EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION
http://www.edcgov.us/DOT/

PLACERVILLE OFFICES:
MAIN OFFICE:
2850 Fairlane Court, Placerville, CA 95667
(530) 621-5900 / (530) 626-0387 Fax

CONSTRUCTION & MAINTENANCE:
2441 Headington Road, Placerville, CA 95667
(530) 642-4909 / (530) 642-0508 Fax

LAKE TAHOE OFFICES:
ENGINEERING:
924 B Emerald Bay Road, South Lake Tahoe, CA 96150
(530) 573-7900 / (530) 541-7049 Fax

MAINTENANCE:
1121 Shakori Drive, South Lake Tahoe, CA 96150
(530) 573-3180 / (530) 577-8402 Fax

DATE: February 18, 2022

TO: All Prospective Bidders

SUBJECT: **Addendum No. 2**
Mosquito Road at South Fork American River Bridge Replacement Project
Contract No. 5084, Project No. 36105028 (77126)

Submit proposals for this work with the understanding and full consideration of this Addendum No. 2. The revisions declared in this Addendum are essential revisions to the Contract Documents.

ITEM NO.	LOCATION, PAGE, OR DRAWING NO.	DESCRIPTION OF CHANGE
2.01	Contract Documents	County instructs Bidders to **replace** various sections of the Contract Documents with the attached revised sections of the Contract Documents.
2.02	Draft Agreement Pages C-12 to C-19	County instructs Bidders to **replace "EXHIBIT A CONTRACTOR'S BID AND BID PRICE SCHEDULE MOSQUITO ROAD AT SOUTH FORK AMERICAN RIVER BRIDGE REPLACEMENT CONTRACT NO. 5084, CIP No. 36105028 (77126)"** pages REV C-12 through REV C-19 of the Draft Agreement with the attached pages REV2 C-12 through REV2 C-19.
2.03	Proposal Pages P-3 to P-10	County instructs Bidders to **replace "PROPOASL PAY ITEMS AND BID PRICE SCHEDULE MOSQUITO ROAD AT SOUTH FORK AMERICAN RIVER BRIDGE REPLACEMENT CONTRACT NO. 5084 / CIP No. 36105028 (77126)"** pages REV P-3 through REV P-10 of the Proposal with the attached pages REV2 P-3 through REV2 P-10.
2.04	Proposal Pages P-23 to P-25	County instructs Bidders to **replace "CERTIFICATION OF BIDDER'S QUALIFICATIONS"** page REV P-24 of the Proposal with the attached page REV2 P-24.
2.05	Various Plan Sheets	County instructs Bidders to incorporate the attached revised Plan Changes into the Contract Plan Set.

Indicate receipt of this Addendum No. 2 by filling in the number of this Addendum in the space provided on the signature page of the Proposal. Holders who have already electronically submitted their Proposal can contact Brian Franklin at 530-621-5311 (email: brian.franklin@edcgov.us) to arrange return of their Proposal. Inform all

suppliers and subcontractors as necessary. The Department of Transportation is only sending this Addendum by posting on QuestCDN's website at: https://www.questcdn.com/. You must be a Contract Documents holder on the Quest Plan Holder Report and comply with the requirements of this Addendum No. 2 when submitting your bid.

End of Addendum No. 2

2/18/22

Recommended by:
Matthew Smeltzer, Deputy Director
Fairlane Engineering Unit

Date

2/18/22

Approved by:
Rafael Martinez, Director
Community Development Services
Department of Transportation

Date

ADDENDUM #2 REVISIONS TO CONTRACT DOCUMENTS

NOTICE TO BIDDERS REVISIONS:

Replace Item J in "Notice To Bidders" with:

J. The Contract time is seven hundred (700) WORKING DAYS.

SPECIAL PROVISIONS REVISIONS:

Add the following to the list in Special Provision section 8-1.04B:

12. Concrete Batch Plant Work Plan (if applicable) (Standard Specifications Section 13-1.01)

Replace "Reserved" in Standard Specification section 17-3 with:

17-3 REMOVE TREES

17-3.01 General

Remove trees larger than 4" diameter at breast height or greater as shown on the Contract Plan sheets TR-1 to TR-7.

17-3.02 Materials

Not Used

17-3.03 Construction

Remove all trees that have been tagged and are shown on the Contract Plans as "Trees To Be Removed".

Removal of trees includes removal of stumps and roots.

Except for the trees specifically identified for removal, no native trees with a trunk diameter a breast height (DBH) in excess of four (4) inches shall be removed or damaged without prior consultation and approval from the Engineer. Using hand tools (clipers, chainsaw, etc.); trees may be trimmed to the extent necessary to gain access to the worksite. All cleared material/vegetation and tree branches less than 4-inches must be removed from County right of way or chipped in place.

All removed tree trunks and limbs greater than 4-inches must be cut and staged in accordance with Special Provisions section 5-1.20H.

17-3.04 Payment

Removing all portions of the existing standing trees (including stumps and roots) with 4-inch DBH tagged for removal and disposal outside of County right-of-way and slope and drainage easements.

Trimming of trees for access is either paid in Special Provisions section 17-2 "Clearing and Grubbing" or Special Provisions section 19-11 "Construct Access".

Payment for trees removed for access in temporary construction easements are paid in accordance with Special Provisions section 19-11 "Construct Access".

Replace the paragraph in Special Provision section 19-4.04 with:

Replace all references to Structure Excavation (Rock) in Plan sheets A4RWL-1 (79 of 180) and A4CG (81 of 180) with Structure Excavation (Abut 4 / Ret Wall 4f) (Rock) to match the name revision to Bid Item #22. Payment for rock excavation at Abutment 4 and Retaining Wall 4F, including pre-splitting and controlled blasting, is paid for under Bid Item 22. Payment for rock excavation, including pre-splitting and controlled blasting, at all other locations will be paid for by the bid item(s) that necessitate the rock excavation.

Replace the last sentence in the eighth paragraph of the Addendum #1 replacement of Special Provision section 19-11 with:

You must also account for coverage under the Construction General Permit, associated erosion control plans, grading plans as applicable, and ORMP requirements discussed herein within any temporary construction easements you procure on private property outside the limits of the Project. Provide proof of these documents with the agreements made with private property owners prior to any clearing or grading on private property.

Replace the second paragraph of Special Provision section 50-1.02D(3) with:

Smooth HDPE duct must be manufactured in accordance with ASTM D3035 or ASTM F714.

Replace the last sentence in the eighth paragraph of Special Provision section 51-8.01C(2) with:

The Geometry Control Technician must be intimately familiar with the Contractor's Geometry Control Manual and Construction Manual and must have hands-on experience controlling geometry on three (3) segmentally erected balanced cantilever bridges completed within the last fifteen (15) years with at least one (1) bridge constructed by the cast-in-place, segmental method. The Geometry Control Technician may be a firm that specializes in cast-in-place segmental design and construction provided there is one qualifying individual in responsible charge of the firm's team. The qualifying individual must meet, at minimum, the requirements of this section. The qualifying individual in responsible charge must have direct access to monitoring and controlling the geometry of successive cast-in-place segmental sections to the approved Geometry Control Plan, line, and grade of the structure. The Geometry Control Technician must have the authorization to direct field changes as needed to assure the final geometry of the structure meets the lines and grades per Plan.

Replace the last paragraph of Special Provision section 51-8.01C(3)(b) with:

All calculations included with the Construction Analysis Report must be sealed and signed by a Professional Engineer registered in the State of California. The Registered Professional Engineer must have a minimum of four (4) years of cumulative relevant experience obtained over the past 15 years in the design and construction of post-tensioned concrete box girder bridges constructed using balanced cantilever methods. The Registered Professional Engineer may be a firm that specializes in cast-in-place segmental design and construction as long as there is one qualifying individual in responsible charge of the firm's team. The qualifying individual must meet, at minimum, the requirements of this section. The qualifying individual in responsible charge must have the authorization to make field changes as needed to assure that the construction means and methods meet the approved designs and calculations. The qualifying individual or their qualified designee must certify the means and methods constructed in the field meet the approved designs and calculations prior to loading.

Replace the list addition in Special Provisions section 64-2.04 with:

4. Includes trench excavation and backfill as shown
5. Includes slurry cement backfill as shown
6. Includes construction and materials for pipe anchorage system

EXHIBIT A

CONTRACTOR'S BID AND BID PRICE SCHEDULE

MOSQUITO ROAD AT SOUTH FORK AMERICAN RIVER

BRIDGE REPLACEMENT

CONTRACT NO. 5084, CIP NO. 36105028 (77126)

ITEM NO.	ITEM CODE		ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
BASE BID (SCHEDULE A)							
1		072007A	Excavation Safety	LS	1		
2		080050	Progress Schedule (Level 3 Critical Path Method)	LS	1		
3		100100	Develop Water Supply	LS	1		
4		120090	Construction Area Signs	LS	1		
5		120100	Traffic Control System	LS	1		
6		128652	Portable Changeable Message Sign	LS	1		
7		129000	Temporary Railing (Type K)	LF	520		
8		129110	Temporary Crash Cushion	EA	5		
9		130100	Job Site Management	LS	1		
10		130300	Prepare Storm Water Pollution Prevention Plan	LS	1		
11		130310	Rain Event Action Plan	EA	20	500.00	10,000.00
12		130320	Storm Water Sampling and Analysis Day	EA	20	500.00	10,000.00

13		130330	Storm Water Annual Report	EA	2	2,000.00	4,000.00
14		149001A	Prepare Fugitive Dust Control Plan	LS	1		
15		160110	Temporary High-Visibility Fence	LF	4,700		
16		**160120**	**Tree Removal**	**EA**	**165**		
17		170103	Clearing and Grubbing	LS	1		
18	F	190101	Roadway Excavation	CY	**5,788**		
19		190185	Shoulder Backing	TON	60		
20	F	192003	Structure Excavation (Bridge)	CY	822		
21		192004	Supplemental Structure Excavation and Backfill	CY	300		
22	F	192035	Structure Excavation **(Abut 4 / Ret Wall 4F)** (Rock)	CY	902		
23	F	192049	Structure Excavation (Soldier Pile Wall)	CY	60		
24	F	192055	Structure Excavation (Soil Nail Wall)	CY	8,180		
25	F	193000	Backfill (Pier)	CY	2,410		
26	F	193003	Structure Backfill (Bridge)	CY	1,357		
27	F	193028	Structure Backfill (Soil Nail Wall)	CY	31		
28	F	193029	Structure Backfill (Soldier Pile Wall)	CY	87		
29	F	193116	Concrete Backfill (Soldier Pile Wall)	CY	103		
30	F	193119	Lean Concrete Backfill	CY	20		

31		194001	Ditch Excavation	CY	89		
32	F	198010	Imported Borrow	CY	**11,801**		
33		198250	Geosynthetic Reinforcement	SQYD	950		
34		19XXXX	Construct Access	LS	1		
35		210270	Rolled Erosion Control Product (Netting)	SQFT	33,000		
36		210350	Fiber Rolls	LF	2,500		
37		210430	Hydroseed (3-Step)	SQFT	60,000		
38		260203	Class 2 Aggregate Base	CY	1,520		
39		**303000**	**Pulverize AC**	**SQYD**	**690**		
40		390132	Hot Mix Asphalt (Type A, PG 64-16)	TON	1,400		
41		394073	Place Hot Mix Asphalt Dike (Type A)	LF	200		
42		398200	Cold Plane Asphalt Concrete Pavement	SQYD	300		
43	**F**	460220	Ground Anchor (T = 100 Kips)	EA	121		
44	**F**	460230	Ground Anchor (T = **210** Kips)	EA	111		
45	**F**	460300	Soil Nail	LF	5,721		
46	F	490311	Steel Soldier Pile (HP 12 x 74)	LF	1279		
47	F	490400	24" Drilled Hole	LF	1058		
48		490604	30" Cast-In-Drilled-Hole Concrete Piling	LF	317		

