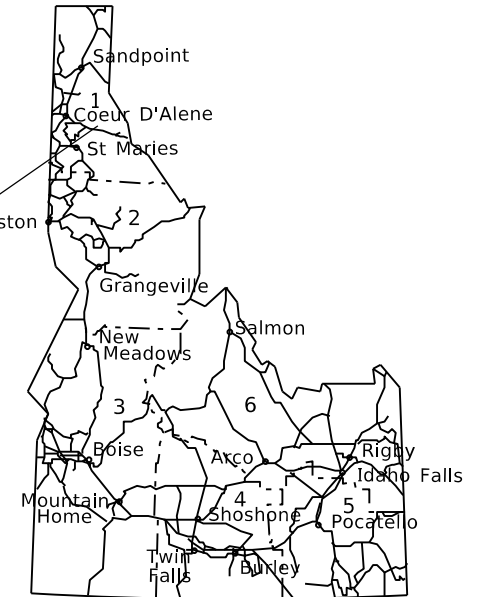


SHOSHONE COUNTY

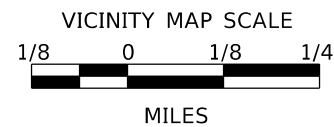
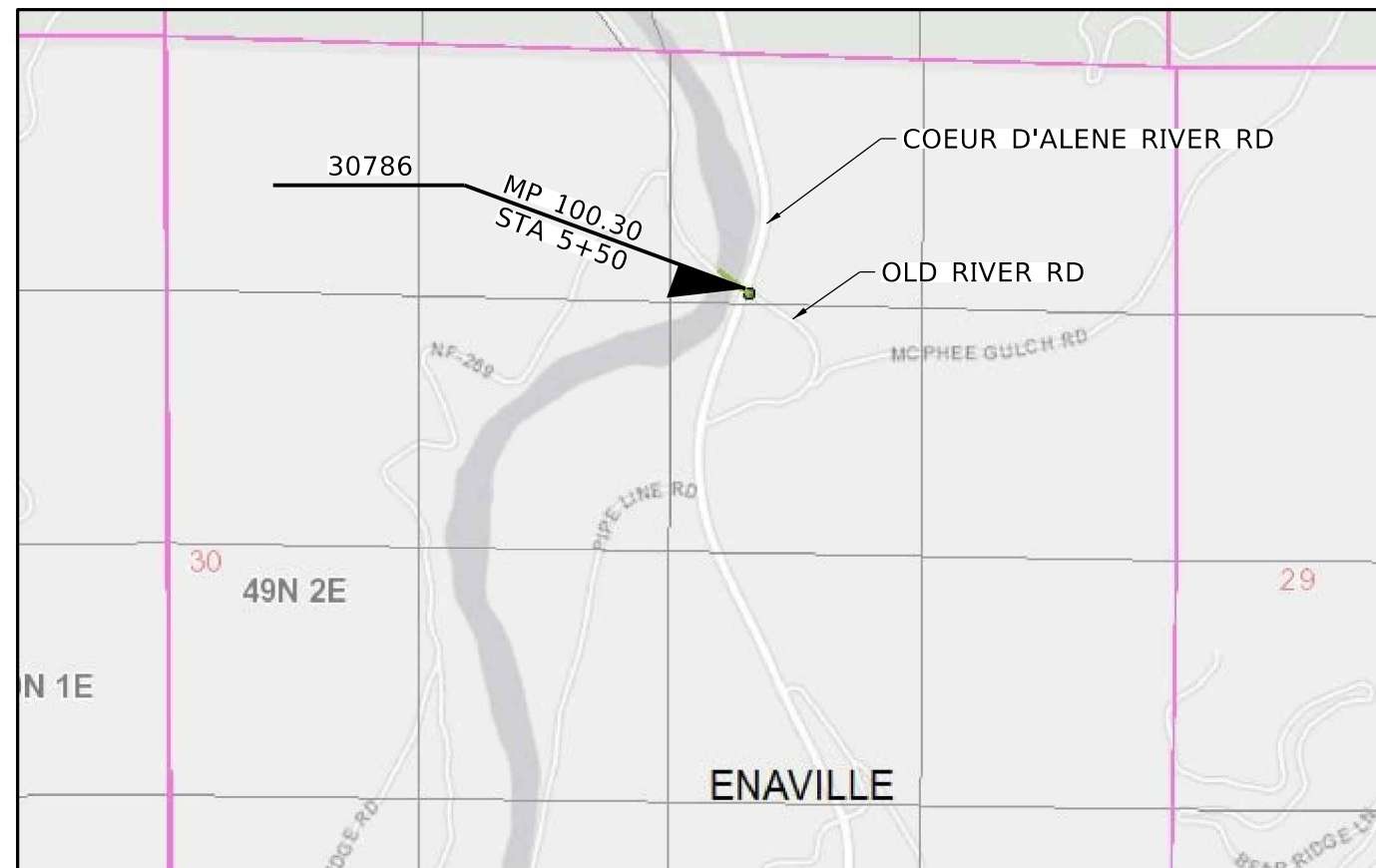
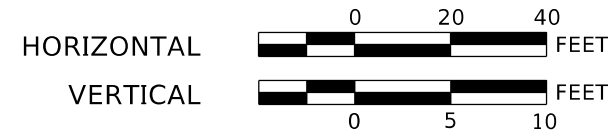
PLAN AND PROFILE OF PROPOSED SILVER BRIDGE REPLACEMENT KEY NO. 30786 SHOSHONE COUNTY

JULY, 2025

30786
SILVER BRIDGE
REPLACEMENT
M.P. 100.24 to M.P. 100.30



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SURVEY CONTROL MAP
3	TOTAL OWNERSHIP MAP
4	PROJECT CLEARANCE SUMMARY
5-6	TYPICAL SECTIONS
7-8	ROADWAY SUMMARY
9	BRIDGE SUMMARY
10	CRASH CUSHION SUMMARY
11	STORM SEWER PIPE SUMMARY
12-14	ROADWAY PLAN AND PROFILE
15	CHANNEL PLAN AND PROFILE
16	CHANNEL RIPRAP DETAILS
17	DRAINAGE PLAN AND PROFILE
18	DRAINAGE DETAILS
19	POLLUTION PREVENTION PLAN
20	SIGN SUMMARY
21	SIGNING AND PAVEMENT MARKING PLAN
22-24	TEMPORARY TRAFFIC CONTROL PLAN
1	UTILITY PLAN
1-41	BRIDGE PLANS
1-27	ITD STANDARD DRAWINGS
1-5	RIGHT OF WAY PLANS



PS&E DESIGN
ROADWAY PLANS
7/18/2025

July 14, 2025 11:16:26 AM p:\idaho\pw\deainc\pw-22\Documents\Projects\idaho\HTAC\p\30786\Project_Development\Plan_Sheets\30786 TITL D01

REVISIONS			
NO.	DATE	BY	DESCRIPTION

THE DIMENSIONS SHOWN ON THE PLANS SHALL BE ATTAINED WITHIN LIMITS OF PRECISION THAT GOOD CONSTRUCTION PRACTICES WILL PERMIT

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 30786 TITL D01.DGN
DRAWING DATE: 7/14/2025



DAVID EVANS AND ASSOCIATES INC.

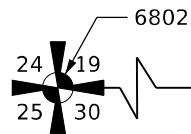
PROJECT NO.

TITLE SHEET
SILVER BRIDGE REPLACEMENT
SHOSHONE COUNTY

ENGLISH
COUNTY SHOSHONE
KEY NUMBER 30786
SHEET 1 OF 24

Approved for Advertising
Date Approved

LOCATED WITHIN
SECTION 30
T.49N R.02E B.M.
SHOSHONE COUNTY, IDAHO



N87°30'30"W
2659.46'

SURVEYOR'S NOTES:
THE PURPOSE OF THIS SURVEY IS TO ASSIST IN THE DESIGN AND CONSTRUCTION ASSOCIATED WITH THE LOCAL HIGHWAY TECHNICAL ASSISTANCE COUNCIL (LHTAC) PROJECT 30786.

BASIS OF BEARING:
THE BASIS OF BEARING IS GRID NORTH PER THE WEST ZONE OF THE IDAHO STATE PLANE COORDINATE SYSTEM 2011 (EPSG 6453). THE CONVERGENCE ANGLE AT POINT 100 IS -0°22'20".

GROUND PROJECTION:
THE INVERSE OF A COMBINED SCALE FACTOR (CSF) OF 0.99984964 WAS APPLIED AT 0,0 TO CREATE A MODIFIED GROUND SYSTEM. A FALSE NORTHING OF -100000 AND FALSE EASTING OF -100000 WERE APPLIED TO EACH COORDINATE VALUE TO TRUNCATE THE SYSTEM.

ALL GROUND COORDINATES ARE MODIFIED FROM THE IDAHO STATE PLANE WEST ZONE, NAD83(2011) EPOCH 2010.

COORDINATES DISPLAYED HEREON ARE IN US SURVEY FEET.

BASIS OF ELEVATION AND COORDINATES:
THE VERTICAL DATUM USED HEREON IS BASED UPON NAVD88 COMPUTED USING GEOID 2018 CONUS.

ELEVATIONS WERE ESTABLISHED BY HOLDING THE PUBLISHED ELEVATION OF POINT 104 WHICH WAS VERIFIED BY DIFFERENTIAL LEVELING THROUGH THE NGS BENCHMARK B124 POINT 3200.

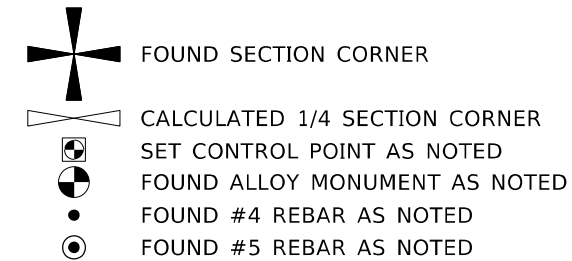
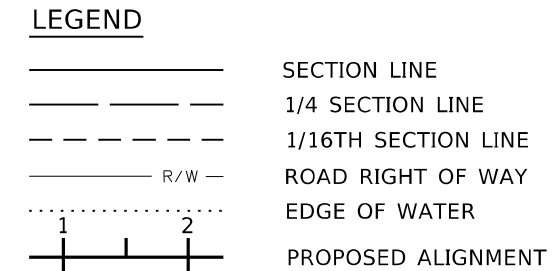
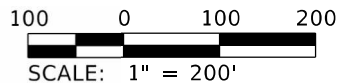
CONTROL FIELD WORK WAS PERFORMED MARCH 2023 THROUGH JULY 2023.

ALL DISTANCES SHOWN ARE GROUND DISTANCES IN US SURVEY FEET.

A STATIC CONTROL NETWORK WAS USED TO ESTABLISH HORIZONTAL POSITIONS ON CONTROL MONUMENTS TO SET THIS SURVEY. PRIMARY CONTROL POINTS (100-104).

STATE PLANE TO GROUND FROMULA:
(N * (1/CSF))-100000 = GROUND NORTHING (E * (1/CSF))-100000 = GROUND EASTING

GROUND TO STATE PLANE FROMULA:
(N + 100000) * (CSF) = STATE PLANE NORTHING (E + 100000) * (CSF) = STATE PLANE EASTING



NE⁴ NW⁴

NW⁴ NE⁴

SW⁴ NE⁴

PROJECT PRIMARY CONTROL TABLE					
POINT NO.	LOCAL GROUND COORDINATE SYSTEM (USFT)			DESCRIPTION	NOTES
	NORTHING	EASTING	ELEVATION		
100	2053252.03	2400547.47	2177.70	SET 5/8 INCH REBAR W/RPC "DEA CONTROL"	PRIMARY CONTROL
101	2054409.20	2400813.97	2180.10	SET 5/8 INCH REBAR W/RPC "DEA CONTROL"	PRIMARY CONTROL
102	2051880.33	2399440.62	2231.55	SET 5/8 INCH REBAR W/RPC "DEA CONTROL"	PRIMARY CONTROL
103	2051166.56	2400841.53	2176.23	SET 5/8 INCH REBAR W/RPC "DEA CONTROL"	PRIMARY CONTROL
104	2052533.73	2400975.27	2178.36	SET 5/8 INCH REBAR W/RPC "DEA CONTROL"	PRIMARY CONTROL

PROJECT COORDINATE TABLE - PLSS MONUMENTS					
POINT NO.	LOCAL GROUND COORDINATE SYSTEM (USFT)			DESCRIPTION	NOTES
	NORTHING	EASTING	ELEVATION		
3000	2051324.51	2400511.51	2173.98	FOUND 1/2 INCH REBAR WITH BROKEN CAP	CP&F 458269
3010	2052585.00	2401886.68	2301.44	FOUND 5/8 INCH REBAR W/ YPC WELCH COMER PLS12318	1/16TH CORNER, NO CP&F
3016	2053941.01	2400647.39	2169.96	FOUND 2-1/2 INCH ALUMINUM CAP (WC) MECKEL PLS 6374	CP&F 494187
3200	2052652.04	2401000.94	2203.34	FOUND BENCHMARK IN CONCRETE OF BRIDGE (B 124) 1958	NGS: B 124, PID: SV0112
6003	2053886.09	2401905.21	2617.51	FOUND 1/2 INCH REBAR W/ YPC DURTSCHI PLS 3814	1/16TH CORNER, NO CP&F
6802	2054061.30	2397883.32	2854.26	FOUND 3-1/4 INCH BRASS CAP BLM BAUER 1978	CP&F 488845

PRIMARY CONTROL POINT 102
~488 FEET SOUTH

PRIMARY CONTROL POINT 103
~1611 FEET SOUTHEAST

3043 FOUND PROPERTY MONUMENT
2' NW OF CALCULATED
POSITION OF 1/6TH CORNER



DAVID EVANS AND ASSOCIATES INC.

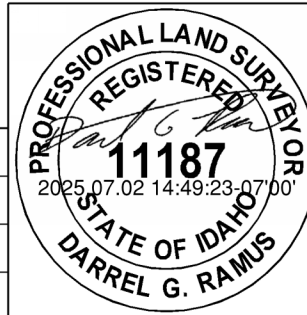
REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	J. GILLEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	D. GOWER	
DETAILED	J. GILLEY	CADD FILE NAME 30786 SCM D01.dgn
DRAWING CHECKED	D. RAMUS	DRAWING DATE: 6/30/2025

PROJECT NO.	
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SURVEY CONTROL SHEET	ENGLISH
SILVER BRIDGE REPLACEMENT	COUNTY SHOSHONE
SHOSHONE COUNTY	KEY NUMBER 30786
	SHEET 2 OF 24

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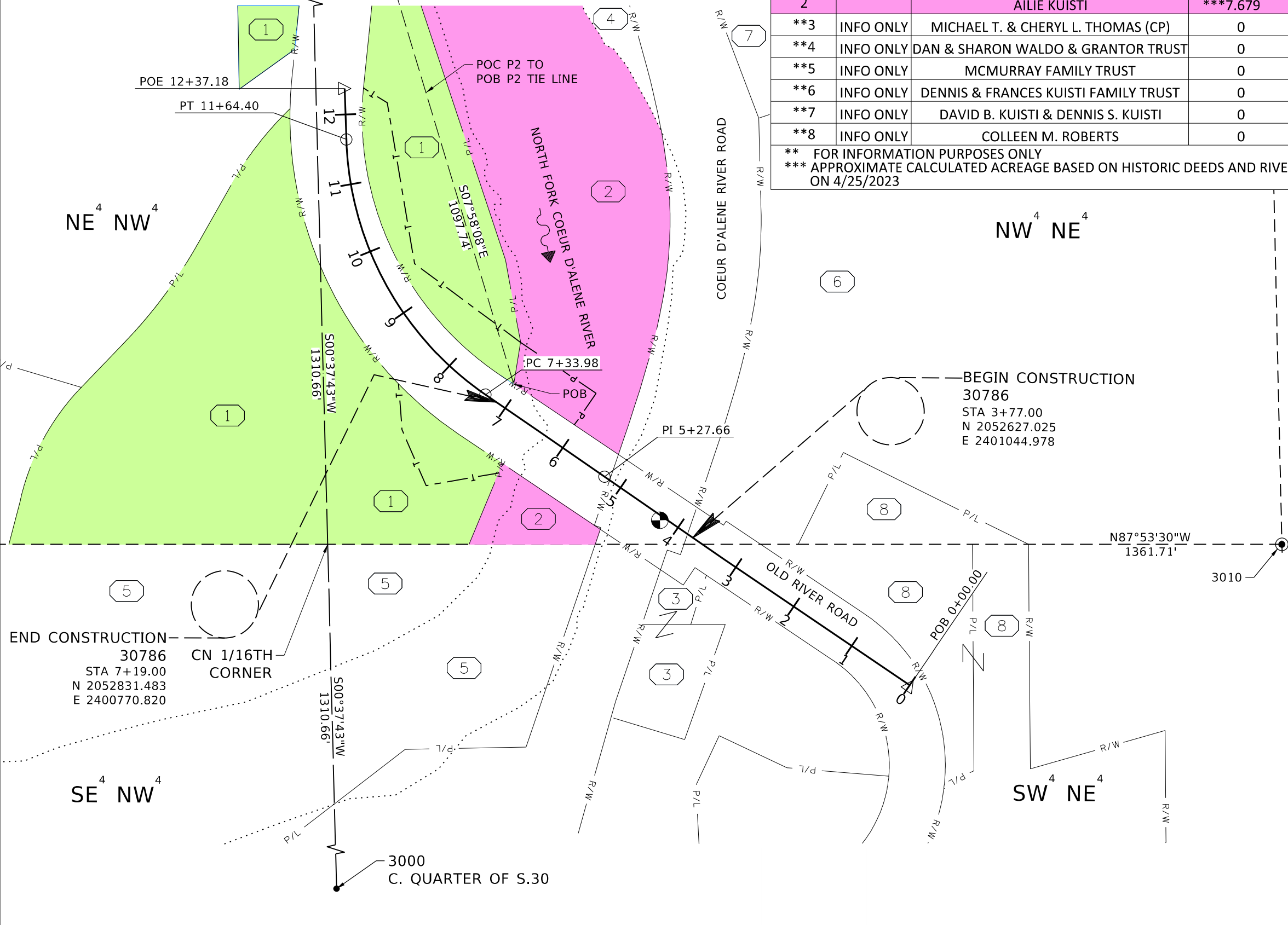


June 30, 2025 3:23:17 PM p:\idaho\c-pw\development\lhtac\p\30786\Project_Development\Plan_Sheets\30786_SCM_D01

S87°30'20"E 107.23'
 N87°30'30"W 2659.46'
 T.49N, R.02E, S.30 B.M.
 N. 1/4 S.30 WC

Parcel No.	Parcel I.D. No.	Record Owner	Total Ownership Assessed Ac.	Right of Way		Remainder		Easement	
				Req'd Ac.	Exist. Ac.	Left Ac.	Right Ac.	Perm. Ac.	Temp. Ac.
1		NORTH FORK CAMP LLC	8.650	0	0	0	0	0	0.651
2		AILIE KUISTI	***7.679	0	0	0	0	0.148	0
**3	INFO ONLY	MICHAEL T. & CHERYL L. THOMAS (CP)	0	0	0	0	0	0	0
**4	INFO ONLY	DAN & SHARON WALDO & GRANTOR TRUST	0	0	0	0	0	0	0
**5	INFO ONLY	MCMURRAY FAMILY TRUST	0	0	0	0	0	0	0
**6	INFO ONLY	DENNIS & FRANCES KUISTI FAMILY TRUST	0	0	0	0	0	0	0
**7	INFO ONLY	DAVID B. KUISTI & DENNIS S. KUISTI	0	0	0	0	0	0	0
**8	INFO ONLY	COLLEEN M. ROBERTS	0	0	0	0	0	0	0

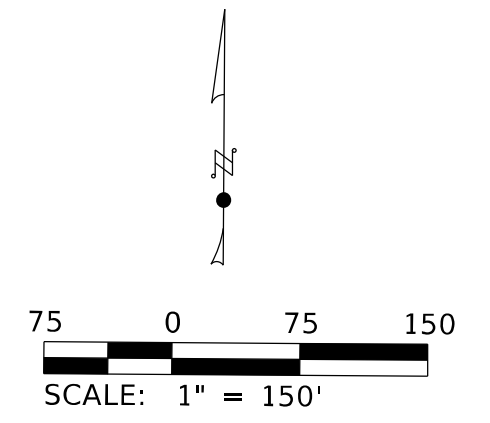
** FOR INFORMATION PURPOSES ONLY
 *** APPROXIMATE CALCULATED ACREAGE BASED ON HISTORIC DEEDS AND RIVER BANK DERIVED FROM REMOTE SENSING DATA COLLECTED ON 4/25/2023



LEGEND

- SECTION LINE
- 1/4 SECTION LINE
- 1/16TH SECTION LINE
- ROAD RIGHT OF WAY
- EDGE OF WATER
- PROPOSED ALIGNMENT
- PROPOSED PERMANENT EASEMENT
- PROPOSED TEMPORARY EASEMENT

- FOUND ALLOY MONUMENT AS NOTED
- FOUND #5 REBAR AS NOTED
- FOUND #4 REBAR AS NOTED



REVISIONS			
NO.	DATE	BY	DESCRIPTION

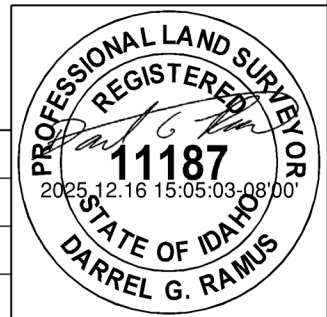
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DESIGN CHECKED	D. GOWER	
DETAILED	J. GILLEY	CADD FILE NAME 30786 OMAP D01.dgn
DRAWING CHECKED	D. RAMUS	DRAWING DATE: 7/14/2025



PROJECT NO.

TOTAL OWNERSHIP MAP
 SILVER BRIDGE REPLACEMENT
 SHOSHONE COUNTY

ENGLISH
 COUNTY SHOSHONE
 KEY NUMBER 30786
 SHEET 3 OF 24



December 16, 2025 2:55:54 PM
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July 14, 2025 11:17:04 AM pww://daefnc-pw.com/daefnc-pw-22/Documents/Projects/Idaho/LHTAC/0130786/Project_Development/Plan_Sheets/30786_PCSM_D01

CLEARANCES

PROJECT STANDARDS
 CHARTER APPROVAL AASHTO 3R 1R STATE
 PP OTHER PRELIMINARY DESIGN REPORT
 DESIGN EXCEPTIONS: _____
 PUBLIC HEARING WAIVER _____
 PUBLIC HEARING DATE (Latest hearing date held or scheduled for opportunity) _____
 DESIGN APPROVAL _____
 RECLAMATION PLAN APPROVAL NO(S) _____
 AIRPORT _____
 Land Survey Monument Search and Documentation (I.C.55-1613) _____
 R/W CERTIFICATE: Issued by HQ DISTRICT _____
 TRIBAL LANDS: AGREEMENT REQUIRED SPECIAL PROVISIONS FOR CONTRACT PROPOSAL _____
 BRIDGE PS & E _____
 ENVIRONMENTAL DECISION: TYPE CAT-EX FONSI ROD _____
 ENVIRONMENTAL RE-EVALUATION _____

CLEARED UNDER PROJECT NO.	APPROVAL DATE
30786	8/25/2023
N/A	
30786	5/30/2024
30786	12/18/2023
N/A	
N/A	
30786	TBD
30786	TBD
N/A	
N/A	
N/A	
N/A	

ESTIMATING BASIS

CONCRETE:
 PORTLAND CEMENT CONCRETE USING COURSE AGGREGATE SIZE NO. 4

TACK COAT:
 NEW CONSTRUCTION CSS-1 DILUTED EMULSIFIED ASPHALT FOR TACK COAT AT 0.12 GALLONS/SY
 EXISTING SURFACES CSS-1 DILUTED EMULSIFIED ASPHALT FOR TACK COAT AT 0.18 GALLONS/SY

PAVING:
 OLD RIVER ROAD: PG 58-28 ASPHALT BINDER FOR SUPERPAVE HMA PAVEMENT CLASS SP-3 (1/2 INCH NOMINAL AGGREGATE) ESTIMATED AT 150 PCF
 COEUR D'ALENE RIVER ROAD: PG 58-28 ASPHALT BINDER FOR SUPERPAVE HMA PAVEMENT CLASS SP-3 (1/2 INCH NOMINAL AGGREGATE) ESTIMATED AT 150 PCF

AGGREGATE:
 3/4-INCH TYPE B AGGREGATE BASE AT AN ESTIMATED 140 PCF, INCLUDING 7% MOISTURE CONTENT

GRANULAR SUBBASE:
 GRANULAR IN-SITU SUBGRADE WET DENSITY ESTIMATED AT 125 PCF, INCLUDING 2% MOISTURE
 GRANULAR BORROW WET DENSITY ESTIMATED AT 130 PCF, INCLUDING 8% MOISTURE CONTENT

WATER FOR DUST ABATEMENT:
 0.5 GAL. PER SY OF EXPOSED SUBGRADE

SMOOTHNESS:
 PAVEMENT SMOOTHNESS TEST WILL BE WITH A 10 FT STRAIGHTEDGE.

PERMITS

IDAHO DEPARTMENT OF WATER RESOURCES PERMIT NO(S) 594-20242
 US ARMY CORPS OF ENGINEERS 404 PERMIT NO(S) _____
 OTHER _____
 DEQ SECTION 401 WATER QUALITY CERTIFICATION YES NO
 NPDES GENERAL PERMIT/SWPPP REQUIRED YES NO
 POLLUTION PREVENTION PLAN REQUIRED YES NO

		EXPIRATION DATE
30786	4/8/2025	12/31/2027
30786	2/13/2025	N/A

AGREEMENTS (List Appropriate Name)

LOCAL: CITY _____
 COUNTY _____
 HIGHWAY DISTRICT _____
 ROAD CLOSURE AND MAINTENANCE _____
 STATE/LOCAL CONSTRUCTION _____

N/A
N/A
N/A
N/A
N/A
N/A

IRRIGATION DISTRICT(S): Crossing Agreement Required YES NO
 (Signatures Required on either Structure Drawing or Bridge Sheet)

UTILITIES: List all Utilities shown on plans

Co.	UTILITY	RETAIN & PROTECT
Co.	AVISTA UTILITIES (ELECTRICITY)	<input checked="" type="checkbox"/>
Co.	PHILLIPS 66 (GAS)	<input checked="" type="checkbox"/>
Co.	ZIPLY FIBER (FIBER OPTIC & TELEPHONE)	<input checked="" type="checkbox"/>
Co.	_____	<input type="checkbox"/>
Co.	_____	<input type="checkbox"/>
Co.	_____	<input type="checkbox"/>
Co.	_____	<input type="checkbox"/>

APPROVAL DATES		AGREEMENT NO.
UTILITY HEARING WAIVER	AGREEMENT	
3/28/2025		
3/24/2025		
3/21/2025		

RAILROAD List all Railroads encroached upon

Co.	RAILROAD	AGREEMENT FOR	EFFECTIVE DATE	NO.
Co.	N/A	N/A	N/A	N/A

- NOTES**
1. GRANULAR SUBBASE AND STRUCTURAL BACKFILL IN THE PLANS ARE UNFACTORED AND ASSUMED 100% WASTE OF EXISTING PAVEMENT, BASE, AND SUBGRADE SOILS.
 2. EXCAVATION QUANTITIES SHOWN IN THE PLANS ARE UNFACTORED.
 3. MATERIAL REPORTS ARE AVAILABLE FOR CONTRACTORS USE.

REVISIONS			
NO.	DATE	BY	DESCRIPTION
			DESIGNED B. CARVER
			DESIGN CHECKED A. MCCALL
			DETAILED B. CARVER
			DRAWING CHECKED A. MCCALL

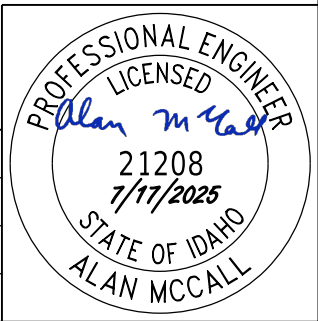
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PROJECT NO.

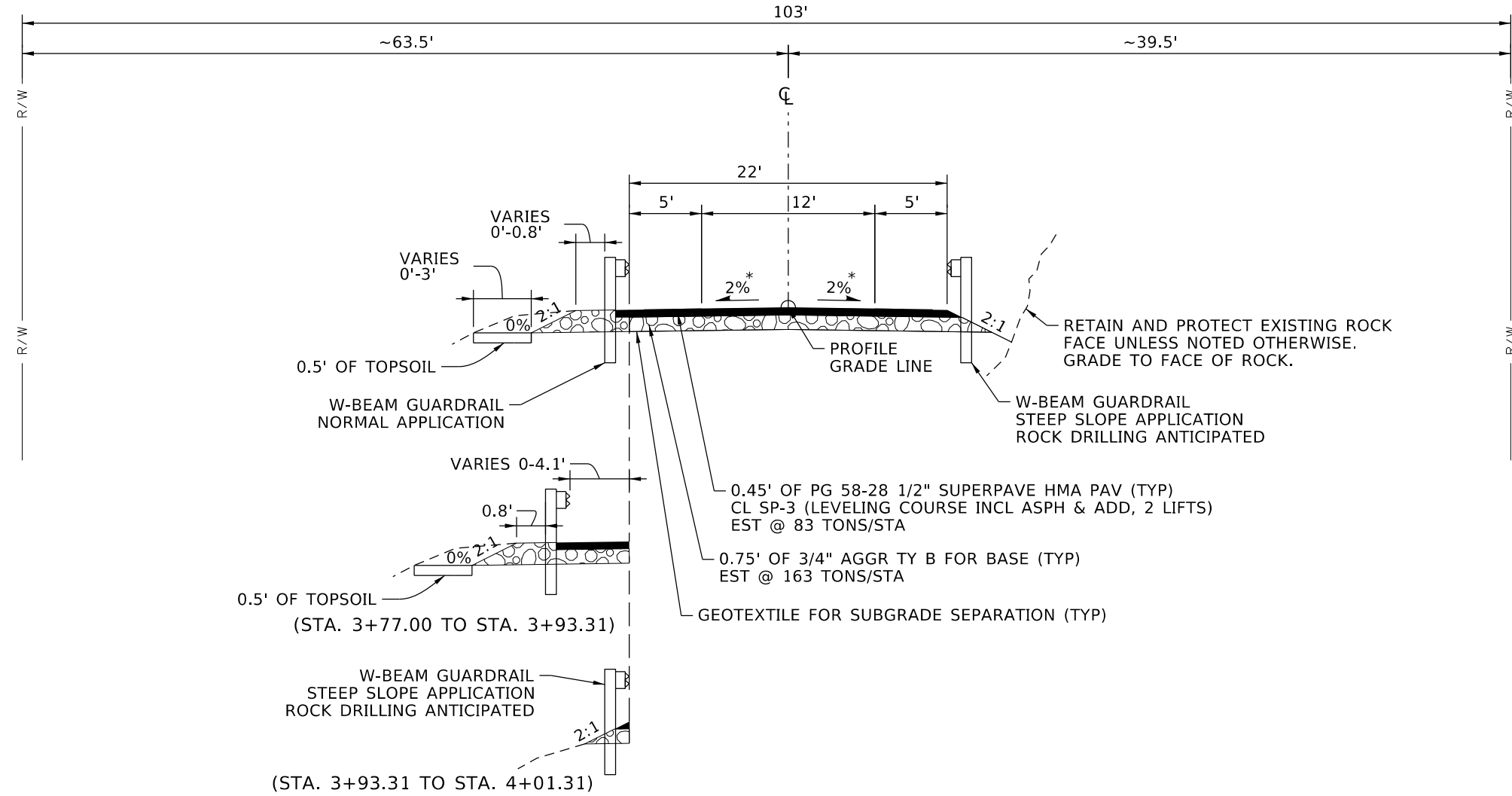
PROJECT CLEARANCE SUMMARY
 SILVER BRIDGE REPLACEMENT
 SHOSHONE COUNTY

ENGLISH
 COUNTY SHOSHONE
 KEY NUMBER 30786
 SHEET 4 OF 24



OLD RIVER RD TYPICAL SECTION

(STA. 3+77.00 TO STA. 4+01.31)
N.T.S



NOTES

- ROCK DRILLING PER ITD STANDARD DRAWING 612-1 IS INCIDENTAL TO W-BEAM GUARDRAIL 612-005A.
- SEE SUPERELEVATION DIAGRAM ON PROFILE SHEET.

OLD RIVER RD BRIDGE APPROACH SLAB

(STA. 4+01.31 TO STA. 4+23.31)
(STA. 6+63.35 TO STA. 6+85.35)
(SEE BRIDGE PLANS)

OLD RIVER RD BRIDGE TYPICAL SECTION

(STA. 4+23.31 TO STA. 6+63.65)
(SEE BRIDGE PLANS)

REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNED	B. CARVER
DESIGN CHECKED	A. MCCALL
DETAILED	B. CARVER
DRAWING CHECKED	A. MCCALL

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 30786 TYPI D01.dgn
DRAWING DATE: 7/14/2025



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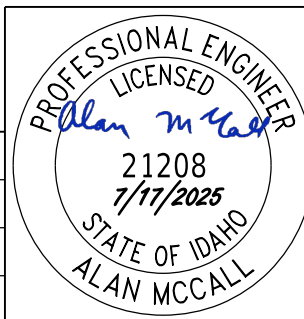
PROJECT NO.

TYPICAL SECTIONS
SILVER BRIDGE REPLACEMENT
SHOSHONE COUNTY

ENGLISH

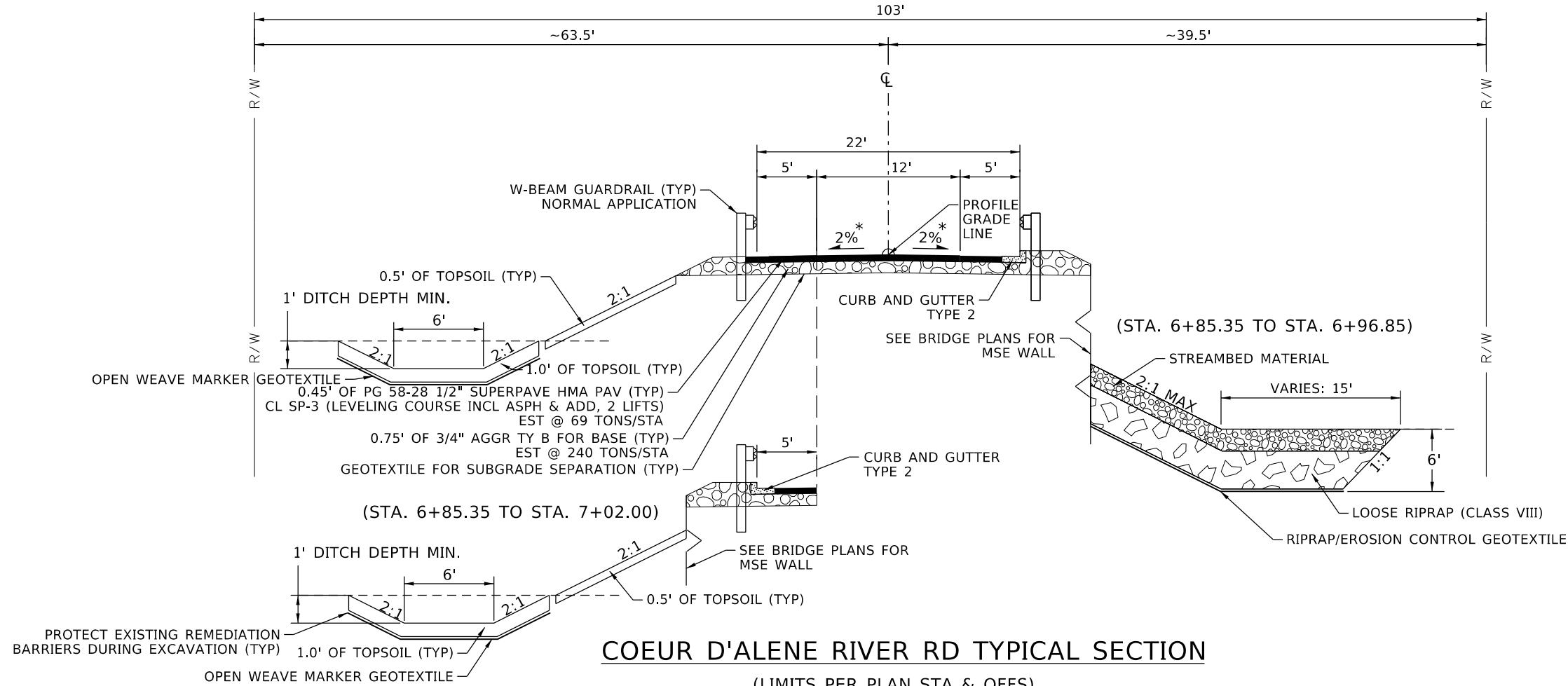
COUNTY SHOSHONE
KEY NUMBER 30786

SHEET 5 OF 24



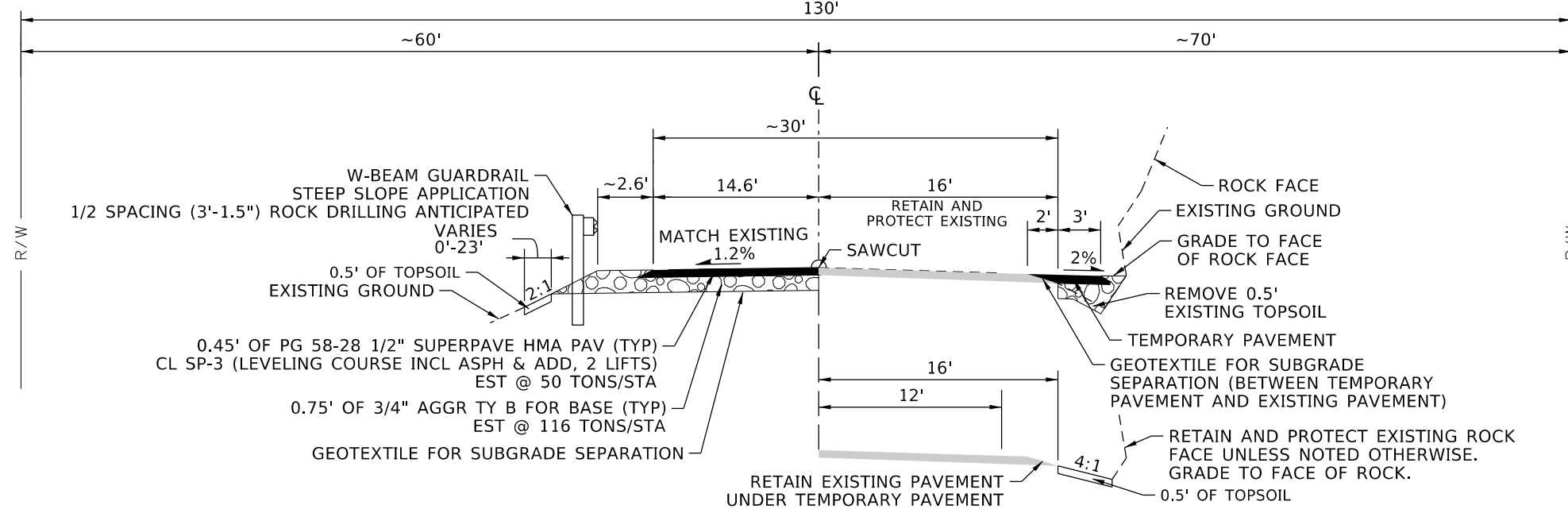
OLD RIVER RD TYPICAL SECTION

(STA. 6+85.35 TO STA. 7+19.00)
N.T.S



COEUR D'ALENE RIVER RD TYPICAL SECTION

(LIMITS PER PLAN STA & OFFS)
N.T.S



NOTES

- ROCK DRILLING PER ITD STANDARD DRAWING 612-1 IS INCIDENTAL TO W-BEAM GUARDRAIL 612-005A.
- SEE SUPERELEVATION DIAGRAM ON PROFILE SHEET.

July 14, 2025 11:17:16 AM pww://daefnc-pw.bentley.com/daefnc-pw-22/Documents/Projects/Idaho/LHTAC/30786/Project_Development/Plan_Sheets/30786 TYPI D02

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NO.	DATE	BY	DESCRIPTION

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DETAILED	B. CARVER	CADD FILE NAME 30786 TYPI D02.dgn
DRAWING CHECKED	A. MCCALL	DRAWING DATE: 7/14/2025

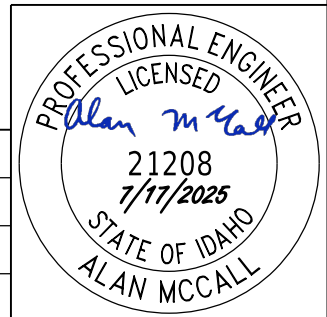


DAVID EVANS AND ASSOCIATES INC.

PROJECT NO. _____

TYPICAL SECTIONS
SILVER BRIDGE REPLACEMENT
SHOSHONE COUNTY

ENGLISH
COUNTY SHOSHONE
KEY NUMBER 30786
SHEET 6 OF 24



July 14, 2025 11:17:22 AM
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SHEET NUMBER				ROADWAY	SWPP	SIGN AND PAVE	TEMP TRAF										
STATION - STATION				3+77 TO 7+19													
ITEM NO.	ITEM	UNIT	TOTAL														
107-019A	SURVEY MONUMENT PRESERVATION	CA	5000	5000													
201-010A	CLEARING & GRUBBING	LS	1	1													
203-005A	REMOVAL OF OBSTRUCTIONS	LS	1	1													
203-006A	REMOVAL OF SIGN	EACH	15			15											
203-015A	REMOVAL OF BITUMINOUS SURFACE	SY	400	400													
203-075A	REMOVAL OF FENCE	FT	100	100													
203-080A	REMOVAL OF GUARDRAIL	FT	640	640													
205-005A	EXCAVATION	CY	2694	2694													
205-030A	BORROW	CY	237	237													
205-060A	WATER FOR DUST ABATEMENT	MG	1	1													
212-020A	SILT FENCE	FT	163		163												
212-105A	WATER AND POLLUTION	CA	10000	10000													
212-110A	WATER POLLUTION CONTROL MANAGER	LS	1	1													
213-005A	TOPSOIL (6")	CY	103		103												
303-022A	3/4" AGGREGATE TYPE B FOR BASE	TON	280	280													
401-020A	CSS-1 DILUTED EMULSIFIED ASPHALT FOR TACK COAT	GAL	132	132													
405-435A	SUPERPAVE HMA PAVEMENT INCLUDING ASPHALT & ADDITIVES CLASS SP-3	TON	100	100													
605-025A	12" STORM SEWER PIPE	FT	30	30													
605-620A	INLET TYPE 4	EACH	1	1													
608-025A	12" APRON FOR PIPE	EACH	1	1													
612-005A	W-BEAM GUARDRAIL	FT	181	181													
612-110A	GUARDRAIL ANCHOR	EACH	4	4													
612-120A	GUARDRAIL TRANSITION, LOW SPEED	EACH	4	4													
615-492A	CURB & GUTTER TYPE 2	FT	51	51													
616-010A	SIGN TYPE B-1	SF	29			29											
616-055A	WOOD SIGN POST TYPE D-1	FT	41			41											
616-055B	WOOD SIGN POST TYPE D-2	FT	34			34											
621-005A	SEED BED PREPARATION	ACRE	0.097		0.097												
621-010A	SEEDING	ACRE	0.097		0.097												
621-035A	FERTILIZING	ACRE	0.097		0.097												
621-065A	HYDRAULICALLY APPLIED EROSION CONTROL PRODUCTS	ACRE	0.097		0.097												
624-005A	LOOSE RIPRAP (CLASS I)	CY	22		22												
624-005B	LOOSE RIPRAP (CLASS VIII)	CY	1442		1442												
626-010A	TEMPORARY TRAFFIC CONTROL SIGNS	SF	329				329										
626-040A	BARRICADE TYPE 3	EACH	8				8										
626-050A	DRUMS	EACH	15				15										
626-093A	TEMPORARY PAVEMENT MARKING - WATERBORNE	FT	338			338											
626-100A	MISCELLANEOUS TEMPORARY TRAFFIC CONTROL ITEMS	CA	3000				3000										
626-105A	TEMPORARY TRAFFIC CONTROL MAINTENANCE	HR	720				720										
626-116A	TEMPORARY CONCRETE BARRIER	FT	150				150										

REVISIONS			
NO.	DATE	BY	DESCRIPTION

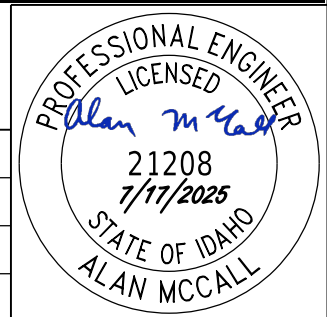
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DESIGN CHECKED A. MCCALL	
DETAILED B. CARVER	CADD FILE NAME 30786_RSUM_D01.dgn
DRAWING CHECKED A. MCCALL	DRAWING DATE: 7/14/2025



PROJECT NO.



ROADWAY SUMMARY
SILVER BRIDGE REPLACEMENT
SHOSHONE COUNTY

ENGLISH
COUNTY SHOSHONE
KEY NUMBER 30786
SHEET 7 OF 24



SHEET NUMBER				ROADWAY	SWPP	SIGN AND PAVE	TEMP TRAF										
STATION - STATION				3+77 TO 7+19													
ITEM NO.	ITEM	UNIT	TOTAL														
626-118A	TEMPORARY CRASH CUSHION	EACH	4				4										
626-120A	FLAGGER CONTROL	HR	300				300										
630-025A	LONGITUDINAL PAVEMENT MARKING - WATERBORNE	FT	2602			2602											
640-010A	RIPRAP/EROSION CONTROL GEOTEXTILE	SY	850		850												
640-015A	SUBGRADE SEPARATION GEOTEXTILE	SY	490		490												
675-005A	SURVEY	LS	1	1													
675-010A	DIRECTED SURVEYING	CA	5000	5000													
677-005A	RECORD DRAWINGS	LS	1	1													
S900-50A	CONTINGENCY AMOUNT (MISC WORK)	CA	10000	10000													
S900-50C	CONTINGENCY AMOUNT (REMOVAL OF LEAD PAINT)	CA	10000	10000													
S904-05A	SP TEMPORARY COFFER DAM AND DEWATERING	LS	1		1												
S912-05A	SP OPEN WEAVE MARKER GEOTEXTILE	SY	100		100												
S913-05A	SP STREAMBED MATERIAL	CY	317		317												
Z629-05A	MOBILIZATION	LS	1	1													

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NO.	DATE	BY	DESCRIPTION																																		

SHEET NUMBER				2																
STATION - STATION				4+01.31 TO																
ITEM NO.	ITEM	UNIT	TOTAL																	
203-020A	REMOVAL OF BRIDGE - FULL	EACH	1	1																
210-005A	STRUCTURE EXCAVATION SCHEDULE NO. 1	CY	332	332																
210-005B	STRUCTURE EXCAVATION SCHEDULE NO. 1 (ROCK)	CY	213	213																
210-015A	COMPACTING BACKFILL	CY	226	226																
502-140A	CONCRETE CLASS 40-A SCHEDULE NO. 1	CY	143	143																
502-310A	CONCRETE CLASS 40 AF SCHEDULE NO. 2	CY	219	219																
502-435A	APPROACH SLAB	SY	128	128																
502-465A	PRESTRESSED SLAB (26" VOIDED)	FT	359	359																
503-010A	METAL REINFORCEMENT SCHEDULE NO. 1	LB	22412	22412																
503-015A	METAL REINFORCEMENT SCHEDULE NO. 2	LB	18880	18880																
503-020A	EPOXY COATED METAL REINFORCEMENT	LB	35297	35297																
504-005A	STEEL BRIDGE (APPROX. 227,600 LBS)	LS	1	1																
504-050A	3-TUBE CURB MOUNT RAIL	FT	568	568																
505-115A	PROVIDE & DRIVE 18" DIAMETER STEEL SHELL PILE	FT	273	273																
505-165A	PROVIDE & DRIVE TEST STEEL SHELL PILE (18")	FT	82	82																
505-205C	PROVIDE & INSTALL PILE SHOES OR TIPS (18")	EACH	6	6																
505-215A	SPLICE STEEL PILE BEFORE DRIVING	EACH	1	1																
505-215B	SPLICE STEEL PILE DURING DRIVING	EACH	12	12																
507-005A	ELASTOMERIC BEARINGS PLAIN (12" x 20" x 1/2")	EACH	6	6																
507-010A	ELASTOMERIC BEARINGS LAMINATED (6" x 42" x 2.3")	EACH	6	6																
509-005A	NON-STRUCTURAL CONCRETE (CLASS 15)	CY	19	19																
521-005A	DYNAMIC PILE TESTING	EACH	1	1																
521-010A	CAPWAP ANALYSIS	EACH	2	2																
567-005A	STRIP SEAL EXPANSION JOINT	FT	52	52																
576-005A	GLASS FIBER REINFORCED POLYMER (GFRP) REINFORCEMENT	FT	250	250																
577-005A	PILE SLEEVES (30" DIAMETER)	FT	112	112																
S501-17A	MSE RETAINING WALL (WELDED WIRE)	SF	2528	2528																

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REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED B. CARVER
 DESIGN CHECKED J. WARREN
 DETAILED B. CARVER
 DRAWING CHECKED J. WARREN

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME 30786 BSUM D01.dgn
 DRAWING DATE: 7/14/2025

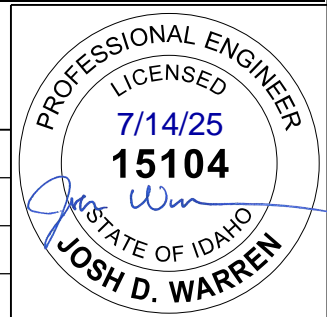


DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.



BRIDGE SUMMARY
 SILVER BRIDGE REPLACEMENT
 SHOSHONE COUNTY

ENGLISH
 COUNTY SHOSHONE
 KEY NUMBER 30786
 SHEET 9 OF 24

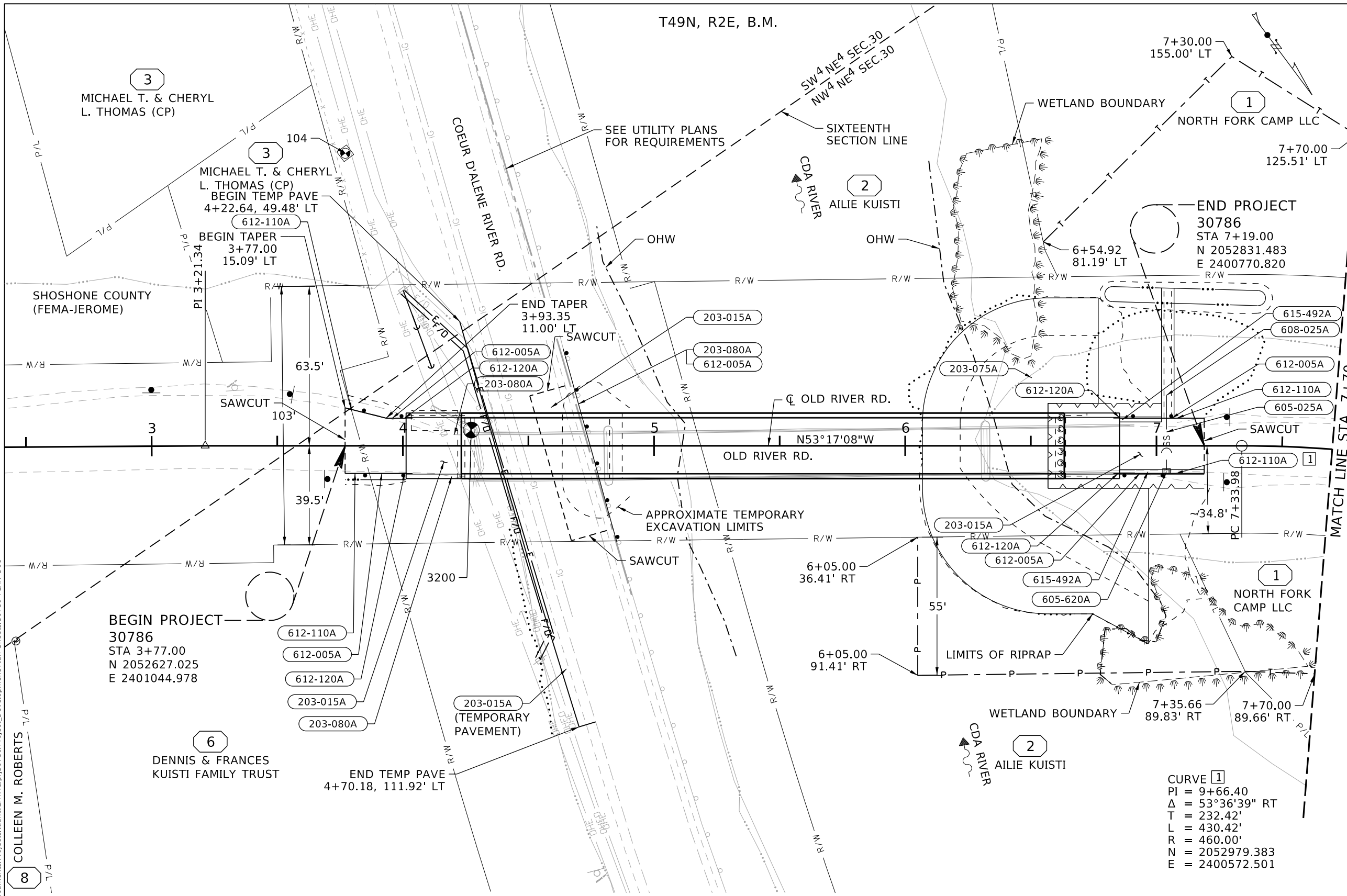


STATION	OFFSET			MAINTENANCE CHARACTERISTIC				PERFORMANCE CHARACTERISTICS			TEST LEVEL		DIMENSIONS			LOCATION			CONNECTION			REMARKS
	DISTANCE	RIGHT	LEFT	SACRIFICIAL - SAND	SACRIFICIAL - METAL	PARTIALLY REUSABLE	LOW MAINTENANCE	NON-REDIRECTIVE, GATING	REDIRECTIVE, GATING	REDIRECTIVE, NON-GATING	TL-2 (SPEED LESS THAN 44 MPH)	TL-3 (SPEED GREATER THAN 44 MPH)	WIDTH OF OBSTACLE	MAXIMUM LENGTH	MAXIMUM HEIGHT	SHOULDER	GORE	MEDIAN	W-BEAM GUARDRAIL	CONCRETE BARRIER OR PARAPET	OTHER (INDICATE IN REMARKS)	
	FT.	X	X	X	X	X	X	X	X	X	X	X	IN.	FT.	IN.	X	X	X	X	X	X	
3+78.91	14.61		X		X					X				26	31	X			X			INCLUDE CHEVRONS
3+78.85	11	X			X					X				25	31	X			X			INCLUDE CHEVRONS
7+07.85	11		X		X					X				25	31	X			X			INCLUDE CHEVRONS
7+07.85	11	X			X					X				25	31	X			X			INCLUDE CHEVRONS

STATION	OFFSET			MAINTENANCE CHARACTERISTIC				PERFORMANCE CHARACTERISTICS			TEST LEVEL		DIMENSIONS			LOCATION			CONNECTION			REMARKS	
	DISTANCE	RIGHT	LEFT	SACRIFICIAL - SAND	SACRIFICIAL - WATER FILLED	SACRIFICIAL - METAL	PARTIALLY REUSABLE	LOW MAINTENANCE	NON-REDIRECTIVE, GATING	REDIRECTIVE, GATING	REDIRECTIVE, NON-GATING	TL-2 (SPEED LESS THAN 44 MPH)	TL-3 (SPEED GREATER THAN 44 MPH)	WIDTH OF OBSTACLE	MAXIMUM LENGTH	MAXIMUM HEIGHT	SHOULDER	GORE	MEDIAN	W-BEAM GUARDRAIL	CONCRETE BARRIER OR PARAPET		OTHER (INDICATE IN REMARKS)
	FT.	X	X	X	X	X	X	X	X	X	X	X	X	IN.	FT.	IN.	X	X	X	X	X		X
0+50	6	X			X				X		X						X				X		
12+00	6		X		X				X		X						X				X		
4+50	20		X		X				X		X						X				X		
4+92	60	X			X				X		X						X				X		

REVISIONS NO. DATE BY DESCRIPTION				DESIGNED B. CARVER DESIGN CHECKED A. MCCALL DETAILED B. CARVER DRAWING CHECKED A. MCCALL		SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME 30786 CCSM D01.DGN DRAWING DATE: 7/14/2025		 DAVID EVANS AND ASSOCIATES INC.		PROJECT NO.		CRASH CUSHION SUMMARY SILVER BRIDGE REPLACEMENT SHOSHONE COUNTY				ENGLISH COUNTY SHOSHONE KEY NUMBER 30786		SHEET 10 OF 24			
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T49N, R2E, B.M.



- 201-010A CLEARING & GRUBBING**
1 LS
(8640 SF)
STA 3+77.00, 20.84' LT TO
STA 7+24.00, 62.00' RT
- 203-005A REMOVAL OF OBSTRUCTIONS**
1 LS
STA 3+77.00, 20.84' LT TO
STA 7+24.00, 62.00' RT
- 203-015A REMOVAL OF BITUMINOUS SURFACE**
111 SY
98 SY
57 SY
134 SY
STA 3+77.00, 14.84' LT TO
STA 4+27.00, 13.42' RT
STA 4+50.56, 19.90' LT TO
STA 4+81.17, 33.75' RT
STA 6+90.20, 7.67' LT TO
STA 7+19.00, 10.49' RT
STA 4+22.64, 49.48' LT TO
STA 4+76.75, 109.92' RT
- 203-075A REMOVAL OF FENCE**
100 FT
STA 6+50.00, 27.40' LT TO
STA 7+42.00, 43.00' LT
- 203-080A REMOVAL OF GUARDRAIL**
285 FT
275 FT
80 FT
STA 4+26.73, 4.56' LT TO
STA 7+10.33, 9.10' LT
STA 4+26.34, 13.79' RT TO
STA 7+01.80, 11.00' RT
STA 4+63.84, 38.66' LT TO
STA 4+85.20, 38.43' RT
- 605-025A 12" STORM SEWER PIPE**
30 FT
STA 7+04.00, 20.09' LT TO
STA 7+04.00, 9.50' RT
- 605-620A INLET TYPE 4**
1 EA
STA 7+04.00, 11.00' RT
- 608-025A 12" APRON FOR PIPE**
1 EA
STA 7+04.00, 20.09' LT
- 612-005A W-BEAM GUARDRAIL**
26 FT
25 FT
80 FT
25 FT
25 FT
STA 3+78+91, 14.61' LT TO
STA 4+03.85, 11.00' LT
STA 3+78.85, 11.00' LT TO
STA 4+03.85, 11.00' LT
STA 4+63.84, 38.66' LT TO
STA 4+85.20, 38.43' RT
STA 6+82.85, 11.00' LT TO
STA 7+07.85, 11.00' LT
STA 6+82.85, 11.00' RT TO
STA 7+07.85, 11.00' RT
- 612-110A GUARDRAIL ANCHOR**
1 EA
1 EA
1 EA
1 EA
STA 3+78.91, 14.61' LT
STA 3+78.85, 11.00' RT
STA 7+07.85, 11.00' LT
STA 7+07.85, 11.00' RT
- 612-120A GUARDRAIL TRANSITION, LOW SPEED**
1 EA
1 EA
1 EA
1 EA
STA 4+03.85, 11.00' LT
STA 4+03.85, 11.00' RT
STA 6+82.85, 11.00' LT
STA 6+82.85, 11.00' RT
- 615-492A CURB & GUTTER TYPE 2**
17 FT
34 FT
STA 6+85.35, 11.00' LT TO
STA 7+02.00, 11.00' LT
STA 6+85.35, 11.00' RT TO
STA 7+19.00, 11.00' RT

NOTES
 1. REMOVAL OF OBSTRUCTIONS, 203-005A, INCLUDES BUT NOT LIMITED TO RELOCATING CAMPING TABLE AND FIREPIT OUTSIDE GRADING LIMITS.

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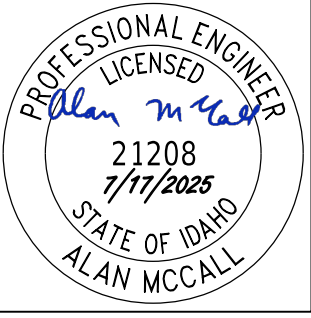
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DETAILED B. CARVER	CADD FILE NAME 30786 PLAN D01.dgn
DRAWING CHECKED A. MCCALL	DRAWING DATE: 7/14/2025



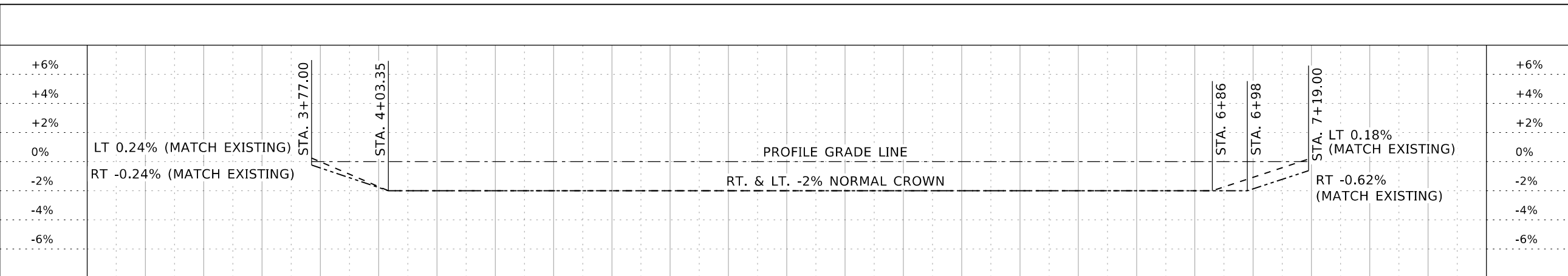
DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.	ROADWAY PLAN
	SILVER BRIDGE REPLACEMENT
	SHOSHONE COUNTY

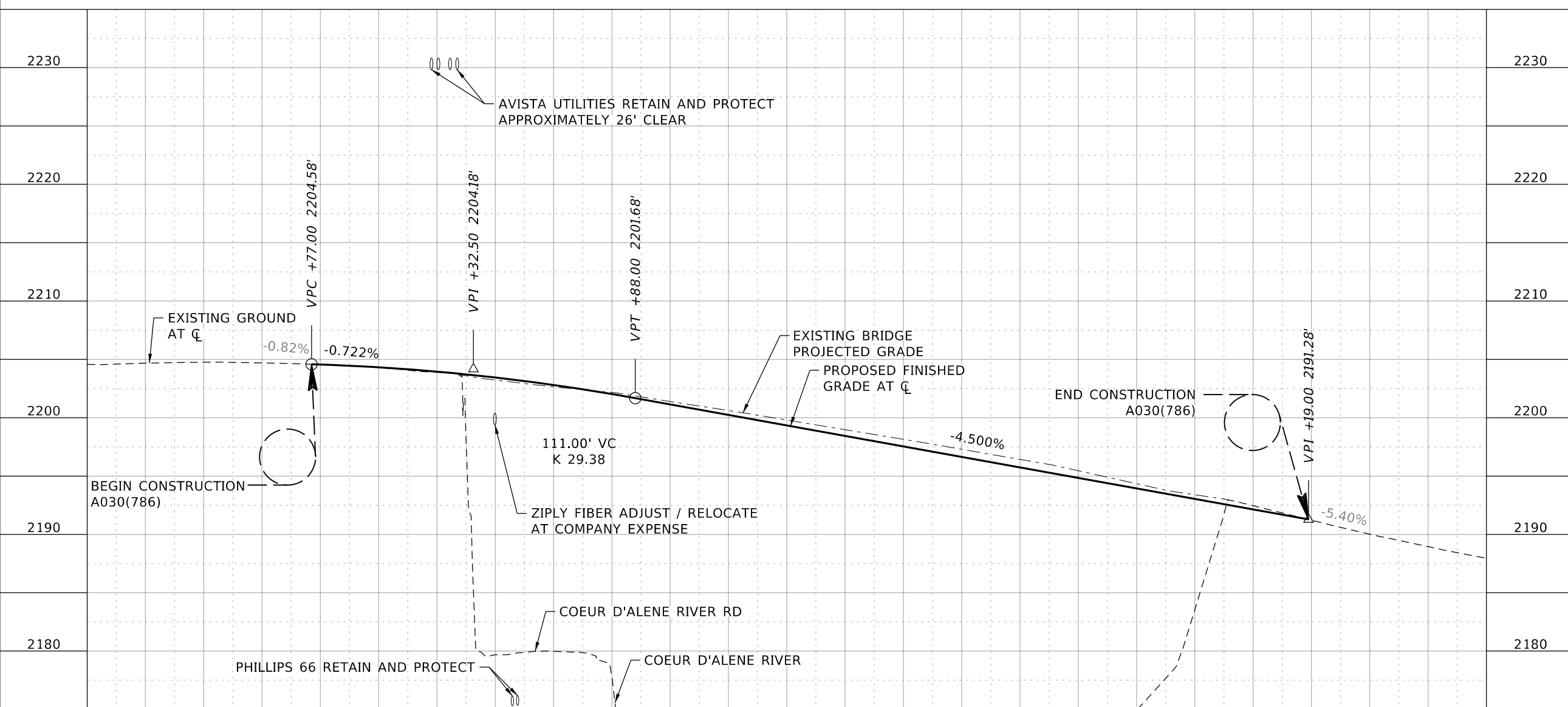
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KEY NUMBER 30786
SHEET 12 OF 24



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OLD RIVER RD. SUPERELEVATION



OLD RIVER RD. PROFILE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

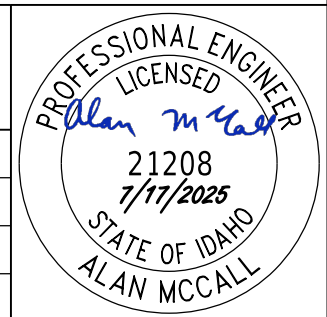
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DRAWING CHECKED	A. MCCALL	DRAWING DATE: 7/14/2025



DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.	ROADWAY PROFILE
	SILVER BRIDGE REPLACEMENT
	SHOSHONE COUNTY

ENGLISH
COUNTY SHOSHONE
KEY NUMBER 30786
SHEET 13 OF 24



T49N, R2E, B.M.

