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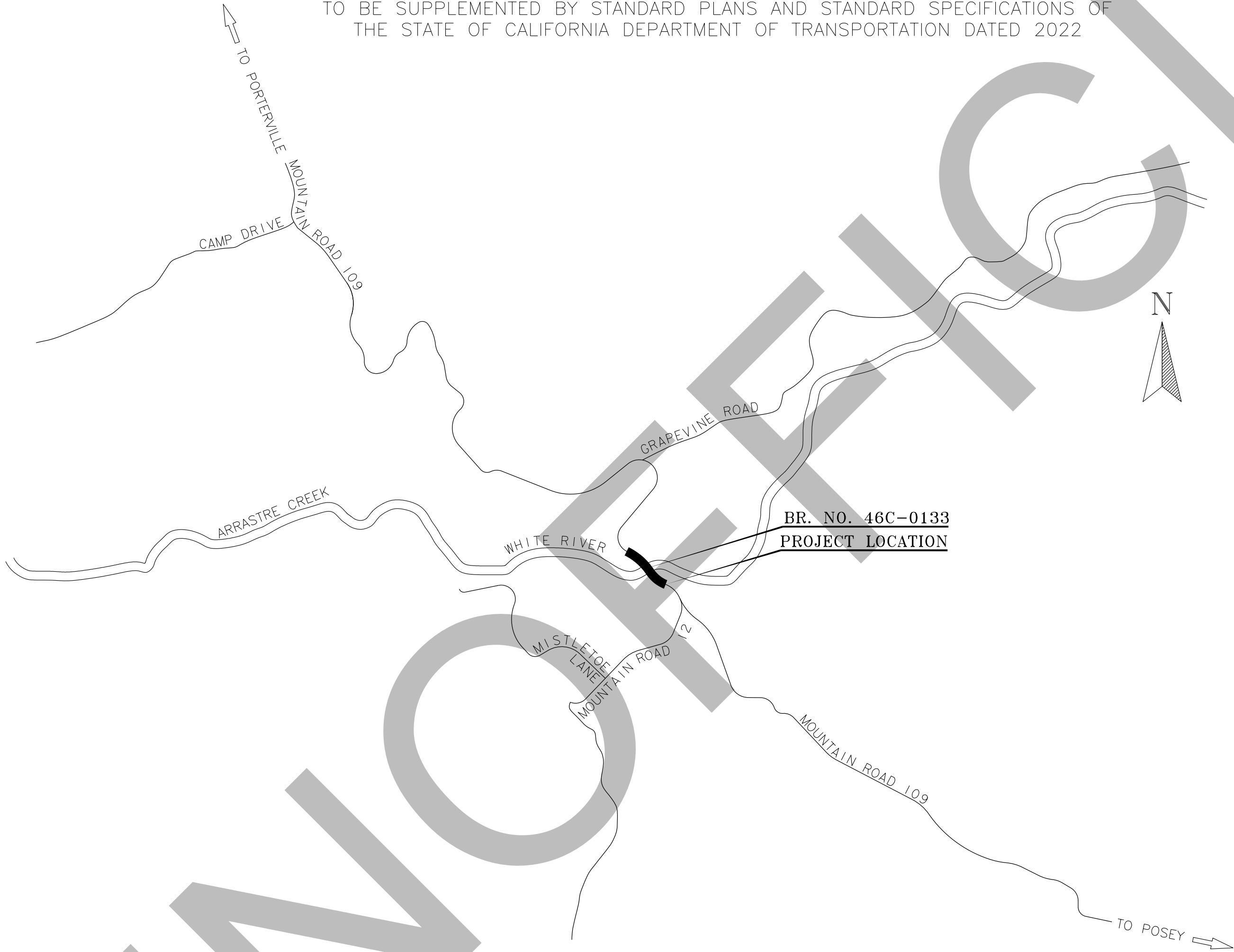
SHEET NO.	PAGE NO.	DESCRIPTION
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STATE OF CALIFORNIA
COUNTY OF TULARE

PROJECT PLANS FOR CONSTRUCTION OF
MOUNTAIN ROAD 109 (M109) OVER
WHITE RIVER BRIDGE REPLACEMENT

FEDERAL PROJECT NO. BRLS-5946(170)
BRIDGE NO. 46C-0487
OLD BRIDGE NO. 46C-0133
HIGHWAY BRIDGE PROGRAM (HBP)

TO BE SUPPLEMENTED BY STANDARD PLANS AND STANDARD SPECIFICATIONS OF
THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DATED 2022



VICINITY MAP

BASIS OF BEARING AND COORDINATES

HORIZONTAL DATUM: NAD 83 CALIFORNIA ZONE 4 AS ADJUSTED TO NGS PID DH6642.

BENCHMARK

VERTICAL DATUM: NAVD 88 AS ADJUSTED TO NGS PID DH6642 ELEVATION = 276.2 FEET.

POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
1	1091.04	1814949.04	6607729.95	60D
2	1082.35	1815078.32	6607501.39	60D
4	1079.23	1815185.43	6607446.75	MAG
7	1086.62	1815372.15	6607182.16	60D/IN TURNOUT

UTILITY CONTACTS

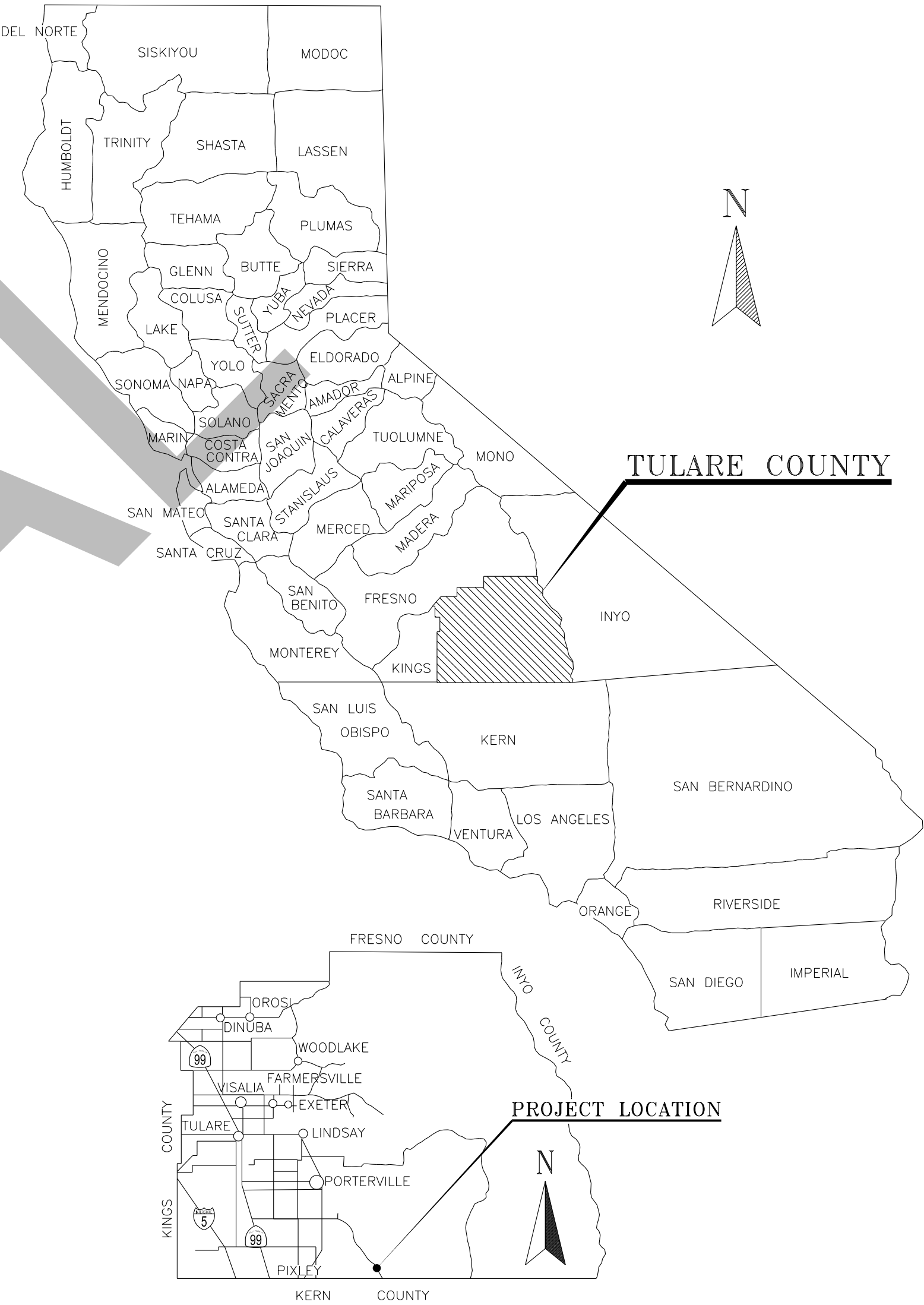
LEWIS EDROZO

FRONTIER COMMUNICATIONS

(760) 375-6616



Contractor shall call
Underground Service Alert at
811 two working days prior
to excavation



LOCATION MAP

APPROVED BY:

DATE:

DENNIS TOWNSEND, CHAIR
TULARE COUNTY BOARD OF SUPERVISORS

APPROVED BY:

DATE:

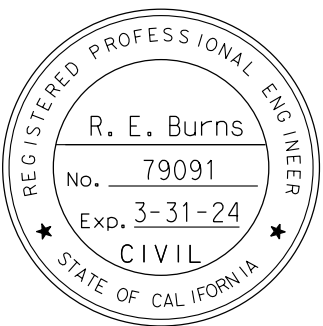
9/11/23

REED SCHENKE, P.E., DIRECTOR
TULARE COUNTY RESOURCE MANAGEMENT AGENCY

SIGNED BY:

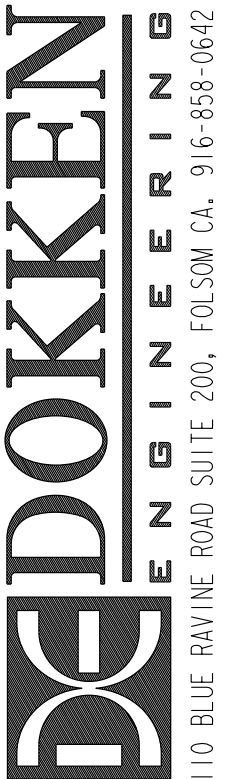
DATE:

ROBERT BURNS, P.E., PROJECT MANAGER
DOKKEN ENGINEERING



REVISIONS

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559)624-7000
WWW.TULARECOUNTY.CA.GOV/RMA



MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
TITLE SHEET

SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	

T1

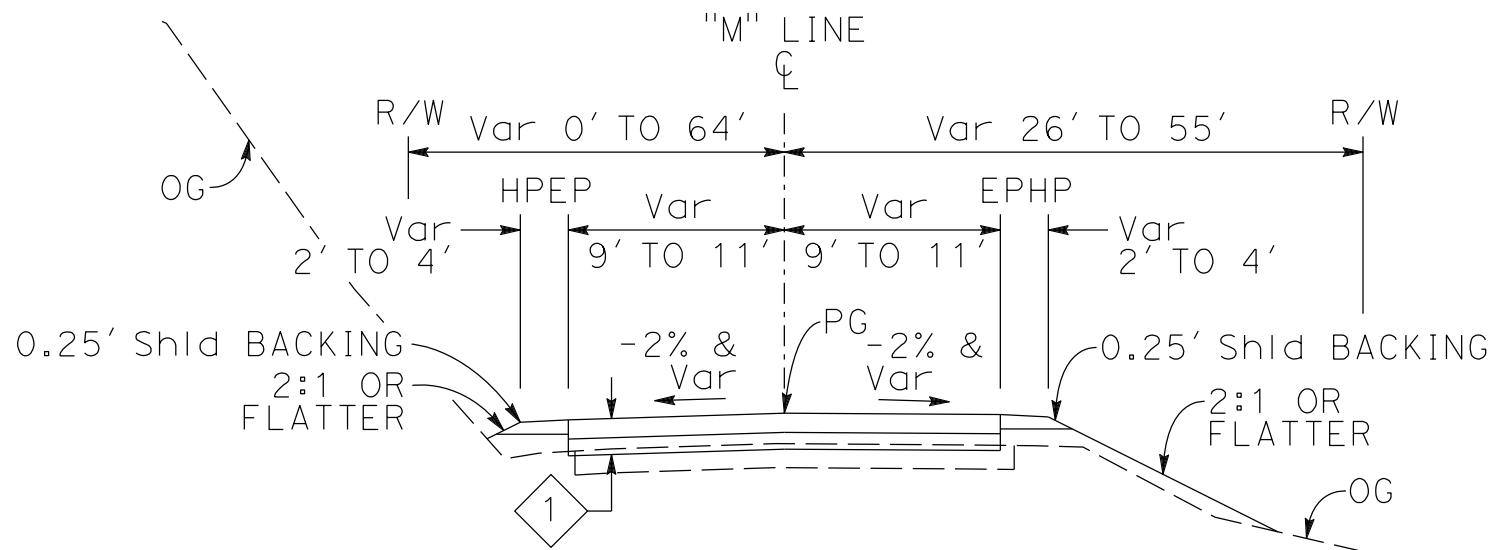
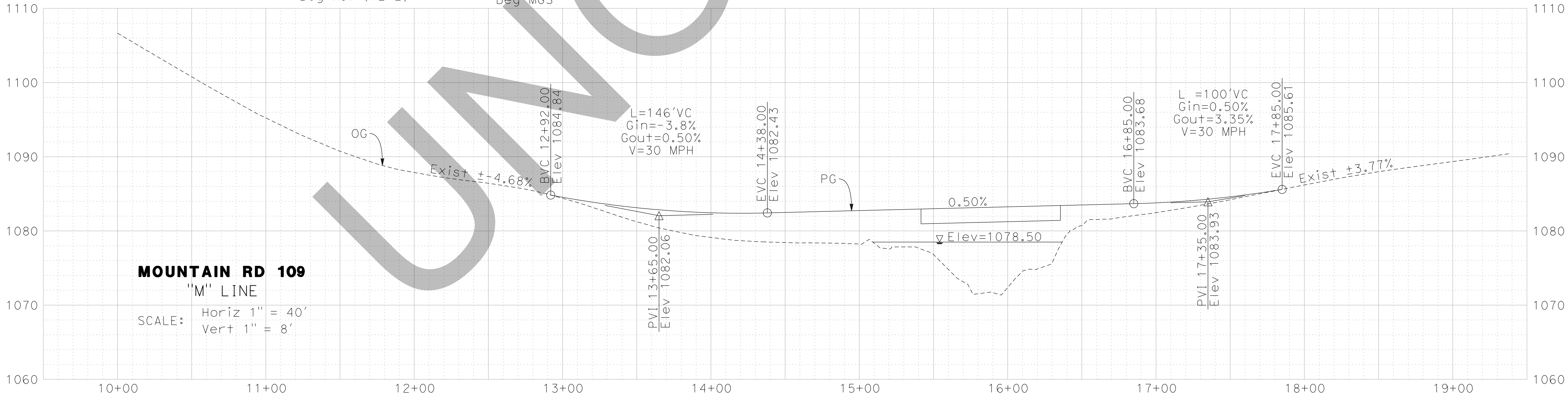
NOTE:
1. FOR ALL FENCE INFORMATION, SEE CONSTRUCTION DETAILS.

LEGEND:

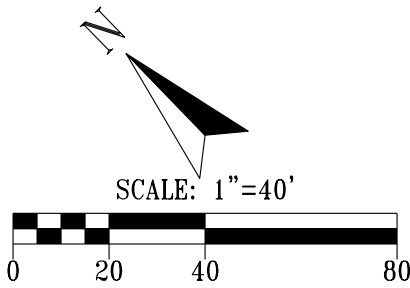
- RIGHT OF WAY
- PROPERTY LINE
- TEMPORARY CONSTRUCTION EASEMENT
- F F/C C GRADING LIMITS
- x-x-x- THVF TEMPORARY HIGH VISIBILITY FENCE
- x-x-x- CHAIN LINK FENCE (TYPE CL-5)
- o-o-o- FENCE (TYPE BW, 4-STRAND, METAL POST)
- Obir Surf
- EXISTING STRUCTURE
- EXISTING OVERHEAD COMMUNICATION
- EXISTING CHAIN LINK FENCE
- EXISTING FENCE (TYPE BW)
- TREES TO BE REMOVED (57 TOTAL)
- 60" DIA CALIFORNIA SYCAMORE (PROTECT IN PLACE)
- 36" VALLEY OAK (PROTECT IN PLACE)

TANGENT DATA		
No	Δ	L
1	S45°22'52"E	300.51'
2	S63°56'32"E	80.00'

CURVE DATA				
No	R	Δ	T	L
1	1,305'	05°07'20"	58.37'	116.66'
2	185'	23°51'24"	39.08'	77.03'
3	115'	70°43'28"	81.61'	141.95'
4	375'	15°24'12"	50.71'	100.81'
5	375'	18°33'39"	61.28'	121.48'



STRUCTURAL SECTION TYPE	
1	0.40' HMA (TYPE A) 0.35' CLASS 2 AB



REVISIONS	
DATE	BY

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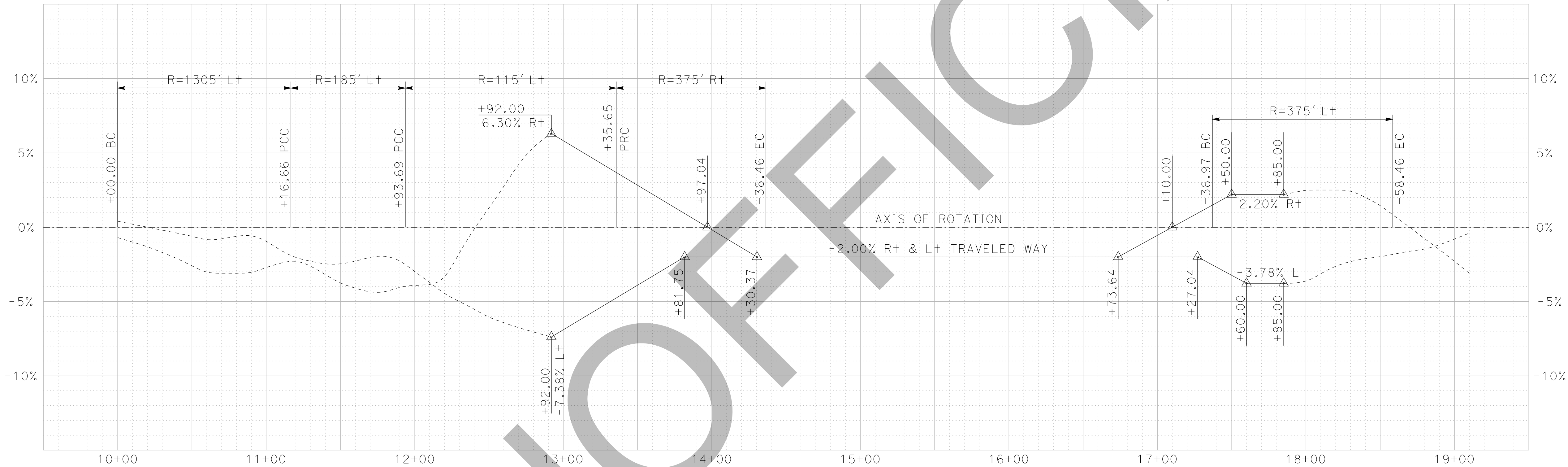


DEDOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 95688-0642
KRIS KOFOD, PROJECT ENGINEER
7/7/23 DATE

**MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
PLAN, PROFILE, AND
TYPICAL SECTION**

SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	

L1
2 OF 27

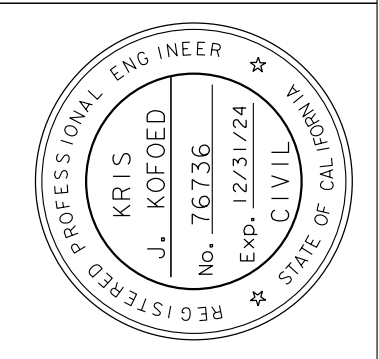


SUPERELEVATION DIAGRAM

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

REVISIONS		DATE	BY
No.	DESCRIPTION		

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
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ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642

Kris Kofod
KRIS KOFOD, PROJECT ENGINEER

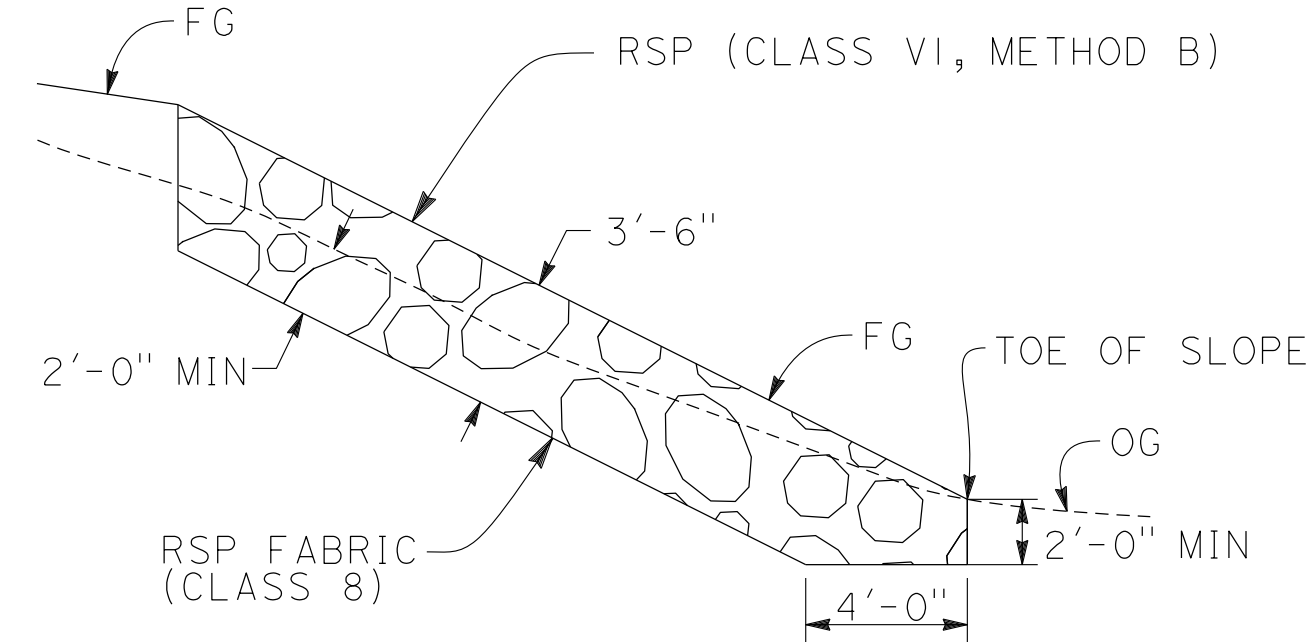
7/17/23
DATE

MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
SUPERELEVATION DIAGRAM

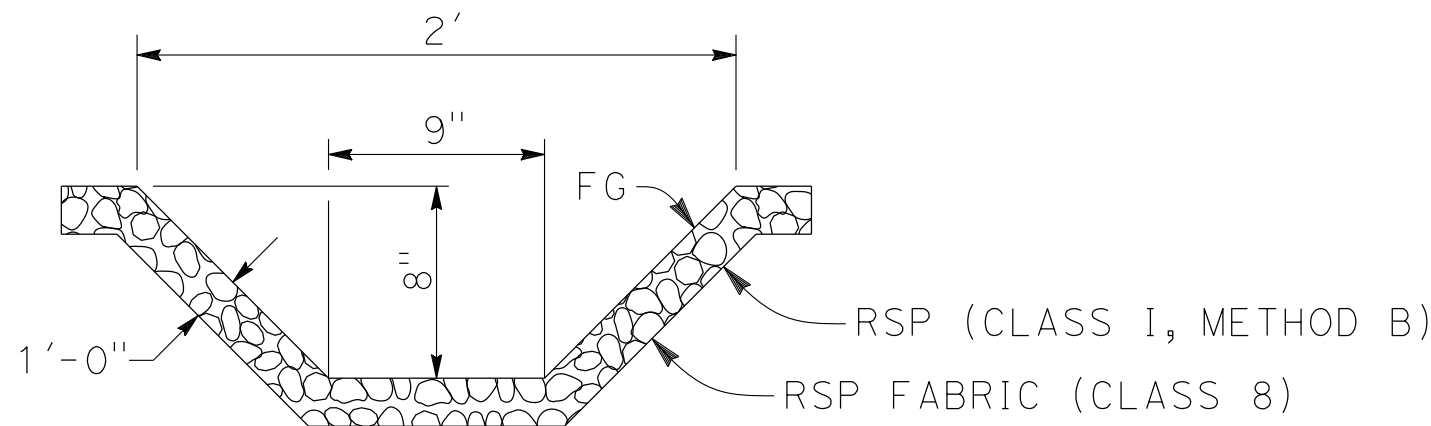
SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	

LEGEND:

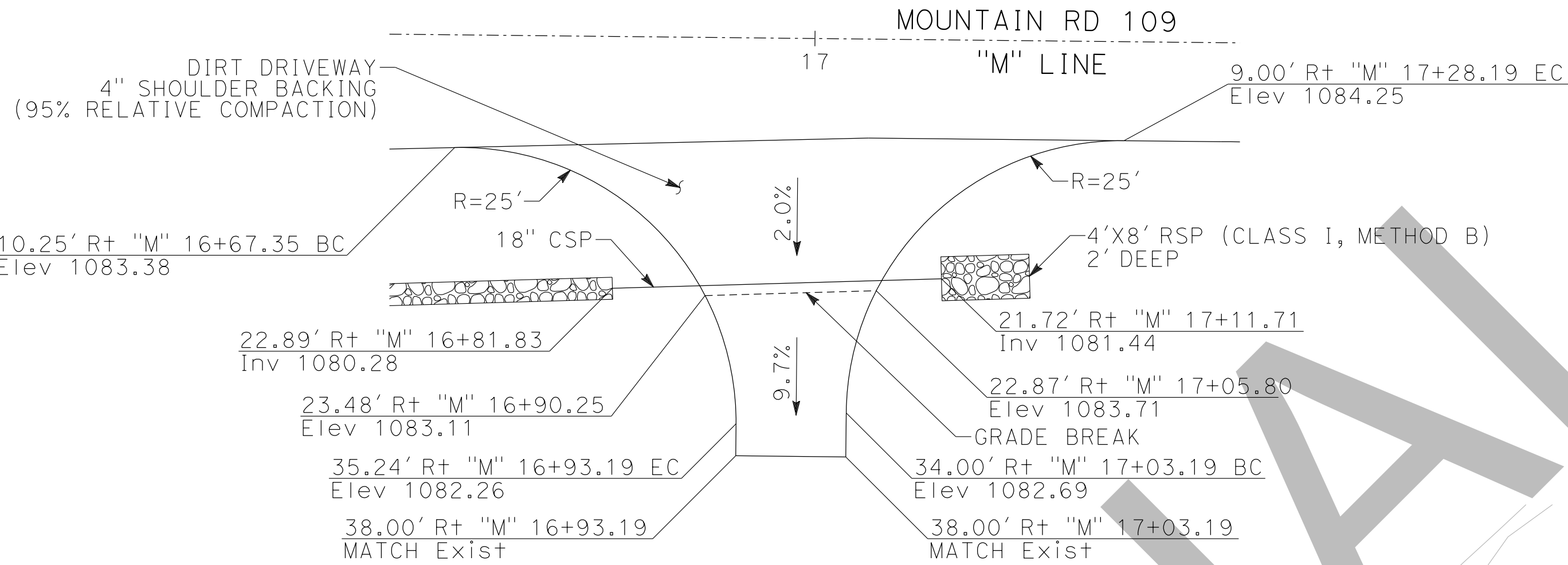
- xx-xx- THVF- TEMPORARY HIGH VISIBILITY FENCE
- x-x-x- CHAIN LINK FENCE (TYPE CL-5)
- o-o-o- FENCE (TYPE BW, 4-STRAND, METAL POST)
- - - +c - - - EXISTING OVERHEAD COMMUNICATION
- x-x-x- EXISTING CHAIN LINK FENCE
- o-o-o- EXISTING FENCE (TYPE BW)



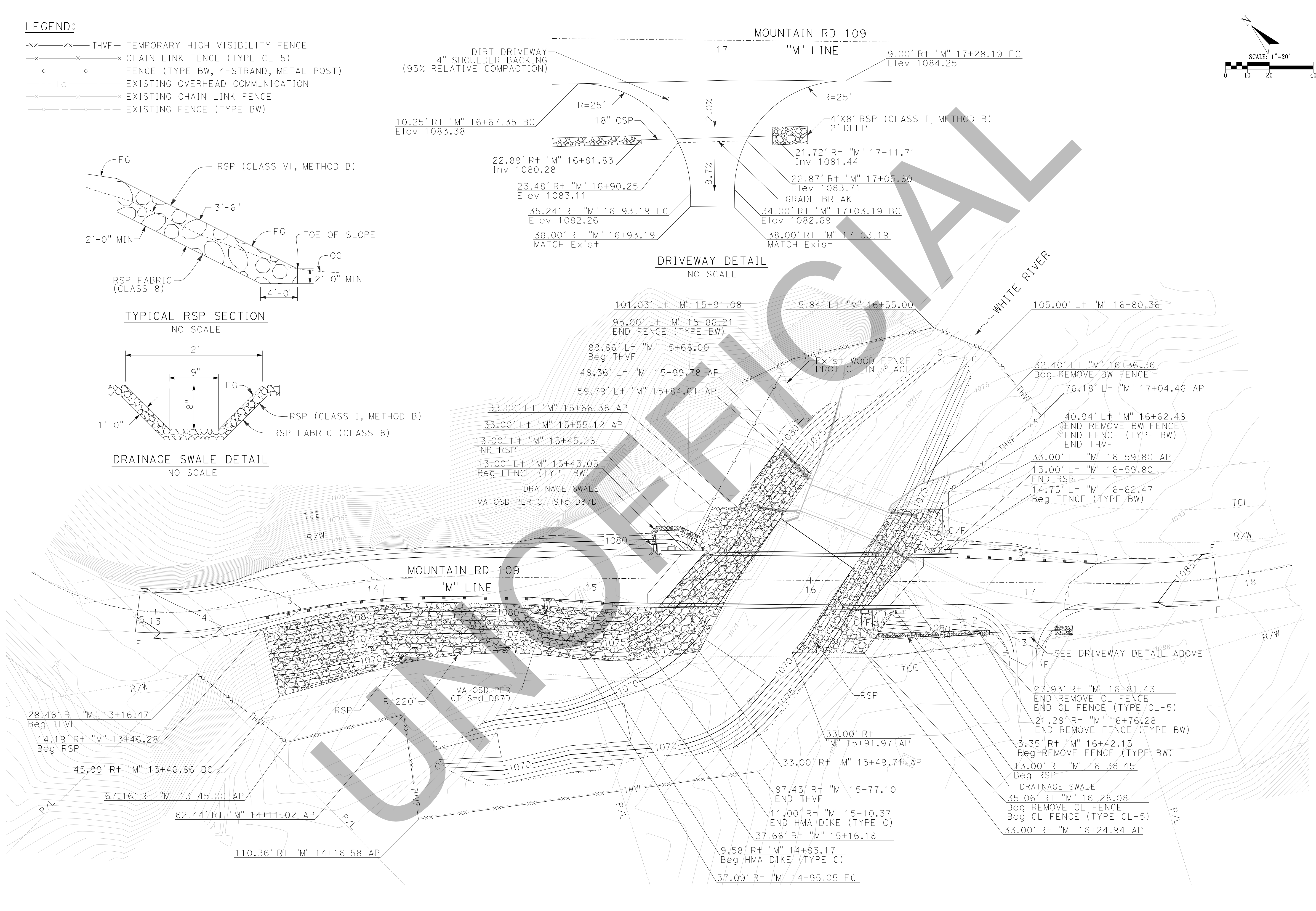
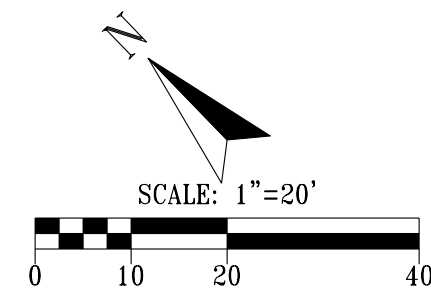
TYPICAL RSP SECTION
NO SCALE