49		500001	Prestressing Cast-In-Place Concrete	LS	1		
50	F	510051	Structural Concrete, Bridge (Footing)	CY	2,231		
51	F	510052	Structural Concrete, Bridge (Pier)	CY	2,396		
52	F	510053	Structural Concrete, Bridge (Abutments)	CY	282		
53	F	510054	Structural Concrete, Bridge (Polymer Fiber)	CY	6442		
54	F	510060	Structural Concrete, Retaining Wall	CY	405		
55	F	510085	Structural Concrete, Approach Slab (Type EQ Modified)	CY	27		
56		518051	PTFE Spherical Bearing	EA	4		
57		519107	Joint Seal Assembly (MR 10")	LF	71		
58	F	520102	Bar Reinforcing Steel (Bridge)	LB	2,098,350		
59	F	520103	Bar Reinforcing Steel (Retaining Wall)	LB	174,767		
60	F	520110	Bar Reinforcing Steel (Epoxy Coated) (Bridge)	LB	569,037		
61	F	520120	Headed Bar Reinforcement	EA	12,136		
62	F	530050	Sculpted Shotcrete	SQFT	10,355		
63	F	530100	Shotcrete	CY	545		
64	F	530200	Structural Shotcrete	CY	600		
65	F	575004	Timber Lagging	MFBM	9.2		
66		590120	Clean And Paint Steel Soldier Piling	LS	1		

67		600037	Prepare Concrete Bridge Deck Surface	SQFT	40,120		
68	F	600041	Furnish Polyester Concrete Overlay	CF	3,343		
69	F	600043	Place Polyester Concrete Overlay	SQFT	40,120		
70		641107	18" Plastic Pipe	LF	281		
71		641131	48" Plastic Pipe	LF	188		
72		698100A	18" Plastic Pipe Downdrain (Fusion Welded)	LF	599		
73		703450	Welded Steel Pipe Casing (Bridge)	LF	40		
74		705011	18" Steel Flared End Section	EA	1		
75		705031	48" Steel Flared End Section	EA	2		
76		707117	36" Precast Concrete Pipe Inlet (Type OCPI or GCP)	EA	3		
77		707117A	Drainage Inlet	EA	3		
78		707125	48" Precast Concrete Pipe Inlet (Type OCPI or GCP)	EA	4		
79		707217	36" Precast Concrete Pipe Manhole	EA	1		
80		710136	Remove Pipe	LF	32		
81	F	721420	Concrete (Ditch Lining)	CY	27		
82		723055A	Rock Slope Protection (1/4 T, Class V, Method A)	TON	76		
83		723065A	Rock Slope Protection (300 lb, Class IV, Method A)	TON	644		
84		723075	Rock Slope Protection (150 lb, Class III, Method B)	TON	3,486		

85		723088	Rock Slope Protection (60 lb, Class II, Method B)	TON	299		
86		723125	Concreted-Rock Slope Protection (Class III, Method A)	TON	59		
87	**F**	730045	Minor Concrete (Gutter)	CY	5		
88	F	750501	Miscellaneous Metal (Bridge)	LB	13,900		
89		**77000A**	**Joint trench**	**LF**	**1452**		
90	**F**	780445	Prepare and Stain Shotcrete	SQFT	10,355		
91		780446	Stain Galvanized Surfaces	LS	1		
92		780600	Inclinometers	EA	8		
93		810180A	Delineator (Type E/Class 2, Barrier Mounted, or Culvert Marker)	EA	29		
94		820840A	Roadside Sign - One Post, Two Post, or Barrier Mounted	EA	34		
95		832006	Midwest Guardrail System (Steel Post)	LF	290		
96		832070	Vegetation Control (Minor Concrete)	SQYD	250		
97	F	833090	Tubular Handrailing (Modified)	LF	2,666		
98	F	839521	Cable Railing	LF	629		
99		839540	Transition Railing (Type STB)	EA	1		
100		839543	Transition Railing (Type WB-31)	EA	3		
101		839584A	MASH In-Line Terminal System	EA	5		
102	F	839700	Concrete Barrier (Type 85 Modified)	LF	2,678		

103		840505	6" Thermoplastic Traffic Stripe	LF	8,000		
104		840515	Thermoplastic Pavement Markings	SQFT	100		
105		999990	Mobilization	LS	1		
PIER 2 ALTERNATIVE BID (SCHEDULE B)							
P2B1		490605	36" Cast-In-Drilled-Hole Concrete Piling	LF	2,389		
P2B2	F	520102	Bar Reinforcing Steel (Bridge)	LB	118,639		
P2B3	F	500030	HS Bar	LB	54,120		
PIER 2 ALTERNATIVE BID (SCHEDULE C)							
P2C1		490607	48" Cast-In-Drilled-Hole Concrete Piling	LF	1,538		
P2C2	F	520102	Bar Reinforcing Steel (Bridge)	LB	154,921		
P2C3	F	500030	HS Bar	LB	25,256		
PIER 2 ALTERNATIVE BID (SCHEDULE D)							
P2D1		490609	60" Cast-In-Drilled-Hole Concrete Piling	LF	965		
P2D2	F	520102	Bar Reinforcing Steel (Bridge)	LB	141,375		
P2D3	F	500030	HS Bar	LB	17,130		
PIER 3 ALTERNATIVE BID (SCHEDULE E)							
P3E1		490605	36" Cast-In-Drilled-Hole Concrete Piling	LF	1,899		
P3E2	F	520102	Bar Reinforcing Steel (Bridge)	LB	99,317		
P3E3	F	500030	HS Bar	LB	54,120		
PIER 3 ALTERNATIVE BID (SCHEDULE F)							

P3F1		490607	48" Cast-In-Drilled-Hole Concrete Piling	LF	1,244		
P3F2	F	520102	Bar Reinforcing Steel (Bridge)	LB	130,723		
P3F3	F	500030	HS Bar	LB	25,256		
PIER 3 ALTERNATIVE BID (SCHEDULE G)							
P3G1		490609	60" Cast-In-Drilled-Hole Concrete Piling	LF	809		
P3G2	F	520102	Bar Reinforcing Steel (Bridge)	LB	122,208		
P3G3	F	500030	HS Bar	LB	17,130		
PIER 3 ALTERNATIVE BID (SCHEDULE H)							
P3H1		495000	Micropile	EA	154		
Total Bid:							

(F) Final Pay Quantity
(LS) Lump Sum

PROPOSAL PAY ITEMS AND BID PRICE SCHEDULE
MOSQUITO ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REPLACEMENT
CONTRACT NO. 5084 / CIP NO. 36105028

ITEM NO.	ITEM CODE		ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
BASE BID (SCHEDULE A)							
1		072007A	Excavation Safety	LS	1		
2		080050	Progress Schedule (Level 3 Critical Path Method)	LS	1		
3		100100	Develop Water Supply	LS	1		
4		120090	Construction Area Signs	LS	1		
5		120100	Traffic Control System	LS	1		
6		128652	Portable Changeable Message Sign	LS	1		
7		129000	Temporary Railing (Type K)	LF	520		
8		129110	Temporary Crash Cushion	EA	5		
9		130100	Job Site Management	LS	1		
10		130300	Prepare Storm Water Pollution Prevention Plan	LS	1		
11		130310	Rain Event Action Plan	EA	20	500.00	10,000.00
12		130320	Storm Water Sampling and Analysis Day	EA	20	500.00	10,000.00
13		130330	Storm Water Annual Report	EA	2	2,000.00	4,000.00
14		149001A	Prepare Fugitive Dust Control Plan	LS	1		
15		160110	Temporary High-Visibility Fence	LF	4,700		

16		**160120**	**Tree Removal**	**EA**	**165**		
17		170103	Clearing and Grubbing	LS	1		
18	F	190101	Roadway Excavation	CY	**5,788**		
19		190185	Shoulder Backing	TON	60		
20	F	192003	Structure Excavation (Bridge)	CY	822		
21		192004	Supplemental Structure Excavation and Backfill	CY	300		
22	F	192035	Structure Excavation **(Abut 4 /Ret Wall 4F)** (Rock)	CY	902		
23	F	192049	Structure Excavation (Soldier Pile Wall)	CY	60		
24	F	192055	Structure Excavation (Soil Nail Wall)	CY	8,180		
25	F	193000	Backfill (Pier)	CY	2,410		
26	F	193003	Structure Backfill (Bridge)	CY	1,357		
27	F	193028	Structure Backfill (Soil Nail Wall)	CY	31		
28	F	193029	Structure Backfill (Soldier Pile Wall)	CY	87		
29	F	193116	Concrete Backfill (Soldier Pile Wall)	CY	103		
30	F	193119	Lean Concrete Backfill	CY	20		
31		194001	Ditch Excavation	CY	89		
32	F	198010	Imported Borrow	CY	**11,801**		
33		198250	Geosynthetic Reinforcement	SQYD	950		

34		19XXXX	Construct Access	LS	1		
35		210270	Rolled Erosion Control Product (Netting)	SQFT	33,000		
36		210350	Fiber Rolls	LF	2,500		
37		210430	Hydroseed (3-Step)	SQFT	60,000		
38		260203	Class 2 Aggregate Base	CY	1,520		
39		**303000**	**Pulverize AC**	**SQYD**	**690**		
40		390132	Hot Mix Asphalt (Type A, PG 64-16)	TON	1,400		
41		394073	Place Hot Mix Asphalt Dike (Type A)	LF	200		
42		398200	Cold Plane Asphalt Concrete Pavement	SQYD	300		
43	**F**	460220	Ground Anchor (T = 100 Kips)	EA	121		
44	**F**	460230	Ground Anchor (T = **210** Kips)	EA	111		
45	**F**	460300	Soil Nail	LF	5,721		
46	F	490311	Steel Soldier Pile (HP 12 x 74)	LF	1279		
47	F	490400	24" Drilled Hole	LF	1058		
48		490604	30" Cast-In-Drilled-Hole Concrete Piling	LF	317		
49		500001	Prestressing Cast-In-Place Concrete	LS	1		
50	F	510051	Structural Concrete, Bridge (Footing)	CY	2,231		
51	F	510052	Structural Concrete, Bridge (Pier)	CY	2,396		

52	F	510053	Structural Concrete, Bridge (Abutments)	CY	282		
53	F	510054	Structural Concrete, Bridge (Polymer Fiber)	CY	**6,442**		
54	F	510060	Structural Concrete, Retaining Wall	CY	405		
55	F	510085	Structural Concrete, Approach Slab (Type EQ Modified)	CY	27		
56		518051	PTFE Spherical Bearing	EA	4		
57		519107	Joint Seal Assembly (MR 10")	LF	71		
58	F	520102	Bar Reinforcing Steel (Bridge)	LB	2,098,350		
59	F	520103	Bar Reinforcing Steel (Retaining Wall)	LB	174,767		
60	F	520110	Bar Reinforcing Steel (Epoxy Coated) (Bridge)	LB	569,037		
61	F	520120	Headed Bar Reinforcement	EA	**12,136**		
62	F	530050	Sculpted Shotcrete	SQFT	10,355		
63	F	530100	Shotcrete	CY	545		
64	F	530200	Structural Shotcrete	CY	600		
65	F	575004	Timber Lagging	MFBM	9.2		
66		590120	Clean And Paint Steel Soldier Piling	LS	1		
67		600037	Prepare Concrete Bridge Deck Surface	SQFT	40,120		
68	F	600041	Furnish Polyester Concrete Overlay	CF	3,343		
69	F	600043	Place Polyester Concrete Overlay	SQFT	40,120		

