

Exhibit S: Response to 1.4.6-1

Updated Table 4.6-1: Geological Formations within the Proposed Project Area

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Crystalline bedrock: Granodiorite of Rainbow	Mid-Cretaceous	0.04	0
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.19	0.1
Crystalline bedrock: Granodiorite of Rainbow	Mid-Cretaceous	0.36	0.5
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.08	0.6
Crystalline bedrock: Granodiorite of Rainbow	Mid-Cretaceous	0.04	0.7
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.19	0.9
Crystalline bedrock: Granodiorite of Rainbow	Mid-Cretaceous	0.57	1.3
Crystalline bedrock: Granodiorite of Rainbow	Mid-Cretaceous	0.03	1.5
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.03	1.5
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.07	1.6
Crystalline bedrock: Granodiorite of Rainbow	Mid-Cretaceous	0.25	1.8
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.03	1.9
Crystalline bedrock: Granodiorite of Rainbow	Mid-Cretaceous	0.46	2

¹ The nearest milepost provides the general location of the geological formations, which are depicted in Figure 1: Geological Formation Map.

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Crystalline bedrock: Gabbro, undivided	Mid-Cretaceous	0.22	2.6
Crystalline bedrock: Metasedimentary and metavolcanic rocks, undivided	Mesozoic	0.23	2.7
Crystalline bedrock: Gabbro, undivided	Mid-Cretaceous	0.48	3
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.04	3.3
Crystalline bedrock: Gabbro, undivided	Mid-Cretaceous	0.53	3.5
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.45	4
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.02	4.3
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.07	4.4
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.03	4.4
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.04	4.5
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.04	4.5
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.29	4.7
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.01	4.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.09	4.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.05	4.9
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.03	5

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.25	5
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.01	5.2
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.001	5.3
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.01	5.3
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.05	5.3
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.03	5.3
Crystalline bedrock: Metasedimentary and metavolcanic rocks, undivided	Mesozoic	0.02	5.5
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.16	5.5
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.01	5.5
Crystalline bedrock: Metasedimentary and metavolcanic rocks, undivided	Mesozoic	0.55	5.6
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.78	6.8
Crystalline bedrock: Granodiorite of Indian Mountain	Mid-Cretaceous	0.03	6.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.20	7
Crystalline bedrock: Granodiorite of Indian Mountain	Mid-Cretaceous	0.04	7.1

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.28	7.3
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.07	7.5
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.84	8.3
Crystalline bedrock: Granodiorite of Indian Mountain	Mid-Cretaceous	0.07	8.4
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.28	8.6
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.14	8.7
River channel, wash deposits	Late Holocene	0.07	8.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.40	9.2
Crystalline bedrock: Metasedimentary and metavolcanic rocks, undivided	Mesozoic	0.21	9.4
Crystalline bedrock: Granodiorite of Indian Mountain	Mid-Cretaceous	0.89	9.5
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	2.01	10.7
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.04	12.4
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.02	12.5
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.04	12.6
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.16	12.6

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.71	13
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.01	13.4
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.01	13.4
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.02	13.4
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.02	13.4
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.24	13.6
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.03	13.7
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.03	13.7
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.09	13.8
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.02	13.8
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.03	13.9
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.07	13.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.12	14
Crystalline bedrock: Granodiorite of Jesmond Dean	Mid-Cretaceous	0.47	14.3
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.19	14.7

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.04	14.7
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.01	14.8
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.08	14.8
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.14	15
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.13	15.1
Crystalline bedrock: Granodiorite of Jesmond Dean	Mid-Cretaceous	0.22	15.3
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.32	15.6
Crystalline bedrock: Granodiorite of Jesmond Dean	Mid-Cretaceous	0.004	15.7
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.06	15.7
Crystalline bedrock: Granodiorite of Jesmond Dean	Mid-Cretaceous	0.22	15.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.01	16
Crystalline bedrock: Granodiorite of Jesmond Dean	Mid-Cretaceous	0.70	16.4
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.94	17
Crystalline bedrock: Granodiorite of Jesmond Dean	Mid-Cretaceous	0.71	17.9
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.54	18.5
Crystalline bedrock: Granodiorite of Jesmond Dean	Mid-Cretaceous	1.87	20.3
Crystalline bedrock: Monzogranite of Merriam Mountain	Mid-Cretaceous	0.54	21.2

