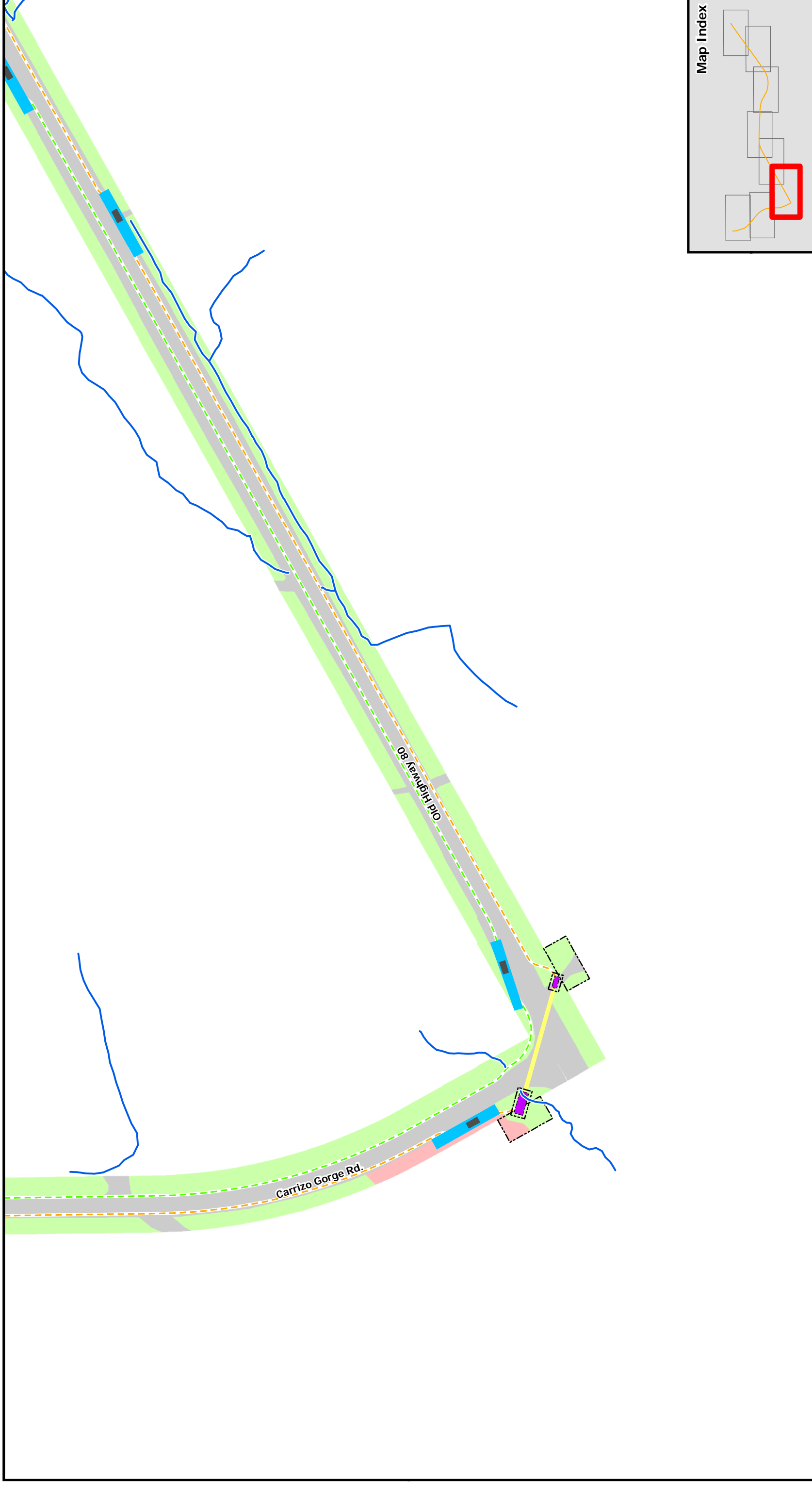
Attachment A: Old Highway 80 - Carrizo Gorge Road Reroute - Impact Summary Map 2 of 8