1 NORTH FORK CAMP LLC

1 NORTH FORK CAMP LLC

NE4 NW4 SEC.30
NW4 NE4 SEC.30

QUARTER SECTION LINE

7+70.00
125.51' LT

7+90.00
113.00' LT

8+31.08
69.49' LT

9 OLD RIVER RD.
CL OLD RIVER RD.

10

11

100

N00°19'31"E

9+55.00
50.00' RT

12+15.00
60.00' RT

12+37.18
26.69' RT

CURVE 1
PI = 9+66.40
Δ = 53°36'39" RT
T = 232.42'
L = 430.42'
R = 460.00'
N = 2052979.383
E = 2400572.501

1 NORTH FORK CAMP LLC

7+70.00
89.66' RT

2 CDA RIVER

2 CDA RIVER

MATCH LINE STA. 7+70

REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNED	B. CARVER
DESIGN CHECKED	A. MCCALL
DETAILED	B. CARVER
DRAWING CHECKED	A. MCCALL

SCALES SHOWN
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PRINTS ONLY

CADD FILE NAME
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DRAWING DATE:
7/14/2025



DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.

ROADWAY PLAN
SILVER BRIDGE REPLACEMENT
SHOSHONE COUNTY

ENGLISH

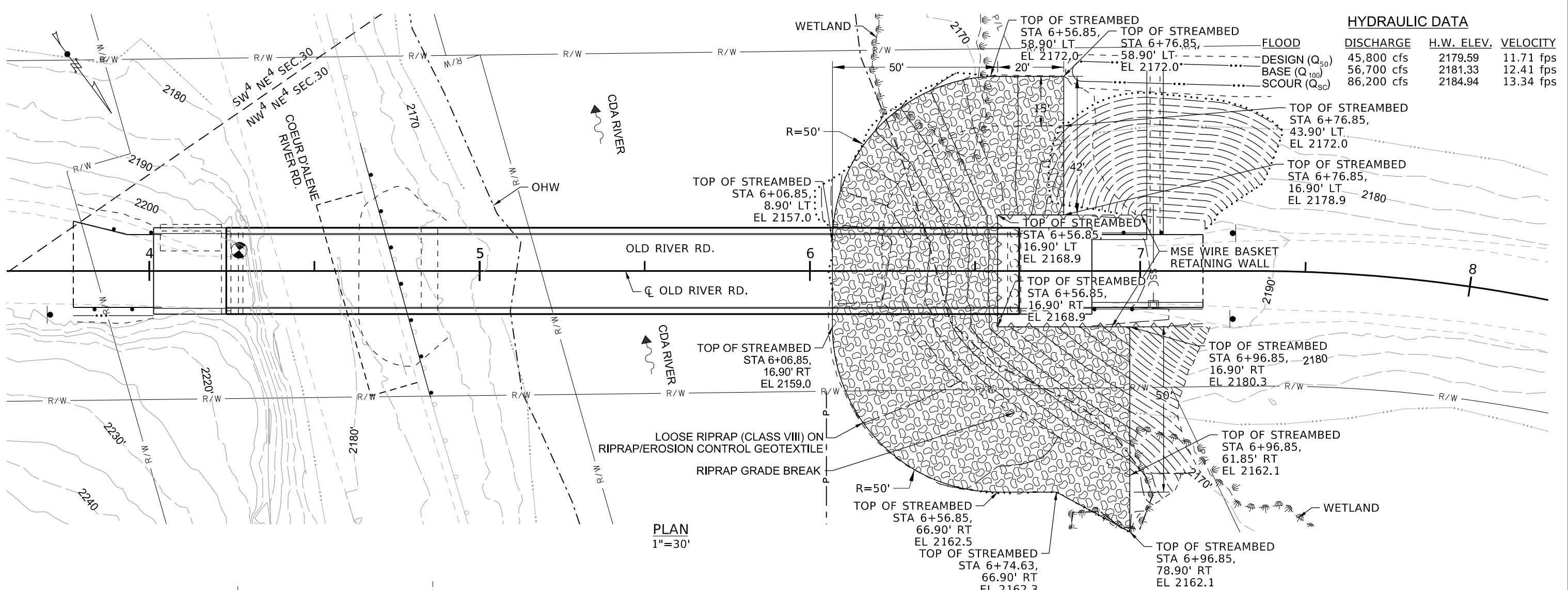
COUNTY
SHOSHONE
KEY NUMBER
30786

SHEET 14 OF 24



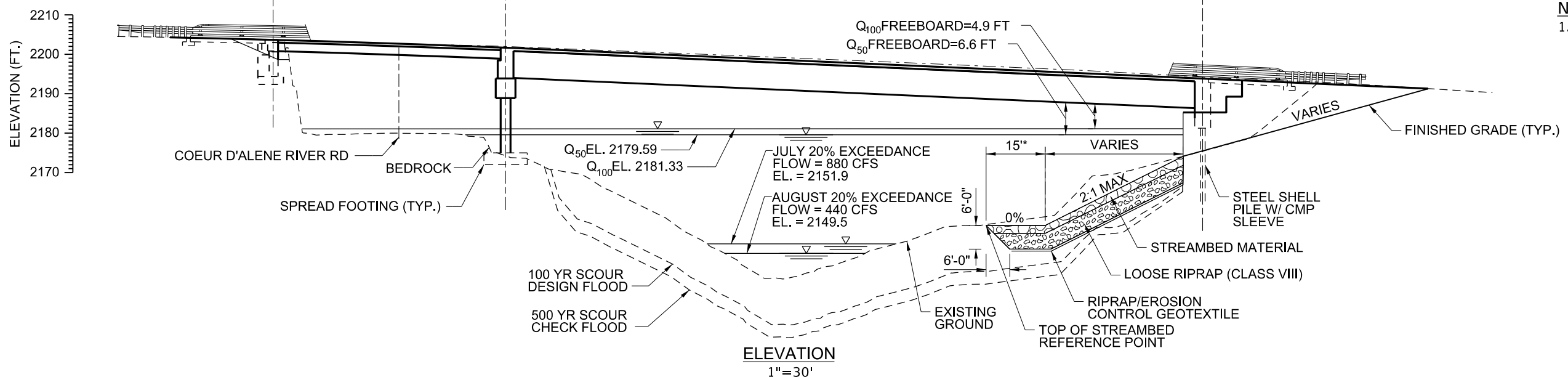
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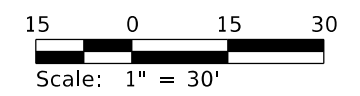
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	DISCHARGE	H.W. ELEV.	VELOCITY
FLOOD	45,800 cfs	2179.59	11.71 fps
DESIGN (Q ₅₀)	56,700 cfs	2181.33	12.41 fps
BASE (Q ₁₀₀)	86,200 cfs	2184.94	13.34 fps
SCOUR (Q _{SC})			

PLAN
1"=30'



ELEVATION
1"=30'

- NOTES**
- SEE DRAINAGE PLAN AND PROFILE FOR GEOMETRY NOT GIVEN ON THIS SHEET.



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	B. CARVER
DESIGN CHECKED	M. EMESON
DETAILED	B. CARVER
DRAWING CHECKED	M. EMESON

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 ARE FOR 11" X 17"
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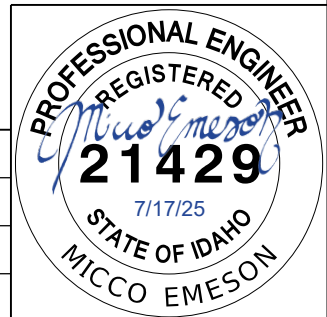


DAVID EVANS AND ASSOCIATES INC.

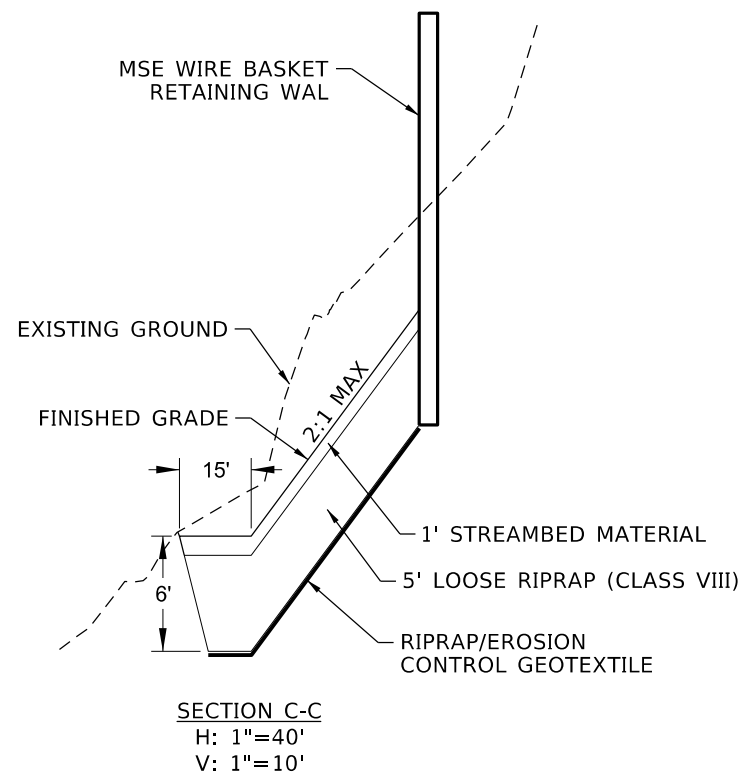
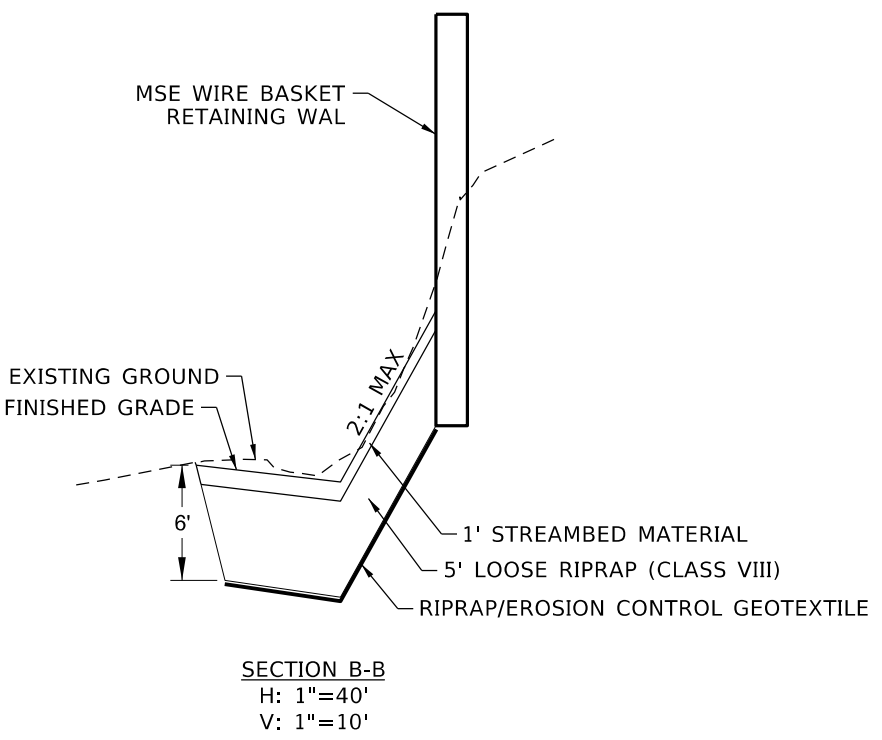
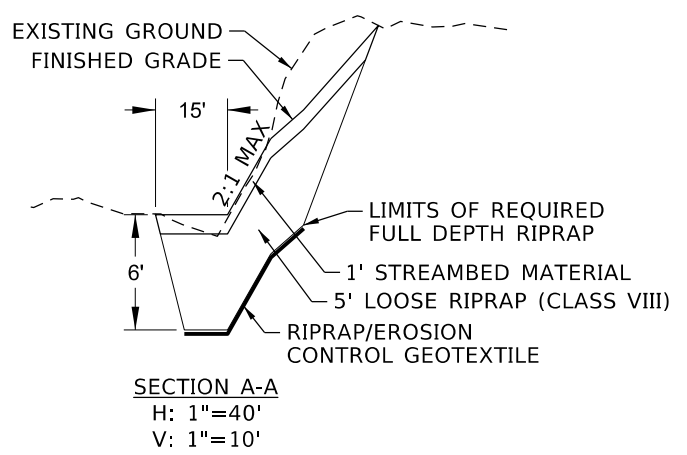
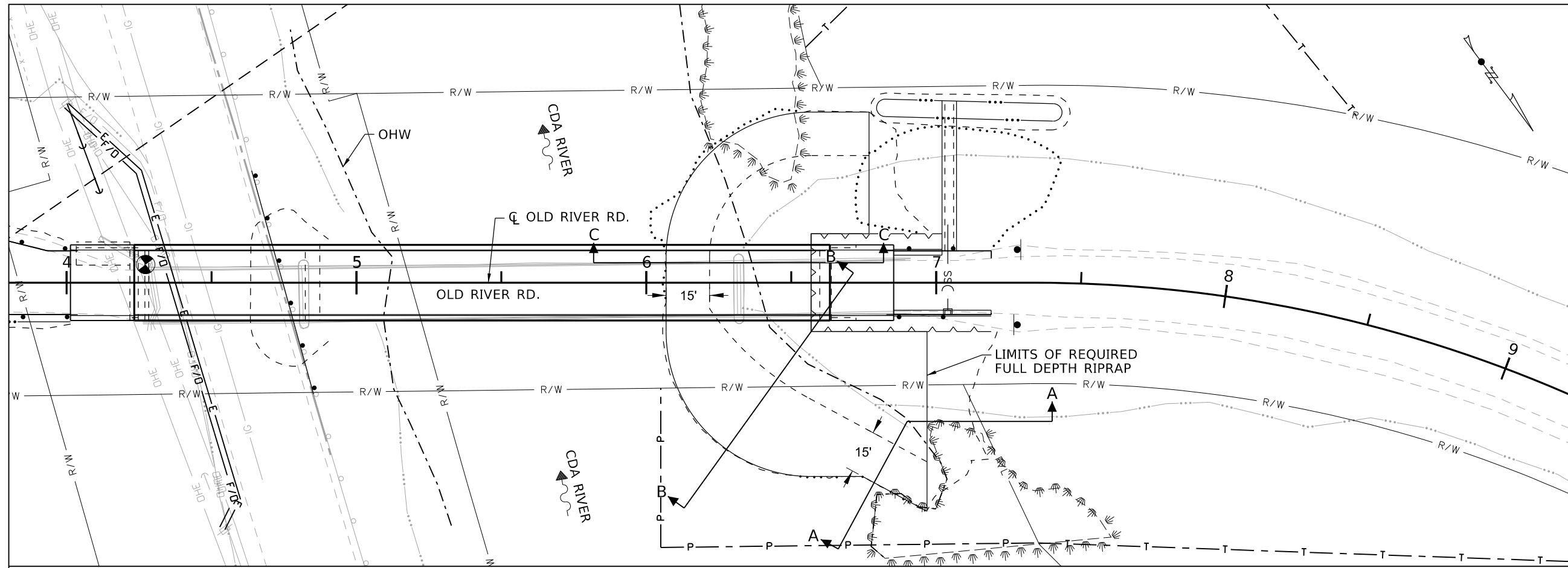
PROJECT NO.

CHANNEL PLAN AND PROFILE
 SILVER BRIDGE REPLACEMENT
 SHOSHONE COUNTY

ENGLISH
 COUNTY
 SHOSHONE
 KEY NUMBER
 30786
 SHEET 15 OF 24



NOTES
 1. SEE DRAINAGE PLAN AND PROFILE FOR GEOMETRY NOT GIVEN ON THIS SHEET.



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REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	B. CARVER
DESIGN CHECKED	A. MCCALL
DETAILED	B. CARVER
DRAWING CHECKED	A. MCCALL

SCALES SHOWN
 ARE FOR 11" X 17"
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 7/14/2025



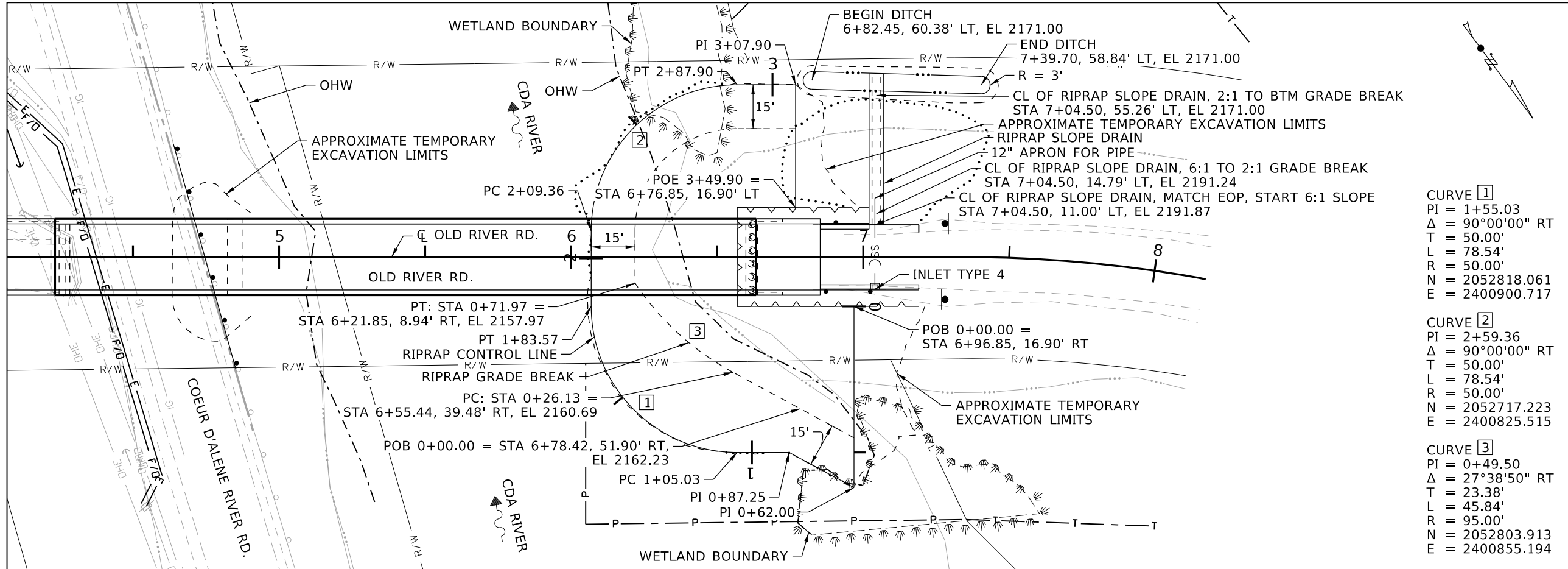
DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.

CHANNEL RIPRAP DETAILS
 SILVER BRIDGE REPLACEMENT
 SHOSHONE COUNTY

ENGLISH
 COUNTY
 SHOSHONE
 KEY NUMBER
 30786
 SHEET 16 OF 24



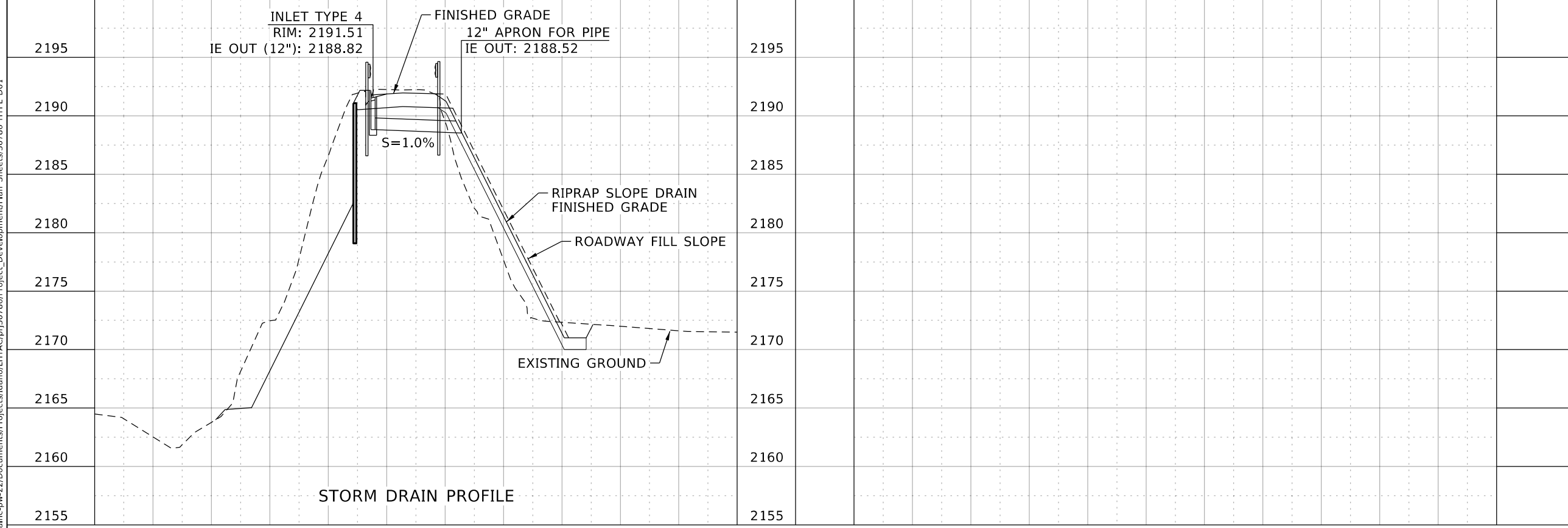


- NOTES**
1. SEE DRAINAGE DETAIL FOR RIPRAP SLOPE DRAIN DETAILS.
 2. SEE STRUCTURAL PLANS FOR PROFILE AT FACE OF MSE WALL.
 3. SEE POLLUTION PREVENTION PLANS FOR BID ITEMS.

CURVE [1]
 PI = 1+55.03
 $\Delta = 90^{\circ}00'00''$ RT
 T = 50.00'
 L = 78.54'
 R = 50.00'
 N = 2052818.061
 E = 2400900.717

CURVE [2]
 PI = 2+59.36
 $\Delta = 90^{\circ}00'00''$ RT
 T = 50.00'
 L = 78.54'
 R = 50.00'
 N = 2052717.223
 E = 2400825.515

CURVE [3]
 PI = 0+49.50
 $\Delta = 27^{\circ}38'50''$ RT
 T = 23.38'
 L = 45.84'
 R = 95.00'
 N = 2052803.913
 E = 2400855.194



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	B. CARVER	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	A. MCCALL	
DETAILED	B. CARVER	CADD FILE NAME 30786 HYPL D01.dgn
DRAWING CHECKED	A. MCCALL	DRAWING DATE: 7/14/2025

SHOSHONE COUNTY IDAHO

DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.

DRAINAGE PLAN AND PROFILE
SILVER BRIDGE REPLACEMENT
SHOSHONE COUNTY

ENGLISH

COUNTY SHOSHONE

KEY NUMBER 30786

SHEET 17 OF 24

PROFESSIONAL ENGINEER
LICENSED

Alan M. McCall

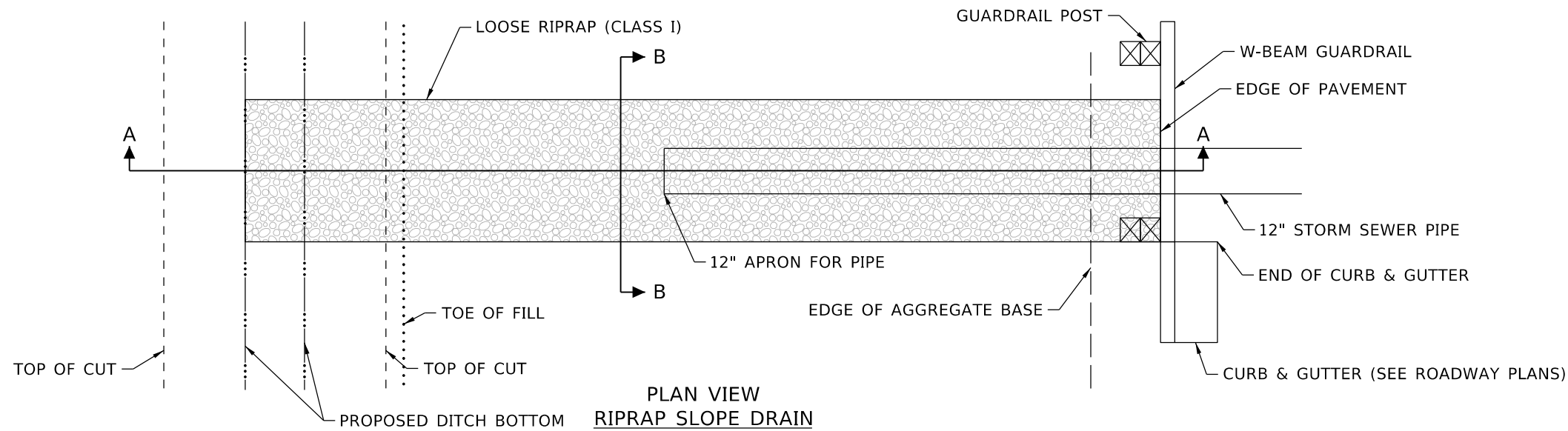
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STATE OF IDAHO
ALAN MCCALL

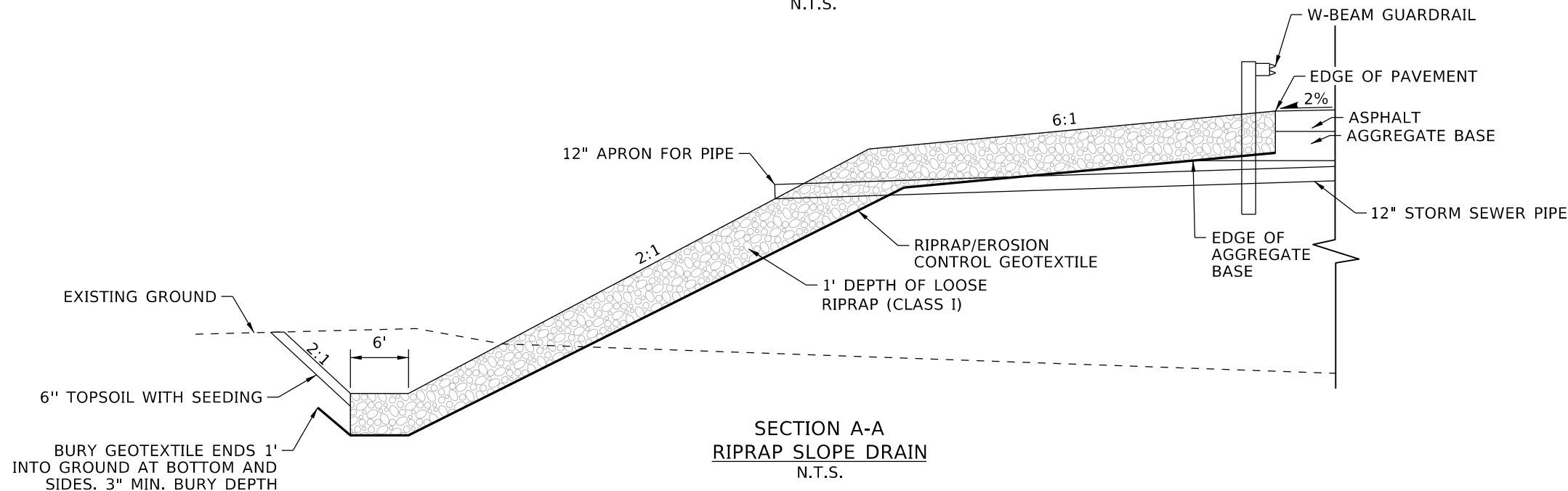
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NOTES

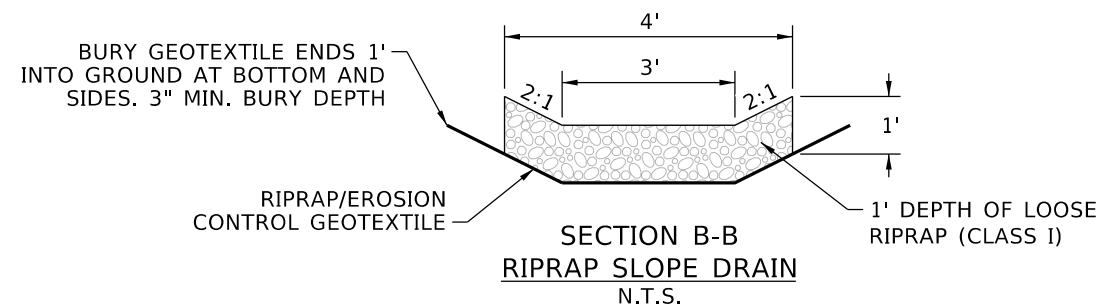
1. CONSTRUCTION OF RIPRAP SLOPE DRAIN IS PAID UNDER 205-005A, EXCAVATION.
2. SEE DRAINAGE AND ROADWAY PLAN SHEETS FOR LOCATION AND ELEVATION INFORMATION OF RIPRAP SLOPE DRAIN.



**PLAN VIEW
RIPRAP SLOPE DRAIN**
624-005A
640-010A
N.T.S.



**SECTION A-A
RIPRAP SLOPE DRAIN**
N.T.S.



**SECTION B-B
RIPRAP SLOPE DRAIN**
N.T.S.

July 14, 2025 11:18:37 AM pww://daefnc-pw-bentley.com/daefnc-pw-22/Documents/Projects/Idaho/LHTAC/pj30786/Project_Development/Plan_Sheets/30786_HYPL_D03

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	B. CARVER
DESIGN CHECKED	A. MCCALL
DETAILED	B. CARVER
DRAWING CHECKED	A. MCCALL

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME
30786_HYPL_D03.dgn

DRAWING DATE:
7/14/2025

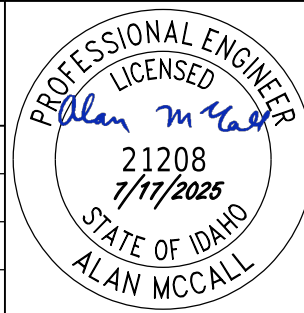


**DAVID EVANS
AND ASSOCIATES INC.**

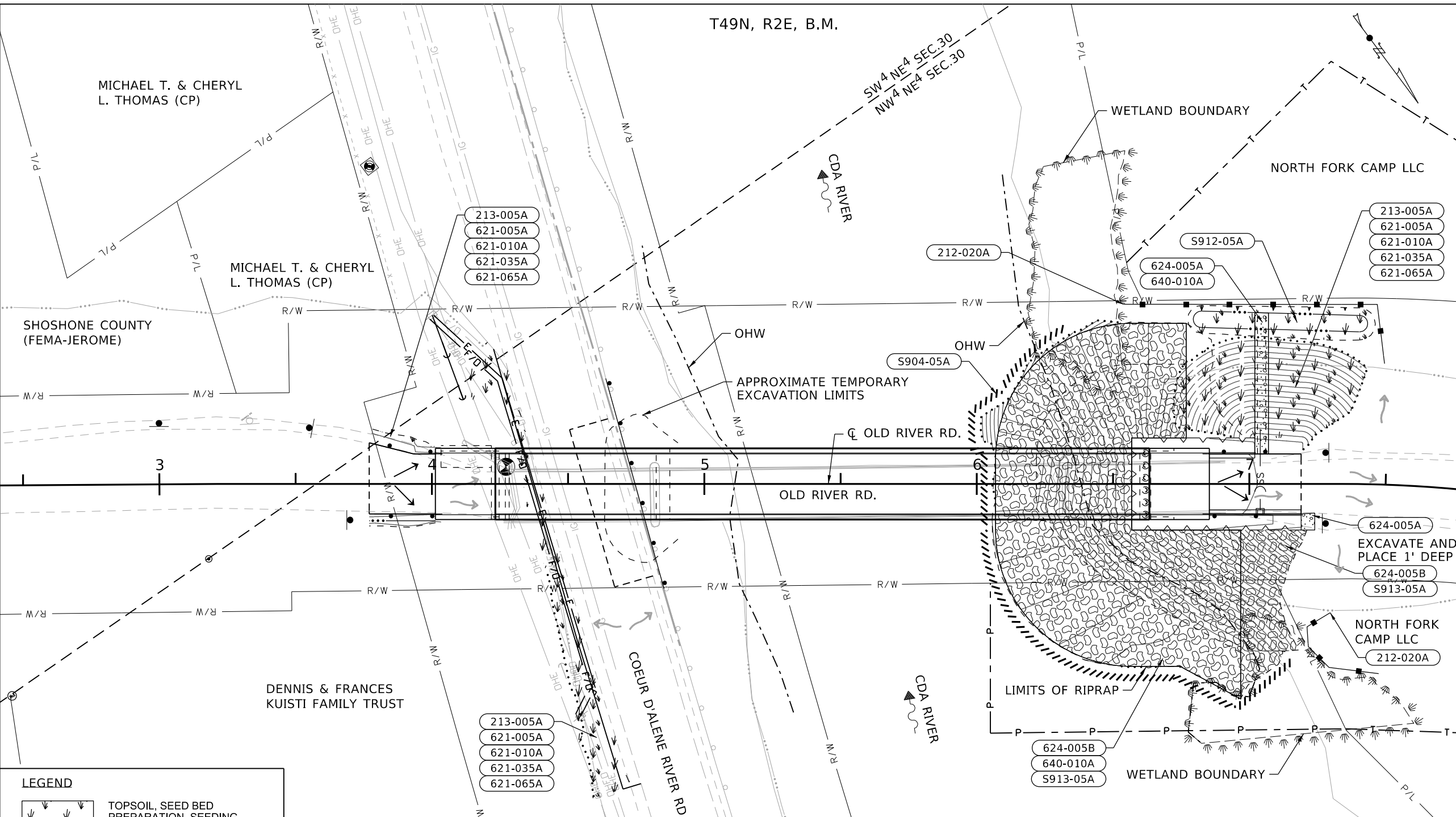
PROJECT NO.

DRAINAGE DETAILS
SILVER BRIDGE REPLACEMENT
SHOSHONE COUNTY
RIPRAP SLOPE DRAIN

ENGLISH
COUNTY
SHOSHONE
KEY NUMBER
30786
SHEET 18 OF 24



T49N, R2E, B.M.



212-020A 116 FT	SILT FENCE STA 6+53.76, 65.89' LT TO STA 7+48.27, 44.33' LT
47 FT	STA 7+29.68, 47.27' RT TO STA 7+49.87, 69.35' RT
213-005A 0.5 CY	TOPSOIL (6") STA 3+77.00, 20.48' LT TO STA 4+01.35, 11.19' LT
30 CY	STA 4+20.25, 52.22' LT TO STA 4+73.05, 111.05' RT
72.5 CY	STA 6+79.98, 60.57' LT TO STA 7+21.06, 14.36' LT
621-005A 0.001 ACRE	SEED BED PREPARATION STA 3+77.00, 20.48' LT TO STA 4+01.35, 11.19' LT
0.036 ACRE	STA 4+20.25, 52.22' LT TO STA 4+73.05, 111.05' RT
0.060 ACRE	STA 3+77.00, 20.48' LT TO STA 4+01.35, 11.19' LT
621-010A 0.001 ACRE	SEEDING (PERMANENT) STA 3+77.00, 20.48' LT TO STA 4+01.35, 11.19' LT
0.036 ACRE	STA 4+20.25, 52.22' LT TO STA 4+73.05, 111.05' RT
0.060 ACRE	STA 3+77.00, 20.48' LT TO STA 4+01.35, 11.19' LT
621-035A 0.001 ACRE	FERTILIZING STA 3+77.00, 20.48' LT TO STA 4+01.35, 11.19' LT
0.036 ACRE	STA 4+20.25, 52.22' LT TO STA 4+73.05, 111.05' RT
0.060 ACRE	STA 3+77.00, 20.48' LT TO STA 4+01.35, 11.19' LT
621-065A 0.001 ACRE	HYDRAULICALLY APPLIED EROSION CONTROL PRODUCTS STA 3+77.00, 20.48' LT TO STA 4+01.35, 11.19' LT
0.036 ACRE	STA 4+20.25, 52.22' LT TO STA 4+73.05, 111.05' RT
0.060 ACRE	STA 3+77.00, 20.48' LT TO STA 4+01.35, 11.19' LT
624-005A 20 CY	LOOSE RIPRAP (CLASS I) STA 7+02.00, 58.51' LT TO STA 7+07.00, 11.00' LT
2 CY	STA 7+19.00, 11.00' RT TO STA 7+24.00, 16.90' RT
624-005B 1370 CY	LOOSE RIPRAP (CLASS VIII) STA 6+06.85, 8.90' LT TO STA 6+96.85, 78.90' RT
72 CY	STA 6+96.85, 16.90' RT TO STA 7+18.35, 60.90' RT
640-010A 790 SY	RIPRAP/EROSION CONTROL GEOTEXTILE STA 6+06.85, 8.90' LT TO STA 6+96.85, 78.90' RT
60 SY	STA 7+02.00, 58.51' LT TO STA 7+07.00, 11.00' LT
S904-05A 1 LS (1565 SF)	SP TEMPORARY COFFER DAM AND DEWATERING STA 6+32.72, 57.21' LT TO STA 7+16.36, 64.08' RT
S912-05A 100 SY	SP OPEN WEAVE MARKER GEOTEXTILE STA 6+77.52, 61.24' LT TO STA 7+44.86, 58.86' LT
S913-05A 282 CY	SP STREAMBED MATERIAL STA 6+06.85, 8.90' LT TO STA 6+96.85, 78.90' RT
35 CY	STA 6+96.85, 16.90' RT TO STA 7+18.35, 60.90' RT

LEGEND

	TOPSOIL, SEED BED PREPARATION, SEEDING (PERMANENT), AND HYDRAULICALLY APPLIED EROSION CONTROL PRODUCTS
	EXISTING FLOW ARROW
	PROPOSED FLOW ARROW
	STREAMBED MATERIAL OVER LOOSE RIPRAP (CLASS VIII)
	LOOSE RIPRAP (CLASS I)
	SILT FENCE

- NOTES**
1. MAINTAIN EORSION AND SEDIMENT CONTROL MEASURES FOR THE DURATION OF THE PROJECT.
 2. COMPLY WITH ALL SPECIAL CONDITIONS TO IDWR'S PERMIT NO. S94-20235

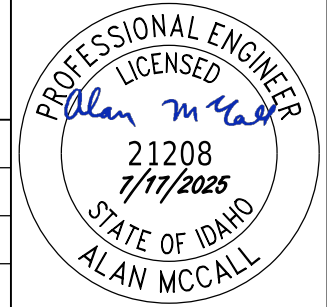
REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	B. CARVER	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	A. MCCALL	
DETAILED	B. CARVER	CADD FILE NAME 30786 SWPP D01.dgn
DRAWING CHECKED	A. MCCALL	DRAWING DATE: 7/14/2025



DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.	POLLUTION PREVENTION PLAN SILVER BRIDGE REPLACEMENT SHOSHONE COUNTY
ENGLISH	
COUNTY SHOSHONE	
KEY NUMBER 30786	
SHEET 19 OF 24	



July 14, 2025 11:18:46 AM p:\idainc-pw\deainc-pw-22\Documents\Projects\idaho\LHTAC\p\30786\Project_Development\Plan_Sheets\30786 SWPP D01

July 14, 2025 11:18:54 AM
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SIGN ASSEMBLY	STATION, OFFSET (XXX+XX.XX, RT/LT, SHLD. OR MEDIAN IF ON DIVIDED HWY)	RAMP NUMBER OR LOCAL STREET	FOUNDATION SIZE (INXIN OR INXINXIN)	POST TYPE (A-X, B-X, D-X, E-X)	OFFSET FROM SHLD. OR FACE OF CURB TO POST 1 CENTER (FT)	DISTANCE BETWEEN POSTS (IF USING 2 OR 3 POSTS, FT)	POST 1 LENGTH * (FT)	POST 2 LENGTH * (IF USING 2 OR 3 POSTS, FT)	POST 3 LENGTH * (IF USING 3 POSTS, FT)	DISTANCE FROM SHOULDER OR TOP OF CURB TO SIGN BOTTOM (FT)	SIGN TYPE (B-X, C-X, E)	SIGN DESIGNATION	SIGN SIZE † (IN X IN)			SIGN AREA (SF)	SIGN BACKGROUND † COLOR	MAIN SIGN LEGEND † COLOR	SIGN BRACE WEIGHT (LBS)	SIGN BRACKET WEIGHT (LBS)	BRACKET NUMBER	NOTES (SIGN LEGEND, SIGN DESCRIPTION, ETC.)
1-1	3+00 LT.			D-1	2.0		13			7	B-1	R8-3a	18	x	24	3.0	WHITE	RED				
1-2	3+55 LT.			D-1	2.5		13			7	B-1	R8-3a	18	x	24	3.0	WHITE	RED				
1-3	3+70 RT.			D-2	2.0		17			7	B-1	W5-3 R8-3d	30 18	x x	30 30	6.3 3.8	YELLOW WHITE	BLACK RED				
1-4	7+28 LT.			D-2	3.5		17			7	B-1	W5-3 R8-3d	30 18	x x	30 30	6.3 3.8	YELLOW WHITE	BLACK RED				
1-5	7+28 RT.			D-1	3.5		15			7	B-1	R8-3a	18	x	24	3.0	WHITE	RED				

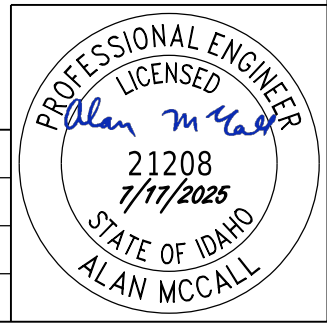
* POST LENGTHS ARE APPROXIMATE. FINALIZE POST LENGTHS IN THE FIELD BEFORE ASSEMBLY.
 † FABRICATE SIGNS IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS AND MARKINGS (SHSM) BOOK, FHWA SHSM SUPPLEMENT, ITD SHSM SUPPLEMENT, OR AS SPECIFIED.

REVISIONS				DESIGNED	SCALES SHOWN
NO.	DATE	BY	DESCRIPTION	B. CARVER	ARE FOR 11" X 17"
				A. MCCALL	PRINTS ONLY
				B. CARVER	CADD FILE NAME
				A. MCCALL	30786 SSUM D01.DGN
					DRAWING DATE:
					7/14/2025

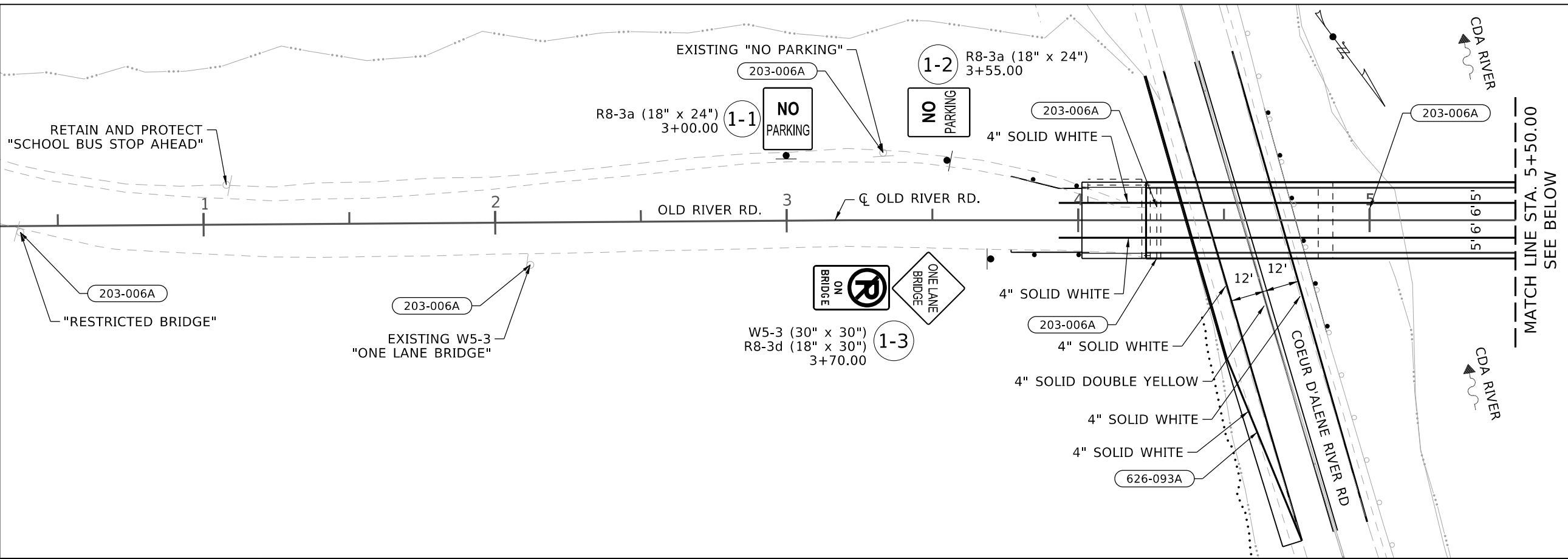


PROJECT NO.	SIGN SUMMARY
	SILVER BRIDGE REPLACEMENT
	SHOSHONE COUNTY

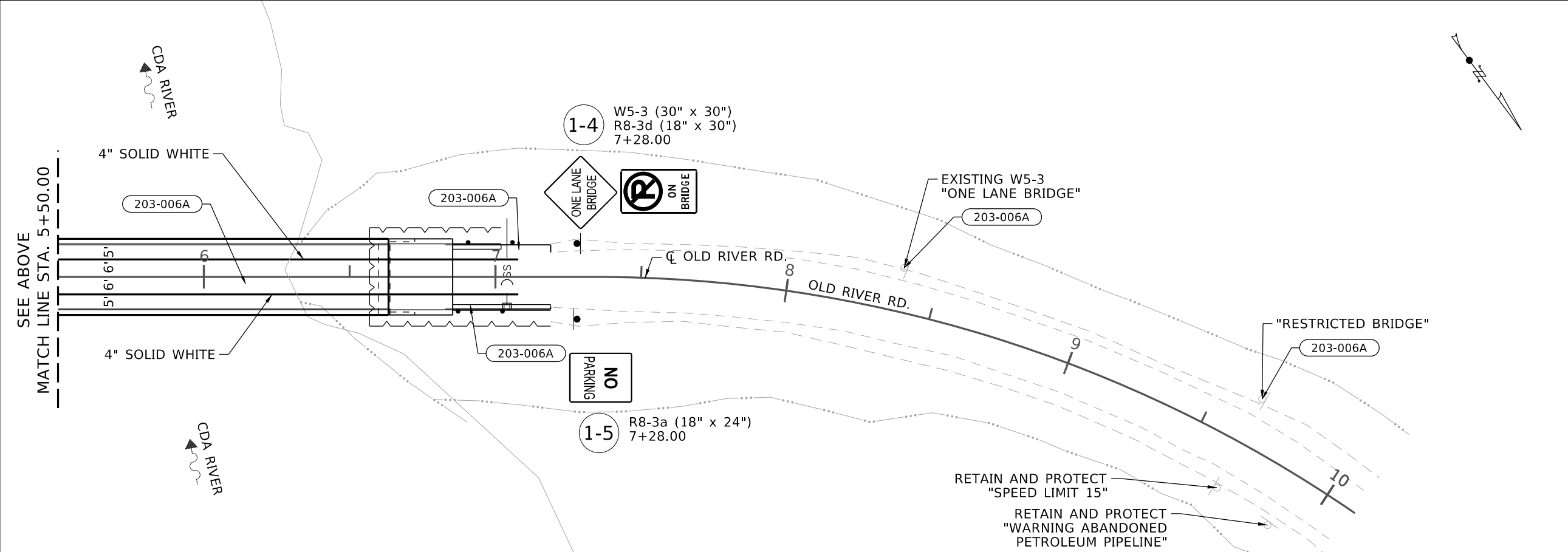
ENGLISH
COUNTY SHOSHONE
KEY NUMBER 30786
SHEET 20 OF 24



July 14, 2025 11:19:03 AM
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203-006A	REMOVAL OF SIGN
1 EA	STA 0+37.10, 2.11' RT
1 EA	STA 2+11.98, 14.50' RT
1 EA	STA 3+33.11, 23.18' LT
3 EA	STA 4+26.98, 13.06' RT
1 EA	STA 4+26.98, 4.56' LT
1 EA	STA 5+00.00, 3.98' RT
1 EA	STA 6+14.36, 2.49' RT
1 EA	STA 6+91.41, 9.78' RT
3 EA	STA 7+08.10, 9.20' LT
1 EA	STA 8+37.73, 15.08' LT
1 EA	STA 9+64.54, 16.70' LT
626-093A	TEMPORARY PAVEMENT MARKING - WATERBORNE WHITE
338 FT	STA 4+23.12, 49.62' LT TO STA 7+67.75, 109.92' RT
630-025A	LONGITUDINAL PAVEMENT MARKING - WATERBORNE WHITE
629 FT	STA 3+93.35, 6.00' LT TO STA 7+07.85, 6.00' LT
629 FT	WHITE STA 3+93.35, 6.00' RT TO STA 7+07.85, 6.00' RT
336 FT	WHITE STA 4+29.37, 51.26' LT TO STA 4+76.75, 109.92' RT
336 FT	WHITE STA 4+52.87, 58.03' LT TO STA 4+99.14, 103.48' RT
672 FT	YELLOW STA 4+40.68, 54.53' LT TO STA 4+88.23, 106.60' RT



NOTES

1. WATERBORNE PAVEMENT MARKING QUANTITIES SHOWN WERE DOUBLED TO ACCOUNT FOR TWO PAINT APPLICATIONS PER SECTION 630.

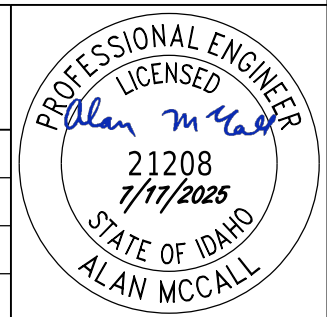
REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	B. CARVER	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	A. MCCALL	
DETAILED	B. CARVER	CADD FILE NAME 30786_SIGN_D01.dgn
DRAWING CHECKED	A. MCCALL	DRAWING DATE: 7/14/2025





PROJECT NO. _____
 SIGNING AND PAVEMENT MARKING PLAN
 SILVER BRIDGE REPLACEMENT
 SHOSHONE COUNTY


ENGLISH
 COUNTY SHOSHONE
 KEY NUMBER 30786
 SHEET 21 OF 24



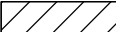




CONSTRUCTION DETOUR SIGNING

- ① ROAD WORK AHEAD W20-1 (36" x 36")
- ② ONE LANE ROAD AHEAD W20-4 (36" x 36")
- ③ BE PREPARED TO STOP W3-4 (36" x 36")
- ④  W20-7a (36" x 36")

⑤ **Old Coeur d'Alene River Rd**

 W16-8aP (72" x 24")
 M4-9 (30" x 24")

⑥ **Old Coeur d'Alene River Rd**

 W16-8aP (72" x 24")
 M4-8P (24" x 12")
 M6-3P (21" x 15")

LEGEND

-  ROAD CLOSURE
-  SINGLE POST SIGN
-  TYPE 3 BARRICADE
-  CHANNELIZING DRUM
-  FLAGGER LOCATION

REVISIONS			
NO.	DATE	BY	DESCRIPTION

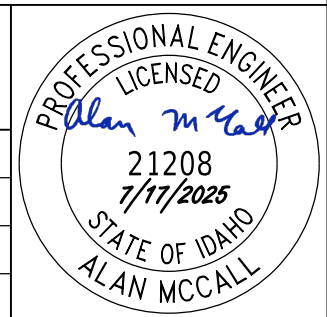
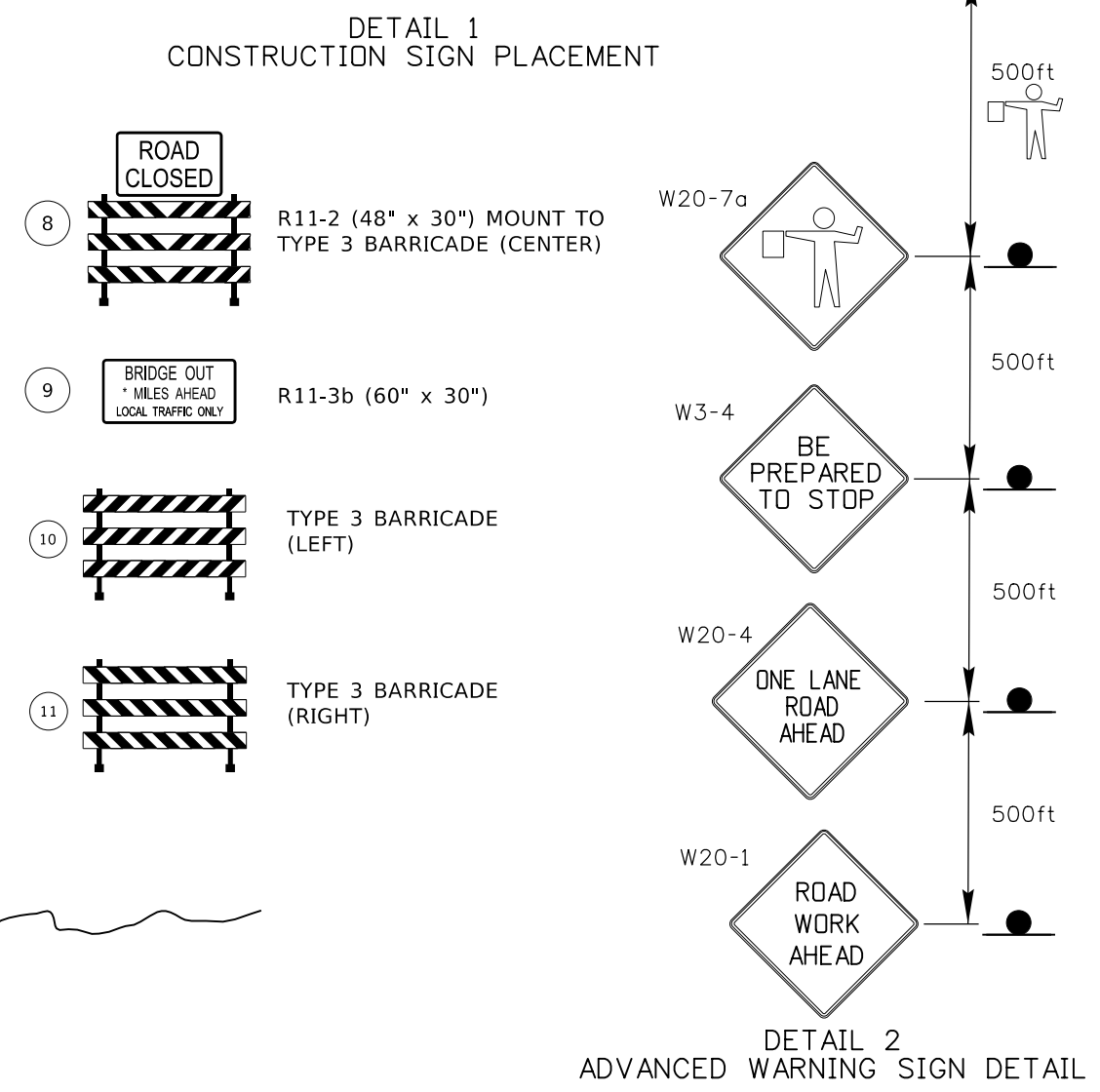
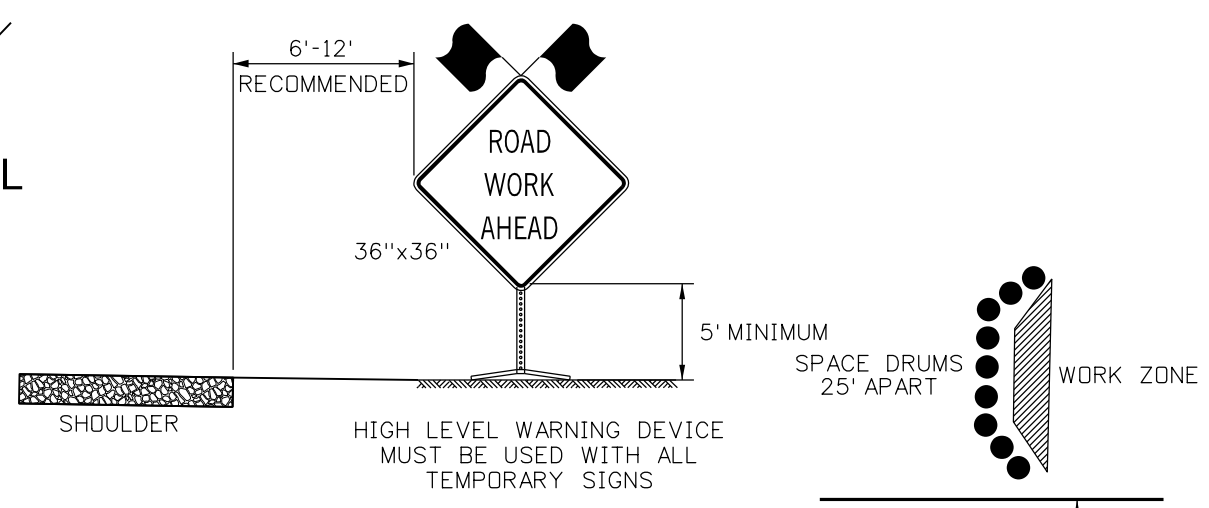
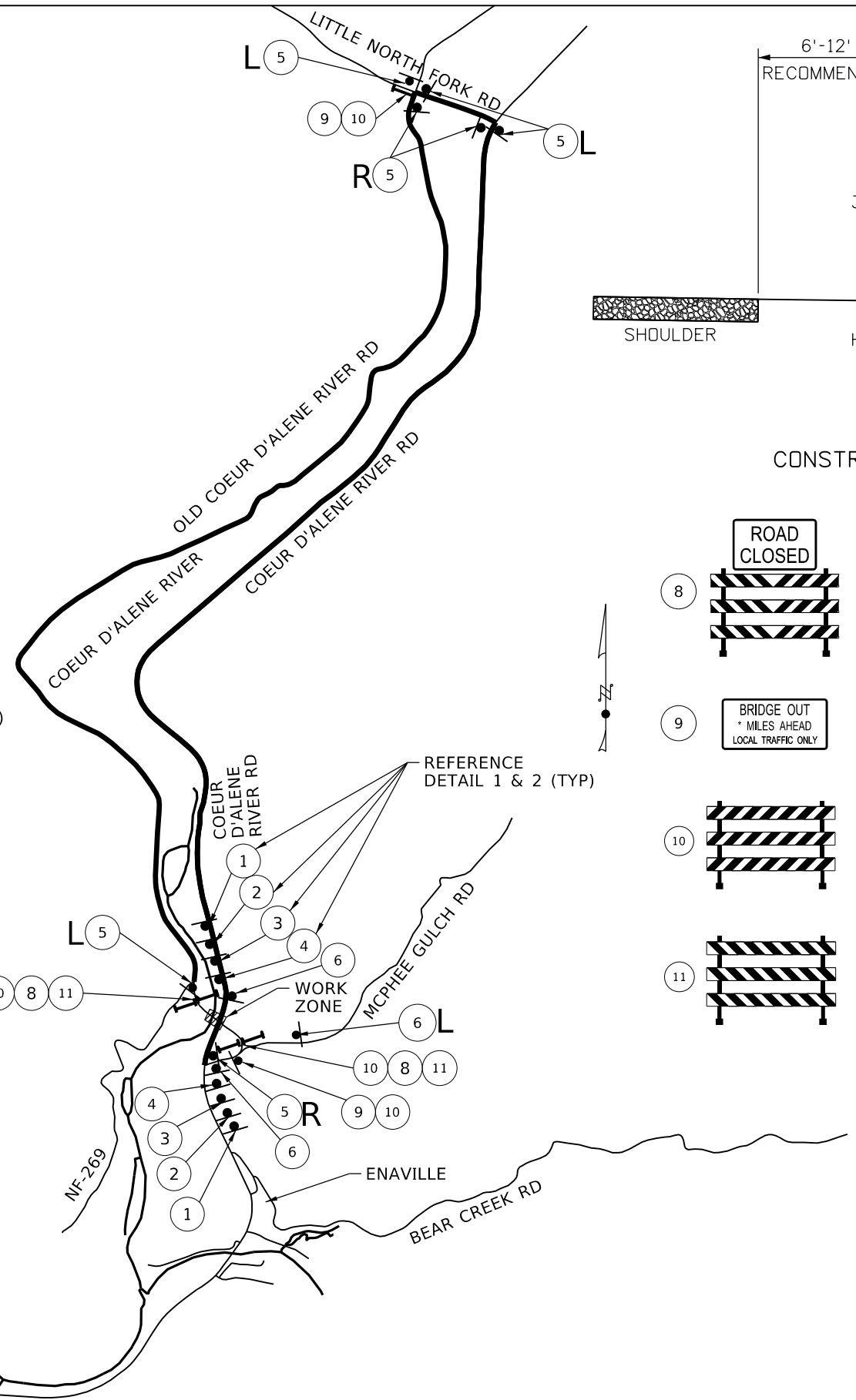
DESIGNED	B. CARVER	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	A. MCCALL	
DETAILED	B. CARVER	CADD FILE NAME 30786 TRAF D01.dgn
DRAWING CHECKED	A. MCCALL	DRAWING DATE: 7/14/2025



DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.	TEMPORARY TRAFFIC CONTROL PLAN
	SILVER BRIDGE REPLACEMENT
	SHOSHONE COUNTY
	DETOUR PLAN




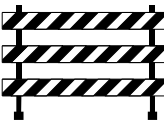
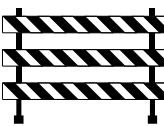

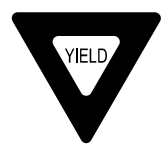


ENGLISH
COUNTY SHOSHONE
KEY NUMBER 30786
SHEET 23 OF 24

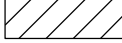






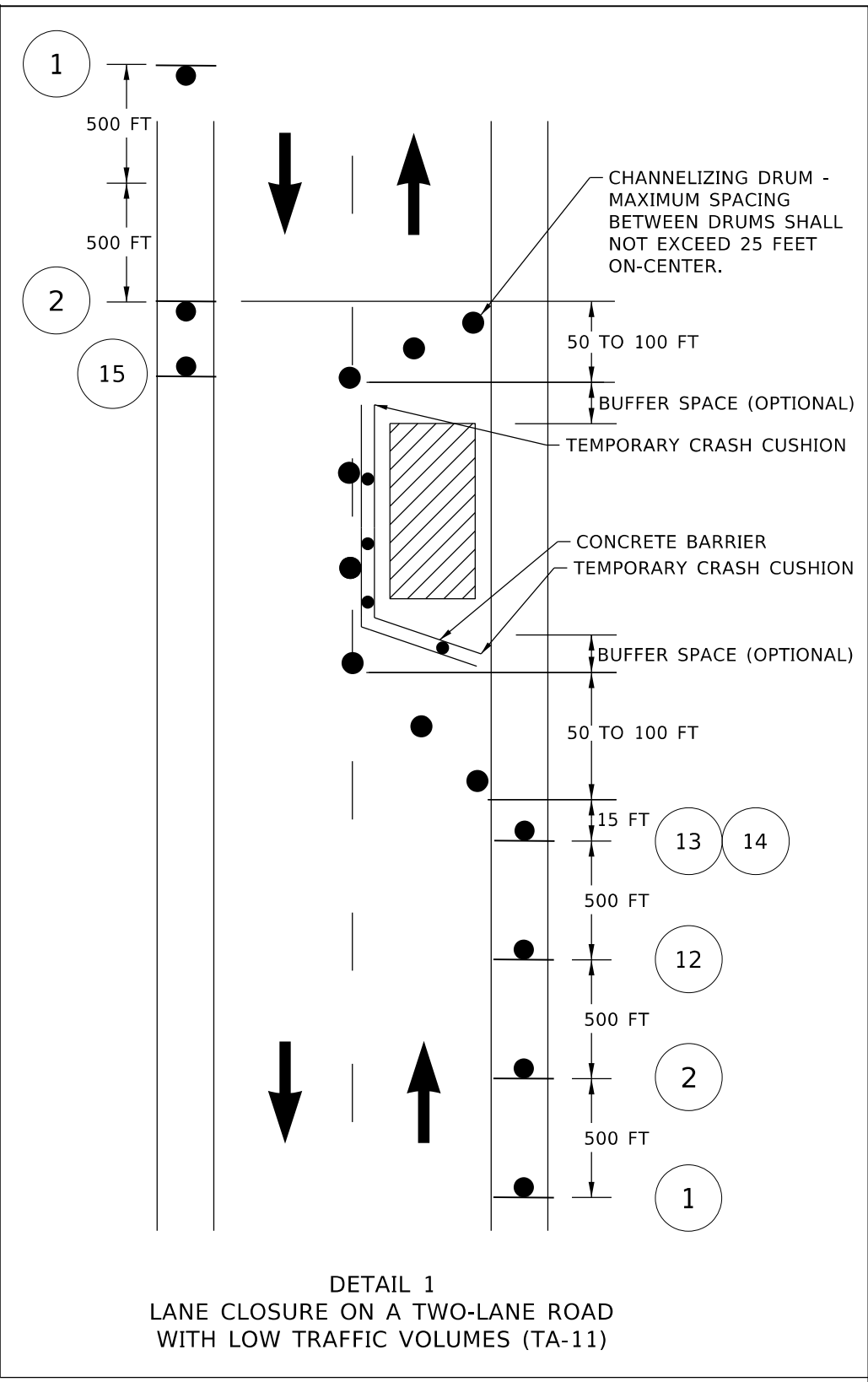
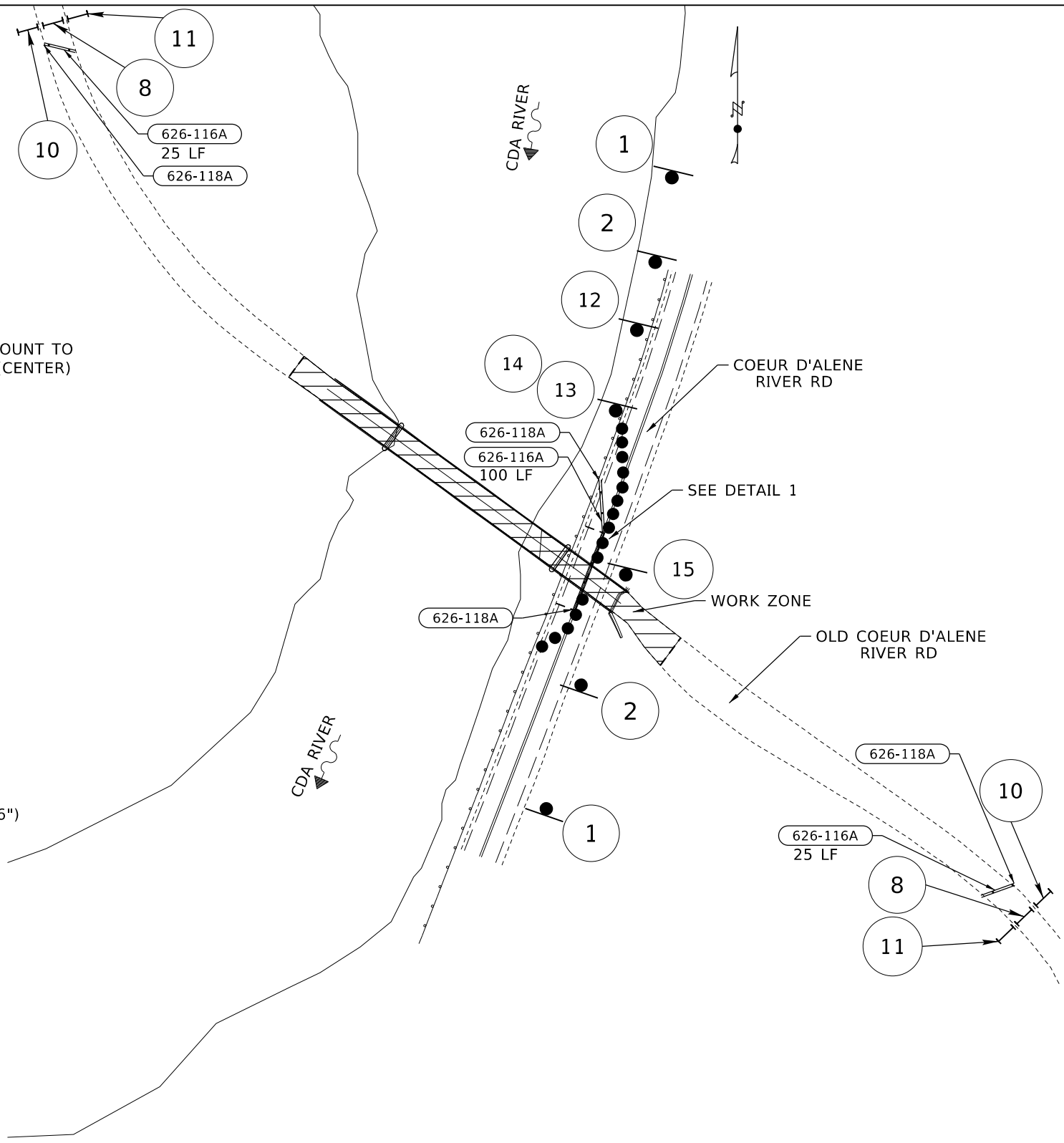
- WORK ZONE TRAFFIC CONTROL**
1. MAINTAIN ACCESS DURING ONE LANE CLOSURE ON COEUR D'ALENE RIVER RD AND ALL OPERATIONS OF BRIDGE WORK.
 2. AT WORK ZONE, ONLY ONE TYPE 3 BARRICADE WILL NEED A R11-2 ON IT.
 3. WHEN NO FLAGGER IS PRESENT, MAINTAIN YIELD CONDITIONS AS DETAILED ON SHEET TRAF D02.