DRAINAGE SWALE DETAIL
NO SCALE

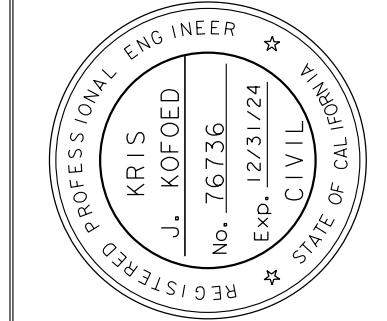


DRIVEWAY DETAIL
NO SCALE



REVISIONS	
DATE	BY

COUNTY OF TULARE
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5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
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DEDOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 95688-0642
Kris Kofod, PROJECT ENGINEER
7/17/23
DATE

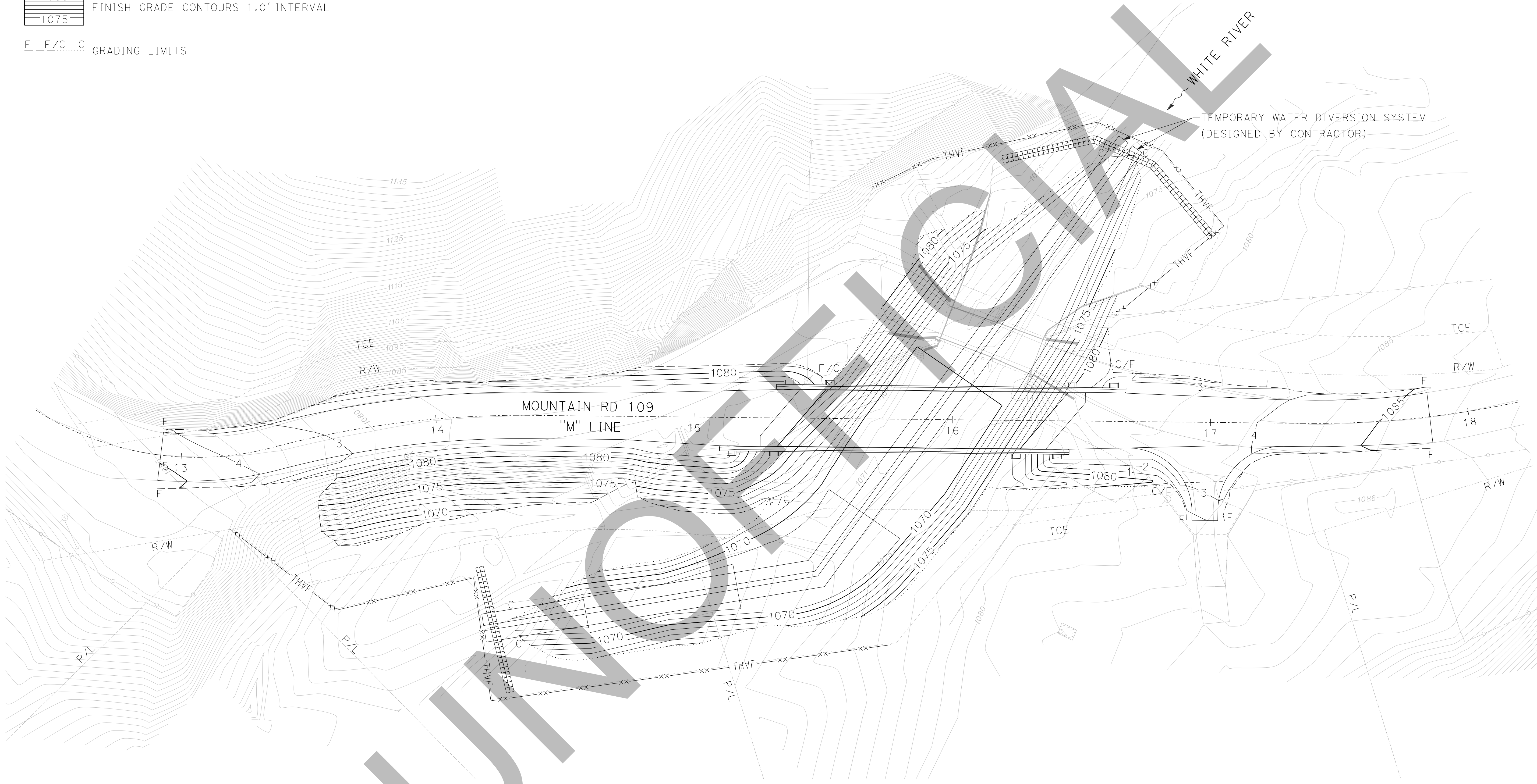
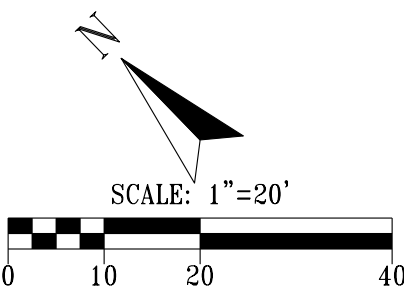
**MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
CONSTRUCTION DETAILS**

SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	

LEGEND:

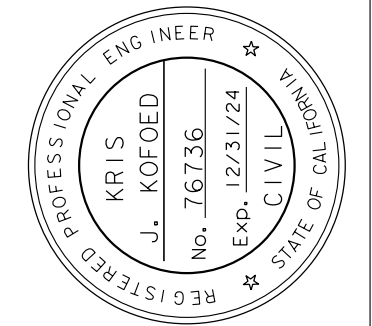
1080
1075
FINISH GRADE CONTOURS 1.0' INTERVAL

F _ F/C _ C GRADING LIMITS



REVISIONS	
No.	DESCRIPTION

COUNTY OF TULARE
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DE**DOKKEN**
ENGINEERING

110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 95688-0642

Kris Koford

KRIS KOFORD, PROJECT ENGINEER

7/17/23

DATE

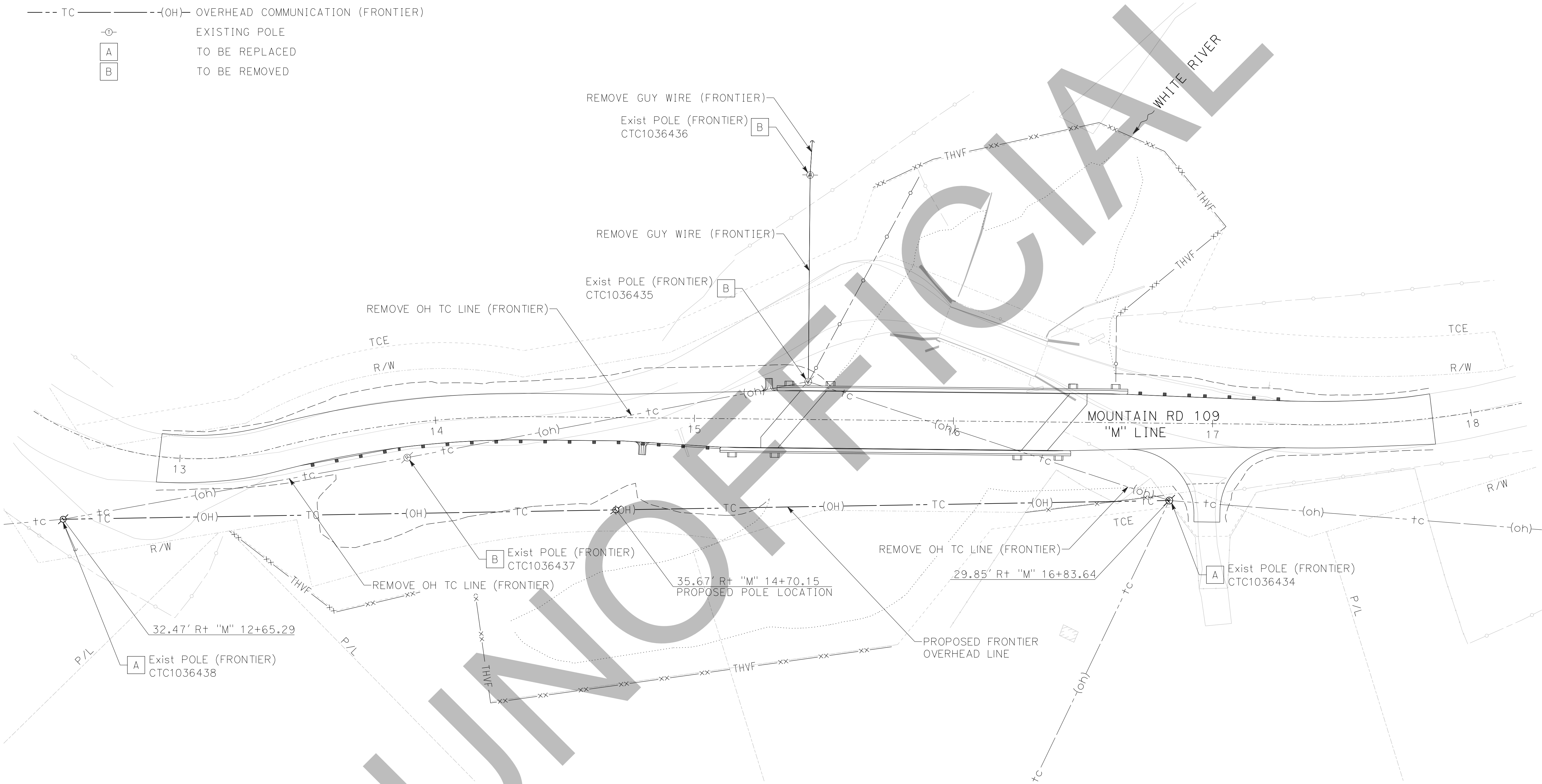
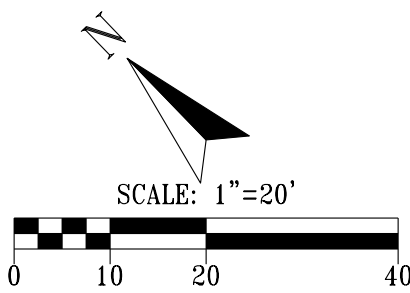
MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
CONTOUR GRADING PLAN

SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	

NOTE:
1. FRONTIER RELOCATION TO BE DONE CONCURRENTLY WITH CONSTRUCTION.

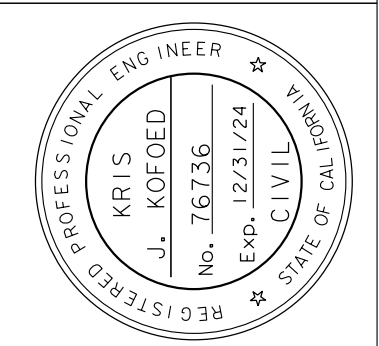
- LEGEND:
- tc---(oh)--- EXISTING OVERHEAD COMMUNICATION (FRONTIER)
 - TC---(OH)--- OVERHEAD COMMUNICATION (FRONTIER)
 - ⊙ EXISTING POLE
 - A TO BE REPLACED
 - B TO BE REMOVED

UTILITY CONTACT
LEWIS EDROZO FRONTIER COMMUNICATIONS (760) 375-6616



REVISIONS	
No.	DESCRIPTION

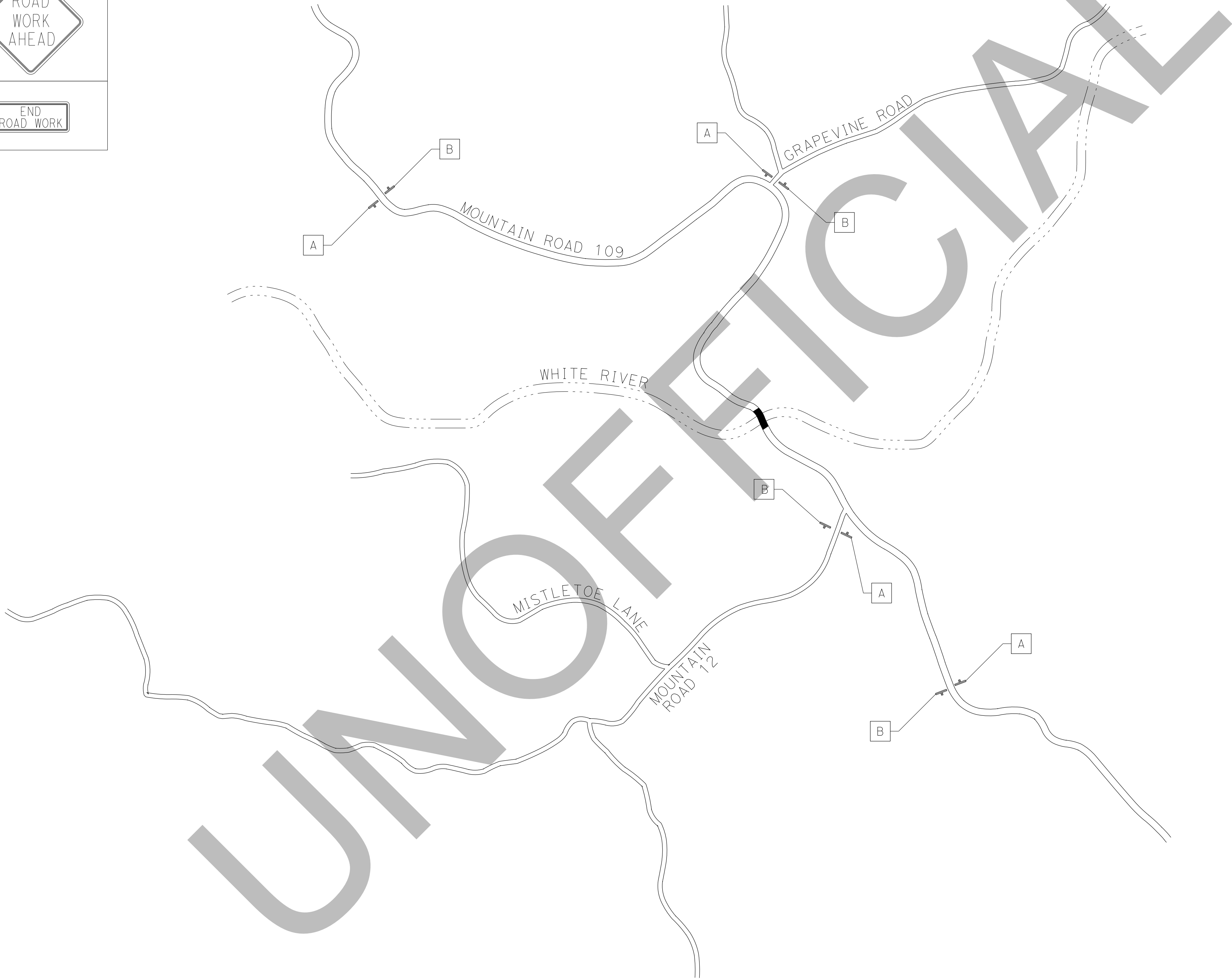
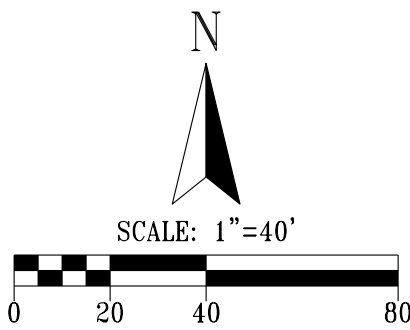
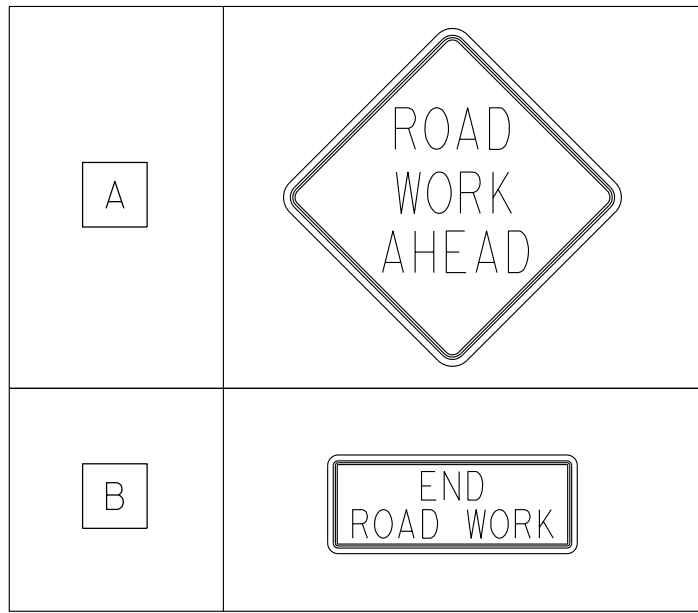
COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559) 624-7000
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DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 95688-0642
Kris Kofod, PROJECT ENGINEER
7/7/23 DATE

**MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
UTILITY PLAN**

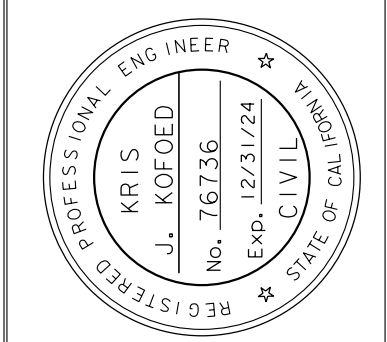
SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	



NO SCALE

REVISIONS	
DESCRIPTION	DATE BY
No.	

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559)624-7000
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DE**DOKKEN**

E**N****G****I****N****E****E****R****I****N****G**

110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642


KRIS KOFOD, PROJECT ENGINEER

7/17/23DATE

**MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
CONSTRUCTION AREA SIGNS**

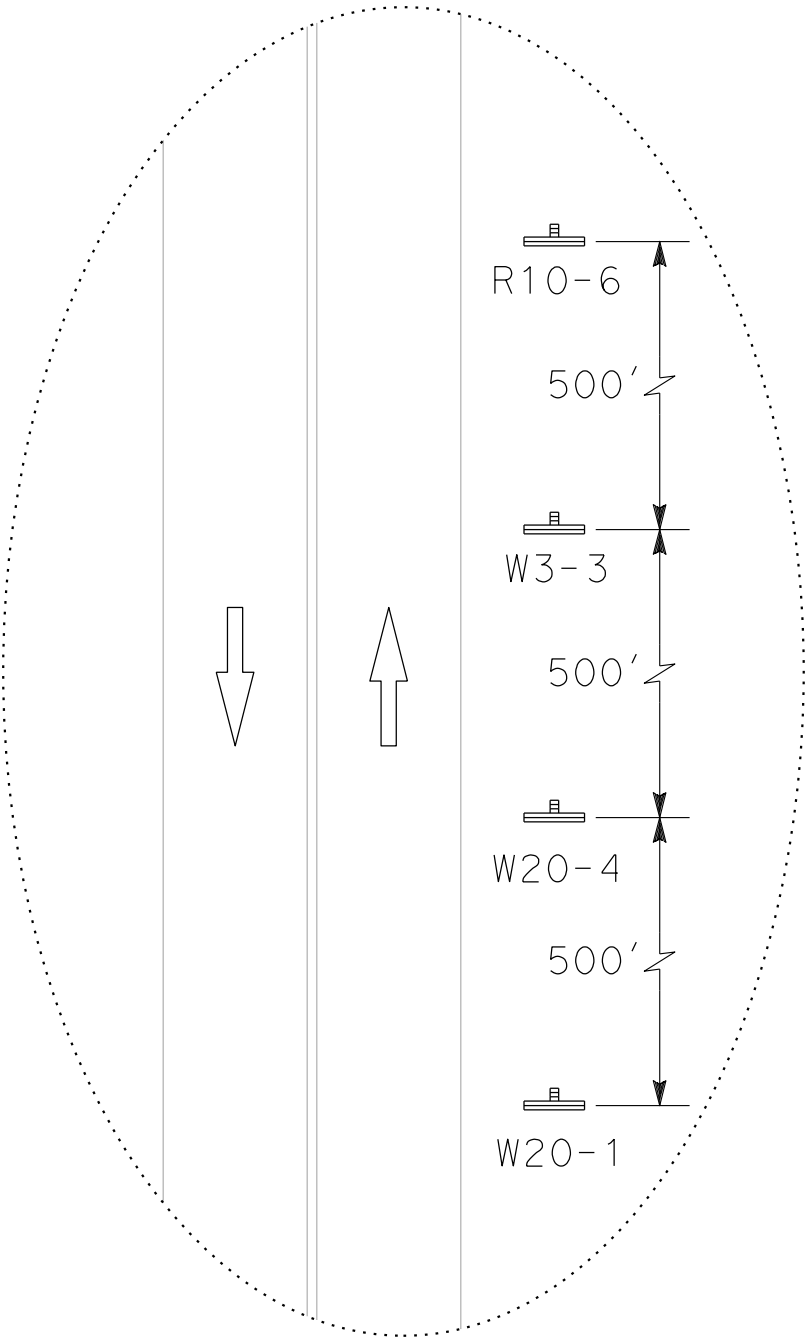
SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	

NOTE:
1. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, REFER TO SHEET CS1.

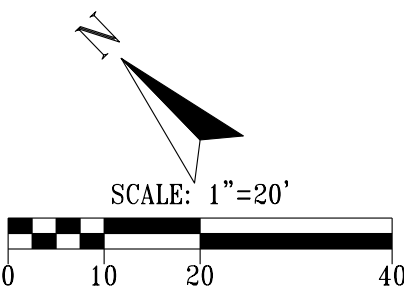
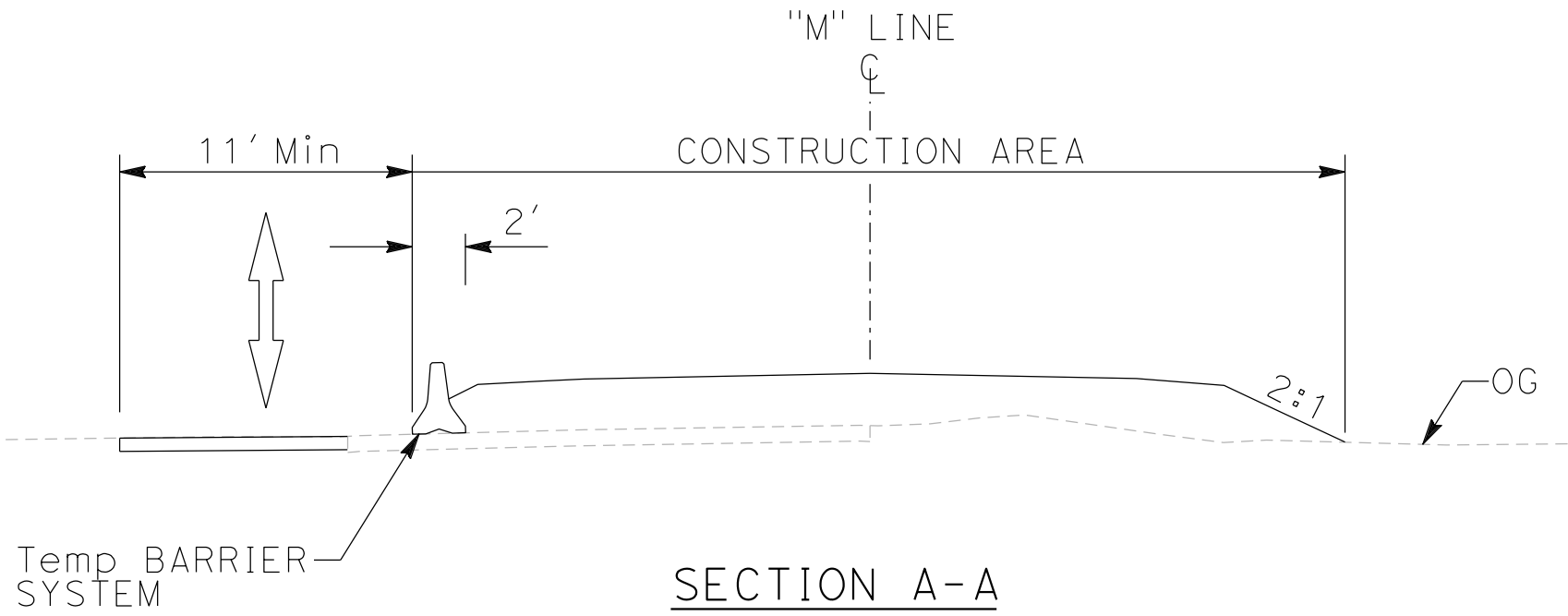
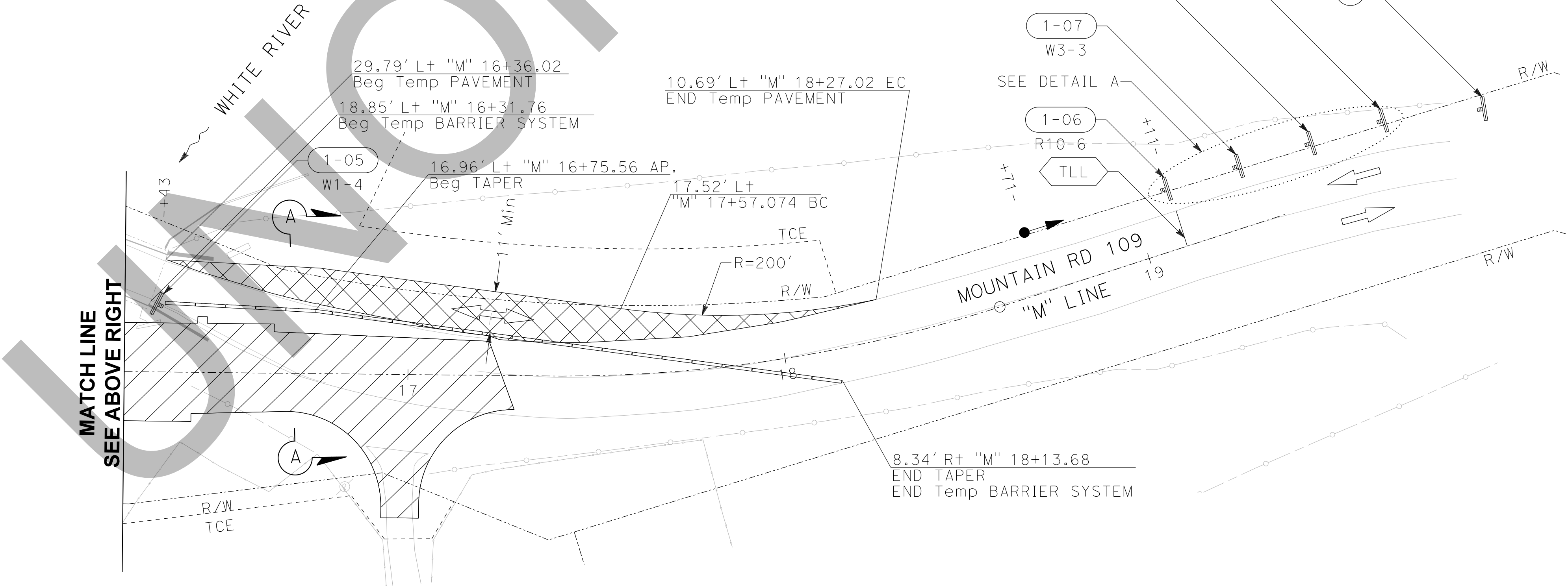
- LEGEND:
- CONSTRUCT THIS STAGE
 - TEMPORARY PAVEMENT (2" HMA/4" CLASS 2 AB)
 - TLL TEMPORARY LIMIT LINE
 - TEMPORARY PORTABLE TRAFFIC CONTROL SIGNAL
 - REVERSIBLE TRAFFIC LANE

PCMS

SIGN No. (X)	LOCATION	SIGN MESSAGE	
		FIRST FLASH	SECOND FLASH
A	MOUNTAIN ROAD 109/ HOT SPRINGS ROAD INTERSECTION	NARROW LANE TRUCKS	WHITE RIVER BRIDGE
B	MOUNTAIN ROAD 109/ JACK RANCH ROAD INTERSECTION	NARROW LANE TRUCKS	WHITE RIVER BRIDGE

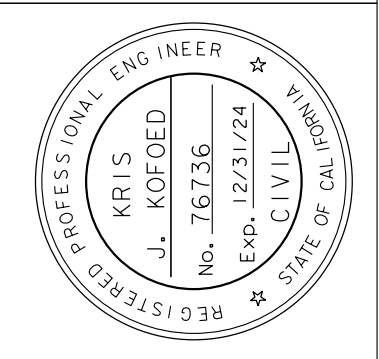


DETAIL "A"
NTS



REVISIONS	
DATE	BY

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559) 624-7000
WWW.TULARECOUNTY.CA.GOV/RMA

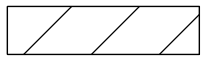


DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 95630
916-858-0642
Kris Kofod, PROJECT ENGINEER
7/17/23
DATE

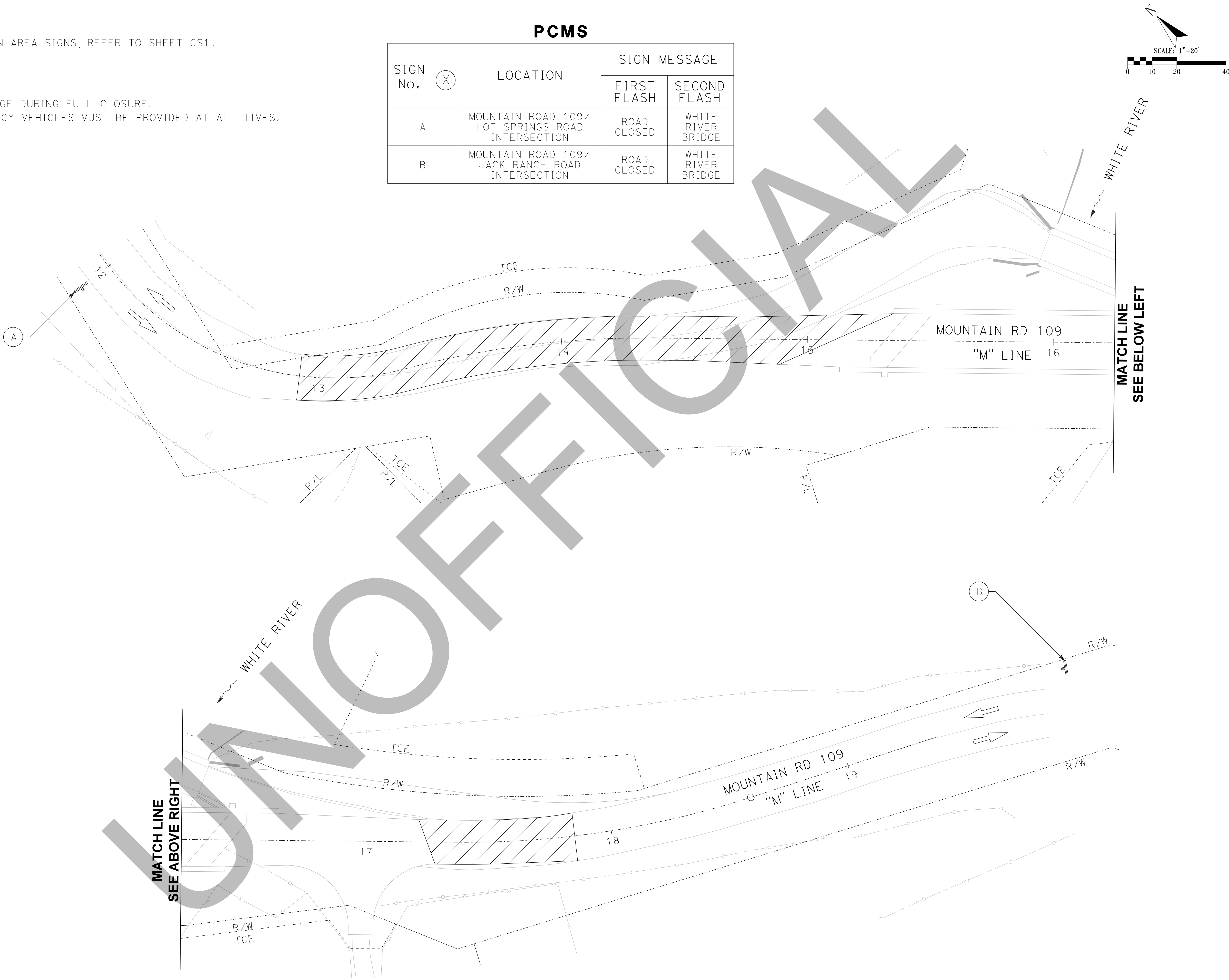
**MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
TRAFFIC HANDLING PLAN
STAGE 1**

SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	

NOTE:
1. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, REFER TO SHEET CS1.