70		641107	18" Plastic Pipe	LF	281		
71		641131	48" Plastic Pipe	LF	188		
72		698100A	18" Plastic Pipe Downdrain (Fusion Welded)	LF	599		
73		703450	Welded Steel Pipe Casing (Bridge)	LF	40		
74		705011	18" Steel Flared End Section	EA	1		
75		705031	48" Steel Flared End Section	EA	2		
76		707117	36" Precast Concrete Pipe Inlet (Type OCPI or GCP)	EA	3		
77		707117A	Drainage Inlet	EA	3		
78		707125	48" Precast Concrete Pipe Inlet (Type OCPI or GCP)	EA	4		
79		707217	36" Precast Concrete Pipe Manhole	EA	1		
80		710136	Remove Pipe	LF	32		
81	**F**	721420	Concrete (Ditch Lining)	CY	27		
82		723055A	Rock Slope Protection (1/4 T, Class V, Method A)	TON	76		
83		723065A	Rock Slope Protection (300 lb, Class IV, Method A)	TON	644		
84		723075	Rock Slope Protection (150 lb, Class III, Method B)	TON	3,486		
85		723088	Rock Slope Protection (60 lb, Class II, Method B)	TON	299		
86		723125	Concreted-Rock Slope Protection (Class III, Method A)	TON	59		
87	**F**	730045	Minor Concrete (Gutter)	CY	5		

88	F	750501	Miscellaneous Metal (Bridge)	LB	13,900		
89		**77000A**	**Joint Trench**	**LF**	**1,452**		
90	**F**	780445	Prepare and Stain Shotcrete	SQFT	10,355		
91		780446	Stain Galvanized Surfaces	LS	1		
92		780600	Inclinometers	EA	8		
93		810180A	Delineator (Type E/Class 2, Barrier Mounted, or Culvert Marker)	EA	29		
94		820840A	Roadside Sign - One Post, Two Post, or Barrier Monted	EA	34		
95		832006	Midwest Guardrail System (Steel Post)	LF	290		
96		832070	Vegetation Control (Minor Concrete)	SQYD	250		
97	F	833090	Tubular Handrailing (Modified)	LF	2,666		
98	F	839521	Cable Railing	LF	629		
99		839540	Transition Railing (Type STB)	EA	1		
100		839543	Transition Railing (Type WB-31)	EA	3		
101		839584A	MASH In-Line Terminal System	EA	5		
102	F	839700	Concrete Barrier (Type 85 Modified)	LF	2,678		
103		840505	6" Thermoplastic Traffic Stripe	LF	8,000		
104		840515	Thermoplastic Pavement Markings	SQFT	100		
105		999990	Mobilization	LS	1		
PIER 2 ALTERNATIVE BID (SCHEDULE B)							

P2B1		490605	36" Cast-In-Drilled-Hole Concrete Piling	LF	2,389		
P2B2	F	520102	Bar Reinforcing Steel (Bridge)	LB	118,639		
P2B3	F	500030	HS Bar	LB	54,120		
PIER 2 ALTERNATIVE BID (SCHEDULE C)							
P2C1		490607	48" Cast-In-Drilled-Hole Concrete Piling	LF	1,538		
P2C2	F	520102	Bar Reinforcing Steel (Bridge)	LB	154,921		
P2C3	F	500030	HS Bar	LB	25,256		
PIER 2 ALTERNATIVE BID (SCHEDULE D)							
P2D1		490609	60" Cast-In-Drilled-Hole Concrete Piling	LF	965		
P2D2	F	520102	Bar Reinforcing Steel (Bridge)	LB	141,375		
P2D3	F	500030	HS Bar	LB	17,130		
PIER 3 ALTERNATIVE BID (SCHEDULE E)							
P3E1		490605	36" Cast-In-Drilled-Hole Concrete Piling	LF	1,899		
P3E2	F	520102	Bar Reinforcing Steel (Bridge)	LB	99,317		
P3E3	F	500030	HS Bar	LB	54,120		
PIER 3 ALTERNATIVE BID (SCHEDULE F)							
P3F1		490607	48" Cast-In-Drilled-Hole Concrete Piling	LF	1,244		
P3F2	F	520102	Bar Reinforcing Steel (Bridge)	LB	130,723		
P3F3	F	500030	HS Bar	LB	25,256		
PIER 3 ALTERNATIVE BID (SCHEDULE G)							
P3G1		490609	60" Cast-In-Drilled-Hole Concrete Piling	LF	809		

P3G2	F	520102	Bar Reinforcing Steel (Bridge)	LB	122,208		
P3G3	F	500030	HS Bar	LB	17,130		
PIER 3 ALTERNATIVE BID (SCHEDULE H)							
P3H1		495000	Micropile	EA	154		
Total Bid:							

(F) Final Pay Quantity
(LS) Lump Sum

(NOTICE: Bidders failure to execute the questionnaires and statements contained in this proposal as required by applicable laws and regulations, or the determinations by County of El Dorado based upon those questionnaires and statements, may prohibit award of the subject Contract to the bidder.)

Will provide a Registered Professional Engineer in the State of California with the following qualifications:

_____

(**Insert Name of Registered Professional Engineer in the State of California)**

- ☐ A minimum of 4 years of cumulative relevant experience obtained over the past 15 years in the design and construction of post-tensioned concrete box girder bridges constructed using balanced cantilever techniques; and
- ☐ If a firm specializes in cast in place segmental design and construction, list the firm and the person or personnel that satisfies the requirements

NOTE: The qualifications listed above are intended to highlight specific requirements for specialized personnel integral to the erection of the balanced cantilever superstructure. The list above is not comprehensive of all contractor qualification requirements. The contractor will be required to show proof of qualifications if prompted by the County. The contractor is responsible for meeting all qualification requirements listed in the Specifications.

The above Certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

MOSQUITO ROAD - 'M' LINE

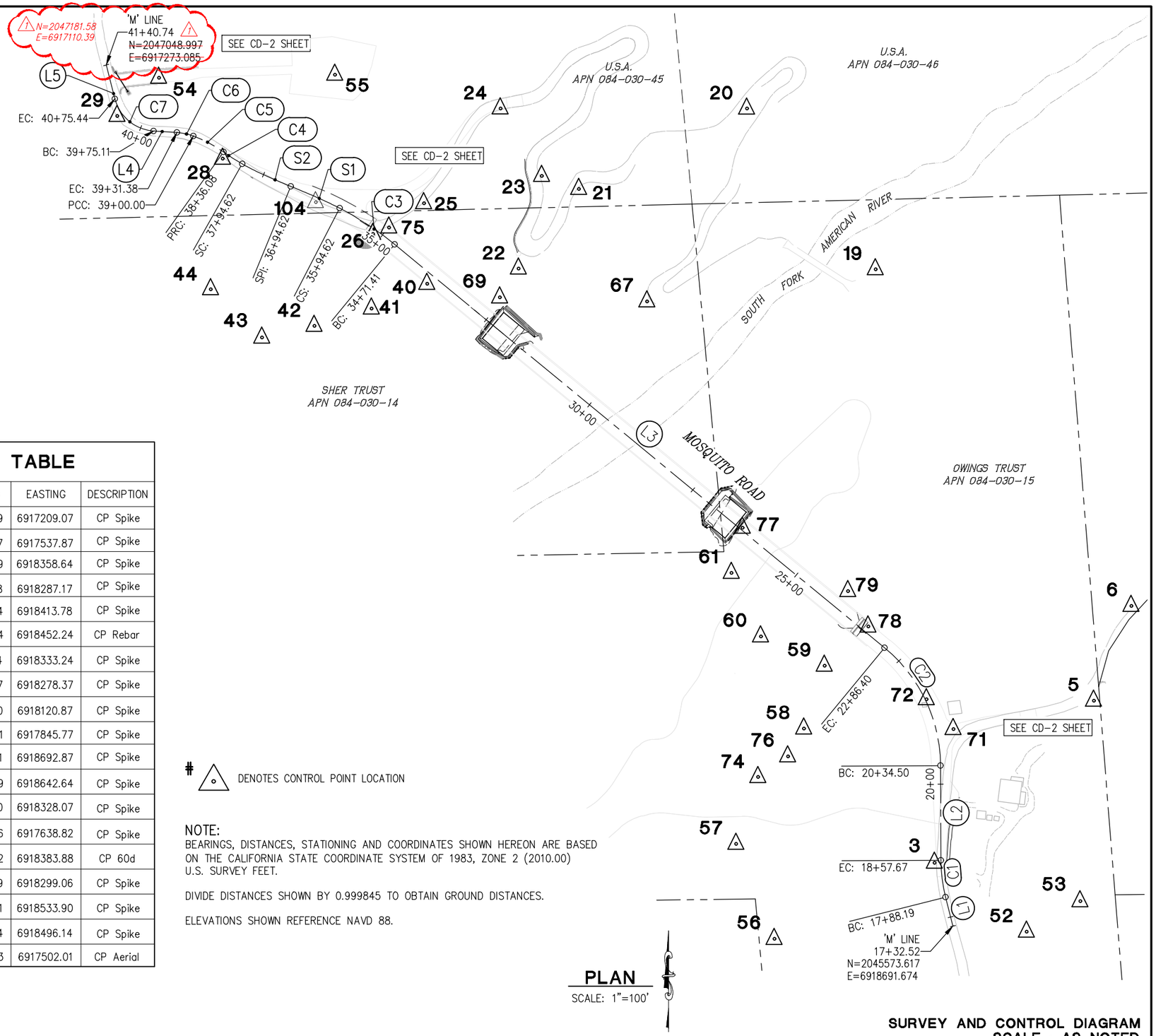
NUMBER	LENGTH	RADIUS	LINE / CHORD DIRECTION & LENGTH	DELTA	A VALUE
L1	55.67		N 14° 07' 39" W		
C1	69.48	287.00	N 7° 11' 30" W – 69.32	13° 52' 18"	
L2	176.83		N 0° 15' 21" W		
C2	251.90	287.00	N 25° 24' 01" W – 243.89	50° 17' 19"	
L3	1185.01		N 50° 32' 40" W		
C3	123.21	582.00	N 56° 36' 32" W – 122.98	12° 07' 45"	
S1	100.00		N 65° 57' 19" W – 99.97		241.25
S2	100.00		N 65° 12' 32" W – 99.93		200.00
C4	41.46	400.00	N 57° 27' 51" W – 41.45	5° 56' 22"	
C5	63.92	241.00	N 62° 05' 33" W – 63.73	15° 11' 45"	
C6	31.38	108.59	N 77° 58' 06" W – 31.27	16° 33' 22"	
L4	43.73		N 86° 14' 47" W		
C7	100.33	80.00	N 50° 19' 00" W – 93.89	71° 51' 33"	
L5	65.30		N 14° 23' 14" W		