July 14, 2025 11:19:15 AM
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CONSTRUCTION DETOUR SIGNING

- ①  W20-1 (36" x 36")
- ②  W20-4 (36" x 36")
- ⑧  R11-2 (48" x 30") MOUNT TO TYPE 3 BARRICADE (CENTER)
- ⑩  TYPE 3 BARRICADE (LEFT)
- ⑪  TYPE 3 BARRICADE (RIGHT)
- ⑫  W3-2 (36" x 36")
- ⑬  R1-2 (36" x 36" x 36")
- ⑭  R1-2aP (24" x 18")
- ⑮  W1-4R (36" x 36")

LEGEND	
	ROAD CLOSURE
	SINGLE POST SIGN
	TYPE 3 BARRICADE
	CHANNELIZING DRUM



July 14, 2025 11:19:21 AM
 pwr://daefnc-pw.bentley.com/daefnc-pw-22/Documents/Projects/Idaho/LHTAC/pj30786/Project_Development/Plan_Sheets/30786 TRAF D02

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	B. CARVER
DESIGN CHECKED	A. MCCALL
DETAILED	B. CARVER
DRAWING CHECKED	A. MCCALL

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME 30786 TRAF D02.DGN
 DRAWING DATE: 7/14/2025

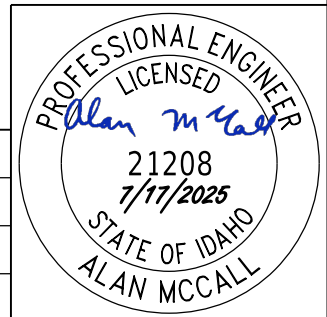


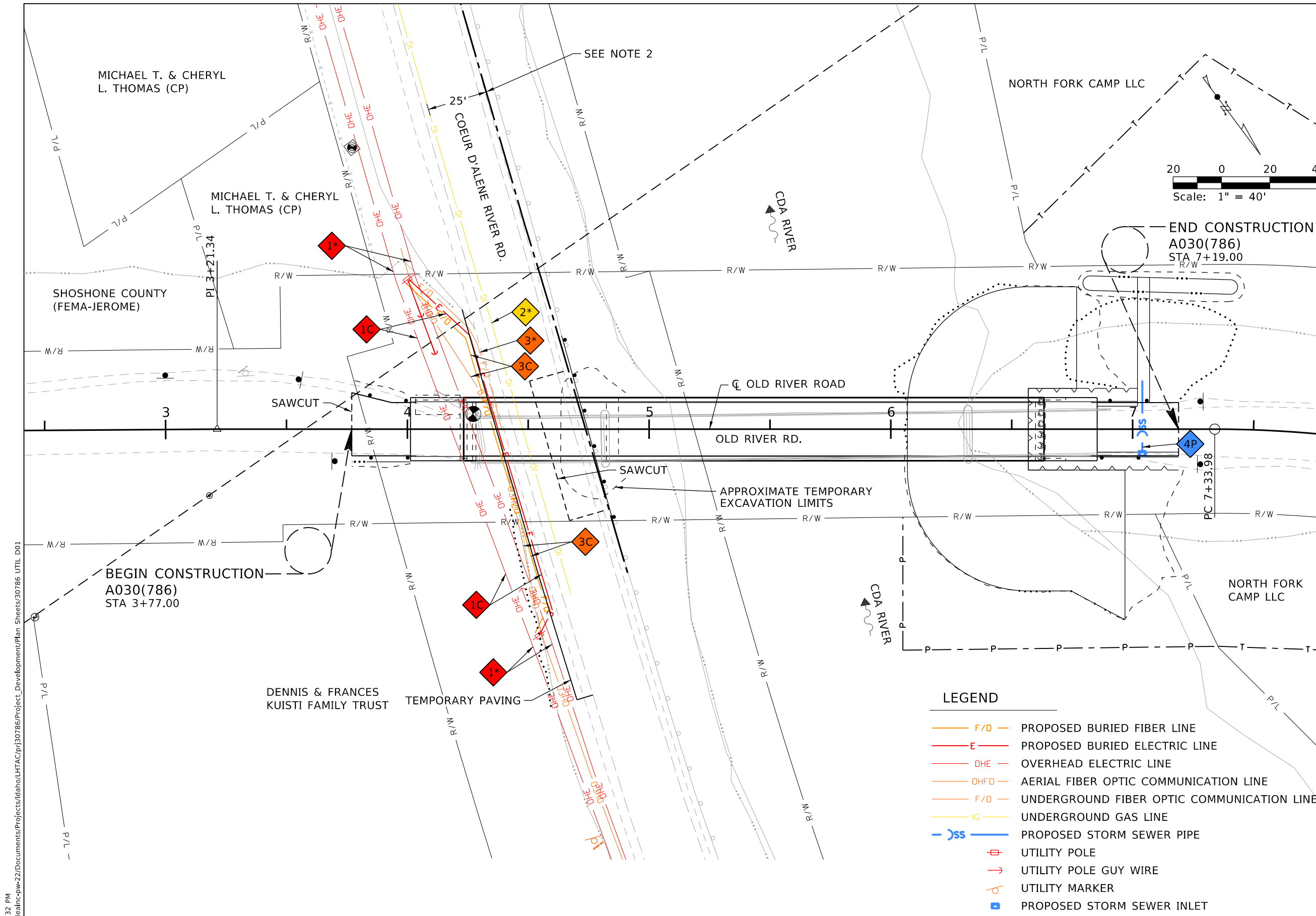
DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.

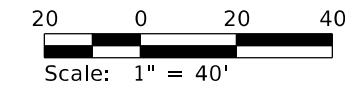
TEMPORARY TRAFFIC CONTROL PLAN
 SILVER BRIDGE REPLACEMENT
 SHOSHONE COUNTY
 BRIDGE CLOSURE &
 ONE LANE CLOSURE PLAN

ENGLISH
 COUNTY SHOSHONE
 KEY NUMBER 30786
 SHEET 24 OF 24





- ◆ 1* RETAIN/PROTECT LINE/POLE BY AVISTA UTILITIES
- ◆ 1C ADJUST/RELOCATE LINE/POLE BY AVISTA UTILITIES
- ◆ 2* RETAIN/PROTECT LINE BY PHILLIPS 66
- ◆ 3* RETAIN/PROTECT LINE/POLE BY ZIPLY FIBER
- ◆ 3C ADJUST/RELOCATE LINE/POLE BY ZIPLY FIBER
- ◆ 4P CONSTRUCT LINE/STRUCTURE BY CONTRACTOR



- NOTES:**
- RETAIN AND PROTECT ALL UTILITIES UNLESS NOTED OTHERWISE.
 - ANY EXCAVATION OR HEAVY EQUIPMENT WITHIN 25' OF THE 10" GAS LINE WILL REQUIRE NOTIFICATION AND AN ONSITE GAS REPRESENTATIVE.
 - COORDINATE WITH PHILLIPS 66 AND PROVIDE A LIST OF EQUIPMENT AND ACTIVITIES WHEN WITHIN 25' OF THE GAS LINE.

- KEY**
- ◆ UTILITY COMPANY RESPONSIBLE PARTY
 - P = PROJECT EXPENSE
 - C = COMPANY EXPENSE
 - * = RETAIN & PROTECT
- EXISTING**
- OHE
- RELOCATED FROM EXISTING TO PROPOSED LOCATION**
- OHE
- PROPOSED**
- OHE
- UTILITY COMPANIES**
- 1 = AVISTA UTILITIES
 - 2 = PHILLIPS 66 PIPELINE CO LLC (YELLOWSTONE PIPELINE CO)
 - 3 = ZIPLY FIBER
 - 4 = SHOSHONE COUNTY

- LEGEND**
- F/O — PROPOSED BURIED FIBER LINE
 - E — PROPOSED BURIED ELECTRIC LINE
 - OHE — OVERHEAD ELECTRIC LINE
 - OHFO — AERIAL FIBER OPTIC COMMUNICATION LINE
 - F/O — UNDERGROUND FIBER OPTIC COMMUNICATION LINE
 - IG — UNDERGROUND GAS LINE
 - SSS — PROPOSED STORM SEWER PIPE
 - ⊕ — UTILITY POLE
 - ↗ — UTILITY POLE GUY WIRE
 - ⊙ — UTILITY MARKER
 - — PROPOSED STORM SEWER INLET

June 30, 2025 2:54:32 PM pww://daefnc-pw.bentley.com/daefnc-pw-22/Documents/Projects/Idaho/LHTAC/30786/Project_Development/Plan_Sheets/30786_UTIL_D01

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	B. CARVER
DESIGN CHECKED	A. MCCALL
DETAILED	B. CARVER
DRAWING CHECKED	A. MCCALL

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME
30786_UTIL_D01.dgn

DRAWING DATE:
6/30/2025



DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.

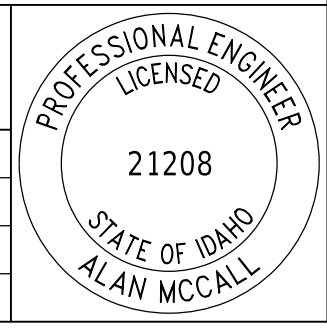
UTILITY PLAN SHEET
SILVER BRIDGE REPLACEMENT
SHOSHONE COUNTY

ENGLISH

COUNTY
SHOSHONE

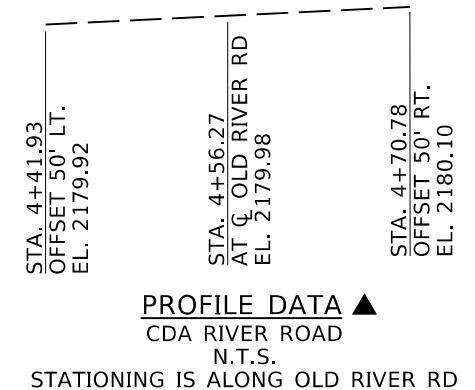
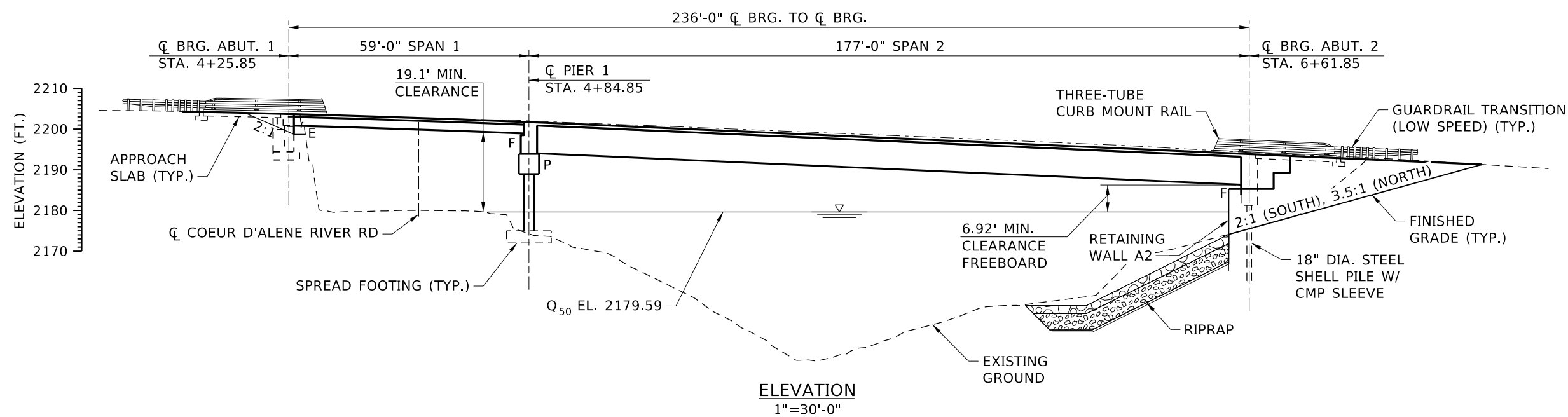
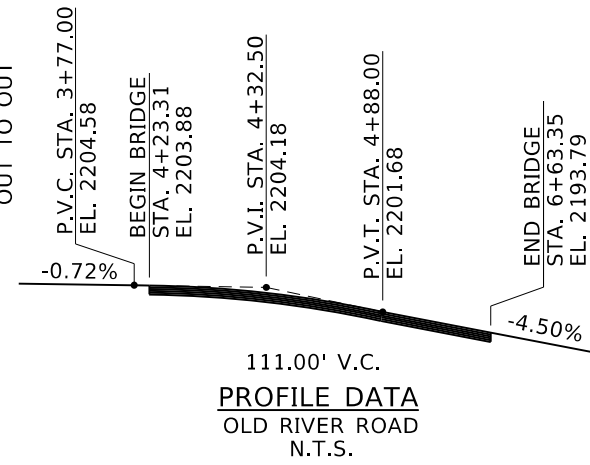
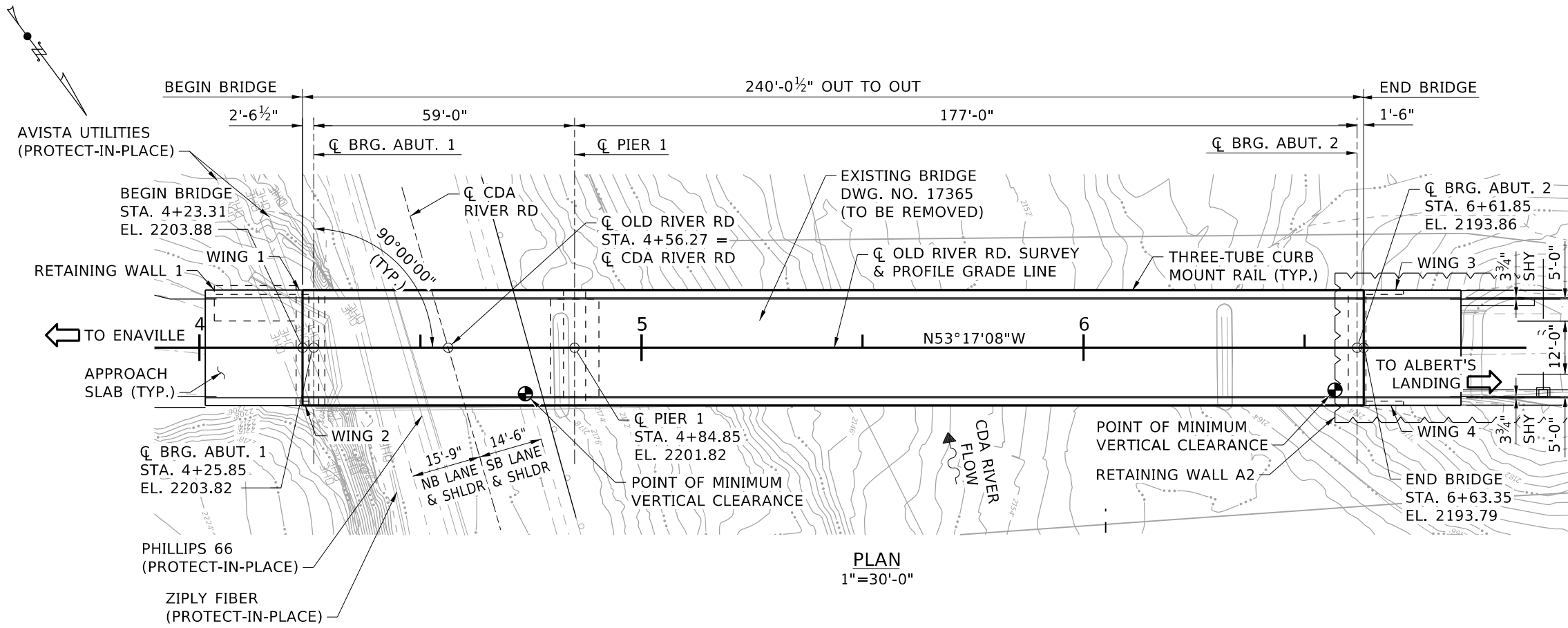
KEY NUMBER
30786

SHEET 1 OF 1



HYDRAULIC DATA

	DISCHARGE	H.W. ELEV.	VELOCITY
FLOOD DESIGN (Q ₅₀)	45,800 cfs	2179.59	15.8 fps
BASE (Q ₁₀₀)	56,700 cfs	2181.31	16.9 fps
SCOUR (Q _{5c})	86,200 cfs	2184.94	18.9 fps



- NOTES:**
1. SEE UTILITY PLANS FOR ADDITIONAL UTILITY INFORMATION.
 2. SEE CHANNEL PLAN AND PROFILE FOR RIPRAP DETAILS AND GRADING.
 - ▲ 3. CDA RIVER ROAD PROFILE DATA BASED ON EXISTING GROUND AND SHOWN FOR VERTICAL CLEARANCE INFORMATION ONLY.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

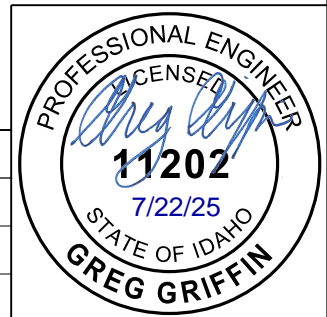
DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	
DETAILED D. FOSTER	
DWG. CHECKED G. GRIFFIN	
CORRECTIONS D. FOSTER	

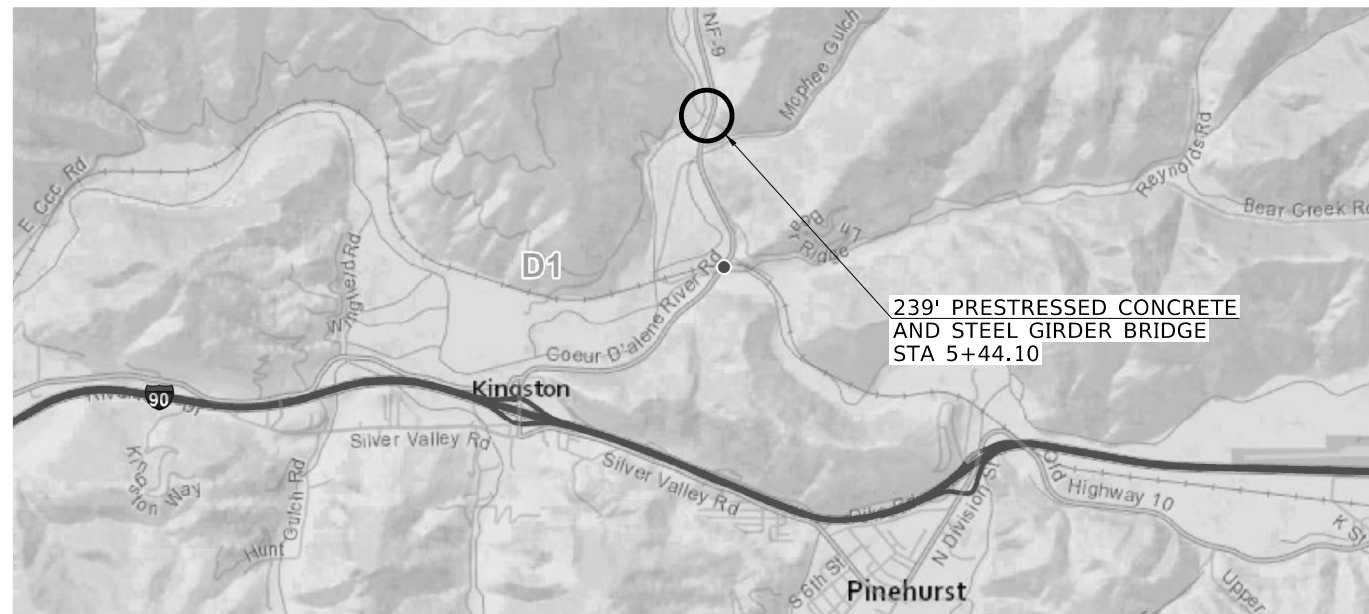
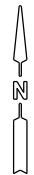
CADD FILE NAME 30786_bdt1_d01.dgn	DRAWING DATE: JULY 2025
DAVID EVANS AND ASSOCIATES INC.	



ENGLISH	SITUATION AND LAYOUT
PROJECT NO. 30786	239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10

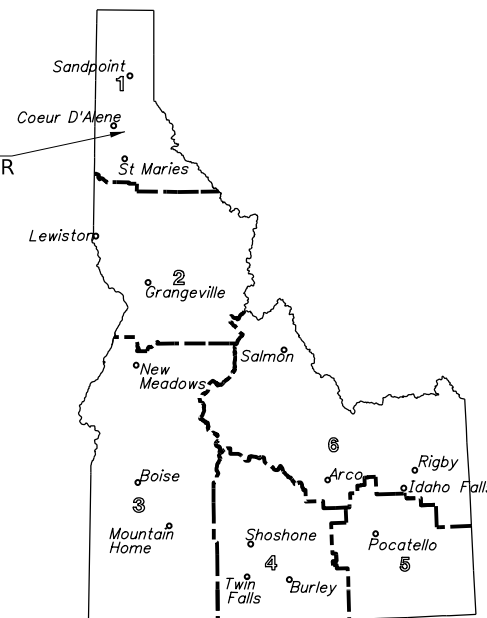
BRIDGE PLANS	
BRIDGE KEY NO. 30786	KEY NO. 30786
COUNTY SHOSHONE	BRIDGE DWG. NO. -
SHEET 1 OF 41	





VICINITY MAP
N.T.S.

30786
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
SHOSHONE COUNTY,
STA. 5+44.10



IDAHO MAP
N.T.S.

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ONE DIRECTIONAL TRAFFIC DATA

CONSTRUCTION YEAR (2026)	
AADT	306
CAADT	16
CAADT%	5%
FUTURE YEAR (2048)	
AADT	391
CAADT	20
CAADT%	5%

QUANTITIES

203-020A	REMOVAL OF BRIDGE - FULL	1 EACH
+210-005A	STRUCTURE EXCAVATION SCHEDULE NO. 1	332 CY
+210-005B	STRUCTURAL EXCAVATION SCHEDULE NO. 1 (ROCK)	213 CY
+210-015A	COMPACTING BACKFILL	226 CY
502-140A	CONCRETE CLASS 40-A SCHEDULE NO. 1	143 CY
+502-310A	CONCRETE CLASS 40-AF SCHEDULE NO. 2	219 CY
502-435A	APPROACH SLAB	128 SY
502-465A	PRESTRESSED SLAB (26" VOIDED)	359 FT
503-010A	METAL REINFORCEMENT SCHEDULE NO. 1	22,412 LB
+503-015A	METAL REINFORCEMENT SCHEDULE NO. 2	18,880 LB
503-020A	EPOXY COATED METAL REINFORCEMENT	35,297 LB
504-005A	STEEL BRIDGE (APPROX. 227,600 LBS)	1 LS
504-050A	3-TUBE CURB MOUNT RAIL	568 FT
505-115A	PROVIDE & DRIVE 18" DIAMETER STEEL SHELL PILE	273 FT
505-165A	PROVIDE & DRIVE TEST STEEL SHELL PILE (18")	82 FT
505-205C	PROVIDE & INSTALL PILE SHOES OR TIPS (18")	6 EACH
505-215A	SPLICE STEEL SHELL PILE BEFORE DRIVING	1 EACH
505-215B	SPLICE STEEL SHELL PILE DURING DRIVING	12 EACH
507-005A	ELASTOMERIC BEARINGS PLAIN (12" X 20" X 1/2")	6 EACH
507-010A	ELASTOMERIC BEARING LAMINATED (6" X 42" X 2.3")	6 EACH
509-005A	NON-STRUCTURAL CONCRETE (CLASS 15)	19 CY
521-005A	DYNAMIC PILE TESTING	1 EACH
521-010A	CAPWAP ANALYSIS	2 EACH
567-005A	STRIP SEAL EXPANSION JOINT	52 FT
576-005A	GLASS FIBER REINFORCED POLYMER (GFRP) REINFORCEMENT	250 FT
577-005A	PILE SLEEVE (30" DIAMETER)	112 FT
S501-17A	MSE RETAINING WALL (WELDED WIRE)	2,528 SF

+ DENOTES PLAN QUANTITY

REVISIONS		
NO.	DATE	DESCRIPTION
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▲		
▲		
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DESIGNED P. BARUWAL
DESIGN CHECKED G. GRIFFIN
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CORRECTIONS D. FOSTER

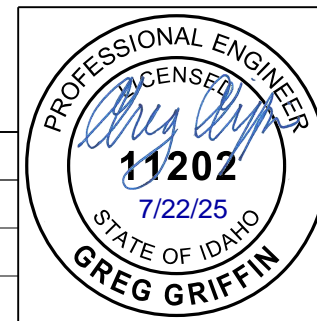
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CADD FILE NAME 30786_bdt1_d02.dgn
DRAWING DATE: JULY 2025



ENGLISH
PROJECT NO. 30786

SHEET INDEX, QUANTITIES, & VICINITY MAP
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10

BRIDGE PLANS
BRIDGE KEY NO. 30786
COUNTY SHOSHONE
KEY NO. 30786
BRIDGE DWG. NO. -
SHEET 2 OF 41



DESIGN NOTES

DESIGN SPECIFICATIONS

IN ACCORDANCE WITH : "AASHTO LRFD BRIDGE DESIGN SPECIFICATION" 9th EDITION, OCTOBER 2023 ITD BRIDGE DESIGN MANUAL, AND AASHTO/AWS "BRIDGE WELDING CODE" D1.5.

DESIGN PROCEDURES

GIRDERS DESIGNED AS SIMPLE SPANS AND SLAB REINFORCEMENT DESIGNED FOR 1 LANE OF TRAFFIC OVER THE PIER. DECK DESIGNED USING EMPIRICAL METHOD. RAILING CONFORMS TO MASH TL-3. DESIGN SPEED IS 20 mph. THE FOLLOWING PROPRIETARY COMPUTER SOFTWARE PROGRAMS WERE USED TO FACILITATE THE STRUCTURAL ANALYSIS:

NAME	VERSION	RELEASE DATE	NAME	VERSION	RELEASE DATE
LPILE	2019	2019	LEAP BRIDGE CONCRETE	22.0.4.34	2022
LEAP STEEL BRIDGE	21.02.00.31	2022	PGSUPER	8.0.5.0	2024
SAP2000	25.1.0	2024			

DESIGN LOADS

PERMANENT LOADS

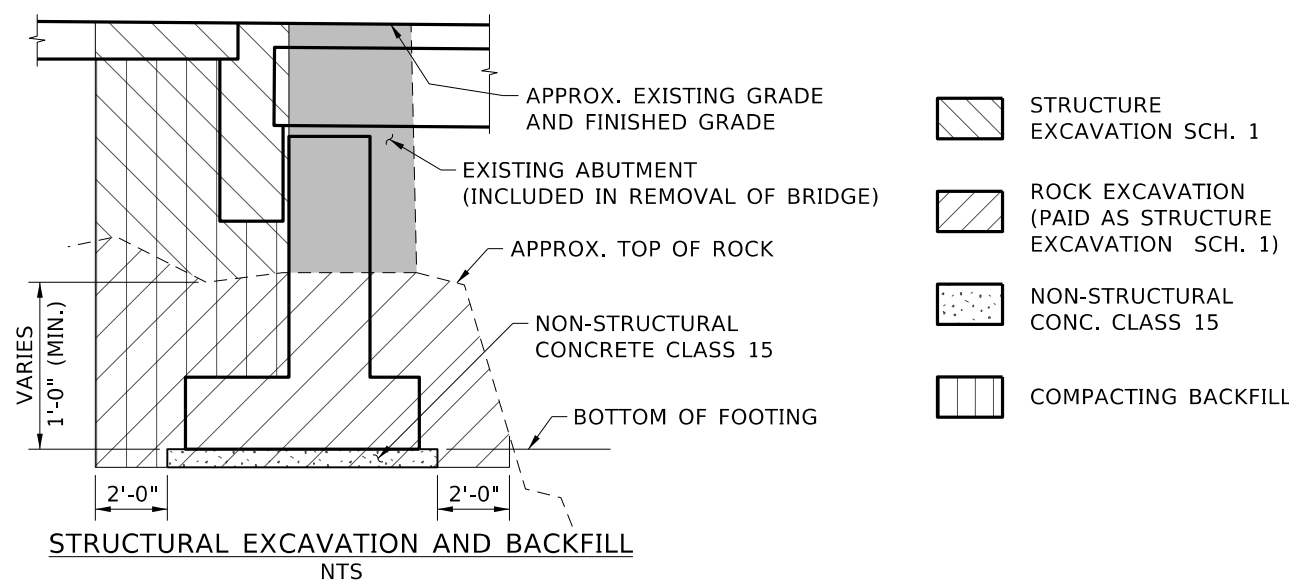
DC	UNIT WEIGHT OF REINFORCED CONCRETE	0.150 kcf
	UNIT WEIGHT OF PRESTRESSED CONCRETE	0.155 kcf
	UNIT WEIGHT OF STRUCTURAL STEEL	0.490 kcf
DW	INITIAL WEARING SURFACE	0.000 ksf
	FUTURE WEARING SURFACE	0.028 ksf
	UTILITIES	0.000 klf
	FUTURE UTILITIES	0.300 klf
EV	UNIT WEIGHT OF SOIL	0.130 kcf
EH	ACTIVE PRESSURE	0.036 kcf
	AT REST PRESSURE	0.057 kcf

TRANSIENT LOADS

LL	HL-93 INCLUDING PAIR OF DESIGN TANDEM IN ACCORDANCE WITH "AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS" ARTICLE 3.6.1.3	
IM	DYNAMIC ALLOWANCE APPLIED TO TRUCK & TANDEM	
LS	LIVE LOAD SURCHARGE AT ABUTMENT	3.00 feet
	LIVE LOAD SURCHARGE AT WING WALL AND RETAINING WALL	2.00 feet
TU	UNIFORM TEMPERATURE RANGE (STEEL)	-30° F TO 120° F
	UNIFORM TEMPERATURE RANGE (CONC)	0° F TO 80° F
	BASE SETTING TEMPERATURE	60° F

EXTREME EVENT LOADS

EQ	SITE CLASS	B
		D
	ACCELERATION COEFFICIENT S_{D1}	0.181 g (SITE CLASS D)
	SEISMIC PERFORMANCE ZONE	2



GENERAL NOTES

CONSTRUCTION SPECIFICATIONS

MATERIALS, CONSTRUCTION AND WORKMANSHIP WILL BE IN ACCORDANCE WITH THE STATE OF IDAHO TRANSPORTATION DEPARTMENT, "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION", 2023 EDITION, THE PROJECT PLANS, AND SPECIFICATIONS.

MATERIAL

CONCRETE :	DECK SLAB AND PARAPET - CLASS 40AF	f'c= 4.00 ksi
	ABUTMENTS, RETAINING WALLS, AND WINGS - CLASS 40A	f'c= 4.00 ksi
	PRESTRESSED GIRDERS	f'c= 9.00 ksi
	PRESTRESSING REINFORCEMENT: AASHTO M203, GRADE 270 LOW RELAXATION	fpu= 270.00 ksi
	METAL REINFORCEMENT : AASHTO M31, GRADE 60 TYPE S	fy= 60.00 ksi
	STRUCTURAL STEEL : ASTM A709 GRADE 50W	fy= 50.00 ksi
	BASE METAL & WELD METAL CHARPY V-NOTCH TEMPERATURE ZONE 3	
	HIGH STRENGTH BOLTS : ASTM F3125 GRADE A325 TYPE 3	
	CARBON STEEL BOLTS : ASTM A307	

PLAN DIMENSIONS AND ELEVATIONS

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS NOTED OTHERWISE. DIMENSIONS TO REINFORCING STEEL ARE TO CENTERLINE OF BAR UNLESS NOTED OTHERWISE. PROVIDE 2" CONCRETE COVER MEASURED FROM THE FACE OF THE CONCRETE TO THE FACE OF ANY REINFORCING BAR, UNLESS SHOWN OTHERWISE ON THE DRAWINGS. PROVIDE REINFORCING STEEL SPLICE LENGTHS IN ACCORDANCE WITH AASHTO SPECIFICATIONS.

CONSTRUCTION

EPOXY-COATED REINFORCEMENT IS DESIGNATED BY AN (E) AFTER THE BAR MARK. GLASS FIBER REINFORCED POLYMER REINFORCEMENT IS DESIGNATED BY A (G) AFTER THE BAR MARK. PROVIDE CONSTRUCTION JOINTS ONLY AT THE LOCATIONS SHOWN ON THE PLANS OR AS APPROVED. PERMANENT METAL DECK SLAB FORMS MAY BE USED AT CONTRACTOR'S OPTION. PROTECT SURFACES OF THE SUBSTRUCTURE EXCEPT WINGWALLS EXPOSED ON THE COMPLETED STRUCTURE TO PREVENT STAINING WITH PLASTIC SHEETS OR OTHER APPROVED METHODS UNTIL DECK PLACEMENT IS COMPLETED AND GIRDERS ARE BLAST CLEANED. PROVIDE WELDS IN ACCORDANCE WITH AASHTO/AWS D1.5 AND INTERIM REVISIONS. ELEVATIONS BASED ON NAVD 88 DATUM.

INCIDENTAL ITEMS

WORK NECESSARY TO FULFILL THE CONTRACT THAT IS NOT MEASURED OR PAID FOR SEPARATELY.

ELASTOMERIC BEARINGS - ABUTMENT 1 (PRECAST SLABS)

DESIGN PROCEDURE: METHOD B
SHEAR MODULUS (130) PSI
GRADE 4 POLYISOPRENE
DESIGN LOADS: (SERVICE 1)
ABUTMENT 1 99 kips

ELASTOMERIC BEARINGS - PIER 1 & ABUTMENT 2 (STEEL GIRDERS)

DESIGN PROCEDURE: METHOD A
GRADE 3 (60) DUROMETER POLYISOPRENE
DESIGN LOADS: (SERVICE 1)
PIER 1 286 KIP
ABUTMENT 2 286 KIP

ABBREVIATIONS

BTWN. = BETWEEN
BOTT. = BOTTOM
E.F. = EACH FACE
F.F. = FILL FACE
N.F. = NEAR FACE
SP. = SPACE
SPS. = SPACES
T&B = TOP AND BOTTOM
U.N.O. = UNLESS NOTED OTHERWISE

NO.	DATE	BY	DESCRIPTION
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DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	CADD FILE NAME
DETAILED D. FOSTER	30786_bdt1_d03.dgn
DWG. CHECKED G. GRIFFIN	DRAWING DATE: JULY 2025
CORRECTIONS D. FOSTER	

SHOSHONE COUNTY
IDAHO

DAVID EVANS
AND ASSOCIATES INC.

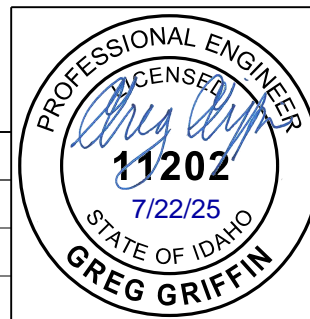
ENGLISH

PROJECT NO.
30786

DESIGN AND GENERAL NOTES (1 OF 2)

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS	
BRIDGE KEY NO. 30786	KEY NO. 30786
COUNTY SHOSHONE	SHEET 3 OF 41



FOOTING DESIGN LOADS - ABUTMENT 1

STRENGTH LIMIT STATE

	ABUT. 1 FOOTING	ABUT. 1 RET. WALL	
BEARING			
NOMINAL BEARING RESISTANCE q_n	= 20	= 20	ksf
EFFECTIVE FOOTING WIDTH B'	= 4.8	= 6.4	ft
EFFECTIVE FOOTING LENGTH L'	= 23.5	= 18.5	ft
RESISTANCE FACTOR ϕ	= 0.45	= 0.45	
FACTORED BEARING RESISTANCE $q_n = q_n \phi_b$	= 9.00	= 9.00	ksf
FACTORED APPLIED LOAD	= 8.8	= 2.36	ksf

SLIDING

NOMINAL SLIDING RESISTANCE R_n	= 433	= 140	kips
RESISTANCE FACTOR ϕ	= 0.80	= 0.80	
FACTORED SLIDING RESISTANCE $R_R = R_n \phi$	= 347	= 112	kips
FACTORED APPLIED LOAD γV	= 99	= 61	kips

FOOTING DESIGN LOADS - PIER 1

STRENGTH LIMIT STATE

BEARING			
NOMINAL BEARING RESISTANCE q_n	= 25		ksf
EFFECTIVE FOOTING WIDTH B'	= 9.4		ft
EFFECTIVE FOOTING LENGTH L'	= 19.5		ft
RESISTANCE FACTOR ϕ	= 0.45		
FACTORED BEARING RESISTANCE $q_n = q_n \phi_b$	= 11.25		ksf
FACTORED APPLIED LOAD	= 10.5		ksf

SLIDING

NOMINAL SLIDING RESISTANCE R_n	= 926		kips
RESISTANCE FACTOR ϕ	= 0.80		
FACTORED SLIDING RESISTANCE $R_R = R_n \phi$	= 740		kips
FACTORED APPLIED LOAD γV	= 79		kips

PILE DESIGN LOADS FOR INTEGRAL ABUTMENT - ABUTMENT 2

STRENGTH LIMIT STATE

NOMINAL AXIAL RESISTANCE R_n	= 375		kips
AXIAL RESISTANCE FACTOR ϕ	= 0.65		
FACTORED AXIAL RESISTANCE ϕR_n	= 244		kips
MAX. APPLIED AXIAL LOAD Q	= 237		kips
MIN. APPLIED AXIAL LOAD Q	= 100		kips

PILE DESIGN DATA FOR SCOUR

FOUNDATIONS DESIGNED FOR THE FOLLOWING SCOUR DEPTHS BELOW THE BOTTOM OF THE PILE CAP/TOP OF DRILLED SHAFT.

ABUTMENT 2	=	0	ft
------------	---	---	----

SERVICE LIMIT STATE

	ABUT. 1 FOOTING	ABUT. 1 RET. WALL	
PRESUMPTIVE BEARING CAPACITY q_p	= 20	= 20	ksf
BASED UPON FOOTING SETTLEMENT OR LESS	= 0.50	= 0.50	inches
EFFECTIVE FOOTING WIDTH B'	= 4.0	= 7.2	ft
EFFECTIVE FOOTING LENGTH L'	= 23.9	= 18.5	ft
RESISTANCE FACTOR ϕ	= 1.00	= 1.00	
FACTORED PRESUMPTIVE BEARING RESISTANCE ϕq_p	= 20	= 20	ksf
FACTORED APPLIED LOAD	= 7.8	= 1.71	ksf

SERVICE LIMIT STATE

PRESUMPTIVE BEARING CAPACITY q_p	= 25		ksf
BASED UPON FOOTING SETTLEMENT	= 0.50		inches OR LESS
EFFECTIVE FOOTING WIDTH B'	= 9.4		ft
EFFECTIVE FOOTING LENGTH L'	= 19.5		ft
RESISTANCE FACTOR ϕ	= 1.00		
FACTORED PRESUMPTIVE BEARING RESISTANCE ϕq_p	= 25		ksf
FACTORED APPLIED LOAD	= 8.3		ksf

EXTREME LIMIT STATE

	ABUT. 1 FOOTING	ABUT. 1 RET. WALL	
BEARING			
NOMINAL BEARING RESISTANCE q_n	= 20	= 20	ksf
EFFECTIVE FOOTING WIDTH B'	= 4.0	= 7.1	ft
EFFECTIVE FOOTING LENGTH L'	= 17.7	= 18.5	ft
RESISTANCE FACTOR ϕ	= 1.0	= 1.0	
FACTORED BEARING RESISTANCE ϕq_n	= 20	= 20	ksf
FACTORED APPLIED LOAD	= 6.5	= 1.79	ksf

SLIDING

NOMINAL SLIDING RESISTANCE R_n	= 341	= 131	kips
RESISTANCE FACTOR ϕ	= 1.0	= 1.0	
FACTORED SLIDING RESISTANCE ϕR_n	= 341	= 105	kips
FACTORED APPLIED LOAD γV	= 251	= 59	kips

EXTREME LIMIT STATE

BEARING			
NOMINAL BEARING RESISTANCE q_n	= 25		ksf
EFFECTIVE FOOTING WIDTH B'	= 9.7		ft
EFFECTIVE FOOTING LENGTH L'	= 10.5		ft
RESISTANCE FACTOR ϕ	= 1.0		
FACTORED BEARING RESISTANCE ϕq_n	= 25		ksf
FACTORED APPLIED LOAD $\gamma Q/(B'L')$	= 12.7		ksf

SLIDING

NOMINAL SLIDING RESISTANCE R_n	= 738		kips
RESISTANCE FACTOR ϕ	= 1.0		
FACTORED SLIDING RESISTANCE ϕR_n	= 738		kips
FACTORED APPLIED LOAD γV	= 234		kips

MSE WALLS

THE FOLLOWING TABLE SUMMARIZES THE SOIL INFORMATION TO BE USED IN THE WALL DESIGN. OTHER INFORMATION NEEDED FOR THE WALL DESIGN CAN BE FOUND IN THE ITD GEOTECHNICAL ENGINEERING REPORT AVAILABLE AT THE DISTRICT MATERIALS OFFICE.

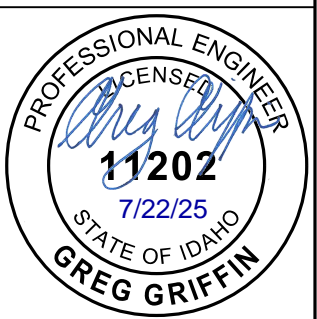
MSE WALL DESIGN PARAMETERS					
SOIL	WET UNIT WEIGHT (pcf)	COHESION (psf)	FRICTION ANGLE (DEGREE)	ALLOWABLE BEARING CAPACITY (ksf)	ULTIMATE BEARING CAPACITY ** (ksf)
WALL BACKFILL	*	*	*	N/A	N/A
RETAINED SOIL	130	0	34	N/A	N/A
FOUNDATION SOIL	60	0	32	***	***

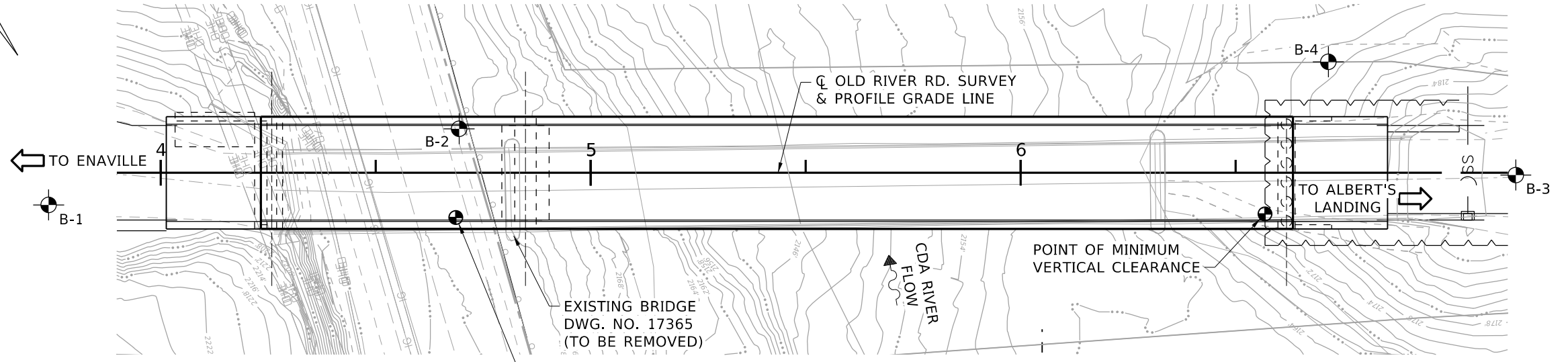
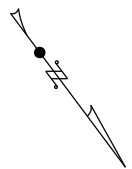
- * - TO BE DETERMINED BY THE CONTRACTOR
- ** - RESISTANCE FACTOR = 0.65 (STRENGTH)
- *** - SEE APPENDIX E IN GEOTECHNICAL ENGINEERING EVALUATION REPORT

REVISIONS			DESIGNED	SCALES SHOWN	ENGLISH	DESIGN AND GENERAL NOTES (2 OF 2)	BRIDGE PLANS		
NO.	DATE	BY	DESCRIPTION	ARE FOR 11" X 17" PRINTS ONLY			BRIDGE KEY NO.		
△			P. BARUWAL	CADD FILE NAME	30786	239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10	30786		
△			G. GRIFFIN	30786_bdt1_d04.dgn			COUNTY	KEY NO.	
△			D. FOSTER	DRAWING DATE:			SHOSHONE	30786	
△			G. GRIFFIN	JULY 2025			BRIDGE DWG. NO.	SHEET	
△			D. FOSTER			-	4 OF 41		

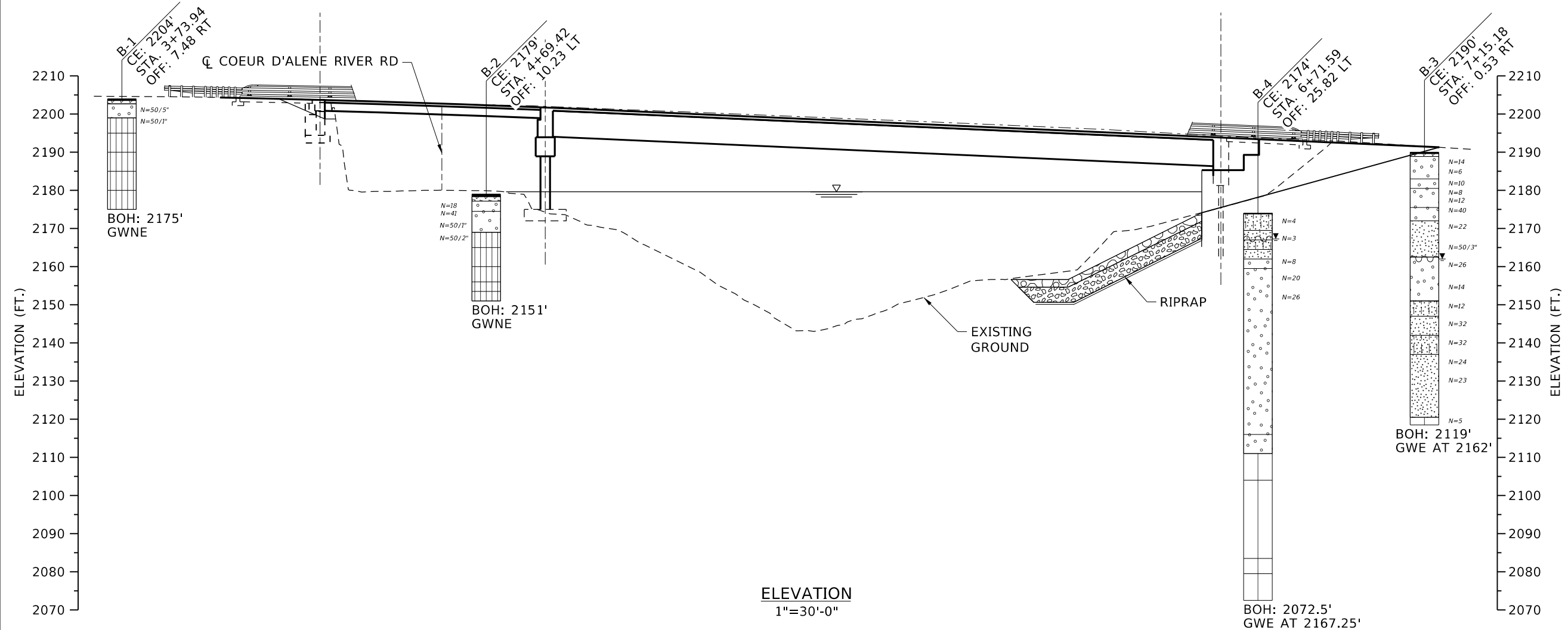


DAVID EVANS AND ASSOCIATES INC.





POINT OF MINIMUM VERTICAL CLEARANCE
PLAN
 1"=30'-0"



ELEVATION
 1"=30'-0"

- ASPHALT (AC)
- CRUSHED SURFACING BASE COURSE (CR)
- TOP SOIL (TS)
- GRAVEL WITH SAND (GP, GP-GM, GM)
- SILT (ML)
- SILTITE
- SILTY SAND W/ GRAVEL (SM)
- SAND W/ SILT (SP, SP-SM)

REVISIONS		
NO.	DATE	DESCRIPTION

DESIGNED
P. BARUWAL
 DESIGN CHECKED
M. MCARTHUR
 DETAILED
D. FOSTER
 DWG. CHECKED
M. MCARTHUR
 CORRECTIONS
D. FOSTER

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 DRAWING DATE:
MARCH 2025

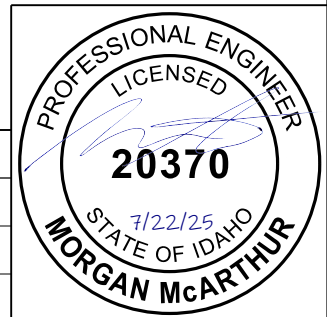


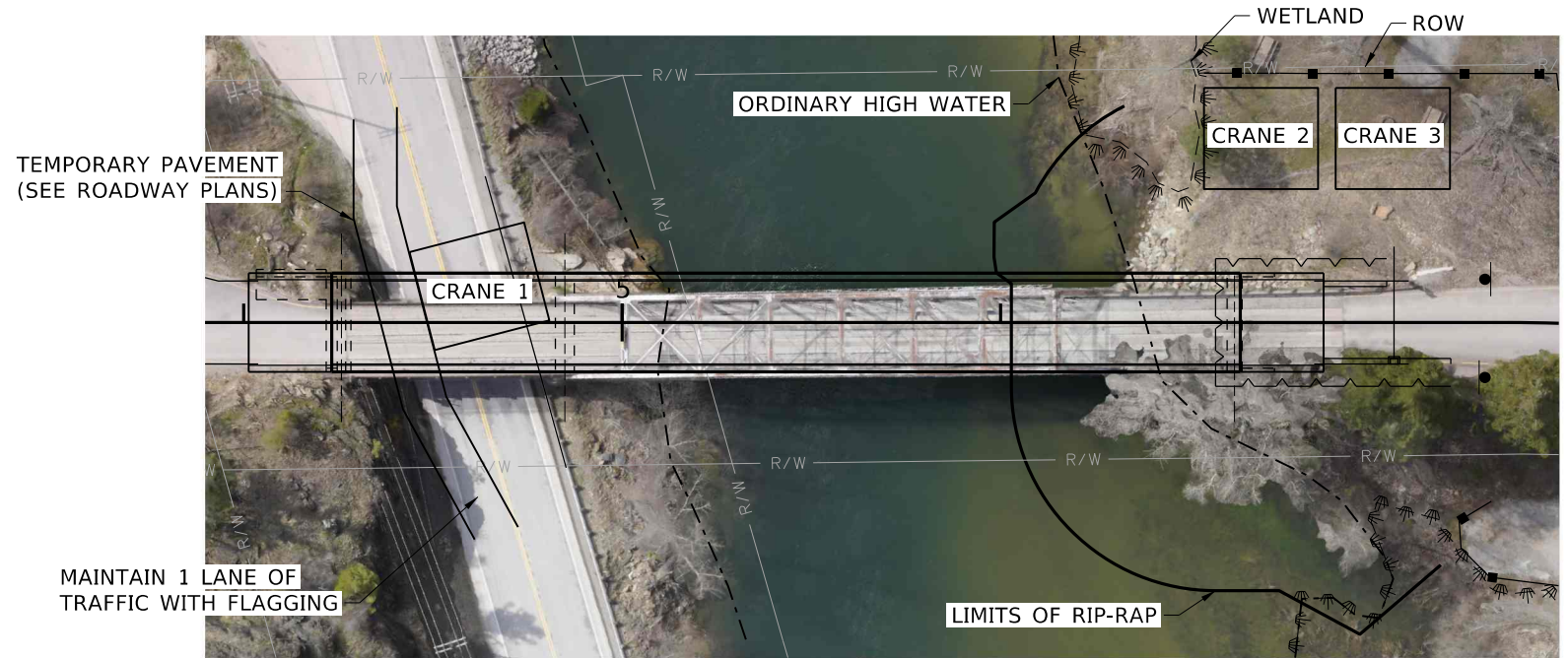
GEOENGINEERS

ENGLISH
 PROJECT NO.
 30786

FOUNDATION INVESTIGATION
 239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
 OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
 STA. 5+44.10

BRIDGE PLANS
 BRIDGE KEY NO.
30786
 COUNTY
SHOSHONE
 BRIDGE DWG. NO.
-
 KEY NO.
30786
 SHEET
5 OF 41



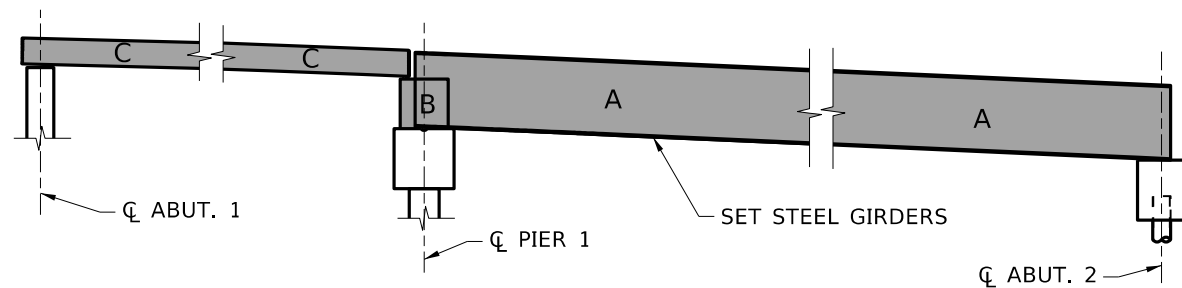


EXISTING BRIDGE REMOVAL AND GIRDER ERECTION CRANE LAYOUT

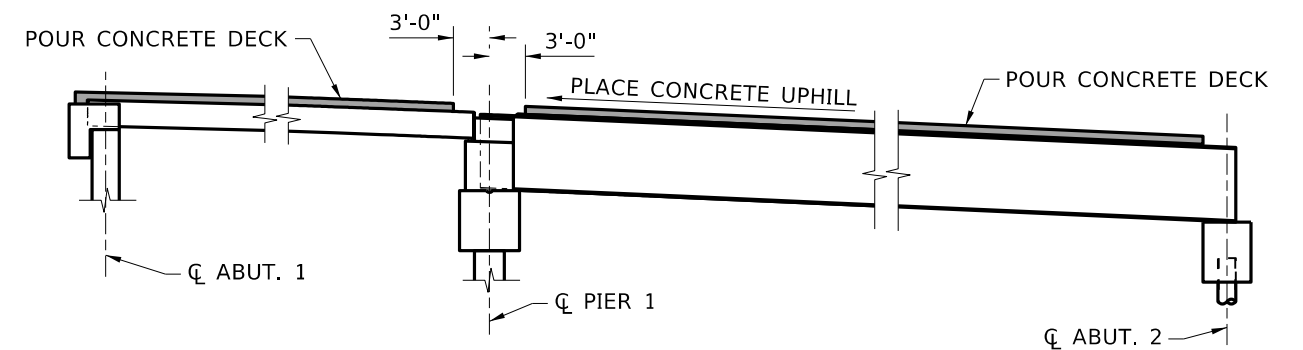
NOTE: CRANE LOCATIONS ARE SHOWN FOR CONCEPT ONLY. FINAL LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR.