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Crystalline bedrock: Metasedimentary and metavolcanic rocks, undivided	Mesozoic	0.07	21.3
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.38	21.6
Crystalline bedrock: Metasedimentary and metavolcanic rocks, undivided	Mesozoic	0.08	21.8
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.44	22
Crystalline bedrock: Granite of Indian Springs	Mid-Cretaceous	0.08	22.3
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.08	22.4
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.09	22.5
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.91	23.4
Artificial fill	late Holocene	0.16	23.5
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.61	23.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.05	24.2
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	1.23	24.9
Crystalline bedrock: Granodiorite of Woodson Mountain	Mid-Cretaceous	0.38	25.5
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.29	26.1

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Crystalline bedrock: Granodiorite of Woodson Mountain	Mid-Cretaceous	0.50	26.3
Crystalline bedrock: Granodiorite of Woodson Mountain	Mid-Cretaceous	0.05	26.7
Young colluvial deposits	Holocene and late Pleistocene	0.05	26.7
Young colluvial deposits	Holocene and late Pleistocene	0.12	26.8
Crystalline bedrock: Granodiorite of Woodson Mountain	Mid-Cretaceous	0.59	26.9
Young colluvial deposits	Holocene and late Pleistocene	0.11	27.5
Crystalline bedrock: Granodiorite of Woodson Mountain	Mid-Cretaceous	0.12	27.7
Young colluvial deposits	Holocene and late Pleistocene	0.03	27.7
Crystalline bedrock: Granodiorite of Woodson Mountain	Mid-Cretaceous	0.07	27.8
Young colluvial deposits	Holocene and late Pleistocene	0.04	27.8
Crystalline bedrock: Granodiorite of Woodson Mountain	Mid-Cretaceous	0.09	27.9
Young colluvial deposits	Holocene and late Pleistocene	0.01	27.9
Crystalline bedrock: Granodiorite of Woodson Mountain	Mid-Cretaceous	0.08	28
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.19	28.1
Young colluvial deposits	Holocene and late Pleistocene	0.08	28.2

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.82	28.9
Young colluvial deposits	Holocene and late Pleistocene	0.08	29.2
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.01	29.2
Young colluvial deposits	Holocene and late Pleistocene	0.17	29.3
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.05	29.4
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.23	29.5
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.26	29.8
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.37	30
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.42	30.6
Crystalline bedrock: Gabbro, undivided	Mid-Cretaceous	0.40	30.7
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.77	31.7
Young colluvial deposits	Holocene and late Pleistocene	0.08	31.9
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.27	32
Young colluvial deposits	Holocene and late Pleistocene	0.08	32.3
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.25	32.3

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.19	32.6
Young colluvial deposits	Holocene and late Pleistocene	0.03	32.6
Young colluvial deposits	Holocene and late Pleistocene	0.06	32.8
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.23	32.9
Young colluvial deposits	Holocene and late Pleistocene	0.34	33.1
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	0.15	33.5
Young colluvial deposits	Holocene and late Pleistocene	0.19	33.7
Crystalline bedrock: Granodiorite, undivided	Mid-Cretaceous	0.44	33.8
Crystalline bedrock: Granodiorite, undivided	Mid-Cretaceous	0.08	34.2
Sedimentary deposits: Claystones, siltstone, Friars Formation, nonmarine and lagoonal sandstone and claystone	Middle Eocene	0.21	34.3
Sedimentary deposits: Claystones, siltstone, Friars Formation, nonmarine and lagoonal sandstone and claystone	Middle Eocene	0.23	34.6
Crystalline bedrock: Granodiorite, undivided	Mid-Cretaceous	0.22	34.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.05	35
Crystalline bedrock: Granodiorite, undivided	Mid-Cretaceous	0.39	35.3
Sedimentary deposits: Claystones, siltstone, Friars Formation, nonmarine and lagoonal sandstone and claystone	Middle Eocene	0.28	35.4