CONTROL TABLE

POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
1	1807.67	2045312.54	6918544.77	CP Spike
2	1781.18	2045418.62	6918729.08	CP Spike
3	1747.74	2045691.66	6918657.73	CP Spike
5	1711.09	2045994.44	6918955.17	CP Spike
6	1710.27	2046171.42	6919025.23	CP Spike
19	1347.88	2046800.12	6918547.59	CP Mag
20	1468.87	2047100.13	6918307.31	CP Spike
21	1516.55	2046949.90	6917993.40	CP Spike
22	1540.76	2046801.25	6917880.78	CP 60d
23	1550.90	2046974.34	6917924.08	CP Spike
24	1613.39	2047100.36	6917846.93	CP Mag
25	1640.75	2046923.45	6917704.03	CP Mag
26	1641.32	2046866.02	6917608.84	CP Spike
28	1673.70	2047006.50	6917328.29	CP Spike
29	1686.40	2047086.41	6917131.28	CP Mag
40	1558.01	2046772.86	6917709.96	CP 60d
41	1555.74	2046726.68	6917606.18	CP 60d
42	1561.74	2046694.23	6917499.36	CP 60d
43	1576.63	2046672.52	6917401.60	CP Mag
44	1575.65	2046762.59	6917305.97	CP 60d
52	1798.06	2045563.17	6918829.70	CP Mag
53	1829.63	2045619.88	6918929.83	CP Mag

CONTROL TABLE

POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
54	1705.40	2047157.59	6917209.07	CP Spike
55	1726.35	2047163.37	6917537.87	CP Spike
56	1738.64	2045549.59	6918358.64	CP Spike
57	1735.30	2045727.18	6918287.17	CP Spike
58	1739.43	2045942.34	6918413.78	CP Spike
59	1723.32	2046059.74	6918452.24	CP Rebar
60	1633.04	2046114.44	6918333.24	CP Spike
61	1539.52	2046233.17	6918278.37	CP Spike
67	1385.68	2046740.10	6918120.87	CP Spike
69	1527.18	2046747.51	6917845.77	CP Spike
71	1726.73	2045941.31	6918692.87	CP Spike
72	1717.01	2045996.99	6918642.64	CP Spike
74	1733.17	2045851.90	6918328.07	CP Spike
75	1640.08	2046877.86	6917638.82	CP Spike
76	1737.08	2045890.32	6918383.88	CP 60d
77	1514.78	2046317.49	6918299.06	CP Spike
78	1706.27	2046132.91	6918533.90	CP Spike
79	1659.54	2046199.04	6918496.14	CP Spike
104	1654.60	2046925.23	6917502.01	CP Aerial



PLAN
SCALE: 1"=100'

# DENOTES CONTROL POINT LOCATION

NOTE:
BEARINGS, DISTANCES, STATIONING AND COORDINATES SHOWN HEREON ARE BASED ON THE CALIFORNIA STATE COORDINATE SYSTEM OF 1983, ZONE 2 (2010.00) U.S. SURVEY FEET.

DIVIDE DISTANCES SHOWN BY 0.999845 TO OBTAIN GROUND DISTANCES.

ELEVATIONS SHOWN REFERENCE NAVD 88.

SURVEY AND CONTROL DIAGRAM
SCALE : AS NOTED

ORIGINAL SCALE IS IN INCHES
Drawing name: Z:\Civil 3D Projects\77126 Mosquito Rd Bridge Replacement\CADD Files\Sheets\CD-1.dwg Layout Tab: CD-1 Feb 15,2022 - 1:54pm SMcVey
FOR REDUCED PLANS

REVISION NUMBER	DATE	DESCRIPTION	BY
1	02/15/22	REVISED COORDINATES	JB

PROFESSIONAL LAND SURVEYOR JOSEPH C. NEELY No. LS 9026 STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF : Joseph C. Neely
REGISTERED CIVIL ENGINEER
DATE: 11/24/21

DESIGNED:	DRAWN:
JB	RR
CHECKED:	DATE:
JN	11/22/21
ROAD NUMBER:	
60	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

MOSQUITO ROAD BRIDGE
at SOUTH FORK AMERICAN RIVER
BRIDGE REPLACEMENT

SHEET
CD-1
2 OF 180
W.O. No. 77126

SOUTH CONFORM - 'S' LINE

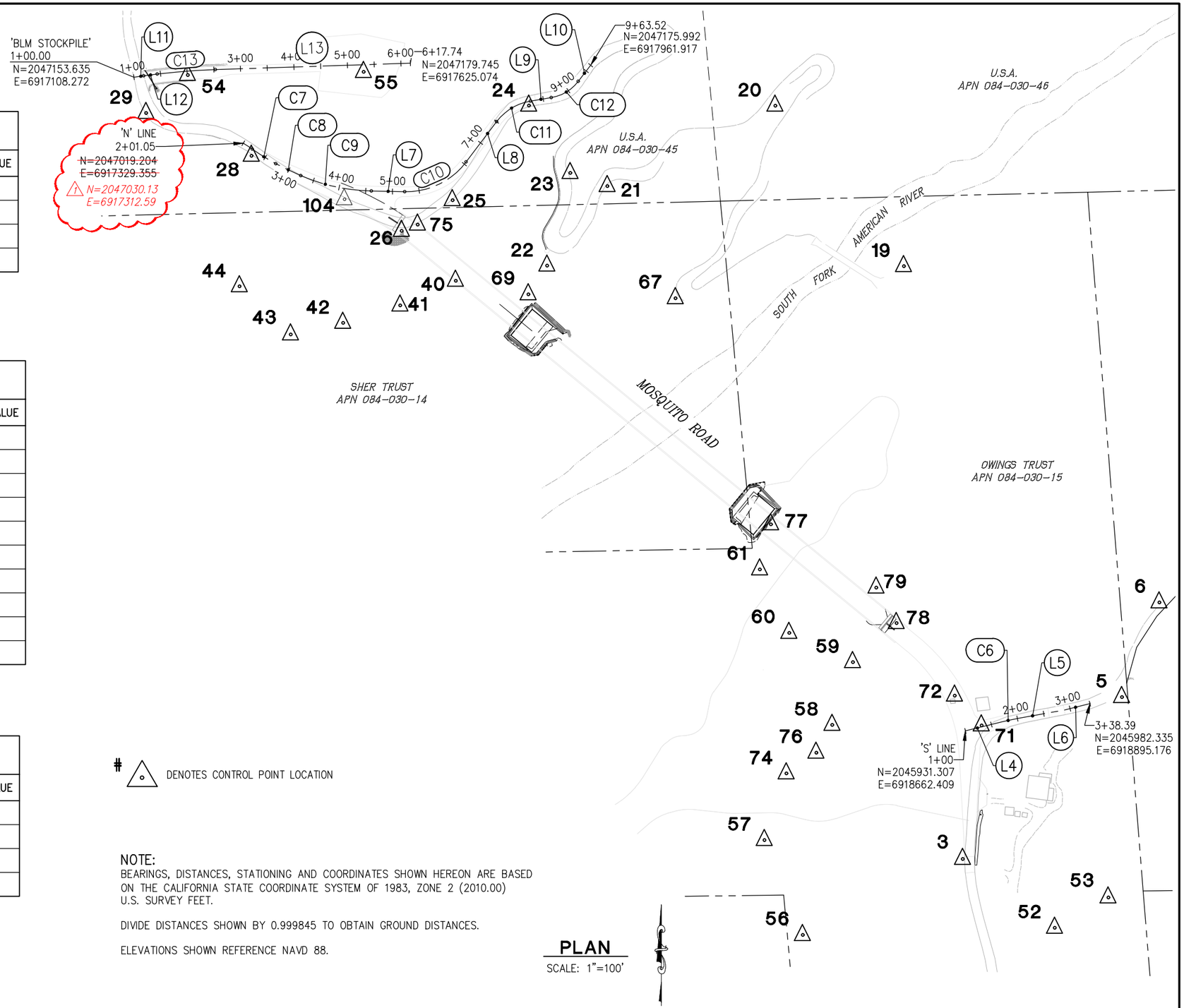
NUMBER	LENGTH	RADIUS	LINE / CHORD DIRECTION & LENGTH	DELTA	A VALUE
L4	69.58		N 76° 09' 50" E		
C6	33.32	550.00	N 77° 53' 57" E – 33.31	3° 28' 14"	
L5	86.08		N 79° 38' 04" E		
L6	49.42		N 76° 02' 47" E		

NORTH CONFORM - 'N' LINE

NUMBER	LENGTH	RADIUS	LINE / CHORD DIRECTION & LENGTH	DELTA	A VALUE
C7	52.05	378.15	S 58° 20' 54" E – 52.01	7° 53' 13"	
C8	51.62	696.42	S 64° 24' 54" E – 51.60	4° 14' 48"	
C9	136.11	350.00	S 77° 40' 44" E – 135.25	22° 16' 51"	
L7	62.32		S 88° 49' 09" E		
C10	132.28	140.00	N 64° 06' 47" E – 127.41	54° 08' 08"	
L8	94.53		N 37° 02' 42" E		
C11	75.79	100.00	N 58° 45' 27" E – 73.99	43° 25' 29"	
L9	39.60		N 80° 28' 11" E		
C12	60.10	80.00	N 58° 56' 47" E – 58.70	43° 02' 49"	
L10	38.06		N 37° 25' 22" E		

BLM STOCKPILE

NUMBER	LENGTH	RADIUS	LINE / CHORD DIRECTION & LENGTH	DELTA	A VALUE
L11	18.47		N 81° 56' 52" E		
L12	25.41		N 82° 58' 42" E		
C13	109.05	1214.91	N 85° 33' 00" E – 109.02	5° 08' 35"	
L13	364.81		N 88° 07' 17" E		



# DENOTES CONTROL POINT LOCATION

NOTE:
BEARINGS, DISTANCES, STATIONING AND COORDINATES SHOWN HEREON ARE BASED ON THE CALIFORNIA STATE COORDINATE SYSTEM OF 1983, ZONE 2 (2010.00) U.S. SURVEY FEET.

DIVIDE DISTANCES SHOWN BY 0.999845 TO OBTAIN GROUND DISTANCES.

ELEVATIONS SHOWN REFERENCE NAVD 88.