East County Substation Project

Palmer's grappling hook	Juniper Woodland	Drainage	Access Roads	Vault
Slender-leaved ipomopsis	Mixed Desert Scrub	Proposed Underground Alignment A	Jack-and-Bore Alignment	Permanent Work Area
Riser Pole	Residential/Developed	Proposed Underground Alignment B	Boring Pit	Pull Site
Riser Pole (Future)	Road	Proposed 138 kV Line	Earth Ditch	Temporary Construction Area
		Existing Transmission Line	Grading	

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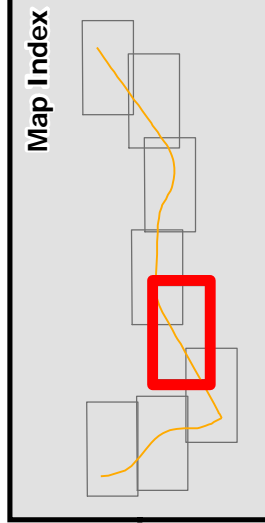
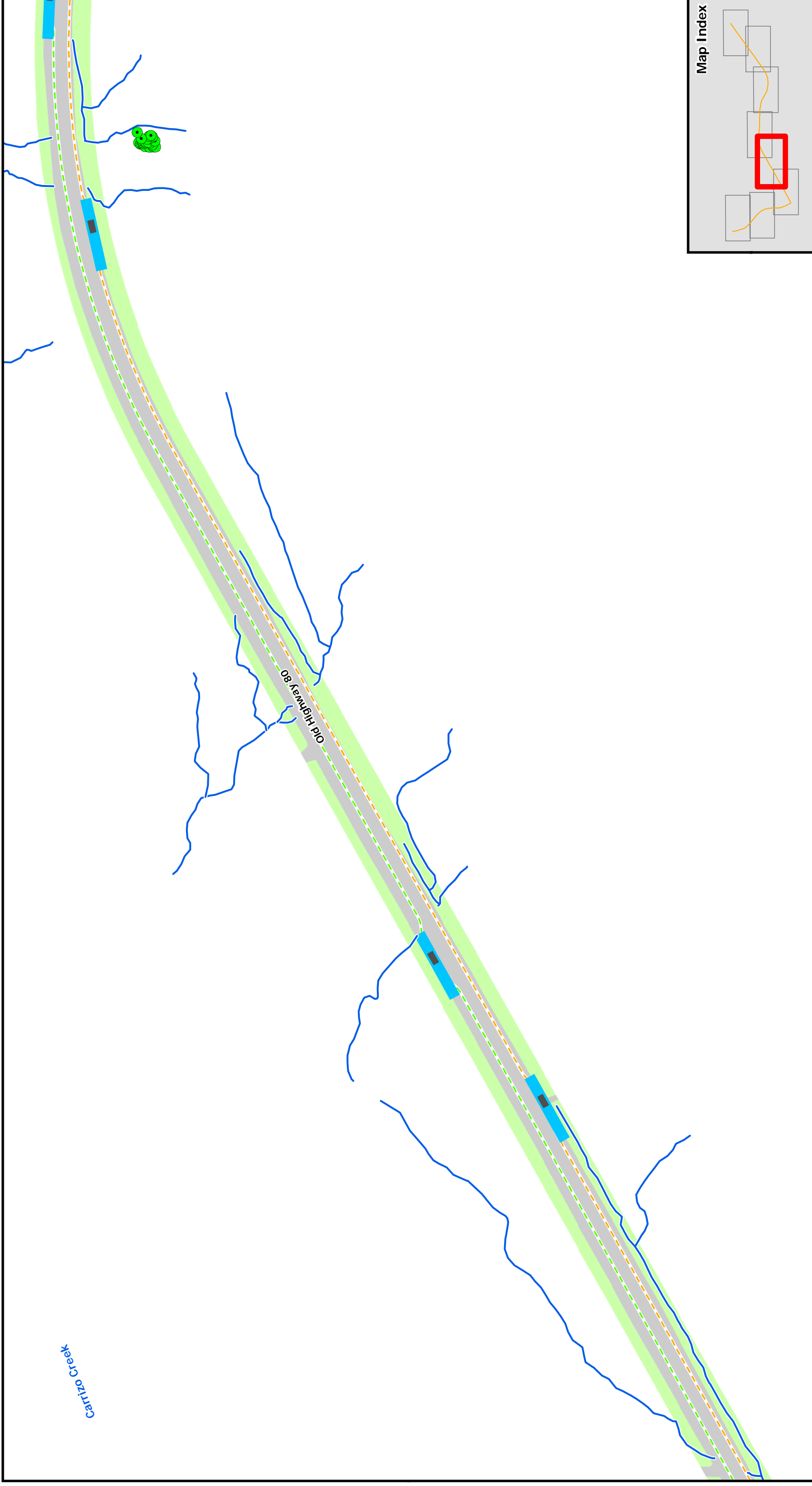
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Attachment A: Old Highway 80 - Carrizo Gorge Road Reroute - Impact Summary Map 3 of 8