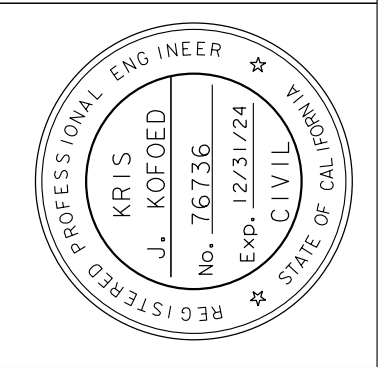
LEGEND:
 CONSTRUCT THIS STAGE DURING FULL CLOSURE.
ACCESS FOR EMERGENCY VEHICLES MUST BE PROVIDED AT ALL TIMES.

PCMS			
SIGN No.	LOCATION	SIGN MESSAGE	
		FIRST FLASH	SECOND FLASH
A	MOUNTAIN ROAD 109/ HOT SPRINGS ROAD INTERSECTION	ROAD CLOSED	WHITE RIVER BRIDGE
B	MOUNTAIN ROAD 109/ JACK RANCH ROAD INTERSECTION	ROAD CLOSED	WHITE RIVER BRIDGE



REVISIONS	
DESCRIPTION	DATE
No.	BY

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559)624-7000
WWW.TULARECOUNTY.CA.GOV/RMA



DE**DOKKEN**
ENGINEERING

110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642


KRIS KOFOD, PROJECT ENGINEER

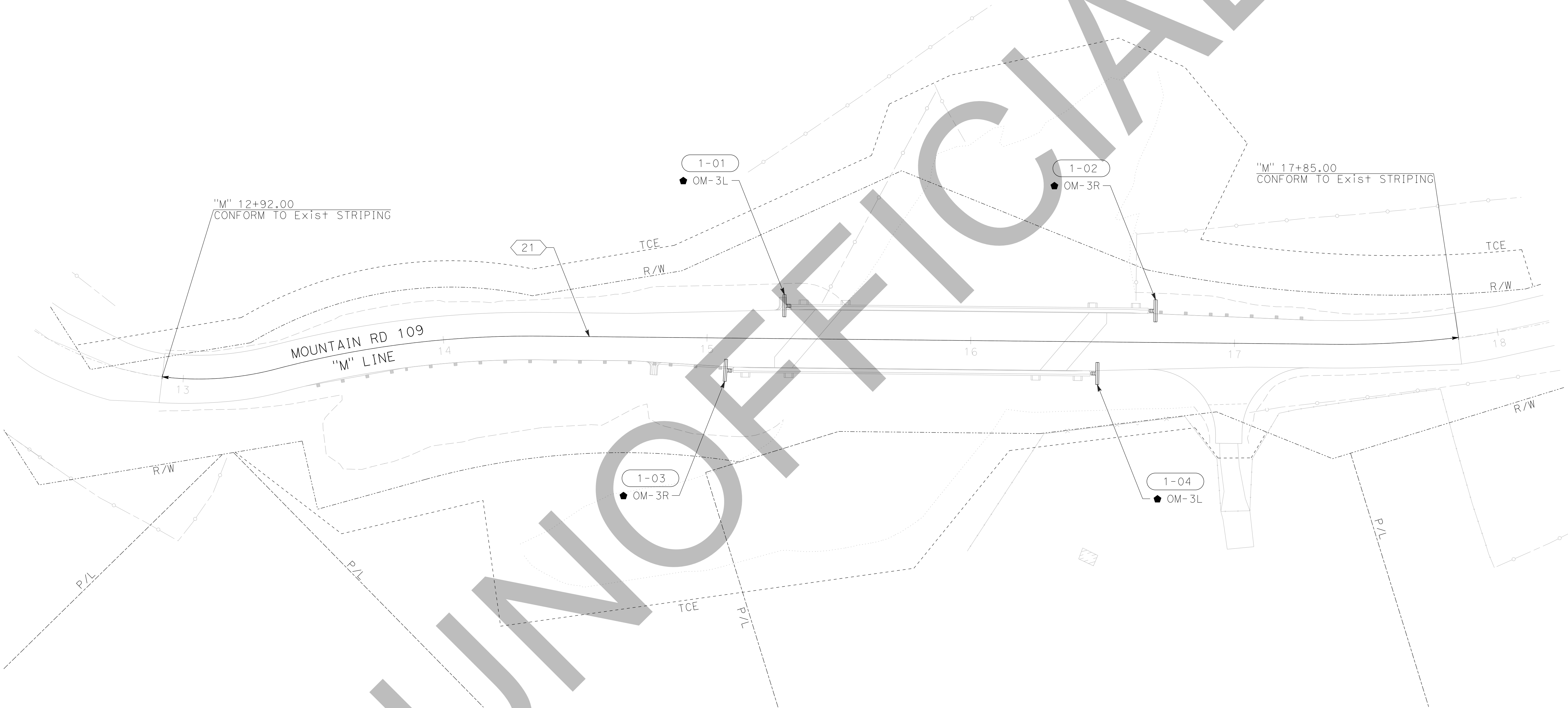
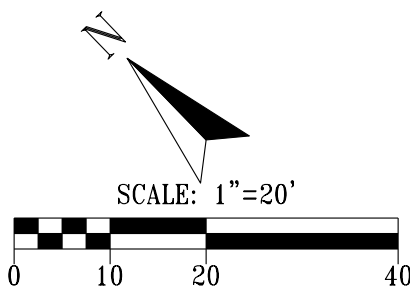
7/7/23
DATE

MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
TRAFFIC HANDLING PLAN
STAGE 2

SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	

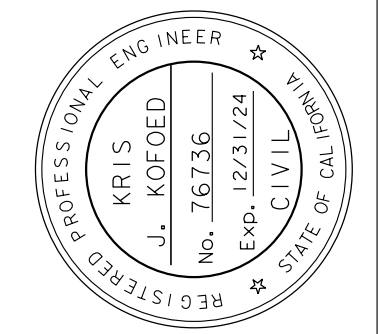
LEGEND:

- BEGIN/END OF TRAFFIC STRIPE DETAIL
- PAVEMENT DELINEATION DETAIL NUMBER
- OBJECT MARKER NUMBER
- OBJECT MARKER LOCATION
- OBJECT MARKER SIGN



REVISIONS	
No.	DESCRIPTION

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
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DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642
Kris Kofod, PROJECT ENGINEER 7/17/23
DATE

**MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
SIGNING AND STRIPING PLAN**

SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	

PD1
10 of 27

LEGEND:

1080
1075
FINISH GRADE CONTOURS 1.0' INTERVAL

EROSION CONTROL

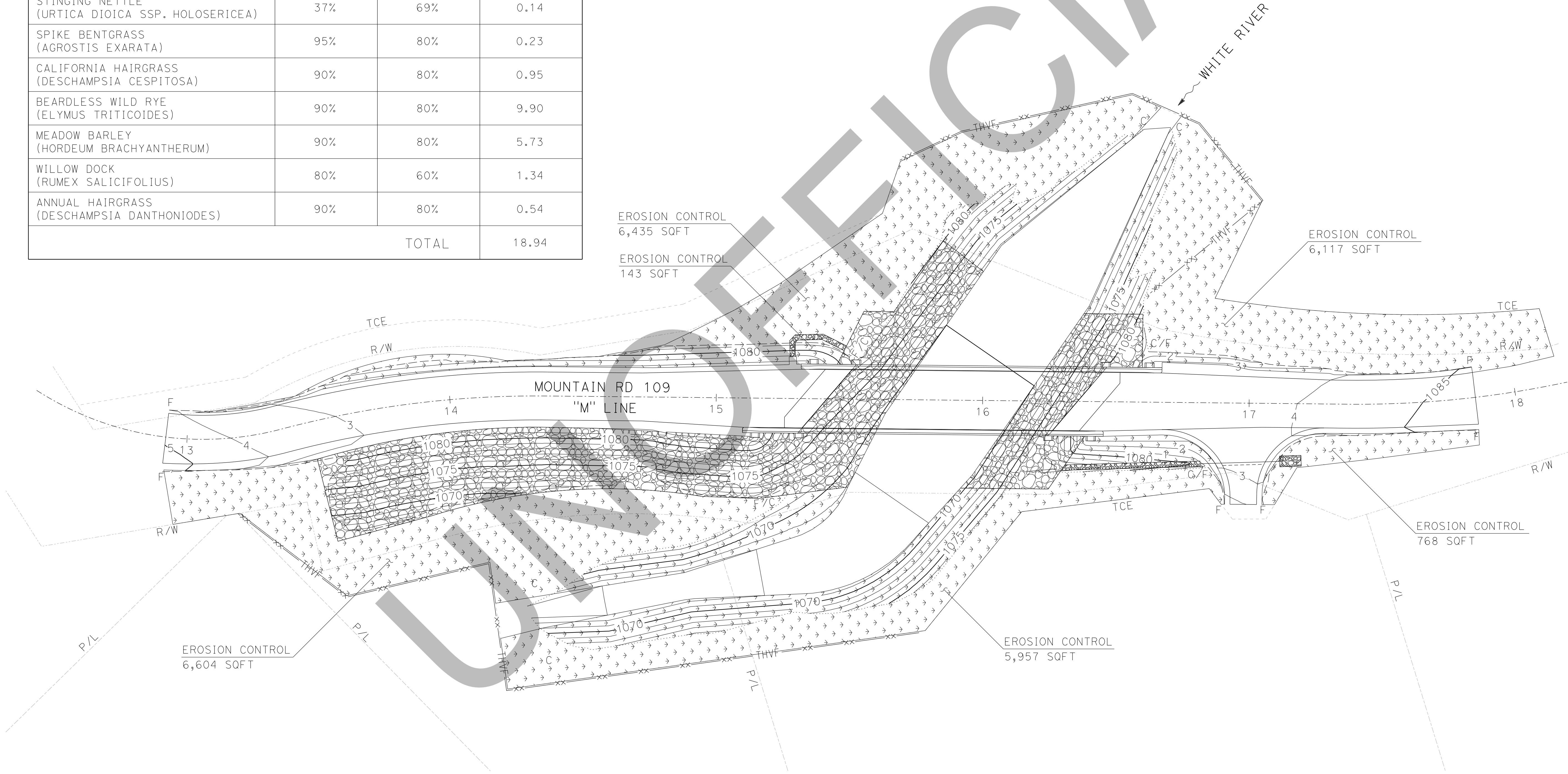
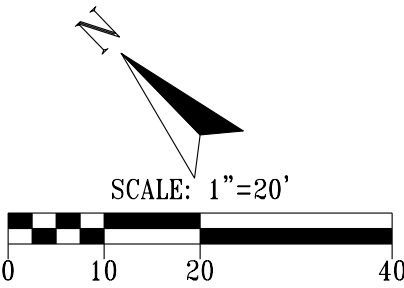
ROCK SLOPE PROTECTION (SEE SHEET C1)

SEED MIX

BOTANICAL NAME (COMMON NAME)	PERCENT PURITY (MINIMUM)	PERCENT GERMINATION (MINIMUM)	POUNDS PER ACRE
CALIFORNIA MUGWORT (ARTEMISIA DOUGLASIANA)	15%	40%	0.11
STINGING NETTLE (URTICA DIOICA SSP. HOLOSERICEA)	37%	69%	0.14
SPIKE BENTGRASS (AGROSTIS EXARATA)	95%	80%	0.23
CALIFORNIA HAIRGRASS (DESCHAMPSIA CESPITOSA)	90%	80%	0.95
BEARDLESS WILD RYE (ELYMUS TRITICOIDES)	90%	80%	9.90
MEADOW BARLEY (HORDEUM BRACHYANTHERUM)	90%	80%	5.73
WILLOW DOCK (RUMEX SALICIFOLIUS)	80%	60%	1.34
ANNUAL HAIRGRASS (DESCHAMPSIA DANTHONIOIDES)	90%	80%	0.54
TOTAL			18.94

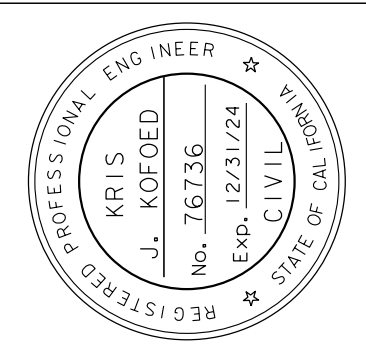
EROSION CONTROL

ITEM	MATERIAL TYPE	APPLICATION RATE	REMARKS
BONDED FIBER MATRIX	BONDED FIBER AND TACKIFIER	2500 LB/ACRE	APPLICATION RATE IS FOR FIBER AND TACKIFIER COMBINED
	SEED MIX	18.94 LB/ACRE	



REVISIONS		DATE	BY
DESCRIPTION			
No.			

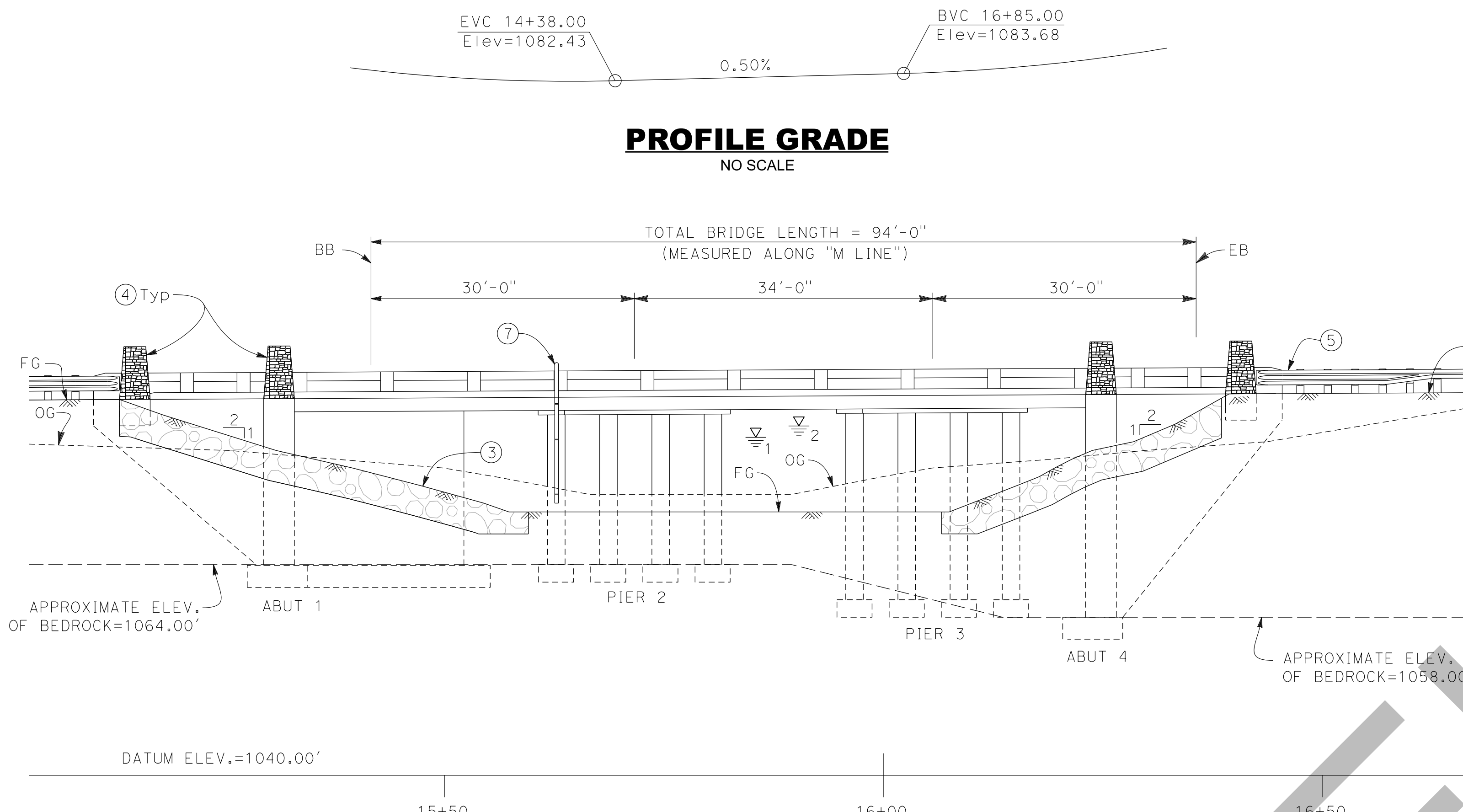
COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559)624-7000
WWW.TULARECOUNTY.CA.GOV/RMA



DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642
Kris Kofod, PROJECT ENGINEER
7/17/23
DATE

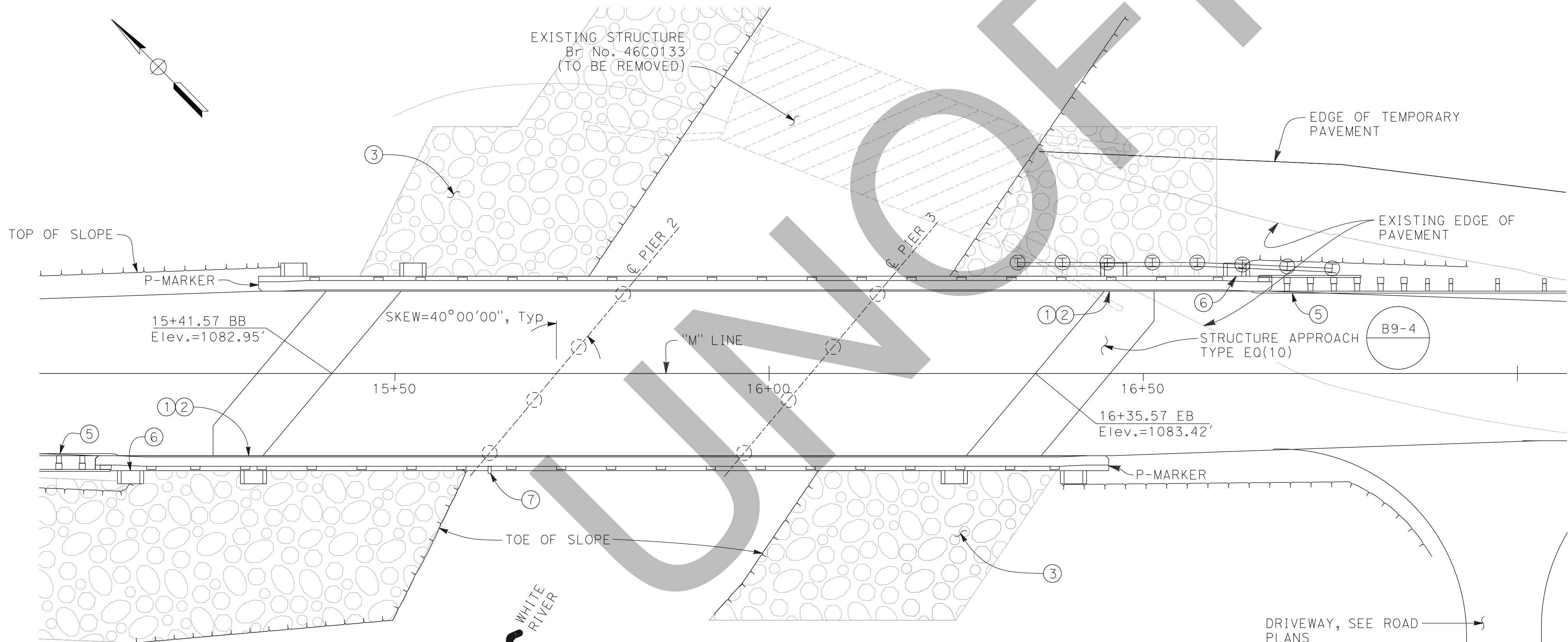
**MOUNTAIN ROAD 109 (M109)
OVER WHITE RIVER BRIDGE
REPLACEMENT
EROSION CONTROL PLAN**

SCALE	AS SHOWN
DIVISION	
JOB NO.	
DESIGNED	KK
DRAWN	AR
CHECKED	KK
FILE	
DATE	\$DATE\$
SHEET No.	



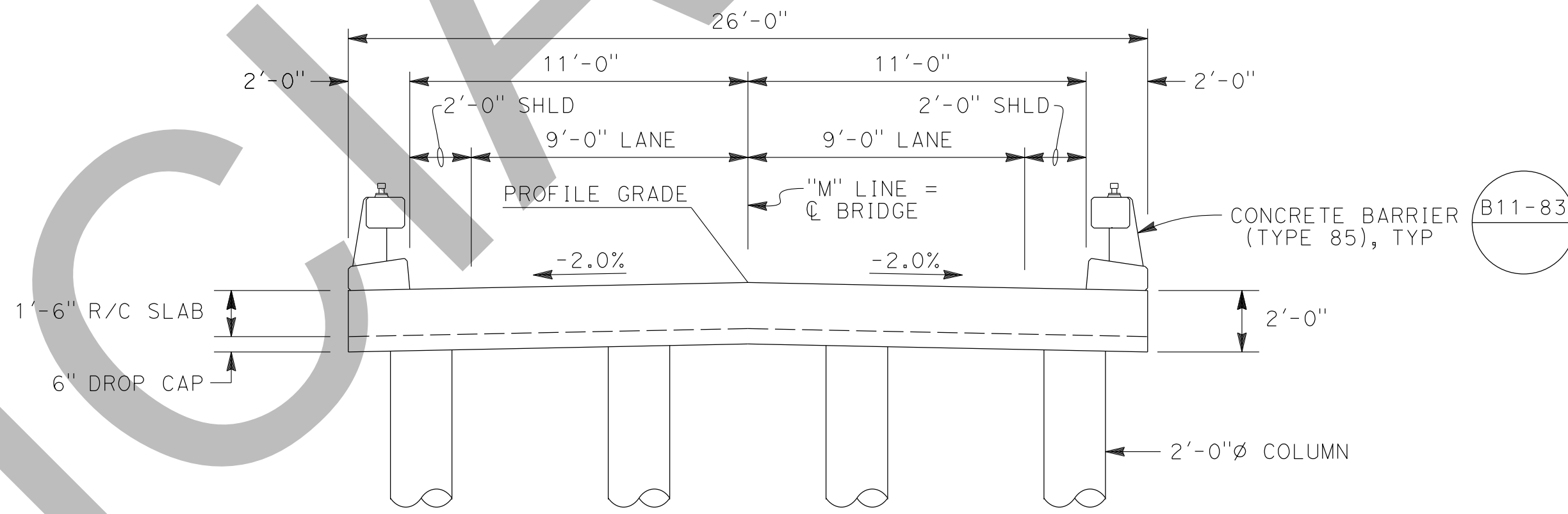
PROFILE GRADE
NO SCALE

ELEVATION
1" = 10'



NOTE:
The contractor shall verify all controlling field dimensions before ordering or fabricating any material.

PLAN
1" = 10'



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

LEGEND:

- ① Paint "Br No. 46C0487"
- ② Place Date Stamp (Provided by County)
- ③ Rock Slope Protection, see Road Plans
- ④ Concrete Surface Texture, see "ARCHITECTURAL DETAILS" sheet
- ⑤ MGS, see Road Plans
- ⑥ Plaque tile, see "ARCHITECTURAL DETAILS" sheet
- ⑦ Dry hydrant. See "DRY HYDRANT DETAILS" on "PIER DETAILS" sheet
- Existing structure
- ⊕---⊕ Indicates anticipated temporary shoring as required for bridge construction and removal. Actual shoring locations and designs are the responsibility of the contractor

NOTES:

- 1. For General Notes and Quantities, see "INDEX TO PLANS" sheet
- 2. For Hydrologic Summary, Scour Data Table, and Spread Footing Data Table, see "FOUNDATION PLAN" sheet.

REVISIONS	
No.	DESCRIPTION

COUNTY OF TULARE
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DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642
JEREMY NOTTMAGEL, PROJECT ENGINEER

MOUNTAIN ROAD 109 OVER WHITE RIVER BRIDGE GENERAL PLAN

SCALE: AS SHOWN
DIVISION: STRUCTURES
JOB NO.: #2599
DESIGNED: JN
DRAWN: MD
CHECKED: TP
FILE: 7/7/23
DATE: 7/7/23
SHEET No. S1

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INDEX TO PLANS

SHEET NO.	TITLE
S1	GENERAL PLAN
S2	INDEX TO PLANS
S3	STAGED CONSTRUCTION
S4	DECK CONTOURS
S5	FOUNDATION PLAN
S6	ABUTMENT LAYOUT
S7	ABUTMENT DETAILS
S8	PIER LAYOUT
S9	PIER DETAILS
S10	SLAB REINFORCEMENT DETAILS No. 1
S11	SLAB REINFORCEMENT DETAILS No. 2
S12	ARCHITECTURAL TREATMENT DETAILS
S13	LOG OF TEST BORINGS NO. 1
S14	LOG OF TEST BORINGS NO. 2
S15	LOG OF TEST BORINGS NO. 3
S16	LOG OF TEST BORINGS NO. 4

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

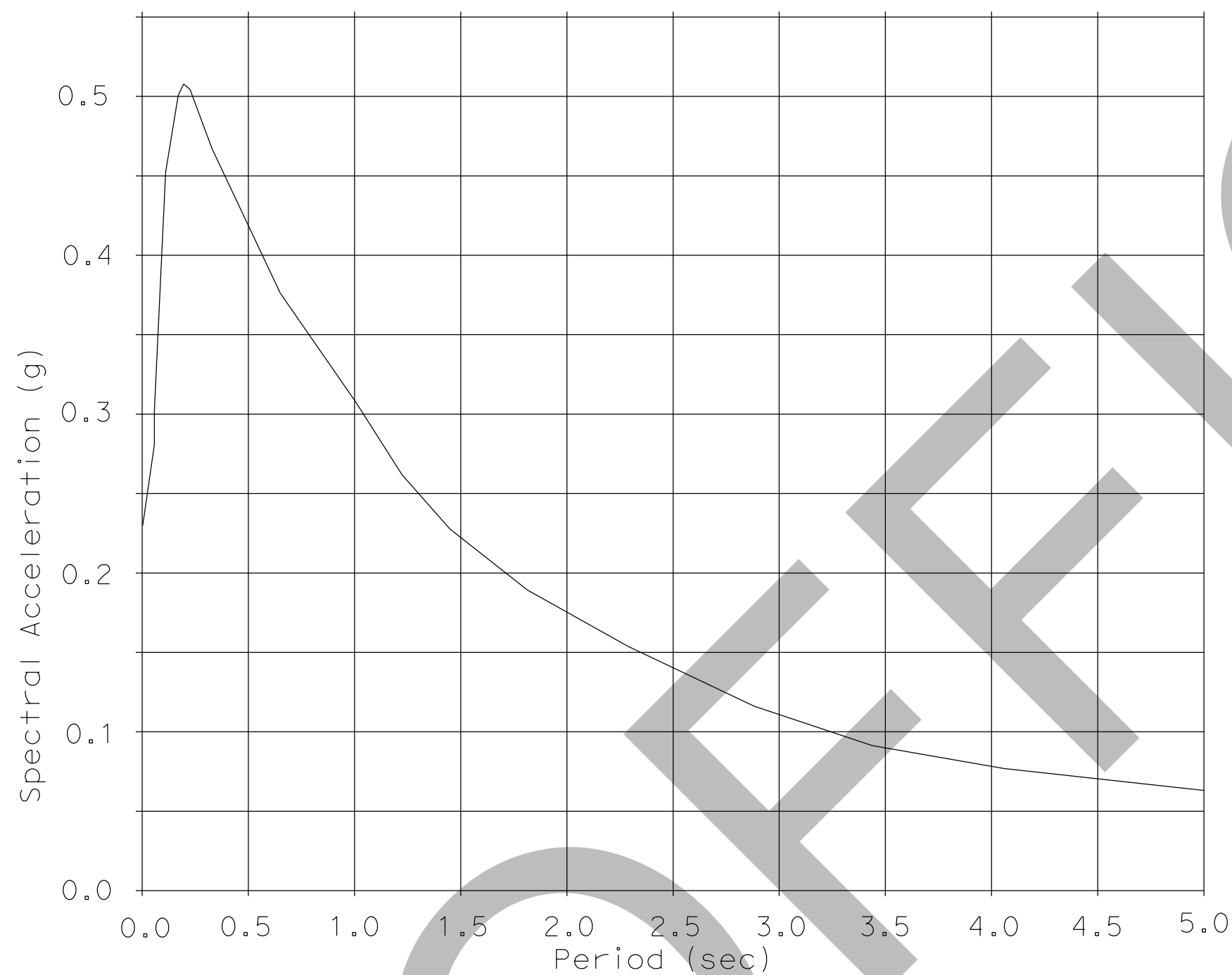
DESIGN: AASHTO LRFD Bridge Design Specifications, 8th Edition with California Amendments, preface dated November 2019

SEISMIC DESIGN: CALTRANS SEISMIC DESIGN CRITERIA (SDC) Version 2.0, April 2019 with October 2019 Revisions