NOTES

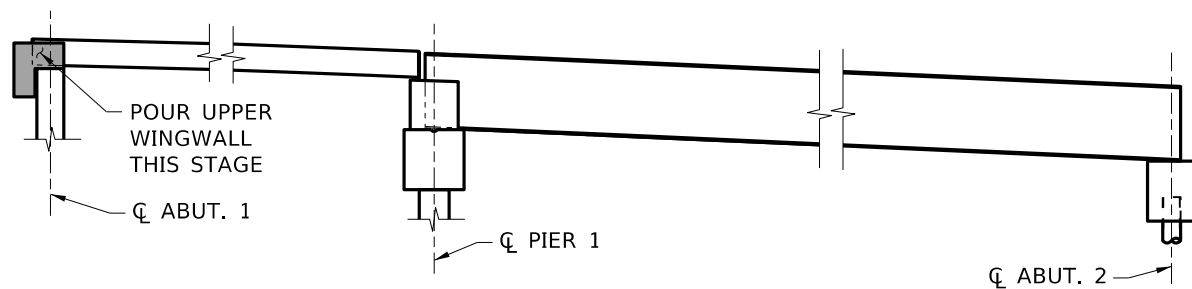
1. NO DEVIATION FROM THE SEQUENCE SHOWN WILL BE PERMITTED UNLESS APPROVED BY THE ENGINEER.
2. STAGE 3 AREAS NEED NOT BE PLACED SIMULTANEOUSLY.
3. DO NOT PLACE STAGE 1C UNTIL STAGE 1B CONCRETE HAS ACHIEVED DESIGN STRENGTH.
4. DO NOT PLACE STAGE 4 AREAS UNTIL AT LEAST 48 HOURS AFTER STAGE 3 IS COMPLETE.



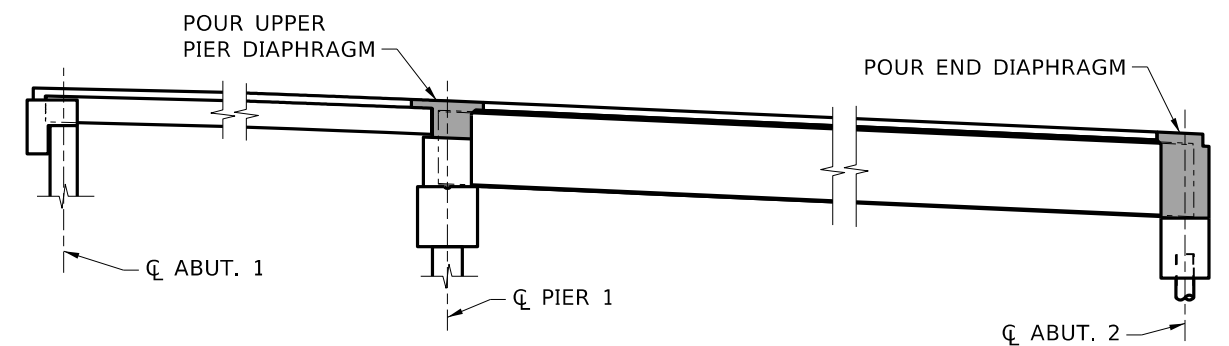
STAGE 1
 A. SET STEEL GIRDERS
 B. POUR LOWER PIER 1 DIAPHRAGM
 C. SET VOIDED SLABS



STAGE 3
 POUR DECK



STAGE 2
 POUR ABUTMENT 1 END DIAPHRAGM



STAGE 4
 POUR PIER AND ABUT 2 DIAPHRAGMS

NO.	DATE	BY	DESCRIPTION
▲			
▲			
▲			
▲			

DESIGNED T. ZANONI
DESIGN CHECKED G. GRIFFIN
DETAILED D. FOSTER
DWG. CHECKED G. GRIFFIN
CORRECTIONS D. FOSTER

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 30786_bdt1_d06.dgn
DRAWING DATE: JULY 2025




DAVID EVANS AND ASSOCIATES INC.

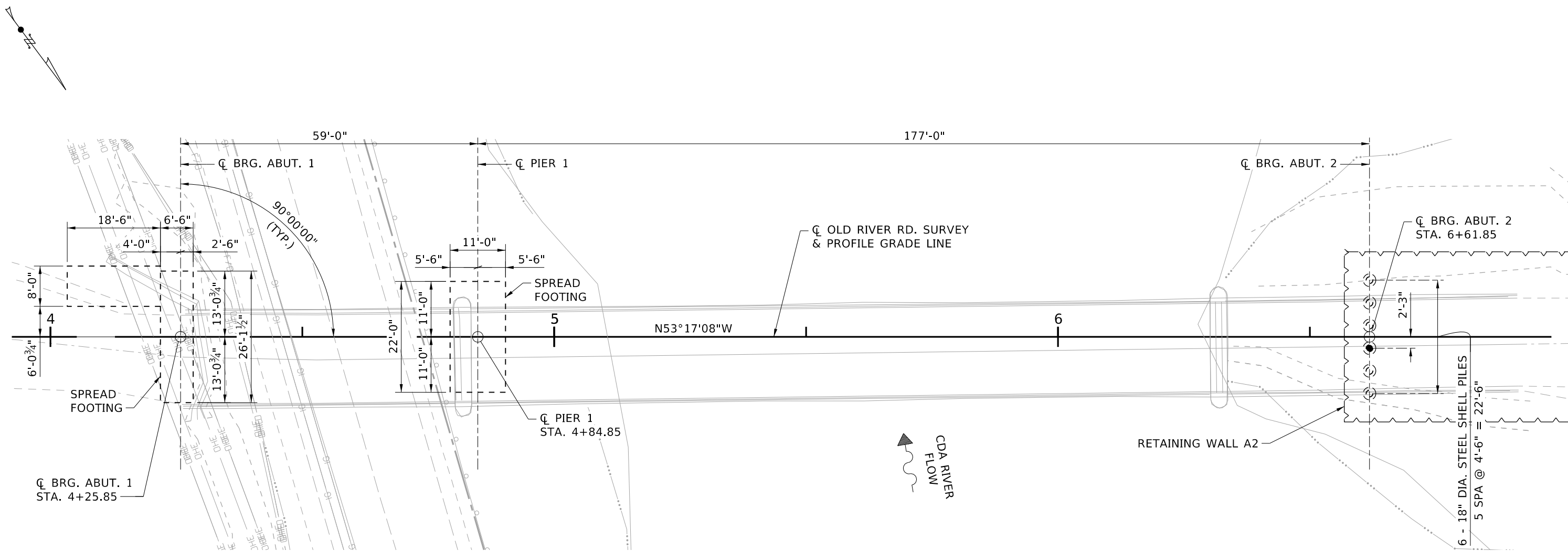
ENGLISH
PROJECT NO. 30786

CONSTRUCTION PHASING
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10

BRIDGE PLANS	
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 6 OF 41



GREG GRIFFIN



FOUNDATION LAYOUT
1"=20'-0"

LEGEND

- TEST PILE & CMP SLEEVE
- ⊙ VERTICAL PILE & CMP SLEEVE

NOTES

1. SEE SHEET 8 FOR PILE SCHEDULE, DETAILS, AND NOTES.
2. FOR UTILITY INFORMATION, SEE SHEET 1 AND UTILITY PLANS.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
P. BARUWAL
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME
30786_bdt1_d07.dgn
DRAWING DATE:
JULY 2025



DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO.
30786

FOUNDATION LAYOUT
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS
BRIDGE KEY NO.
30786
COUNTY
SHOSHONE
KEY NO.
30786
BRIDGE DWG. NO.
-
SHEET
7 OF 41

NOTES

MATERIAL SPECIFICATIONS

1. PROVIDE 18" DIAMETER CONCRETE FILLED STEEL SHELL PILES WITH 1/2" WALL THICKNESS THAT CONFORM TO ASTM A-252 GRADE 3 MOD (Fy = 50 ksi) AND OF SUBSECTION 708.30. PROVIDE CLASS 30 CONCRETE THAT IS INCIDENTAL TO THE STEEL SHELL PILE PAY ITEM.
2. PROVIDE BACKUP PLATES THAT CONFORM TO ASTM A-36 OR BE OF THE SAME MATERIAL AS THE STEEL SHELL PILES. PROVIDE BACKUP PLATE AT LEAST 3/8" THICK.
3. DRIVE ALL PILES WITH HARDENED STEEL DRIVE SHOES PER ITD'S QUALIFIED PRODUCTS LIST FOR CATEGORY 505 PILING AND SUB-CATEGORY "STEEL PIPE PILE - 60 DEG CONICAL POINT (BULLET NOSE)."
4. SPLICE PILE ACCORDING TO THE PILE SPLICE DETAIL OR PROVIDE PREFABRICATED SPLICERS ACCORDING TO ITD'S QUALIFIED PRODUCTS LIST FOR CATEGORY 505 PILING AND SUB-CATEGORY "SPLICING FOR STEEL PIPE PILES".

WELDING

5. QUALIFICATION OF WELDERS, MATERIALS, INSPECTION, AND PROCEDURES FOR WELDING SHELL PILES WITH AN O.D. EQUAL TO OR LESS THAN 18" MUST CONFORM TO THE CURRENT EDITION OF AWS D1.1.
6. PROVIDE WELDING QUALIFICATION TESTS TO DEMONSTRATE THE WELDABILITY OF SHELL PILES UNDER FIELD CONDITIONS FOR WELDS TO BE MADE ON THE PILES.
7. ATTACH PILE POINTS AND PREFABRICATED SPLICERS BY WELDING IN ACCORDANCE WITH THE CURRENT EDITION OF AWS D1.1. SUBMIT WELDING DETAILS AND PROCEDURES FOR APPROVAL.

DRIVING DATA

8. SUBMIT THE TYPE AND OPERATION SPECIFICATIONS OF THE HAMMER 15 CALENDAR DAYS BEFORE PILE DRIVING BEGINS.
9. DRIVE PILES TO (REFUSAL) (NOMINAL AXIAL RESISTANCE OF 375 KIPS PER PILE) AS DETERMINED BY A WAVE EQUATION ANALYSIS IN ACCORDANCE WITH 505.03 PART G.
10. THE RATED ENERGY FOR THE HAMMER USED FOR DRIVING PILES IS RECOMMENDED TO BE BETWEEN 23,500 AND 38,000 FOOT-POUNDS. THE RATED ENERGY RANGE MAY BE CHANGED IF APPROVED.
11. NOTIFY THE ENGINEER BEFORE FURTHER PILE DRIVING IF THE HIGHEST PILE TIP ELEVATION IS NOT OBTAINED. DO NOT DRIVE BELOW LOWEST PILE TIP ELEVATION UNLESS APPROVED BY THE ENGINEER.

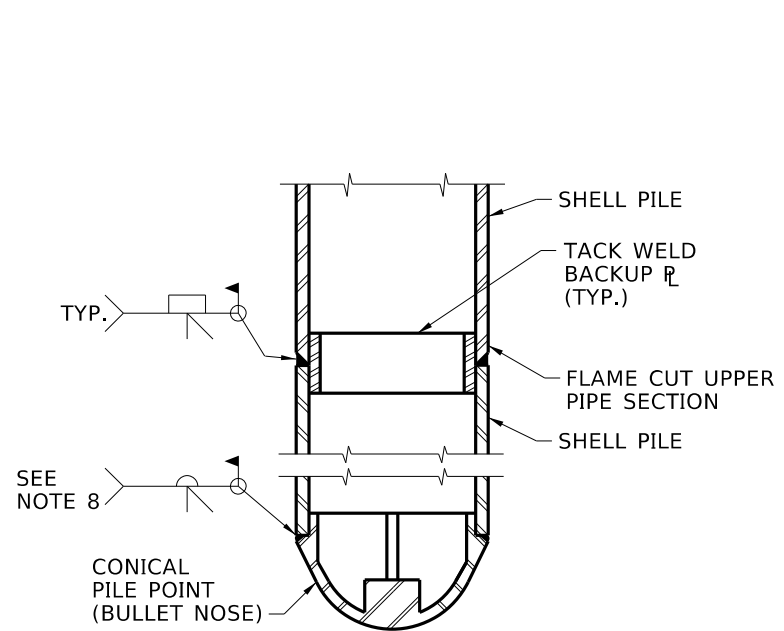
TEST PILES

12. DRIVE THE TEST PILE TO REFUSAL OR TO THE ESTIMATED PILE TIP ELEVATION, WHICHEVER COMES FIRST. FOR EACH TEST PILE PERFORM PILE DYNAMIC TESTING DURING INITIAL DRIVING AND DURING RESTRIKE IF NECESSARY, OR AS DIRECTED.
13. IF THE TEST PILE NOMINAL RESISTANCE IS NOT ACHIEVED DURING INITIAL DRIVING, RESTRIKE THE TEST PILE AFTER A 48 HOUR WAITING PERIOD. IF THE TEST PILE CAPACITY IS NOT ACHIEVED AFTER A 48 HOUR SETUP, NOTIFY THE GEOTECHNICAL ENGINEER BEFORE FURTHER PILE DRIVING. IF THE TEST PILE ACHIEVES THE NOMINAL AXIAL RESISTANCE DURING INITIAL DRIVING, TEST PILE RESTRIKE IS NOT REQUIRED.
14. INCORPORATE TEST PILES THAT MEET PRODUCTION PILE DRIVING CRITERIA INTO THE PERMANENT WORK.
15. PERFORM CAPWAP ANALYSIS AT TWO TEST PILE PENETRATION DEPTHS:
 - a. AT THE DEPTH WHERE THE CASE METHOD INDICATES THE ESTIMATED TEST PILE CAPACITY EQUALS THE NOMINAL AXIAL RESISTANCE SHOWN ON THE PLANS (THIS DEPTH MUST BE EQUAL TO OR DEEPER THAN THE HIGHEST PILE TIP ELEVATION SHOWN ON THE PLANS), OR AS DIRECTED.
 - b. AT THE END OF INITIAL DRIVING AND ON PILE RESTRIKES.

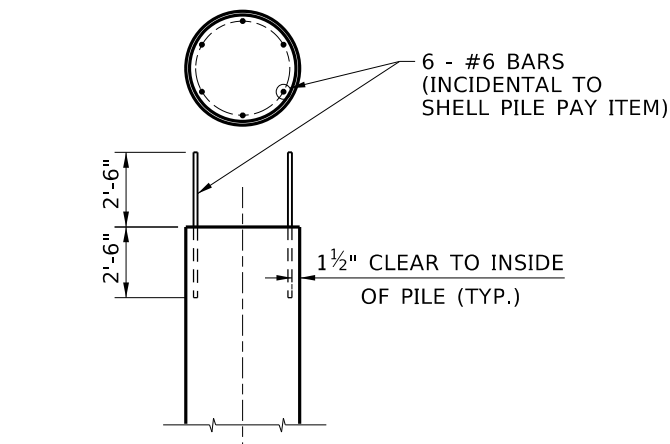
MISCELLANEOUS

16. PILE TIP ELEVATIONS ARE SHOWN FOR ESTIMATING PURPOSES ONLY.
17. ESTIMATED PILE LENGTHS ARE COMPUTED FROM PILE CUT-OFF AND ESTIMATED PILE TIP ELEVATIONS.
18. EMBED PILE SLEEVE BELOW BOTTOM OF MSE WALL AS NEEDED FOR STABILITY

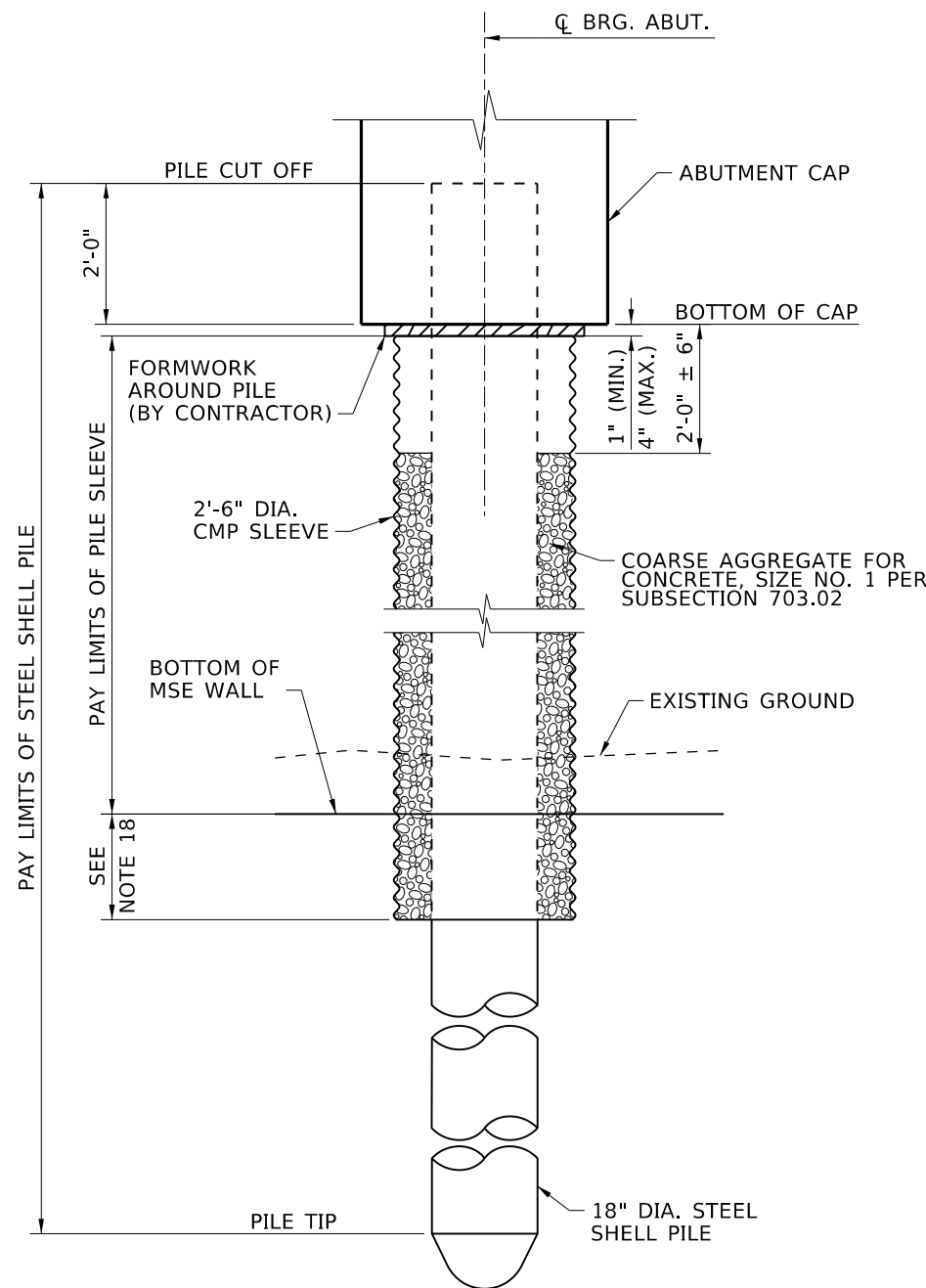
PILE SCHEDULE						
LOCATION	NO.	ELEVATION				ESTIMATED PILE LENGTH
		PILE CUT-OFF	ESTIMATED PILE TIP	HIGHEST PILE TIP	LOWEST PILE TIP	
ABUT. 2	6	2183.50	2129.00	2141.50	2125.00	54.50'



SHELL PILE DETAIL
N.T.S.



SHELL PILE TENSION CONNECTION
N.T.S.



SHELL PILE & CMP SLEEVE DETAIL
(MSE WALL NOT SHOWN FOR CLARITY)
3/8" = 1'-0"

REVISIONS			
NO.	DATE	BY	DESCRIPTION
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▲			
▲			
▲			

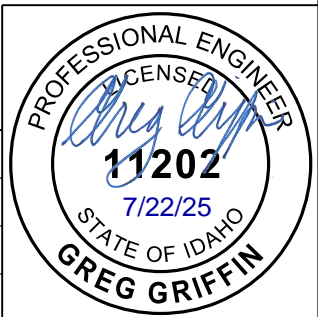
DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	CADD FILE NAME
DETAILED D. FOSTER	30786_bdt1_d08.dgn
DWG. CHECKED G. GRIFFIN	DRAWING DATE: JULY 2025
CORRECTIONS D. FOSTER	

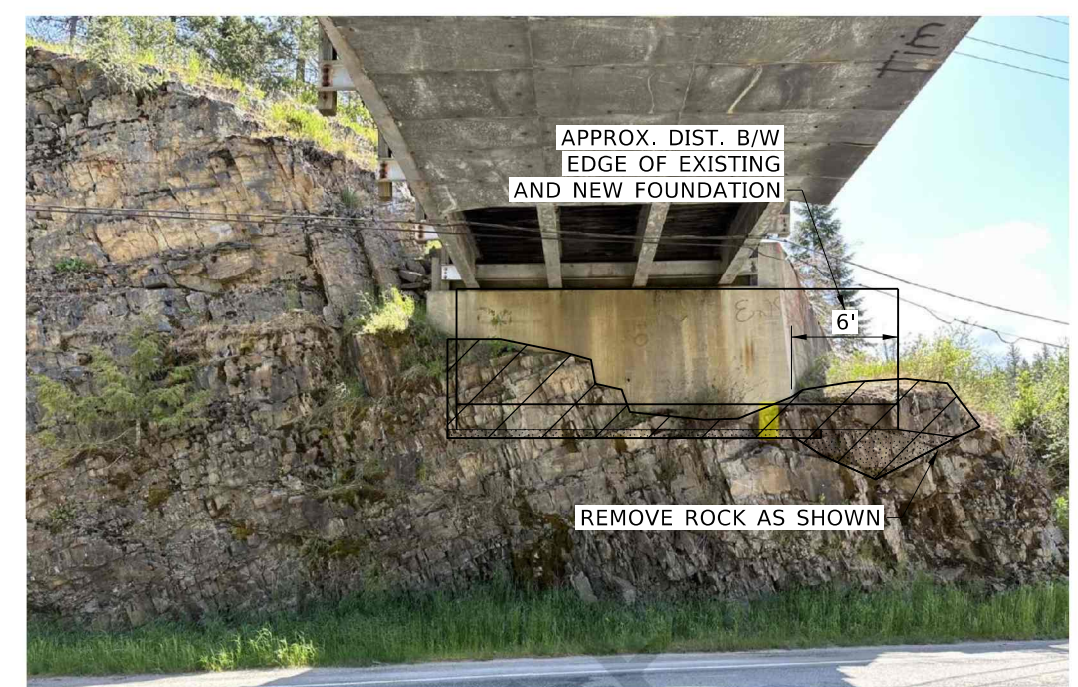
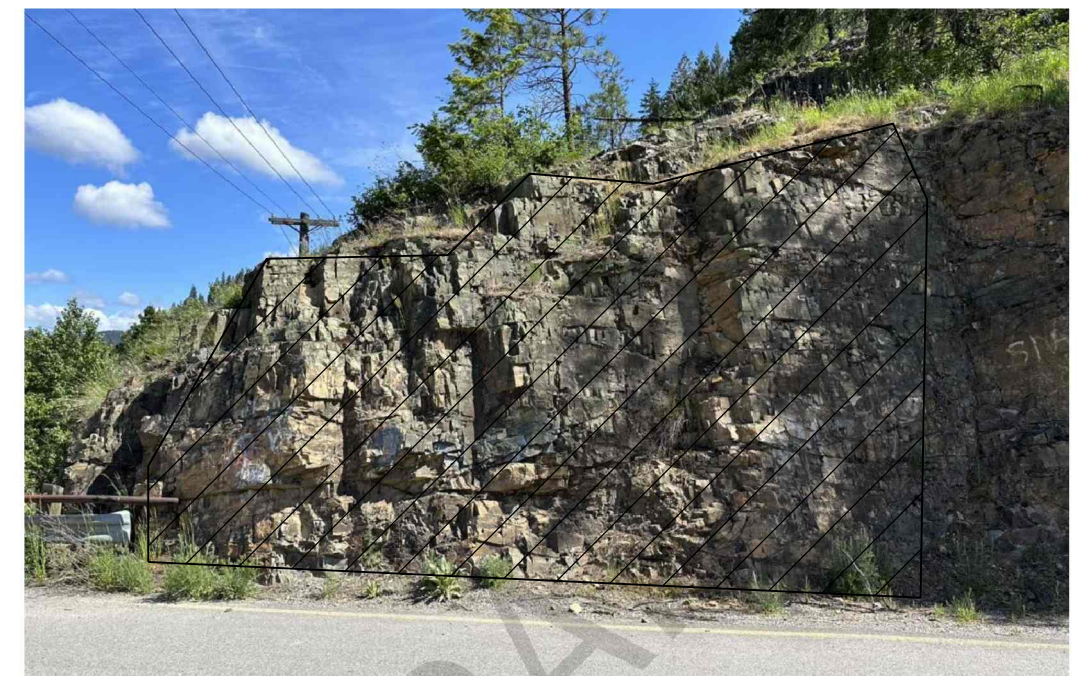
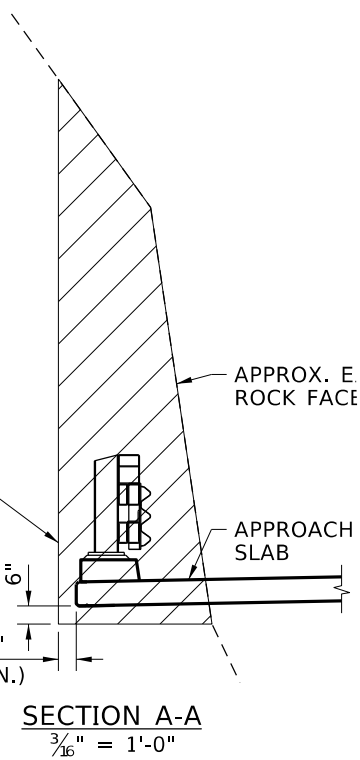
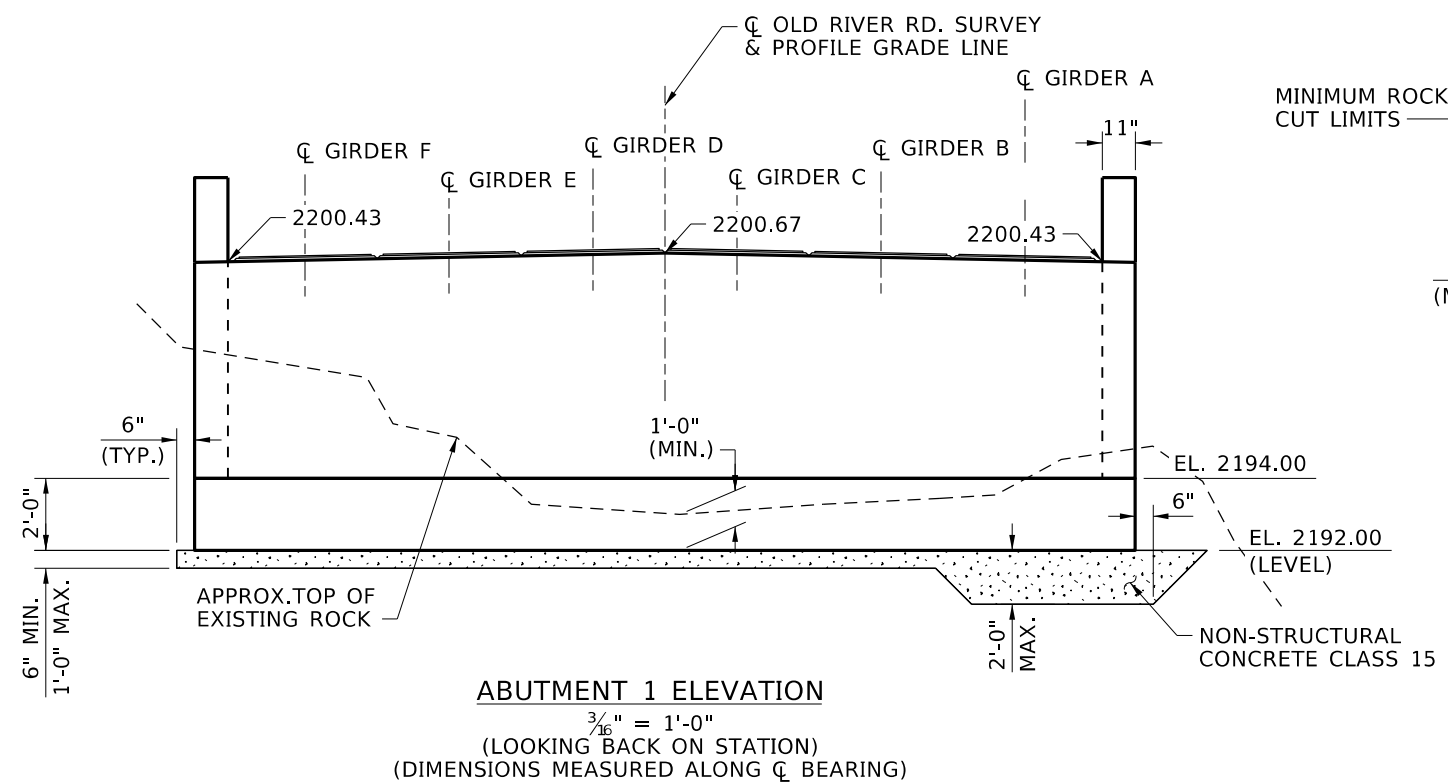
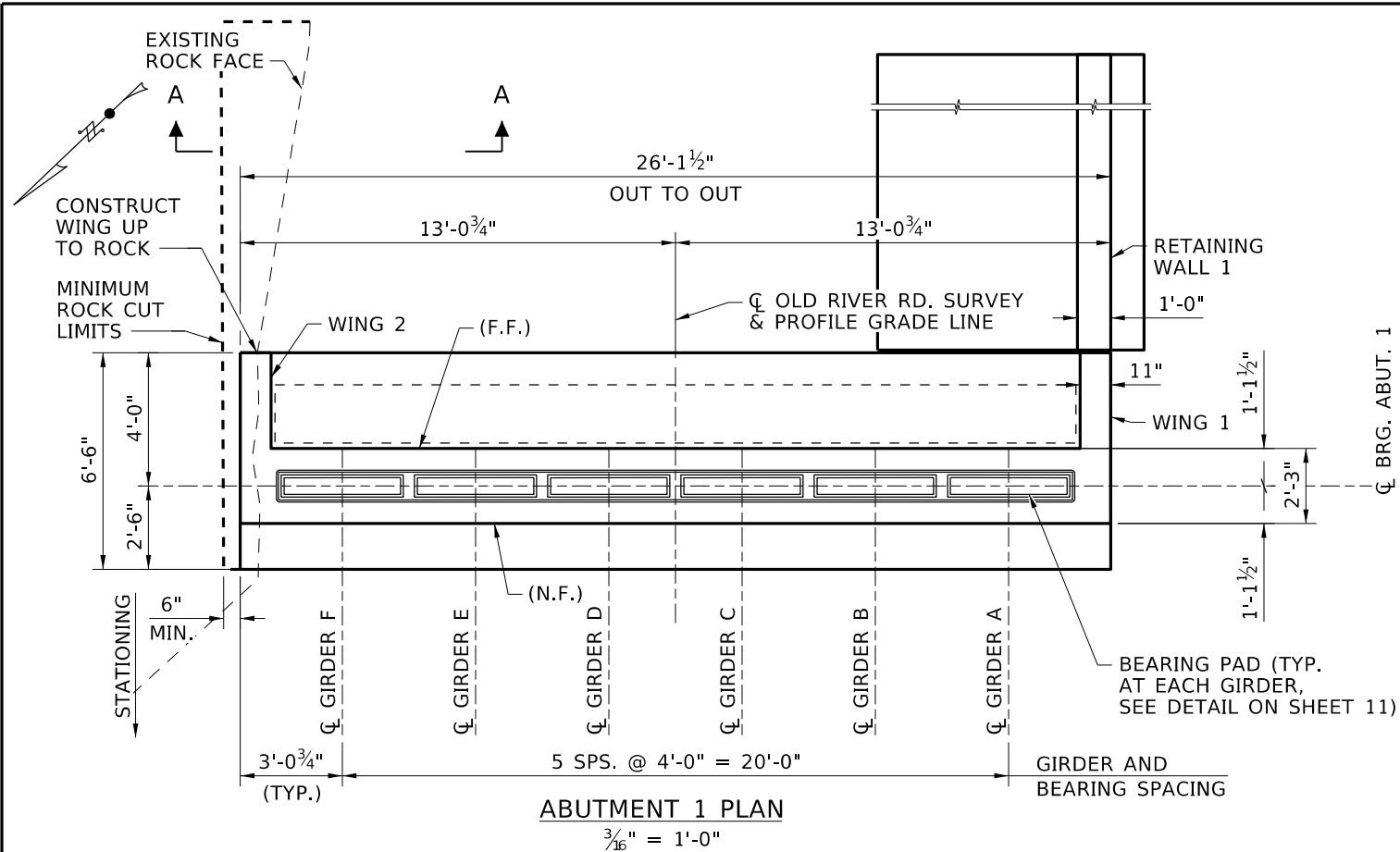

DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO.
30786

FOUNDATION DETAILS
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10

BRIDGE PLANS
BRIDGE KEY NO. 30786
COUNTY SHOSHONE
KEY NO. 30786
BRIDGE DWG. NO. -
SHEET 8 OF 41





LEGEND:
 [Hatched Box] APPROXIMATE LIMITS OF ROCK EXCAVATION
 [Dotted Box] NON-STRUCTURAL CONCRETE CLASS 15

REVISIONS			
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DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
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DETAILED D. FOSTER	
DWG. CHECKED G. GRIFFIN	
CORRECTIONS D. FOSTER	

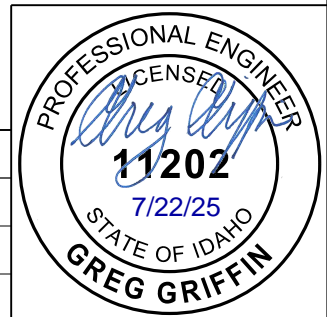
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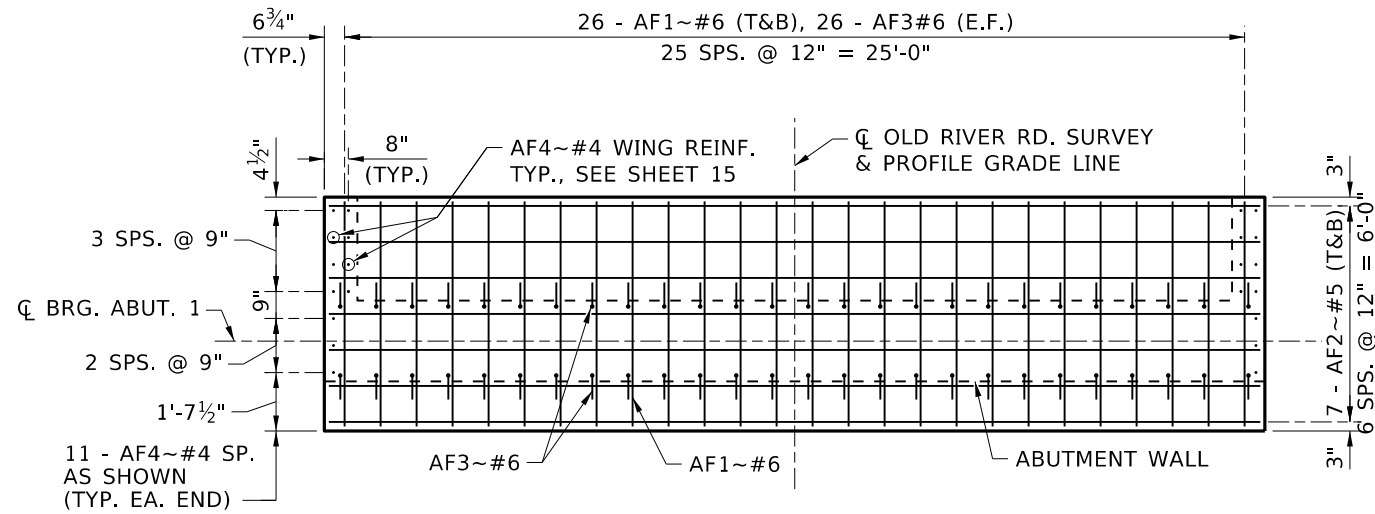


DAVID EVANS AND ASSOCIATES INC.

ENGLISH	ABUTMENT 1 LAYOUT
PROJECT NO. 30786	
30786	239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10

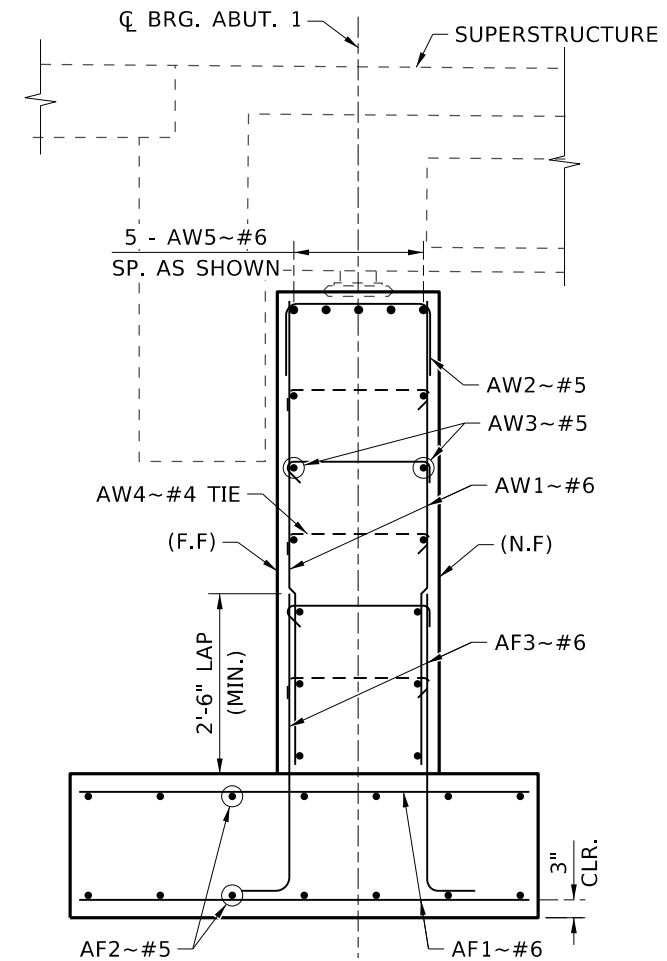
BRIDGE PLANS	
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 9 OF 41





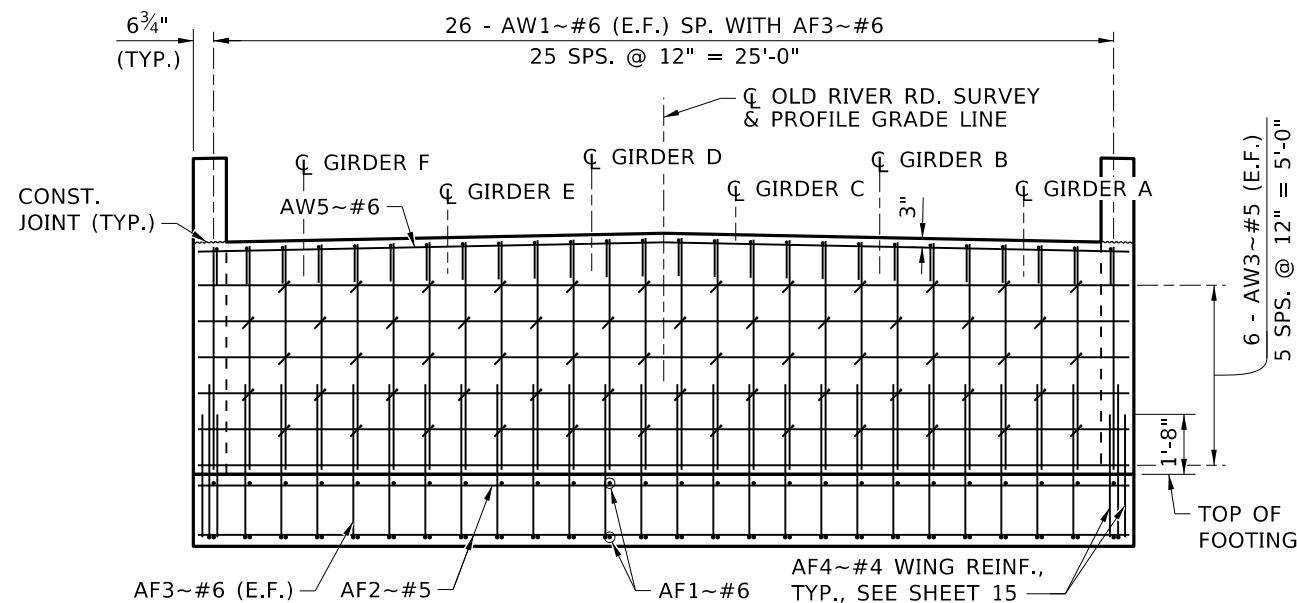
ABUTMENT 1 FOOTING PLAN

3/16" = 1'-0"



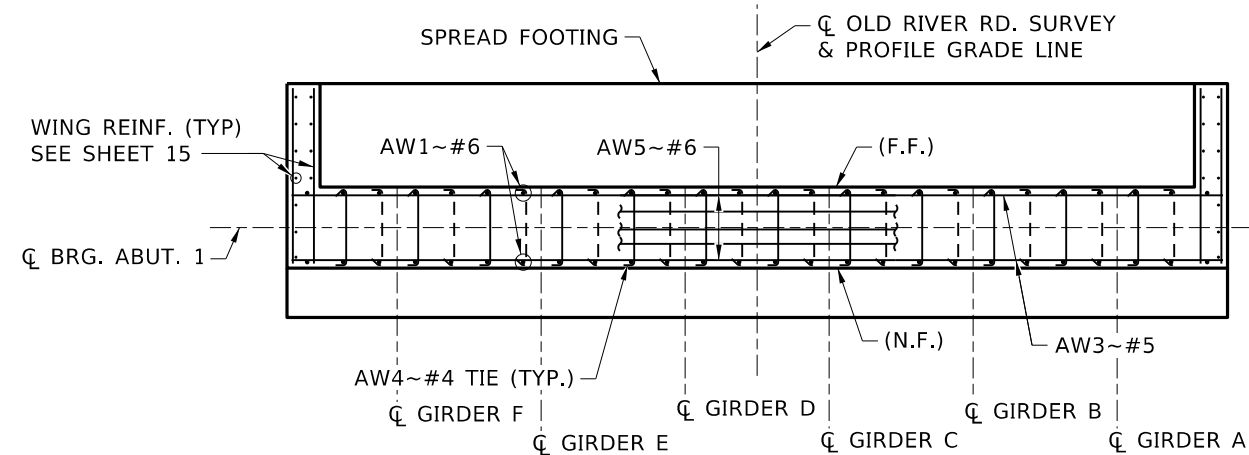
SECTION A-A

3/8" = 1'-0"



ABUTMENT 1 ELEVATION

3/16" = 1'-0"



ABUTMENT 1 WALL PLAN

3/16" = 1'-0"

NOTE:

HOOK TIES AROUND HORIZONTAL AND VERTICAL REINFORCEMENT. ALTERNATE 135° HOOKS IN ADJACENT BARS.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
P. BARUWAL
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME
30786_bdt1.d10.dgn
DRAWING DATE:
JULY 2025



DAVID EVANS AND ASSOCIATES INC.

ENGLISH

PROJECT NO.

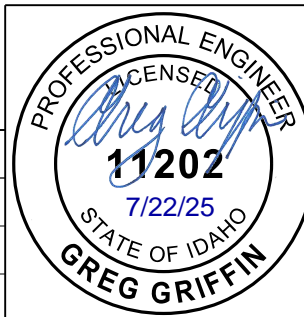
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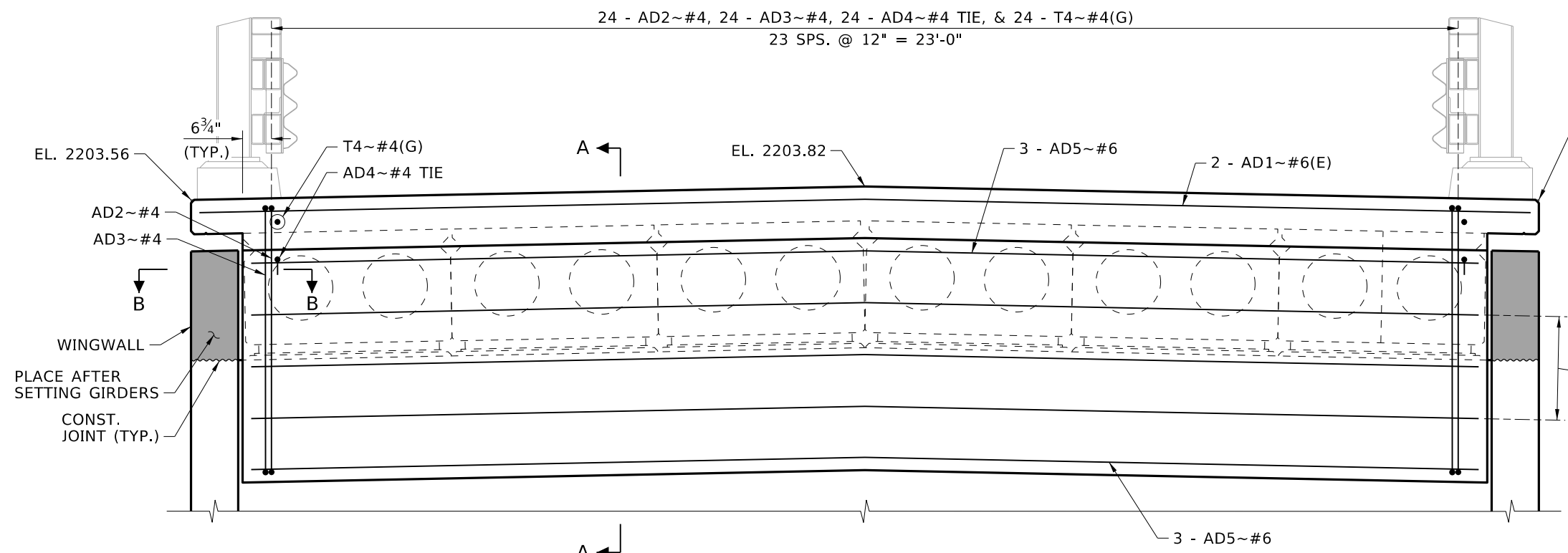
ABUTMENT 1 DETAILS

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

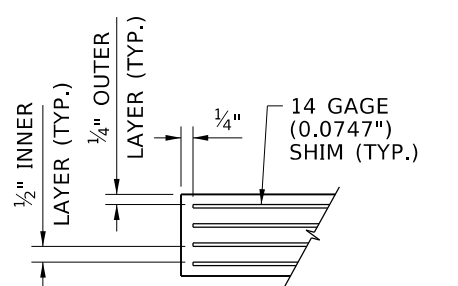
BRIDGE PLANS

BRIDGE KEY NO.
30786
COUNTY
SHOSHONE
KEY NO.
30786
BRIDGE DWG. NO.
-
SHEET
10 OF 41

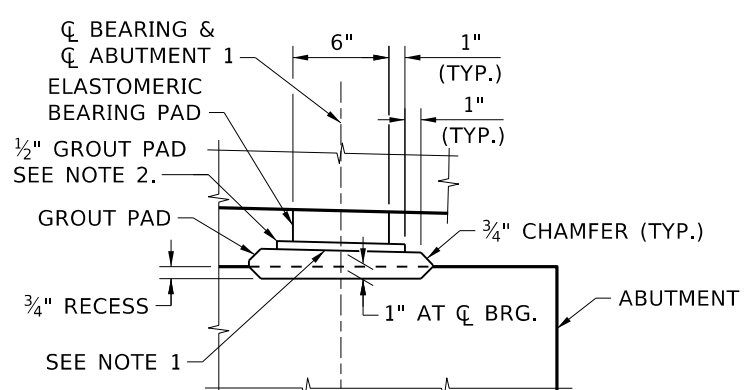




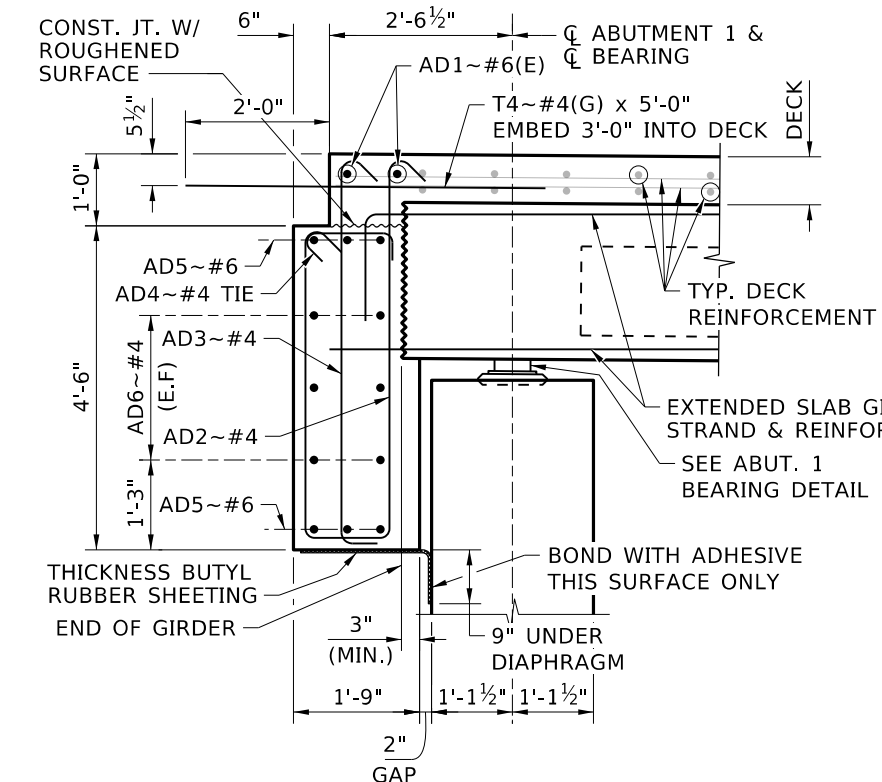
ABUTMENT 1 DIAPHRAGM ELEVATION
(LOOKING BACK)
ELEVATIONS SHOWN ARE FINISH GRADE @ ϕ BRG.
 $\frac{3}{8}$ " = 1'-0"



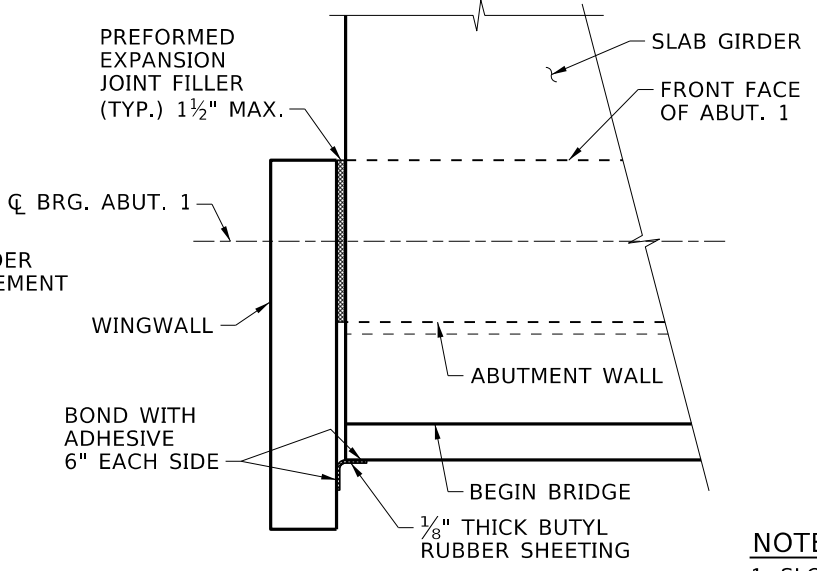
ABUTMENT 1 BEARING DETAIL
3" = 1'-0"



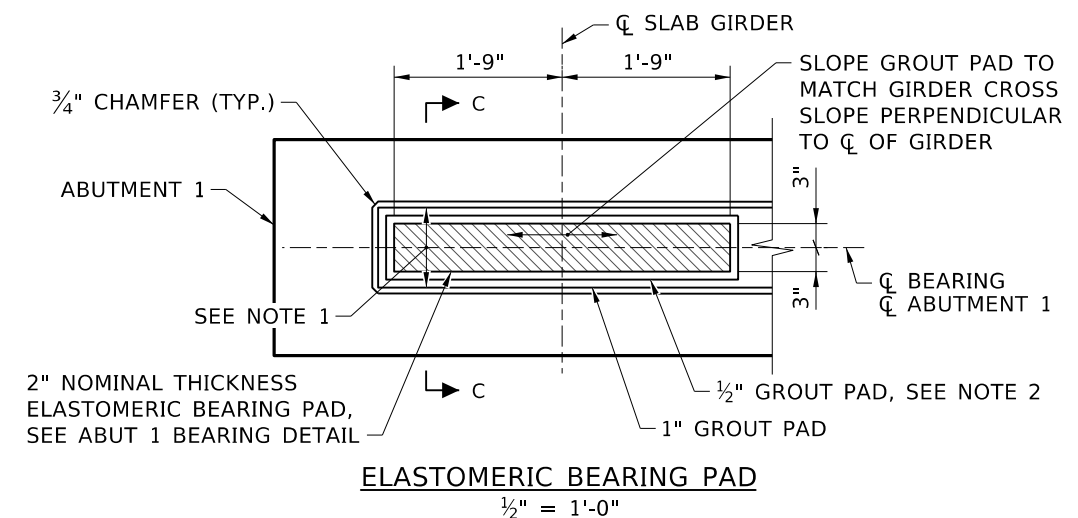
SECTION C-C
1" = 1'-0"



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



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



ELASTOMERIC BEARING PAD
 $\frac{1}{2}$ " = 1'-0"

NOTES

1. SLOPE GROUT PAD TO MATCH LOCAL GRADE OF 2.4%.
2. PLACE 1/2" GROUT PAD A MIN. OF 3 DAYS AFTER 1" GROUT PAD IS POURED. PLACE ELASTOMERIC BEARING PADS AND PRESTRESSED SLABS BEFORE 1/2" THICK GROUT PAD IS FULLY SET TO INSURE UNIFORM BEARING ACROSS FULL WIDTH OF SLAB. IF UNIFORM BEARING IS NOT ACHIEVED LIFT SLAB AND REPEAT PROCEDURE. REMOVE ANY EXCESS GROUT ABOVE BOTTOM OF BEARING PADS IMMEDIATELY AFTER PLACING SLAB.