East County Substation Project

<ul style="list-style-type: none"> ● Palmer's grappaling hook ● Slender-leaved ipomopsis ○ Riser Pole ● Riser Pole (Future) 	<ul style="list-style-type: none"> ■ Juniper Woodland ■ Mixed Desert Scrub ■ Residential/Developed ■ Road 	<ul style="list-style-type: none"> — Drainage - - - Proposed Underground Alignment A - - - Proposed Underground Alignment B - - - Proposed 138 kV Line - - - Existing Transmission Line 	<ul style="list-style-type: none"> ■ Access Roads ■ Boring Pit ■ Earth Ditch ■ Grading ■ Jack-and-Bore Alignment ■ Permanent Work Area ■ Pull Site □ Temporary Construction Area ■ Vault 				<p>1:2,000</p> <p>0 100 200 400 600 Feet</p>
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Attachment A: Old Highway 80 - Carrizo Gorge Road Reroute - Impact Summary Map 4 of 8

East County Substation Project

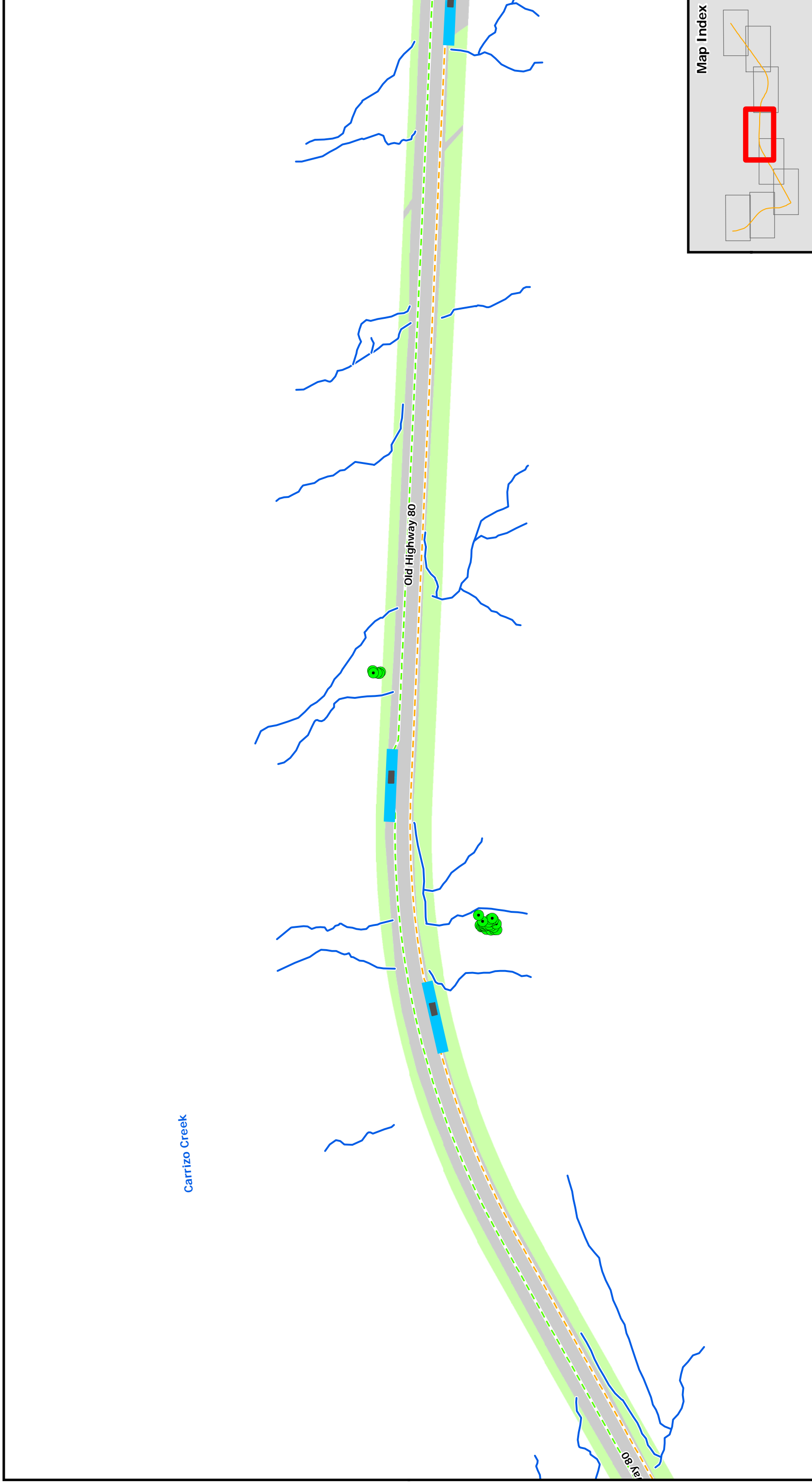
Palmer's grappaling hook	Juniper Woodland	Drainage	Access Roads	Vault
Slender-leaved ipomopsis	Mixed Desert Scrub	Proposed Underground Alignment A	Jack-and-Bore Alignment	Permanent Work Area
Riser Pole	Residential/Developed	Proposed Underground Alignment B	Boring Pit	Pull Site
Riser Pole (Future)	Road	Proposed 138 kV Line	Earth Ditch	Temporary Construction Area
		Existing Transmission Line	Grading	