ADDED DEAD LOAD: Includes 35 psf for future wearing surface

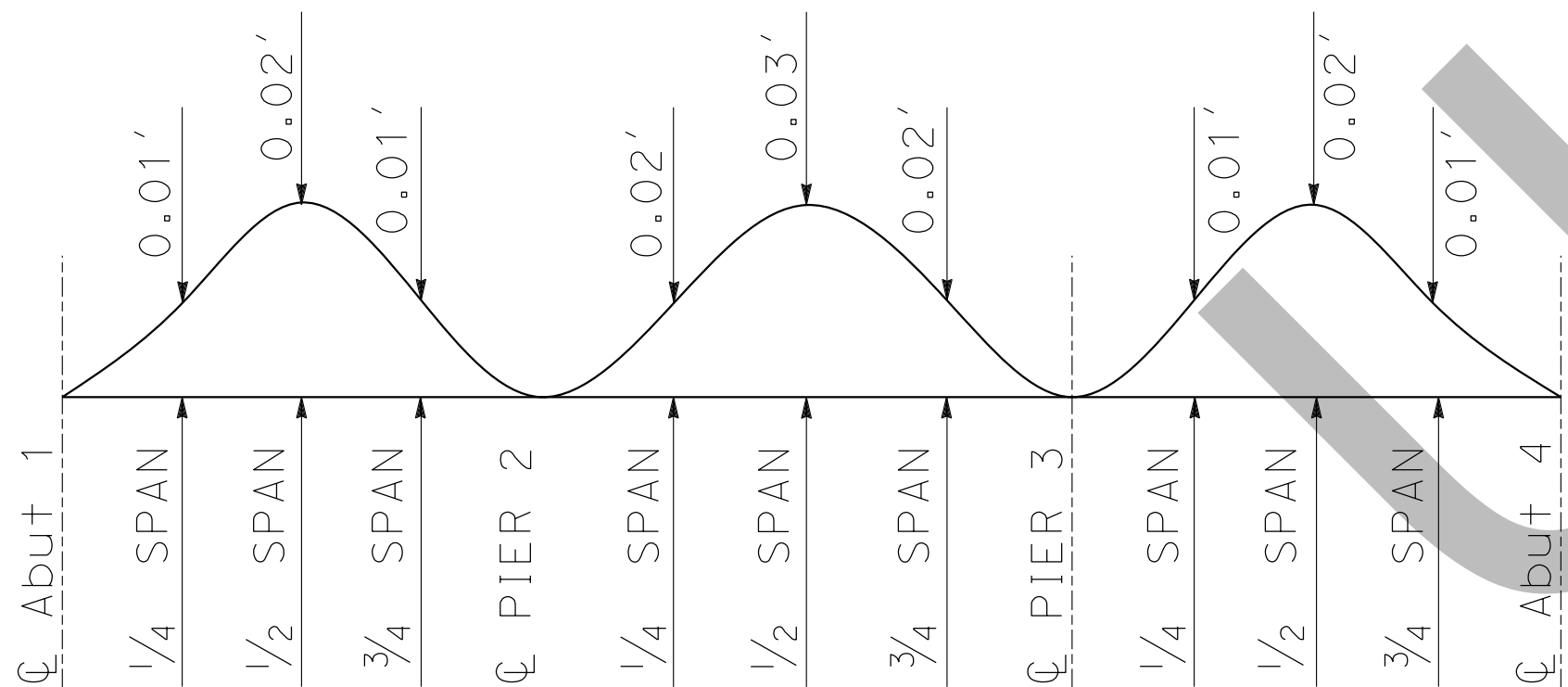
LIVE LOAD: HL93 Design Load
P15 Permit Load

SEISMIC LOAD: Soil profile : $V_{S30} = 2493$ ft/s
Moment Magnitude : 6.16
Peak Ground Acceleration = 0.23g
5% Damping



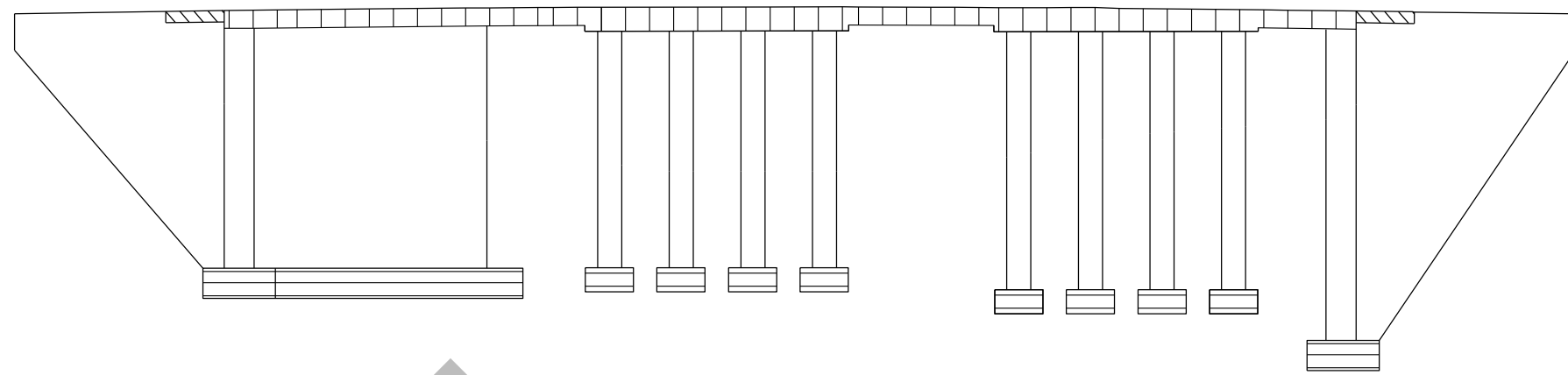
ARS CURVE

REINFORCED CONCRETE: $f_y = 60$ ksi
 $f'_c = 3.6$ ksi
 $n = 8$



CAMBER DIAGRAM

NO SCALE



CONCRETE STRENGTH AND TYPE LIMITS

- STRUCTURAL CONCRETE, (POLYMER FIBER) ($f'_c = 4.0$ ksi)
- STRUCTURAL CONCRETE, BRIDGE ($f'_c = 3.6$ ksi)
- STRUCTURAL CONCRETE, BRIDGE FOOTING ($f'_c = 3.6$ ksi)
- STRUCTURAL CONCRETE, APPROACH SLAB ($f'_c = 3.6$ ksi)

QUANTITIES		
ITEM	UNIT	QUANTITY
BRIDGE REMOVAL	LS	1
STRUCTURE EXCAVATION (ROCK)*	CY	80
STRUCTURE EXCAVATION (TYPE D)*	CY	570
STRUCTURE BACKFILL (BRIDGE)	CY	450
TEMPORARY SHORING	LS	1
STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	35
STRUCTURAL CONCRETE, BRIDGE	CY	230
STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	CY	140
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE EQ)	CY	22
CONCRETE SURFACE TEXTURE (DRY STACK)	SQFT	420
DRILL AND BOND DOWEL	LF	120
JOINT SEAL (MR 1/2")	LF	63
BAR REINFORCING STEEL (BRIDGE)	LB	90000
BAR REINFORCING STEEL (GALVANIZED)	LB	2000
PREPARE AND STAIN CONCRETE	SQFT	500
CONCRETE BARRIER (TYPE 85)	LF	271
MISCELLANEOUS METAL (DRY HYDRANT)	LB	190
WORK AREA MONITORING (BRIDGE)	LS	1

*FOR PAY LIMITS OF EXCAVATION, SEE "DECK CONTOURS" SHEET

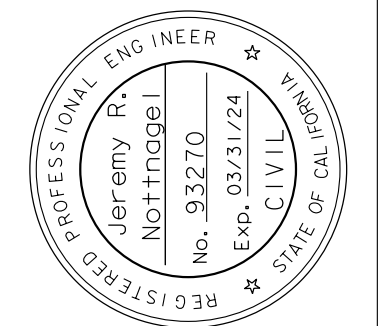
STANDARD PLANS DATED 2022

- A3A Abbreviations (Sheet 1 of 3)
- A3B Abbreviations (Sheet 1 of 3)
- A3C Abbreviations (Sheet 1 of 3)
- A10A Legend - Lines and Symbols (Sheet 1 of 5)
- A10B Legend - Lines and Symbols (Sheet 1 of 5)
- A10C Legend - Lines and Symbols (Sheet 1 of 5)
- A10D Legend - Lines and Symbols (Sheet 1 of 5)
- A10E Legend - Lines and Symbols (Sheet 1 of 5)
- RSP A10F Legend - Soil (Sheet 1 of 2)
- RSP A10G Legend - Soil (Sheet 1 of 2)
- A62C Limits of Payment for Excavation and Backfill - Bridge
- RSP A77U3A Midwest Guardrail System - Connections to Abutments and Walls
- RSP A77U3B Midwest Guardrail System - Connections to Abutments and Walls
- B0-1 Bridge Details
- B0-3 Bridge Details
- B0-5 Bridge Details
- B0-13 Bridge Details
- B6-21 Joint Seals (Maximum Movement Rating = 2")
- B9-4 Structure Approach Type EQ (10)
- B9-5 Structure Approach - Slab Details
- B9-6 Structure Approach - Drainage Details
- B11-83 Concrete Barrier Type 85 (Sheet 1 of 3)
- B11-84 Concrete Barrier Type 85 (Sheet 1 of 3)
- B11-85 Concrete Barrier Type 85 (Sheet 1 of 3)



REVISIONS		DATE	BY
No.	DESCRIPTION		

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
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(559)624-7000
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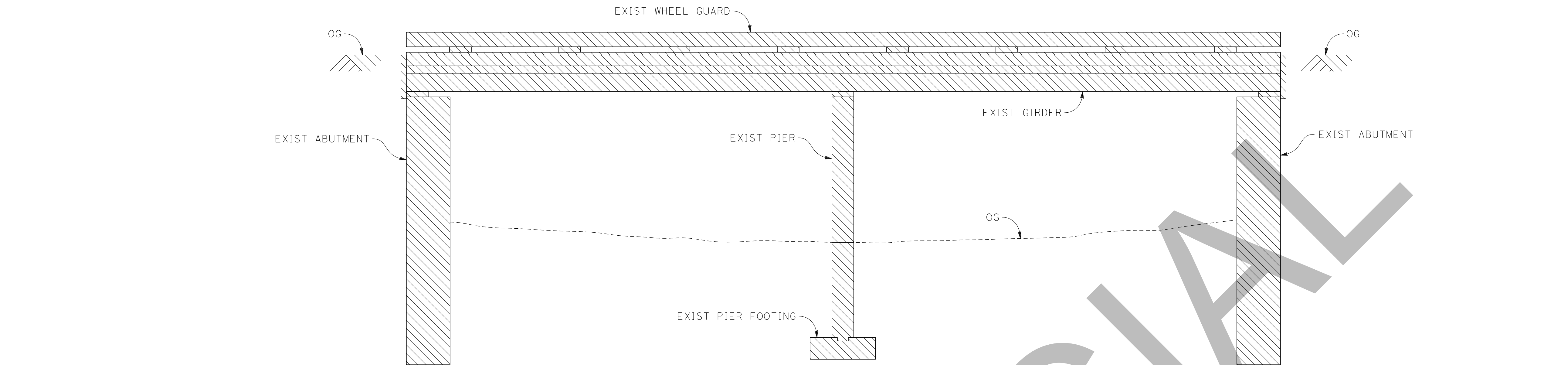


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110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642
JEREMY NOTTINGHAM, PROJECT ENGINEER

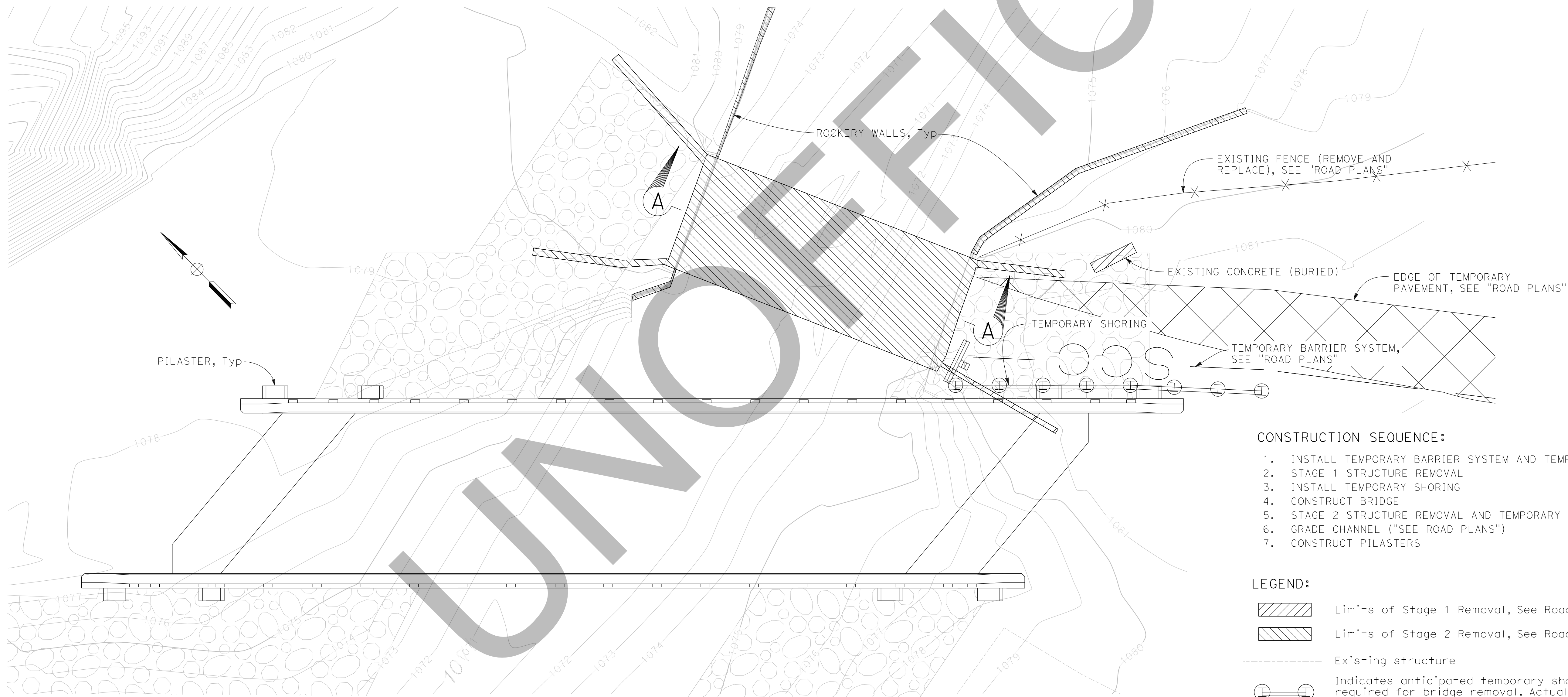
MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE
INDEX TO PLANS

SCALE	AS SHOWN
DIVISION	STRUCTURES
JOB NO.	#2599
DESIGNED	JN
DRAWN	MD
CHECKED	TP
FILE	
DATE	7/7/23
SHEET No.	

S2
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SECTION A-A
3/8" = 1'-0"



PLAN
1/8" = 1'-0"

CONSTRUCTION SEQUENCE:

1. INSTALL TEMPORARY BARRIER SYSTEM AND TEMPORARY PAVEMENT
2. STAGE 1 STRUCTURE REMOVAL
3. INSTALL TEMPORARY SHORING
4. CONSTRUCT BRIDGE
5. STAGE 2 STRUCTURE REMOVAL AND TEMPORARY SHORING REMOVAL
6. GRADE CHANNEL ("SEE ROAD PLANS")
7. CONSTRUCT PILASTERS

LEGEND:

- Limits of Stage 1 Removal, See Road Plans
- Limits of Stage 2 Removal, See Road Plans

Existing structure

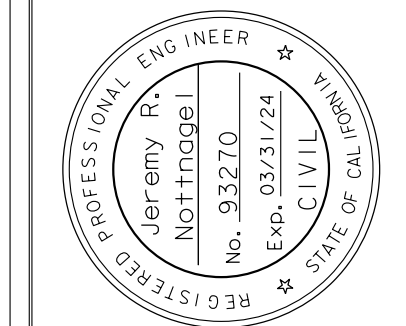
Indicates anticipated temporary shoring as required for bridge removal. Actual shoring location and design are the responsibility of the contractor

NOTES:

1. For all traffic control staging and details, see "Road Plans"

REVISIONS	
NO.	DESCRIPTION

COUNTY OF TULARE
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DEDOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642
Jeremy Notting, PROJECT ENGINEER

**MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE**
STAGED CONSTRUCTION

SCALE	AS SHOWN
DIVISION	STRUCTURES
JOB NO.	#2599
DESIGNED	JN
DRAWN	MD
CHECKED	TP
FILE	
DATE	7/7/23
SHEET No.	

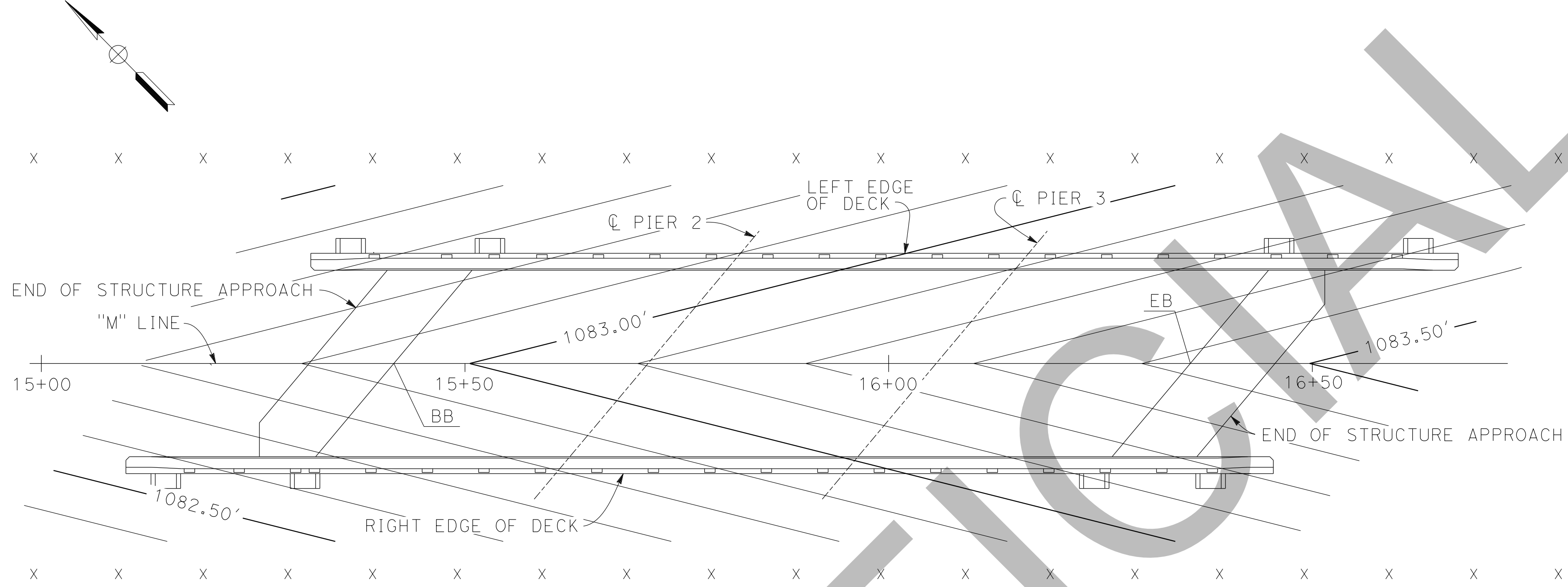
S3
14 OF 27

NOTES:

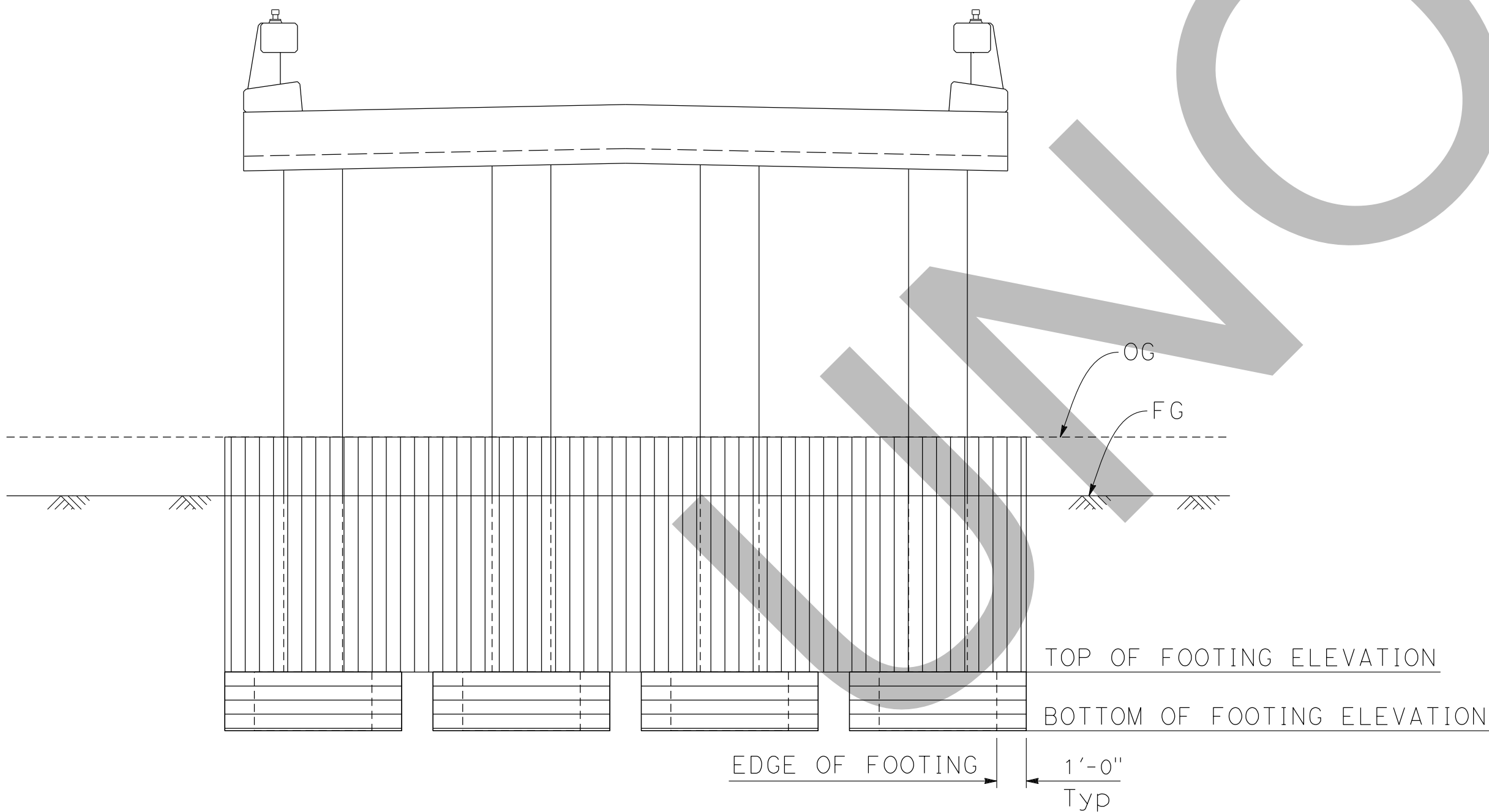
Contours do not include camber, falsework settlement, or allowance for deck grinding and grooving.

Contour interval is 0.10'

x Denotes 10' interval along "M" LINE

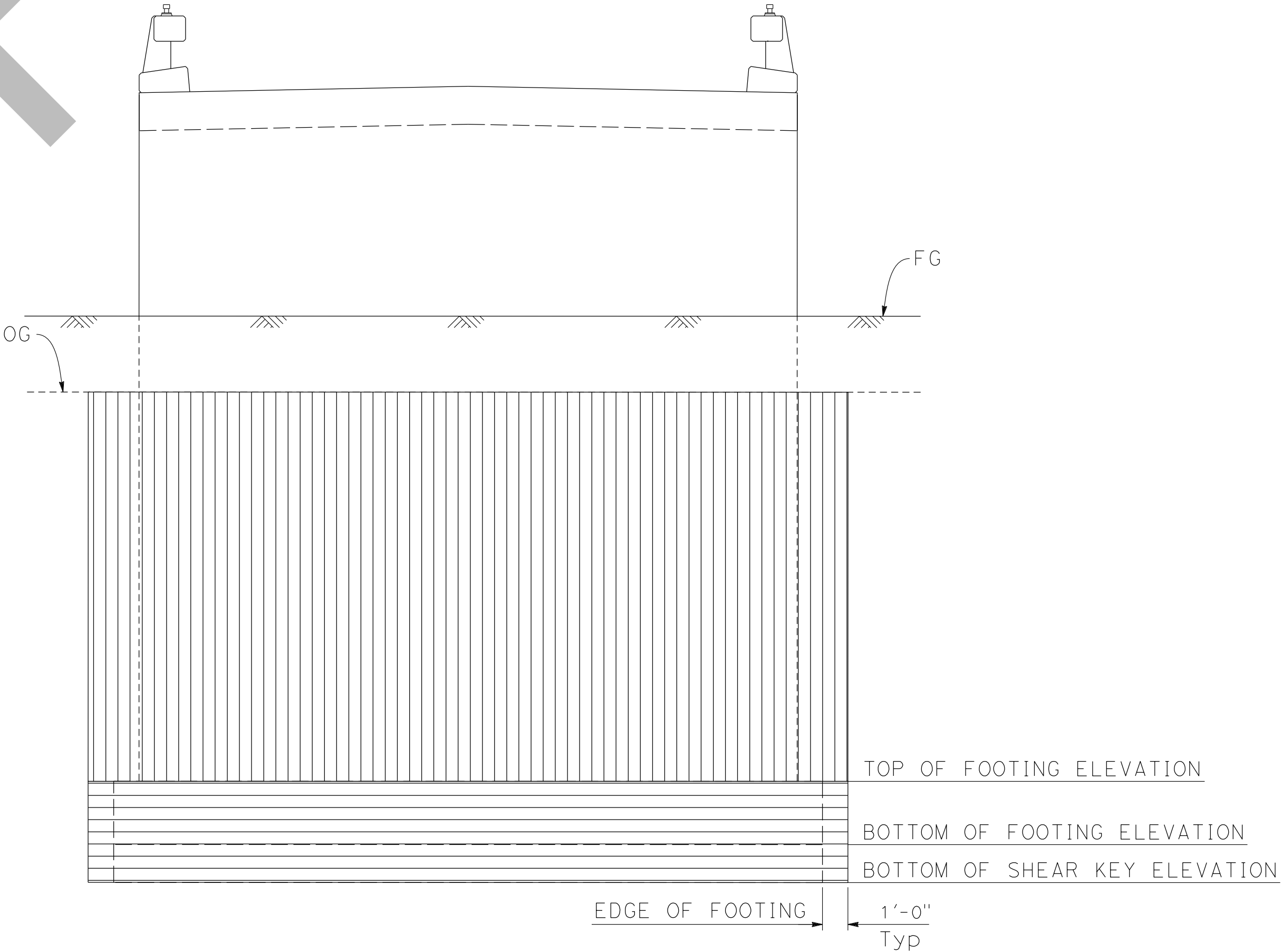


- LEGEND:
- STRUCTURE EXCAVATION (TYPE D)
 - STRUCTURE EXCAVATION (ROCK)



LIMITS OF PAYMENT FOR STRUCTURE EXCAVATION (AT PIERS)

NO SCALE



LIMITS OF PAYMENT FOR STRUCTURE EXCAVATION (AT ABUTMENTS)

NO SCALE

REVISIONS

No.	DESCRIPTION	DATE	BY

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559) 624-7000
WWW.TULARECOUNTY.CA.GOV/RMA

REGISTERED PROFESSIONAL ENGINEER
Jeremy R. Nottinger
No. 93270
Exp. 03/31/24
STATE OF CALIFORNIA
CIVIL

DEDOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642
Jeremy Nottinger
JEREMY NOTTINGER, PROJECT ENGINEER

DATE

MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE
DECK CONTOURS

SCALE AS SHOWN
DIVISION STRUCTURES
JOB NO. #2599
DESIGNED JN
DRAWN MD
CHECKED TP
FILE
DATE 7/7/23
SHEET No.

S4

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Scour Data Table			
Support Location	Long Term (Deg And Contraction) Scour Elev (ft)	Short Term Scour (Local) Depth (ft)	Total Scour * Elevation (ft)
ABUT 1	1065.60'	4.50'	1061.10'
PIER 2	1065.60'	5.60'	1059.90'
PIER 3	1065.60'	4.60'	1061.00'
ABUT 4	1065.60'	5.90'	1059.70'

Spread Footing Data Table			
Support Location	Load and Resistance Factor Design (LRFD)		
	Service Permissible Net Contact Stress (Settlement) (ksf)	Strength/Construction Factored Gross Nominal Bearing Resistance $\phi_c = 0.45$ (ksf)	Extreme Event Factored Gross Nominal Bearing Resistance $\phi_c = 1.00$ (ksf)
ABUT 1	35.3	222.4	N/A
PIER 2	52.7	162.6	361.3
PIER 3	52.7	162.6	361.3
ABUT 4	37.1	249.5	N/A

* Top of footing elevations are to be placed below bedrock as determined by engineer. Bedrock must be non-scourable. Footing elevations may be adjusted by the engineer based on field conditions encountered during construction.