NO.	DATE	BY	DESCRIPTION

DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	CADD FILE NAME
DETAILED D. FOSTER	30786_bdt1.d11.dgn
DWG. CHECKED G. GRIFFIN	DRAWING DATE: JULY 2025
CORRECTIONS D. FOSTER	

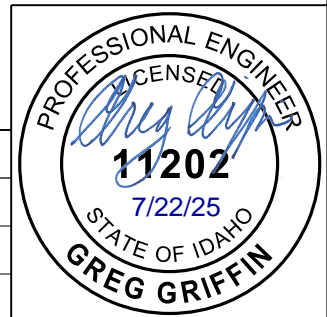
SHOSHONE COUNTY
IDAHO

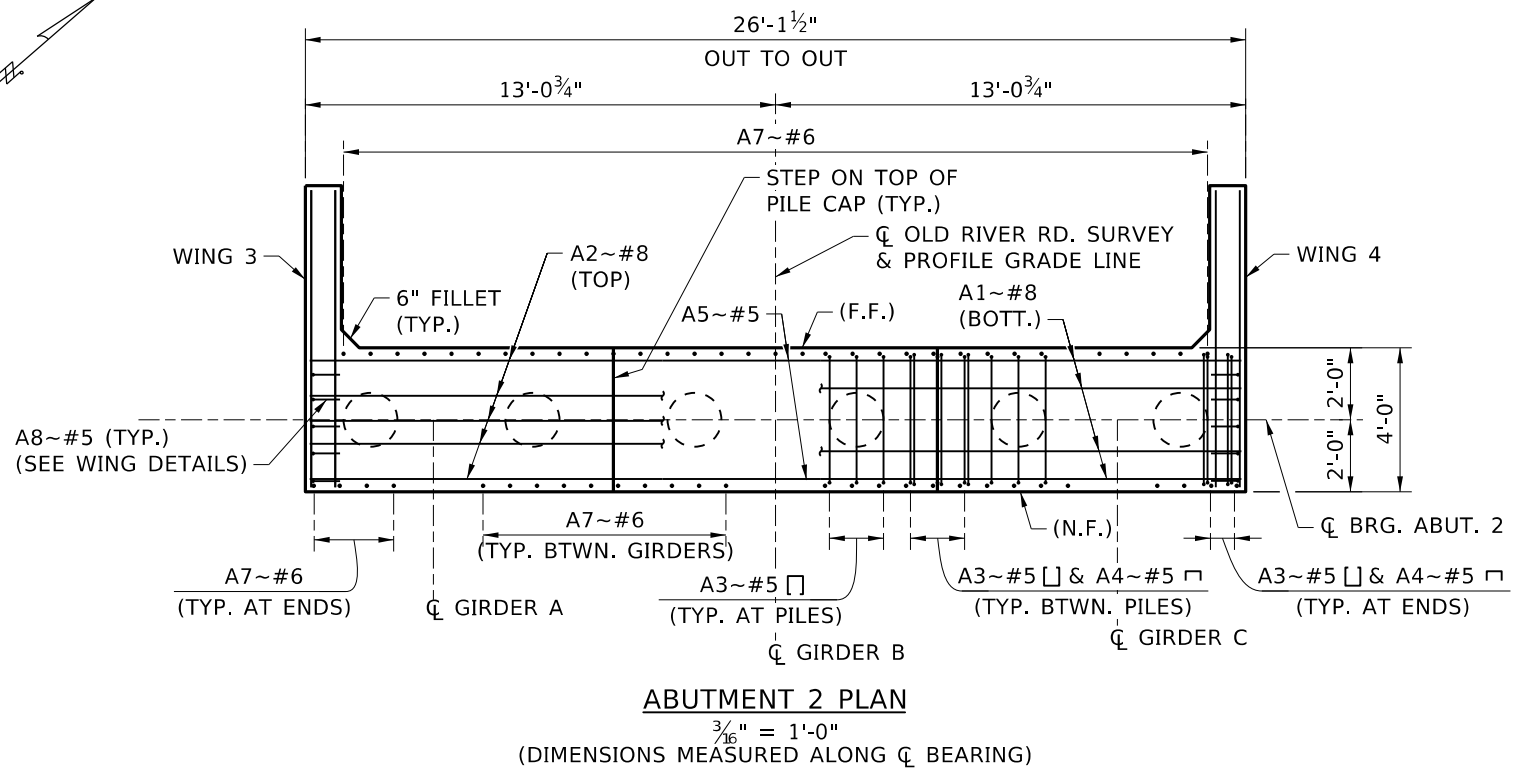
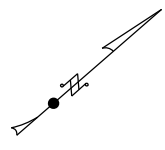
DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO. 30786

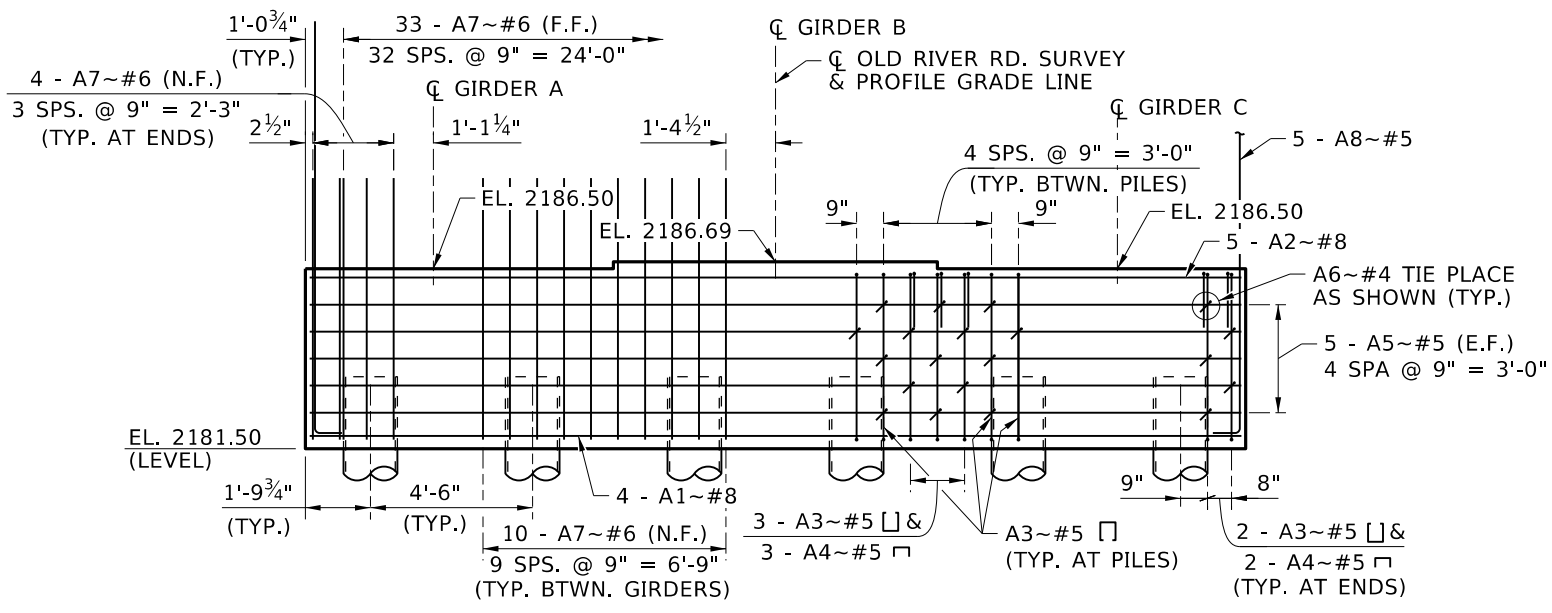
ABUTMENT 1 DIAPHRAGM
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10

BRIDGE PLANS	
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 11 OF 41

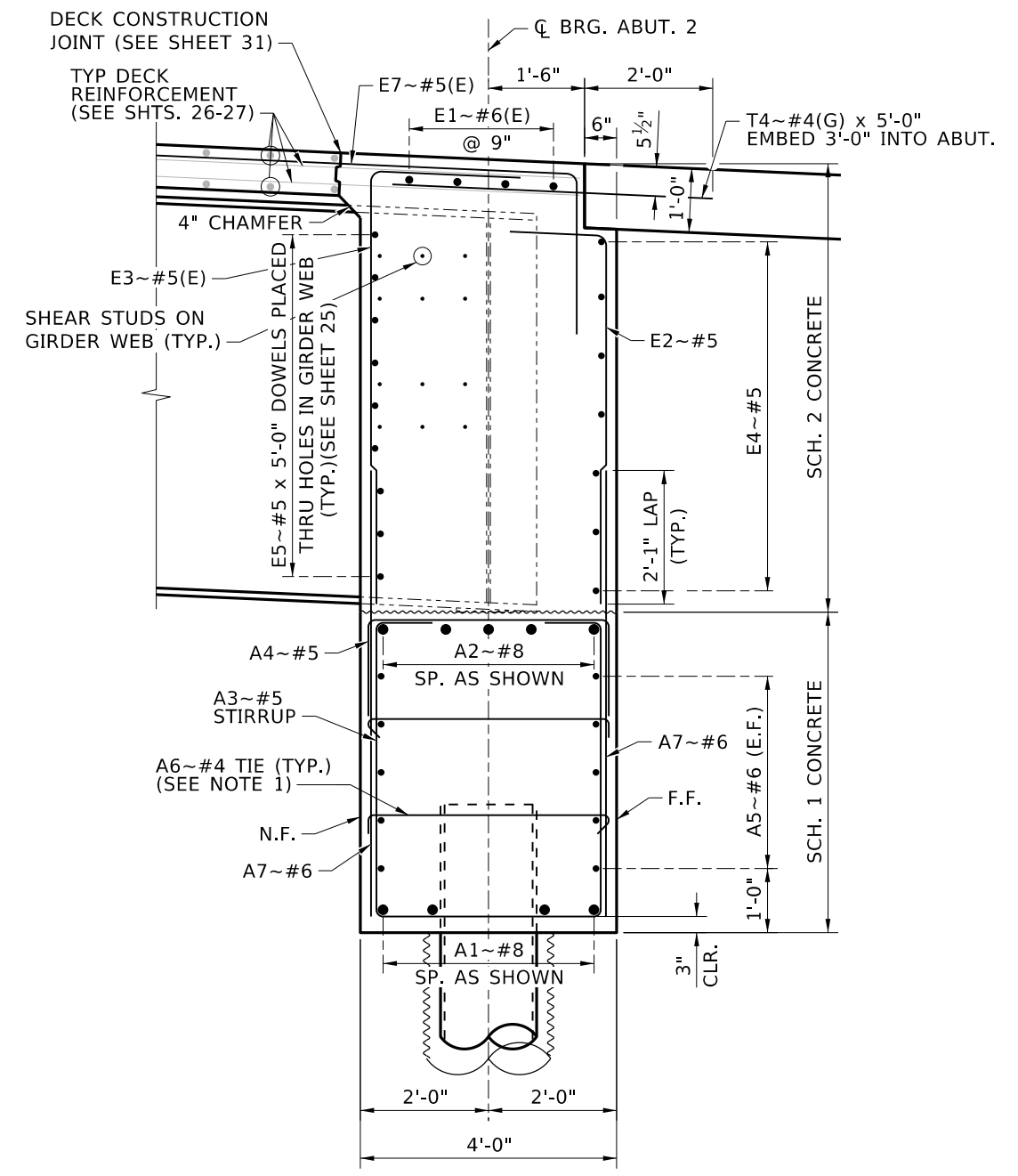




ABUTMENT 2 PLAN
 $\frac{3}{16}'' = 1'-0''$
 (DIMENSIONS MEASURED ALONG \bar{C} BEARING)



ABUTMENT 2 ELEVATION
 $\frac{3}{16}'' = 1'-0''$
 (DIMENSIONS MEASURED ALONG \bar{C} BEARING)



ABUTMENT 2 TYPICAL SECTION
 $\frac{3}{8}'' = 1'-0''$

- NOTES**
- HOOK TIES AROUND HORIZONTAL AND VERTICAL REINFORCEMENT. ALTERNATE 135° HOOKS IN ADJACENT BARS.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	
DETAILED D. FOSTER	
DWG. CHECKED G. GRIFFIN	
CORRECTIONS D. FOSTER	

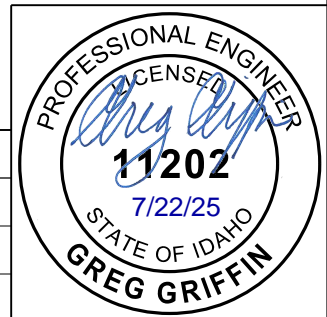
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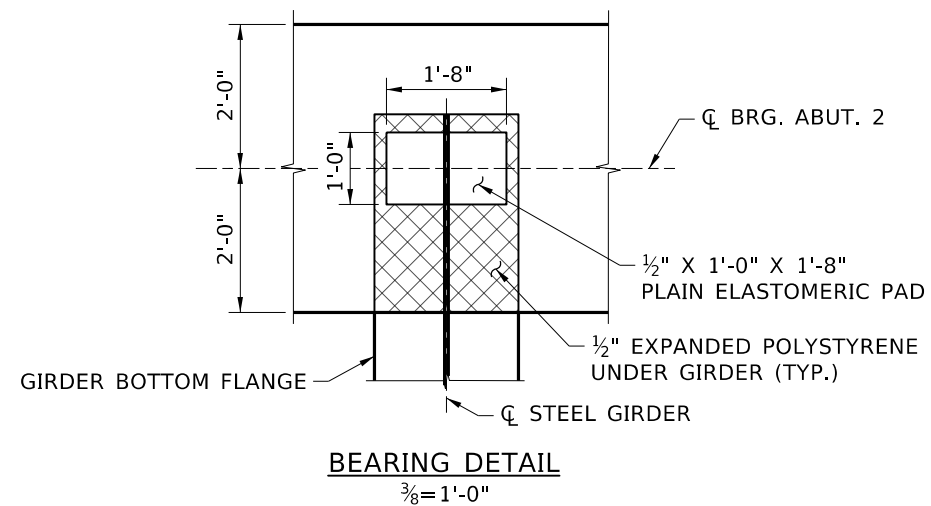


ENGLISH
PROJECT NO. 30786

ABUTMENT 2 LAYOUT
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10

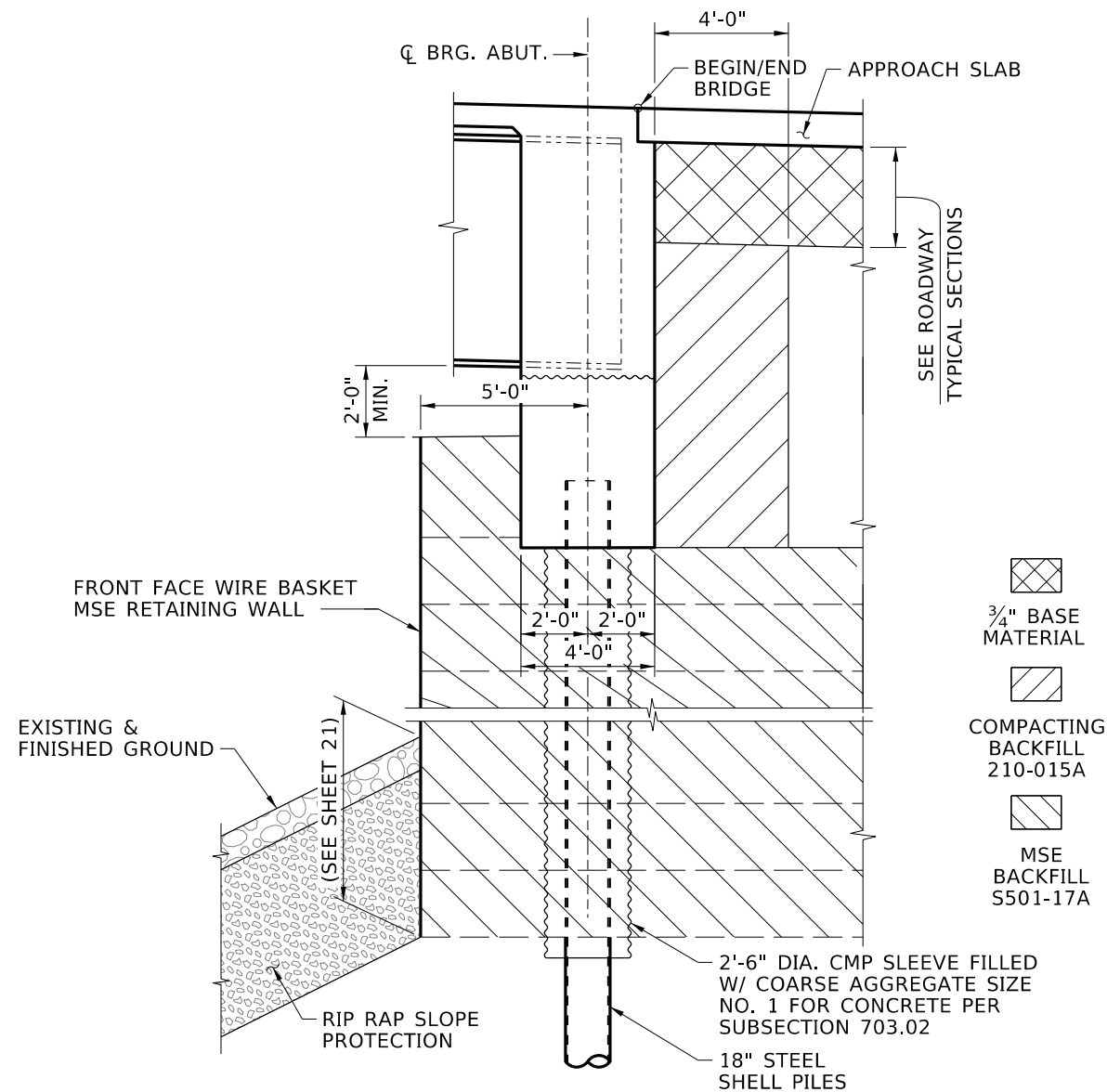
BRIDGE PLANS	
BRIDGE KEY NO. 30786	KEY NO. 30786
COUNTY SHOSHONE	BRIDGE DWG. NO. -
SHEET 12 OF 41	





BEARING DETAIL

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



SECTION THRU ABUTMENT

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

- $\frac{3}{4}$ " BASE MATERIAL
- COMPACTING BACKFILL 210-015A
- MSE BACKFILL 5501-17A

REVISIONS			
NO.	DATE	BY	DESCRIPTION
▲			
▲			
▲			
▲			

DESIGNED
P. BARUWAL
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME
30786_bdt1_d13.dgn
DRAWING DATE:
JULY 2025



DAVID EVANS AND ASSOCIATES INC.

ENGLISH

PROJECT NO.

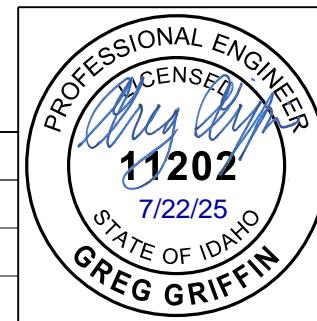
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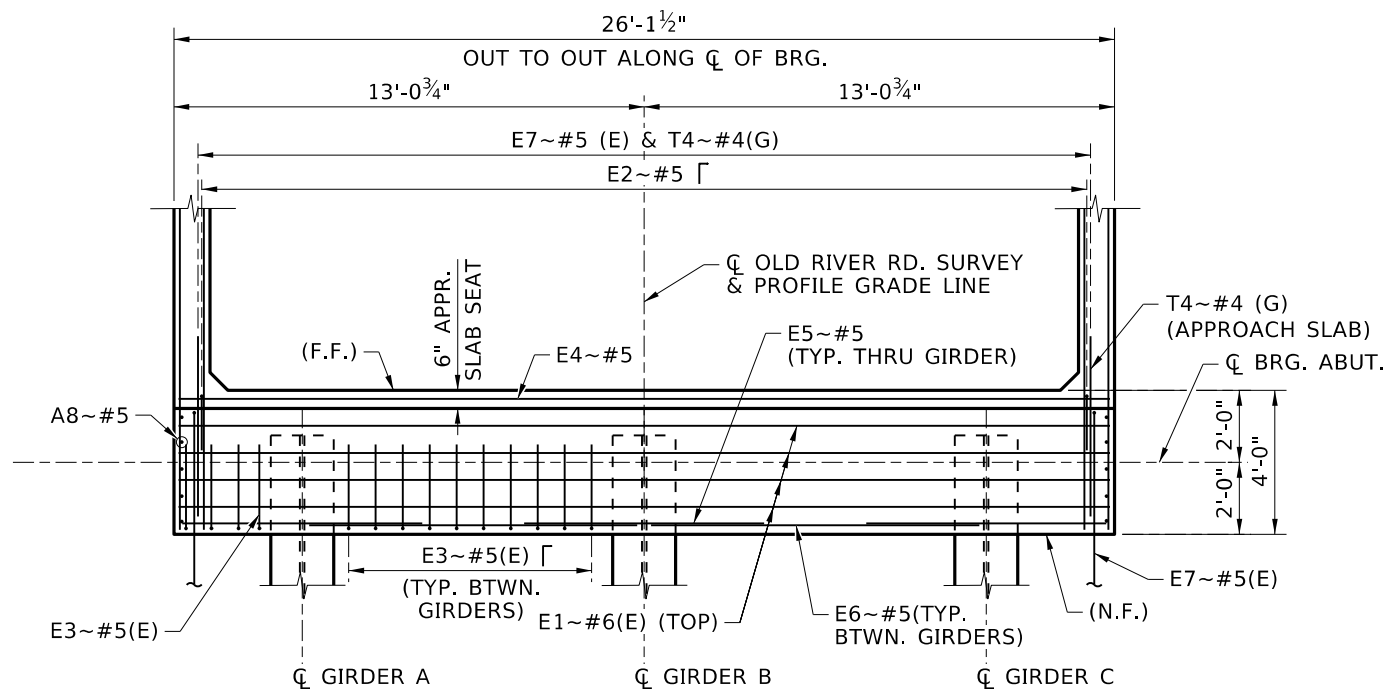
ABUTMENT 2 DETAILS

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

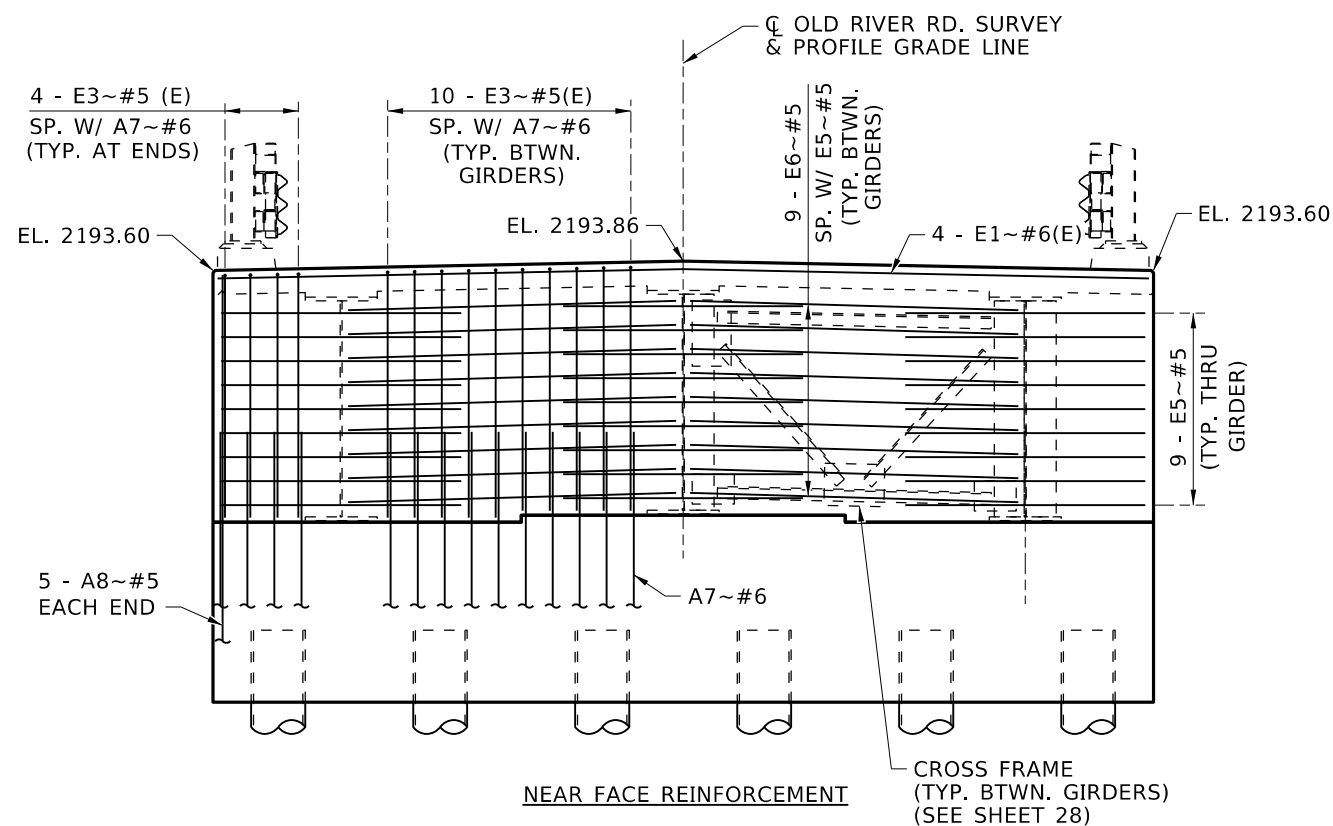
BRIDGE PLANS

BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 13 OF 41

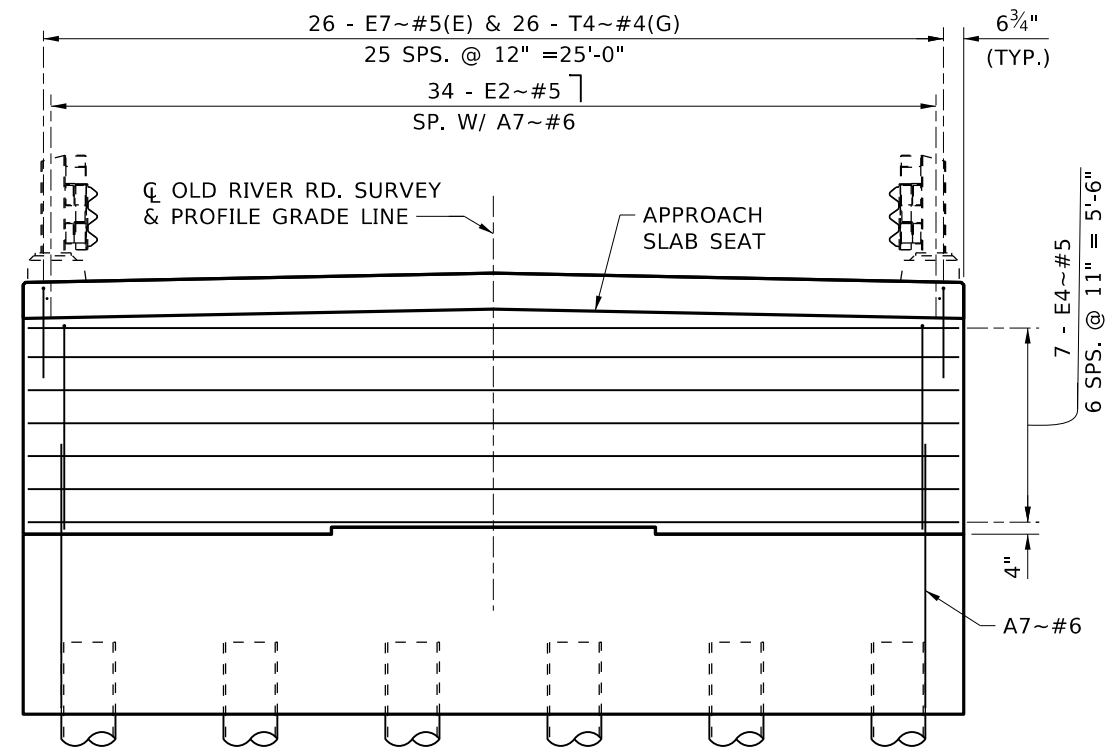




ABUTMENT 2 DIAPHRAGM PLAN
 (DIMENSIONS MEASURED ALONG $\frac{3}{16}$ " = 1'-0" \bar{C} BEARING)



NEAR FACE REINFORCEMENT
 CROSS FRAME (TYP. BTWN. GIRDERS) (SEE SHEET 28)



FILL FACE REINFORCEMENT

NOTE
 1. ELEVATIONS ARE TO TOP OF DECK ALONG \bar{C} BEARING.

ABUTMENT 2 DIAPHRAGM ELEVATION
 (LOOKING AHEAD ON STATION)
 $\frac{3}{16}$ " = 1'-0"

REVISIONS			
NO.	DATE	BY	DESCRIPTION

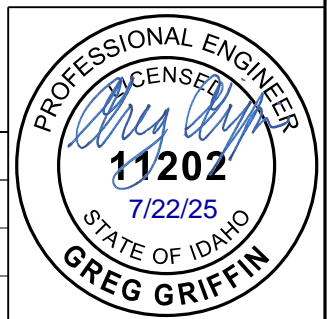
DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	
DETAILED D. FOSTER	CADD FILE NAME
DWG. CHECKED G. GRIFFIN	30786_bdt1_d14.dgn
CORRECTIONS D. FOSTER	DRAWING DATE: JULY 2025


DAVID EVANS AND ASSOCIATES INC.

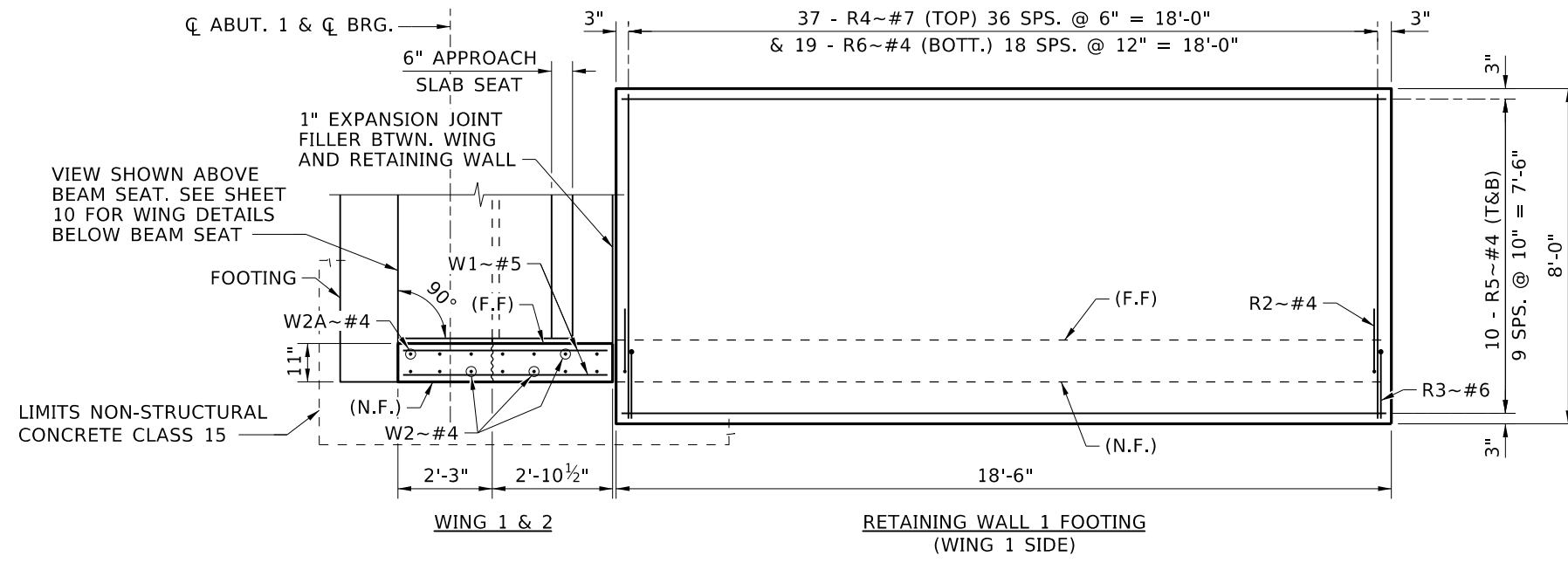
ENGLISH
PROJECT NO.
30786

ABUTMENT 2 DIAPHRAGM	
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10	

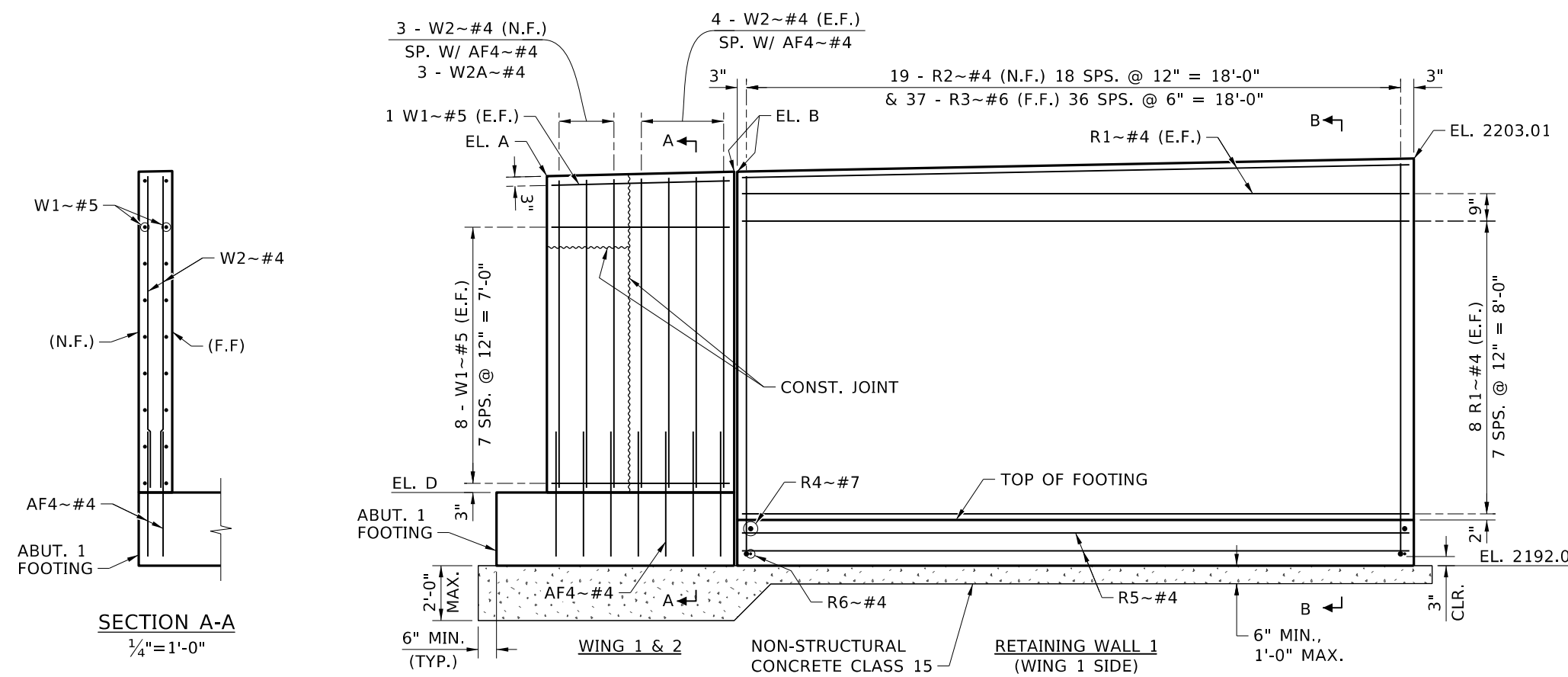
BRIDGE PLANS	
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 14 OF 41



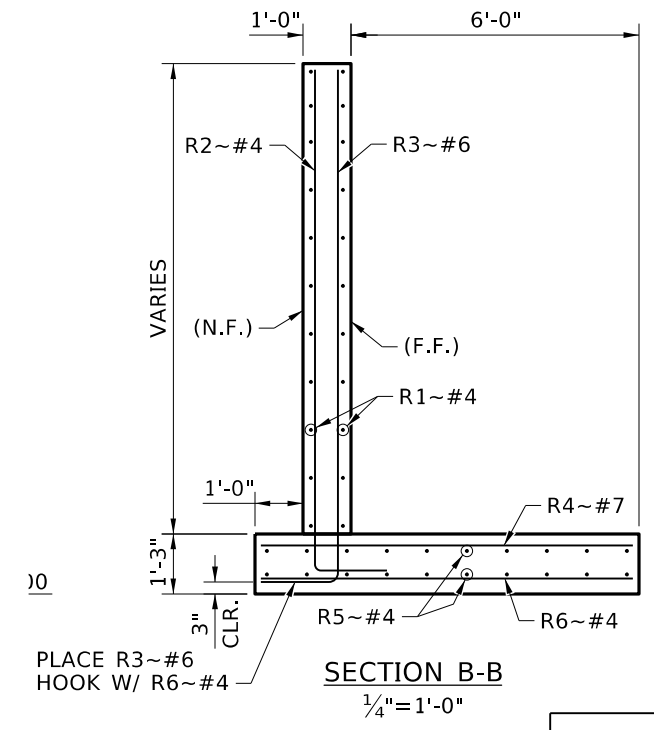
WING ELEVATION SCHEDULE				
LOCATION	EL. A	EL. B	EL. C	EL. D
WING 1	2202.53	2202.65	-	2194.00
WING 2	2202.53	2202.65	-	2194.00
WING 3	2193.53	2192.53	2192.15	2181.50
WING 4	2193.53	2192.53	2192.15	2181.50



ABUTMENT 1 WALL PLAN
1/4"=1'-0"



ABUTMENT 1 WALL ELEVATION
1/4"=1'-0"



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

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	
DETAILED D. FOSTER	
DWG. CHECKED G. GRIFFIN	
CORRECTIONS D. FOSTER	

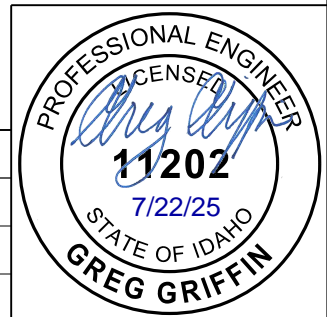
30786_bdt1_d15.dgn	DRAWING DATE: JULY 2025
DAVID EVANS AND ASSOCIATES INC.	

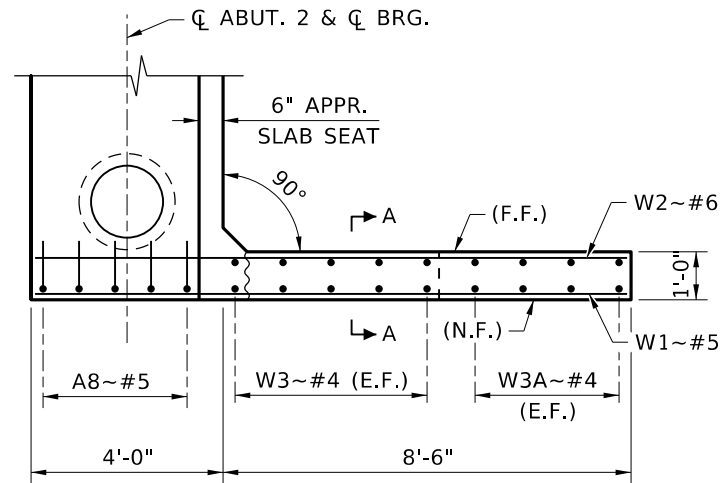


ENGLISH
PROJECT NO. 30786

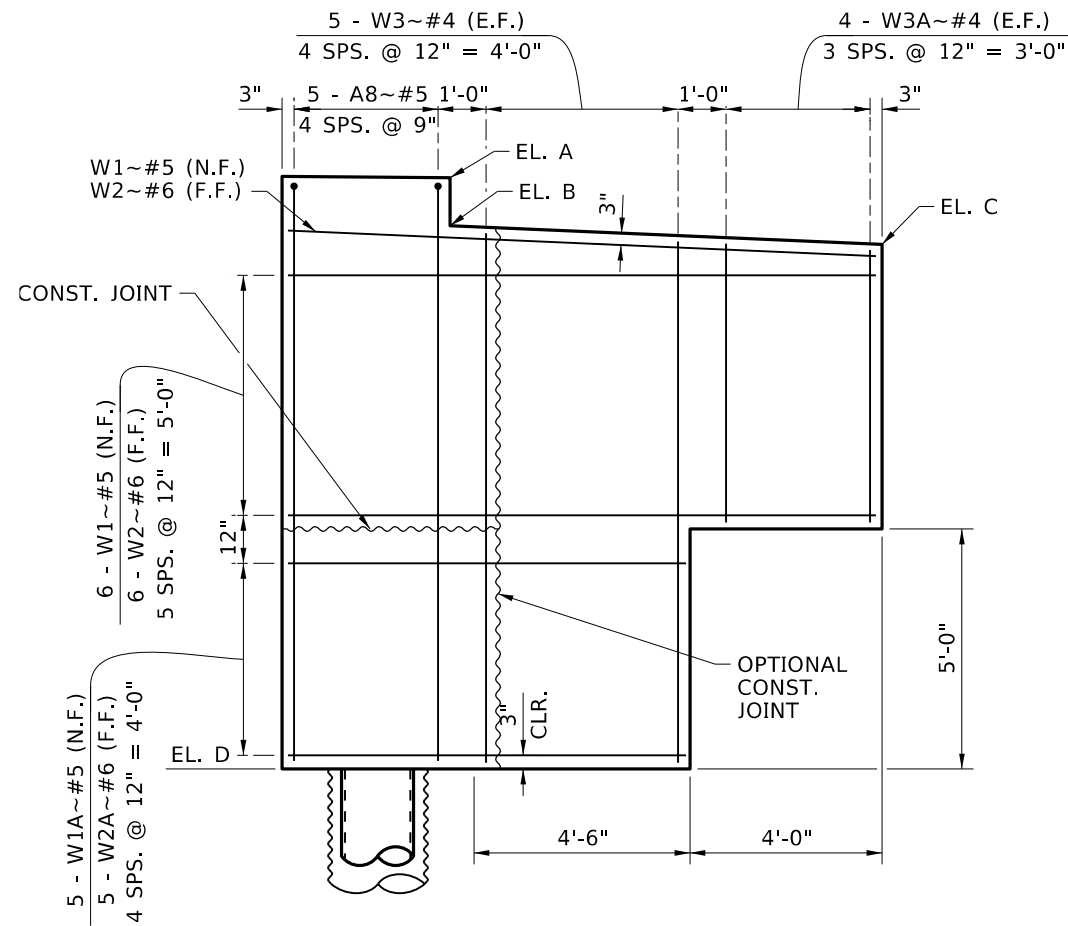
ABUTMENT 1 WING & RETAINING WALL 1 DETAILS
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS	
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 15 OF 41

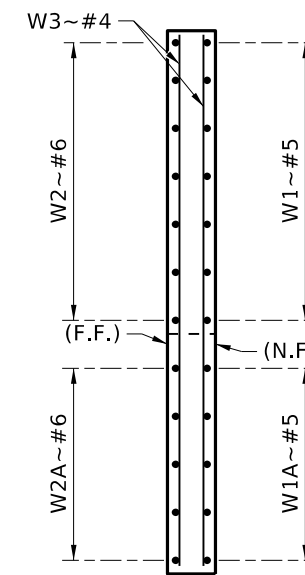




PLAN
WING 4 SHOWN, WING 3 SIMILAR



ELEVATION
WING 4 SHOWN, WING 3 SIMILAR



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

ABUTMENT 2 WINGWALL DETAILS
1/4"=1'-0"

NOTE:
SEE WING ELEVATION SCHEDULE
ON SHEET 15 FOR ELEVATIONS

NO.	DATE	BY	REVISIONS DESCRIPTION
▲			
▲			
▲			
▲			

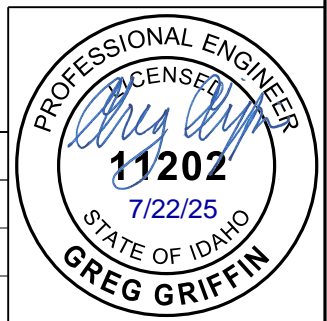
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DESIGN CHECKED G. GRIFFIN	CADD FILE NAME
DETAILED D. FOSTER	30786_bdt1_d16.dgn
DWG. CHECKED G. GRIFFIN	DRAWING DATE: JULY 2025
CORRECTIONS D. FOSTER	

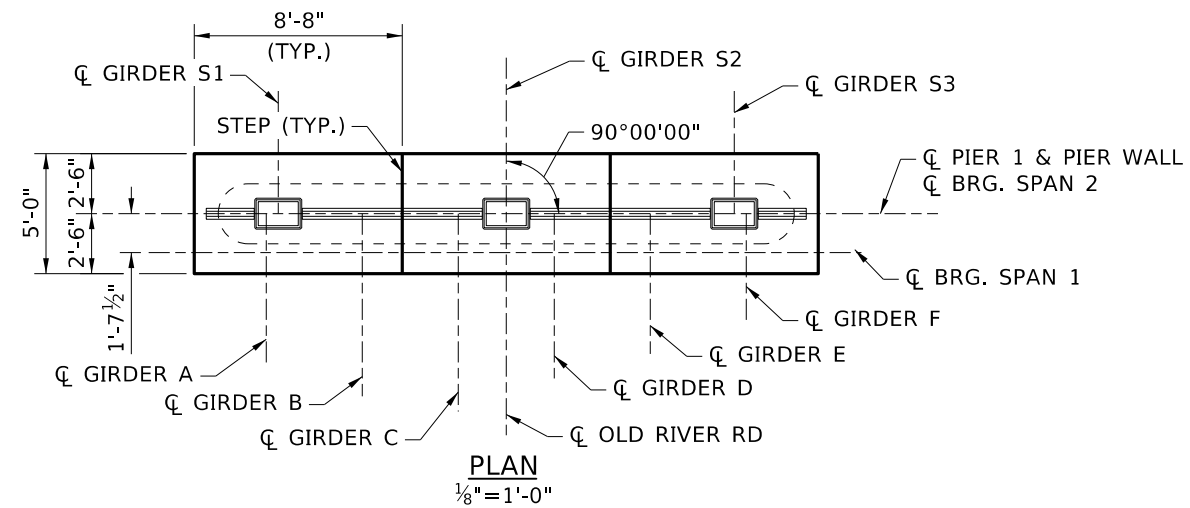
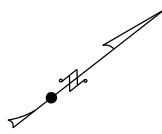

DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO.
30786

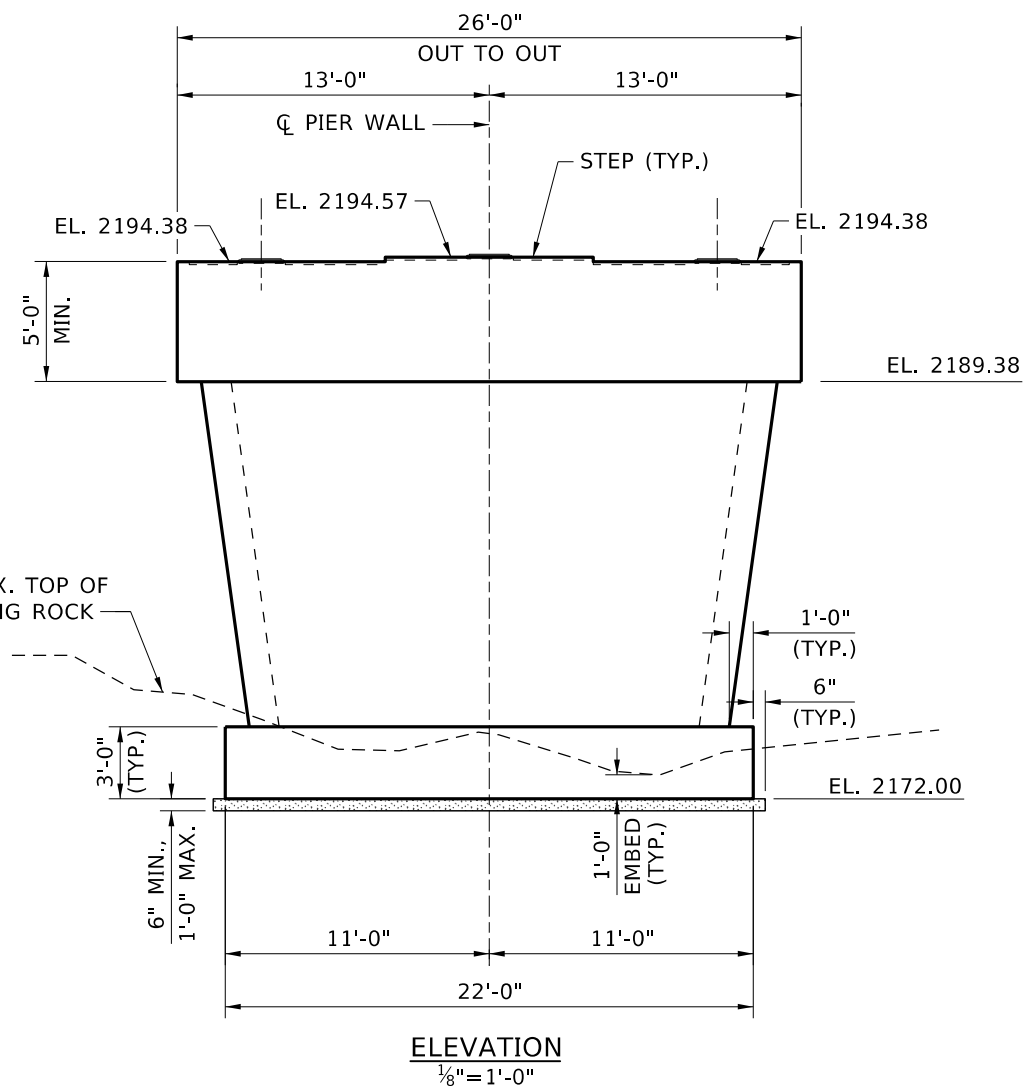
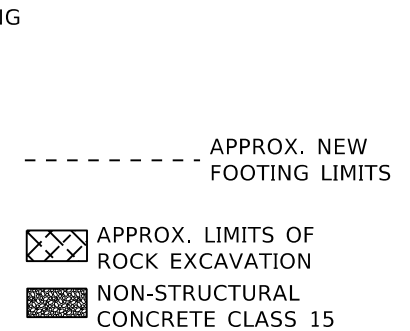
ABUTMENT 2 WING DETAILS
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10

BRIDGE PLANS	
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 16 OF 41





PIER 1
(LOOKING EAST)



NOTE:

1. BEARING AREAS ARE LEVEL TRANSVERSELY AND LONGITUDINALLY (TYP. ALL BEARINGS).
2. BEAM SEAT ELEVATIONS SHOWN ON TOP OF CONCRETE @ CL PIER.
3. KEYWAYS BETWEEN GIRDERS NOT SHOWN FOR CLARITY. SEE SHEET 19 FOR DETAILS.
4. SEE SHEET 19 FOR BEARING PAD DETAILS AND LOCATIONS.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
P. BARUWAL
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME
30786_bdt1_d17.dgn
DRAWING DATE:
JULY 2025



DAVID EVANS AND ASSOCIATES INC.

ENGLISH

PROJECT NO.

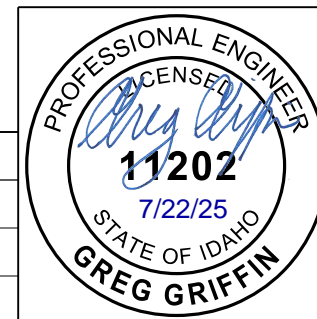
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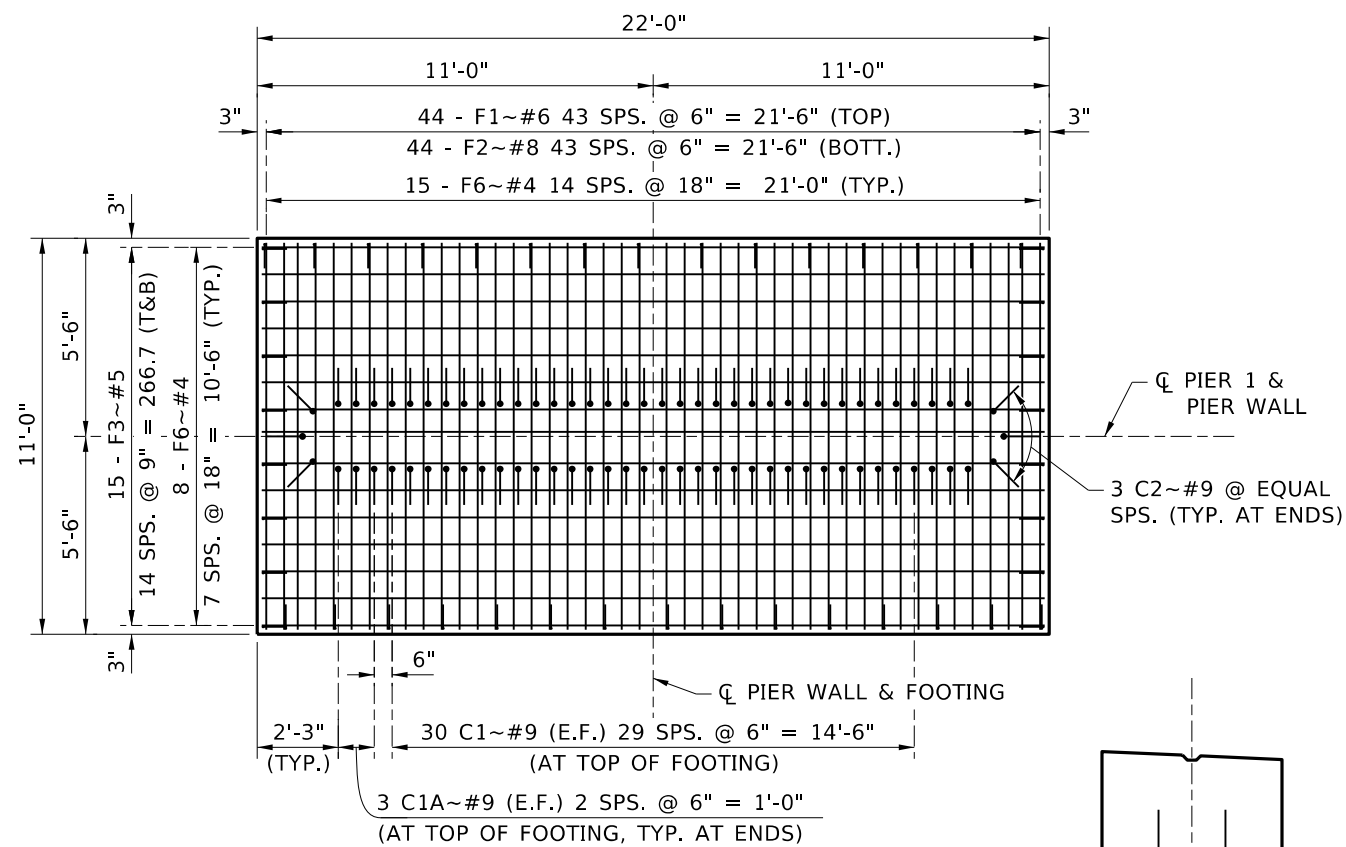
PIER 1 LAYOUT

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS

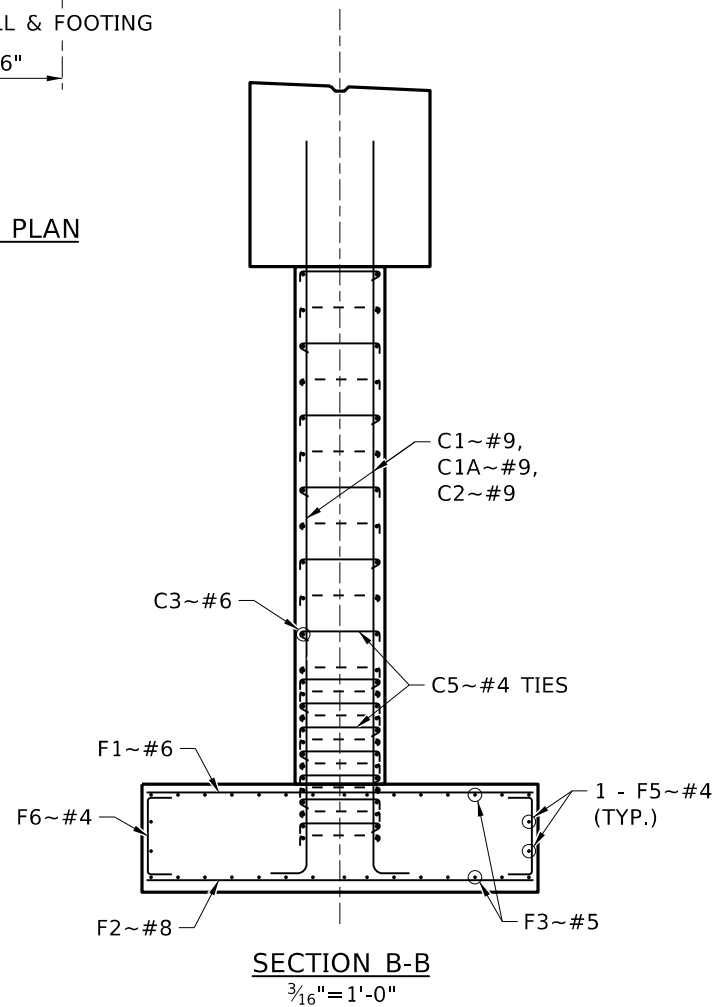
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 17 OF 41



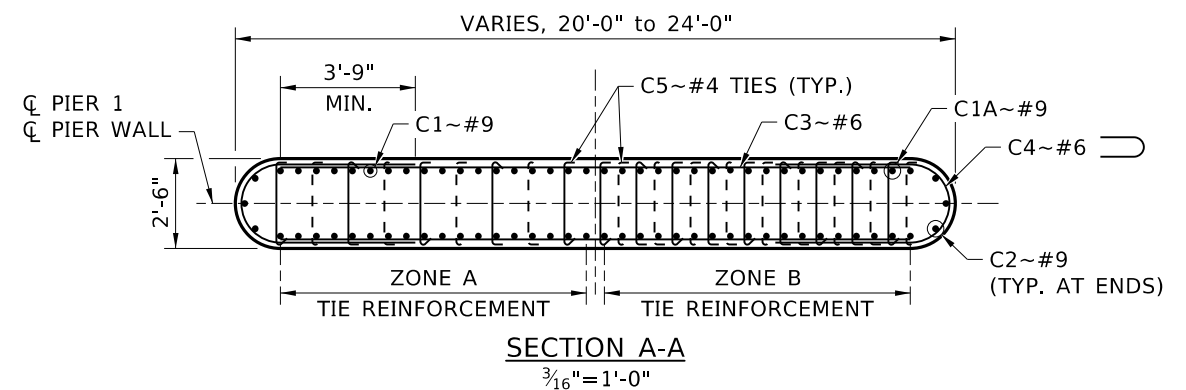


PIER 1 FOOTING REINFORCEMENT PLAN
 $\frac{3}{16}'' = 1'-0''$

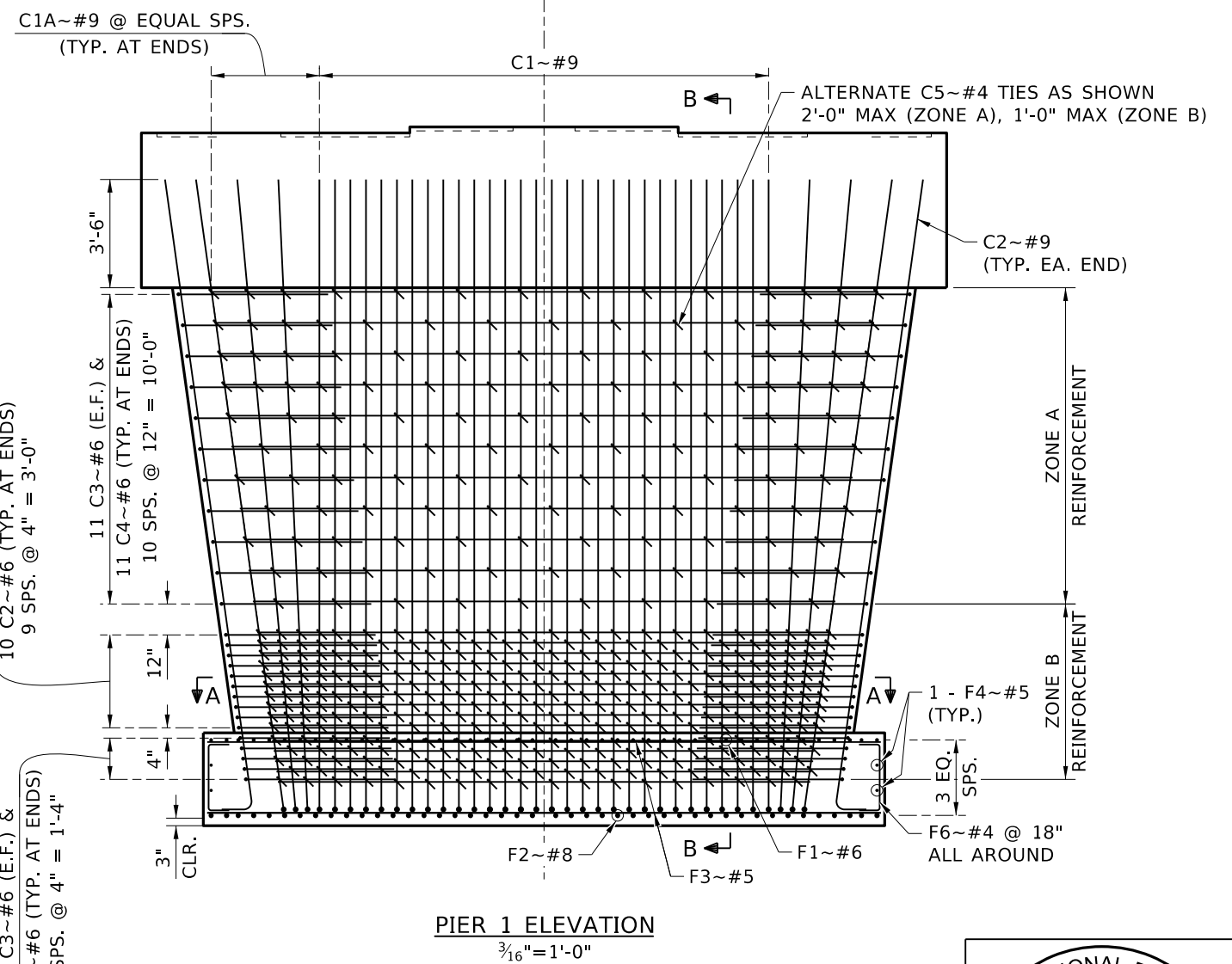
NOTE:
 HORIZONTAL REINFORCEMENT SHOWN IN PIER WALL NOT SHOWN. SEE ZONE B REINFORCEMENT IN PIER ELEVATION FOR DETAILS.



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



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



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

NOTE:
 1. HOOK CROSS-TIES AROUND HORIZONTAL AND VERTICAL REINFORCEMENT. ALTERNATE HOOKS IN ADJACENT CROSS-TIES.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
 P. BARUWAL
 DESIGN CHECKED
 G. GRIFFIN
 DETAILED
 D. FOSTER
 DWG. CHECKED
 G. GRIFFIN
 CORRECTIONS
 D. FOSTER

SCALES SHOWN
 ARE FOR 11" X 17"
 PRINTS ONLY
 CADD FILE NAME
 30786_bdt1_d18.dgn
 DRAWING DATE:
 JULY 2025



DAVID EVANS AND ASSOCIATES INC.

ENGLISH

PROJECT NO.

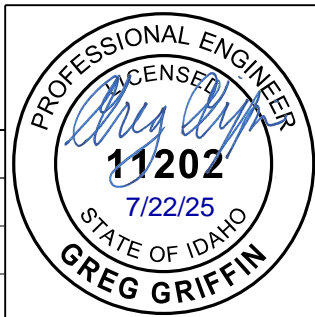
30786

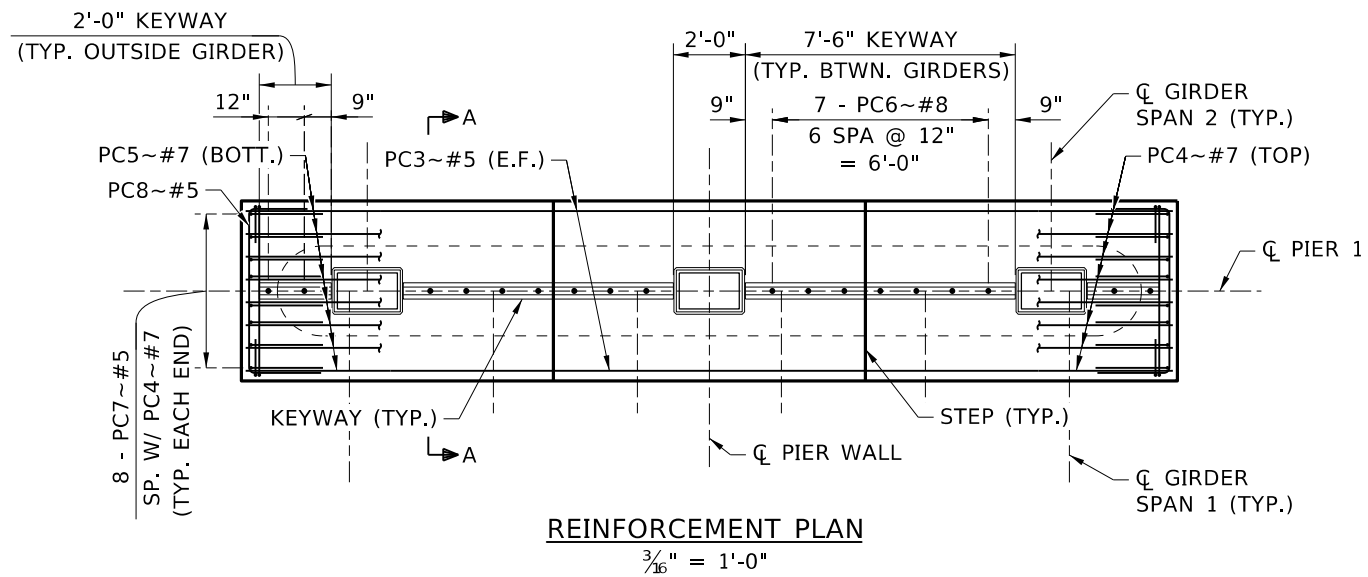
PIER 1 DETAILS

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
 OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
 STA. 5+44.10

BRIDGE PLANS

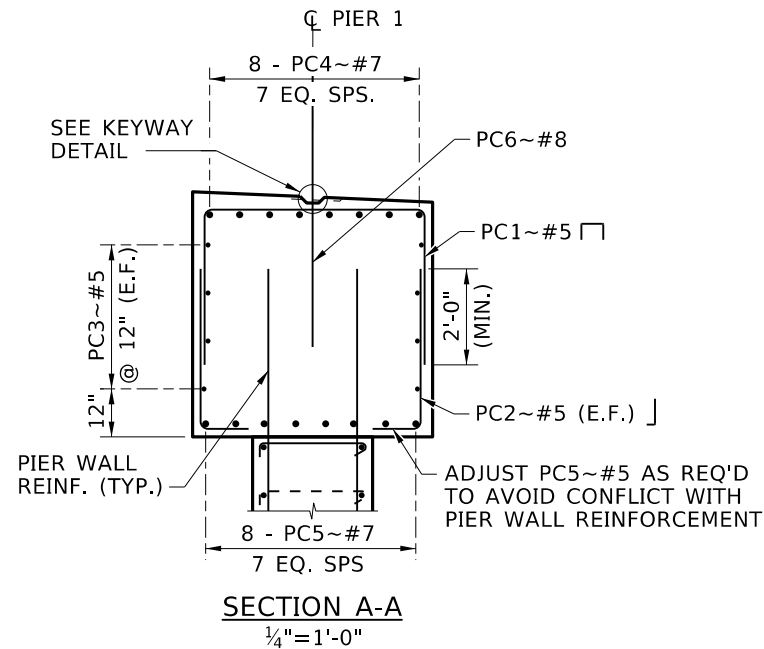
BRIDGE KEY NO.
 30786
 COUNTY
 SHOSHONE
 BRIDGE DWG. NO.
 SHEET
 18 OF 41





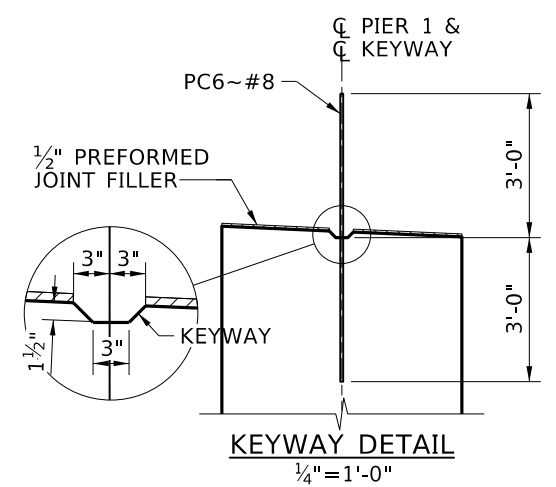
REINFORCEMENT PLAN

3/16" = 1'-0"



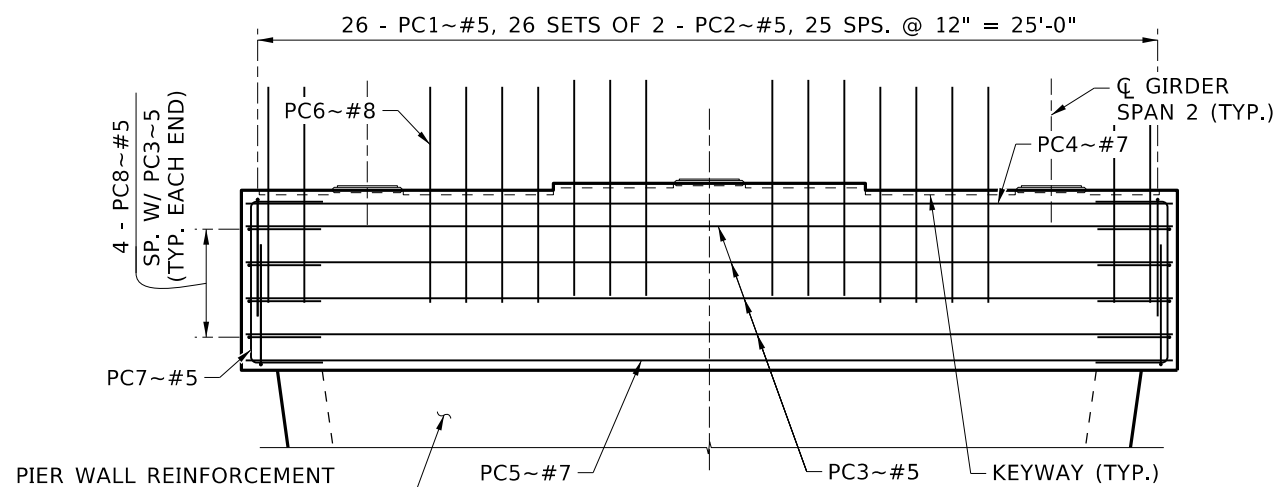
SECTION A-A

1/4" = 1'-0"



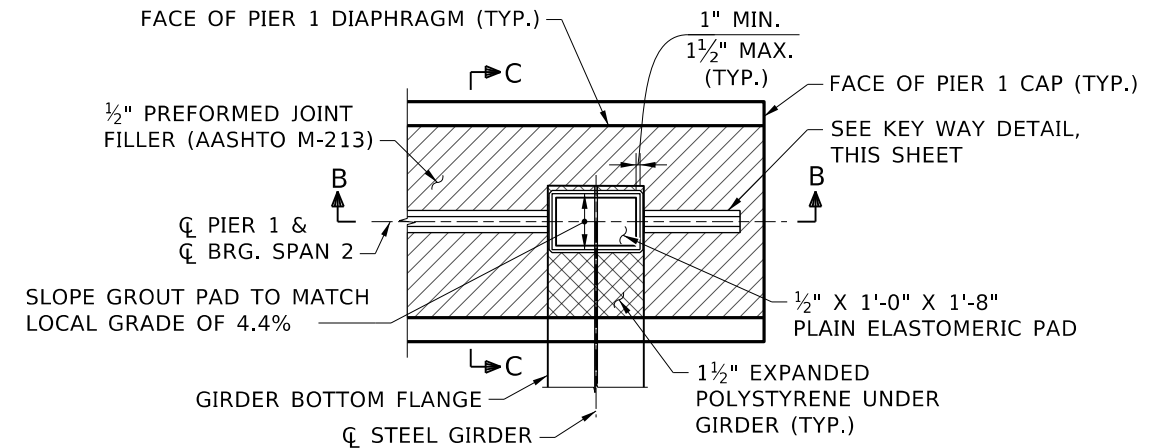
KEYWAY DETAIL

1/4" = 1'-0"



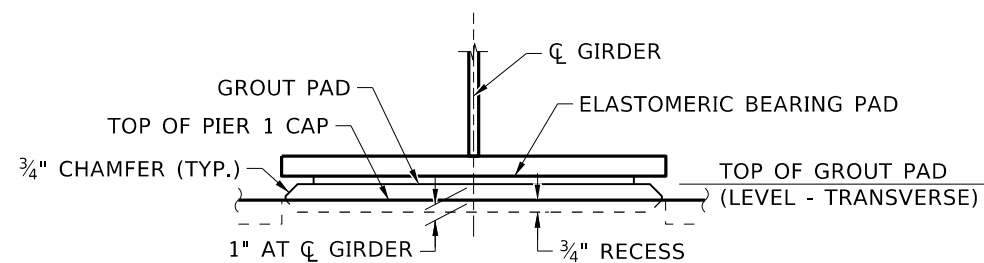
REINFORCEMENT ELEVATION

3/16" = 1'-0"



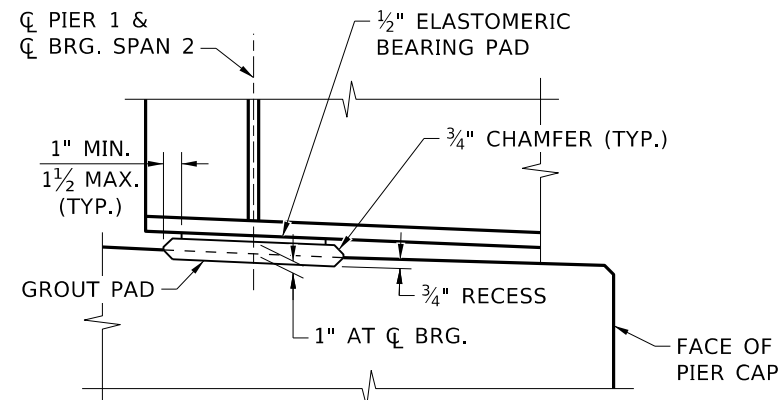
BEARING DETAIL

1/4" = 1'-0"



SECTION B-B

1" = 1'-0"



SECTION C-C

3/4" = 1'-0"

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED P. BARUWAL
DESIGN CHECKED G. GRIFFIN
DETAILED D. FOSTER
DWG. CHECKED G. GRIFFIN
CORRECTIONS D. FOSTER

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 30786_bdt1_d19.dgn
DRAWING DATE: JULY 2025



DAVID EVANS AND ASSOCIATES INC.