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost ¹
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.02	35.7
Sedimentary deposits: Claystones, siltstone, Friars Formation, nonmarine and lagoonal sandstone and claystone	Middle Eocene	0.20	35.7
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.03	35.9
Quaternary surficial deposits, landslide deposits, undivided	Holocene and Pleistocene	0.28	36
Sedimentary deposits: Claystones, siltstone, Friars Formation, nonmarine and lagoonal sandstone and claystone	Middle Eocene	0.11	36.2
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.51	36.4
Crystalline bedrock: Granodiorite, undivided	Mid-Cretaceous	0.14	36.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.09	37
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.04	37.1
Crystalline bedrock: Granodiorite, undivided	Mid-Cretaceous	0.07	37.1
Crystalline bedrock: Granodiorite, undivided	Mid-Cretaceous	0.07	37.2
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.52	37.4
Crystalline bedrock: Granodiorite, undivided	Mid-Cretaceous	0.15	37.8
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.33	37.9
Crystalline bedrock: Granodiorite, undivided	Mid-Cretaceous	0.02	38.2

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Sedimentary deposits: Claystones, siltstone, Friars Formation, nonmarine and lagoonal sandstone and claystone	Middle Eocene	0.25	38.3
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.15	38.5
Sedimentary deposits: Claystones, siltstone, Friars Formation, nonmarine and lagoonal sandstone and claystone	Middle Eocene	0.43	38.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.19	39.1
Sedimentary deposits: Claystones, siltstone, Friars Formation, nonmarine and lagoonal sandstone and claystone	Middle Eocene	0.17	39.3
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.03	39.4
Sedimentary deposits: Claystones, siltstone, Friars Formation, nonmarine and lagoonal sandstone and claystone	Middle Eocene	0.06	39.5
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.70	39.8
Sedimentary deposits: Sandstones, Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	0.11	40.3
Torrey sandstone	Middle Eocene	0.29	40.4
Sedimentary deposits: Sandstones, Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	0.36	40.7
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.67	41.2
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.06	41.7
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.07	41.8

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.07	41.8
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.03	41.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.04	41.9
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.06	42
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.22	42.1
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	1.06	42.8
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.22	43.4
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.18	43.6
Very old paralic deposits, Unit 2	Middle to early Pleistocene	0.22	43.8
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.06	43.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.04	44
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.03	44
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.04	44.2
Very old paralic deposits, Unit 2	Middle to early Pleistocene	0.17	44.2
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.08	44.3
Very old paralic deposits, Unit 2	Middle to early Pleistocene	0.07	44.3

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.06	44.4
Very old paralic deposits, Unit 3	Middle to early Pleistocene	0.05	44.5
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.04	44.5
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.15	44.6
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.07	44.7
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.13	44.8
Very old paralic deposits, Unit 2	Middle to early Pleistocene	0.07	44.9
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.20	45
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.14	45.2
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.02	45.3
Sedimentary deposits: Sandstones, Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	0.03	45.3
Very old paralic deposits, Unit 4	Middle to early Pleistocene	0.11	45.4
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.02	45.4
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.11	45.5
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.04	45.6