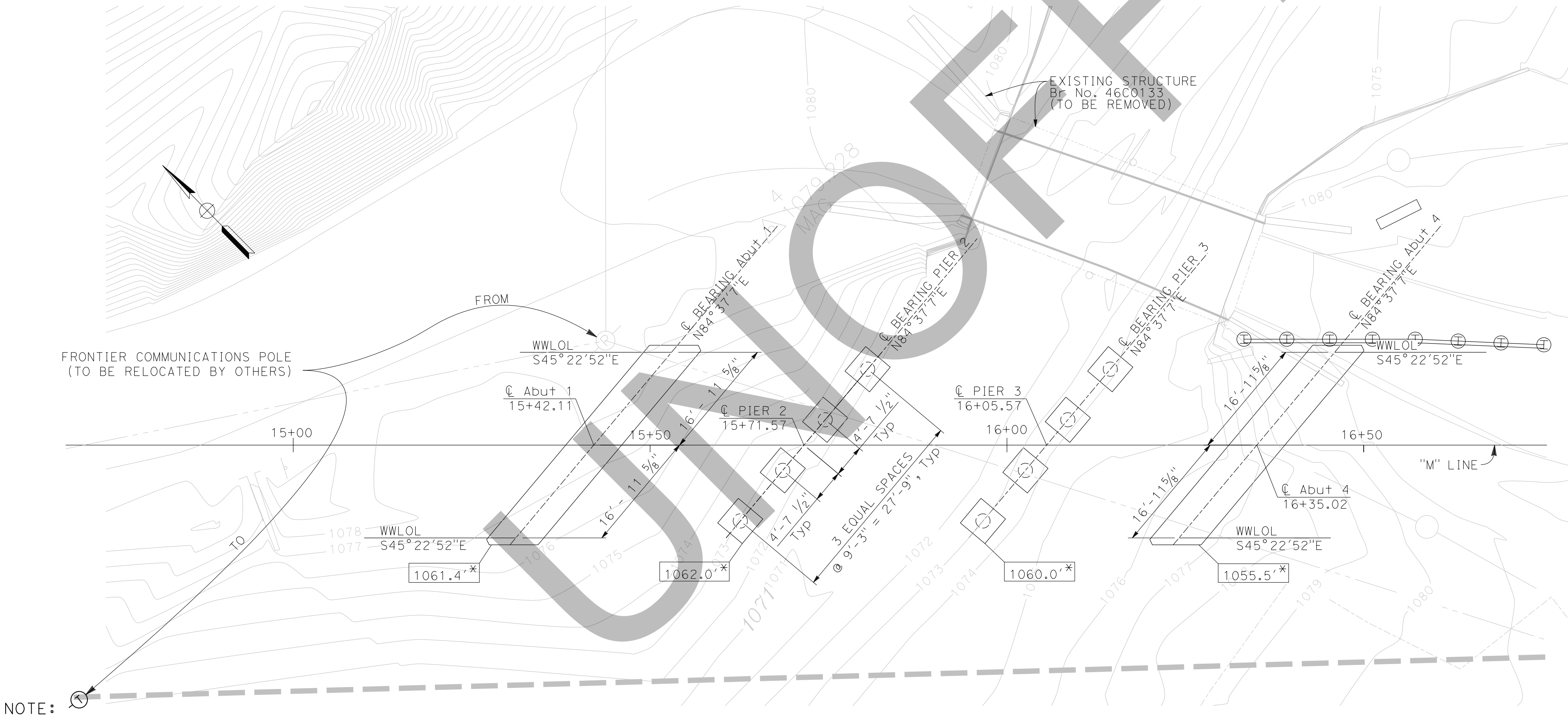
Hydraulic / Hydrology Data		
Drainage Area = 57.4 Sq Mi.	DESIGN FLOOD	BASE FLOOD
Frequency	50 YEAR	100 YEAR
Discharge	3570 CFS	4650 CFS
Proposed Water Surface Elevation at Face of Bridge	1078.5	1079.8

LEGEND:

XXXX.XX' Indicates bottom of footing elevation

NOTES:

⊕—⊕ Indicates anticipated temporary shoring as required for bridge removal. Actual shoring locations and designs are the responsibility of the contractor



PLAN
1" = 10'

REVISIONS

No.	DESCRIPTION	DATE	BY

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559)624-7000
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REGISTERED PROFESSIONAL ENGINEER
Jeremy R. Nottingham
No. 93270
Exp. 03/31/24
STATE OF CALIFORNIA
CIVIL

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ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642
Jeremy Nottingham
JEREMY NOTTMAGEL, PROJECT ENGINEER

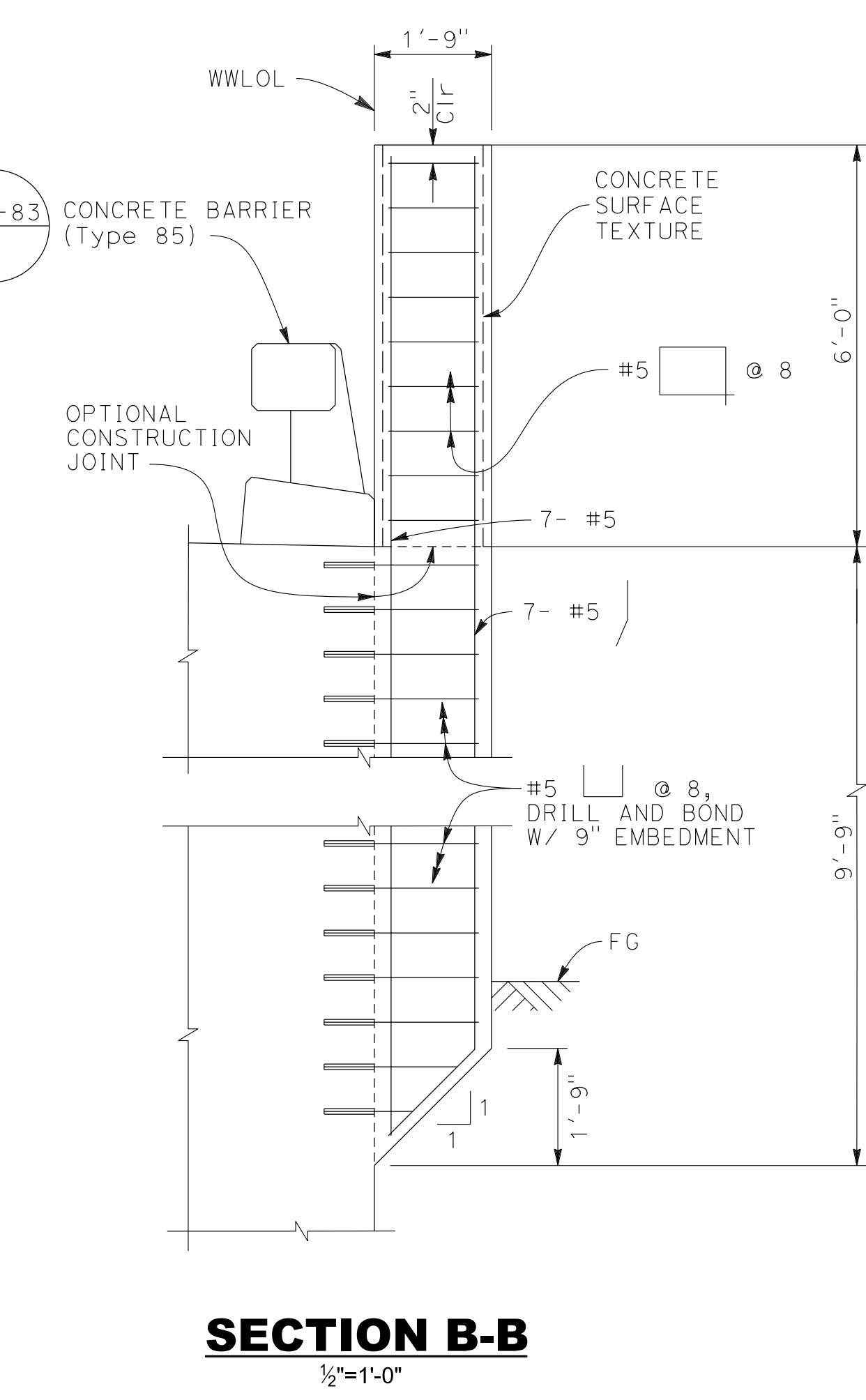
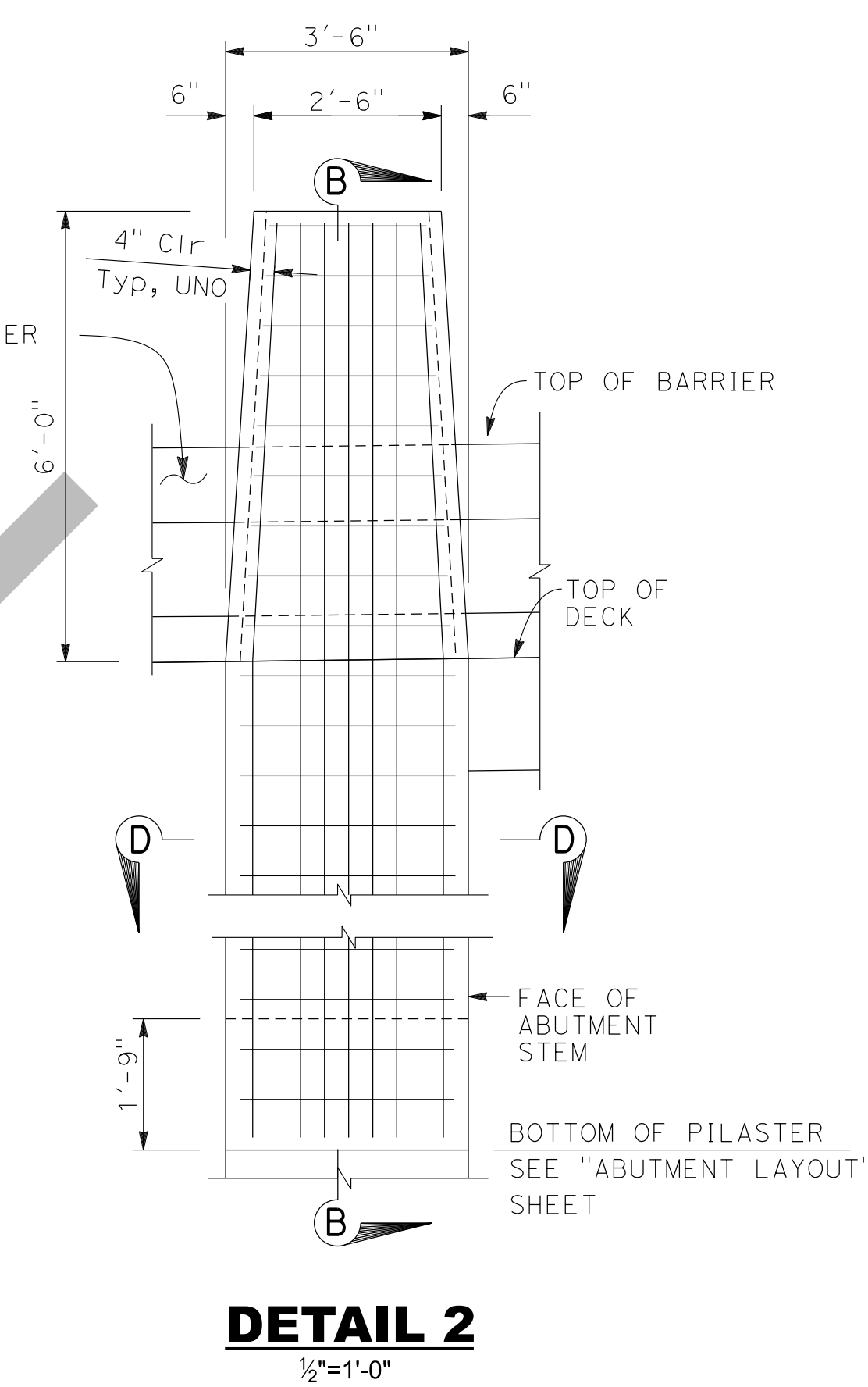
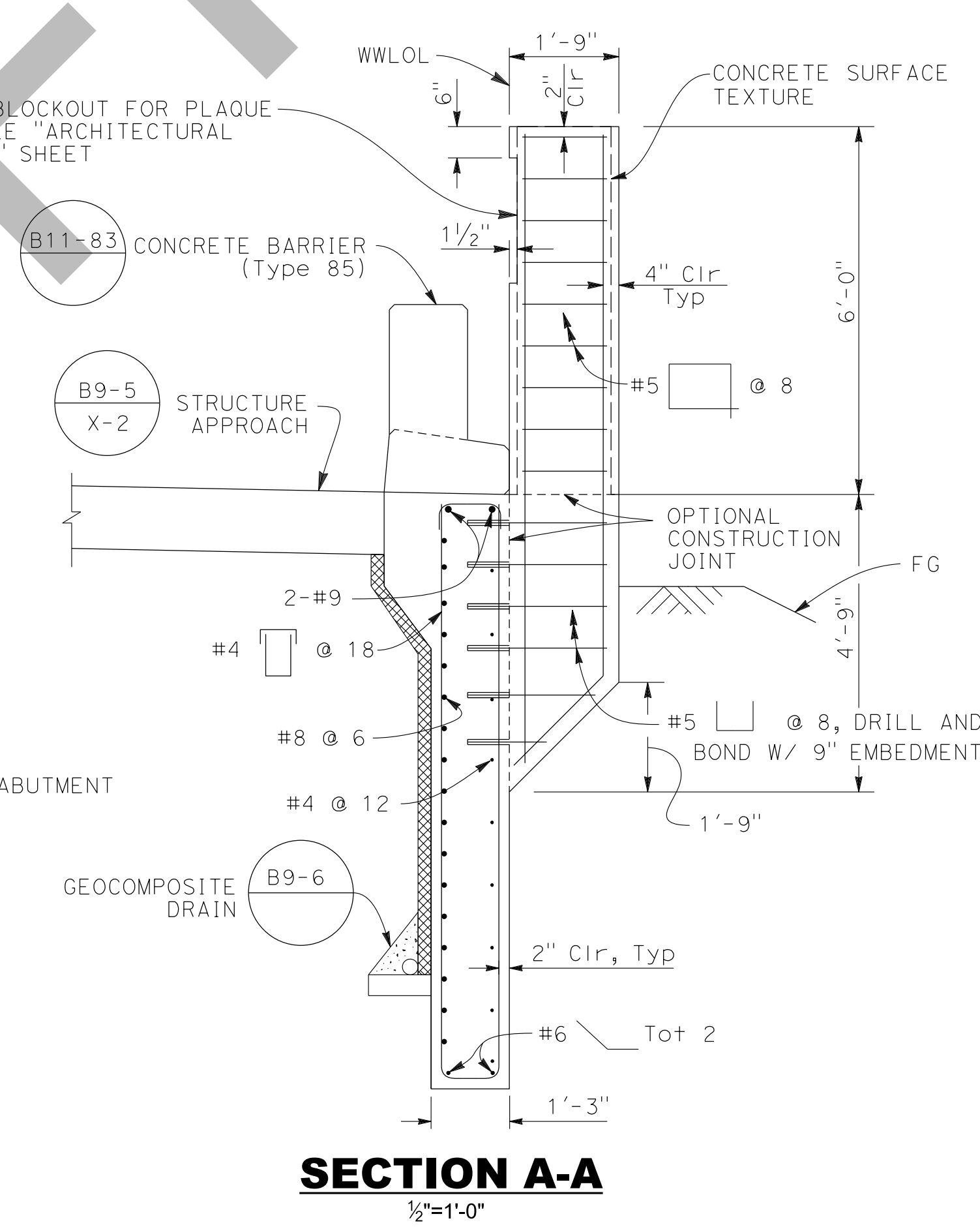
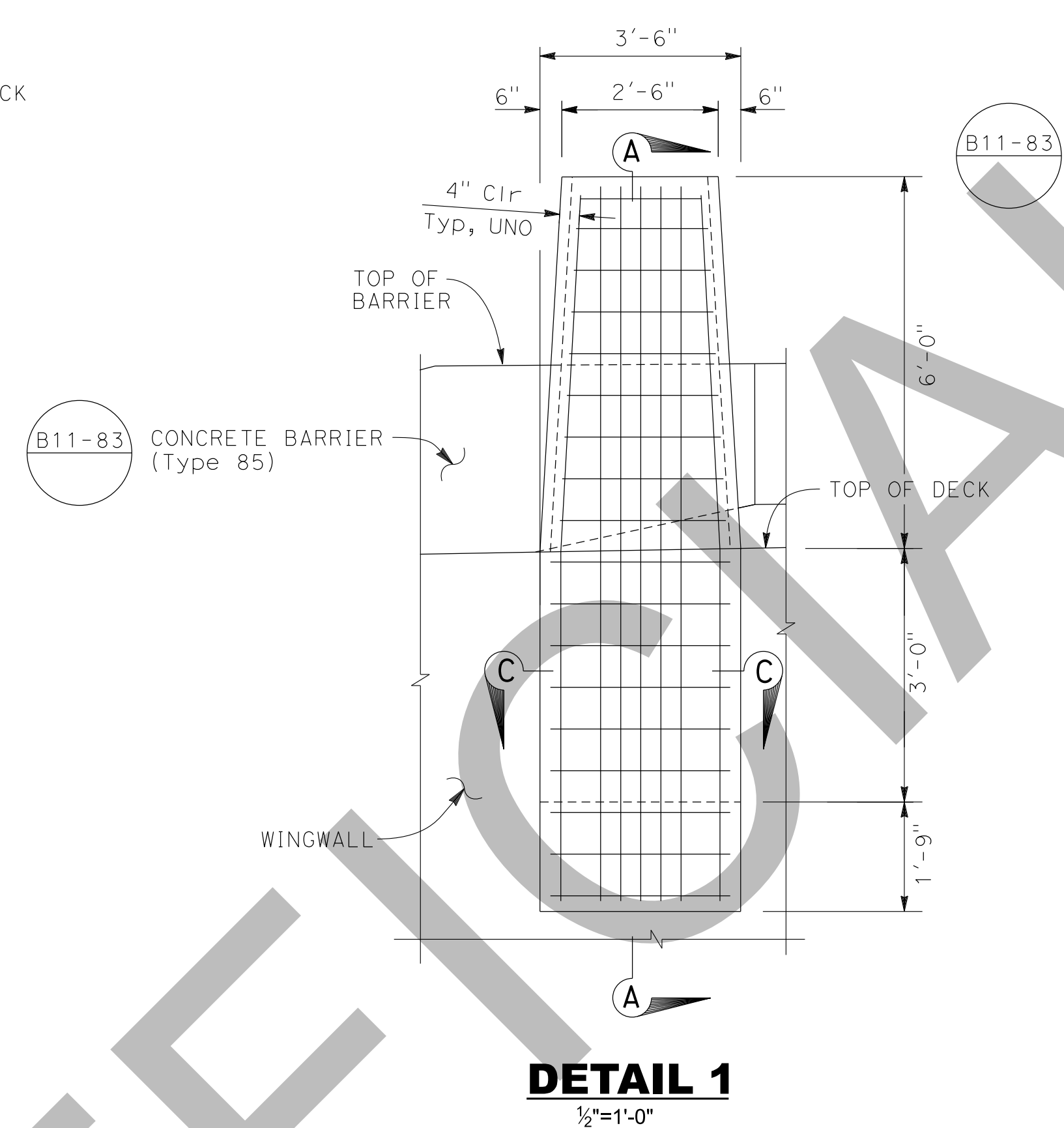
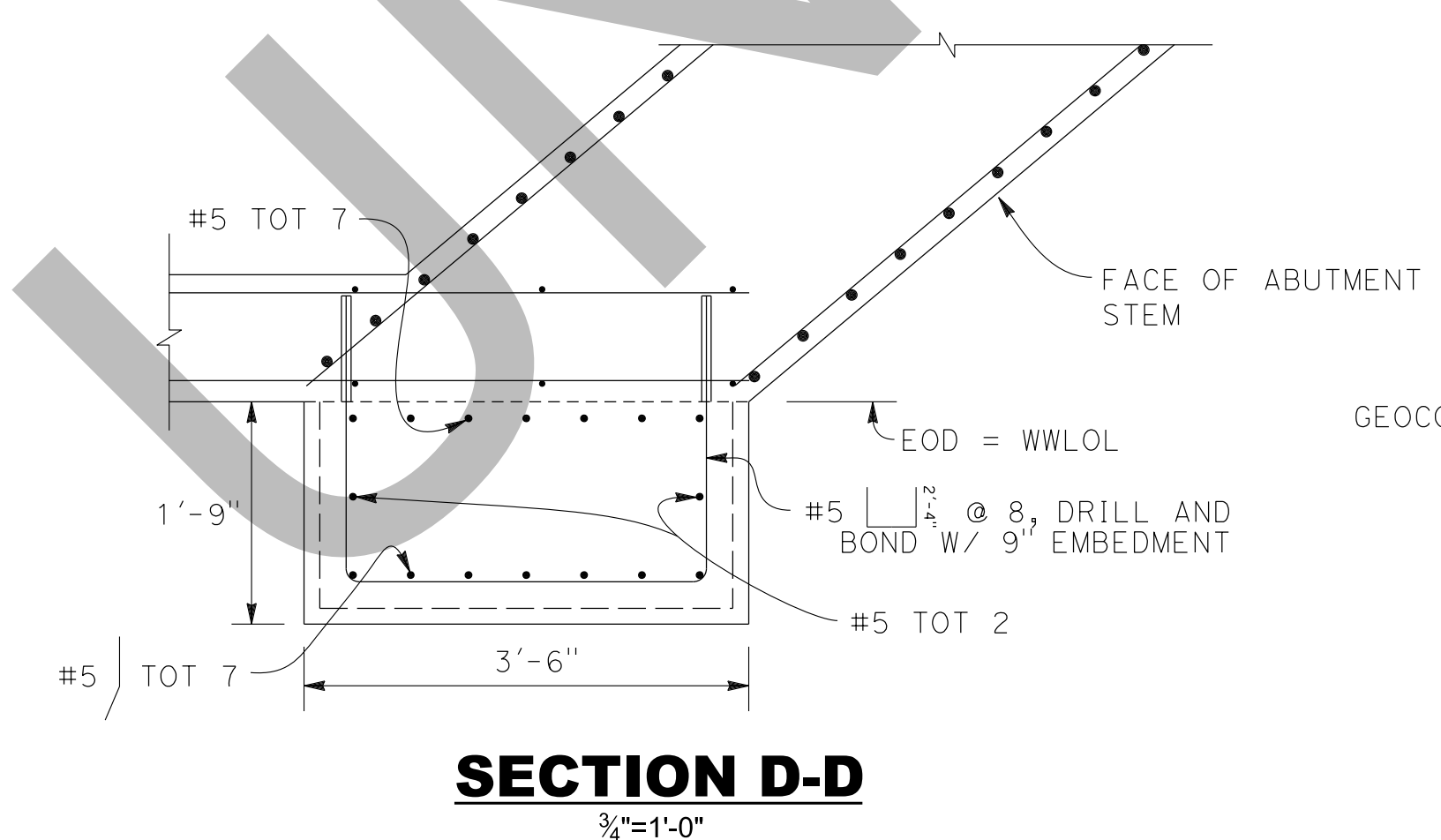
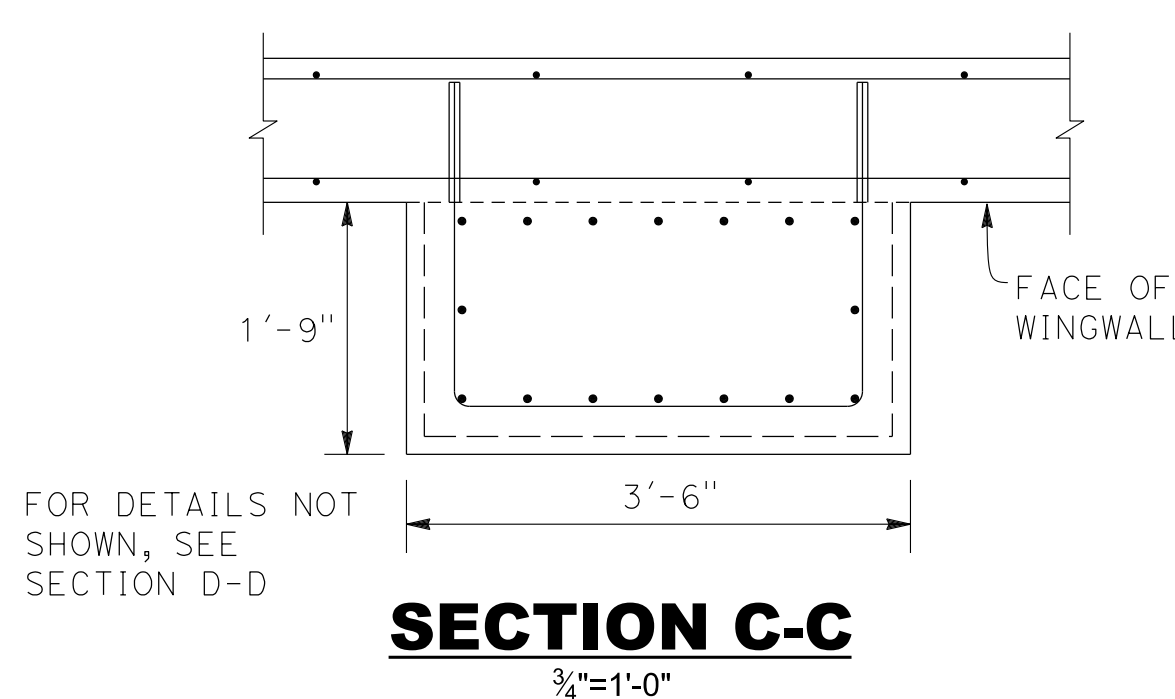
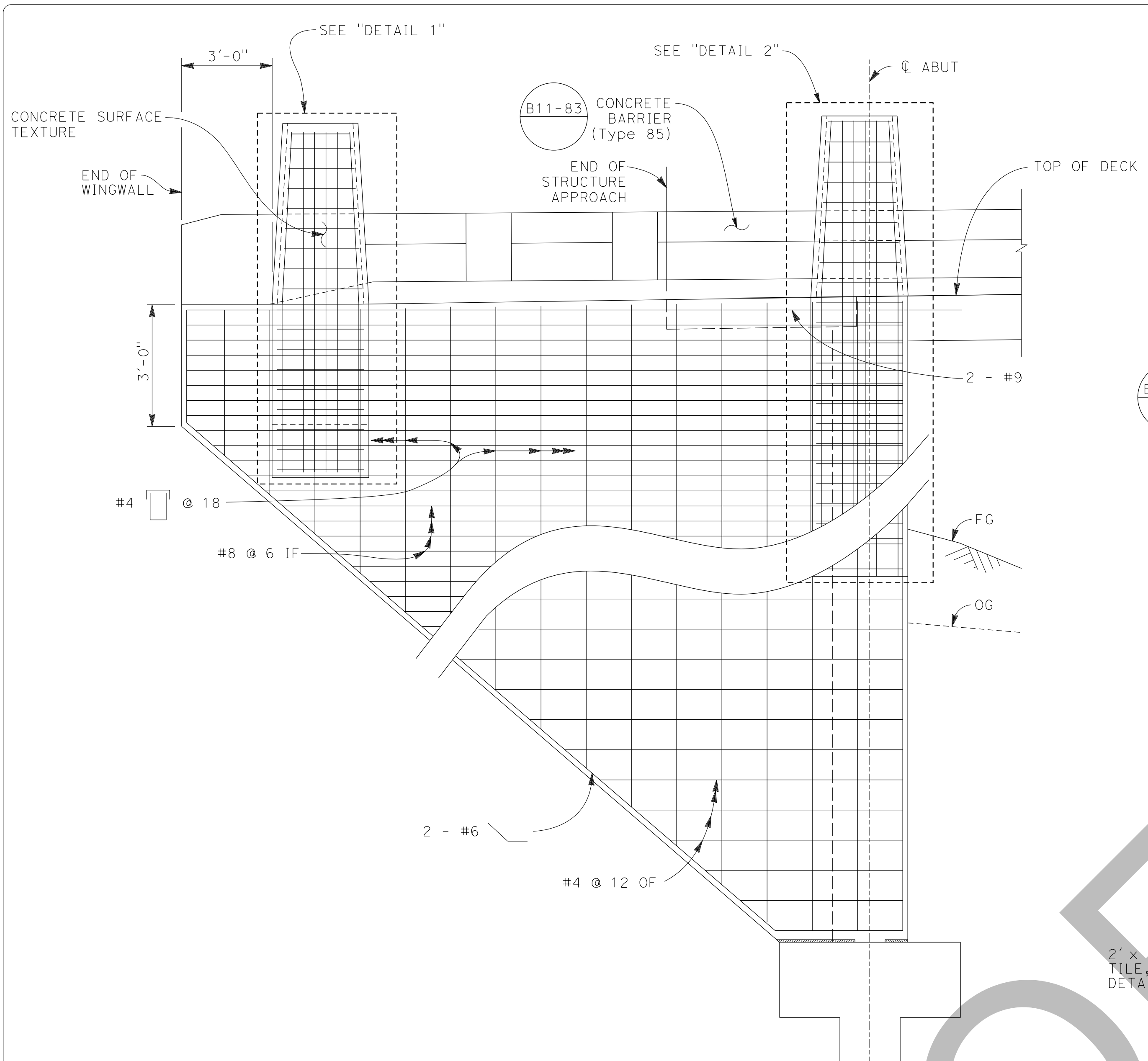
DATE

MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE
FOUNDATION PLAN

SCALE AS SHOWN
DIVISION STRUCTURES
JOB NO. #2599
DESIGNED JN
DRAWN MD
CHECKED TP
FILE
DATE 7/7/23
SHEET No.

S5

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REVISIONS	
NO.	DESCRIPTION

COUNTY OF TULARE
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(559) 624-7000
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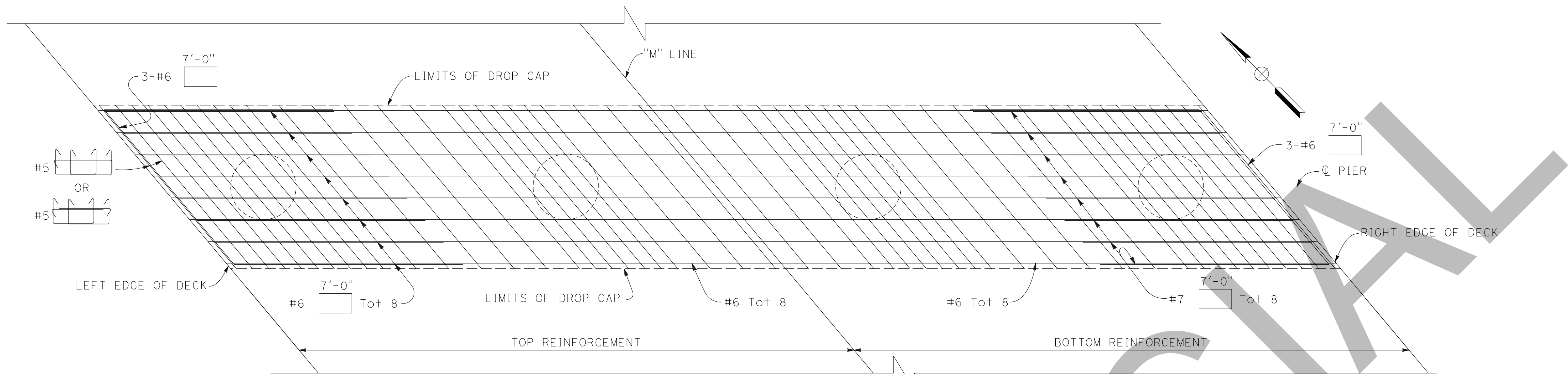
REGISTERED PROFESSIONAL ENGINEER
Jeremy R. Nottinger
No. 93270
Exp. 03/31/24
CIVIL
STATE OF CALIFORNIA

DE DOKKEN ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA. 916-858-0642
JEREMY R. NOTTINGER, PROJECT ENGINEER

MOUNTAIN ROAD 109 OVER WHITE RIVER BRIDGE ABUTMENT DETAILS

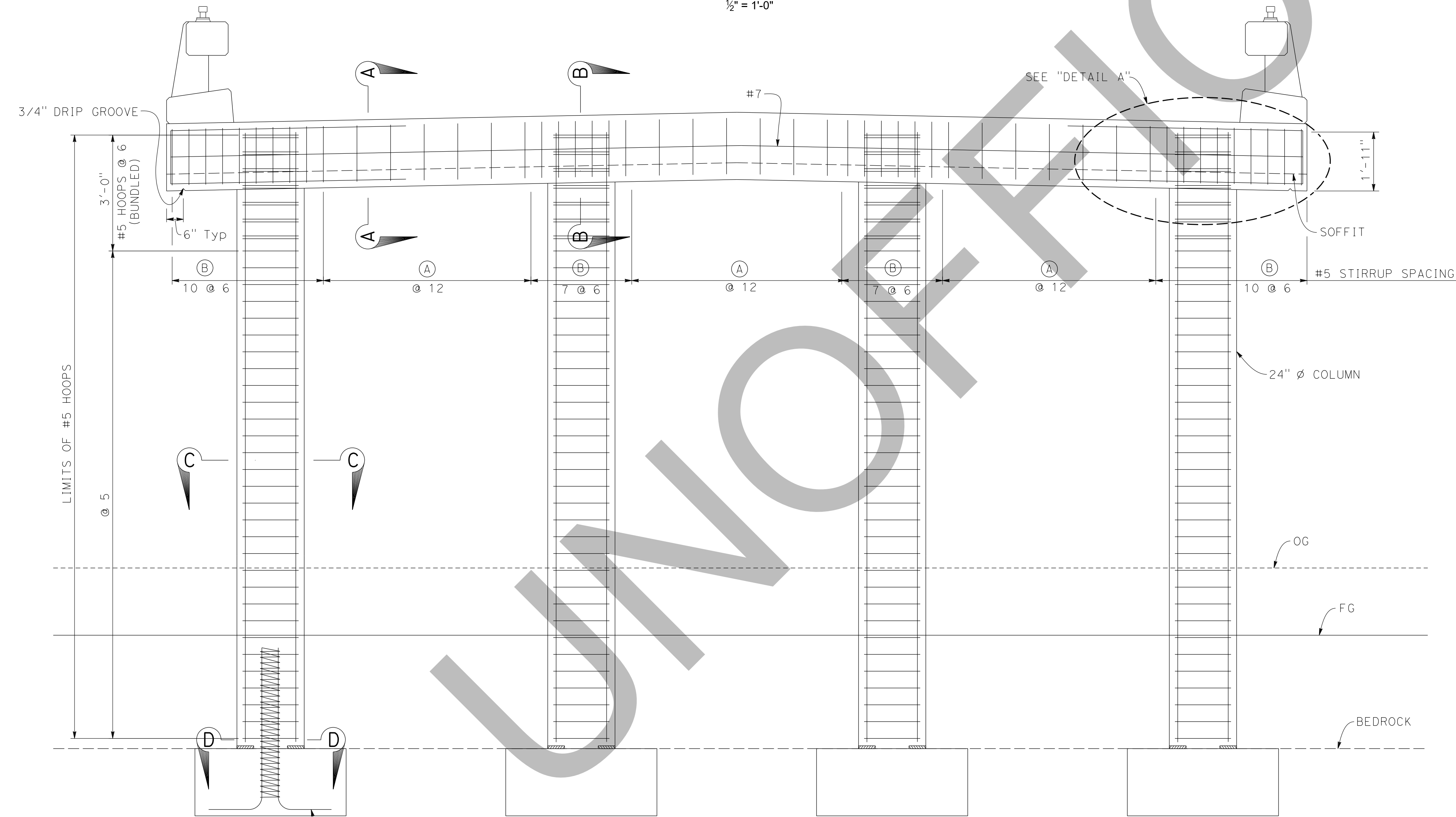
SCALE AS SHOWN
DIVISION STRUCTURES
JOB NO. #2599
DESIGNED JN
DRAWN MD
CHECKED TP
FILE
DATE 7/7/23
SHEET No.