PLAN
SCALE: 1"=100'

SURVEY AND CONTROL DIAGRAM
SCALE : AS NOTED

ORIGINAL SCALE IS IN INCHES
Drawing name: Z:\Civil 3D Projects\77126 Mosquito Rd Bridge Replacement\CADD Files\Sheets\CD-1.dwg Layout Tab: CD-2 Feb 15,2022 - 1:54pm SMcVey
0 1 2
FOR REDUCED PLANS

REVISION			
NUMBER	DATE	DESCRIPTION	BY
1	02/15/22	REVISED COORDINATES	JB

PROFESSIONAL LAND SURVEYOR JOSEPH C. NEELY No. LS 9026 STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF : Joseph C. Neely
REGISTERED CIVIL ENGINEER
DATE: 11/24/21

DESIGNED:	DRAWN:
JB	RR
CHECKED:	DATE:
JCN	11/22/21
ROAD NUMBER:	
60	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

MOSQUITO ROAD BRIDGE
at SOUTH FORK AMERICAN RIVER
BRIDGE REPLACEMENT

SHEET
CD-2
3 OF 180
W.O. No. 77126

INDEX TO PLANS

STRUCTURE PLANS

SHEET NO. TITLE

STRUCTURE PLANS

SHEET NO. TITLE

STANDARD PLANS DATED 2018

	A3A	Abbreviations (Sheet 1 of 3)
	A3B	Abbreviations (Sheet 2 of 3)
	A3C	Abbreviations (Sheet 3 of 3)
	A10A	Legend – Lines and Symbols (Sheet 1 of 5)
	A10B	Legend – Lines and Symbols (Sheet 2 of 5)
	A10C	Legend – Lines and Symbols (Sheet 3 of 5)
	A10D	Legend – Lines and Symbols (Sheet 4 of 5)
	A10E	Legend – Lines and Symbols (Sheet 5 of 5)
	A10F	Legend – Soil (Sheet 1 of 2)
	A10G	Legend – Soil (Sheet 2 of 2)
	A10H	Legend – Rock
RSP	B0-1	Bridge Details
	B0-3	Bridge Details
	B0-13	Bridge Details
	B3-1A	Retaining Wall Type 1 (Case 1)
	B3-3A	Retaining Wall Type 1A (Case 1)
	B3-5	Retaining Wall Details No. 1
	B3-6	Retaining Wall Details No. 2
RSP	B7-8	Deck Drainage Details
RSP	B7-10	Utility Opening – Box Girder
	B7-11	Utility Details
	B9-4	Structure Approach – Type EQ (10)
	B9-5	Structure Approach – Slab Details
	B9-6	Structure Approach – Drainage Details
	B11-47	Cable Railing

QUINCY ENGINEERING
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SYSTRA INTERNATIONAL BRIDGE TECHNOLOGIES
9325 SKY PARK COURT, SUITE 320
SAN DIEGO, CA 92123
P: 858.566.5008

REVISION			
NUMBER	DATE	DESCRIPTION	BY
1	1/28/22	Sheet Replaced, Removed Draft from Log of Test Boring Sheets	GY

REGISTERED PROFESSIONAL ENGINEER
GREG YOUNG
No. C67707
Exp. 6/30/23
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :
Greg Young
REGISTERED CIVIL ENGINEER
DATE: 1/28/22

DESIGNED:	DRAWN:
GRY	AOS
CHECKED:	DATE:
GMG	1/27/2022
ROAD NUMBER:	
60	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

MOSQUITO ROAD AT
SOUTH FORK AMERICAN RIVER BRIDGE REPLACEMENT
INDEX TO PLANS

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65 OF 180
W.O. No. 77126

GENERAL NOTES
LOAD FACTOR DESIGN

DESIGN: AASHTO LRFD Bridge Design Specifications, 6th edition and the Caltrans Amendments preface dated January 2014 except as noted below:

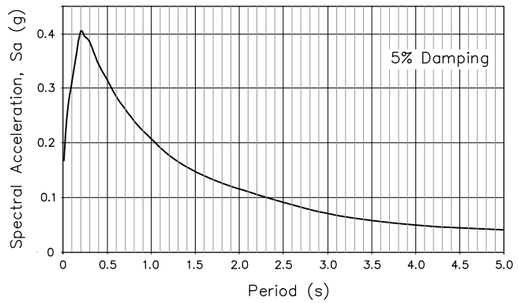
- AASHTO LRFD Bridge Design Specifications, 8th edition (wind loads, wind load factors, and strut and tie provisions)
- Comite Euro-International du Beton CEB-FIP Model Code 1990 (creep and shrinkage)

SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 2.0 dated April 2019.

DEAD LOAD: Includes Polyester Concrete Overlay and future utility load up to a combined 35 psf deck area equivalent

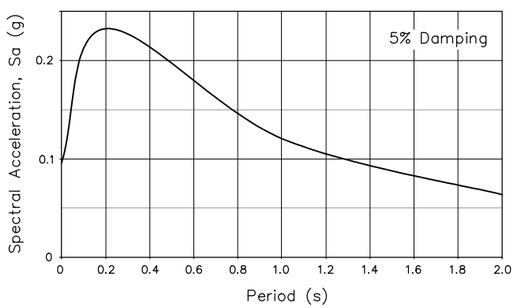
LIVE LOADING: HL93 and permit design load

SEISMIC LOADING: Recovery Standard Bridge
Soil profile: Vs30 = 370 m/s



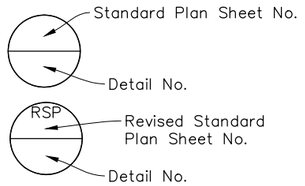
SAFETY EVALUATION EARTHQUAKE (SEE)

Moment Magnitude: Mmax = 7.0
Peak Ground Acceleration 0.17g



FUNCTIONAL EVALUATION EARTHQUAKE (FEE)

Moment Magnitude: Mmax = 7.1
Peak Ground Acceleration 0.10g



CONCRETE: fy = 60 ksi
f'c = 3.6 ksi unless otherwise noted, see Concrete Strength and Type Limits on "Deck Contours No. 1" sheet.
n = 8
See prestressing notes on "Prestressing Notes" sheet.

HS Bar: ASTM A722
Grade 150
All thread bar

(N) NOT A SEPARATE PAY ITEM, INFORMATIONAL ONLY

BRIDGE QUANTITIES (INCLUDES ABUTMENT 1 AND 4 RETAINING WALLS)

STRUCTURE EXCAVATION (BRIDGE)	822	CY
SUPPLEMENTAL STRUCTURE EXCAVATION AND BACKFILL	300	CY
STRUCTURE EXCAVATION (ROCK)	902	CY
STRUCTURE BACKFILL (BRIDGE)	1,357	CY
30" CAST-IN-DRILLED-HOLE CONCRETE PILING	317	LF
PRESTRESSING CAST-IN-PLACE CONCRETE	LS	LS
STRUCTURAL CONCRETE, BRIDGE (FOOTING)	2,231	CY
STRUCTURAL CONCRETE, BRIDGE (PIER)	2,396	CY
STRUCTURAL CONCRETE, BRIDGE (ABUTMENTS)	282	CY
STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	6,442	CY
STRUCTURAL CONCRETE, (RETAINING WALL)	405	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE EQ MODIFIED)	27	CY
PTFE SPHERICAL BEARING	4	EA
JOINT SEAL ASSEMBLY (MR = 10")	71	LF
BAR REINFORCING STEEL (BRIDGE)	2,098,350	LB
BAR REINFORCING STEEL (EPOXY COATED) (BRIDGE)	569,037	LB
HEADED BAR REINFORCEMENT	12,136	EA
PREPARE CONCRETE BRIDGE DECK SURFACE	40,120	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	3,343	CF
PLACE POLYESTER CONCRETE OVERLAY	40,120	SQFT
WELDED STEEL PIPE CASING (BRIDGE)	40	LF
MISCELLANEOUS METAL (BRIDGE)	13,900	LB
TUBULAR HANDRAILING (MODIFIED)	2,666	LF
CABLE RAILING	12	LF
CONCRETE BARRIER (TYPE 85 MODIFIED)	2,678	LF

PIER 2 FOUNDATION ALTERNATIVE (SELECT ONE GROUP)

36" CAST-IN-DRILLED-HOLE CONCRETE PILING	2,389	LF
BAR REINFORCING STEEL (BRIDGE)	118,639	LB
HS BAR	54,120	LB
48" CAST-IN-DRILLED-HOLE CONCRETE PILING	1,538	LF
BAR REINFORCING STEEL (BRIDGE)	154,921	LB
HS BAR	25,256	LB
60" CAST-IN-DRILLED-HOLE CONCRETE PILING	965	LF
BAR REINFORCING STEEL (BRIDGE)	141,375	LB
HS BAR	17,130	LB

PIER 3 FOUNDATION ALTERNATIVE (SELECT ONE GROUP)

36" CAST-IN-DRILLED-HOLE CONCRETE PILING	1,899	LF
BAR REINFORCING STEEL (BRIDGE)	99,317	LB
HS BAR	54,120	LB
48" CAST-IN-DRILLED-HOLE CONCRETE PILING	1,244	LF
BAR REINFORCING STEEL (BRIDGE)	130,723	LB
HS BAR	25,256	LB
60" CAST-IN-DRILLED-HOLE CONCRETE PILING	809	LF
BAR REINFORCING STEEL (BRIDGE)	122,208	LB
HS BAR	17,130	LB
MICROPILE	154	EA

PIER 2 AND 3 RETAINING WALL QUANTITIES

	PIER 2	PIER 3	TOTAL	
STRUCTURE EXCAVATION (SOLDIER PILE WALL)	43	17	60	CY
STRUCTURE EXCAVATION (SOIL NAIL WALL)	3,230	4,950	8,180	CY
BACKFILL (PIER)	1,150	1,260	2,410	CY
STRUCTURE BACKFILL (SOIL NAIL WALL)	15	16	31	CY
STRUCTURE BACKFILL (SOLDIER PILE WALL)	66	21	87	CY
CONCRETE BACKFILL (SOLDIER PILE WALL)	67	36	103	CY
LEAN CONCRETE BACKFILL	13	7	20	CY
DITCH EXCAVATION	(SEE QUANTITY SUMMARY TABLES ON ROADWAY DRAINAGE PLANS)			
GROUND ANCHOR (T=100 KIPS)	0	121	121	EA
GROUND ANCHOR (T=210 KIPS)	111	0	111	EA
SOIL NAIL	2,621	3,100	5,721	LF
STEEL SOLDIER PILE (HP 12 X 74)	841	438	1,279	LF
24" DRILLED HOLE	685	373	1,058	LF
BAR REINFORCING STEEL (RETAINING WALL)	81,663	93,104	174,767	LB
SCULPTED SHOTCRETE	4,729	5,626	10,355	SQFT
SHOTCRETE	250	295	545	CY
STRUCTURAL SHOTCRETE	264	335	600	CY
TIMBER LAGGING	7.0	2.2	9.2	MFBM
CLEAN AND PAINT STEEL SOLDIER PILING	LS	LS	LS	LS
ROCK SLOPE PROTECTION (150 LB, Class III, METHOD B)	(SEE QUANTITY SUMMARY TABLES ON ROADWAY DRAINAGE PLANS)			
(N) ROCK SLOPE PROTECTION FABRIC (CLASS 8)	(SEE QUANTITY SUMMARY TABLES ON ROADWAY DRAINAGE PLANS)			
MINOR CONCRETE (GUTTER)	2.3	2.0	4.3	CY
PREPARE AND STAIN SHOTCRETE	4,729	5,626	10,355	SQFT
CABLE RAILING	320	297	617	LF
CONCRETE (DITCH LINING)	(SEE QUANTITY SUMMARY TABLES ON ROADWAY DRAINAGE PLANS)			

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SAN DIEGO, CA 92123
P: 858.566.5008

REVISION NUMBER	DATE	DESCRIPTION	BY
1	2/18/22	Sheet Replaced, combined Box Girder and Polymer Fiber items increased Headed Bar Reinforcement quantity	GY

REGISTERED PROFESSIONAL ENGINEER — GREG YOUNG — No. C67707 — Exp. 6/30/23 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF : Greg Young
REGISTERED CIVIL ENGINEER 2/18/22
DATE:

DESIGNED:	DRAWN:
GRY	AOS
CHECKED:	DATE:
GMG	2/18/2022
ROAD NUMBER:	
60	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