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.004	45.6
Sedimentary deposits: Sandstones, Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	0.01	45.6
Sedimentary deposits: Sandstones, Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	0.14	45.7
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.04	45.8
Sedimentary deposits: Sandstones, Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	0.03	45.8
Very old paralic deposits, Unit 4	Middle to early Pleistocene	0.03	45.9
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.04	45.9
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.05	45.9
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.06	46
Sedimentary deposits: Sandstones, Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	0.05	46
Sedimentary deposits: Sandstones, Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	0.02	46.1
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.29	46.1
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.04	46.4
Young alluvial floodplain deposits	Holocene and late Pleistocene	0.02	46.5

Geological Formation	Geologic Age	Length of Proposed Project Crossed by Geological Formation (miles)	Nearest Milepost¹
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.10	46.5
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.20	46.7
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.05	46.8
Sedimentary deposits: Sandstones, Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	0.08	46.8
Sedimentary deposits: Sandstones, Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	0.25	47
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	0.005	47.1

Source: United States (U.S.) Geological Survey (USGS) 2015

USGS. 2015. Mineral Resources On-Line Spatial Data – California Geologic Map Data. Online. <http://mrdata.usgs.gov/geology/state/state.php?state=CA>. Site visited November 10, 2015.

Table 4.6-4: Soils in the Proposed Project Area

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.03	0
Grangeville fine sandy loam	GoA	0 to 2	Moderate to Moderately Rapid	Slight	0.11	0.1
Vista rocky coarse sandy loam	VvG	30 to 65	Moderately Rapid	Severe	0.19	0.2
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.06	0.2
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.20	0.5
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.01	0.6
Visalia sandy loam	VaA	0 to 2	Rapid	Slight	0.01	0.6
Visalia sandy loam	VaA	0 to 2	Rapid	Slight	0.05	0.6
Arlington coarse sandy loam	AvC	2 to 9	Slow	Moderate	0.98	1.3
Cieneba-Fallbrook rocky sandy loams, eroded	CnE2	9 to 30	Moderately Rapid	Severe	0.22	1.8
Cieneba-Fallbrook rocky sandy loams, eroded	CnG2	30 to 65	Moderately Rapid	Severe	0.02	2
Visalia sandy loam	VaA	0 to 2	Rapid	Slight	0.14	2
Cieneba rocky coarse sandy loam, eroded	CmE2	9 to 30	Moderately Rapid	Severe	0.06	2.1

² Soil map units are utilized by the National Resources Conservation Service (NRCS) to identify and display specific soils and/or groups of soils on a map based on their soil profile, soil type, relationship to other soils, or suitability for various uses.

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Cieneba-Fallbrook rocky sandy loams, eroded	CnG2	30 to 65	Moderately Rapid	Severe	0.00	2.1
Cieneba rocky coarse sandy loam, eroded	CmE2	9 to 30	Moderately Rapid	Severe	0.13	2.2
Cieneba-Fallbrook rocky sandy loams, eroded	CnG2	30 to 65	Moderately Rapid	Severe	0.04	2.3
Las Posas fine sandy loam, eroded	LpD2	9 to 15	Slow	Severe	0.52	2.7
Las Posas fine sandy loam	LpC	5 to 9	Slow	Moderate	0.09	2.8
Las Posas fine sandy loam, eroded	LpD2	9 to 15	Slow	Severe	0.24	3
Steep gullied land	StG	INA	INA	Severe	0.02	3.1
Wyman loam	WmD	9 to 15	Moderately Slow	Severe	0.22	3.2
Las Posas stony fine sandy loam	LrG	30 to 65	Slow	Severe	0.47	3.5
Vista coarse sandy loam	VsG	30 to 65	Moderately Rapid	Severe	1.78	4.7
Escondido very fine sandy loam, eroded	EsE2	15 to 30	Moderate	Severe	0.16	5.7
Vista coarse sandy loam	VsG	30 to 65	Moderately Rapid	Severe	0.11	5.8
Placentia sandy loam, eroded	PeD2	9 to 15	Very Slow	Severe	0.15	6
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.18	6.2
Visalia sandy loam	VaA	0 to 2	Rapid	Slight	0.65	6.8
Ramona sandy loam, eroded	RaD2	9 to 15	Moderately Slow	Severe	0.31	7