S7
18 OF 27



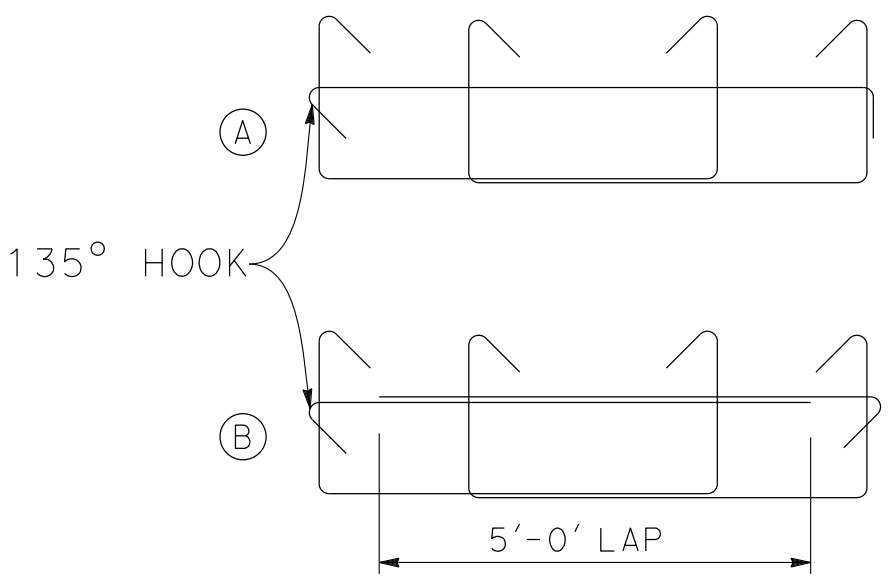
TYPICAL SECTION

1/2" = 1'-0"



ELEVATION VIEW

1/2" = 1'-0"



STIRRUP CONFIGURATION

NO SCALE

- NOTES:
1. For sections A-A, B-B, C-C, & D-D, see "PIER DETAILS" sheet.
 2. For "Detail A", see "PIER DETAILS" sheet.
 3. No splices allowed in main column reinforcement.
 4. All hoops are ultimate butt splice.
 5. Place stirrups parallel to "M" line.
 6. Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

REVISIONS	
DESCRIPTION	DATE

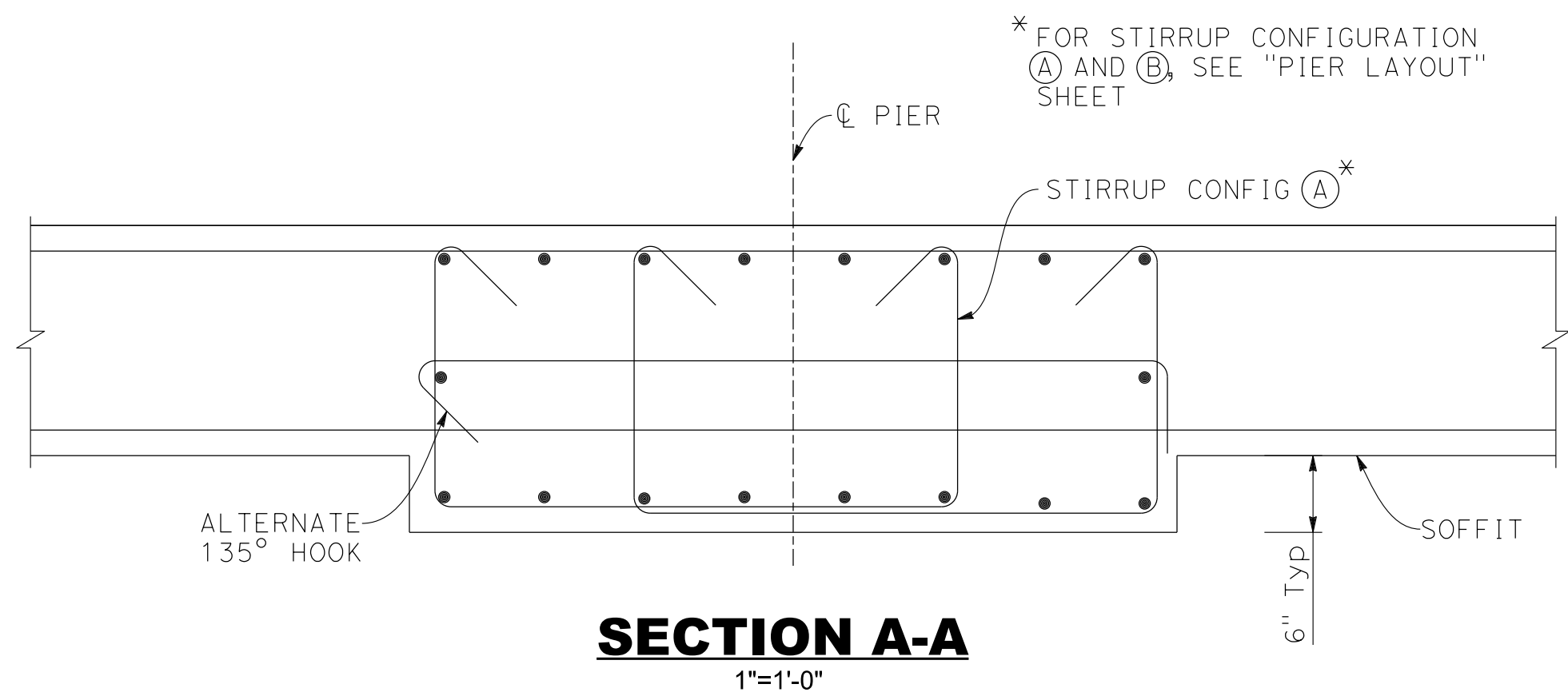
COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559) 624-7000
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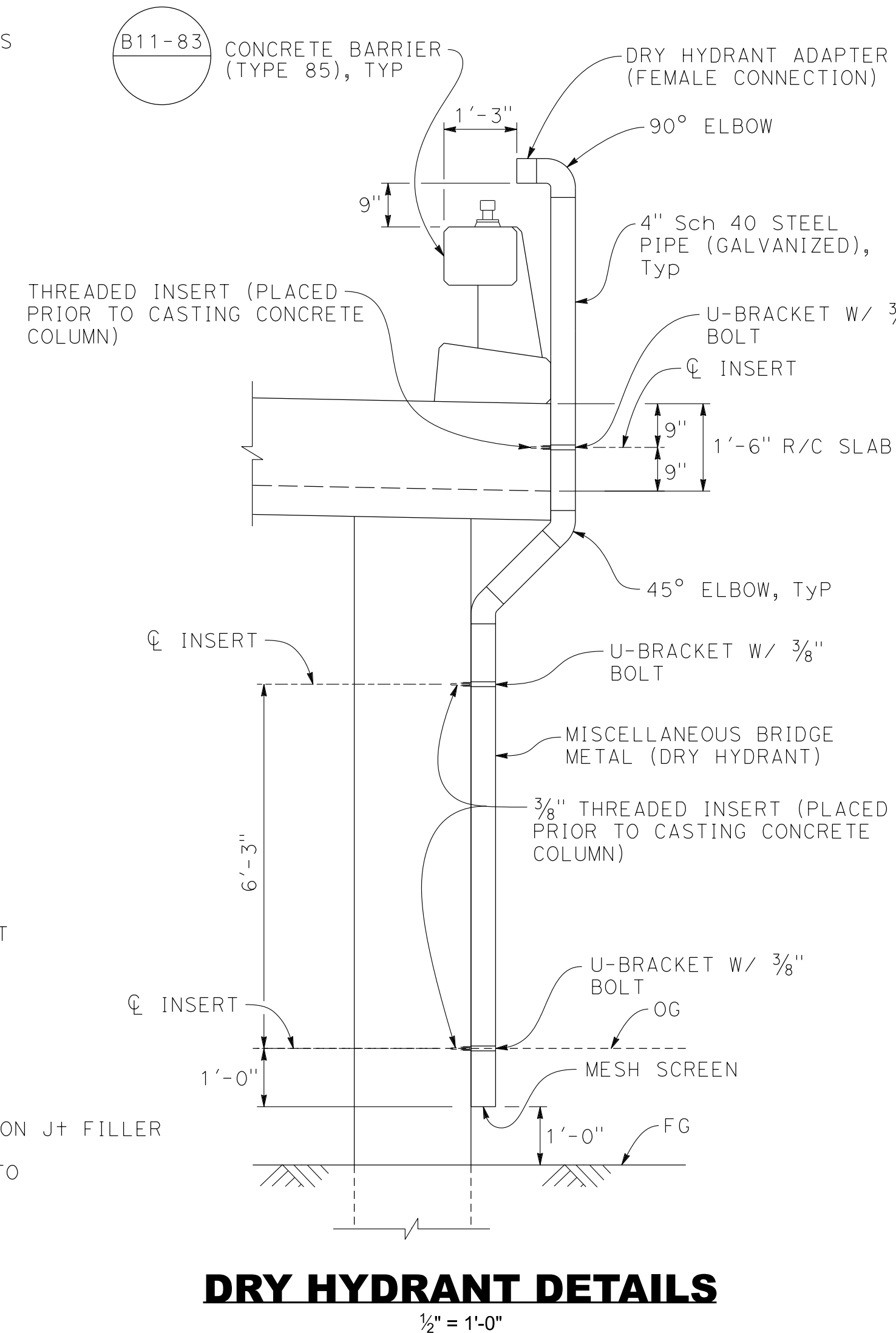
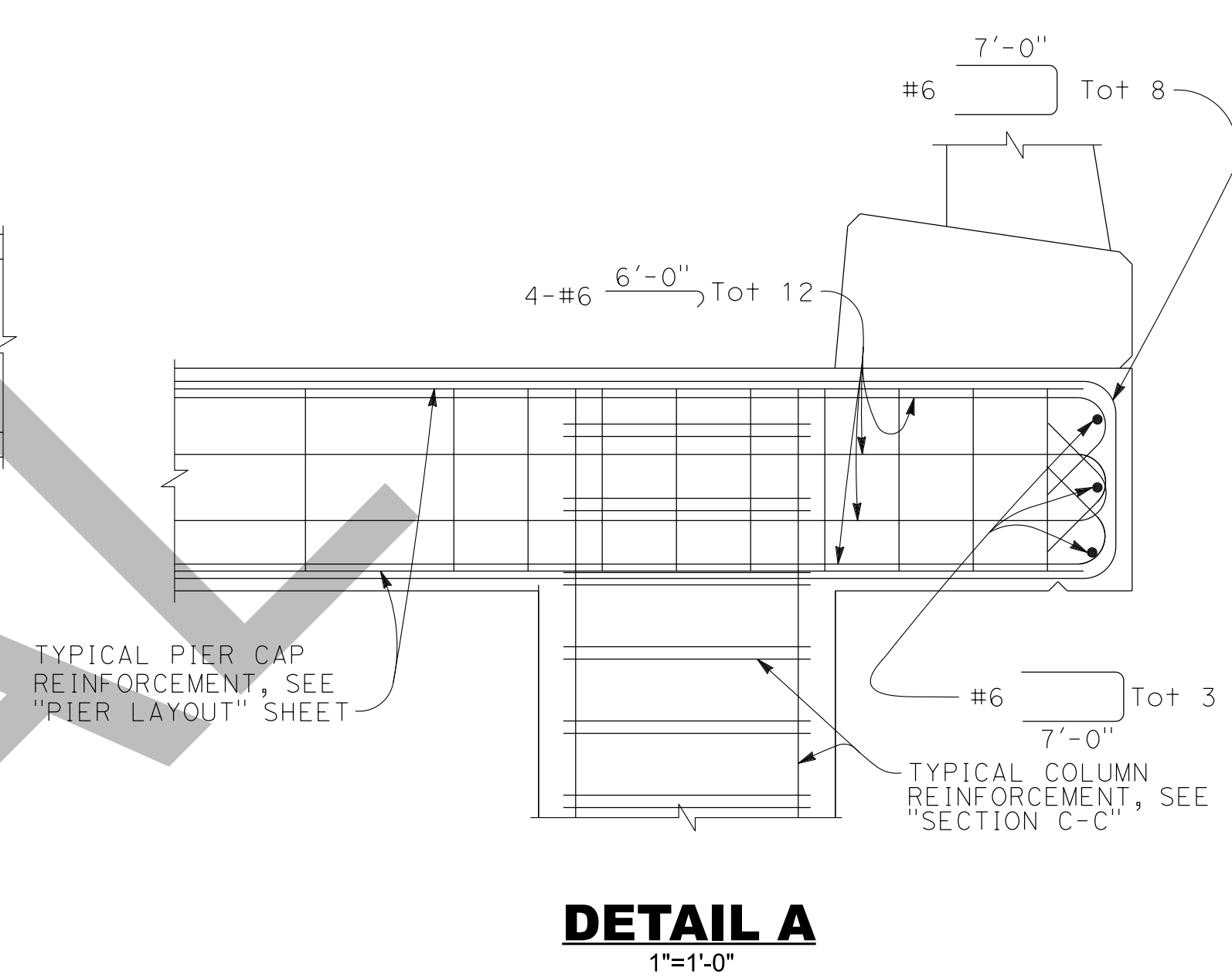
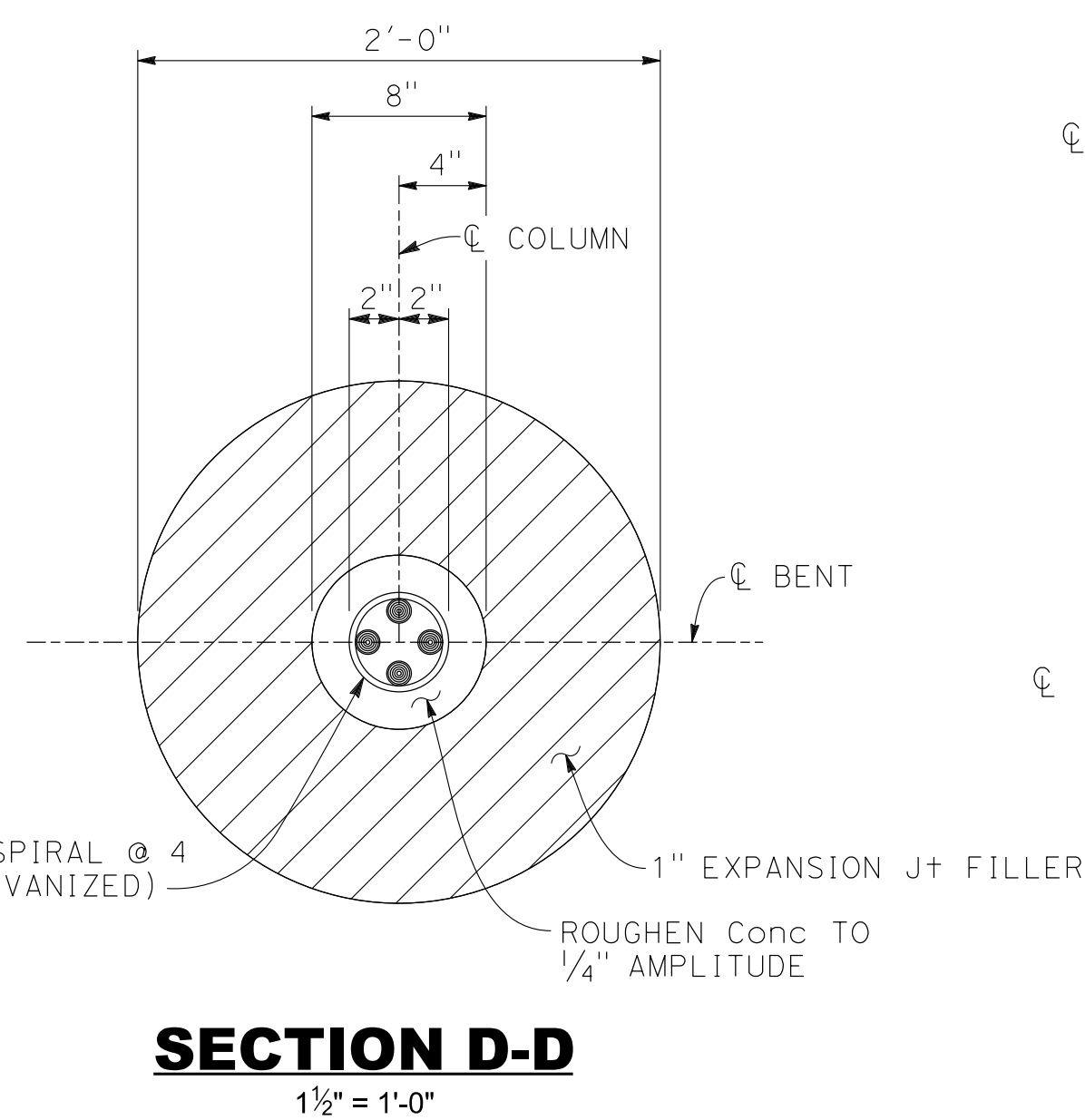
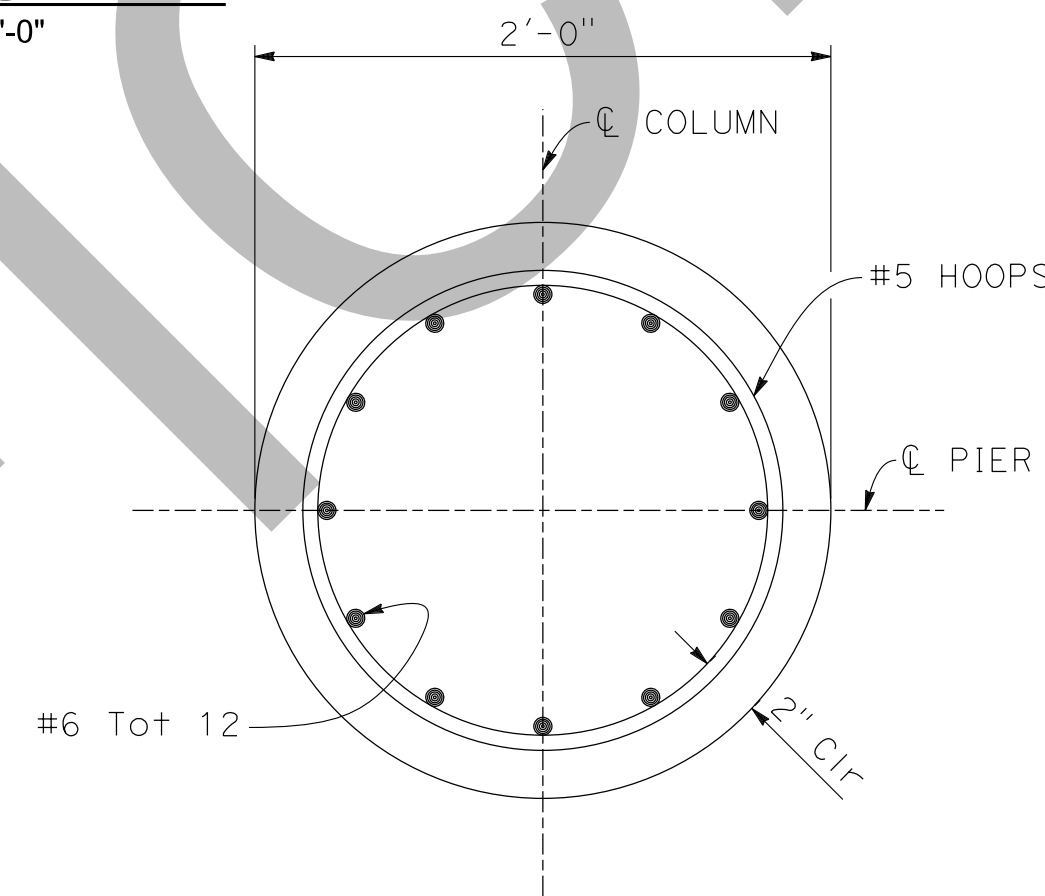
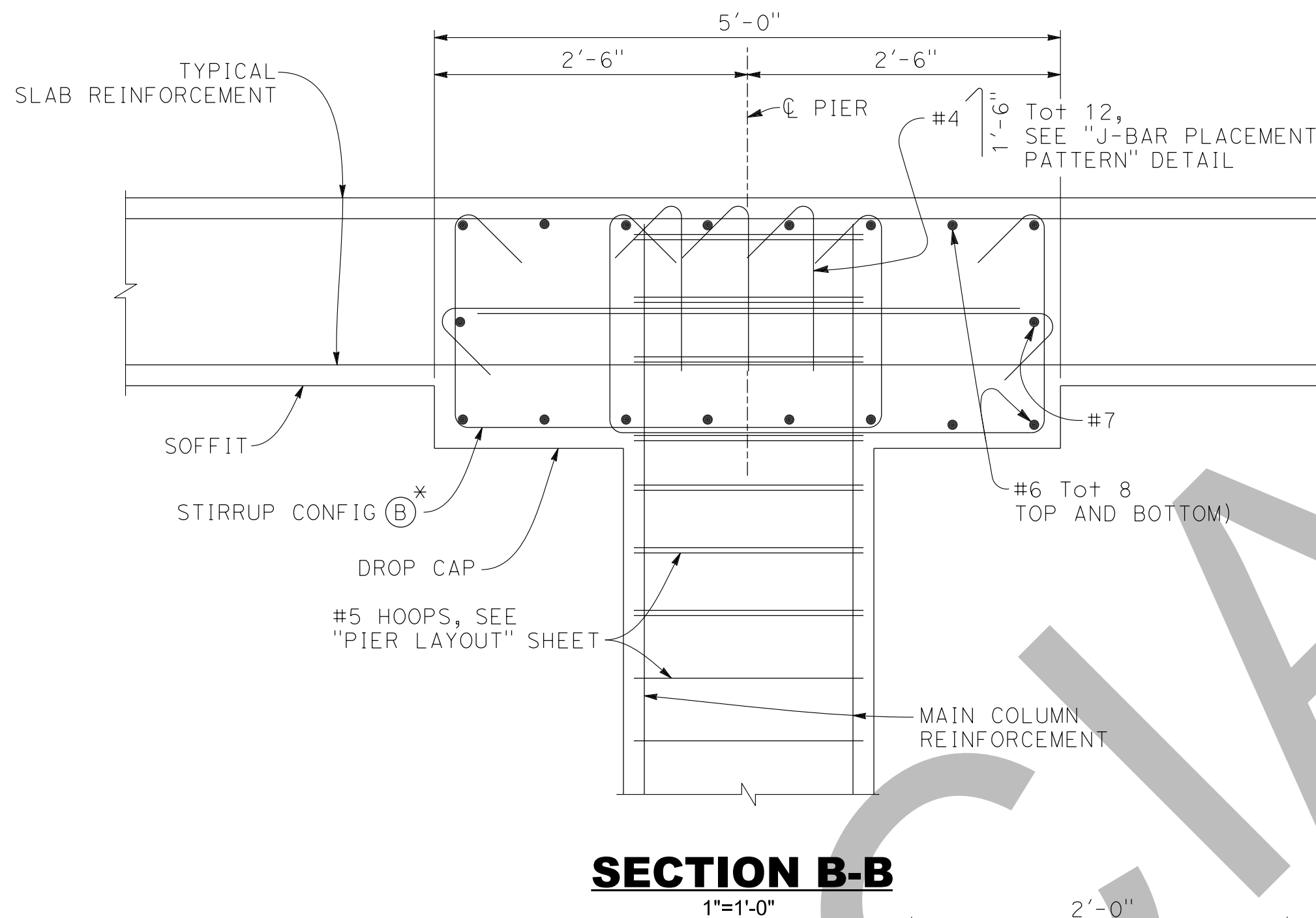
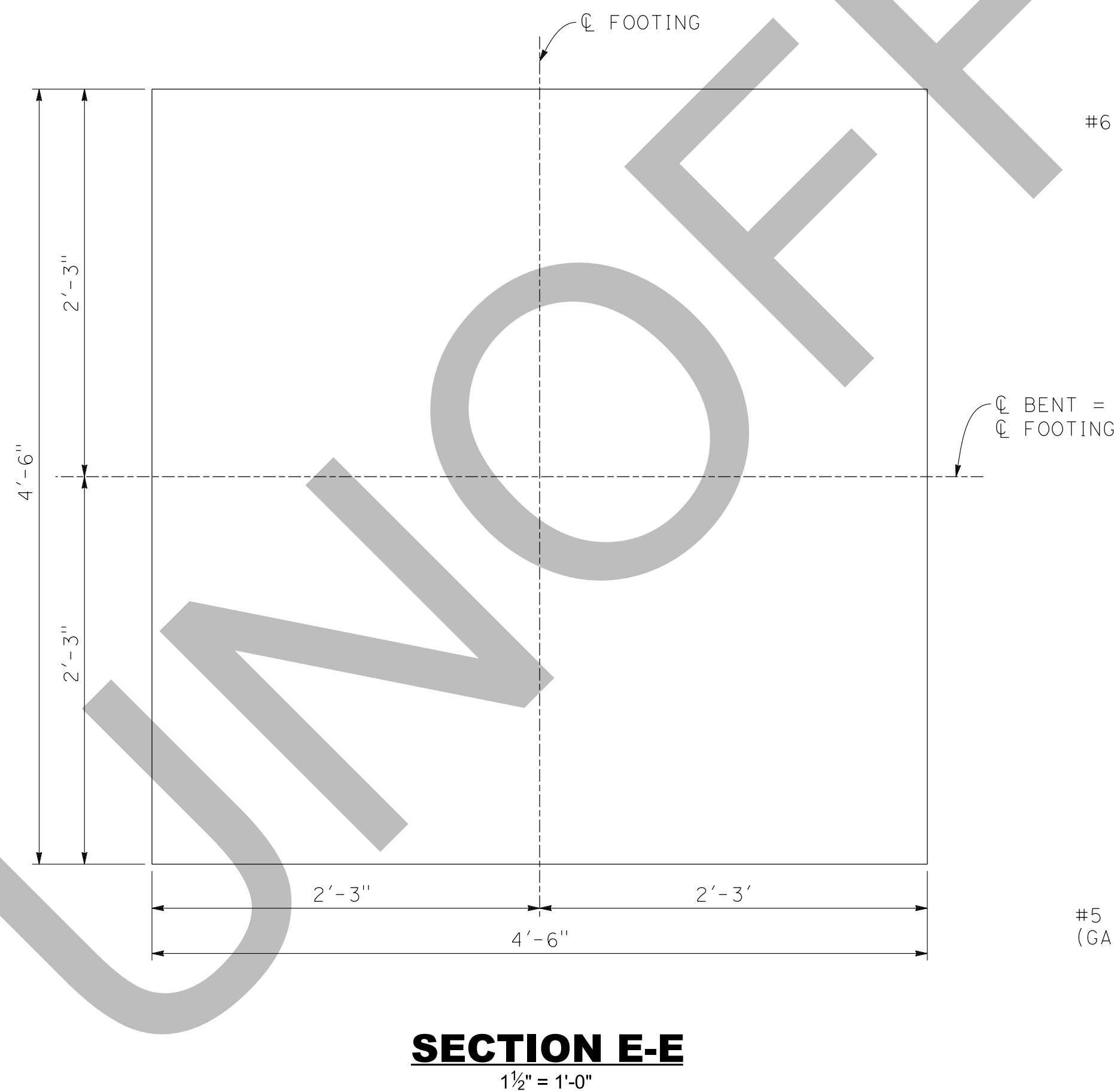
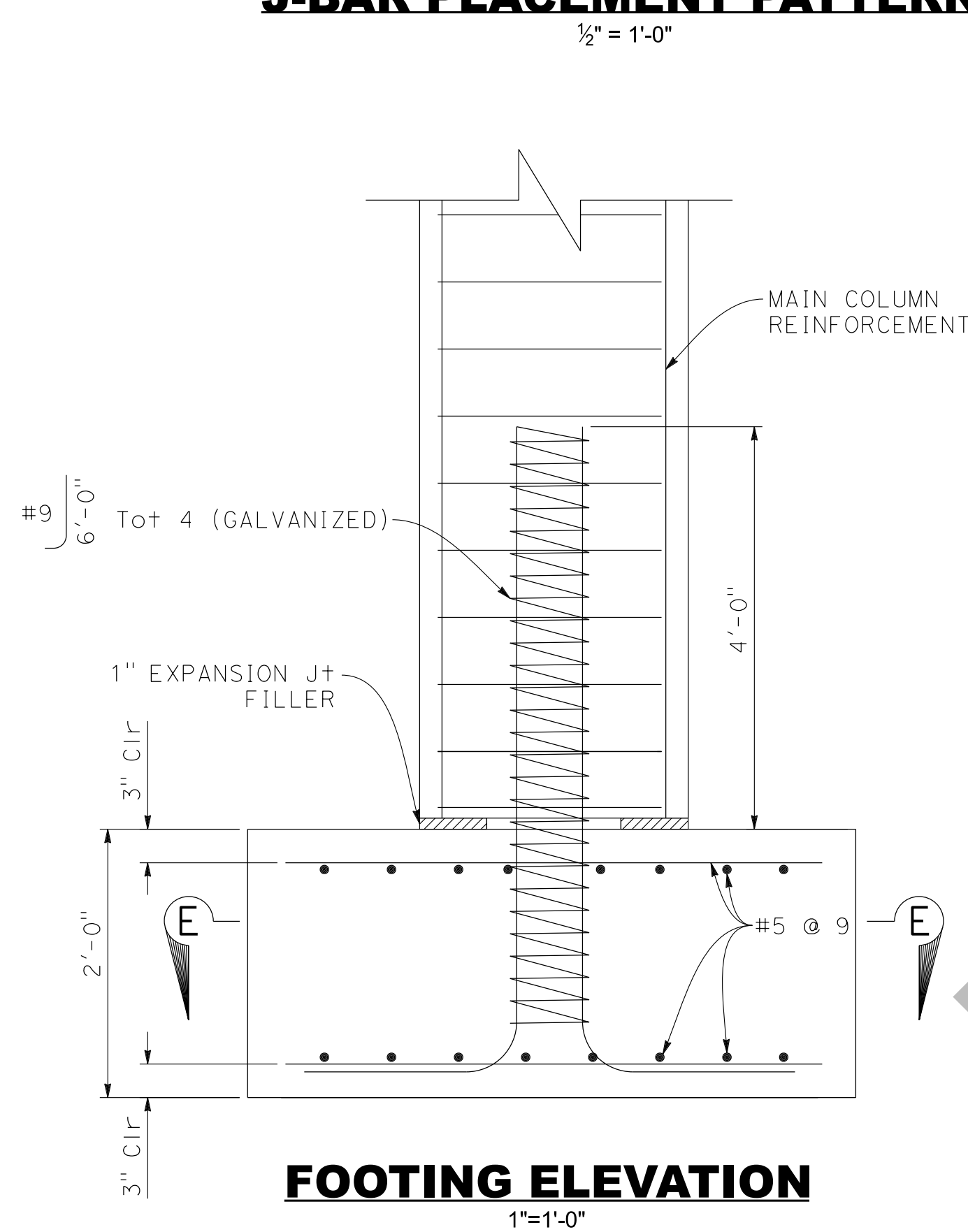
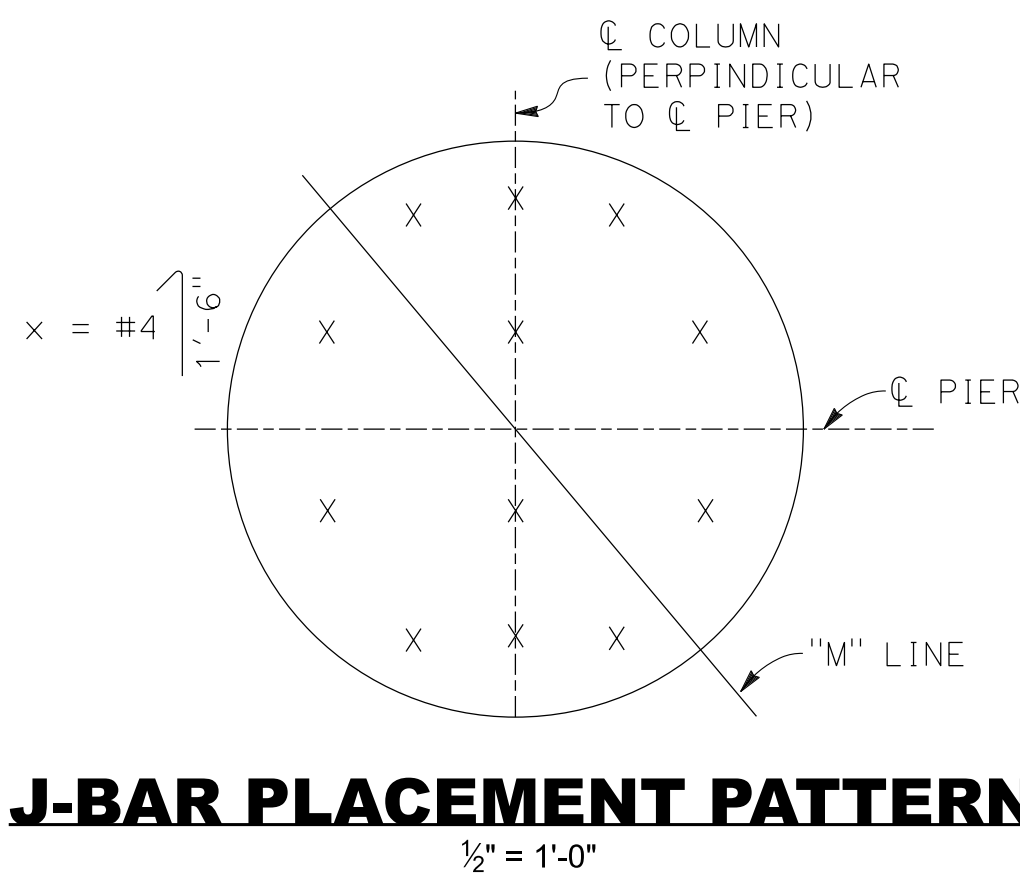
DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA. 916-858-0642
JEREMY NOTTNAGEL, PROJECT ENGINEER

**MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE
PIER LAYOUT**

SCALE	AS SHOWN
DIVISION	STRUCTURES
JOB NO.	#2599
DESIGNED	JN
DRAWN	MD
CHECKED	TP
FILE	
DATE	7/7/23
SHEET No.	