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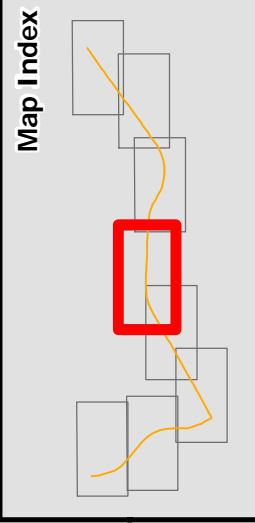
Attachment A: Old Highway 80 - Carrizo Gorge Road Reroute - Impact Summary Map 5 of 8

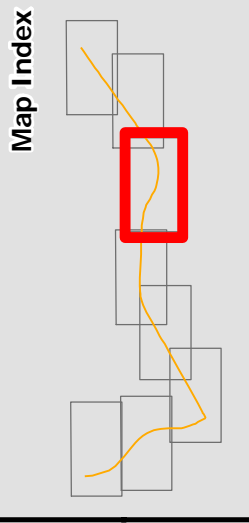
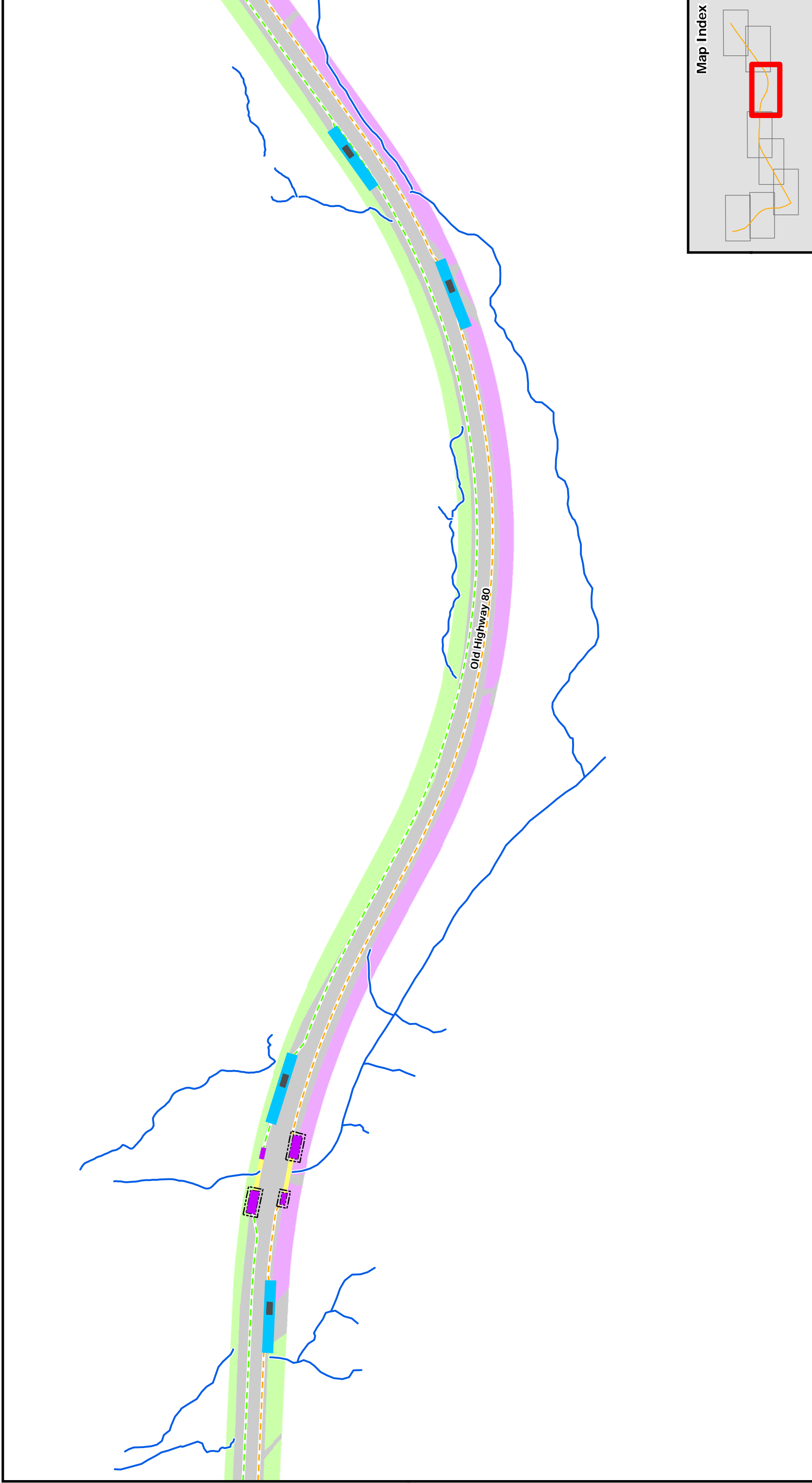
East County Substation Project

Palmer's grappling hook	Juniper Woodland	Drainage	Access Roads	Jack-and-Bore Alignment	Vault
Slender-leaved ipomopsis	Mixed Desert Scrub	Proposed Underground Alignment A	Boring Pit	Permanent Work Area	
Riser Pole	Residential/Developed	Proposed Underground Alignment B	Earth Ditch	Pull Site	
Riser Pole (Future)	Road	Proposed 138 kV Line	Grading	Temporary Construction Area	
		Existing Transmission Line			