MOSQUITO ROAD AT SOUTH FORK AMERICAN RIVER BRIDGE REPLACEMENT
GENERAL NOTES

SHEET GN r
66 OF 180
W.O. No. 77126

QUINCY ENGINEERING
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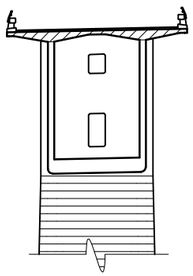
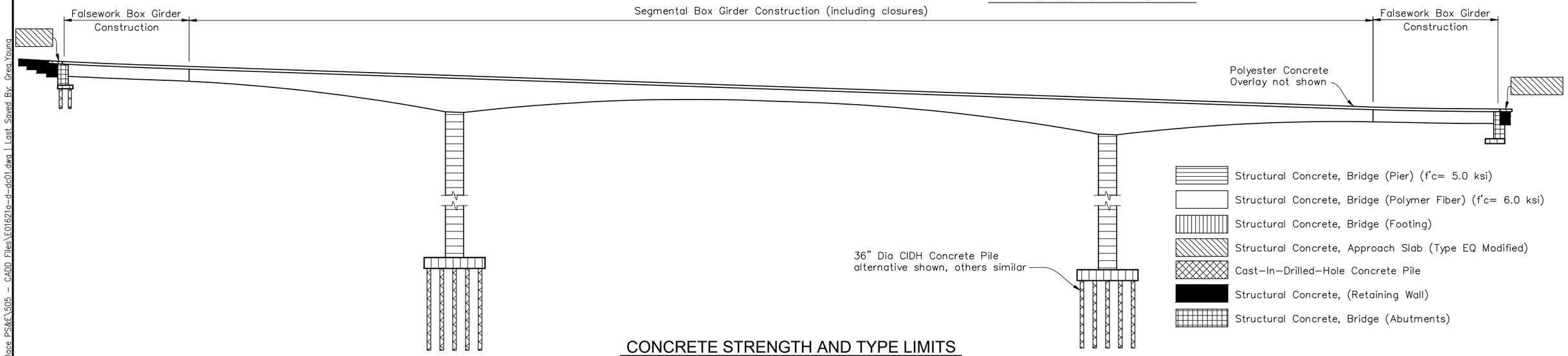
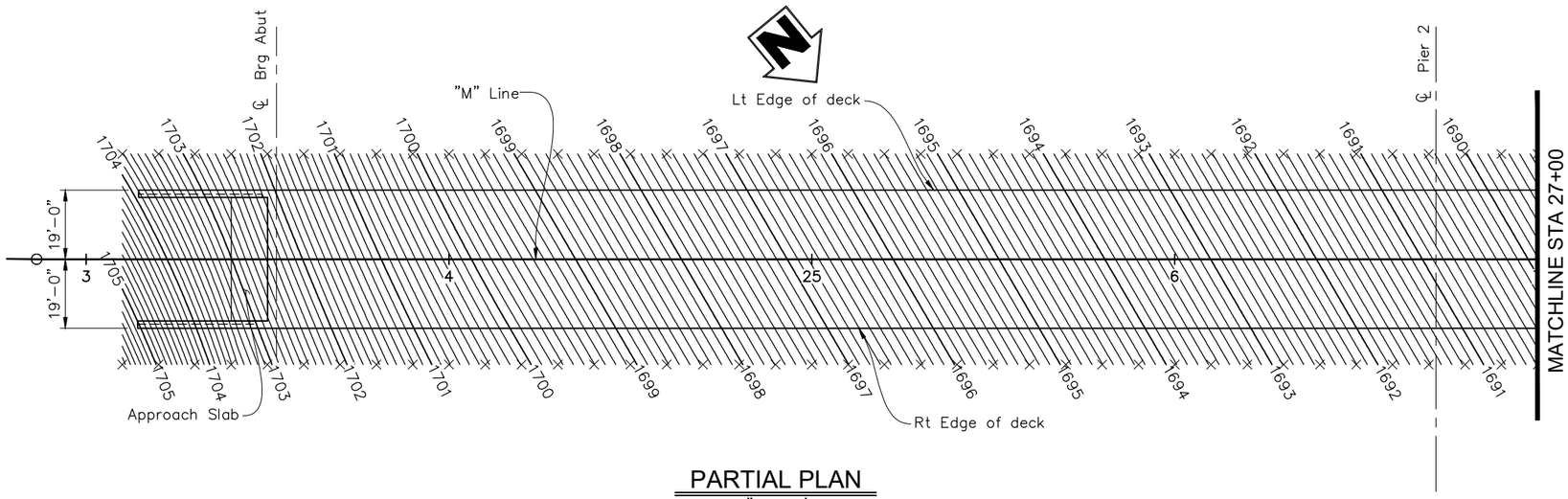


TYPICAL SECTION – PIER CAP



CONCRETE STRENGTH AND TYPE LIMITS
No Scale



PARTIAL PLAN
1" = 20'

Notes:

X = 10' intervals along station line

Contours Intervals = 0.10'

Deck contours represent finished grade at top of Polyester Concrete Overlay. Lower concrete deck grades to accommodate overlay accordingly. Contractor shall provide camber calculations and geometry control plan to the Engineer for approval in accordance with the project specifications. Structure shall be cambered to achieve theoretical finished grade at 30 years.

REVISION NUMBER	DATE	DESCRIPTION	BY
1	2/18/22	Sheet Replaced, modified Box Girder concrete type	GY

REGISTERED PROFESSIONAL ENGINEER — GREG YOUNG — No. C67707 — Exp. 6/30/23 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF : Greg Young
REGISTERED CIVIL ENGINEER
DATE: 2/18/2022

DESIGNED:	DRAWN:
GRY	DCP
CHECKED:	DATE:
GMG	2/18/2022
ROAD NUMBER:	
60	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

MOSQUITO ROAD AT SOUTH FORK AMERICAN RIVER BRIDGE REPLACEMENT
DECK CONTOURS NO. 1

SHEET DC-1 r
67 OF 180
W.O. No. 77126

PILE DATA TABLE

LOCATION	PILE TYPE	NOMINAL RESISTANCE		DESIGN TIP ELEVATION (ft)	SPECIFIED TIP ELEVATION (ft)
		COMPRESSION (kips)	TENSION (kips)		
Abut. 1	30" CIDH	810	N/A	1660(a),(c)	1645
Pier 2	36" CIDH	2720	1300	1392 (a) 1395 (b) 1425 (c)	1392
	48" CIDH	4220	1850	1387 (a) 1393 (b) 1420 (c)	1387
	60" CIDH	6690	2860	1386 (a) 1389 (b) 1410 (c)	1386

Notes:
1) Design tip elevation for Piers and Abutments are controlled by: (a) Compression, (b) Tension, (c) Lateral Load.
2) The Specified Tip Elevation shall not be raised.

NO	R	Δ	T	L
1	287.00	50°17'19"	134.7	251.90'

PROJECT CONTROL DATA

NO	NORTHING	EASTING	ELEVATION	LINE	STATION	OFFSET	Rt/Lt	DESCRIPTION
19	2046800.12	6918547.59	1347.88	"M"	27+48.10	535.12'	Rt	MAG NAIL IN ROCK BEHIND GUARDRAIL
24	2047100.36	6917846.93	1613.39	"D"	99+35.82	7.77'	Lt	MAG NAIL IN AC
104	2046925.23	6917502.01	1654.60	"M"	36+39.22	10.01'	Lt	AERIAL CONTROL POINT

Horizontal Datum: NAD83 Zone 2
Vertical Datum: NAVD88

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SAN DIEGO, CA 92123
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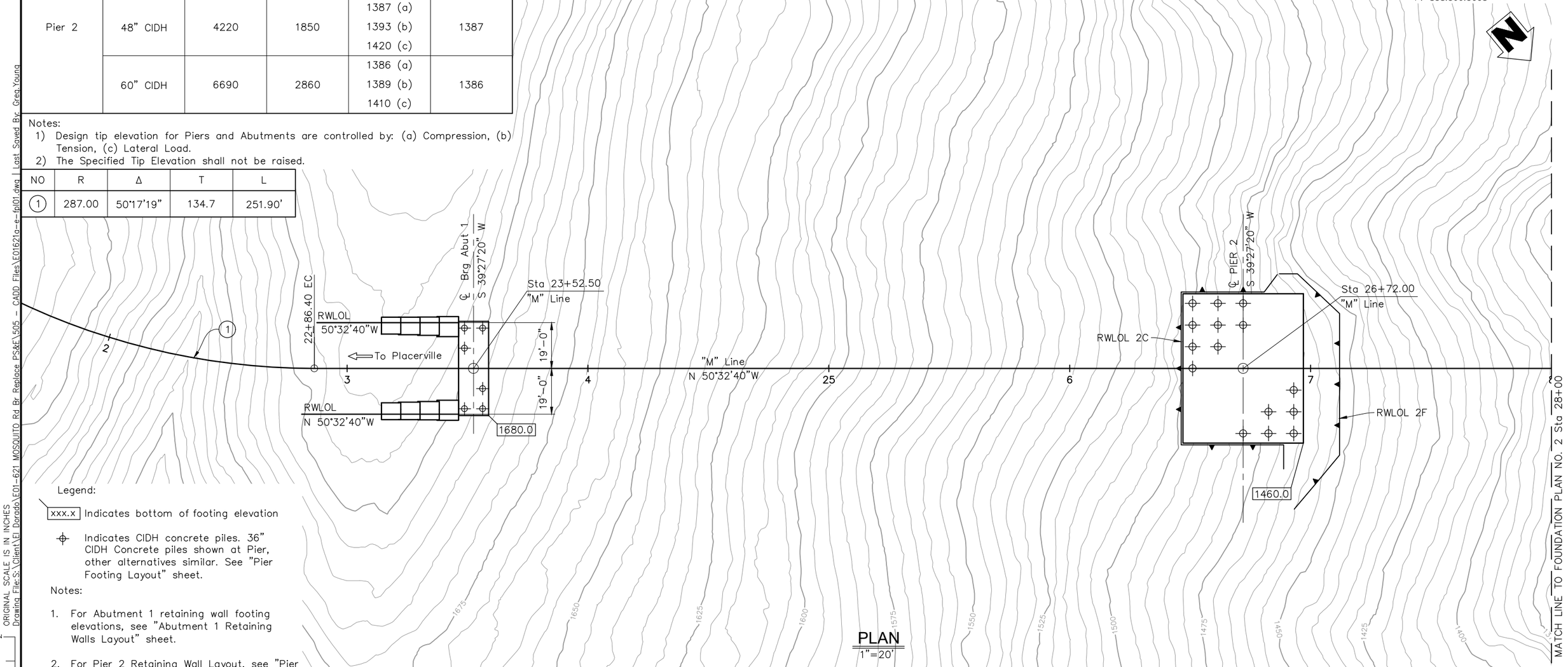

PLAN
1"=20'

Legend:

xxx.x Indicates bottom of footing elevation

⌖ Indicates CIDH concrete piles. 36" CIDH Concrete piles shown at Pier, other alternatives similar. See "Pier Footing Layout" sheet.

Notes:

1. For Abutment 1 retaining wall footing elevations, see "Abutment 1 Retaining Walls Layout" sheet.
2. For Pier 2 Retaining Wall Layout, see "Pier 2 Retaining Walls Layout" sheet.
3. For Right of Way and Temporary Construction Easements, see Road plans.