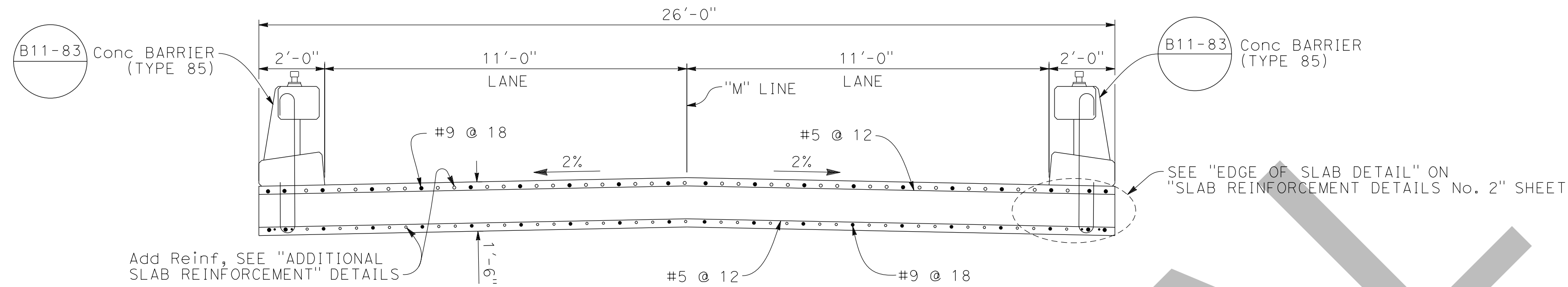


* For details not shown, see "SECTION B-B"



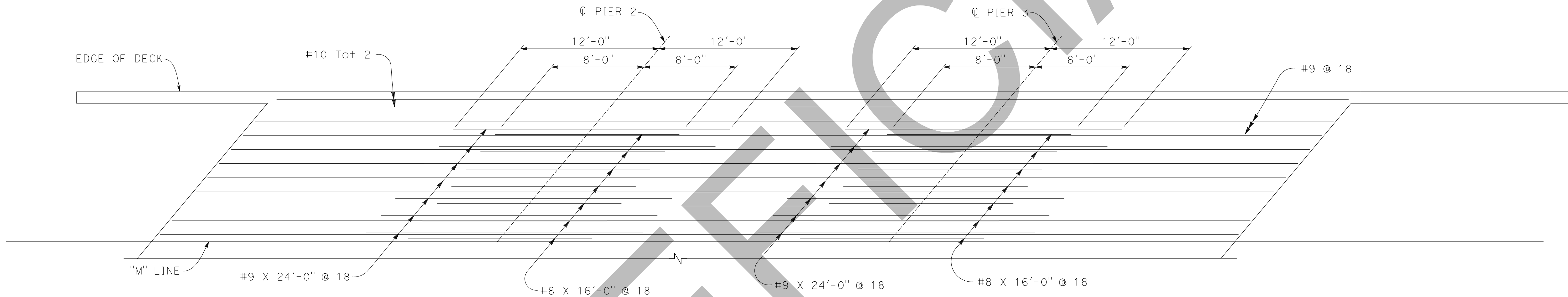
* 4" Sch 40 Steel Pipe (Galvanized)
to be painted red

REVISIONS		DATE	BY
DESCRIPTION			
No.			
COUNTY OF TULARE		RESOURCE MANAGEMENT AGENCY	
5961 SOUTH MOONEY BLVD.		VISALIA, CA 93277	
(559) 624-7000		WWW.TULARECOUNTY.CA.GOV/RMA	
REGISTERED PROFESSIONAL ENGINEER		JEREMY R. NOTTMAGEL	
No. 93270		Exp. 03/31/24	
CIVIL		STATE OF CALIFORNIA	
MOUNTAIN ROAD 109		OVER WHITE RIVER	
BRIDGE		PIER DETAILS	
SCALE		AS SHOWN	
DIVISION		STRUCTURES	
JOB NO.		#2599	
DESIGNED		JN	
DRAWN		MD	
CHECKED		TP	
FILE			
DATE		7/7/23	
SHEET No.		S9	
		20 of 27	



TYPICAL SECTION

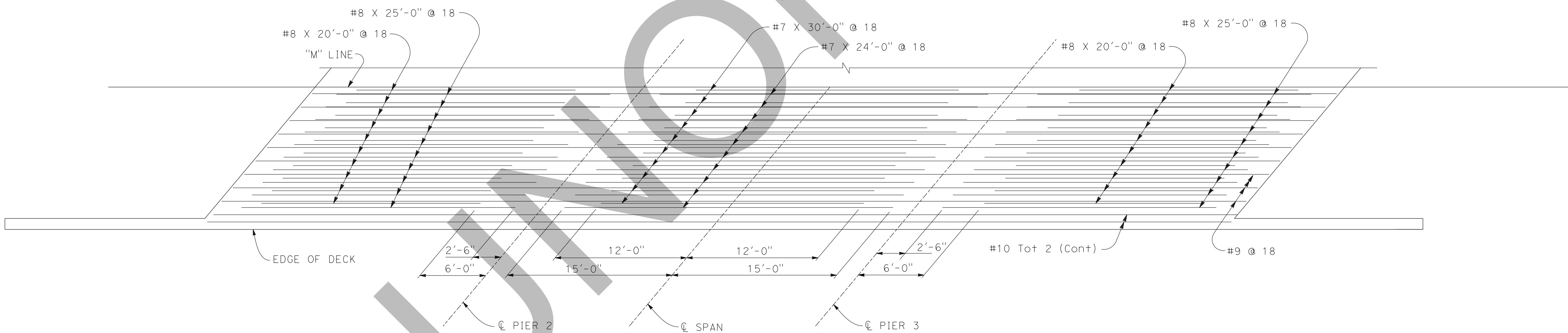
$\frac{3}{8}"=1'-0"$



ADDITIONAL TOP SLAB REINFORCEMENT

$\frac{3}{16}"=1'-0"$

(Half of slab shown, mirror about "M" line)



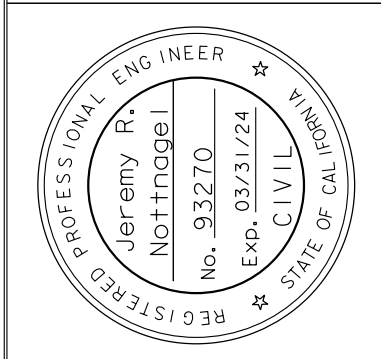
ADDITIONAL BOTTOM SLAB REINFORCEMENT

$\frac{3}{16}"=1'-0"$

(Half of slab shown, mirror about "M" line)

REVISIONS	
DATE	BY

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559)624-7000
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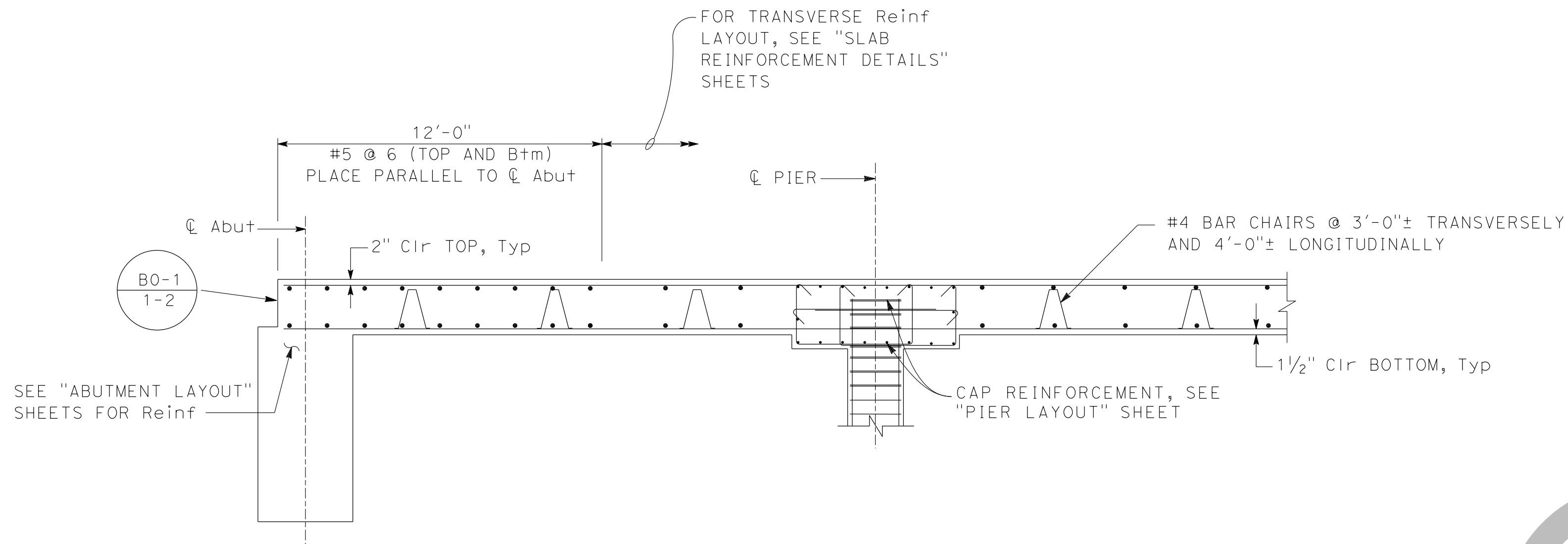


DEDOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA 916-858-0642
Jeremy R. Nottnagel
JEREMY NOTTNAGEL, PROJECT ENGINEER

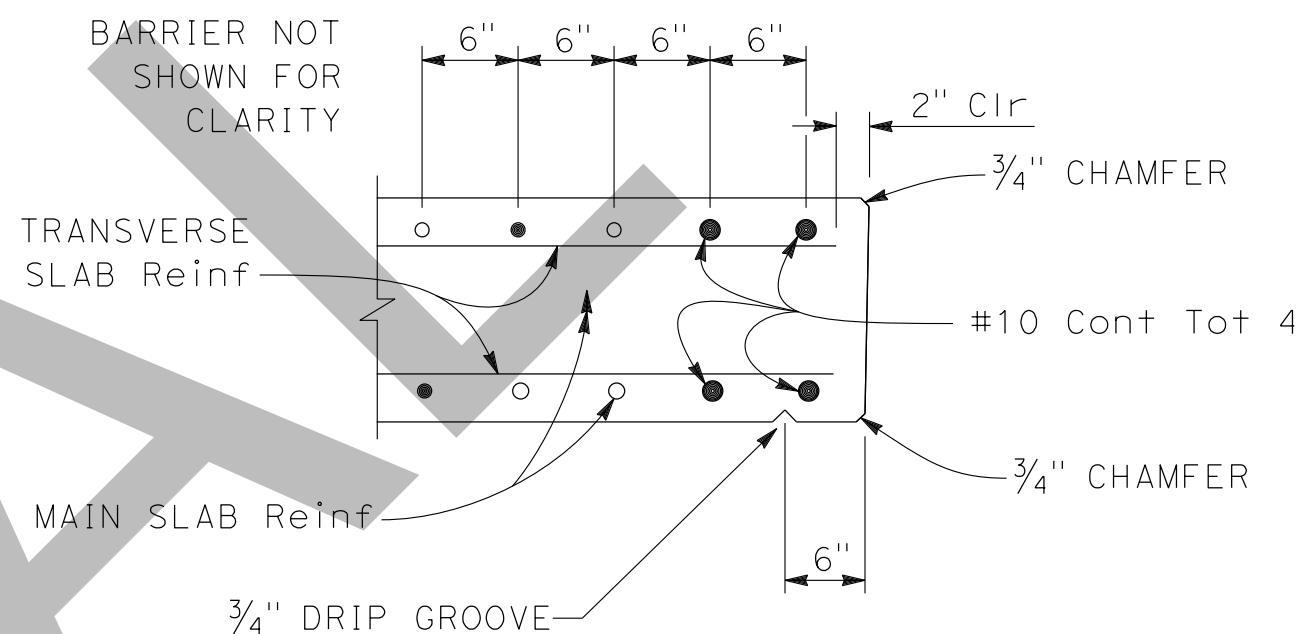
**MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE
SLAB REINFORCEMENT
DETAILS No. 1**

SCALE	AS SHOWN
DIVISION	STRUCTURES
JOB NO.	#2599
DESIGNED	JN
DRAWN	MD
CHECKED	TP
FILE	
DATE	7/7/23
SHEET No.	

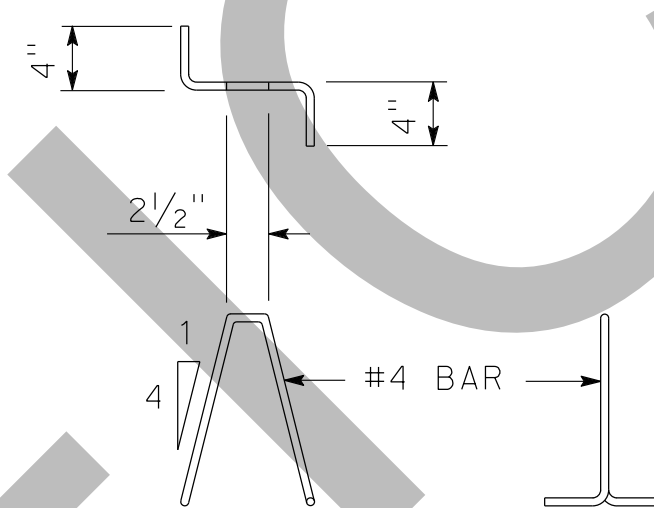
S10
21 of 27



LONGITUDINAL SECTION
NO SCALE



EDGE OF SLAB DETAIL
NO SCALE

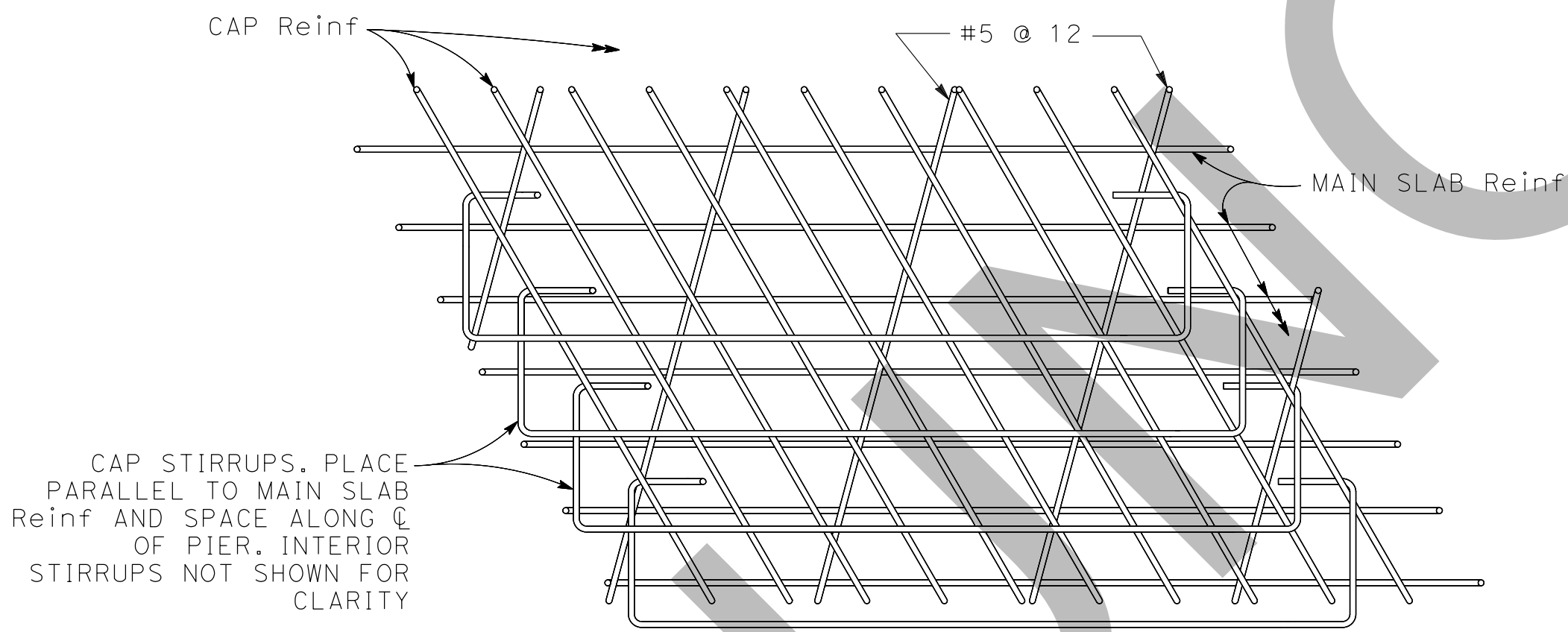


BAR CHAIR DETAIL
NO SCALE

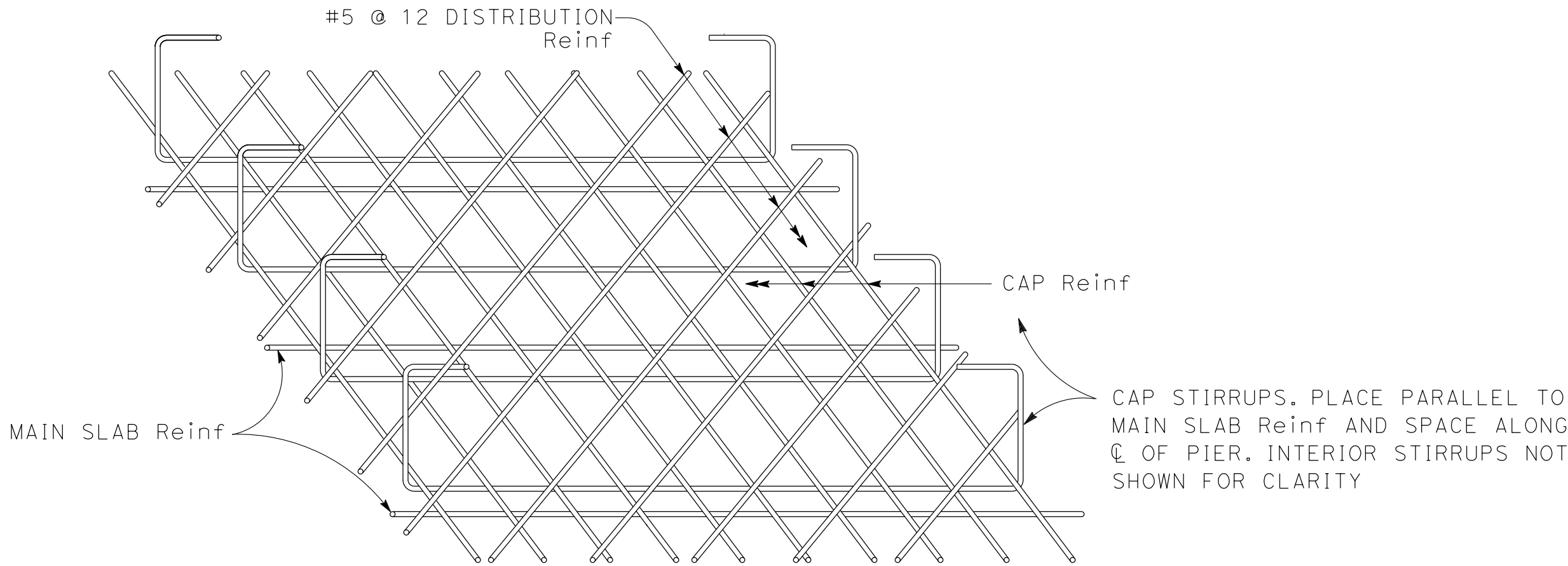
REINFORCEMENT LAP SPlice LENGTH								
Bar size	#4	#5	#6	#7	#8	#9	#10	#11
All bars, except top bars	23"	28"	34"	39"	45"	68"	76"	85"
Top bars	23"	28"	34"	53"	60"	77"	97"	120"

Reinforcement notes:

Splices in top main bars to be located near center of span.
Splices in bottom main bars to be located near piers.
Spacing of all transverse bars is measured along "M" Line.
Place all transverse bars normal to 'M' Line
See details at right and below.



TOP SLAB REINFORCEMENT AT PIER
NO SCALE



BOTTOM SLAB REINFORCEMENT AT PIER
NO SCALE

REVISIONS

NO.	DESCRIPTION	DATE	BY

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559)624-7000
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REGISTERED PROFESSIONAL ENGINEER
Jeremy R. Nottnagel
No. 93270
Exp. 03/31/24
CIVIL
STATE OF CALIFORNIA

DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA. 916-858-0642

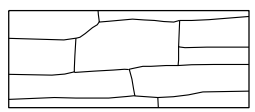
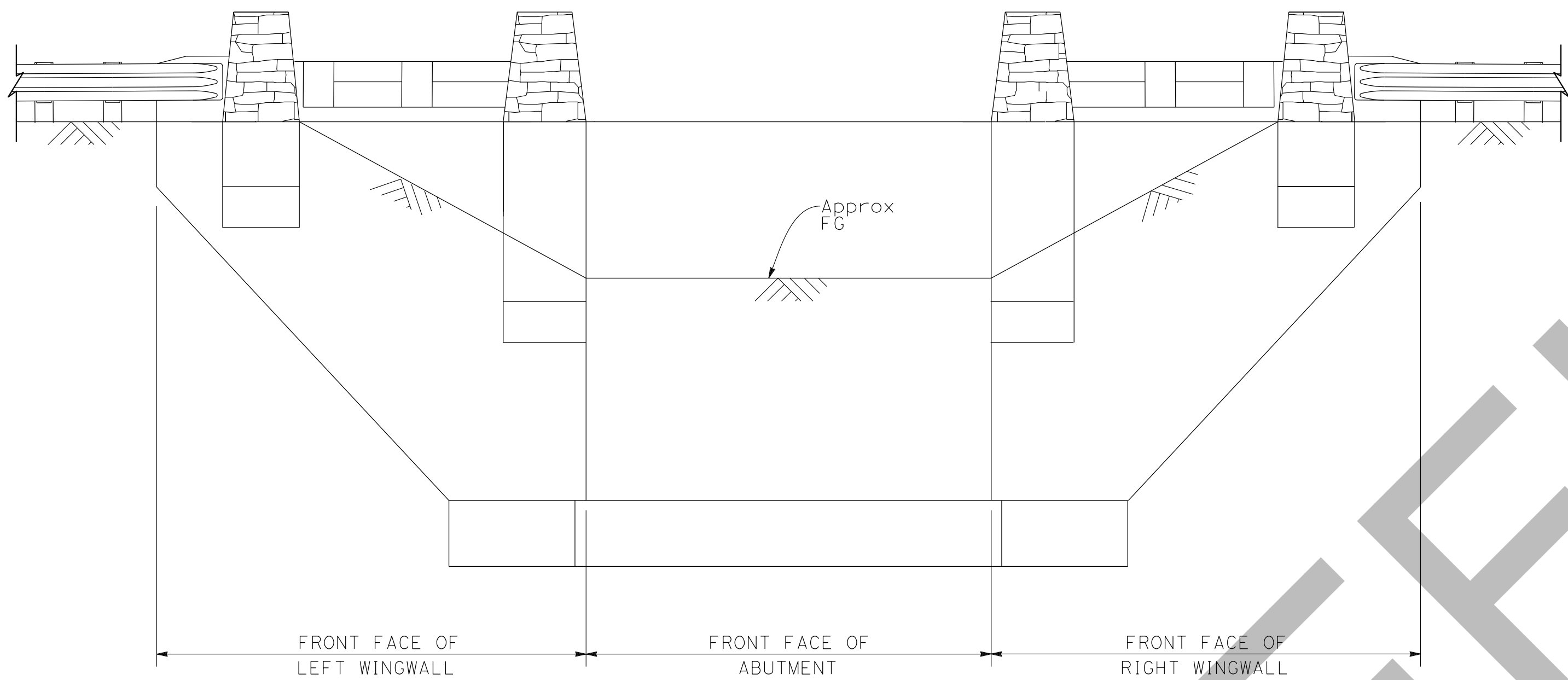
DATE
PROJECT ENGINEER
JEREMY NOTTNAGEL

MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE
SLAB REINFORCEMENT
DETAILS No. 2

SCALE	AS SHOWN
DIVISION	STRUCTURES
JOB NO.	#2599
DESIGNED	JN
DRAWN	MD
CHECKED	TP
FILE	
DATE	7/7/23
SHEET No.	

S11

22 of 27

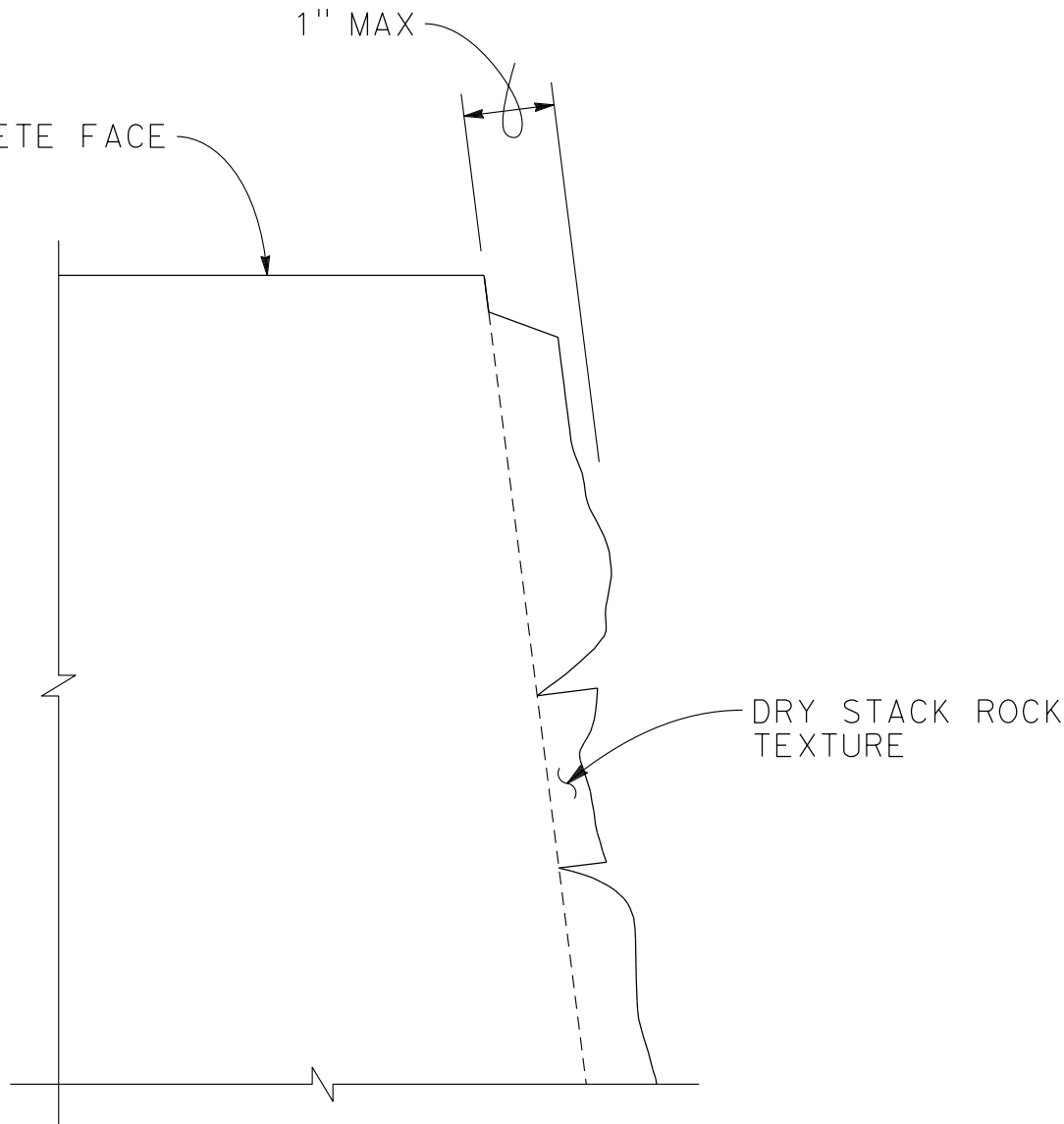


DENOTES CONCRETE SURFACE TEXTURE (DRY STACK)
AND PREPARE AND STAIN CONCRETE LIMITS

Note: Abutment 1 shown, Abutment 4 similar.