ENGLISH

PROJECT NO.

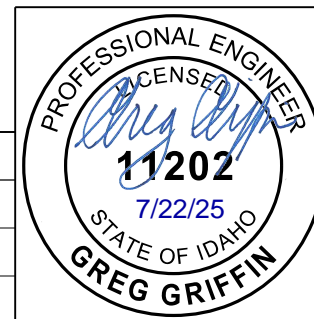
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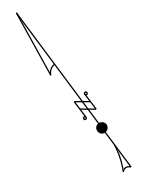
PIER 1 CAP DETAILS

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS

BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 19 OF 41

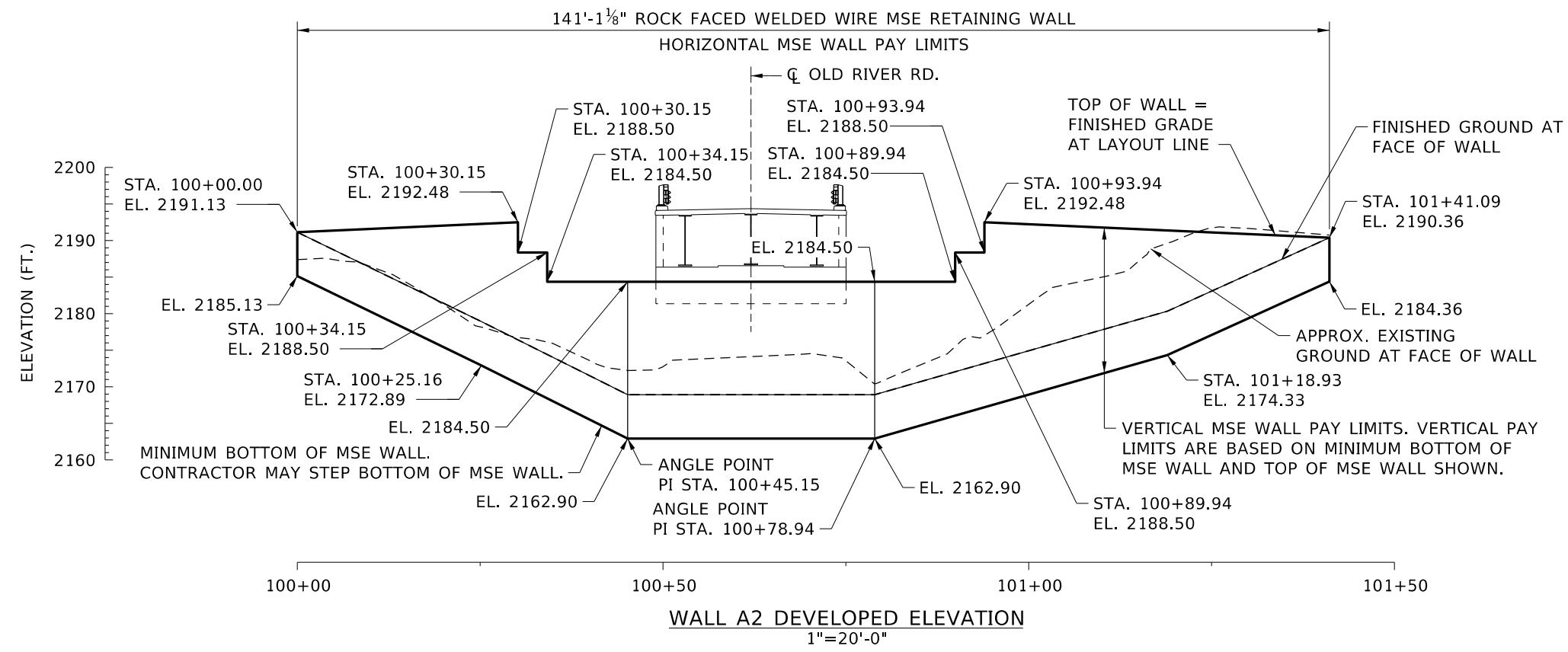
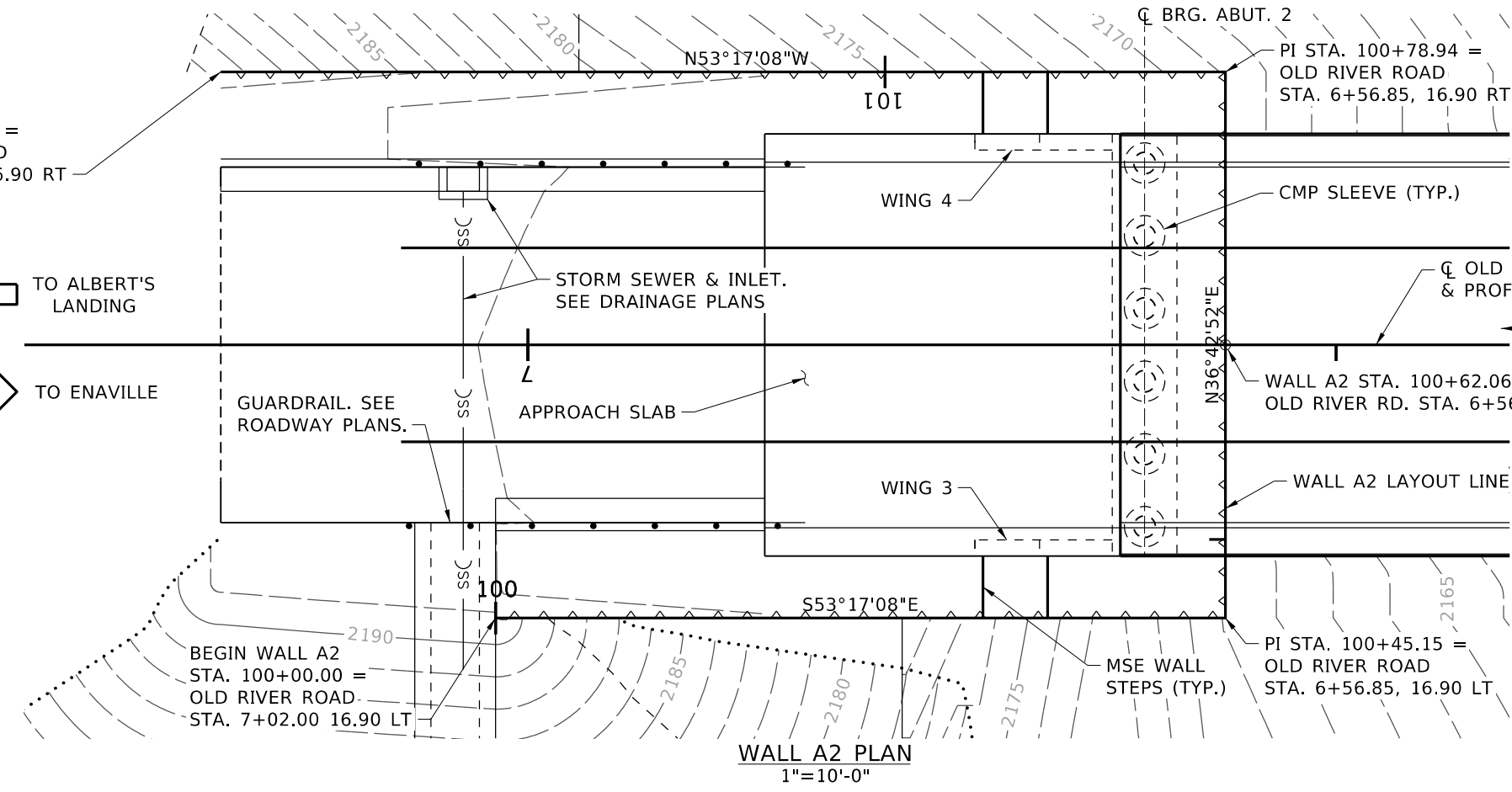




END WALL A2
 STA. 101+41.09 =
 OLD RIVER ROAD
 STA. 7+19.00 16.90 RT

← TO ALBERT'S
 LANDING

→ TO ENAVILLE



NOTE:
 MSE WALL CONSTRUCTED OUTSIDE OF THE
 PAY LIMITS SHOWN ARE CONSIDERED
 INCIDENTAL TO BID ITEM S501-17A.

NO.	DATE	BY	DESCRIPTION

DESIGNED
 P. BARUWAL
 DESIGN CHECKED
 G. GRIFFIN
 DETAILED
 D. FOSTER
 DWG. CHECKED
 G. GRIFFIN
 CORRECTIONS
 D. FOSTER

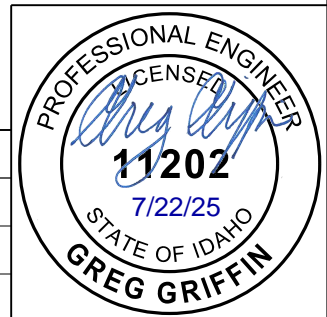
SCALES SHOWN
 ARE FOR 11" X 17"
 PRINTS ONLY
 CADD FILE NAME
 30786_bdt1_d20.dgn
 DRAWING DATE:
 JULY 2025

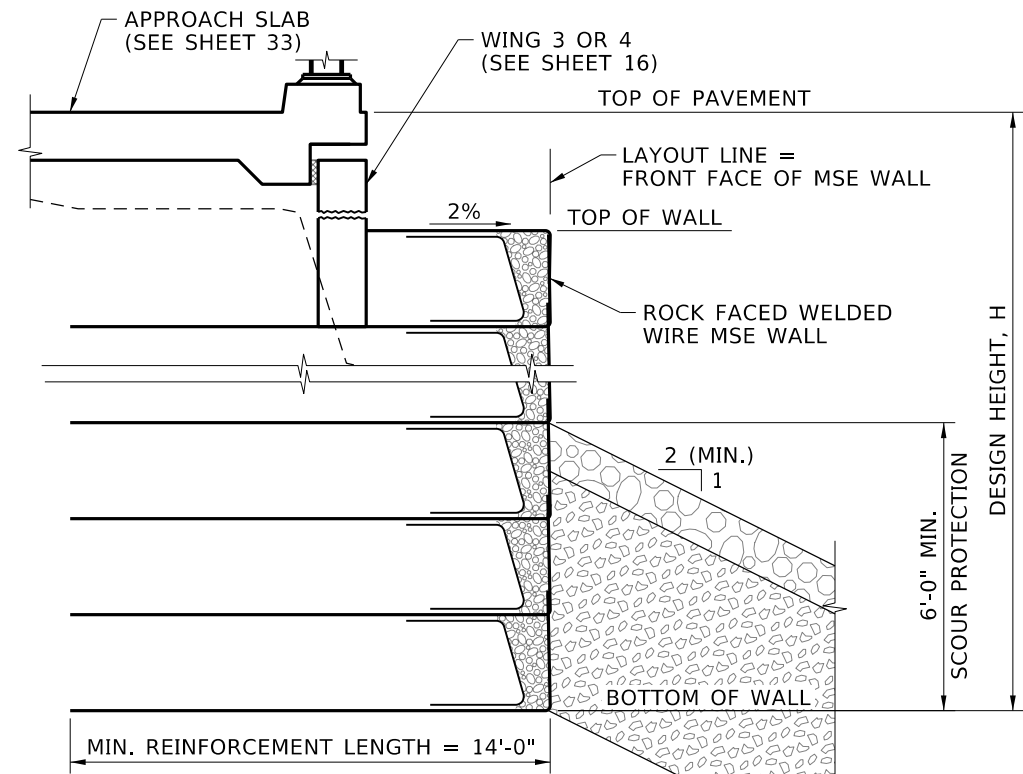


ENGLISH
 PROJECT NO.
 30786

WALL A2 LAYOUT
 239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
 OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
 STA. 5+44.10

BRIDGE PLANS
 BRIDGE KEY NO.
 30786
 COUNTY
 SHOSHONE
 BRIDGE DWG. NO.
 SHEET
 20 OF 41

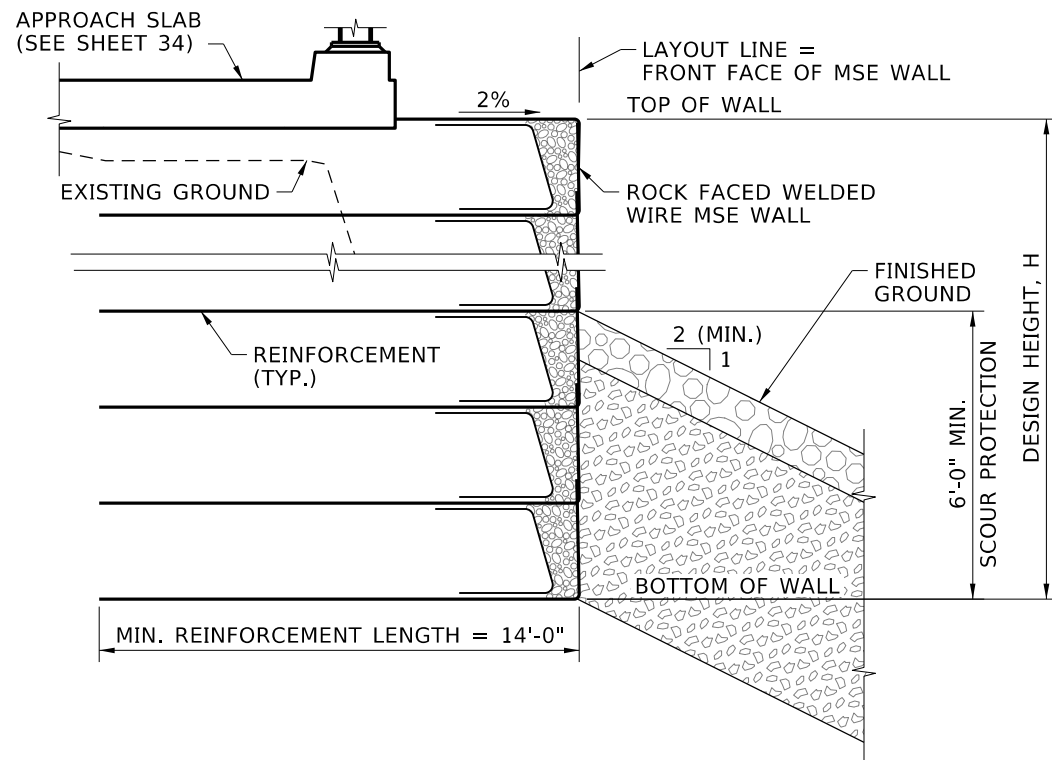




MSE WALL SECTION AT WING

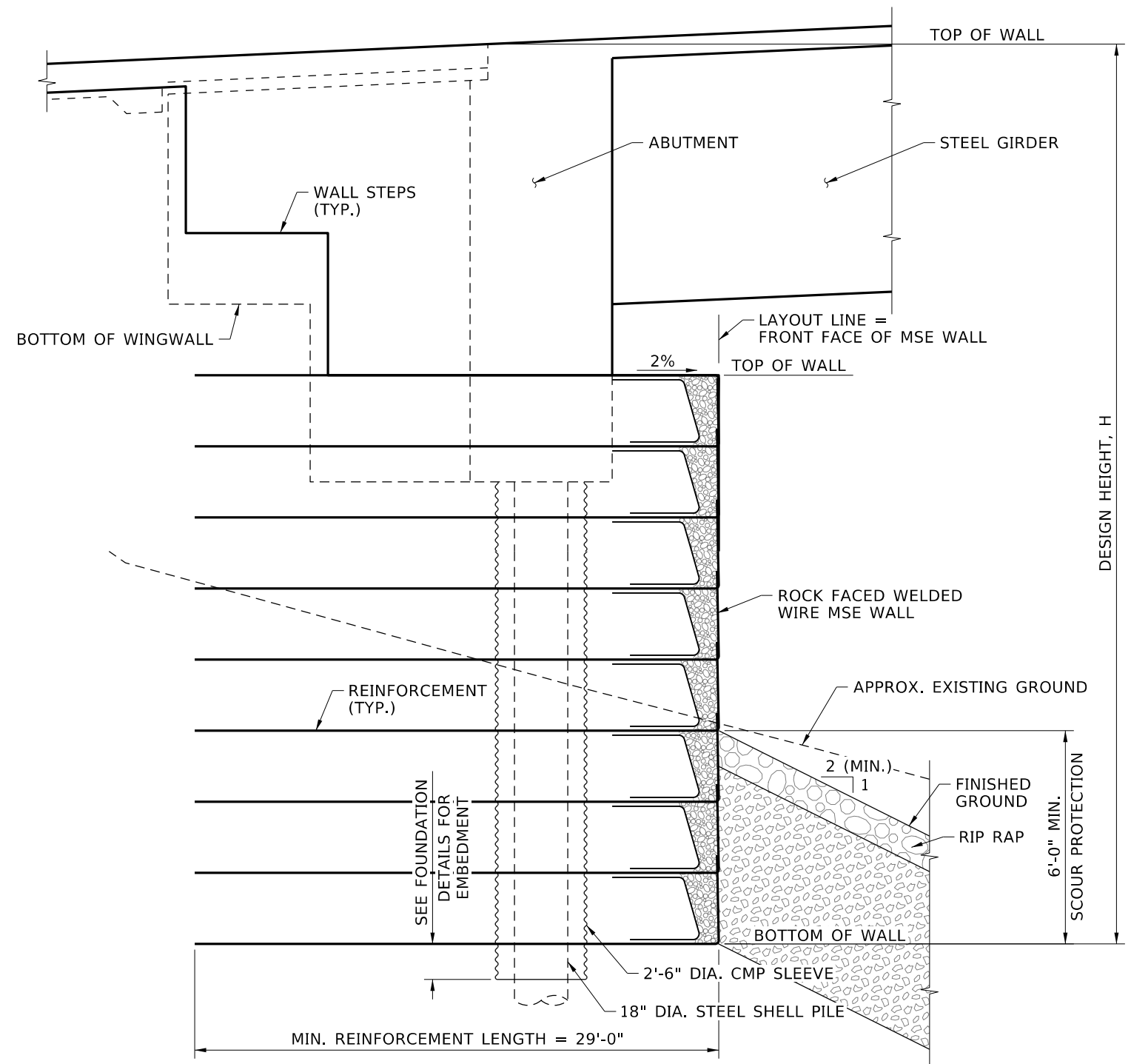
1/4" = 1'-0"

NOTE: SEE MSE WALL SECTION AT APPROACH SLAB FOR INFORMATION NOT SHOWN.



MSE WALL SECTION AT APPROACH SLAB

1/4" = 1'-0"



MSE WALL SECTION AT ABUTMENT

1/4" = 1'-0"

NOTE: SEE MSE WALL SECTION AT APPROACH SLAB FOR INFORMATION NOT SHOWN.

NOTES

SEE SHEET 18 FOR NOTES. FOR SCOUR PROTECTION, SEE CHANNEL RIPRAP DETAILS IN ROADWAY PLANS.

NO.	DATE	BY	DESCRIPTION

DESIGNED P. BARUWAL
DESIGN CHECKED G. GRIFFIN
DETAILED D. FOSTER
DWG. CHECKED G. GRIFFIN
CORRECTIONS D. FOSTER

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 30786_bdt1.d21.dgn
DRAWING DATE: JULY 2025



DAVID EVANS AND ASSOCIATES INC.

ENGLISH

PROJECT NO.

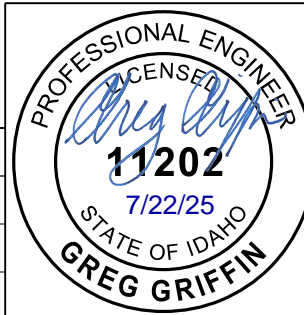
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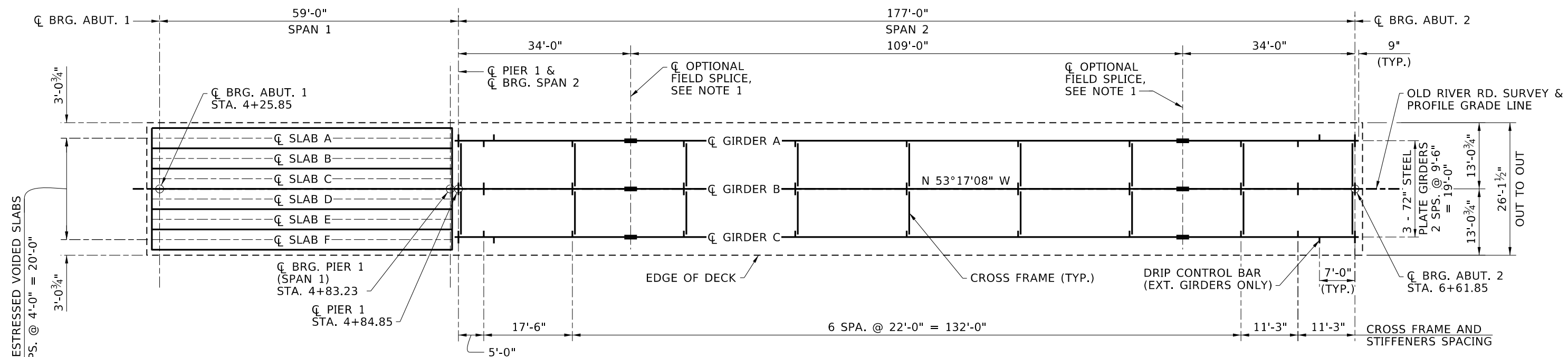
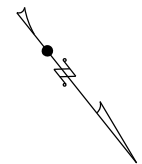
MSE WALL DETAILS

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS

BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 21 OF 41





FRAMING PLAN
1"=20'-0"

- NOTES:**
- GIRDERS TO BE SPliced TOGETHER ON-SITE PRIOR TO ERECTION.

REVISIONS		
NO.	DATE	DESCRIPTION
▲		
▲		
▲		
▲		

DESIGNED
T. ZANONI
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME
30786_bdt1_d22.dgn
DRAWING DATE:
JULY 2025



DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO.
30786

FRAMING PLAN
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

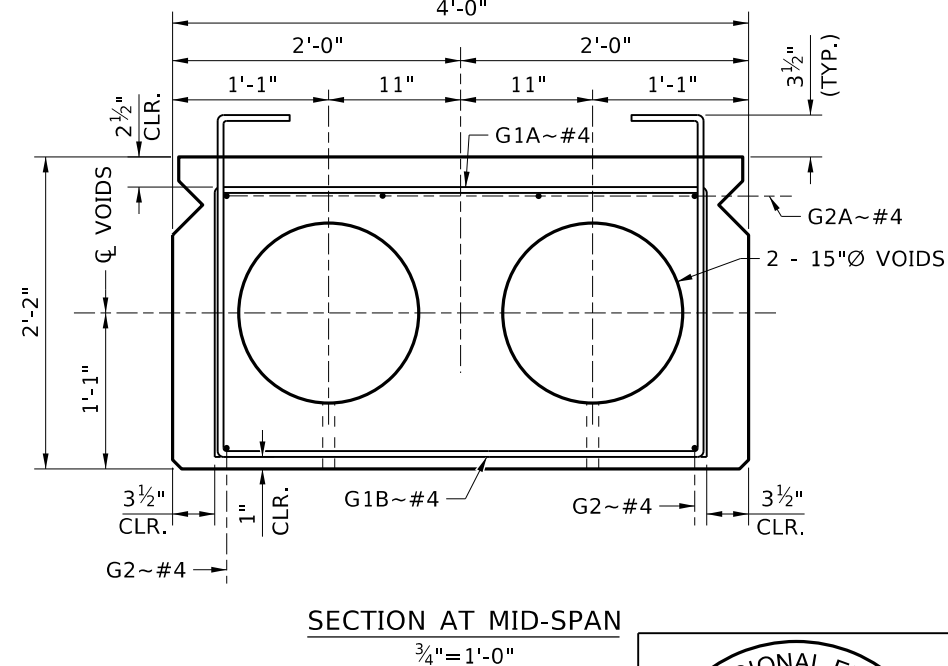
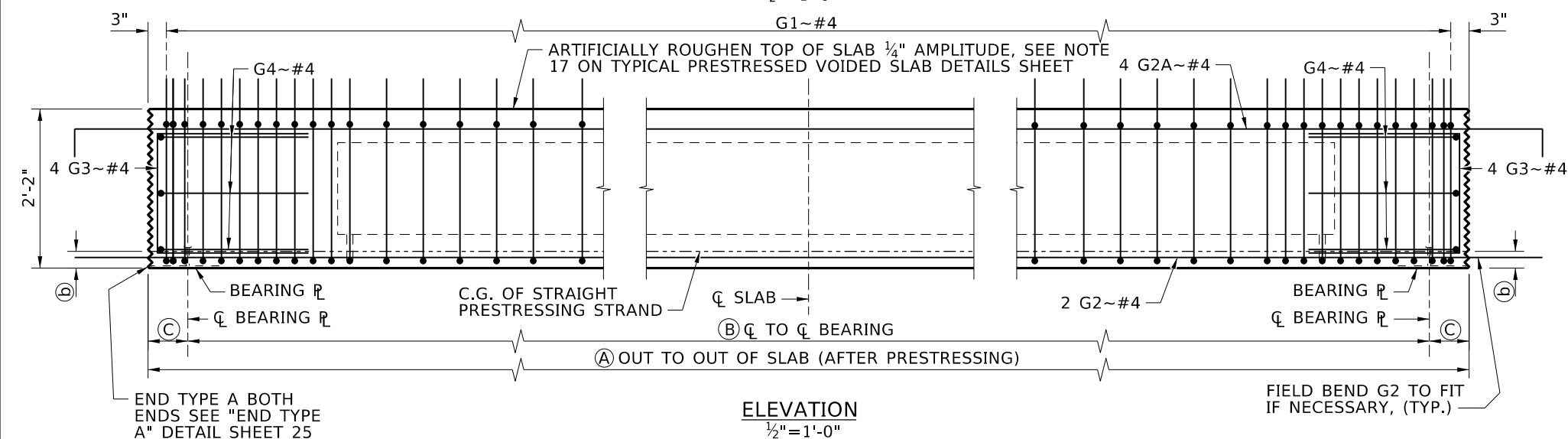
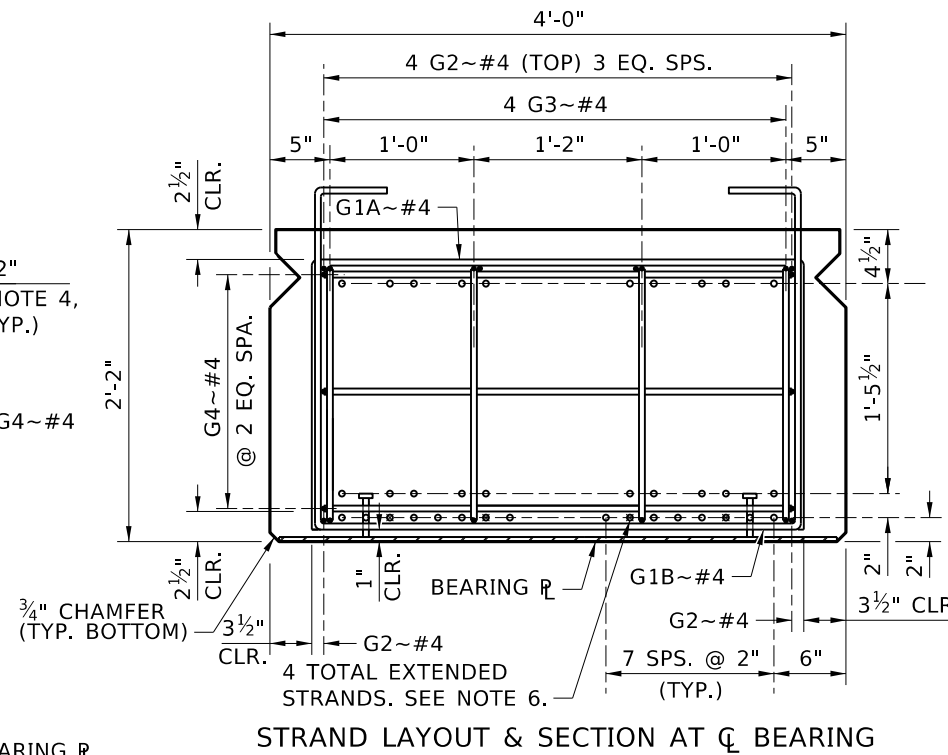
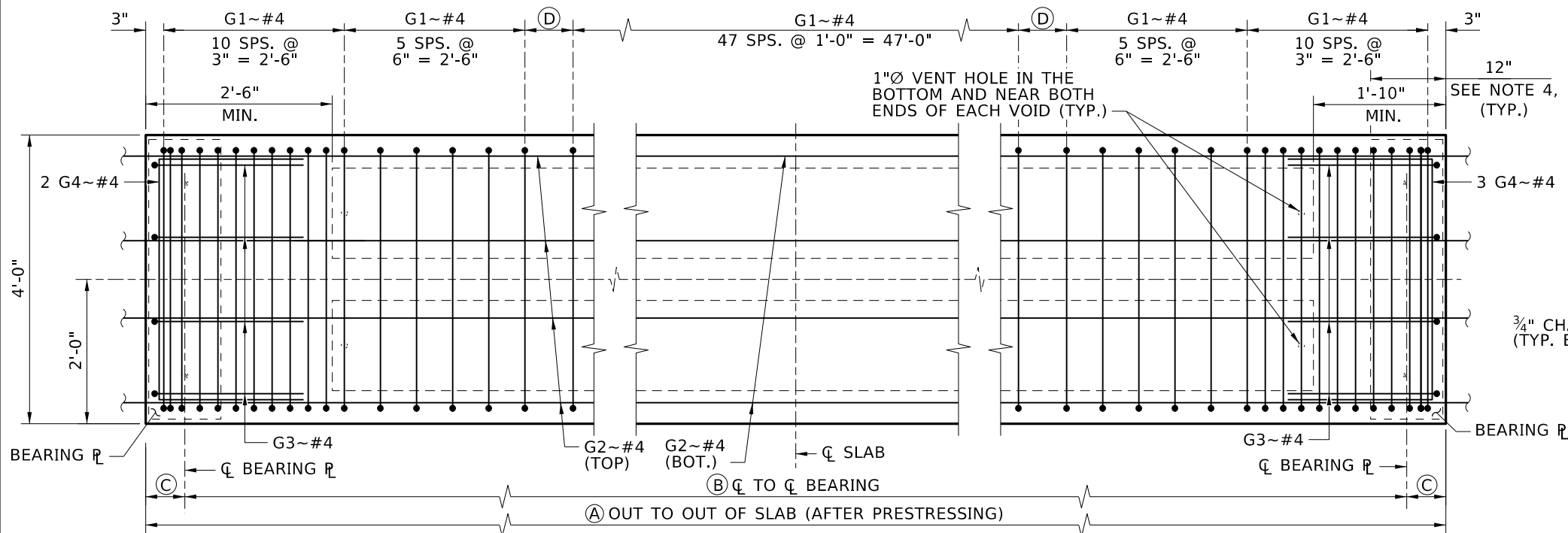
BRIDGE PLANS
BRIDGE KEY NO.
30786
COUNTY
SHOSHONE
KEY NO.
30786
BRIDGE DWG. NO.
-
SHEET
22 OF 41

PRESTRESSED SLAB SCHEDULE

SLAB		PRESTRESS FORCE ~ KIPS		PRESTRESS LOSSES ~ KSI		CONCRETE STRENGTH ~ KSI		SLAB DIMENSIONS						C.G. OF STRAND
NO.	LOCATION	INITIAL BEFORE LOSSES	FINAL AFTER LOSSES	IMMEDIATE LOSSES	FINAL TOTAL LOSSES	AT RELEASE f'ci	AT 28 DAYS f'c	(A)	(B)	(C)		(D)		(b)
										LEFT	RIGHT	LEFT	RIGHT	
A-F	SPAN 1	1582	1319	10.6	33.7	7.5	9.0	59'-3½"	57'-4½"	1'-6½"	4½"	10¾"	10¾"	7.972"

NOTES

1. DIMENSIONS TO STIRRUPS ARE GIVEN AT C OF SLAB.
2. FOR NOTES AND DETAILS, SEE PRESTRESSED VOIDED SLAB DETAILS SHEET.
3. APPROXIMATE SLAB SHIPPING WEIGHT IS 941 LB/FT.
4. REINFORCEMENT IN ACCORDANCE WITH AASHTO ARTICLE 5.9.4.4.1.
5. KEYWAY IS TYPICAL EACH SIDE OF SLABS EXCEPT EXTERIOR SIDE OF EXTERIOR SLABS. OMIT KEYWAY ON OUTSIDE OF EXTERIOR SLABS ONLY.
6. * SPECIFICS WHICH STRANDS ARE TO EXTEND INTO ABUTMENT AND PIER DIAPHRAGMS. SEE END TYPE A DETAIL ON PRESTRESSED VOIDED SLAB DETAILS SHEET.



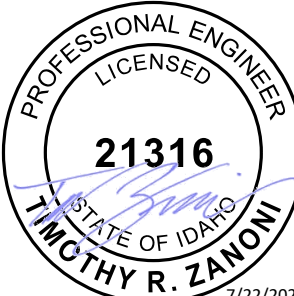
REVISIONS		
NO.	DATE	DESCRIPTION

DESIGNED T. ZANONI	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME 30786_bdt1_d23.dgn DRAWING DATE: JULY 2025
DESIGN CHECKED L. SU	
DETAILED D. FOSTER	
DWG. CHECKED G. GRIFFIN	
CORRECTIONS D. FOSTER	


DAVID EVANS AND ASSOCIATES INC.

ENGLISH	2'-2" PRESTRESSED VOIDED SLAB
PROJECT NO.	239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10
30786	

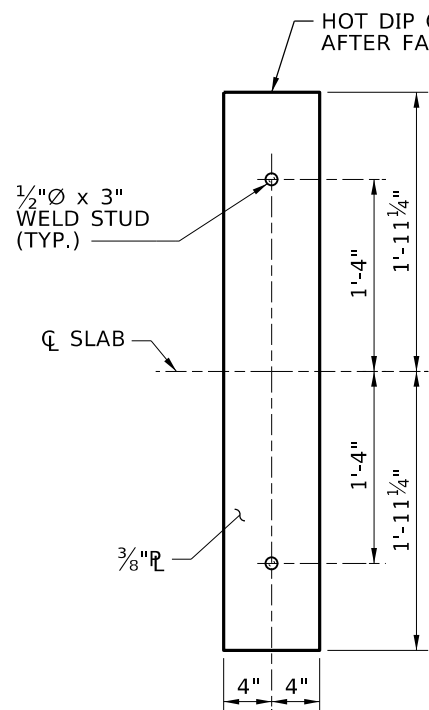
BRIDGE PLANS	
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 23 OF 41


PROFESSIONAL ENGINEER LICENSED 21316
 TIMOTHY R. ZANONI
 7/22/2025

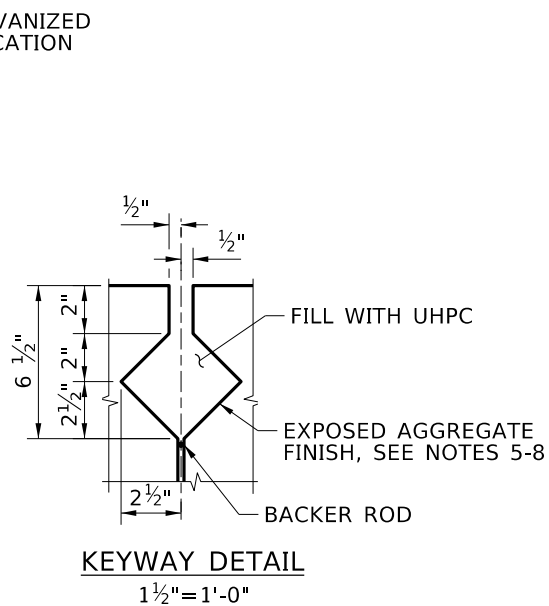
DEFLECTION DATA ~ INCHES

LOCATION	Δ P PRESTRESS	Δ G SLAB	Σ Δ * P + Δ G	Δ 1 ** 1.55 Δ P + 1.65 Δ G	Δ S NON COMP DL	Δ C COMP DL	Δ 2 Δ S + Δ C
SLAB - SPAN 1	1 3/8 ↑	3/4 ↓	5/8 ↑	7/8 ↑	3/8 ↓	0	3/8 ↓

* ESTIMATED DEFLECTION OF PRESTRESSED SLAB AT RELEASE
 ** ESTIMATED DEFLECTION OF PRESTRESSED SLAB AT ERECTION



SLAB BEARING PLATE
 3/4" = 1'-0"



KEYWAY DETAIL
 1 1/2" = 1'-0"

REINFORCEMENT DIAGRAM AASHTO M31 GRADE 60 TYPE S			
MARK	SIZE	GRADE	SKETCH
G1A*	#4	60	1'-10" [3'-5"] 1'-10"
G1B*	#4	60	2'-5" [3'-5"] 2'-5"
G2	#4	60	Ⓐ + 3'-8"
G2A	#4	60	Ⓐ + 3'-8"
G3*	#4	60	1'-9 1/2" [2'-3"]
G4*	#4	60	2'-3" [3'-4"] 2'-3"

BEND DETAILS IN ACCORDANCE WITH LATEST ACI STANDARD PRACTICE.

* STIRRUP AND TIE HOOK BEND DIMENSIONS.

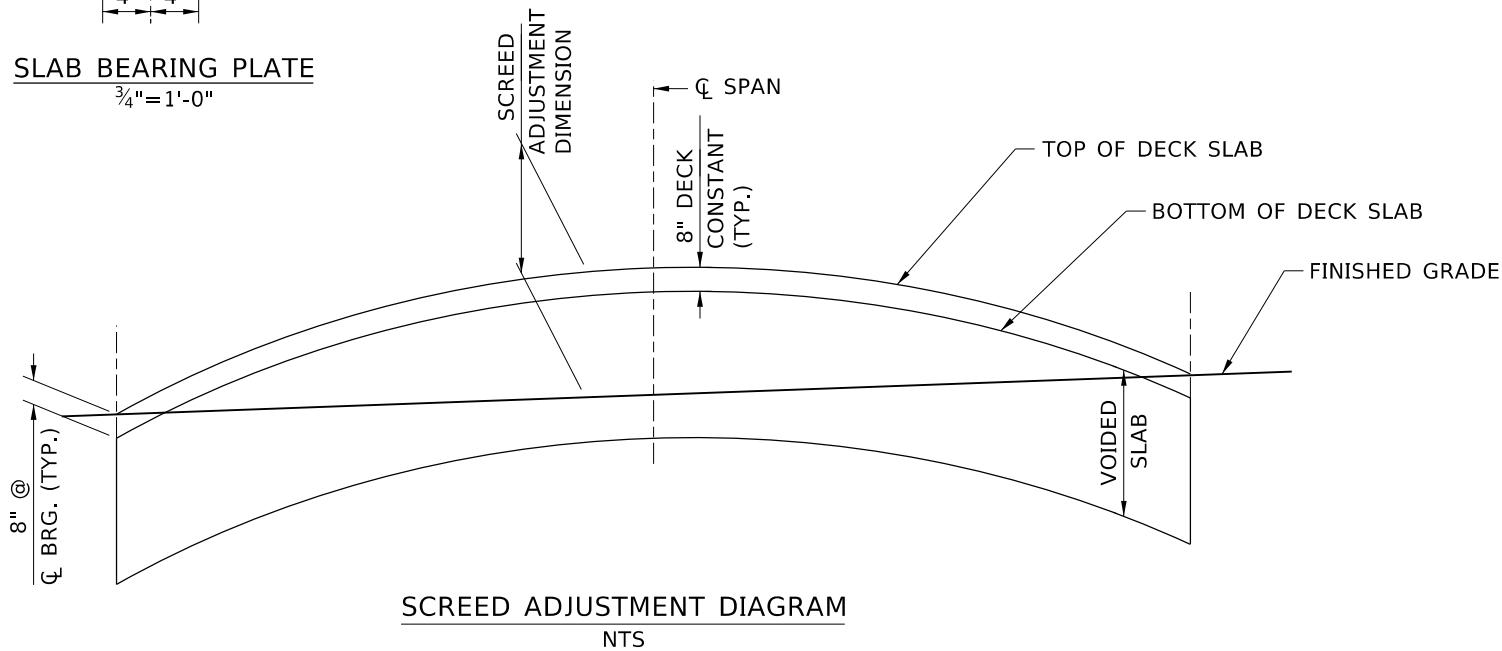
STIRRUPS AND TIES MUST HAVE A MINIMUM 1" COVER OUTSIDE OF BARS.

NOTES

- CONCRETE**
- PROVIDE CONCRETE STRENGTH AS SHOWN ON THE PLANS.
 - PROVIDE CONCRETE THAT CONFORM TO 502 EXCEPT THAT ENTRAINED AIR WILL BE 5% ±1%. SELF CONSOLIDATING CONCRETE MAY BE USED IN ACCORDANCE WITH 502.
- STRAND**
- DESIGN IS BASED ON 0.6" DIA. AASHTO M203 LOW RELAXATION STRAND.
- GROUT**
- FILL KEYWAYS WITH GROUT THAT CONFORM TO TYPE "B" CLASS I NON-METALLIC NON-SHRINK AS SPECIFIED IN 705.02.
- SHEAR KEYS AND KEYWAYS**
- INTENTIONALLY ROUGHEN INTERFACES OF KEYWAYS THROUGH THE USE OF A CHEMICAL RETARDER APPLIED TO THE PRECAST COMPONENT FORMWORK TO PRODUCE AN EXPOSED AGGREGATE SURFACE. SUBMIT THE MATERIAL SPECIFICATIONS OF THE CHEMICAL RETARDER FOR APPROVAL.
 - PROVIDE AN AMPLITUDE OF ETCH AT LEAST 0.25" AND NO LARGER THAN 1/2 OF THE NOMINAL COARSE AGGREGATE SIZE OF THE PRECAST COMPONENT CONCRETE.
 - DO NOT SANDBLAST, ABRASE, OR USE A FORM LINER TO CREATE AN EXPOSED AGGREGATE SURFACE.
 - PLACE A BACKER ROD AT THE BOTTOM OF KEYWAYS FOR CONTAINING THE GROUT.
- SHOP DRAWINGS**
- PROVIDE SHOP DRAWING DETAILS THAT CONFORM TO CURRENT AASHTO SPECIFICATIONS. SHOW DETENSIONING SEQUENCE AND LIFT POINTS ON THE SHOP DRAWINGS.
 - SUBMIT SHOP DRAWINGS ACCORDANCE WITH 506.03 AND 105.02.
 - KEEP THE PRESTRESSED SLABS IN A FLAT POSITION (TOP SURFACE UPWARD) DURING TRANSPORTATION AND ERECTION AND LIFT ONLY BY THE MEANS OF THE LIFTING DEVICES PROVIDED. SUBMIT THE PROVISION FOR SUPPORT POINTS TO BE USED DURING TRANSPORTATION TO THE JOB SITE FOR APPROVAL.
- MISCELLANEOUS SLAB DETAILS**
- DIMENSIONS ARE HORIZONTAL DIMENSIONS. CORRECT THE FINISHED SLAB LENGTH FOR GRADE AND PROVIDE AN ALLOWANCE FOR BEAM SHORTENING.
 - FABRICATE IN ACCORDANCE WITH 506.
 - FINISH THE TOP SURFACE OF THE SLAB IN ACCORDANCE WITH 502.03, PART 1, PARAGRAPH 3d.
 - SLAB ERECTION IS ASSUMED TO OCCUR 60-90 DAYS AFTER FABRICATION.
- GIRDER SHIPPING**
- DO NOT SHIP PRESTRESSED CONCRETE MEMBERS UNTIL TESTS ON CONCRETE CYLINDERS MANUFACTURED FROM THE SAME CONCRETE AND CURED UNDER THE SAME CONDITIONS AS THE SLABS INDICATE THAT THE CONCRETE OF THE PARTICULAR MEMBER HAS ATTAINED A COMPRESSIVE STRENGTH EQUAL TO THE SPECIFIED DESIGN 28 DAY COMPRESSIVE STRENGTH.
- BASIS OF PAYMENT**
- PRESTRESSING CONCRETE MEMBERS IS INCIDENTAL TO THE PRECAST AND PRESTRESSED PAY ITEMS IN 502.

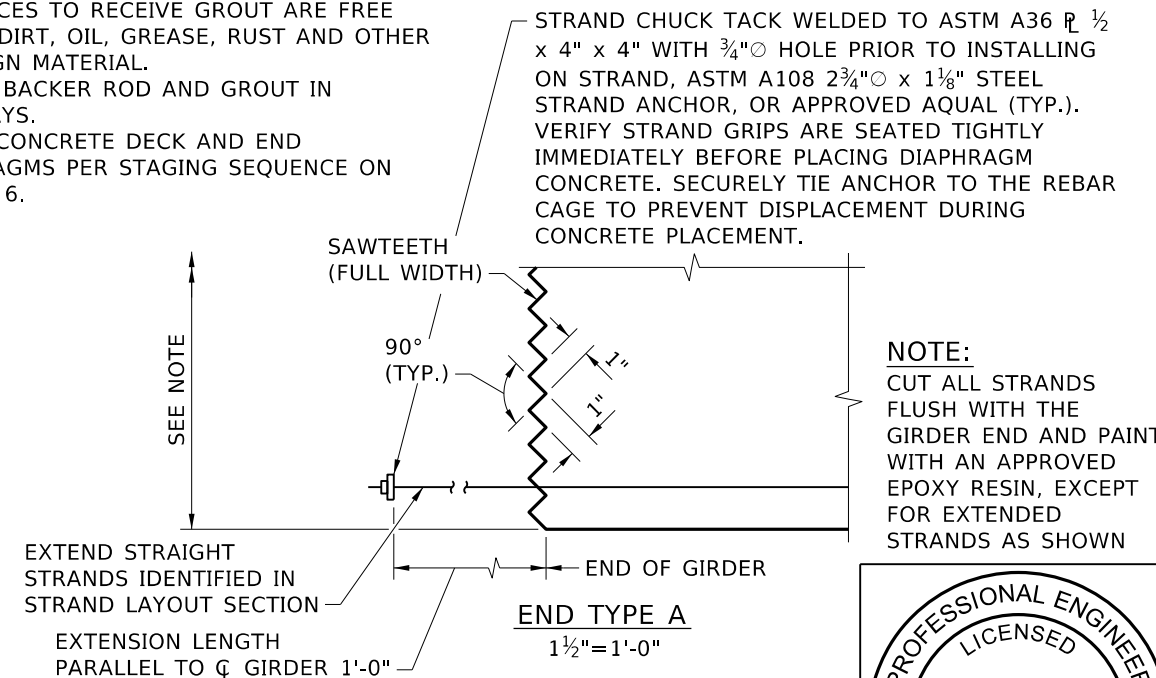
CONSTRUCTION SEQUENCE

- SET SLABS.
- ENSURE THAT KEYWAYS AND SURROUNDING SURFACES TO RECEIVE GROUT ARE FREE FROM DIRT, OIL, GREASE, RUST AND OTHER FOREIGN MATERIAL.
- PLACE BACKER ROD AND GROUT IN KEYWAYS.
- POUR CONCRETE DECK AND END DIAPHRAGMS PER STAGING SEQUENCE ON SHEET 6.



SCREED ADJUSTMENT DIAGRAM
 NTS

SCREED ADJUSTMENT DIMENSIONS AT CL OF VOIDED SLABS											SPAN (TENTH POINTS)
0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	
0	1/8	1/4	1/4	3/8	3/8	3/8	1/4	1/4	1/8	0	SCREED ADJUSTMENT DIMENSION - INCHES



NOTE:
 CUT ALL STRANDS FLUSH WITH THE GIRDER END AND PAINT WITH AN APPROVED EPOXY RESIN, EXCEPT FOR EXTENDED STRANDS AS SHOWN

REVISIONS		
NO.	DATE	DESCRIPTION

DESIGNED
T. ZANONI
 DESIGN CHECKED
L. SU
 DETAILED
D. FOSTER
 DWG. CHECKED
G. GRIFFIN
 CORRECTIONS
D. FOSTER

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME
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 DRAWING DATE:
JULY 2025

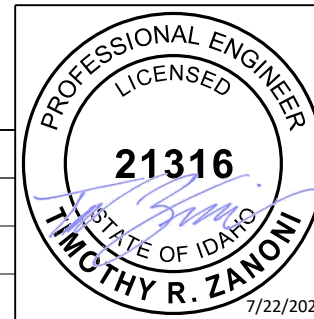


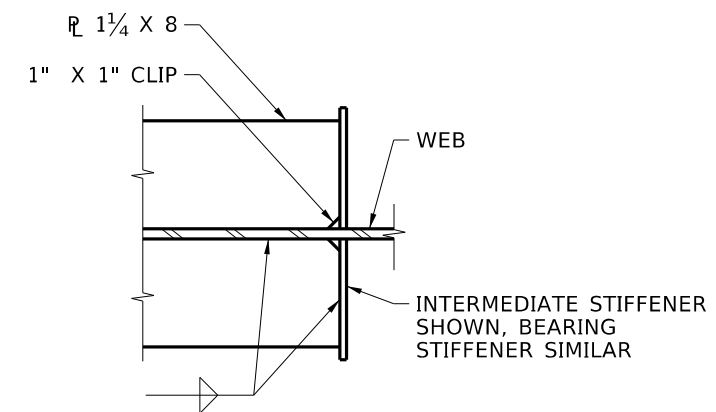
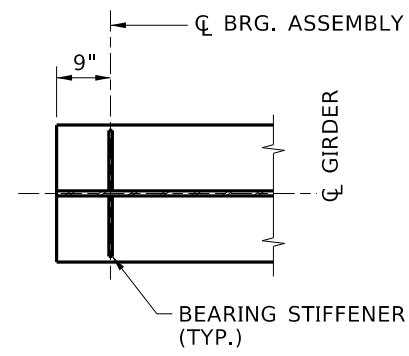
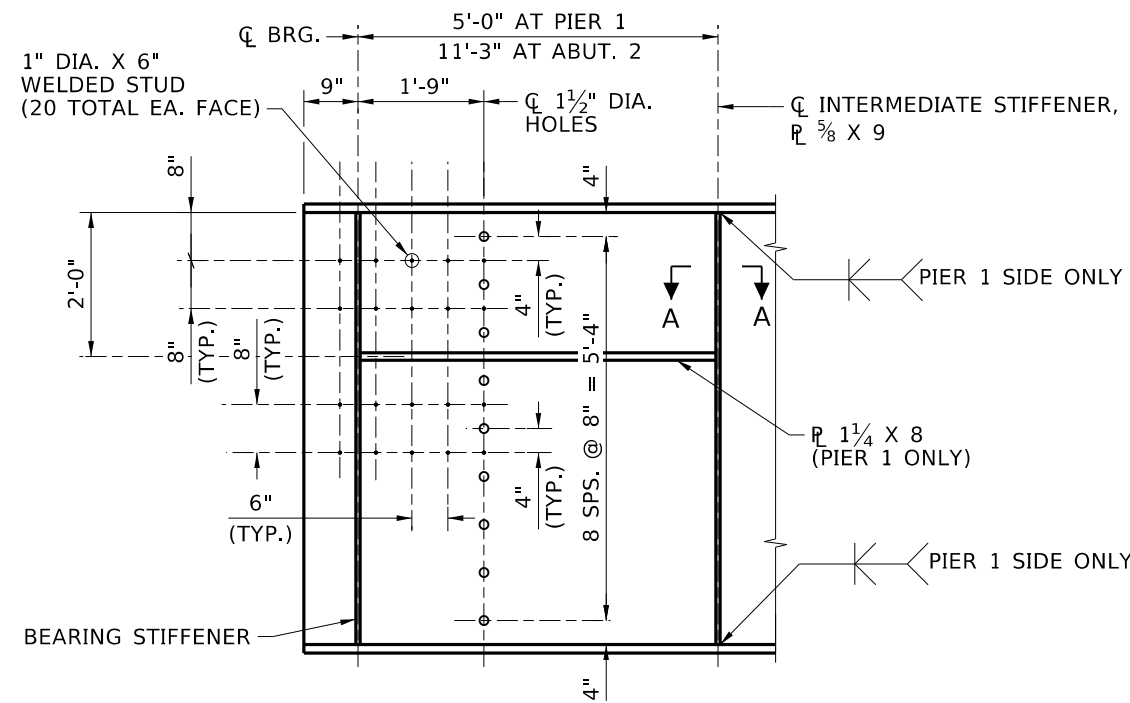
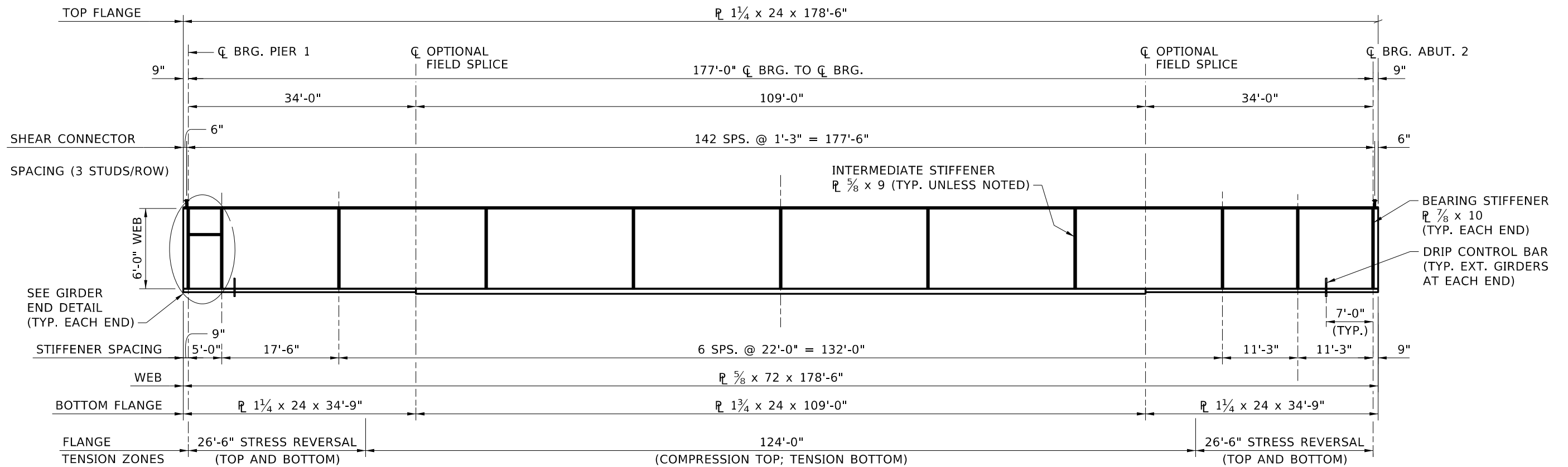
DAVID EVANS AND ASSOCIATES INC.

ENGLISH
 PROJECT NO.
 30786

PRESTRESSED VOIDED SLAB DETAILS
 239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
 OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
 STA. 5+44.10

BRIDGE PLANS
 BRIDGE KEY NO.
30786
 COUNTY SHOSHONE KEY NO. 30786
 BRIDGE DWG. NO. SHEET 24 OF 41





REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
T. ZANONI
 DESIGN CHECKED
G. GRIFFIN
 DETAILED
D. FOSTER
 DWG. CHECKED
G. GRIFFIN
 CORRECTIONS
D. FOSTER

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
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 DRAWING DATE:
JULY 2025

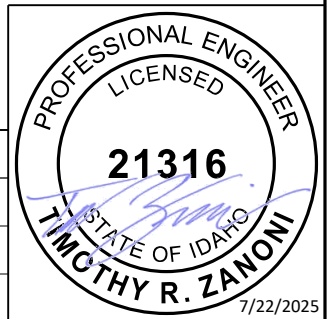


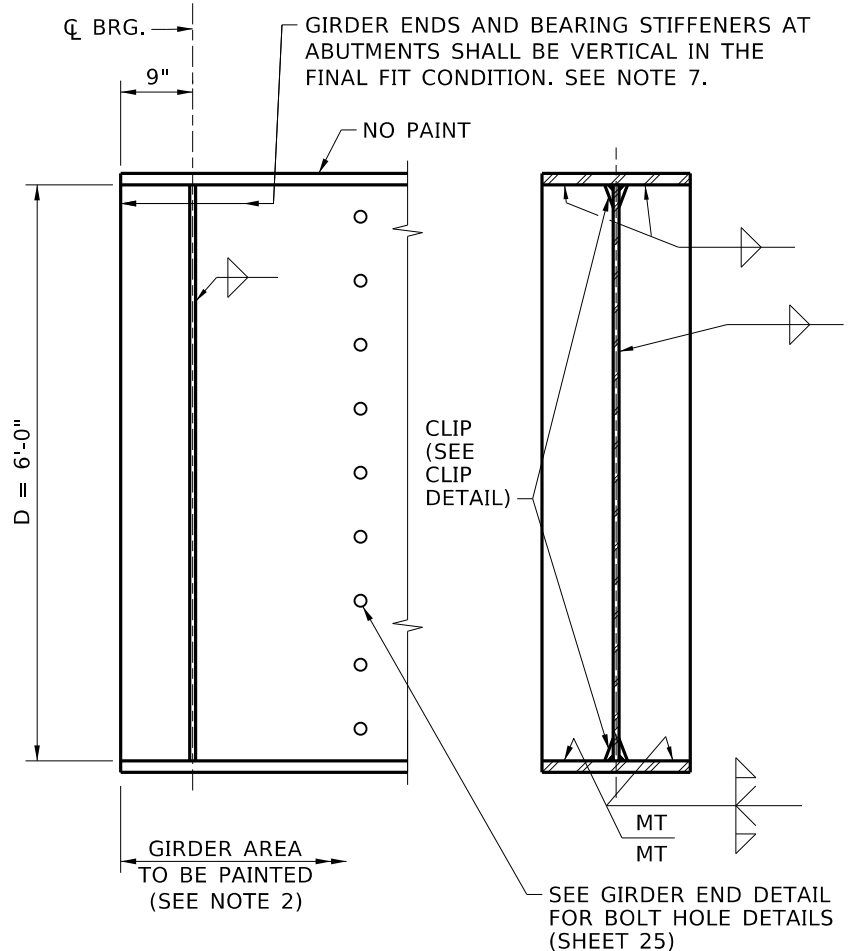
DAVID EVANS AND ASSOCIATES INC.

ENGLISH
 PROJECT NO.
 30786

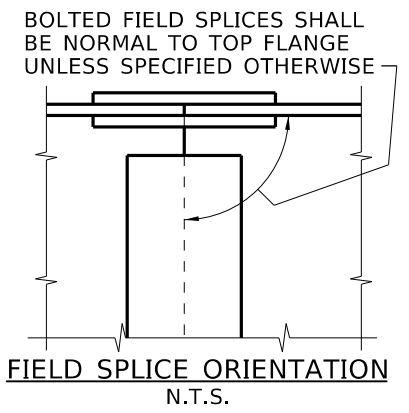
GIRDER ELEVATION
 239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
 OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
 STA. 5+44.10

BRIDGE PLANS
 BRIDGE KEY NO.
30786
 COUNTY
SHOSHONE
 BRIDGE DWG. NO.
-
 KEY NO.
30786
 SHEET
25 OF 41

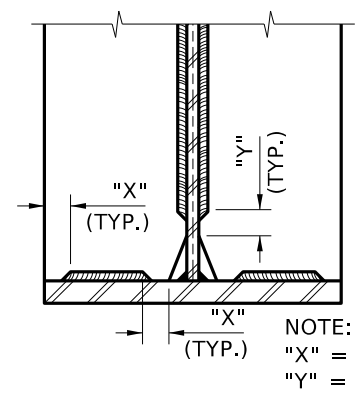




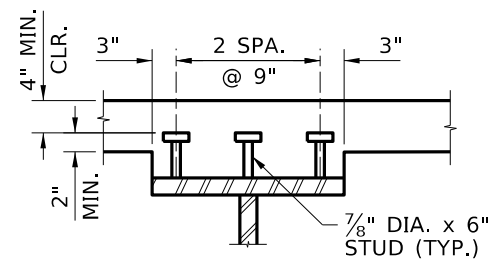
GIRDER END DETAIL
N.T.S.



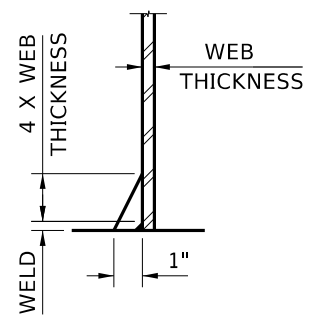
FIELD SPLICE ORIENTATION
N.T.S.