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.10	7.2
Ramona sandy loam, eroded	RaC2	5 to 9	Moderately Slow	Moderate	0.22	7.3
Grangeville fine sandy loam	GoA	0 to 2	Moderate to Moderately Rapid	Slight	0.01	7.5
Ramona sandy loam, eroded	RaD2	9 to 15	Moderately Slow	Severe	0.05	7.5
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.73	8
Greenfield sandy loam	GrC	5 to 9	Moderately Rapid	Moderate	0.04	8.3
Vista coarse sandy loam	VsD	9 to 15	Moderately Rapid	Severe	0.05	8.3
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.06	8.4
Ramona sandy loam	RaC	5 to 9	Moderately Slow	Moderate	0.11	8.5
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.08	8.6
Ramona sandy loam	RaC	5 to 9	Moderately Slow	Moderate	0.06	8.7
Tujunga sand	TuB	0 to 5	Rapid	Slight	0.09	8.7
Riverwash	Rm		Moderately Rapid to Very Rapid	Slight	0.21	8.9
Tujunga sand	TuB	0 to 5	Rapid	Slight	0.11	9
Grangeville fine sandy loam	GoA	0 to 2	Moderate to Moderately Rapid	Slight	0.08	9.1
Grangeville fine sandy loam	GoA	0 to 2	Moderate to Moderately Rapid	Slight	0.02	9.2
Tujunga sand	TuB	0 to 5	Rapid	Slight	0.06	9.2

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Vista coarse sandy loam, eroded	VsE2	15 to 30	Moderately Rapid	Severe	0.12	9.3
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	1.07	9.5
Fallbrook sandy loam, eroded	FaE2	15 to 30	Moderately Slow	Severe	0.10	10.5
Fallbrook sandy loam, eroded	FaE2	15 to 30	Moderately Slow	Severe	0.04	10.6
Steep gullied land	StG	INA	INA	Severe	0.03	10.6
Fallbrook sandy loam, severely eroded	FaE3	9 to 30	Moderately Slow	Severe	0.23	10.7
Fallbrook sandy loam, eroded	FaE2	15 to 30	Moderately Slow	Severe	0.15	10.9
Steep gullied land	StG	INA	INA	Severe	0.02	11
Fallbrook sandy loam, eroded	FaE2	15 to 30	Moderately Slow	Severe	0.09	11.1
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.24	11.2
Fallbrook-Vista sandy loams	FvD	9 to 15	Moderately Slow	Moderate	0.07	11.2
Steep gullied land	StG	INA	INA	Severe	0.02	11.4
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.03	11.5
Steep gullied land	StG	INA	INA	Severe	0.11	11.5

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.03	11.6
Steep gullied land	StG	INA	INA	Severe	0.03	11.6
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.09	11.7
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.09	11.8
Steep gullied land	StG	INA	INA	Severe	0.03	11.8
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.02	11.9
Steep gullied land	StG	INA	INA	Severe	0.02	11.9
Steep gullied land	StG	INA	INA	Severe	0.02	11.9
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.07	12
Cieneba coarse sandy loam, eroded	CIG2	30 to 65	Moderately Rapid	Severe	0.39	12.2
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.30	12.6
Tujunga sand	TuB	0 to 5	Rapid	Slight	0.21	12.7
Friant fine sandy loam	FwF	30 to 50	Moderately Rapid	Severe	0.14	13
Cieneba-Fallbrook rocky sandy loams, eroded	CnG2	30 to 65	Moderately Rapid	Severe	0.71	13.1
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.07	13.8
Visalia sandy loam	VaC	5 to 9	Rapid	Moderate	0.17	13.9