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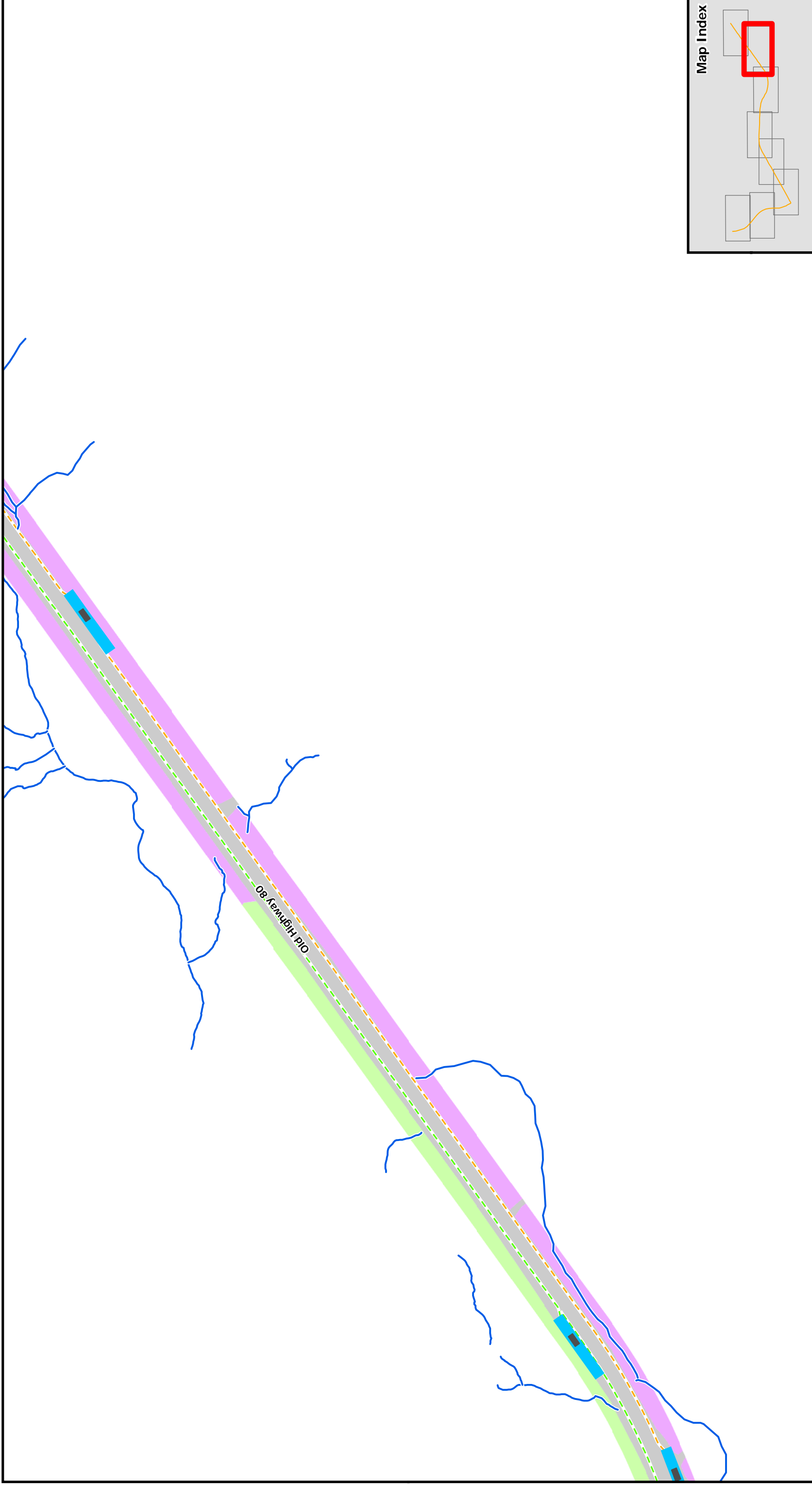


Attachment A: Old Highway 80 - Carrizo Gorge Road Reroute - Impact Summary Map 6 of 8

East County Substation Project

	Palmer's grappaling hook		Juniper Woodland		Drainage		Access Roads		Vault
	Slender-leaved ipomopsis		Mixed Desert Scrub		Proposed Underground Alignment A		Jack-and-Bore Alignment		Permanent Work Area
	Riser Pole		Residential/Developed		Proposed Underground Alignment B		Boring Pit		Pull Site
	Riser Pole (Future)		Road		Proposed 138 kV Line		Earth Ditch		Temporary Construction Area
					Existing Transmission Line		Grading		

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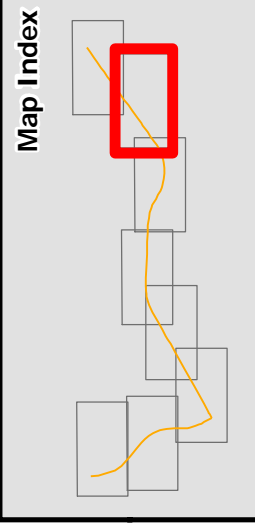
Attachment A: Old Highway 80 - Carrizo Gorge Road Reroute - Impact Summary Map 7 of 8