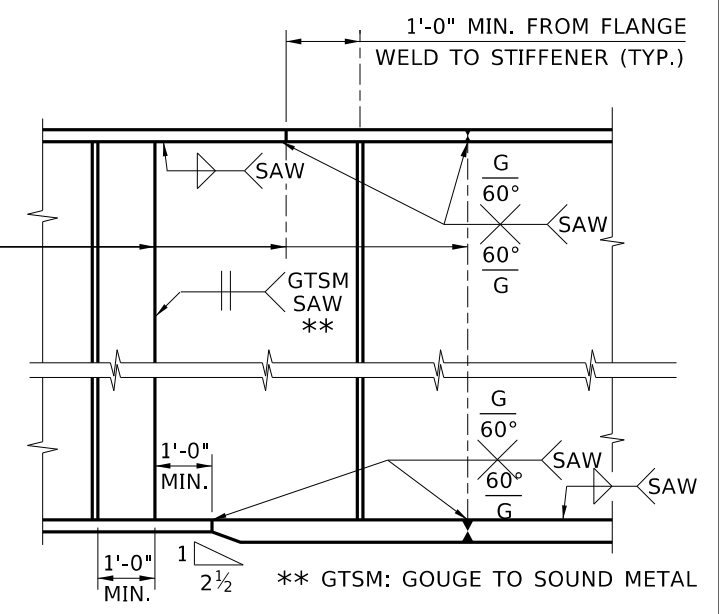
STIFFENER FILLET WELD TERMINATION DETAILS
N.T.S.



WELD STUDS DETAIL
N.T.S.



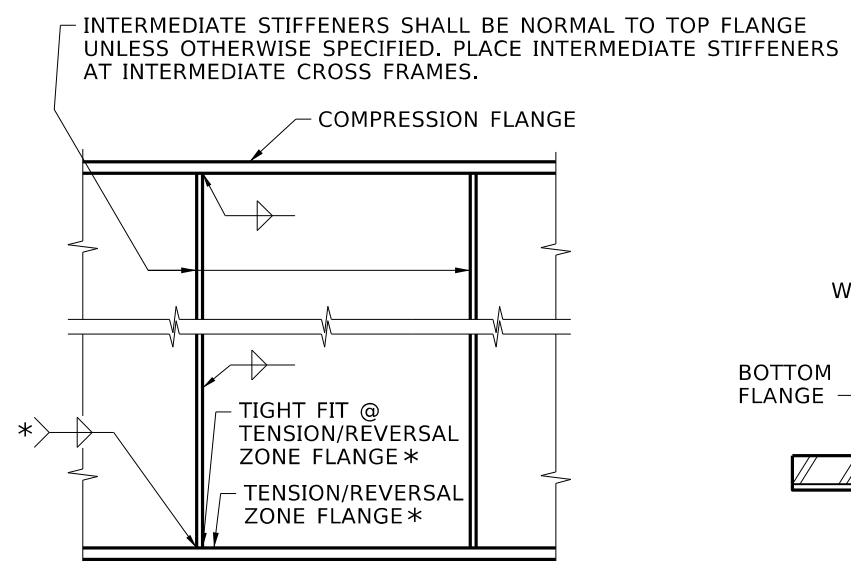
CLIP DETAILS
N.T.S.



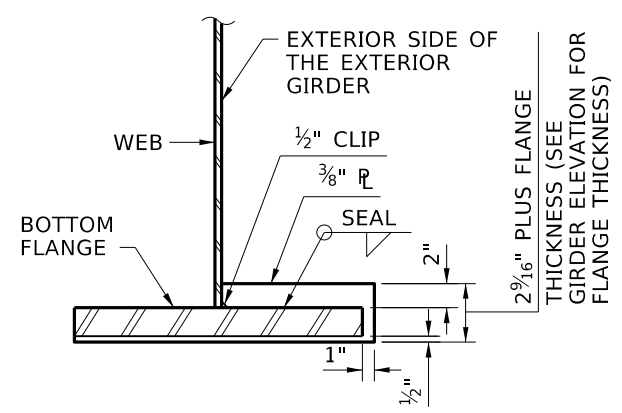
ASSEMBLY AND FABRICATION DETAILS
N.T.S.

GENERAL STEEL NOTES

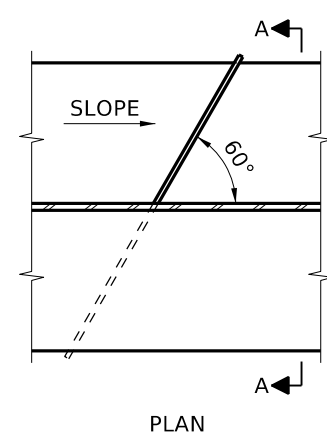
- PROVIDE ALL STRUCTURAL STEEL THAT CONFORMS TO ASTM A709 GRADE 50W UNLESS OTHERWISE NOTED ON THE PLANS.
- DO NOT PAINT THE TOP SURFACE OF THE TOP FLANGE.
 - PAINT BOLTED PAYING SURFACES WITH ONLY THE PRIME COAT IN ACCORDANCE WITH SUBSECTION 627.03 PART A AND C.
 - FOR ENDS OF GIRDER EMBEDDED IN CONCRETE, PAINT A DISTANCE FROM THE END GIRDER TO A MINIMUM OF 3' BEYOND THE FACE OF CONCRETE DIAPHRAGM IN ACCORDANCE WITH SUBSECTION 627 PART A AND C.
 - PROVIDE COLOR 20122 AMS-STD-595 FOR THE TOPCOAT.
- PROVIDE SLIP-CRITICAL JOINTS AT ALL BOLTED CONNECTIONS WITH CLASS B SURFACE CONDITIONS MADE WITH 7/8" DIA. HIGH STRENGTH BOLTS CONFORMING TO ASTM F3125 GRADE A325 TYPE 3. EXCLUDE THREADS FROM THE SHEAR PLANE. FIELD INSPECT ALL CONTACT SURFACES OF THE BOLTED CONNECTIONS IMMEDIATELY PRIOR TO ASSEMBLY TO ENSURE THAT THE SURFACES ARE FREE OF ALL MILL SCALE, DIRT, ROAD OIL, AND OTHER FOREIGN MATERIAL.
- COMPLETE STEEL GIRDER SUPERSTRUCTURE ERECTION BEFORE PLACING FORMS.
- DO NOT WELD IN THE TENSION OR STRESS REVERSAL ZONES OF THE GIRDERS EXCEPT AS SHOWN ON THE PLANS.
- IF THE PLATE THICKNESS FOR PARALLEL GROOVE WELD EXCEEDS THE PREQUALIFIED THICKNESS LISTED IN D1.5 THEN V GROOVE WELD MAY BE SUBSTITUTED.
- USE TOTAL DEAD LOAD FIT (TDLF) FIT CONDITION IN ACCORDANCE WITH ARTICLE 6.7.2 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
- NO ADDITIONAL SHOP SPLICES ARE ALLOWED UNLESS APPROVED BY THE ENGINEER.
- PROVIDE WELDED FABRICATION IN ACCORDANCE WITH ANSI/AASHTO/AWS D1.5 AND ALL INTERIM REVISIONS PUBLISHED BY AASHTO.



INTERMEDIATE STIFFENER DETAILS
N.T.S.



DRIP CONTROL BAR DETAIL (EXTERIOR GIRDERS ONLY)
N.T.S.



PLAN

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
T. ZANONI
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

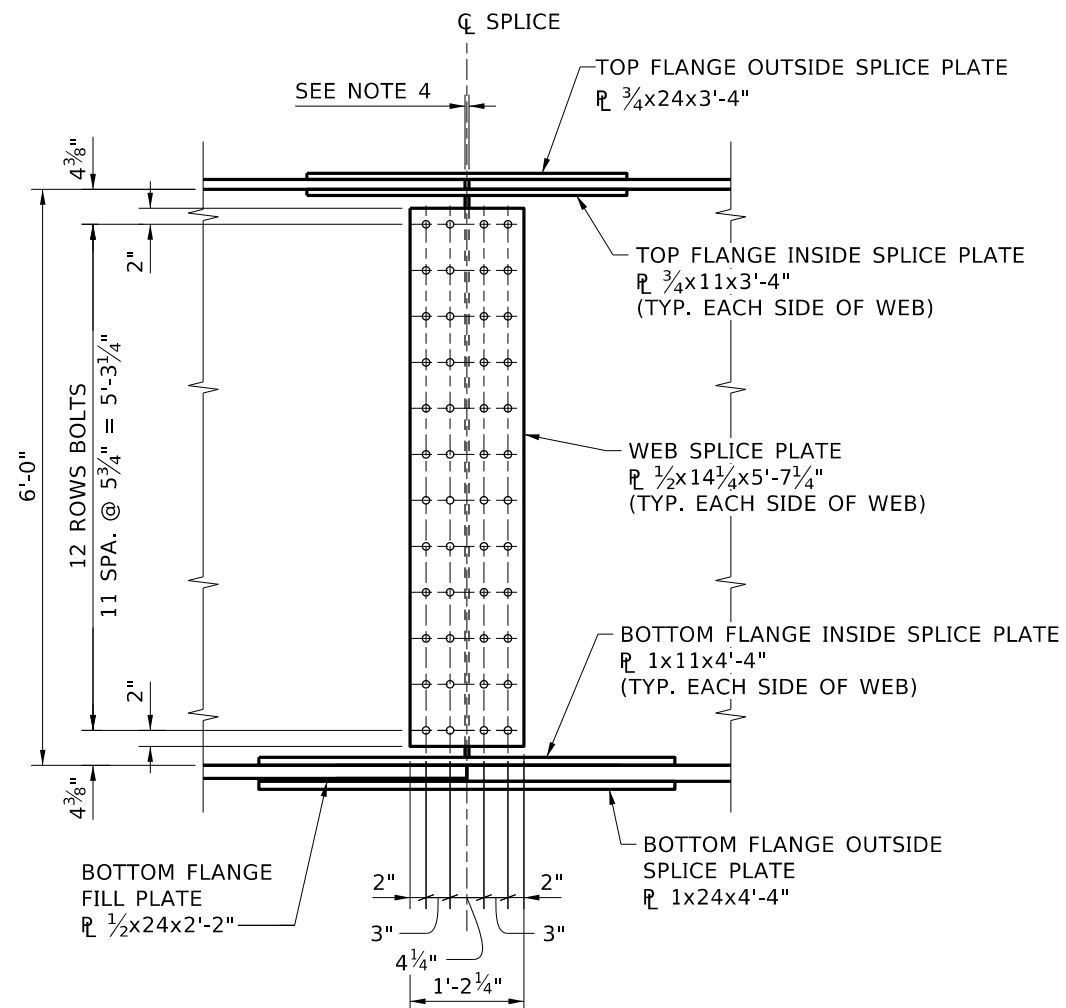
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DRAWING DATE:
JULY 2025

DAVID EVANS AND ASSOCIATES INC.

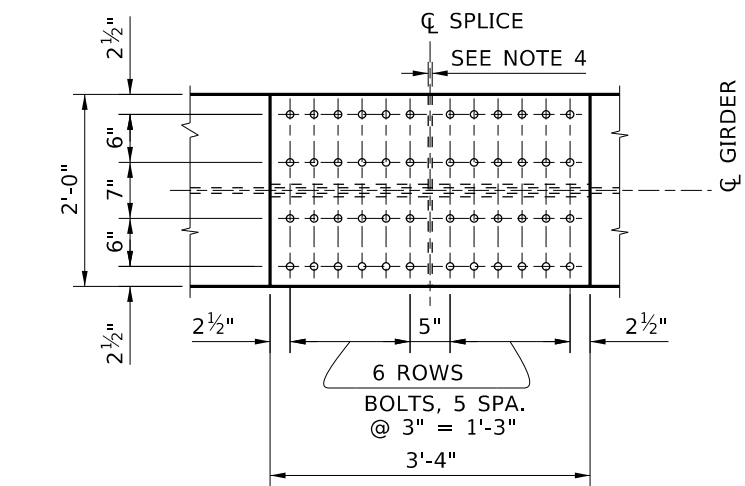
ENGLISH
PROJECT NO.
30786

GIRDER FABRICATION DETAILS
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

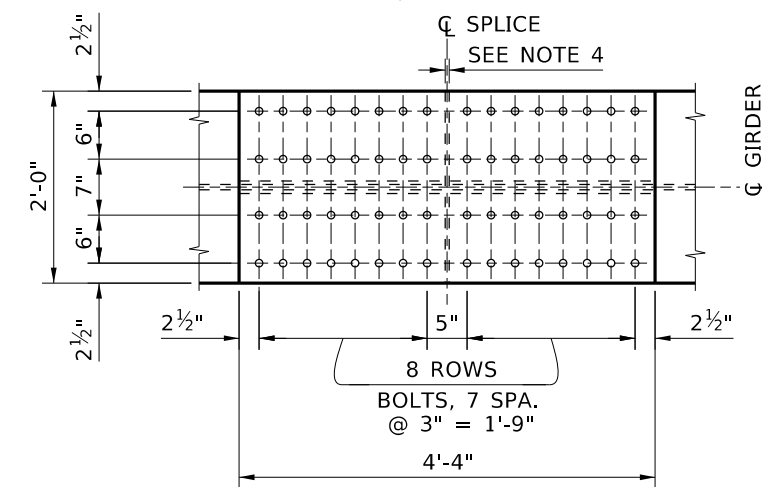
BRIDGE PLANS
BRIDGE KEY NO.
30786
COUNTY
SHOSHONE
BRIDGE DWG. NO.
KEY NO.
30786
SHEET
26 OF 41



ELEVATION - WEB
1/2" = 1'-0"



PLAN - TOP FLANGE
1/2" = 1'-0"



REFLECTED PLAN - BOTTOM FLANGE
1/2" = 1'-0"

NOTES

1. PROVIDE 7/8" DIA. BOLTS IN 15/16" DIA. HOLES FOR ALL BOLTED SPLICES.
2. FOR FLANGE SPLICES, PROVIDE BOLTS WITH GRIP LENGTHS SUFFICIENT TO EXCLUDE THREADS AND THREAD TRANSITIONS FROM SHEAR PLANES.
3. VARY OR ADJUST FILL PLATE THICKNESS DURING FABRICATION TO SECURE A CLOSE FIT. SINGLE FILL PLATES ARE REQUIRED FOR THE FLANGE SPLICES.
4. PROVIDE 1/8" MIN. TO 1/4" MAX. GAP BETWEEN ENDS OF GIRDER FIELD SPLICE SECTIONS, AT THE FIELD SPLICE.
5. LOCATE NUTS FOR THE WEB SPLICE ON THE INSIDE OF THE GIRDER FOR EXTERIOR GIRDER SPLICES.
6. TIGHTEN WEB SPLICE BOLTS BEGINNING WITH ROWS OF BOLTS NEAREST TO THE Q FIELD SPLICE AND PROCEED OUTWARD.
7. SEE SHEET 26 FOR GENERAL STEEL NOTES.

REVISIONS			
NO.	DATE	BY	DESCRIPTION
▲			
▲			
▲			
▲			

DESIGNED T. ZANONI
DESIGN CHECKED G. GRIFFIN
DETAILED D. FOSTER
DWG. CHECKED G. GRIFFIN
CORRECTIONS D. FOSTER

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
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DRAWING DATE: JULY 2025

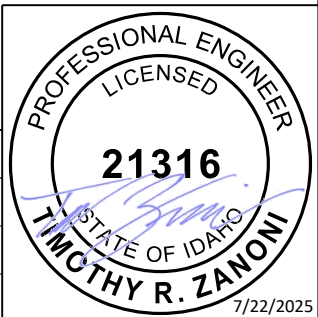


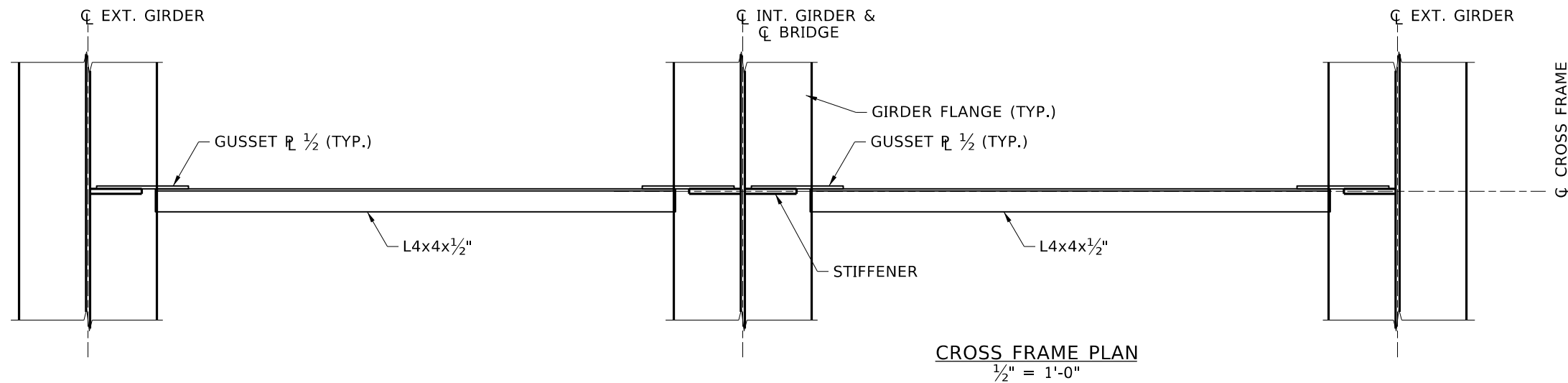
DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO. 30786

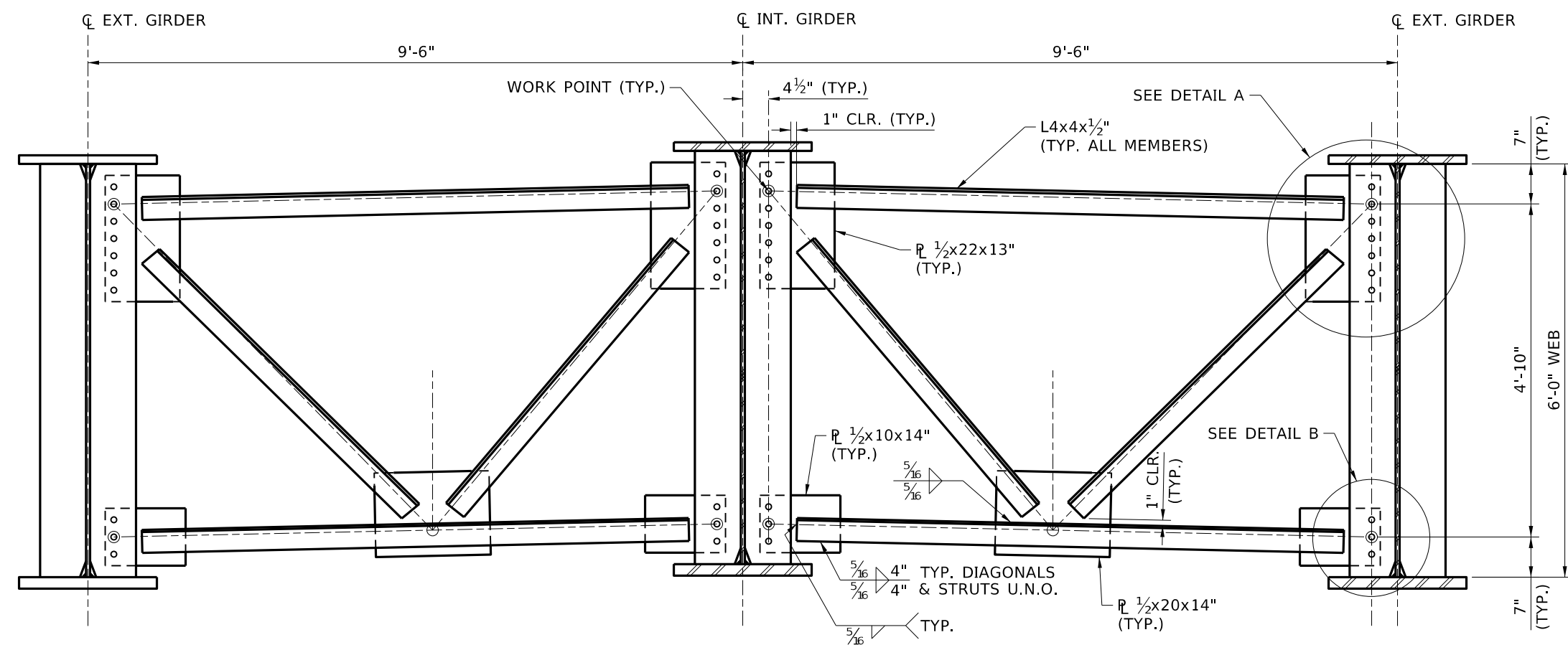
GIRDER SPLICE DETAILS
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10

BRIDGE PLANS	
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 27 OF 41





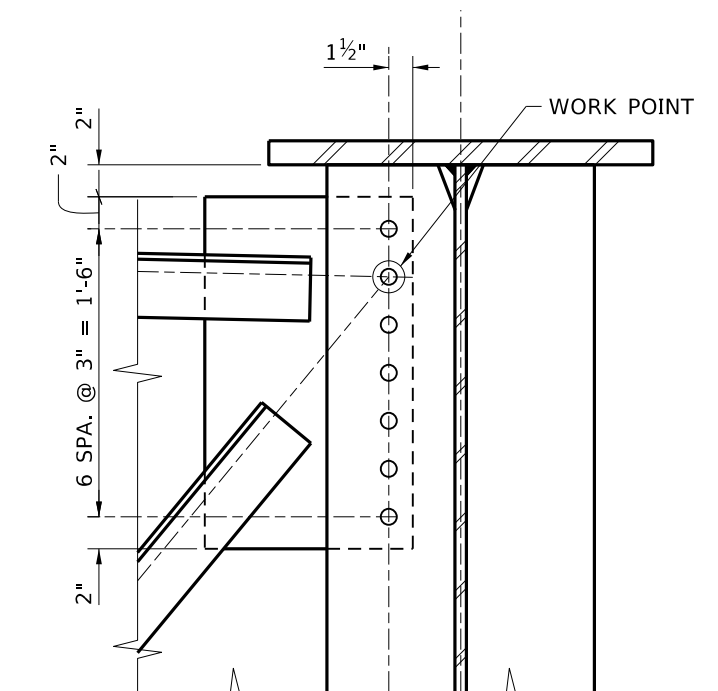
CROSS FRAME PLAN
1/2" = 1'-0"



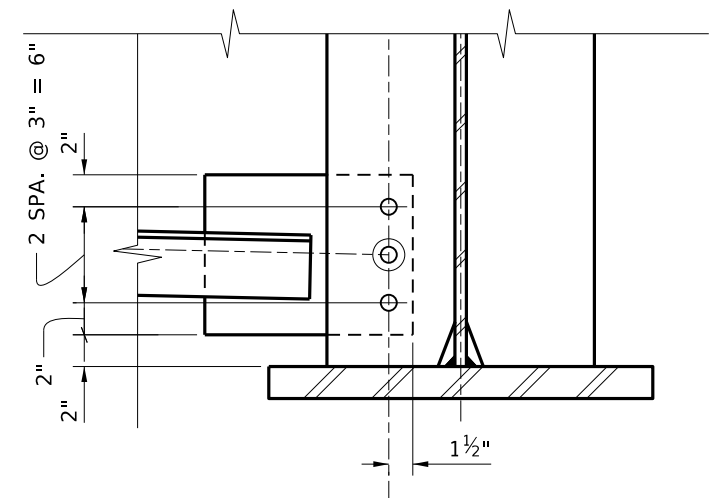
CROSS FRAME ELEVATION
1/2" = 1'-0"

NOTES

1. PROVIDE 7/8" DIA. BOLTS IN 15/16" DIA. HOLES FOR ALL BOLTED CROSS FRAME CONNECTIONS.
2. SEE SHEET 26 FOR GENERAL STEEL NOTES.



DETAIL A
1" = 1'-0"



DETAIL B
1" = 1'-0"

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
T. ZANONI
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME
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DRAWING DATE:
JULY 2025

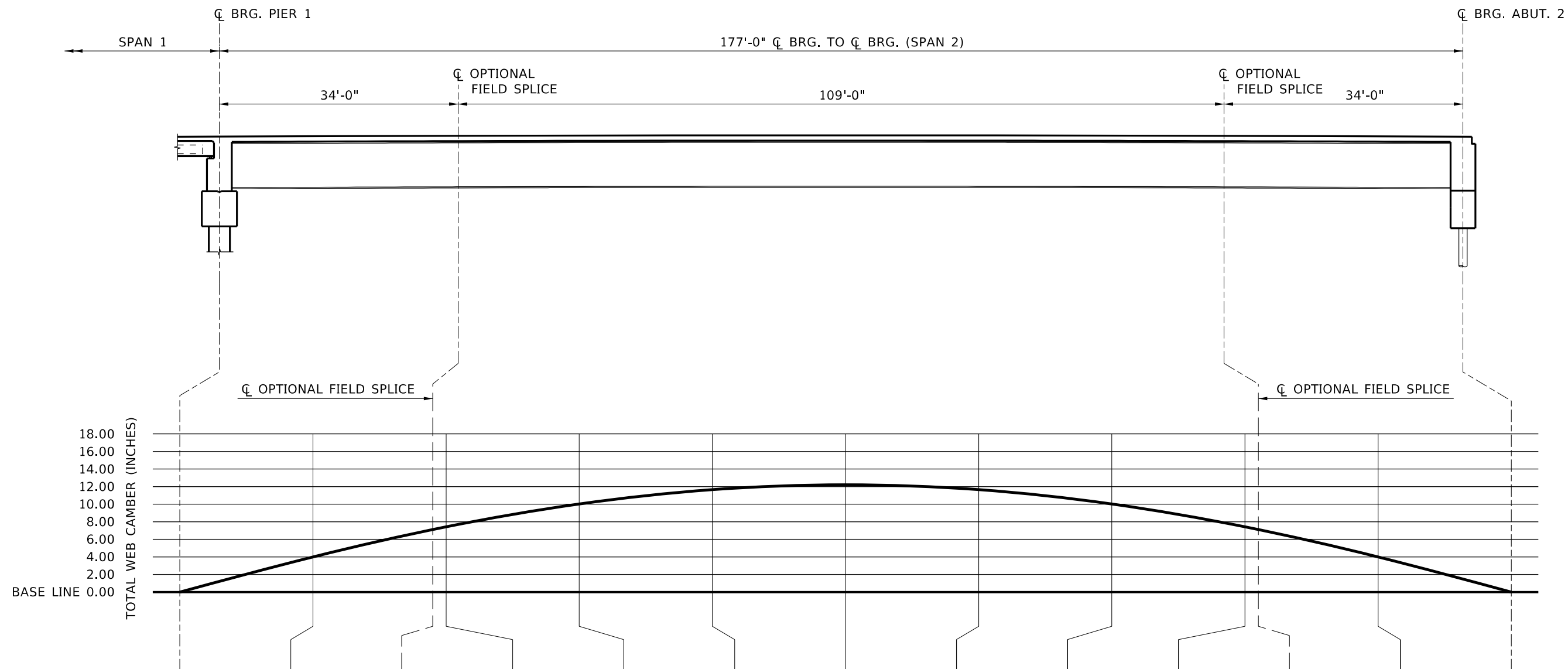


DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO.
30786

CROSS FRAME DETAILS
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS
BRIDGE KEY NO.
30786
COUNTY SHOSHONE KEY NO.
30786
BRIDGE DWG. NO. SHEET
28 OF 41



	Q BRG. ABUT. 1	SPAN											Q BRG. ABUT. 2
SPAN POINT	0.0	0.1	0.192	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.808	0.9	1.0
GIRDER DEAD LOAD	0.00	0.92	1.68	1.74	2.37	2.76	2.90	2.77	2.37	1.74	1.68	0.92	0.00
DECK DEAD LOAD	0.00	2.03	3.70	3.81	5.19	6.07	6.37	6.07	5.19	3.81	3.70	2.03	0.00
SHRINKAGE	0.00	0.76	1.31	1.35	1.77	2.02	2.10	2.02	1.77	1.35	1.31	0.76	0.00
COMPOSITE DEAD LOAD	0.00	0.22	0.41	0.42	0.57	0.67	0.70	0.67	0.57	0.42	0.41	0.22	0.00
TOTAL DEAD LOAD	0.00	3.94	7.10	7.32	9.90	11.52	12.07	11.52	9.90	7.32	7.10	3.94	0.00
VERTICAL CURVE CORRECTION	0.00	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
TOTAL WEB CAMBER	0.00	3.96	7.11	7.34	9.91	11.53	12.08	11.53	9.90	7.33	7.10	3.94	0.00

NOTES

1. POSITIVE NUMBERS REFLECT UPWARD CAMBER.
2. MEASUREMENTS ARE IN INCHES UNLESS NOTED OTHERWISE.
3. DIMENSIONS ARE REFERENCED FROM BASE LINE. BASE LINE REPRESENTS A LINE CONNECTING THE TOP OF WEB BETWEEN Q BRG. PIER 1 AND Q BRG. ABUT. 2.
4. "GIRDER DEAD LOAD" INCLUDES THE WEIGHT OF ALL NON-COMPOSITE STRUCTURAL STEEL INCLUDING STIFFENERS AND CROSS FRAMES.
5. "TOTAL DEAD LOAD" INCLUDES COMPOSITE RAIL WEIGHT, SHRINKAGE, DECK DEAD LOAD AND GIRDER DEAD LOAD.
6. "VERTICAL CURVE CORRECTION" IS THE DIFFERENCE BETWEEN BASELINE AND VERTICAL PROFILE GRADE.
7. ALL GIRDERS ARE CAMBERED THE SAME.

CAMBER DIAGRAM AND TABLE
N.T.S.

NO.	DATE	BY	DESCRIPTION
▲			
▲			
▲			
▲			

DESIGNED
T. ZANONI
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

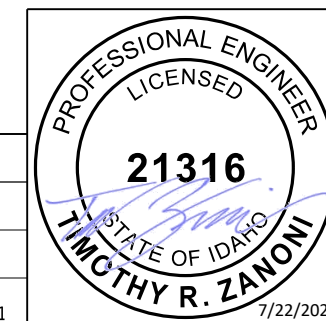
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DRAWING DATE:
JULY 2025

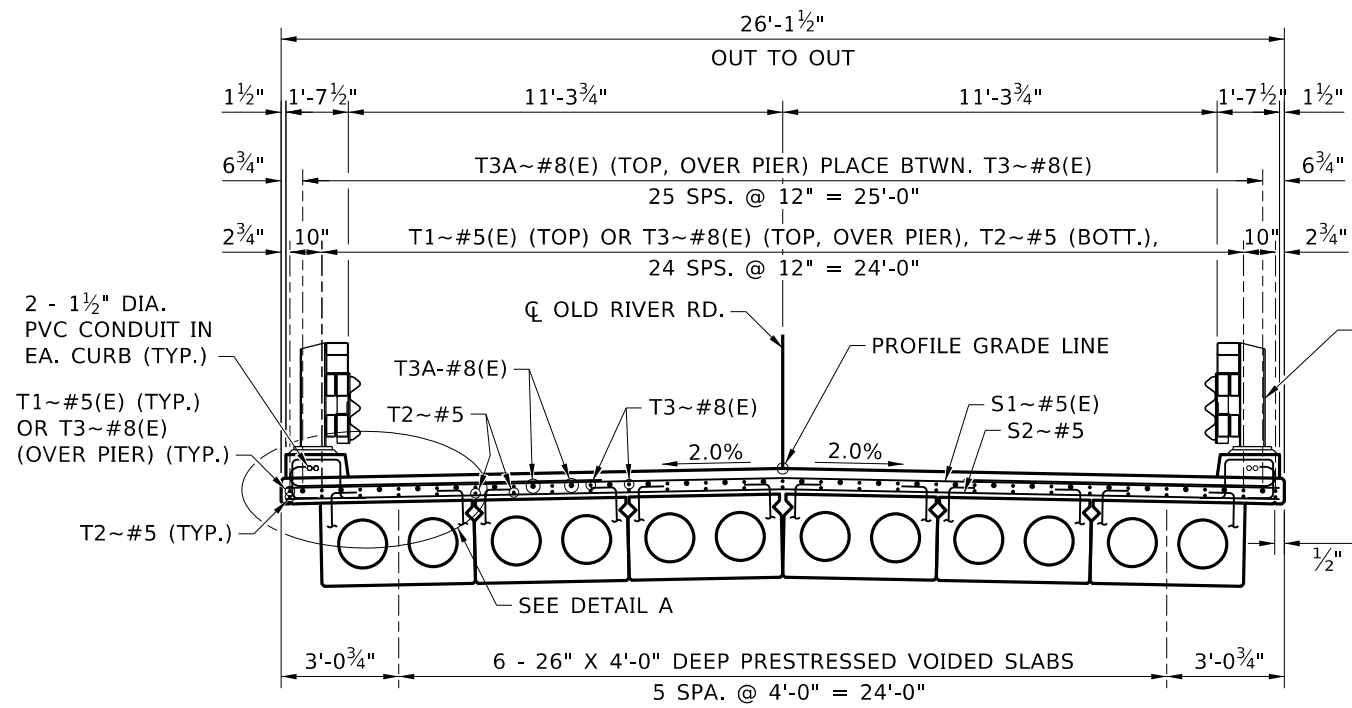


ENGLISH
PROJECT NO.
30786

GIRDER CAMBER DIAGRAM
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS
BRIDGE KEY NO.
30786
COUNTY
SHOSHONE
BRIDGE DWG. NO.
-
KEY NO.
30786
SHEET
29 OF 41





TYPICAL SECTION
(SPAN 1)
1' = 5'-0"

2 - 1 1/2" DIA.
PVC CONDUIT IN
EA. CURB (TYP.)

T1~#5(E) (TYP.)
OR T3~#8(E)
(OVER PIER) (TYP.)

T2~#5 (TYP.)

T3A~#8(E)

T2~#5

T3~#8(E)

S1~#5(E)

S2~#5

SEE DETAIL A

6 - 26" X 4'-0" DEEP PRESTRESSED VOIDED SLABS
5 SPA. @ 4'-0" = 24'-0"

2 - 1 1/2" DIA.
PVC CONDUIT IN
EA. CURB (TYP.)

THREE-TUBE CURB
MOUNT RAIL (TYP.)
(SEE SHEETS 37-39)

T1~#5(E) (TYP.) OR
T3~#8(E) (OVER PIER) (TYP.)

3" (TYP.)
1/2" DRIP GROOVE

T2~#5 (TYP.)

CL OLD RIVER RD.

PROFILE GRADE LINE

T3A~#8(E)

T2~#5

T3~#8(E)

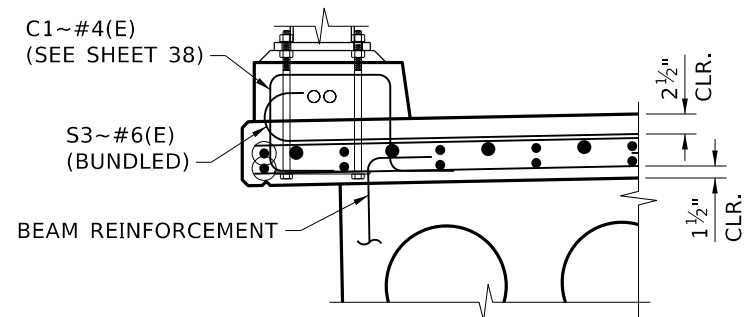
S1~#5(E)

S2~#5

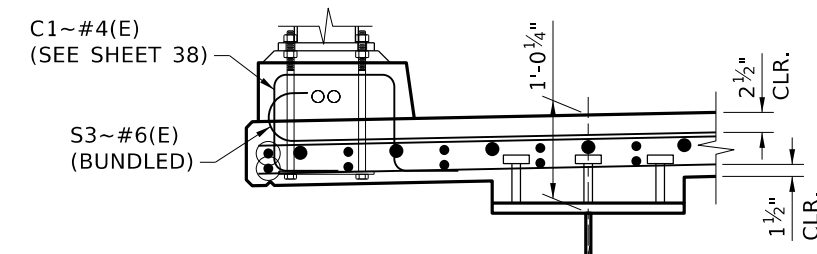
SEE DETAIL B

3 - 72" STEEL PLATE GIRDER
2 SPA. @ 9'-6" = 19'-0"

TYPICAL SECTION
(SPAN 2)
1' = 5'-0"



DETAIL A
1/2" = 1'-0"



DETAIL B
1/2" = 1'-0"

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
P. BARUWAL
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME
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DRAWING DATE:
JULY 2025

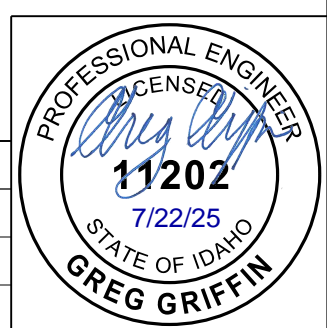


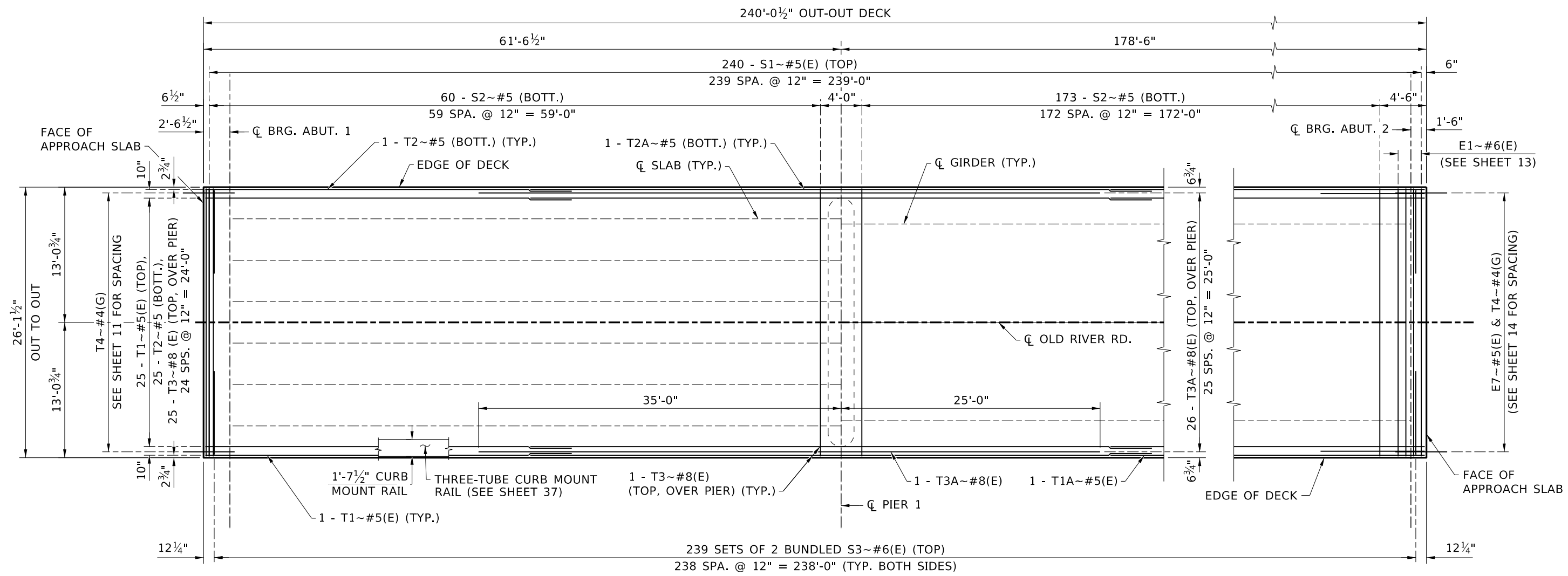
DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO.
30786

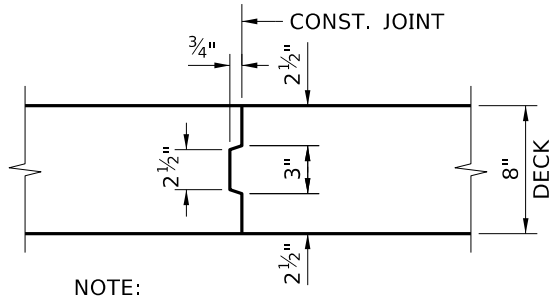
DECK CROSS SECTION AND DETAILS
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS
BRIDGE KEY NO.
30786
COUNTY
SHOSHONE
BRIDGE DWG. NO.
KEY NO.
30786
SHEET
30 OF 41



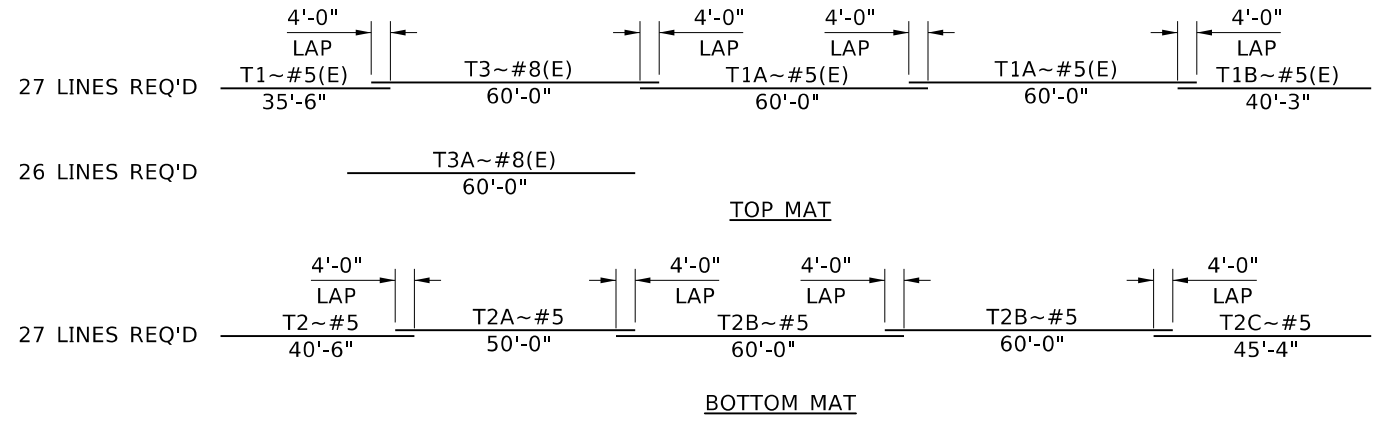


DECK REINFORCEMENT PLAN
1"=10'-0"



NOTE:
DECK REINF. NOT SHOWN FOR CLARITY

DECK CONSTRUCTION JOINT
1"=1'-0"



LAP SPLICE DIAGRAM
N.T.S.

- NOTES:**
1. ALL GIRDERS ARE PARALLEL TO BRIDGE LAYOUT LINE.
 2. SEE SHEET 6 FOR DECK PLACING SEQUENCE.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	
DETAILED D. FOSTER	CADD FILE NAME
DWG. CHECKED G. GRIFFIN	30786_bdt1_d31.dgn
CORRECTIONS D. FOSTER	DRAWING DATE: JULY 2025

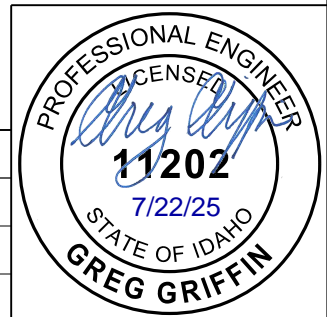


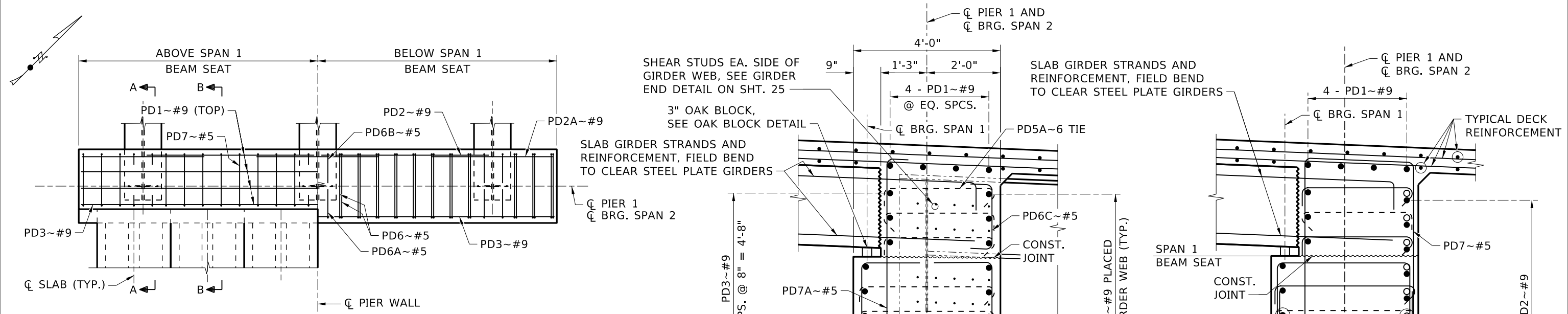
DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO.
30786

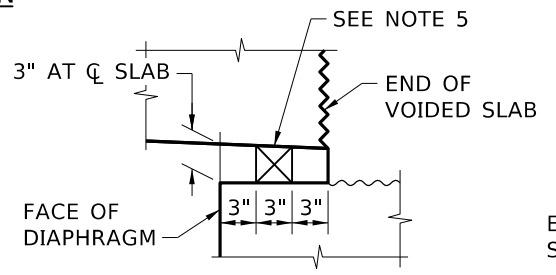
DECK REINFORCEMENT PLAN
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS	
BRIDGE KEY NO. 30786	KEY NO. 30786
COUNTY SHOSHONE	SHEET 31 OF 41



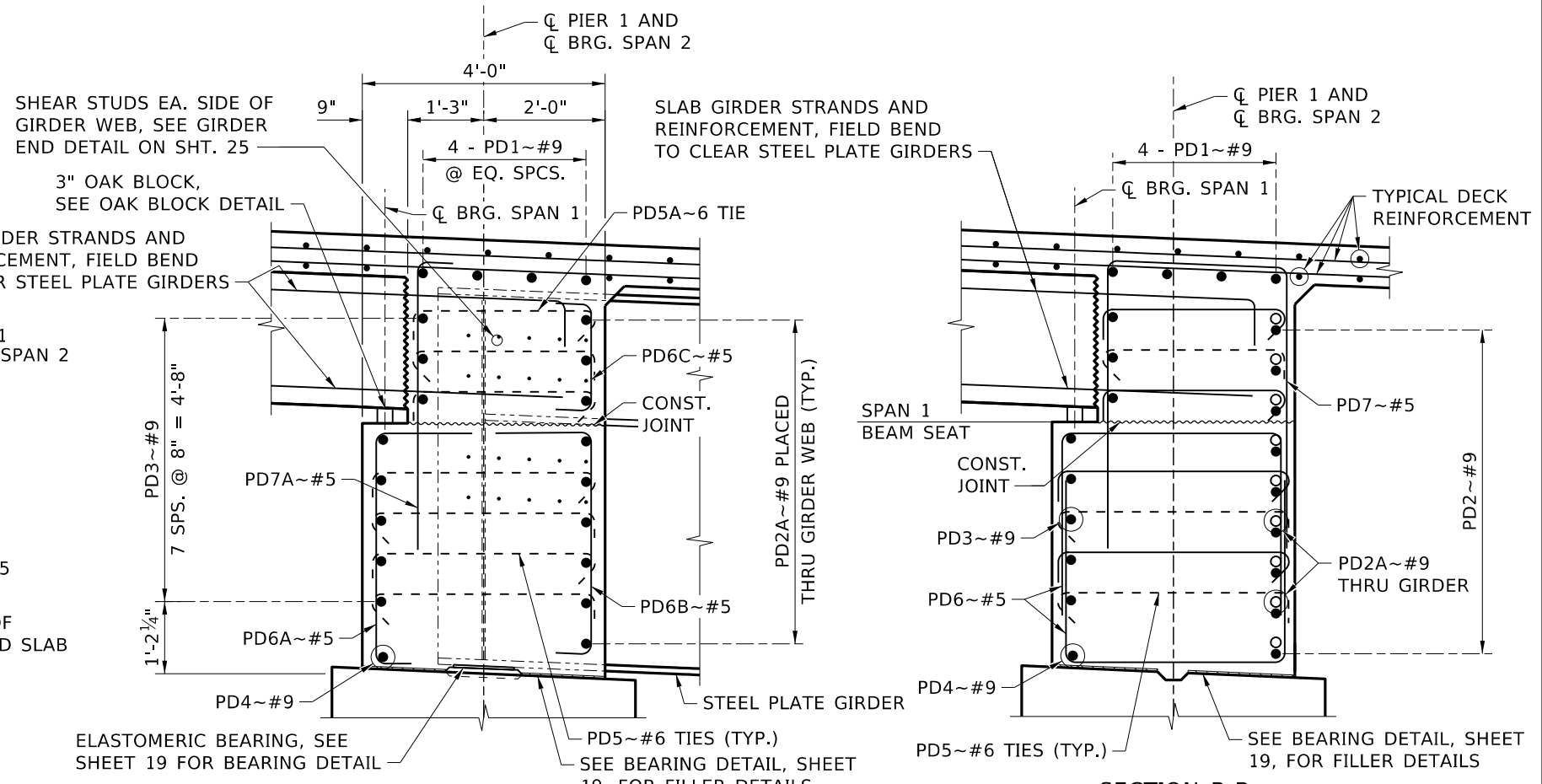


PIER 1 DIAPHRAGM PLAN
3/16" = 1'-0"



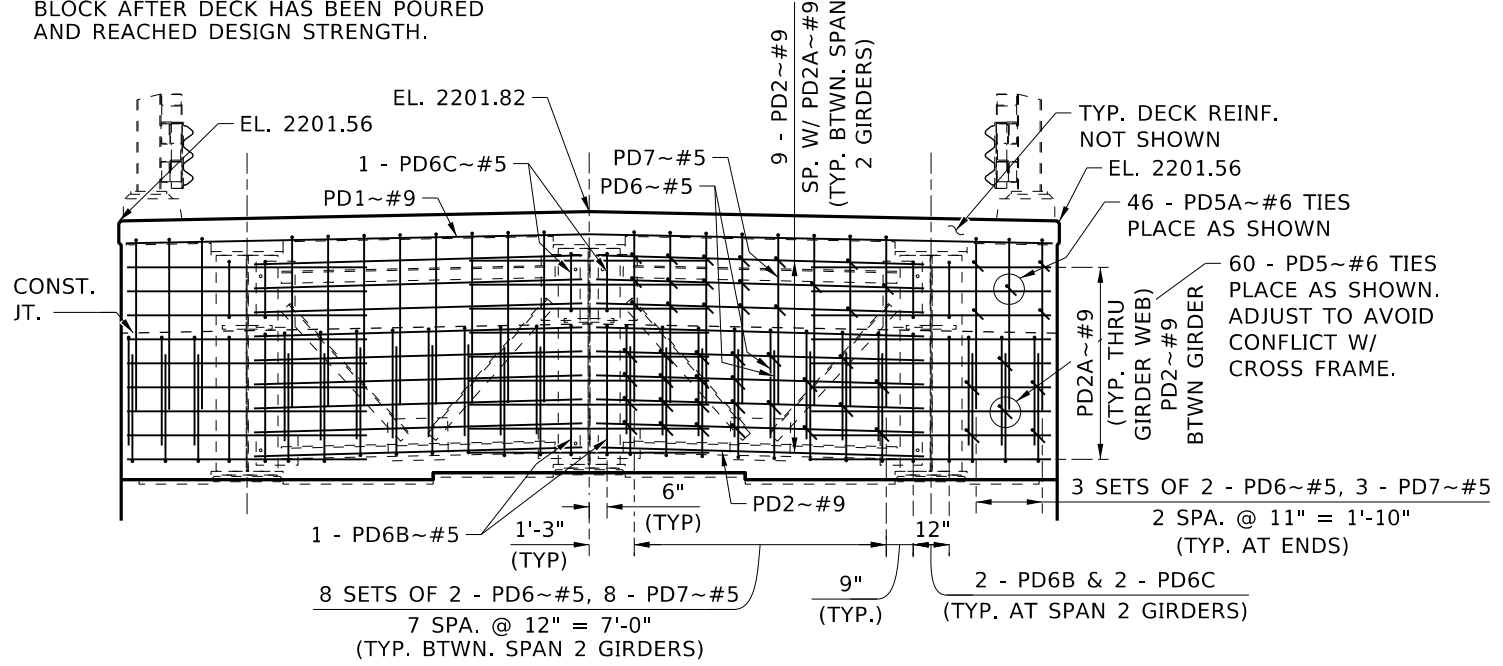
OAK BLOCK DETAIL
3/4" = 1'-0"

- NOTE:**
1. BEARING AREAS ARE LEVEL TRANSVERSELY AND LONGITUDINALLY (TYP. ALL BEARINGS).
 2. KEYWAYS BETWEEN GIRDERS NOT SHOWN FOR CLARITY. SEE SHEET 19 FOR DETAILS.
 3. SEE SHEET 20 FOR LOCATION AND SHEET 24 FOR BEARING PAD DETAILS.
 4. OAK BLOCK TO BE PLACED PARALLEL TO FACE OF CROSSBEAM. OAK BLOCK TO RUN FULL WIDTH OF GIRDER. REMOVE OAK BLOCK AFTER DECK HAS BEEN POURED AND REACHED DESIGN STRENGTH.



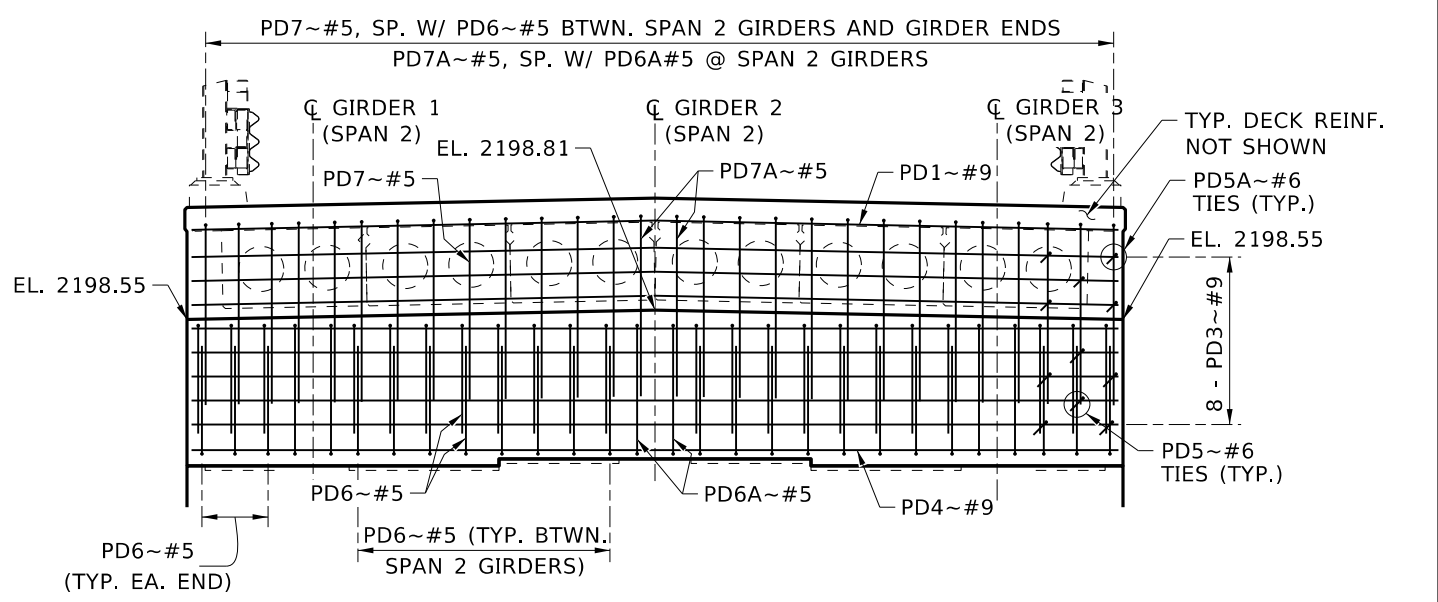
SECTION A-A
3/8" = 1'-0"

SECTION B-B
3/8" = 1'-0"



PIER 1 DIAPHRAGM ELEVATION
3/16" = 1'-0"

(LOOKING BACK ON STATION)
ELEVATIONS SHOWN AT FINISHED GRADE @ CL PIER 1



PIER 1 DIAPHRAGM ELEVATION
3/16" = 1'-0"

(LOOKING AHEAD ON STATION)
ELEVATIONS SHOWN AT CL BRG SPAN 1 BEAM SEAT

NO.	DATE	BY	DESCRIPTION

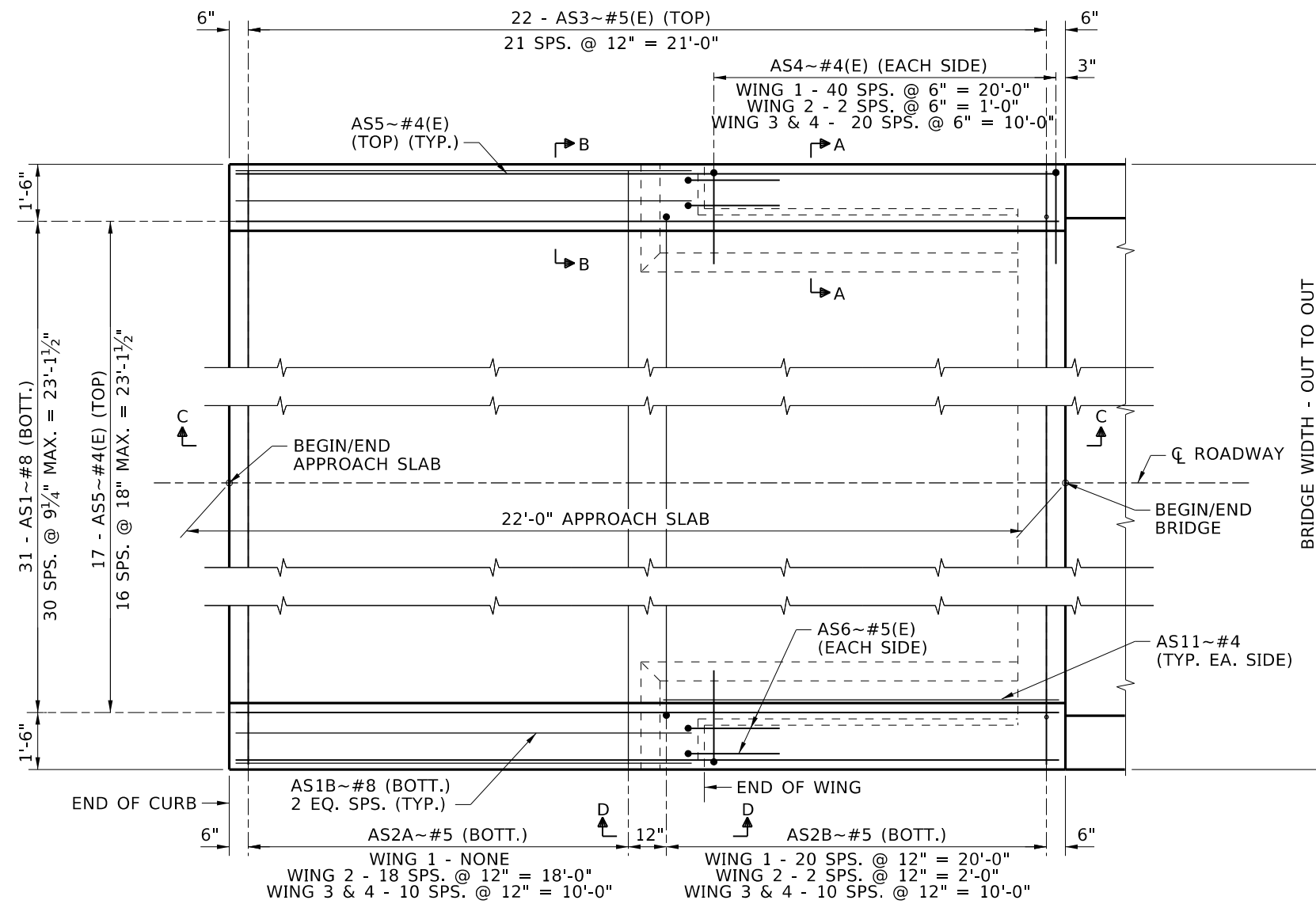
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DESIGN CHECKED G. GRIFFIN	CADD FILE NAME
DETAILED D. FOSTER	30786_bdt1_d32.dgn
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CORRECTIONS D. FOSTER	

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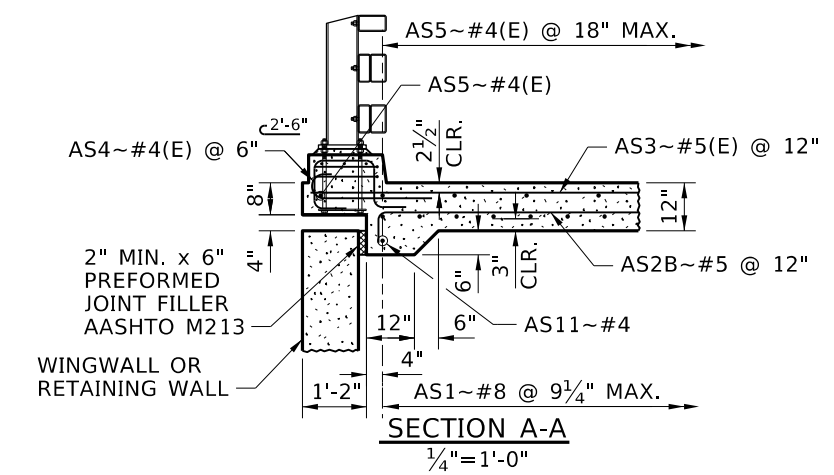
ENGLISH
PROJECT NO. 30786

PIER 1 DIAPHRAGM DETAILS
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

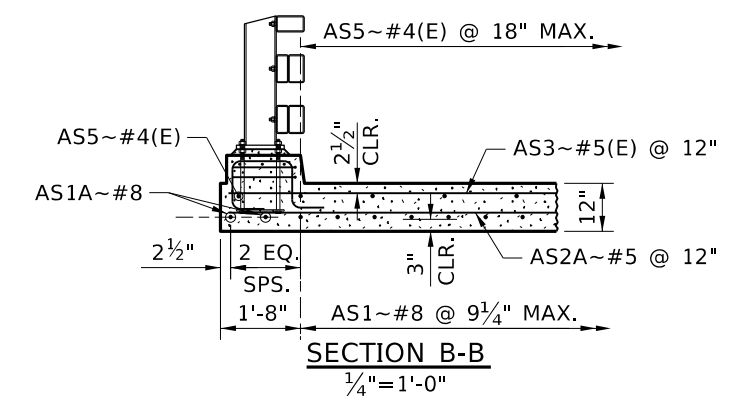
BRIDGE PLANS	
BRIDGE KEY NO. 30786	KEY NO. 30786
COUNTY SHOSHONE	SHEET 32 OF 41



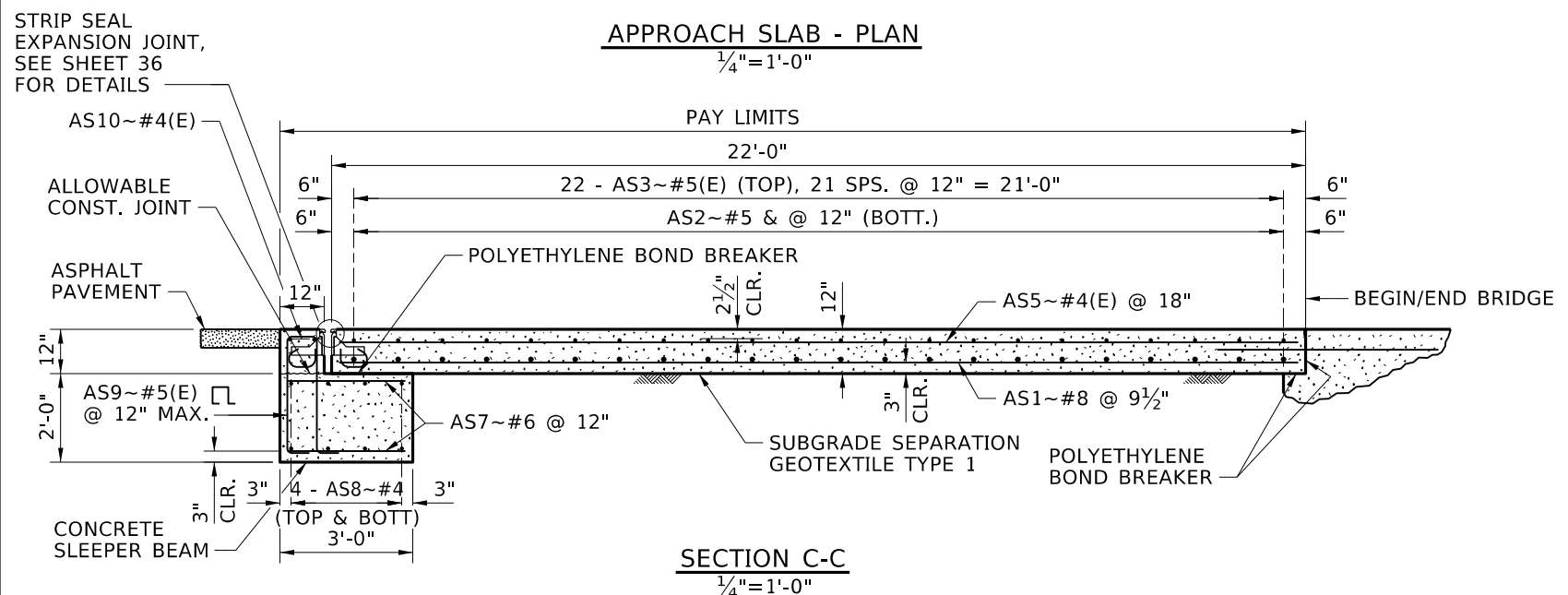
APPROACH SLAB - PLAN
1/4" = 1'-0"



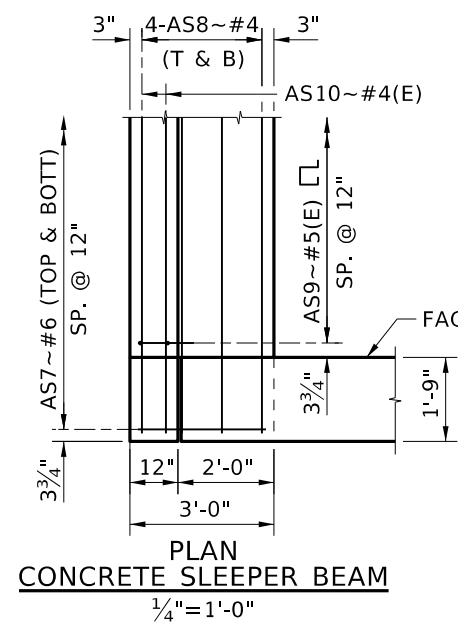
SECTION A-A
1/4" = 1'-0"



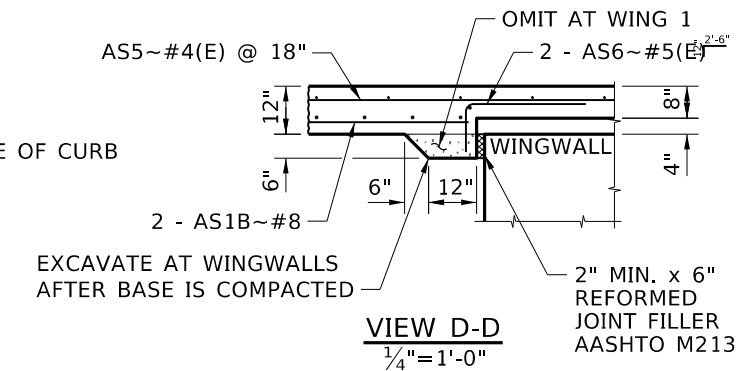
SECTION B-B
1/4" = 1'-0"



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



PLAN CONCRETE SLEEPER BEAM
1/4" = 1'-0"



VIEW D-D
1/4" = 1'-0"

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
P. BARUWAL
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME
30786_bdt1_d33.dgn
DRAWING DATE:
JULY 2025

DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO.
30786

APPROACH SLAB DETAILS (1 OF 2)
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS
BRIDGE KEY NO.
30786
COUNTY
SHOSHONE
BRIDGE DWG. NO.
KEY NO.
30786
SHEET
33 OF 41

NOTES

APPROACH SLAB

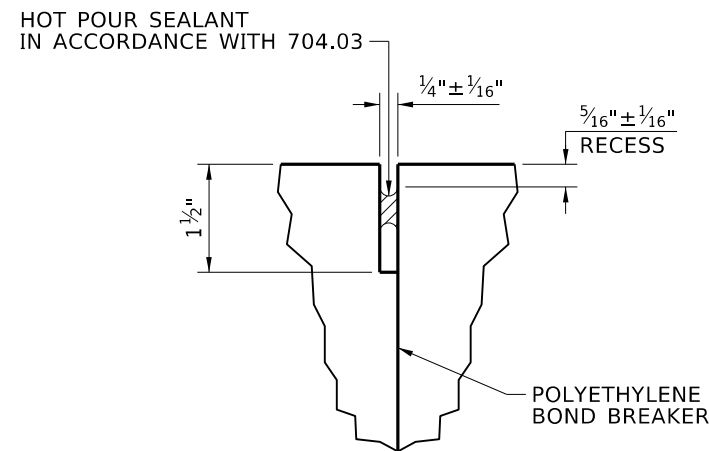
1. PROVIDE CLASS 40AF CONCRETE.
2. PROVIDE REINFORCEMENT IN ACCORDANCE WITH AASHTO M31 GRADE 60 TYPE S. EPOXY COAT THE TOP MAT OF BOTH TRANSVERSE AND LONGITUDINAL REINFORCEMENT IN ACCORDANCE WITH 708.02. PROVIDE BEND DETAILS IN ACCORDANCE WITH THE LATEST A.C.I. STANDARD PRACTICE AND AASHTO SPECIFICATIONS.
3. PLACE LONGITUDINAL REINFORCEMENT PARALLEL TO THE CENTERLINE OF THE ROADWAY; PLACE THE TRANSVERSE REINFORCEMENT PERPENDICULAR TO THE CENTERLINE OF THE ROADWAY.
4. PROVIDE 3/4" TYPE A BASE MATERIAL COMPACTED TO MEET CLASS "A" COMPACTION REQUIREMENTS TO THE LIMITS SHOWN IN DETAIL C BEFORE POURING THE APPROACH SLAB. THE COST OF THE MATERIAL IS INCIDENTAL TO PAY ITEM 502-435A.
5. THE COST OF THE SUBGRADE SEPARATION GEOTEXTILE TYPE I IS INCIDENTAL TO PAY ITEM 502-435A.
6. PROVIDE 4 MIL (MIN.) POLYETHYLENE SHEET. THE COST IS INCIDENTAL TO PAY ITEM 502-435A.
7. PAYMENT FOR APPROACH SLAB IS PAY ITEM 502-435A.