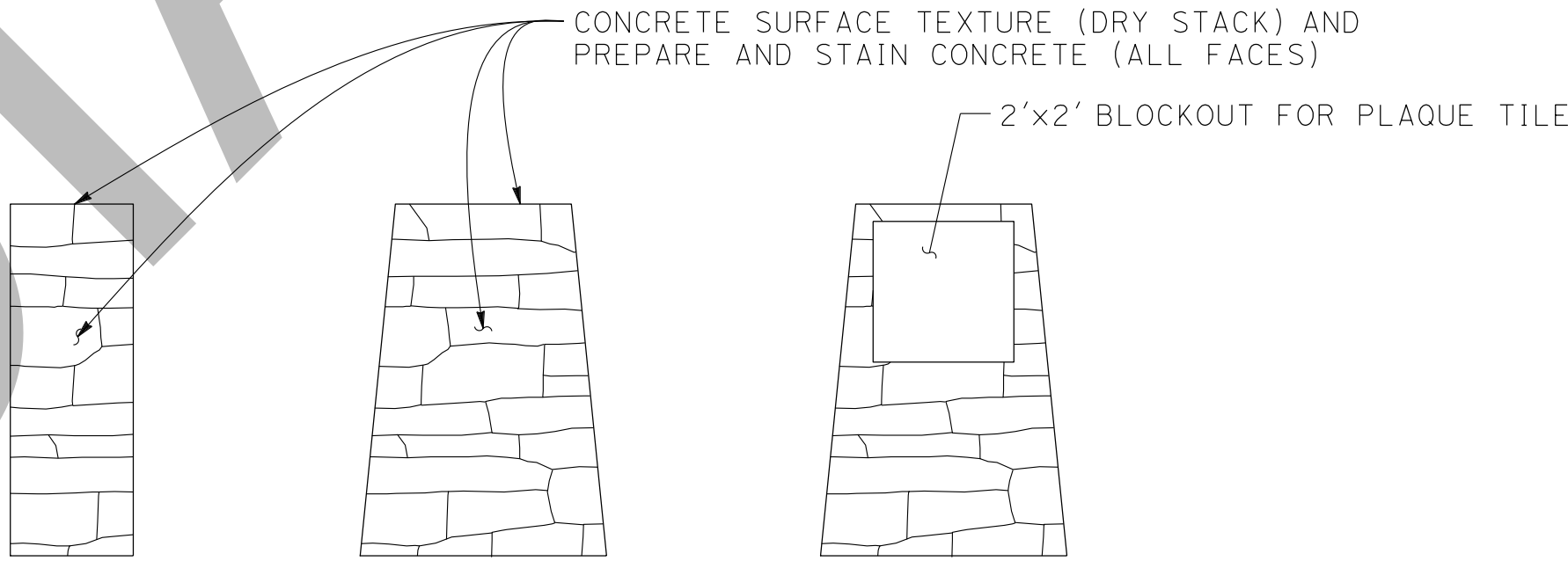
DEVELOPED ELEVATION
NO SCALE

SMOOTH CONCRETE FACE



SECTION VIEW

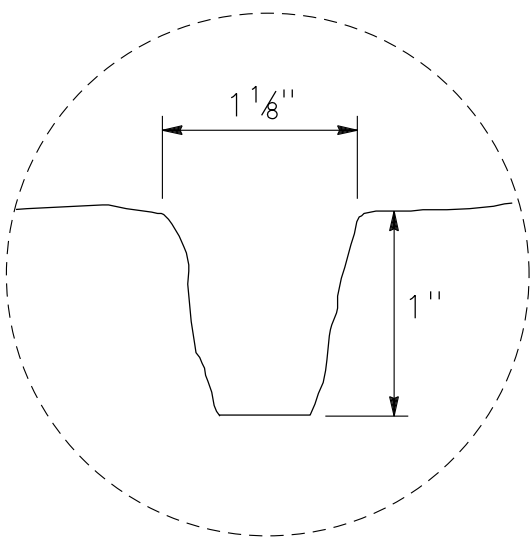
DRY STACK ROCK TEXTURE DETAILS
NO SCALE



PLAQUE BLOCKOUT
PILASTER DETAILS
NO SCALE

NOTES:

1. For locations of plaque blockout, see "GENERAL PLAN" sheet.
2. Concrete surface texture (dry stack) shall be Fitzgerald No. 17911 San Diego Drystack or equal



GROOVE DETAILS

NOTE:

The contractor shall verify all controlling
field dimensions before ordering or
fabricating any material.

REVISIONS	
NO.	DESCRIPTION

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
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VISALIA, CA 93277
(559) 624-7000
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DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA. 916-858-0642
JEREMY NOTTNAGEL, PROJECT ENGINEER

**MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE
ARCHITECTURAL
TREATMENT DETAILS**

SCALE	AS SHOWN
DIVISION	STRUCTURES
JOB NO.	#2599
DESIGNED	JN
DRAWN	MD
CHECKED	TP
FILE	
DATE	7/7/23
SHEET No.	

S12
23 of 27

POINT #4, ELEV. 1079.23 FEET, NORTHING 1815185.43, EASTING 6607446.75

VERTICAL DATUM NAVD 88 AS ADJUSTED TO NCS PID DH6642
ELEVATION = 276.2 FEET



PLAN VIEW
SCALE : 1" = 40'

Borehole B3B:

- Elevation: 1079.0' - 1057.0'
- Length: 25.00' Lt Sta 15+49
- "M"-Line
- Soil/Rock Layers (from top):
 - ASPHALT CONCRETE.
 - SILTY SAND (SM); brown; dry; coarse to fine SAND; (FILL).
 - SILTY SAND with GRAVEL (SM); medium dense; brown; dry; with cobbles and boulders; (COLLUVIUM).
 - SILTY GRAVEL with SAND (GM); very dense; yellow brown; dry; with cobbles and boulders; (ALLUVIUM).
 - GRANITIC ROCK, white and greenish black; medium crystalline; moderately weathered; strong; moderately fractured.
 - slightly weathered, gray and greenish black.
 - slightly fractured to unfractured.
 - slightly weathered; unfractured; very strong.
- Terminated at Elev 1057.0'
ERi = 81.8%
- 12-15-20
- RQD=100%, REC=100%, SDC=100%, SFC=100%, SOD=100%, REC=71%

Borehole B3:

- Elevation: 1079.0' - 1067.5'
- Length: 21.00' Lt Sta 15+56
- "M"-Line
- Soil/Rock Layers (from top):
 - SILTY SAND (SM); dense; brown; dry; few GRAVEL; trace cobble and boulders; (FILL).
 - SILTY SAND with GRAVEL (SM); dense; brown; dry; with cobbles and boulders; (COLLUVIUM).
 - SILTY GRAVEL with SAND (GM); very dense; yellow brown; dry; with cobbles and boulders; (ALLUVIUM).
- Terminated at Elev 1067.5'
ERi = 80%
- 12-07-20
- REF 1.4, REF 1.4, 34 2.4, M, G, R, E, F, A, R

- 1) RELATIVELY UNDISTURBED SOIL SAMPLES WERE OBTAINED BY DRIVING A 3-INCH OUTSIDE DIAMETER, WITH A 2.4-INCH INSIDE DIAMETER (CALIFORNIA MODIFIED) SPLIT-SPOON SAMPLER FOR MODIFIED CALIFORNIA SAMPLING METHODS AND A 2-INCH OUTSIDE DIAMETER WITH A 1.4-INCH INSIDE DIAMETER SPLIT-SPOON SAMPLER FOR STANDARD PENETRATION TEST SAMPLING METHODS.
- 2) THE BORING LOGS AND RELATED INFORMATION REPRESENT THE OPINION OF THE PROFESSIONAL ENGINEER/GEOLOGIST AS TO THE CHARACTER OF THE MATERIAL AT THE LOCATIONS SHOWN. SOIL AND GROUNDWATER CONDITIONS BETWEEN ADJACENT TEST HOLES AND AT OTHER LOCATIONS MAY DIFFER FROM THOSE SHOWN. GROUNDWATER CONDITIONS MAY CHANGE WITH PASSAGE OF TIME.
- 3) TEST BORING LOCATIONS WERE DETERMINED IN THE FIELD BASED ON STAKING AND PACING FROM MAPPED SITE FEATURES. THE LOCATIONS OF THE EXPLORATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE MEASURING METHODS USED.
- 4) 140-POUND AUTOMATIC HAMMER FALLING 30 INCHES WAS USED TO DRIVE SAMPLERS.
- 5) VISUAL CLASSIFICATION OF EARTH MATERIALS WAS BASED ON FIELD INSPECTION AND WAS CONFIRMED OR REVISED WITH LABORATORY TEST RESULTS.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
06	TUL	M109			

R. Hal 02-18-22
 GEOTECHNICAL PROFESSIONAL DATE

PLANS APPROVAL DATE

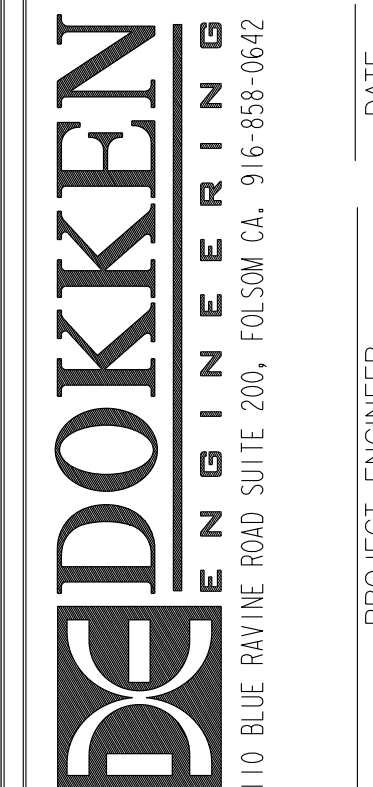
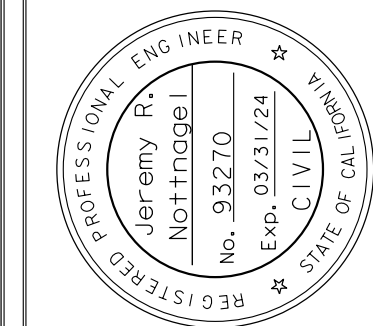
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GEOCON CONSULTANTS INC.
 3160 GOLD VALLEY DR. STE. 800 - RANCHO CORDOVA, CA 95742
 PHONE 916 852-9118 - FAX 916 852-9132
 PROJECT NO. S1977-05-01

DOKKEN ENGINEERING
 110 BLUE RAVINE ROAD, SUITE 200
 FOLSOM, CA 95630

THIS LOTB SHEET WAS PREPARED IN ACCORDANCE WITH THE CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010 EDITION). SEE 2018 STANDARD PLANS A10F AND A10G FOR SOIL LEGEND, AND A10H FOR ROCK LEGEND.

REGISTERED PROFESSIONAL ENGINEER
 RONALD E. LOUTZENHISER
 No. 2865
 Exp. 09/30/22
 GEOTECHNICAL
 STATE OF CALIFORNIA

[illegible]

MOUNTAIN ROAD 109 OVER WHITE RIVER BRIDGE

LOG OF TEST BORINGS No. 1

SCALE	AS SHOWN
DIVISION	STRUCTURES
JOB NO.	#2599
DESIGNED	JN
DRAWN	MD
CHECKED	TP
FILE	
DATE	7/7/23
SHEET No.	

S13
24 OF 27

VERTICAL DATUM NAVD 88 AS ADJUSTED TO NCS PID DH6642
ELEVATION = 276.2 FEET

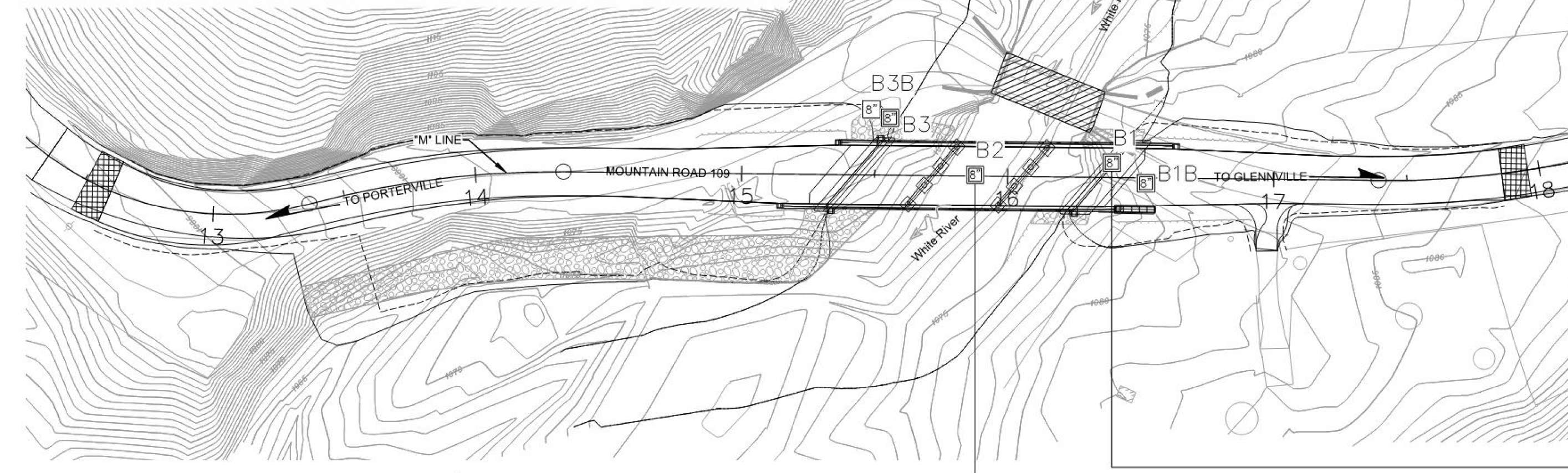


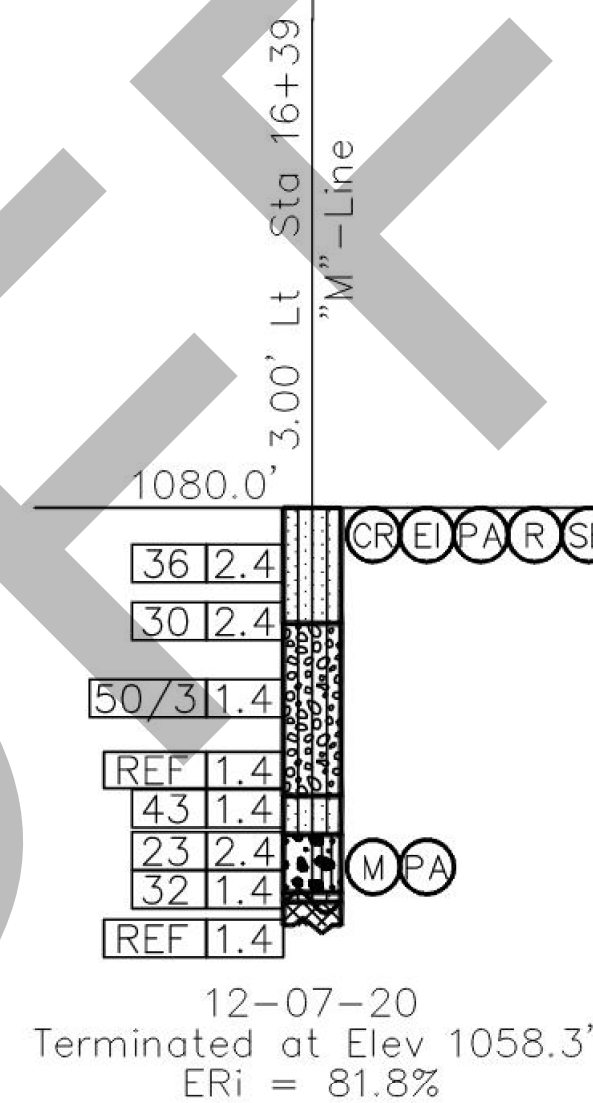
Diagram illustrating the profile of Borehole B2, showing elevation (ft) on the vertical axis and depth (ft) on the horizontal axis.

The profile shows the following layers and data:

- Elevation 1090 ft
- Elevation 1080 ft
- Elevation 1070 ft
- 1.00' Lt Sta 15+88
- 1.00' M-Line
- 1071.0'
- 1.4' CRCA
- 1.4' REF
- 12-07-20
- Terminated at Elev 1064.5'
- ERI = 81.8%
- Auger refusal at 6.5 feet.

Well-graded SAND with GRAVEL (SW); medium dense; gray, dry;
coarse to fine, subangular to subrounded GRAVEL; coarse to fine,
subangular SAND; (ALLUVIUM).
- boulders and cobble from 3.5' to 6.5'.
Very dense. _____

- 1) RELATIVELY UNDISTURBED SOIL SAMPLES WERE OBTAINED BY DRIVING A 3-INCH OUTSIDE DIAMETER, WITH A 2.4-INCH INSIDE DIAMETER (CALIFORNIA MODIFIED) SPLIT-SPOON SAMPLER FOR MODIFIED CALIFORNIA SAMPLING METHODS AND A 2-INCH OUTSIDE DIAMETER WITH A 1.4-INCH INSIDE DIAMETER SPLIT-SPOON SAMPLER FOR STANDARD PENETRATION TEST SAMPLING METHODS.
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- 4) 140-POUND AUTOMATIC HAMMER FALLING 30 INCHES WAS USED TO DRIVE SAMPLERS.
- 5) VISUAL CLASSIFICATION OF EARTH MATERIALS WAS BASED ON FIELD INSPECTION AND WAS CONFIRMED OR REVISED WITH LABORATORY TEST RESULTS.



Auger refusal at 21.7 feet.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
06	TUL	M109			

R. Hal 02-18-22
 GEOTECHNICAL PROFESSIONAL DATE

PLANS APPROVAL DATE

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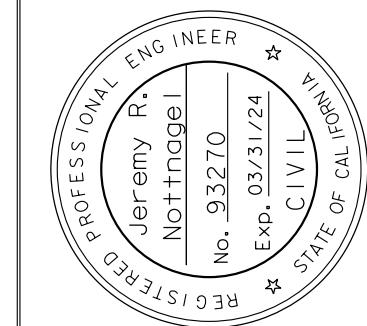
GEOCON CONSULTANTS INC.
 3160 GOLD VALLEY DR. STE. 800 - RANCHO CORDOVA, CA 95742
 PHONE 916 852-9118 - FAX 916 852-9132
 PROJECT NO. S1977-05-01

DOKKEN ENGINEERING
 110 BLUE RAVINE ROAD, SUITE 200
 FOLSOM, CA 95630

THIS LOTB SHEET WAS PREPARED IN ACCORDANCE WITH THE CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010 EDITION). SEE 2018 STANDARD PLANS A10F AND A10G FOR SOIL LEGEND, AND A10H FOR ROCK LEGEND.

[illegible]

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559)624-7000
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DE DOKKEN
ENGINEERING
10 BLUE RAVINE ROAD SUITE 200, FOLSOM CA. 916-858-0642

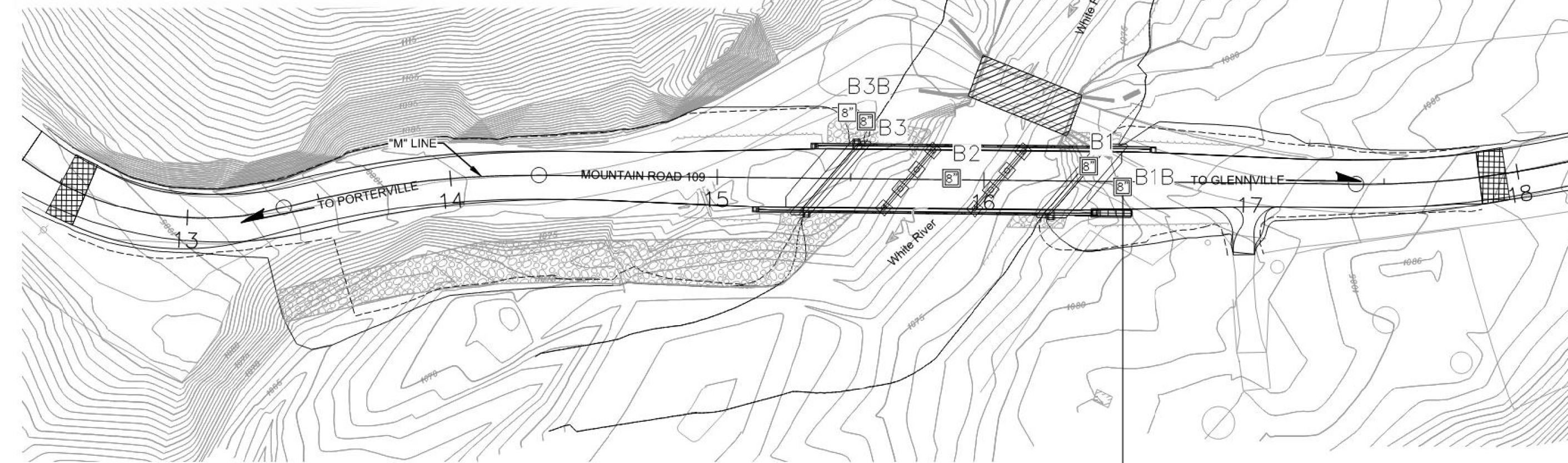
**MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE
LOG OF TEST BORINGS No. 2**

SCALE	AS SHOWN
DIVISION	STRUCTURES
JOB NO.	#2599
DESIGNED	JN
DRAWN	MD
CHECKED	TP
FILE	
DATE	7/7/23
SHEET No.	

S14

POINT #4, ELEV. 1079.23 FEET, NORTHING 1815185.43, EASTING 6607446.75

VERTICAL DATUM NAVD 88 AS ADJUSTED TO NCS PID DH6642
ELEVATION = 276.2 FEET



- 1) RELATIVELY UNDISTURBED SOIL SAMPLES WERE OBTAINED BY DRIVING A 3-INCH OUTSIDE DIAMETER, WITH A 2.4-INCH INSIDE DIAMETER (CALIFORNIA MODIFIED) SPLIT-SPOON SAMPLER FOR MODIFIED CALIFORNIA SAMPLING METHODS AND A 2-INCH OUTSIDE DIAMETER WITH A 1.4-INCH INSIDE DIAMETER SPLIT-SPOON SAMPLER FOR STANDARD PENETRATION TEST SAMPLING METHODS.
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
06	TUL	M109			

R. Hal 02-18-22
 GEOTECHNICAL PROFESSIONAL DATE

PLANS APPROVAL DATE

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 PHONE 916 852-9118 - FAX 916 852-9132
 PROJECT NO. S1977-05-01

DOKKEN ENGINEERING
 110 BLUE RAVINE ROAD, SUITE 200
 FOLSOM, CA 95630

THIS LOTB SHEET WAS PREPARED IN ACCORDANCE WITH THE
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 PLANS A10F AND A10G FOR SOIL LEGEND, AND A10H FOR ROCK
 LEGEND.

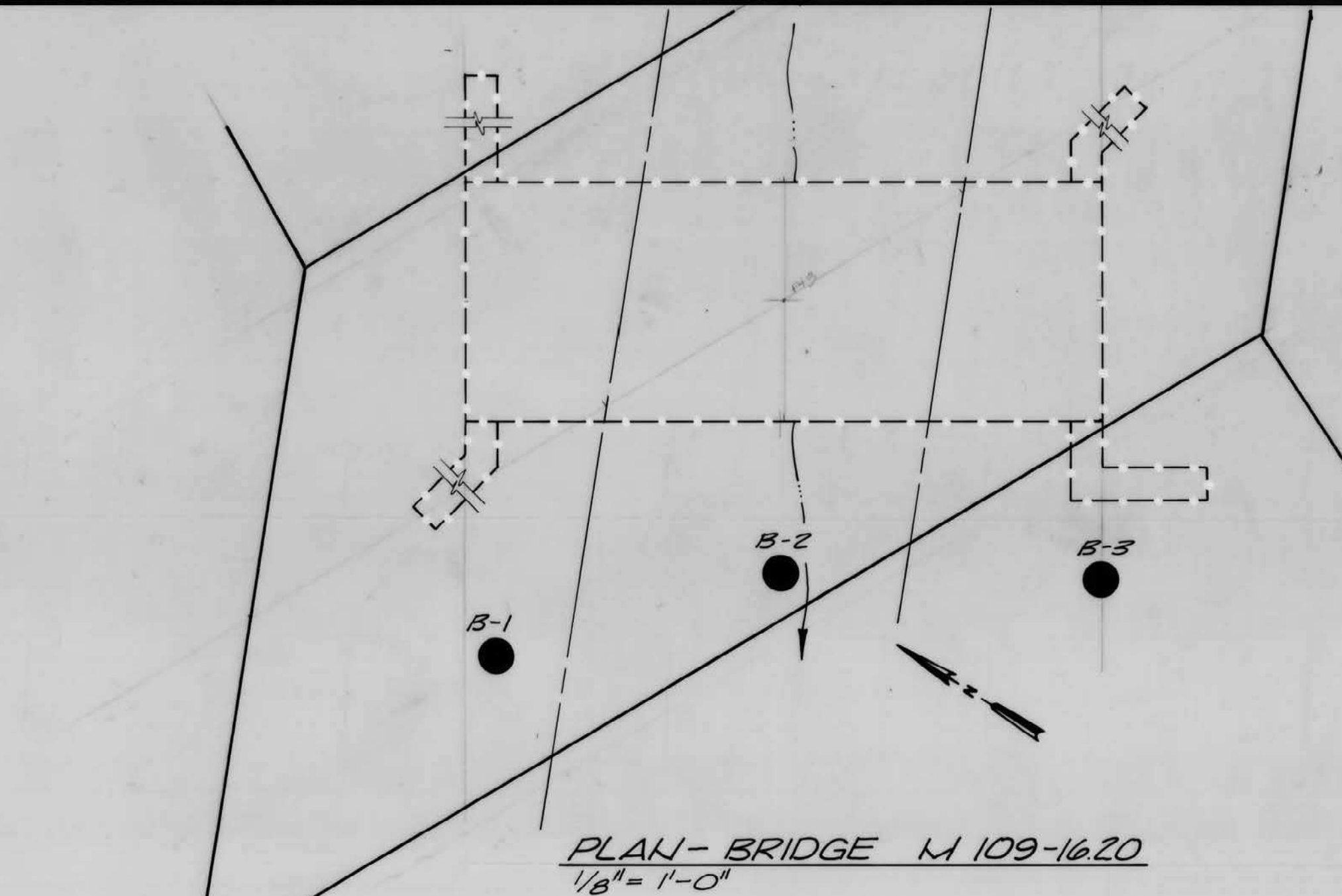
[illegible]

DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA. 916-858-0642

**MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE
LOG OF TEST BORINGS No. 3**

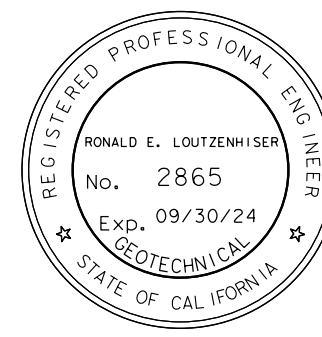
SCALE	AS SHOWN
DIVISION	STRUCTURES
JOB NO.	#2599
DESIGNED	JN
DRAWN	MD
CHECKED	TP
FILE	
DATE	7/7/23
SHEET No.	

S15
26 OF 27



**MOUNTAIN ROAD 109
OVER WHITE RIVER
BRIDGE**
LOG OF TEST BORINGS No. 4

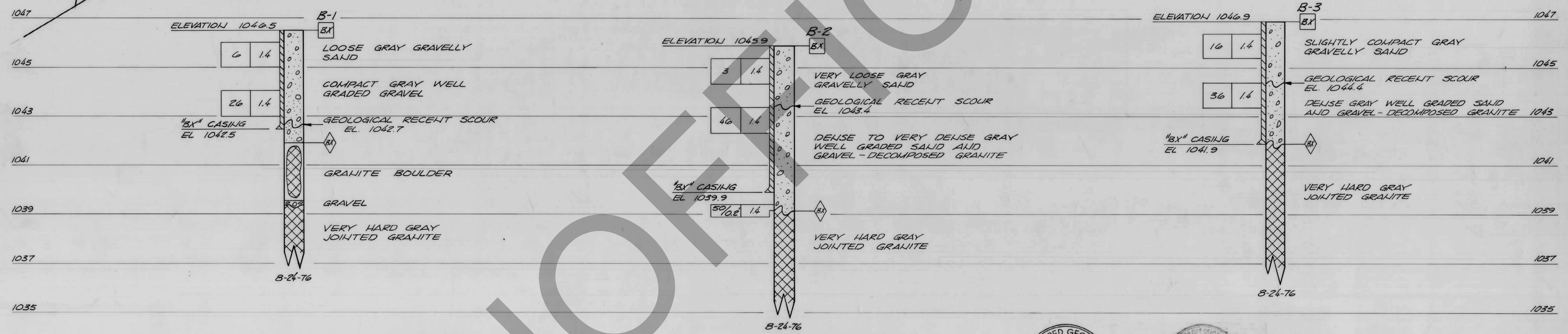
DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD SUITE 200, FOLSOM CA. 916-858-0642



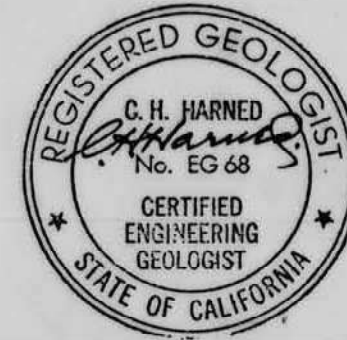
COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
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VISALIA, CA 93277
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SHEET No.
S16
27 OF 27

As-Built Log of Test Borings sheet is considered an informational document only. As such, the State of California registration seal with signature, license number and registration certificate expiration date confirm that this is a true and accurate copy of the original document. It does not attest to the accuracy or validity of the information contained in the original document. This drawing is available and presented only for the convenience of any bidder, contractor or other interested party.



NOTE:
NO GROUNDWATER WAS
ENCOUNTERED IN ANY OF
THE BORINGS.



SCALE: VERT 0 2' 4'
HORIZ. 1"=10'

LEGEND OF DRILLING, SAMPLING & TESTING OPERATIONS										THE UNIFIED SOIL CLASSIFICATION SYSTEM										ROCK CLASSIFICATION		SOIL CONSISTENCY CLASSIFICATION												
ROTARY BORING					PENETRATION BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
TOP HOLE ELEV.					TOP HOLE ELEV.					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
B-N#.					B-N#.					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
CASING DRIVEN.					PUSHED					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
SIZE OF SAMPLER (INCHES).					NO COUNT RECORDED					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
BLOWS PER FOOT (USING A 140 LB. HAMMER WITH A 30" DROP, OR AS NOTED).					BLOWS PER FOOT (DRIVEN BY MEANS OF A 342 LB. HAMMER AND A 30" FREE-FALL BLOW).					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
QU=UNCONFINED COMPRESSIVE STRENGTH (T/SQ. FT.).					G.W.S. (WATER) ELEV. DATE MEASURED.					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
VANE SHEAR.					GRAPHIC PRESENTATION OF PENETRATION					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
SHEAR STRENGTH (P/SQ. FT.).					AVERAGE SKIN FRICTION ABOVE THIS POINT (P/SQ. FT.)					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
DS= DIRECT SHEAR.					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
TS= TRI-AXIAL SHEAR.					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
DATE OF BORING					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
DATE OF BORING					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
DATE OF BORING					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
DATE OF BORING					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
DATE OF BORING					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
DATE OF BORING					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
DATE OF BORING					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
DATE OF BORING					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
DATE OF BORING					DATE OF BORING					PLAN OF ANY BORING					AUGER BORING (DRY)					JET BORING					DIAMOND CORE BORING					TEST PIT				
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