ORIGINAL SCALE IS IN INCHES
0 1 2
FOR REDUCED PLANS

REVISION NUMBER	DATE	DESCRIPTION	BY
1	1/28/22	Sheet Replaced, updated control point coordinates	GY

REGISTERED PROFESSIONAL ENGINEER
GREG YOUNG
No. C67707
Exp. 6/30/23
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF : Greg Young
REGISTERED CIVIL ENGINEER 1/28/22
DATE:

DESIGNED:	DRAWN:
GRY	AOS
CHECKED:	DATE:
CMH	1/27/2022
ROAD NUMBER:	
60	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

MOSQUITO ROAD AT
SOUTH FORK AMERICAN RIVER BRIDGE REPLACEMENT
FOUNDATION PLAN NO. 1

SHEET FP-1 r
69 OF 180
W.O. No. 77126

QUINCY ENGINEERING
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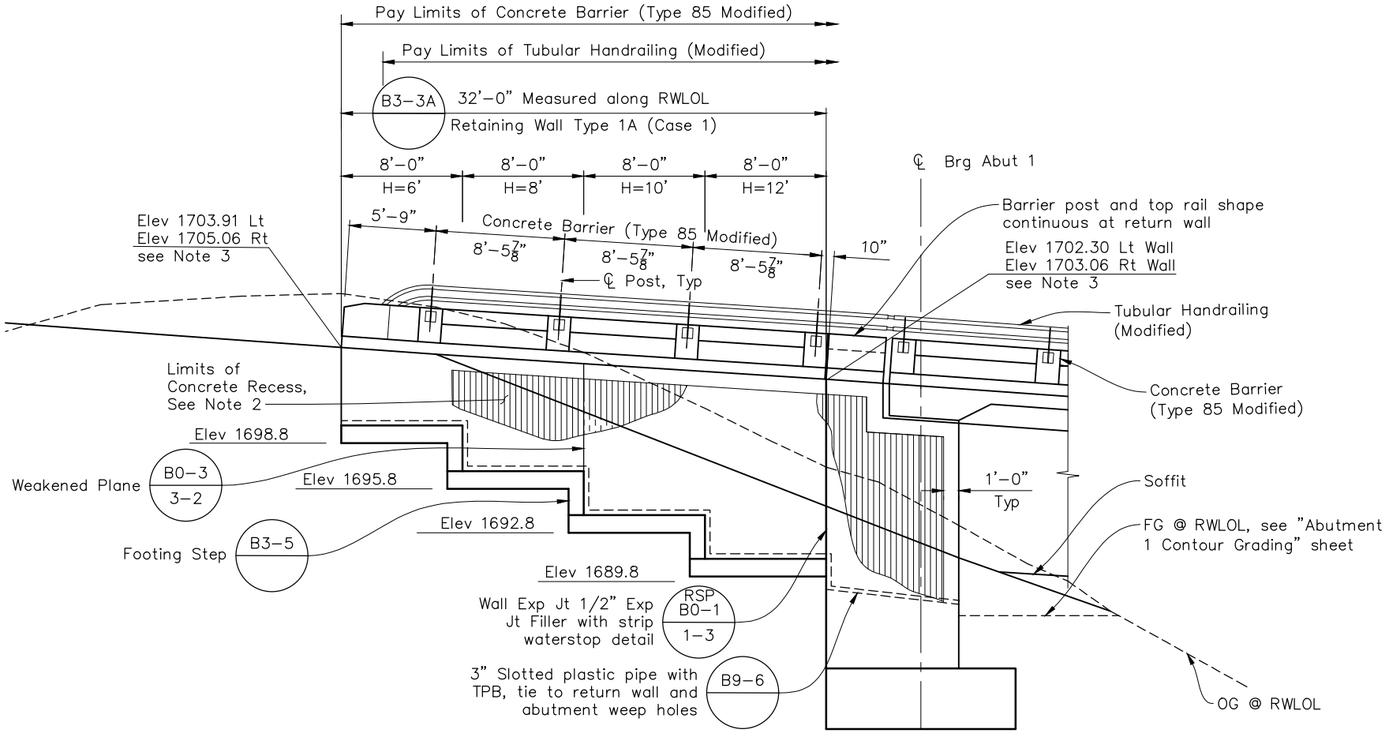
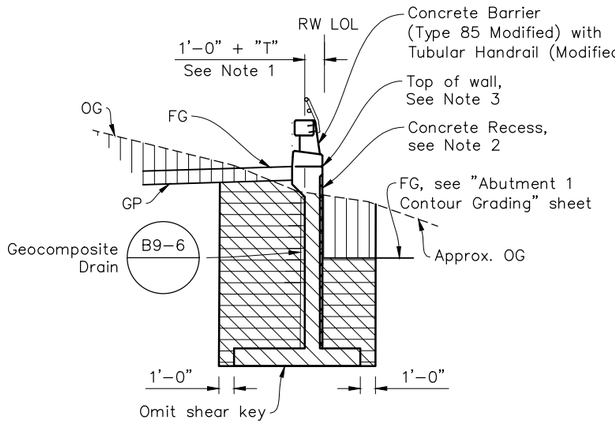
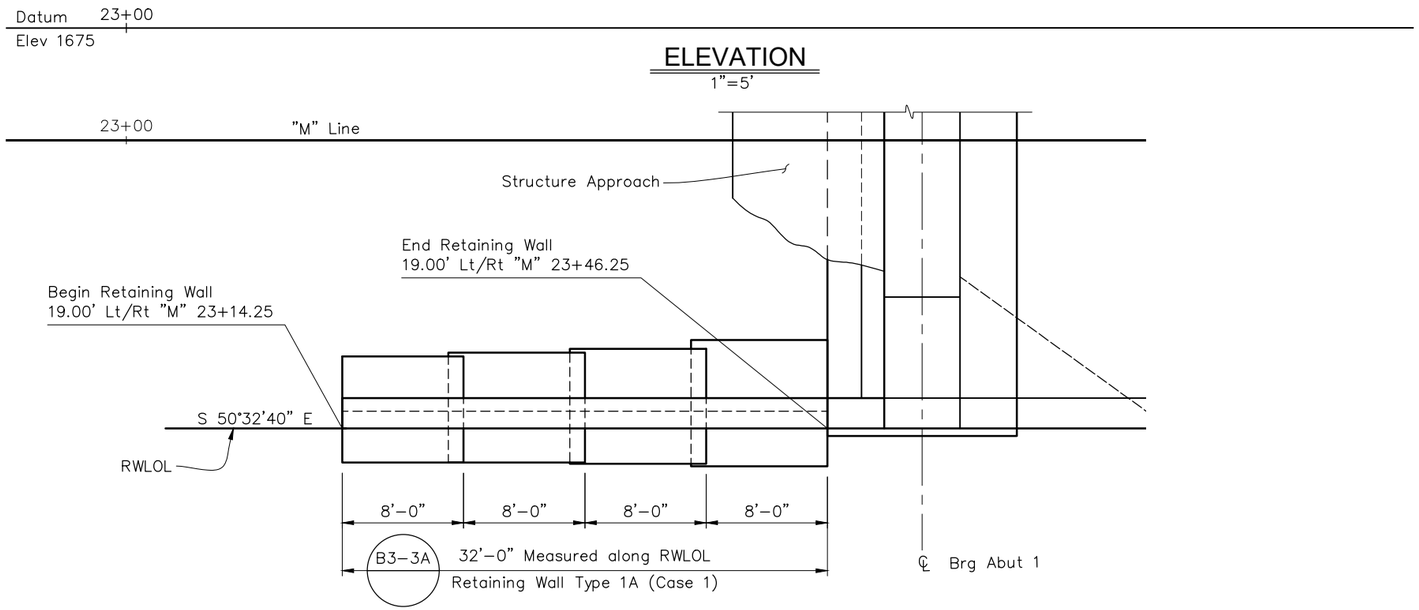






ELEVATION
1"=5'

PLAN
1"=5'

Legend:

- Structure Excavation (Bridge)
- Structure Backfill (Bridge)
- Roadway Excavation

TYPICAL SECTION
1/4"=1'-0"

Notes:

1. Increase wall thickness to accommodate concrete recess. Increase clear cover to bar reinforcing steel at front face of wall. "T" = 2"
2. For concrete recess, see "Architectural Details" sheet.
3. Top of wall elevations provided are approximate and for information only. Actual top of wall elevations shall match proposed roadway grades.
4. Abutment 1 Rt Wall shown, Abutment Lt Wall similar.

Legend:

Indicates concrete recess, extend a minimum of 3' below finish grade.

REVISION NUMBER	DATE	DESCRIPTION	BY
1	1/28/22	Sheet Replaced, modified excavation type	GY

REGISTERED PROFESSIONAL ENGINEER — GREG YOUNG — No. C67707 — Exp. 6/30/23 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF : Greg Young
REGISTERED CIVIL ENGINEER — DATE: 1/28/22

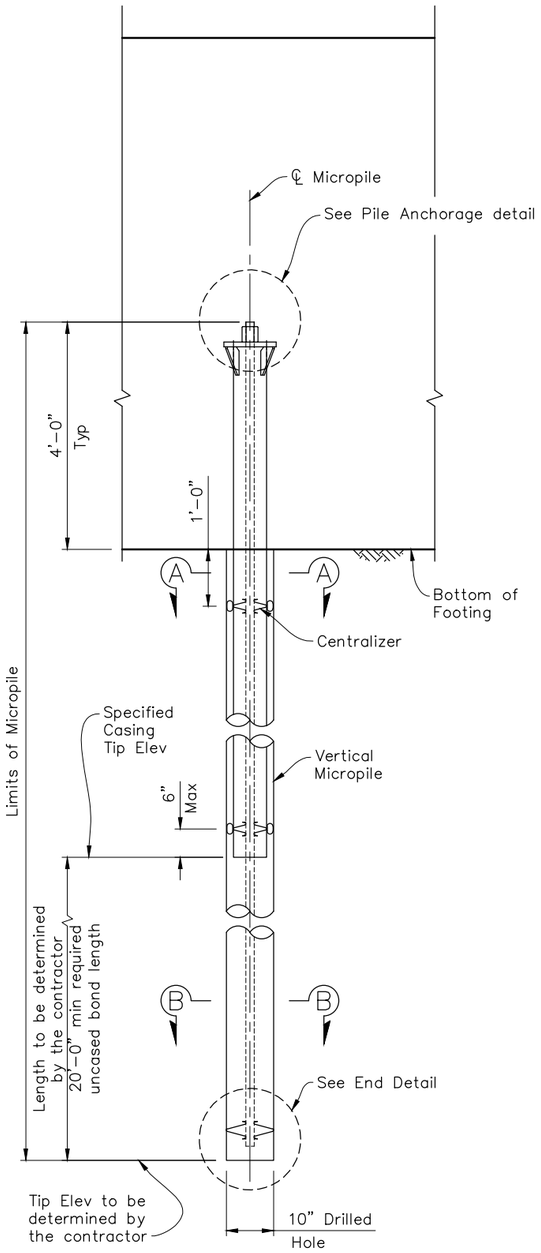
DESIGNED:	DRAWN:
GRY	DCP
CHECKED:	DATE:
MJZ	1/27/2022
ROAD NUMBER:	60

EL DORADO COUNTY CALIFORNIA

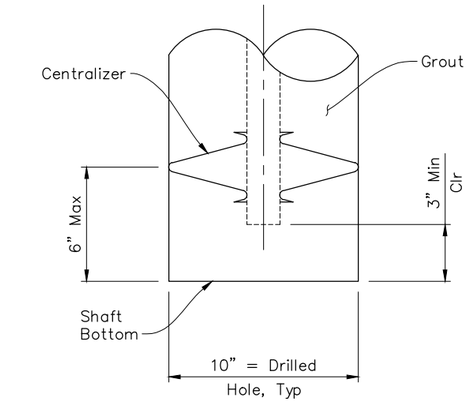
COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