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Riverwash	Rm		Moderately Rapid to Very Rapid	Slight	0.02	14
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.29	14
Fallbrook sandy loam, eroded	FaE2	15 to 30	Moderately Slow	Severe	0.04	14.3
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.07	14.4
Fallbrook sandy loam, eroded	FaE2	15 to 30	Moderately Slow	Severe	0.25	14.5
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.24	14.8
Fallbrook sandy loam, eroded	FaE2	15 to 30	Moderately Slow	Severe	0.09	14.9
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.05	15
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.06	15.1
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.04	15.1
Fallbrook sandy loam, eroded	FaE2	15 to 30	Moderately Slow	Severe	0.33	15.3
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.15	15.6
Vista coarse sandy loam	VsD	9 to 15	Moderately Rapid	Severe	0.11	15.7
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.13	15.8
Cieneba-Fallbrook rocky sandy loams, eroded	CnE2	9 to 30	Moderately Rapid	Severe	0.13	15.9
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.05	16

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Cieneba-Fallbrook rocky sandy loams, eroded	CnE2	9 to 30	Moderately Rapid	Severe	0.11	16.1
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.17	16.3
Cieneba-Fallbrook rocky sandy loams, eroded	CnE2	9 to 30	Moderately Rapid	Severe	0.84	16.4
Cieneba very rocky coarse sandy loam	CmrG	30 to 75	Moderately Rapid	Severe	0.09	17.2
Cieneba-Fallbrook rocky sandy loams, eroded	CnE2	9 to 30	Moderately Rapid	Severe	0.21	17.4
Cieneba rocky coarse sandy loam, eroded	CmE2	9 to 30	Moderately Rapid	Severe	0.25	17.6
Ramona sandy loam, eroded	RaD2	9 to 15	Moderately Slow	Severe	0.05	17.7
Fallbrook sandy loam, eroded	FaE2	15 to 30	Moderately Slow	Severe	0.10	17.8
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.01	17.8
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.08	17.9
Wyman loam	WmC	5 to 9	Moderately Slow	Moderate	0.02	18
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.07	18
Fallbrook sandy loam, eroded	FaE2	15 to 30	Moderately Slow	Severe	0.07	18.1
Las Posas fine sandy loam, eroded	LpD2	9 to 15	Slow	Severe	0.09	18.1
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.15	18.2

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Placentia sandy loam, eroded	PeC2	5 to 9	Very Slow	Moderate	0.07	18.4
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.06	18.4
Placentia sandy loam	PeC	2 to 9	Very Slow	Moderate	0.60	18.5
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.03	18.5
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.26	19.1
Placentia sandy loam, thick surface	PfC	2 to 9	Very Slow	Moderate	0.28	19.4
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.10	19.7
Fallbrook-Vista sandy loams	FvD	9 to 15	Moderately Slow	Moderate	0.50	20.1
Vista rocky coarse sandy loam	VvD	5 to 15	Moderately Rapid	Severe	0.08	20.3
Placentia sandy loam	PeC	2 to 9	Very Slow	Moderate	0.24	20.5
Ramona sandy loam, eroded	RaD2	9 to 15	Moderately Slow	Severe	0.11	20.6
Ramona sandy loam, eroded	RaC2	5 to 9	Moderately Slow	Moderate	0.17	20.7
Cieneba rocky coarse sandy loam, eroded	CmE2	9 to 30	Moderately Rapid	Severe	0.18	21
Escondido very fine sandy loam, eroded	EsE2	15 to 30	Moderate	Severe	0.24	21.2
Escondido very fine sandy loam	EsC	5 to 9	Moderate	Moderate	0.10	21.3
Huerhuero loam	HrC	2 to 9	Very Slow	Moderate	0.13	21.4