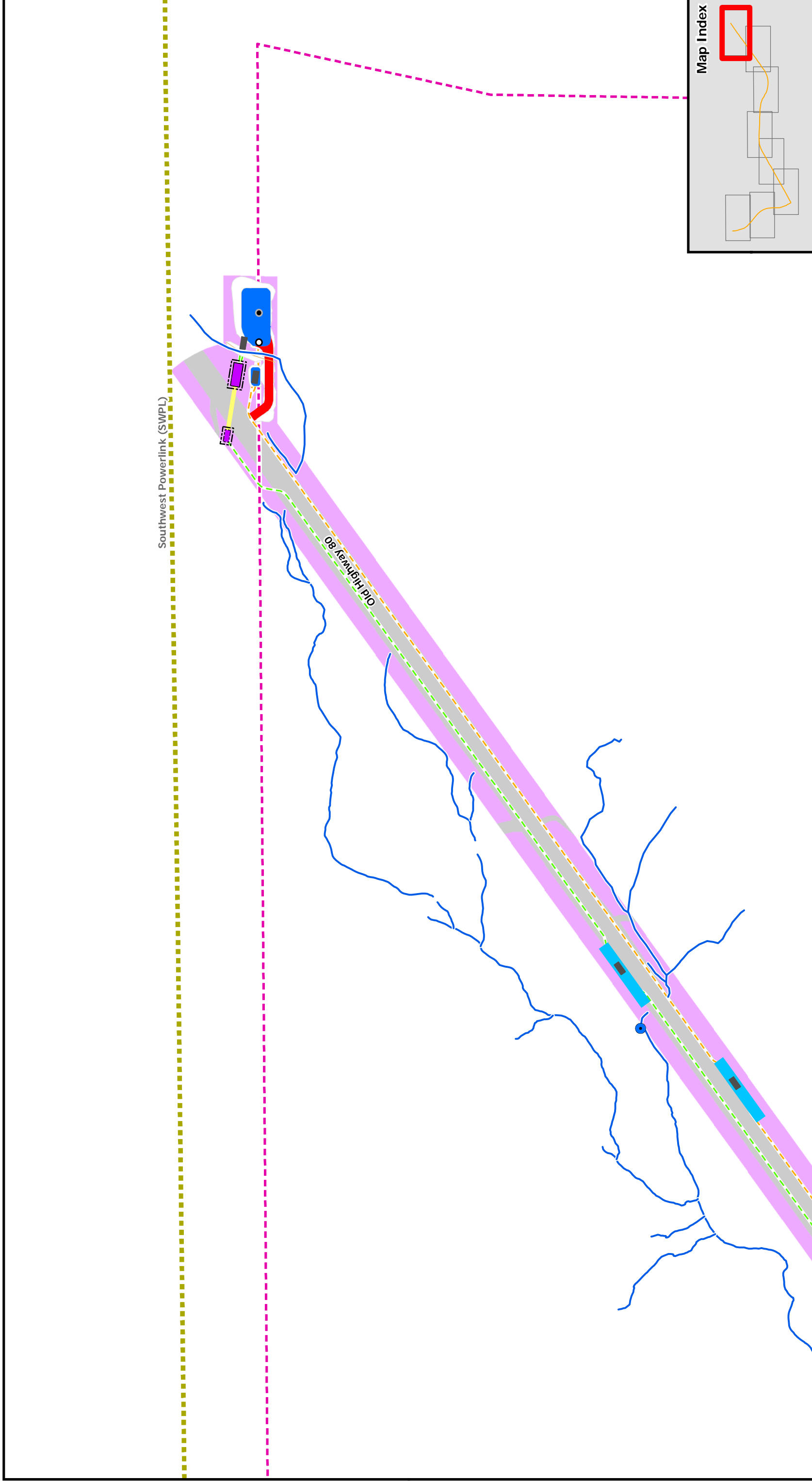
East County Substation Project

	Palmer's grappaling hook		Juniper Woodland		Drainage		Access Roads		Jack-and-Bore Alignment		Vault
	Slender-leaved ipomopsis		Mixed Desert Scrub		Proposed Underground Alignment A		Boring Pit		Permanent Work Area		
	Riser Pole		Residential/Developed		Proposed Underground Alignment B		Earth Ditch		Pull Site		
	Riser Pole (Future)		Road		Proposed 138 kV Line		Grading		Temporary Construction Area		
					Existing Transmission Line						

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Attachment A: Old Highway 80 - Carrizo Gorge Road Reroute - Impact Summary Map 8 of 8

East County Substation Project

	Palmer's grappaling hook		Juniper Woodland		Access Roads		Vault
	Slender-leaved ipomopsis		Mixed Desert Scrub		Boring Pit		Jack-and-Bore Alignment
	Riser Pole		Residential/Developed		Earth Ditch		Permanent Work Area
	Riser Pole (Future)		Road		Grading		Pull Site
					Proposed 138 kV Line		Temporary Construction Area
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