MOSQUITO ROAD AT
SOUTH FORK AMERICAN RIVER BRIDGE REPLACEMENT
ABUTMENT 1 RETAINING WALLS LAYOUT

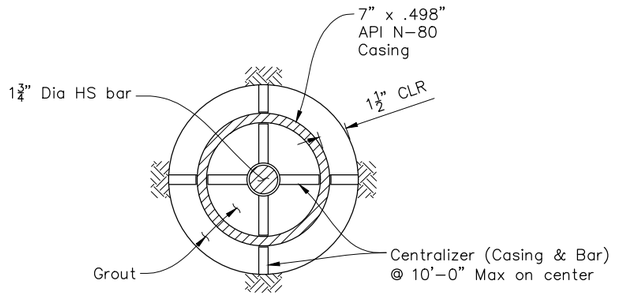
SHEET A1RWLr
77 OF 180
W.O. No. 77126



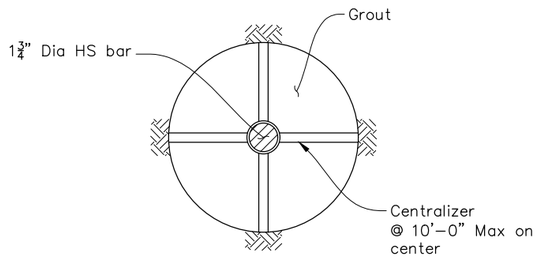
MICROPILE DETAIL
3/4"=1'-0"



END DETAIL
3"=1'-0"



SECTION A-A
3"=1'-0"



SECTION B-B
3"=1'-0"

Notes:

1. Casing will be completely filled to bottom of bearing plate with grout.
2. Bearing plate must have provisions to allow injecting grout at lower end and venting at high end.
3. No splices allowed in Casing or HS bar.
4. Min Grout compressive strength 5.5 ksi.
5. HS bar shall be ASTM A722 Grade 150 All Thread, Fy=120 ksi.
6. Casing shall be API N80, Fy=80 ksi.
7. Plates must comply with A709 Grade 50, or A572 Grade 50.
8. Factored Test Load (FTL) = 635 kips compression and 313 kips tension.
9. Install 2 non-production verification test piles at Pier 3 outside the proposed footing limits at locations selected by the Engineer. Proof test 15 production micropiles at locations selected by the Engineer.

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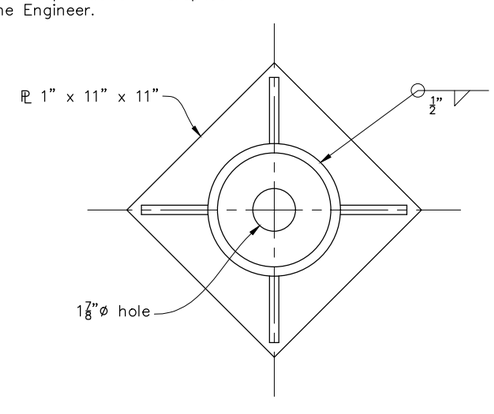
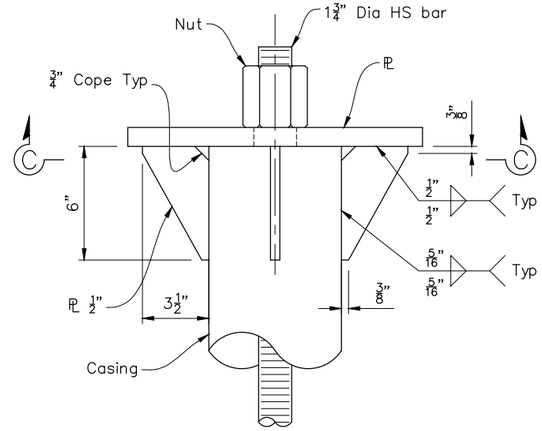


SECTION C-C
3"=1'-0"



PILE ANCHORAGE
3"=1'-0"

REVISION	NUMBER	DATE	DESCRIPTION	BY
	1	1/28/22	Sheet Replaced, modified number of verification test piles	GY

REGISTERED PROFESSIONAL ENGINEER — GREG YOUNG — No. C67707 — Exp. 6/30/23 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF : Greg Young
REGISTERED CIVIL ENGINEER — DATE: 1/28/22

DESIGNED:	DRAWN:
GRY	AOS
CHECKED:	DATE:
CMH	1/27/2022
ROAD NUMBER:	
60	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

MOSQUITO ROAD AT SOUTH FORK AMERICAN RIVER BRIDGE REPLACEMENT
PIER FOOTING DETAILS NO. 2

SHEET **PFD-2** r
105 OF 180
W.O. No. **77126**

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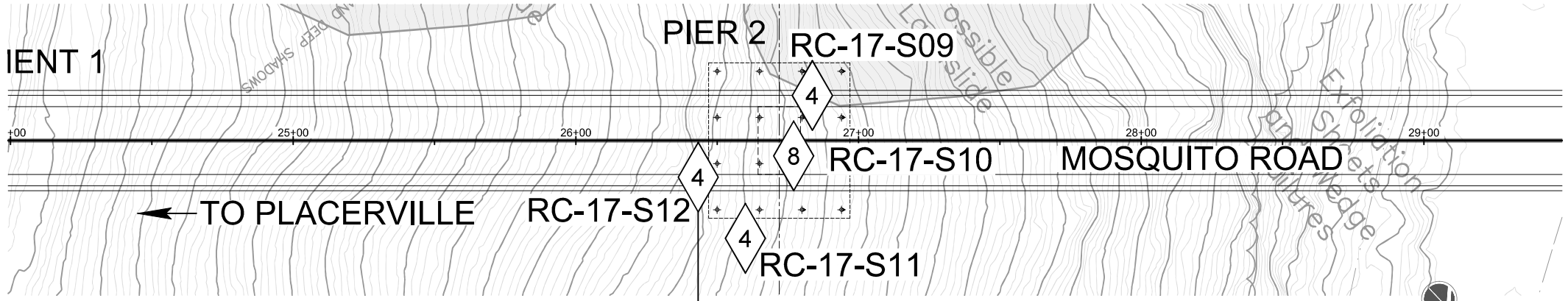
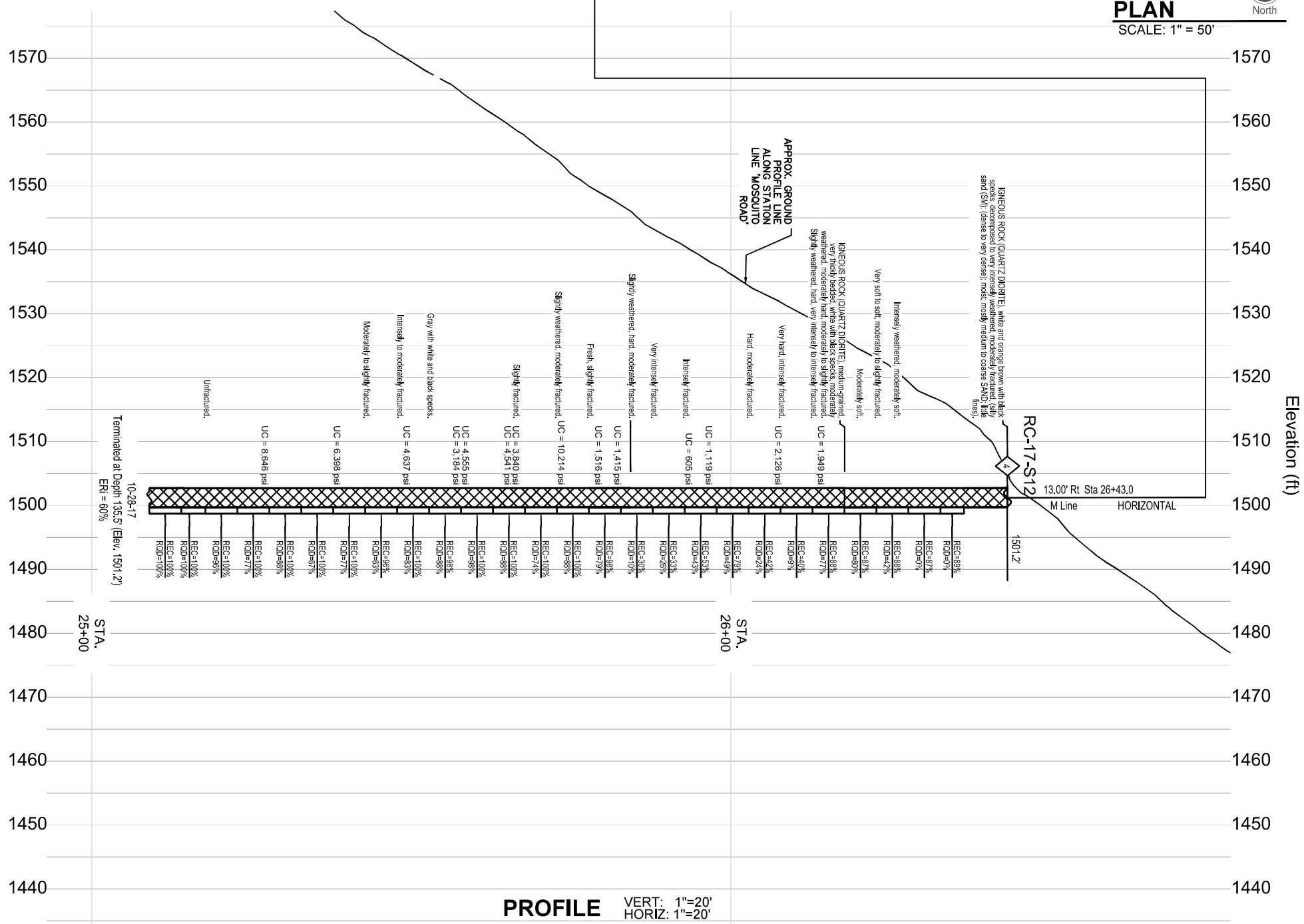


PLAN
SCALE: 1" = 50'



PROFILE
VERT: 1"=20'
HORIZ: 1"=20'

REVISION NUMBER	DATE	DESCRIPTION	BY
1	1/28/22	PLAN VIEW REORIENTATION	BJU

REGISTERED PROFESSIONAL ENGINEER — WILLIAM E. NICHOLS — No. 82103 — Exp. 3-31-22 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :
W. Eric Nichols
REGISTERED CIVIL ENGINEER
12/15/21
DATE:

DESIGNED: ---	DRAWN: B.J.U.
CHECKED: W.E.N.	DATE: 6/2/2020
ROAD NUMBER: 60	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

MOSQUITO ROAD BRIDGE AT SOUTH FORK AMERICAN RIVER BRIDGE REPLACEMENT
LOG OF TEST BORINGS NO. 4 OF 8

SHEET
LTB-4 *r*
176 OF 180
W.O. No. 77126

22-0364 B 31 of 31