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Cieneba coarse sandy loam, eroded	CID2	5 to 15	Moderately Rapid	Moderate	0.06	21.5
Escondido very fine sandy loam, eroded	EsD2	9 to 15	Moderate	Severe	0.12	21.6
San Miguel rocky silt loam	SmE	9 to 30	Very Slow	Severe	0.11	21.7
Escondido very fine sandy loam, eroded	EsD2	9 to 15	Moderate	Severe	0.25	22
Vista coarse sandy loam, eroded	VsE2	15 to 30	Moderately Rapid	Severe	0.10	22.1
Visalia sandy loam	VaA	0 to 2	Rapid	Slight	0.33	22.4
Placentia sandy loam, eroded	PeC2	5 to 9	Very Slow	Moderate	0.41	22.5
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.30	23
Grangeville fine sandy loam	GoA	0 to 2	Moderate to Moderately Rapid	Slight	0.03	23.2
Grangeville fine sandy loam	GoA	0 to 2	Moderate to Moderately Rapid	Slight	0.05	23.3
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.05	23.3
Grangeville fine sandy loam	GoA	0 to 2	Moderate to Moderately Rapid	Slight	0.00	23.4
Placentia sandy loam	PeC	2 to 9	Very Slow	Moderate	0.02	23.4
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.07	23.4
Placentia sandy loam	PeC	2 to 9	Very Slow	Moderate	0.04	23.5
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.10	23.5

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.29	23.7
Placentia sandy loam	PeC	2 to 9	Very Slow	Moderate	0.10	23.9
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.21	24.1
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.16	24.2
Placentia sandy loam	PeC	2 to 9	Very Slow	Moderate	1.13	24.9
Fallbrook sandy loam	FaB	2 to 5	Moderately Slow	Slight	0.06	25.5
Placentia sandy loam	PeC	2 to 9	Very Slow	Moderate	0.22	25.7
Fallbrook sandy loam, eroded	FaC2	5 to 9	Moderately Slow	Moderate	0.06	25.8
Placentia sandy loam	PeC	2 to 9	Very Slow	Moderate	0.13	25.9
Fallbrook sandy loam, eroded	FaC2	5 to 9	Moderately Slow	Moderate	0.17	26
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.07	26.1
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.04	26.2
Ramona sandy loam, eroded	RaC2	5 to 9	Moderately Slow	Moderate	0.05	26.2
Fallbrook-Vista sandy loams	FvD	9 to 15	Moderately Slow	Moderate	0.25	26.3
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.97	26.9
Ramona sandy loam, eroded	RaD2	9 to 15	Moderately Slow	Severe	0.06	27.5
Ramona sandy loam, eroded	RaC2	5 to 9	Moderately Slow	Moderate	0.55	27.7
Chino silt loam, saline	CkA	0 to 2	Moderately Slow	Slight	0.35	28.3
Placentia sandy loam, thick surface	PfC		Very Slow	Moderate	0.02	28.5

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Ramona sandy loam, eroded	RaC2	5 to 9	Moderately Slow	Moderate	0.06	28.5
Placentia sandy loam, eroded	PeC2	5 to 9	Very Slow	Moderate	0.15	28.6
Placentia sandy loam, thick surface	PfC	2 to 9	Very Slow	Moderate	0.33	28.9
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.48	29.4
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.06	29.5
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.01	29.5
Visalia sandy loam	VaB	2 to 5	Rapid	Slight	0.13	29.6
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.13	29.8
Ramona sandy loam	RaC	5 to 9	Moderately Slow	Moderate	0.10	29.9
Water	W	NA	NA	Not Rated	0.32	30
Ramona sandy loam	RaC	5 to 9	Moderately Slow	Moderate	0.31	30.4
Fallbrook rocky sandy loam	FeC	5 to 9	Moderately Slow	Moderate	0.43	30.6
Ramona sandy loam	RaC	5 to 9	Moderately Slow	Moderate	0.07	31
Fallbrook sandy loam	FaC	5 to 9	Moderately Slow	Moderate	0.04	31.4
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.36	31.4
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.00	31.7
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	0.29	31.7
Bonsall sandy loam, thick surface	BmC	2 to 9	Very slow	Moderate	0.57	31.9

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Vista coarse sandy loam	VsE	15 to 30	Moderately Rapid	Severe	0.05	32.3
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.40	32.4
Bonsall sandy loam	BIC	2 to 9	Very slow	Moderate	0.05	32.8
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.26	32.9
Chino silt loam, saline	CkA	0 to 2	Moderately Slow	Slight	0.27	33.1
Placentia sandy loam, thick surface	PfC	2 to 9	Very Slow	Moderate	0.22	33.4
Grangeville fine sandy loam	GoA	0 to 2	Moderate to Moderately Rapid	Slight	0.18	33.7
Vista rocky coarse sandy loam	VvD	5 to 15	Moderately Rapid	Severe	0.20	33.8
Cieneba-Fallbrook rocky sandy loams, eroded	CnE2	9 to 30	Moderately Rapid	Severe	0.11	34
Fallbrook sandy loam, eroded	FaD2	9 to 15	Moderately Slow	Severe	0.09	34.1
Vista rocky coarse sandy loam	VvD	5 to 15	Moderately Rapid	Severe	0.38	34.2
Bosanko clay	BsD	9 to 15	Slow	Moderate	0.58	34.6
Olivenhain cobbly loam	OhE	9 to 30	Very Slow	Moderate	0.18	35.2
Placentia sandy loam, thick surface	PfC	2 to 9	Very Slow	Moderate	0.26	35.3
Olivenhain cobbly loam	OhC	2 to 9	Very Slow	Slight	0.81	36.3

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Fallbrook sandy loam, eroded	FaC2	5 to 9	Moderately Slow	Moderate	0.07	37.2
Olivenhain-Urban land complex	OkC	2 to 9	Very Slow	Slight	0.86	37.2
Olivenhain-Urban land complex	OkC	2 to 9	Very Slow	Slight	0.27	37.4
Olivenhain cobbly loam	OhC	2 to 9	Very Slow	Slight	0.34	37.7
Placentia sandy loam, thick surface	PfC	2 to 9	Very Slow	Moderate	0.14	37.9
Visalia sandy loam	VaA	0 to 2	Rapid	Slight	0.25	38.2
Diablo-Olivenhain complex	DoE	9 to 30	Medium to Rapid	Severe	0.79	38.5
Riverwash	Rm		Moderately Rapid to Very Rapid	Slight	0.12	39.1
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.14	39.3
Redding cobbly loam, dissected	RfF	15 to 50	Slow to Very Slow	Severe	1.03	39.5
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.25	40.4
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.43	41
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.31	41.2
Riverwash	Rm		Moderately Rapid to Very Rapid	Slight	0.03	41.4
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.22	41.6
Riverwash	Rm		Moderately Rapid to Very Rapid	Slight	0.67	42.1

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.70	42.8
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.08	43.1
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.08	43.4
Riverwash	Rm		Moderately Rapid to Very Rapid	Slight	0.30	43.4
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.33	43.8
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.01	43.8
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.02	43.8
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.38	43.9
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.22	44.4
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.05	44.5
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.40	44.7
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.06	44.9
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.20	45
Riverwash	Rm		Moderately Rapid to Very Rapid	Slight	0.15	45.2
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.27	45.4
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.39	45.9
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.04	46
Riverwash	Rm		Moderately Rapid to Very Rapid	Slight	0.05	46
Terrace escarpments	TeF	INA	INA	Severe	0.03	46.1
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.26	46.1

Soil Type	Soil Map Unit²	Slope (percent)	Permeability	Erosion Potential	Length of Soil Type Crossed by Proposed Project (miles)	Nearest Milepost
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.09	46.4
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.04	46.4
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.08	46.5
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.14	46.6
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.11	46.8
Riverwash	Rm		Moderately Rapid to Very Rapid	Slight	0.05	46.8
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	0.15	47
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	0.10	47.1

Sources: U.S. Department of Agriculture (USDA) 2015a and 2015b

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