EXPANSION JOINT

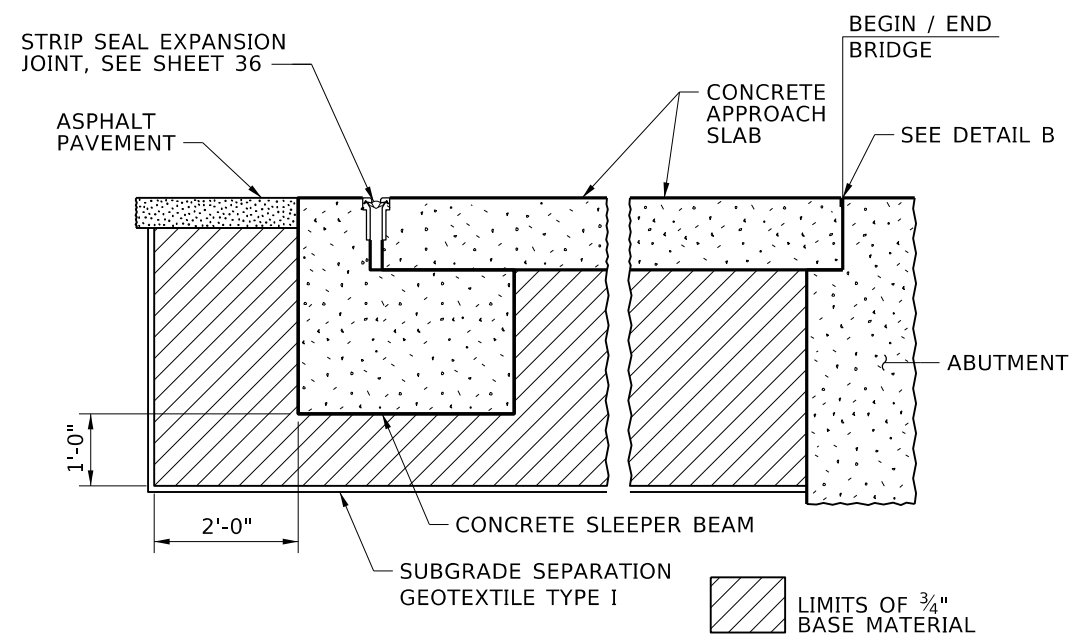
8. PROVIDE CONTINUOUS JOINT SEAL.
9. INSTALL THE SEAL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
10. ADJUST EXPANSION JOINT 0.20" FOR EVERY 10° CHANGE IN TEMPERATURE FROM THE MEDIAN TEMPERATURE OF 60°F AT THE TIME OF INSTALLATION OF THE JOINT.
11. PAYMENT FOR EXPANSION JOINT IS PAY ITEM 566-005A.

APPROXIMATE QUANTITIES (BOTH APPROACH SLABS)

CONCRETE.....	56 CY
PLAIN REINF.....	6245 LB
EPOXY REINF.....	2708 LB
3/4" BASE MATERIAL.....	135 CY
SUBGRADE SEPARATION GEOTEXTILE TYPE I.....	166 SY



DETAIL B
NTS



LIMITS OF 3/4" BASE MATERIAL FOR ASPHALT PAVEMENT

3/8" = 1'-0"

REVISIONS			
NO.	DATE	BY	DESCRIPTION
▲			
▲			
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DESIGNED
P. BARUWAL
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

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CADD FILE NAME
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DRAWING DATE:
JULY 2025



DAVID EVANS AND ASSOCIATES INC.

ENGLISH

PROJECT NO.

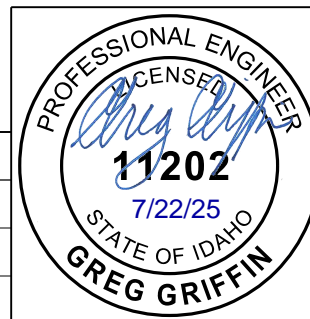
30786

APPROACH SLAB DETAILS (2 OF 2)

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS

BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 34 OF 41



NOTES

MATERIALS AND SPECIFICATIONS

1. PROVIDE STEEL PLATE AND EXTRUSION IN ACCORDANCE WITH ASTM A709 GRADE 36, AND GALVANIZE IN ACCORDANCE WITH ASTM A123.
2. PROVIDE STRIP SEALS IN ACCORDANCE WITH ASTM D5973 AND PROVIDE AND INSTALL IN ONE CONTINUOUS PIECE.
3. WELD IN ACCORDANCE WITH CURRENT AASHTO SPECIFICATIONS.

FABRICATION

4. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH 105.02.
5. DUE TO THE LENGTH OF STEEL EXTRUSIONS AND THE JOINT PROFILE, PARTIAL PENETRATION GROOVE WELD SHOP SPLICES WILL BE PERMITTED. DO NOT WELD IN THE INTERNAL SECTION OF THE STEEL EXTRUSION WHERE THE NEOPRENE STRIP SEAL IS LOCATED.
6. SHOW THE LOCATION OF SPLICES, THE FINAL LINE AND GRADE OF THE JOINT, NECESSARY WELDING INFORMATION, AND THE METHOD OF SUPPORT DURING THE DECK POURS ON THE SHOP DRAWINGS.
7. THE LINE AND GRADE OF THE JOINT MUST CONFORM TO THAT SHOWN ON THIS SHEET. THE ELEVATION OF THE POINTS SHOWN IN THE JOINT PROFILE DETAIL MAY VARY NO MORE THAN ±.02 FEET FROM THE VALUES SHOWN.
8. WHEN THE JOINT ANGLES EXCEED 60' IN LENGTH, A MAXIMUM OF TWO PARTIAL PENETRATION GROOVE WELD FIELD SPLICES WILL BE PERMITTED. DO NOT LOCATE THE FIELD SPlice IN THE WHEEL PATH, AND SHOW THE LOCATION ON THE SHOP DRAWINGS.

INSTALLATION

9. INSTALL THE JOINT SYSTEM IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
10. BOND NEOPRENE EXTRUSION TO THE STEEL EXTRUSION WITH AN ELASTIC ADHESIVE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE ADHESIVE LUBRICANT IN ACCORDANCE WITH ASTM D4070.
11. ADJUST THE EXPANSION JOINT 0.16" FOR EVERY 10°F CHANGE IN TEMPERATURE FROM THE MEDIAN TEMPERATURE OF 60°F AT THE TIME OF INSTALLATION OF THE JOINT.
12. FLOOD THE JOINT AREA WITH WATER AND INSPECT FROM BELOW FOR LEAKAGE AFTER THE JOINT IS INSTALLED. REPAIR THE JOINT SYSTEM IF LEAKAGE IS OBSERVED, IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND APPROVED.
13. FABRICATE THE COMPLETED JOINT ASSEMBLY, INCLUDING COMPONENTS AND SUBASSEMBLIES, BY ONE MANUFACTURER.

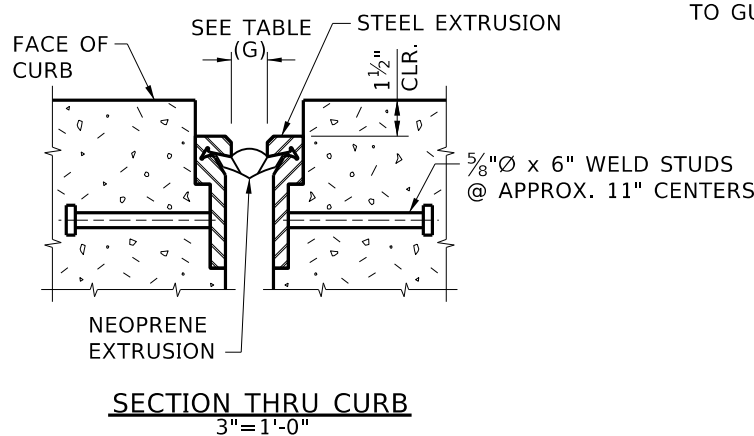
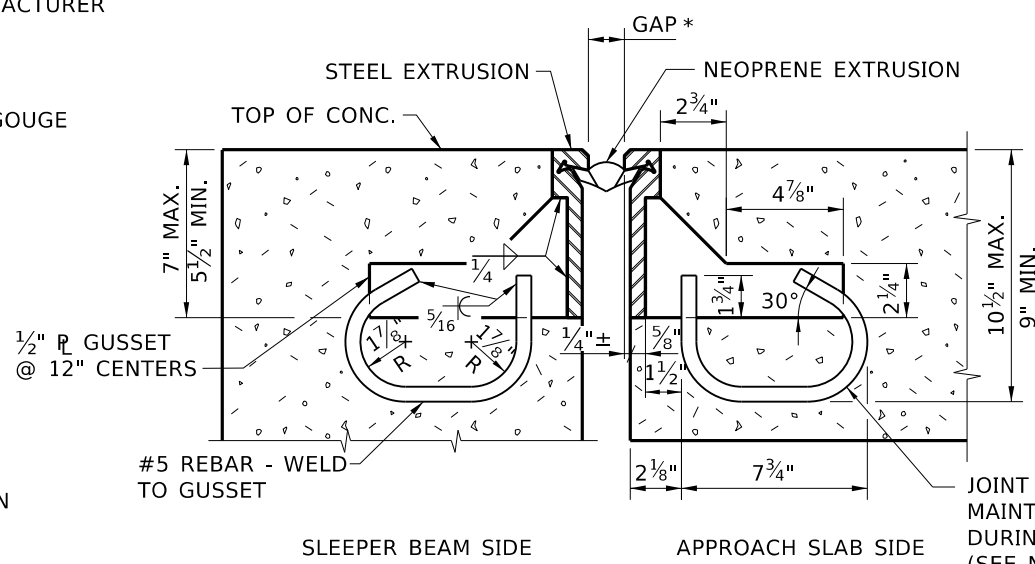
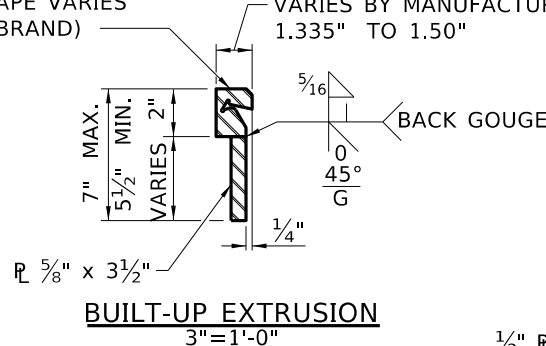
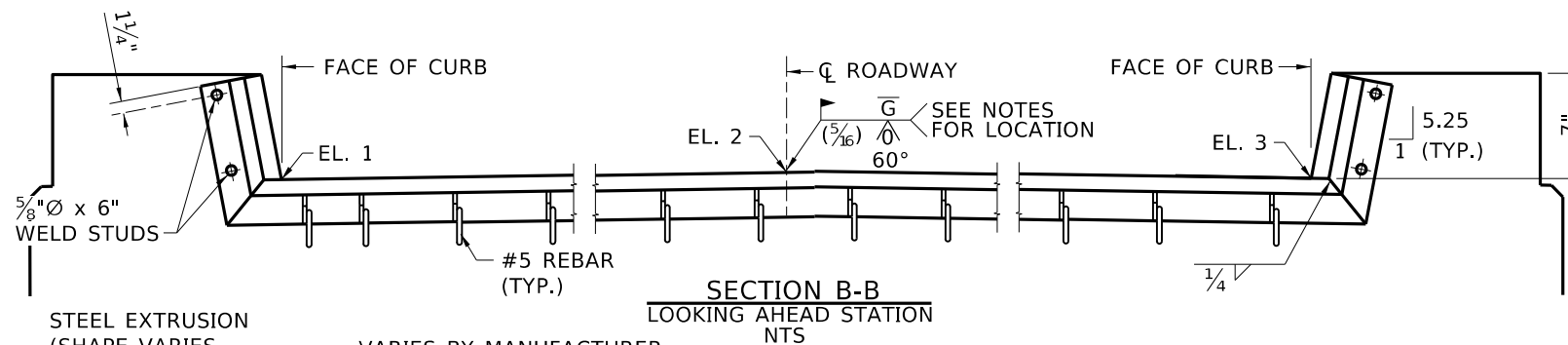
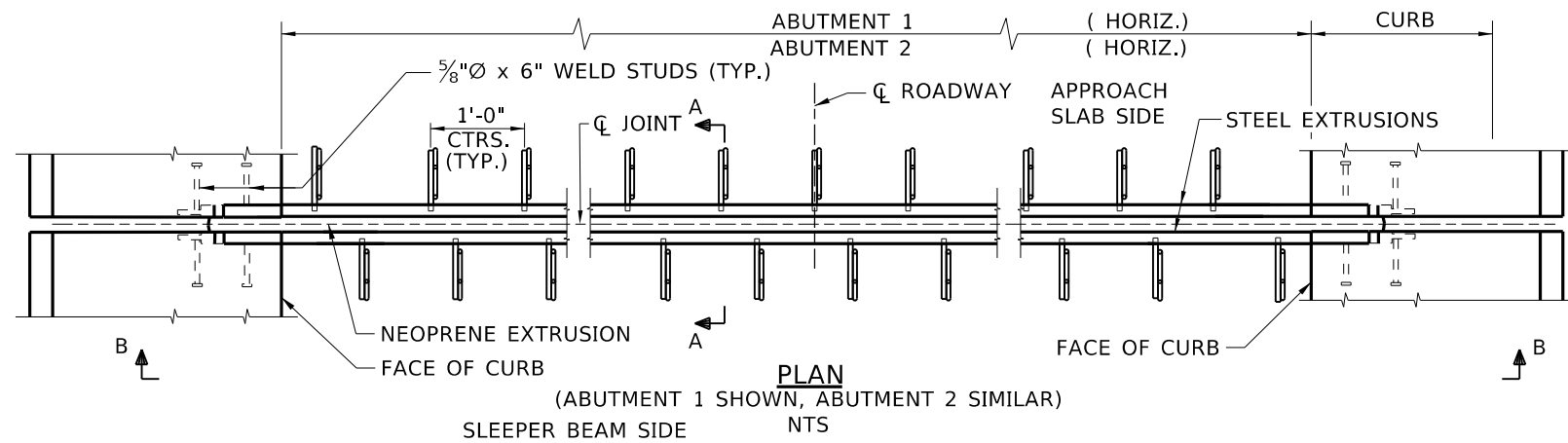


TABLE OF ELEVATIONS			
LOCATION	LEFT SIDE AT FACE OF CURB	AT ϕ ROADWAY	RIGHT SIDE AT FACE OF CURB
	ELEVATION 1	ELEVATION 2	ELEVATION 3
BEGIN APPROACH SLAB	2204.08	2204.30	2204.08
END APPROACH SLAB	2192.58	2191.80	2192.58

RECOMMENDED MANUFACTURERS OF THE SHOWN JOINT ASSEMBLY **			
LOCATION	MANUFACTURER	STYLE	EXTRUSION TYPE
SLEEPER BEAM	WATSON BOWMAN ACME	SE-400	A
SLEEPER BEAM	D.S. BROWN*	A2R-400	SSA2
SLEEPER BEAM	TECHSTAR	STANDARD STRIP SEAL GLANDS	STANDARD A3.500

** OR APPROVED EQUAL
* MIN INSTALLATION WIDTH 2" @ 60 deg F

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
P. BARUWAL
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME
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DRAWING DATE:
JULY 2025



DAVID EVANS AND ASSOCIATES INC.

ENGLISH

PROJECT NO.

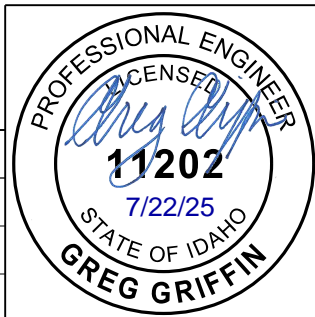
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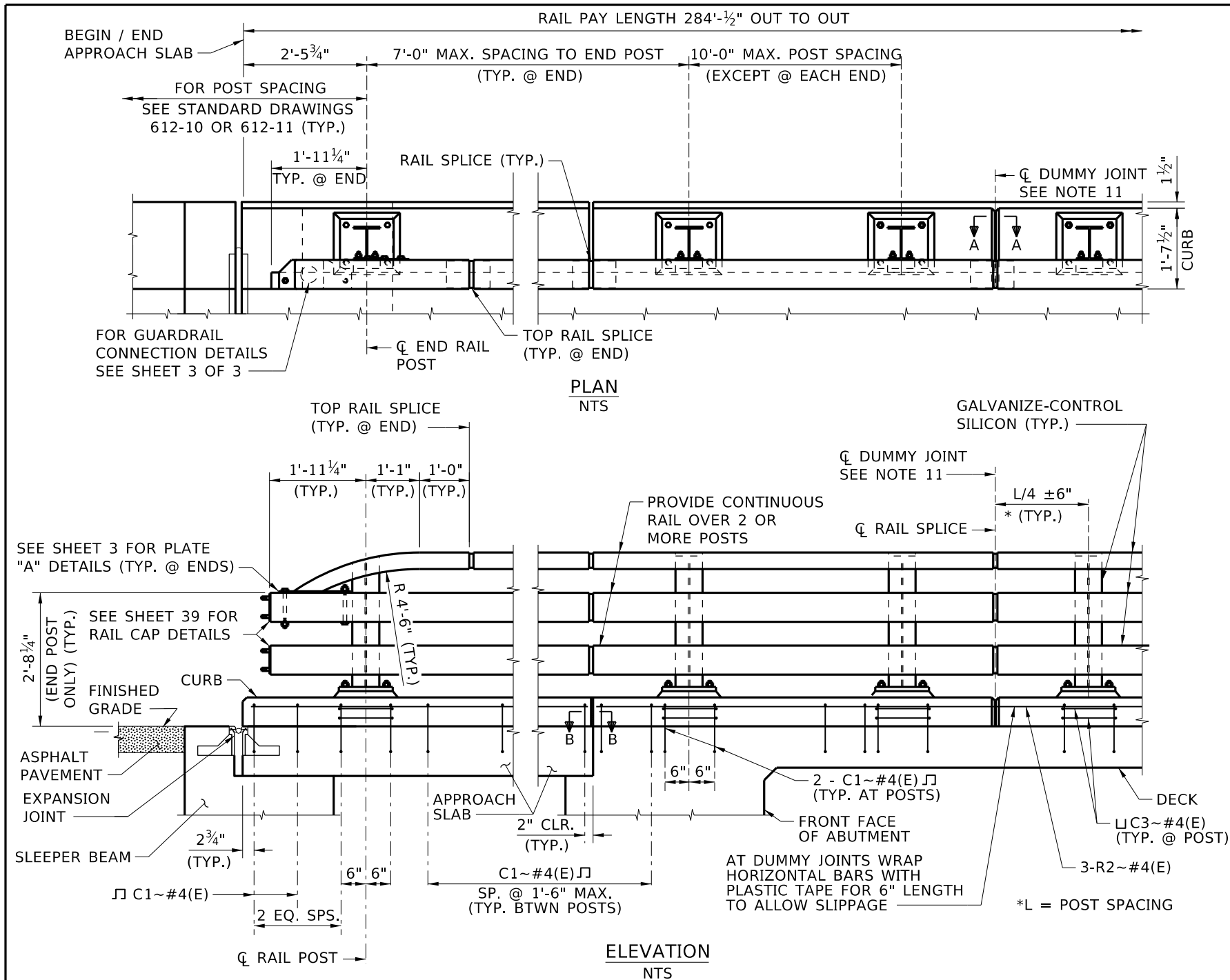
STRIP SEAL EXPANSION JOINT

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS

BRIDGE KEY NO.
30786
COUNTY
SHOSHONE
KEY NO.
30786
BRIDGE DWG. NO.
-
SHEET
35 OF 41





NOTES

MATERIALS

1. PROVIDE STRUCTURAL STEEL TUBING IN ACCORDANCE WITH ASTM A500 GRADE B, OR ASTM A501 STEEL.
2. PROVIDE STRUCTURAL STEEL POSTS, RAIL SPLICES, AND BASE PLATES IN ACCORDANCE WITH ASTM A709 GRADE 50.
3. PROVIDE ANCHOR BOLTS, NUTS, AND WASHERS IN ACCORDANCE WITH ASTM F1554 GRADE 105. PROVIDE H.S. BOLTS IN ACCORDANCE WITH ASTM F3125 GRADE A325.
4. PROVIDE CLASS 40AF CONCRETE.
5. PROVIDE EPOXY-COATED GRADE 60 TYPE S REINFORCEMENT IN ACCORDANCE WITH 708.02.
6. PROVIDE TYPE B CLASS 1 GROUT IN ACCORDANCE WITH 705.02.
7. PROVIDE SCHEDULE 80 PVC CONDUIT AND JUNCTION BOXES

GALVANIZING

8. GALVANIZE STRUCTURAL STEEL PARTS, RAILING, AND SLEEVES AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 AND ASTM A153. THOROUGHLY CLEAN WELDED AREAS BEFORE GALVANIZING TO REMOVE SLAG OR OTHER MATERIAL THAT WOULD INTERFERE WITH THE ADHERENCE OF THE ZINC. PROVIDE GALVANIZED SURFACES FREE OF FINS, ABRASIONS, ROUGH OR SHARP EDGES, OR OTHER SURFACE DEFECTS. REPAIR DAMAGED COATINGS IN ACCORDANCE WITH ASTM A780 AND ASTM A123.
9. GALVANIZE-CONTROL SILICON MEANS SILICON CONTENT OF THE BASE METAL WILL BE IN THE RANGE OF 0% TO 0.06% (PREFERABLY 0% TO 0.04%) OR 0.15% TO 0.28% (PREFERABLY 0.15% TO 0.25%)

FABRICATION AND ERECTION

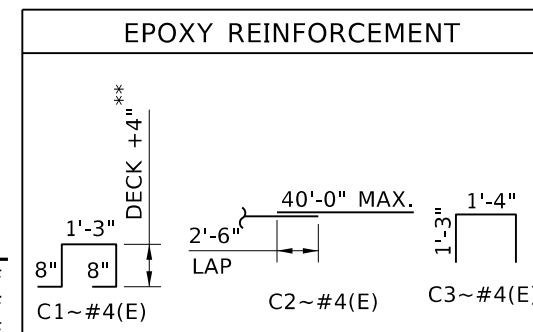
10. FABRICATE AND ERECT THE RAILING IN ACCORDANCE WITH THE CURRENT EDITION OF AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES AND ITD STANDARD SPECIFICATIONS.
11. CONSTRUCT RAILING WITH TOP OF POST 3'-6" ABOVE FINISHED GRADE. ADJUST HEIGHT OF CURB TO COMPENSATE FOR THE CAMBER AND LOAD DEFLECTION OF THE SUPERSTRUCTURE. CALCULATE THE AMOUNT OF ADJUSTMENT FOR APPROVAL.
12. SPACE CURB DUMMY JOINTS AT RAIL SPLICE LOCATIONS, EXPANSION JOINTS, AND AT THE ABUTMENT/APPROACH SLAB NOTCH ON INTEGRAL ABUTMENTS. SPACE INTERMEDIATE CURB DUMMY JOINTS UNIFORMLY THE LENGTH OF THE BRIDGE WITH SPACING NOT LESS THAN 6'-0" NOR GREATER THAN 12'-0".
13. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH 504.01 F AND 105.02.
14. CONSTRUCT RAILING CONFORMING TO THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE STRUCTURE. INSTALL POSTS NORMAL TO GRADE IN THE LONGITUDINAL DIRECTION AND VERTICAL IN THE TRANSVERSE DIRECTION.
15. SAW OR MILL BASE PLATES AND END TUBE SECTIONS AT SPLICES. PROVIDE CUT ENDS THAT ARE TRUE, SMOOTH AND FREE FROM BURRS OR RAGGED EDGES.
16. PROVIDE VENT HOLES FOR GALVANIZING AS REQUIRED AND SHOW ON THE SHOP DRAWINGS. DRILL VENT HOLES AWAY FROM TRAFFIC FACE AND NOT ON THE TOP SURFACE OF THE HORIZONTAL TUBES.
17. PROVIDE EXPANSION JOINT OR SPLICE JOINT IN RAIL AS REQUIRED.
18. ROUND OR CHAMFER EXPOSED EDGES OF STEEL COMPONENTS 1/16" BY GRINDING BEFORE GALVANIZING. METHOD OF MEASUREMENT
19. PAYMENT FOR "3-TUBE CURB MOUNT RAIL" IS PAY ITEM 504-050A. THE COST OF CONCRETE, EPOXY-COATED REINFORCEMENT, PVC CONDUIT, AND JUNCTION BOXES IS INCIDENTAL TO PAY ITEM 504-050A.

SECTION A-A ~ DUMMY JOINT
(TYP. @ BOTH SIDES AND TOP OF CURB)
3"=1'-0"

SECTION B-B
(TYP. @ BOTH SIDES AND TOP OF CURB)
3"=1'-0"

APPROXIMATE QUANTITIES (10' POSTS SPACING)

CONCRETE	0.92 CF/LF
STRUCTURAL STEEL	66 LB/LF
EPOXY REINFORCEMENT	5 LB/LF



NO.	DATE	BY	DESCRIPTION

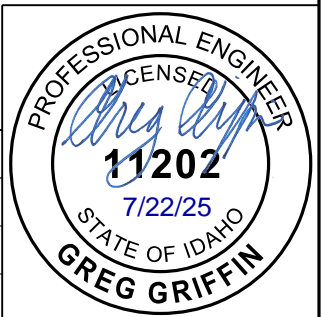
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DETAILED D. FOSTER	
DWG. CHECKED G. GRIFFIN	
CORRECTIONS D. FOSTER	

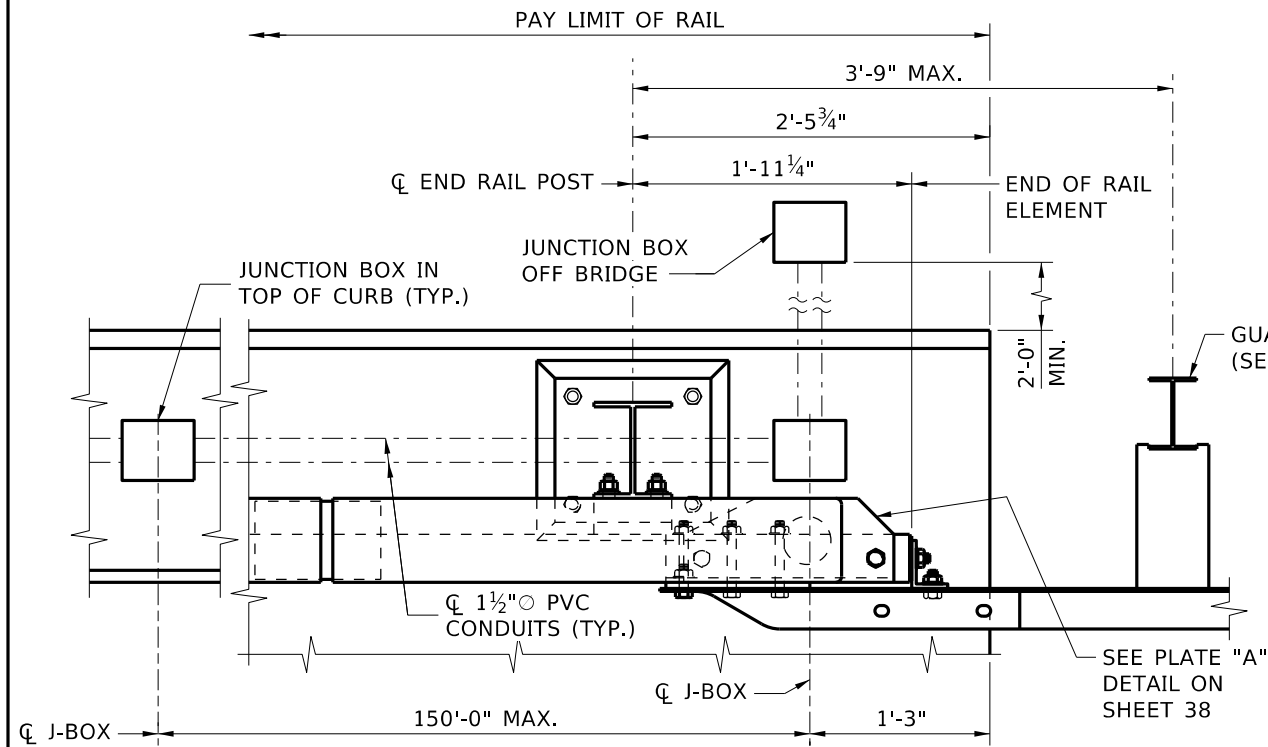
30786_bdt1_d36.dgn	DRAWING DATE: JULY 2025
DAVID EVANS AND ASSOCIATES INC.	

ENGLISH	3-TUBE CURB MOUNT RAIL (1 OF 3)
PROJECT NO.	
30786	

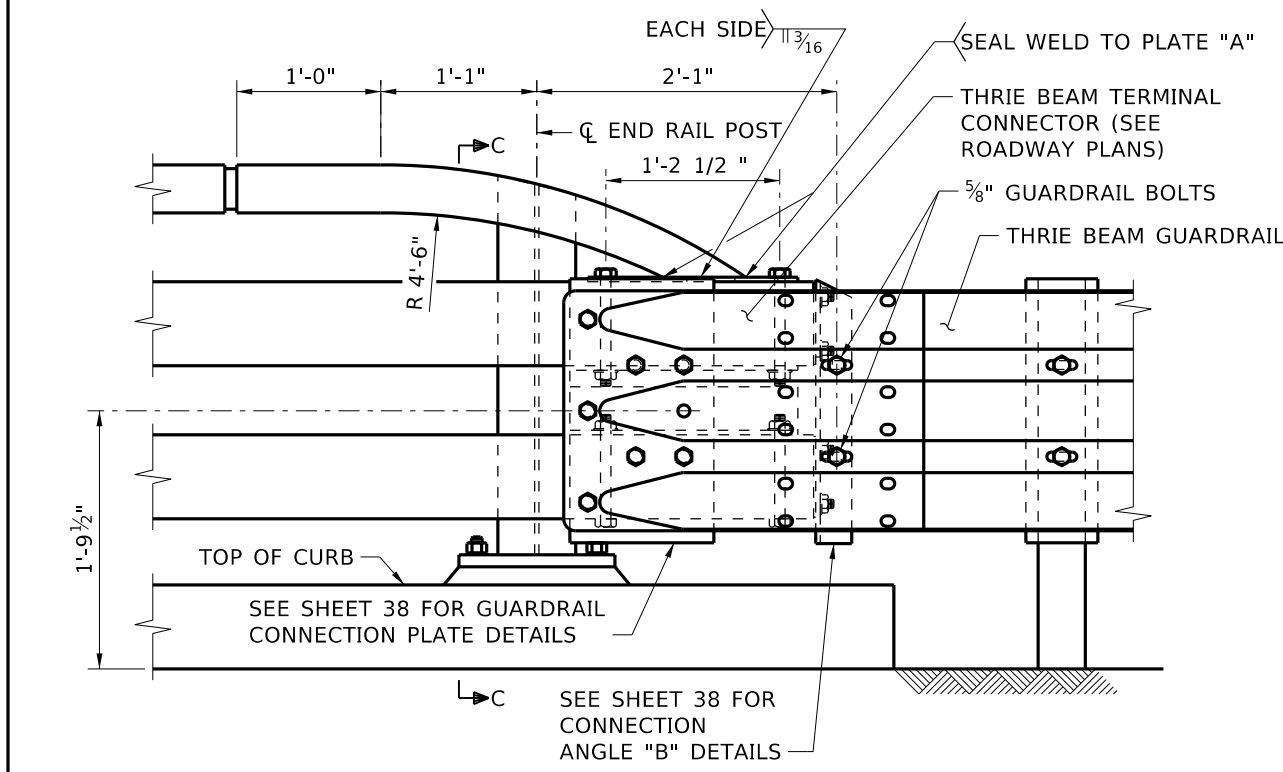
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10

BRIDGE PLANS	
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 36 OF 41



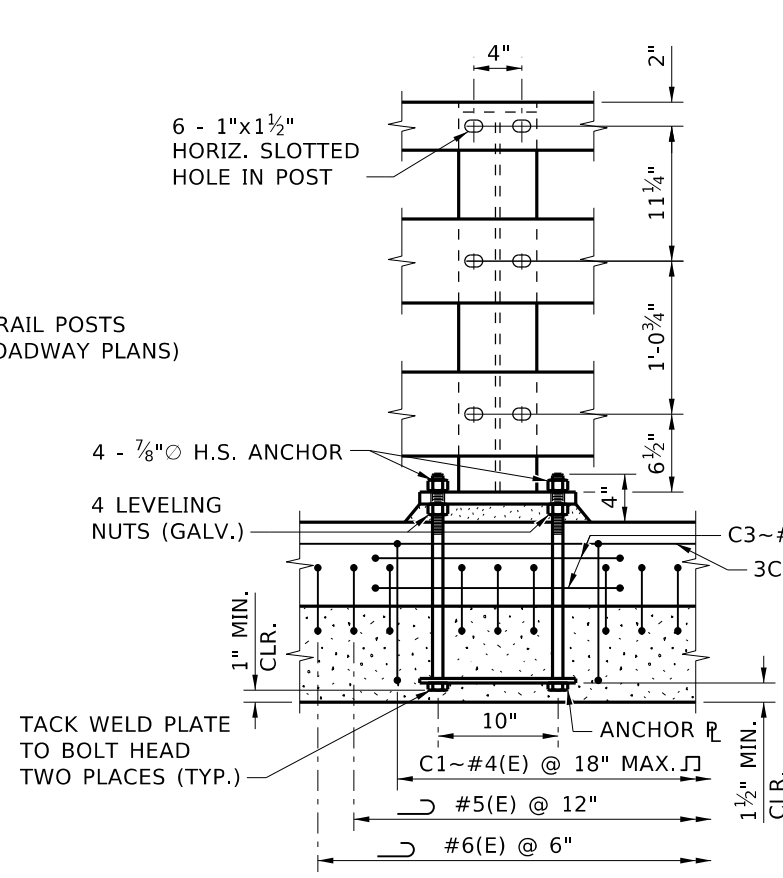


PLAN
3/4" = 1'-0"

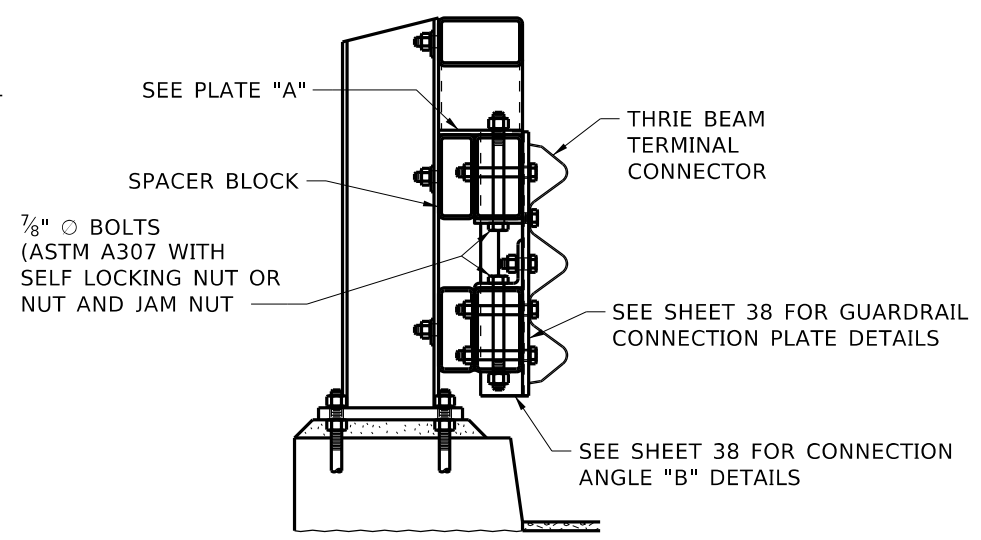


ELEVATION
3/4" = 1'-0"

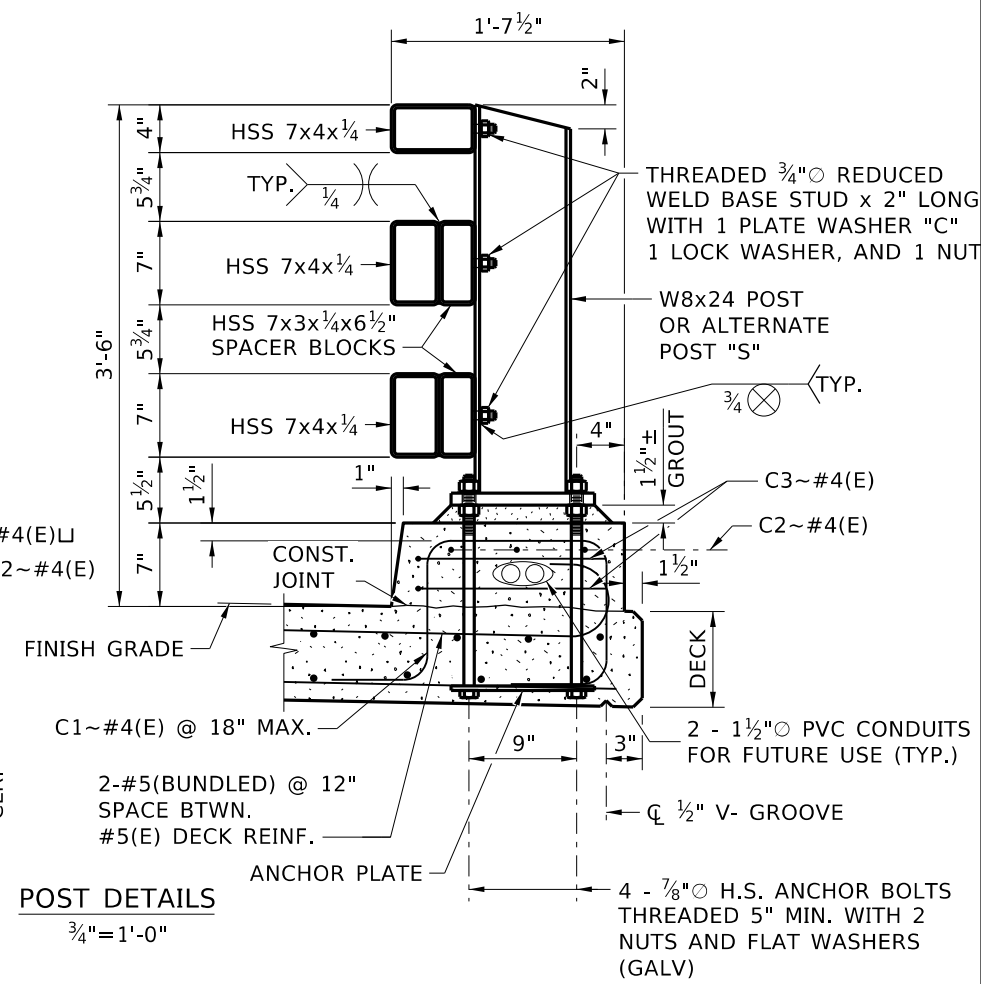
TRANSITION CONNECTION



POST DETAILS
3/4" = 1'-0"



SECTION C-C
3/4" = 1'-0"



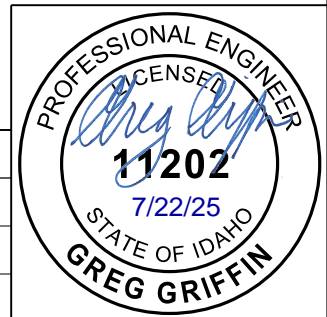
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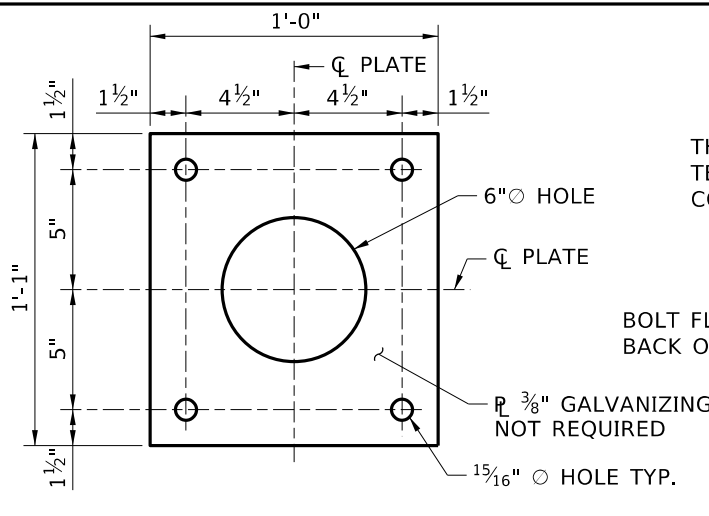
DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	CADD FILE NAME
DETAILED D. FOSTER	30786_bdt1_d37.dgn
DWG. CHECKED G. GRIFFIN	DRAWING DATE: JULY 2025
CORRECTIONS D. FOSTER	

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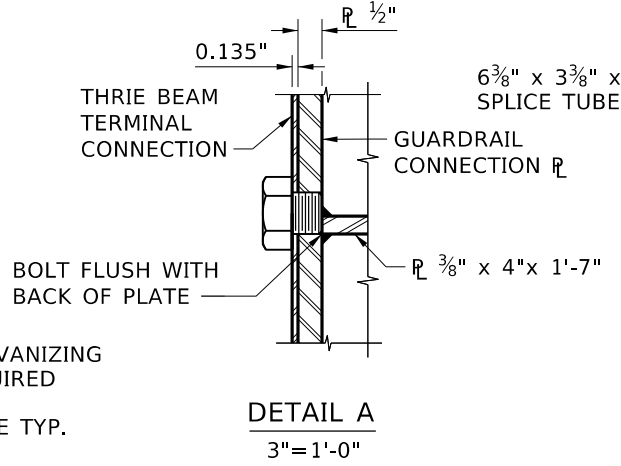
ENGLISH	3-TUBE CURB MOUNT RAIL (2 OF 3)
PROJECT NO.	239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER STA. 5+44.10
30786	

BRIDGE PLANS	
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 37 OF 41

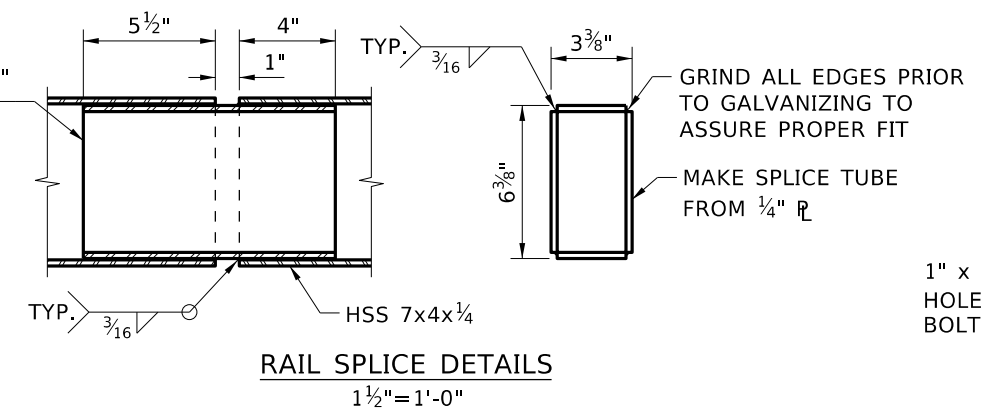




ANCHOR PLATE DETAIL
1 1/2" = 1'-0"



DETAIL A
3" = 1'-0"



RAIL SPLICE DETAILS
1 1/2" = 1'-0"

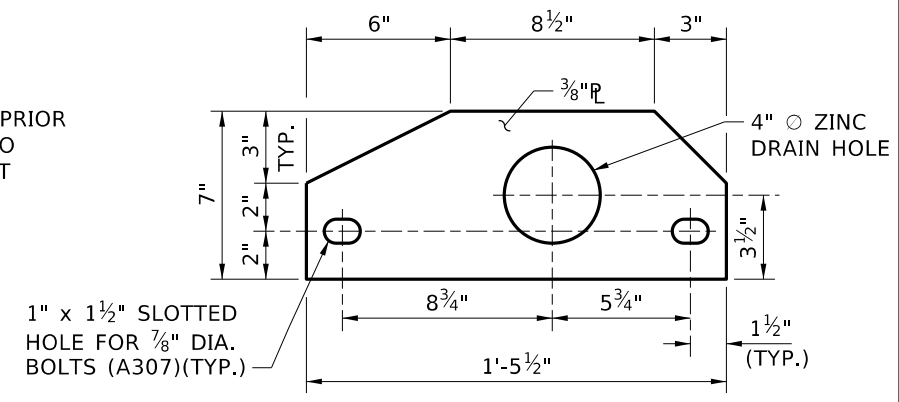
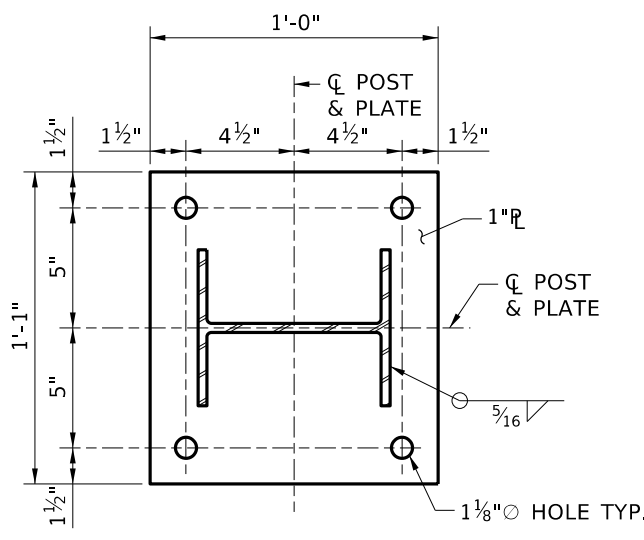


PLATE "A"
1 1/2" = 1'-0"



BASE PLATE DETAIL
1 1/2" = 1'-0"

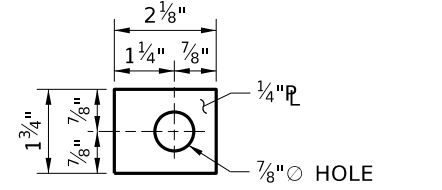
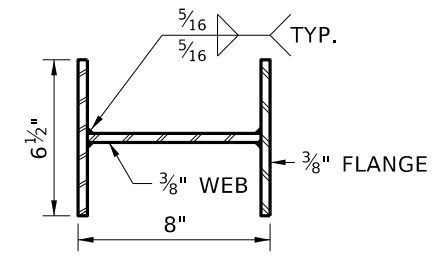
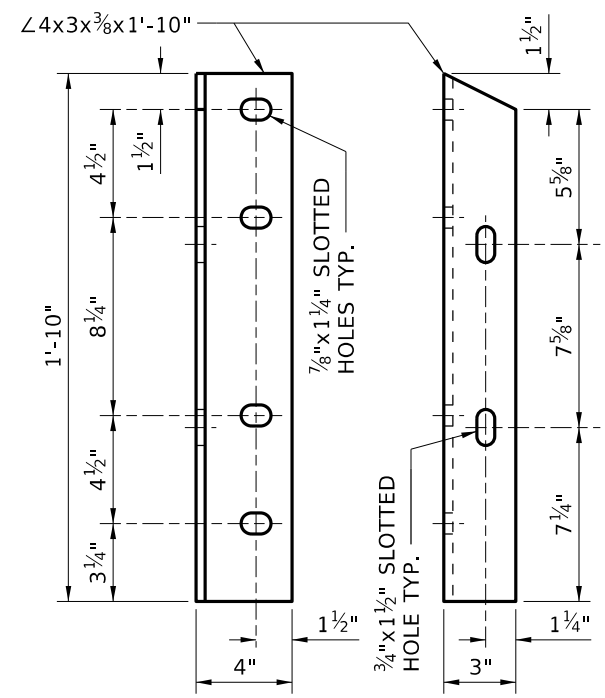


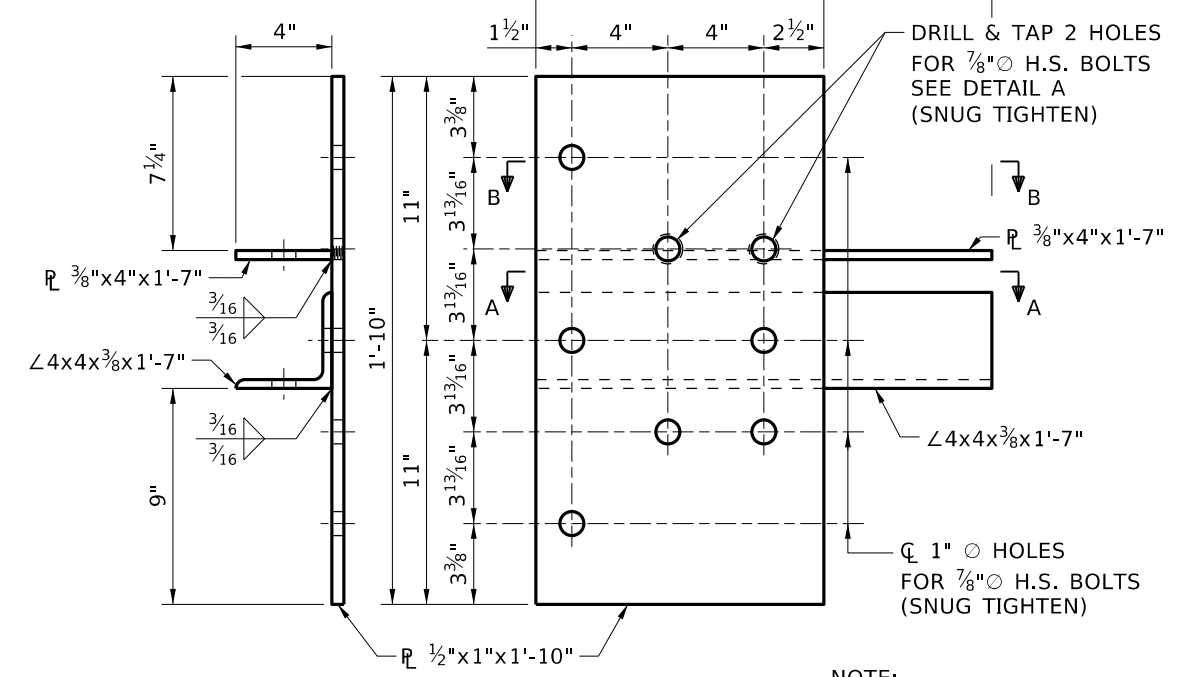
PLATE WASHER "C"
3" = 1'-0"



ALTERNATE POST "S"
1 1/2" = 1'-0"

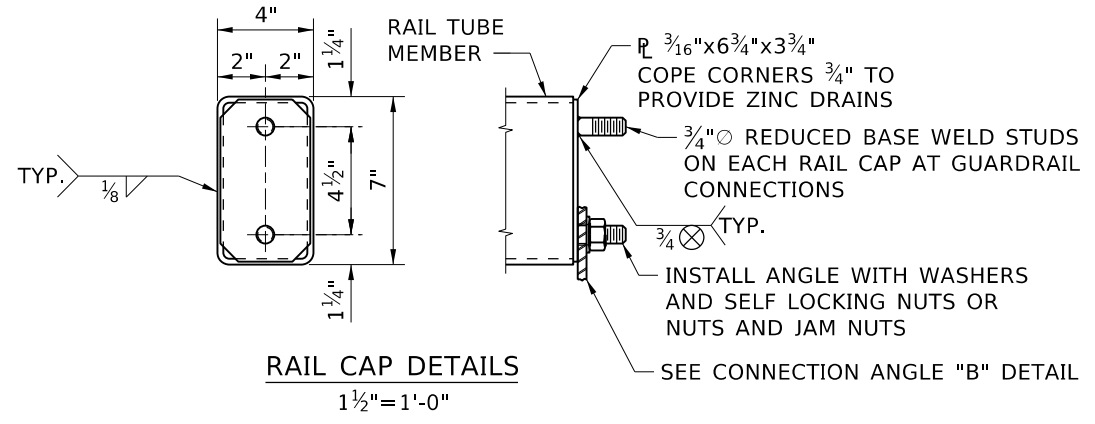


CONNECTION ANGLE "B"
1 1/2" = 1'-0"

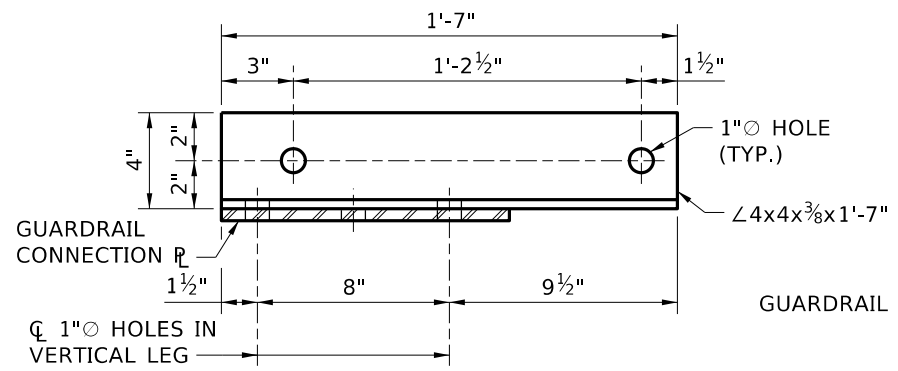


GUARDRAIL CONNECTION PLATE
1 1/2" = 1'-0"

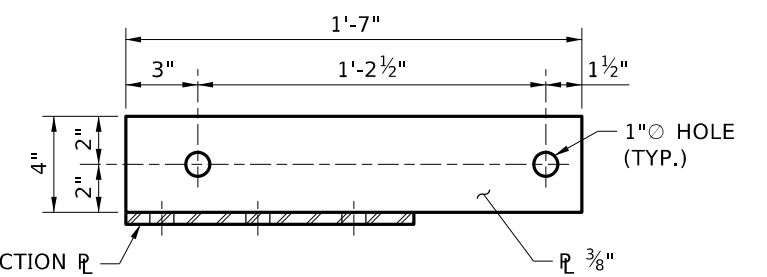
NOTE:
VERIFY ALL BOLT HOLE LOCATIONS MATCH THRIE BEAM TERMINAL CONNECTOR



RAIL CAP DETAILS
1 1/2" = 1'-0"



SECTION A-A
1 1/2" = 1'-0"



SECTION B-B
1 1/2" = 1'-0"

NO.	DATE	BY	DESCRIPTION

DESIGNED
P. BARUWAL
DESIGN CHECKED
G. GRIFFIN
DETAILED
D. FOSTER
DWG. CHECKED
G. GRIFFIN
CORRECTIONS
D. FOSTER

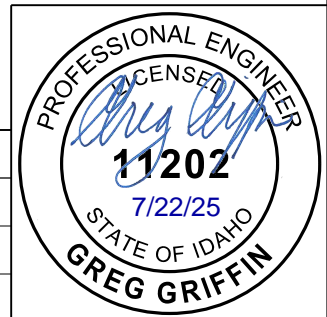
SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME
30786_bdt1_d38.dgn
DRAWING DATE:
JULY 2025



ENGLISH
PROJECT NO.
30786

3-TUBE CURB MOUNT RAIL (3 OF 3)
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

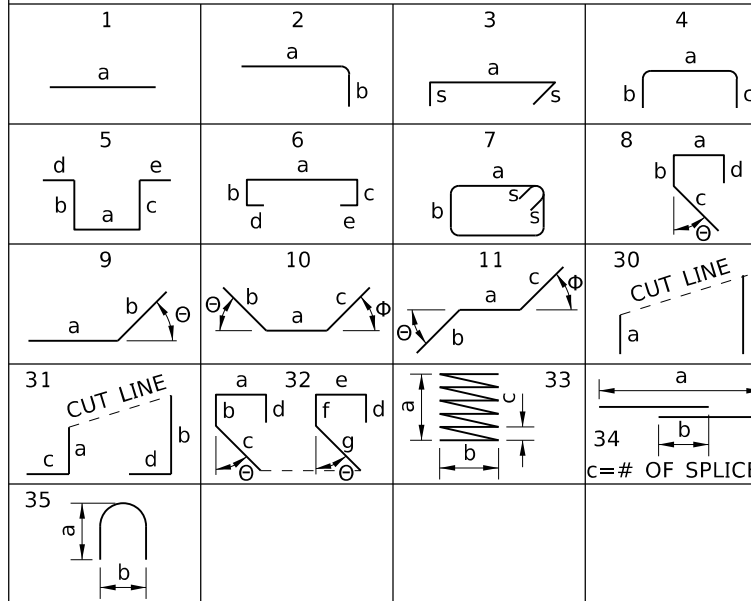
BRIDGE PLANS
BRIDGE KEY NO.
30786
COUNTY
SHOSHONE
BRIDGE DWG. NO.
-
KEY NO.
30786
SHEET
38 OF 41



SUBSTRUCTURE

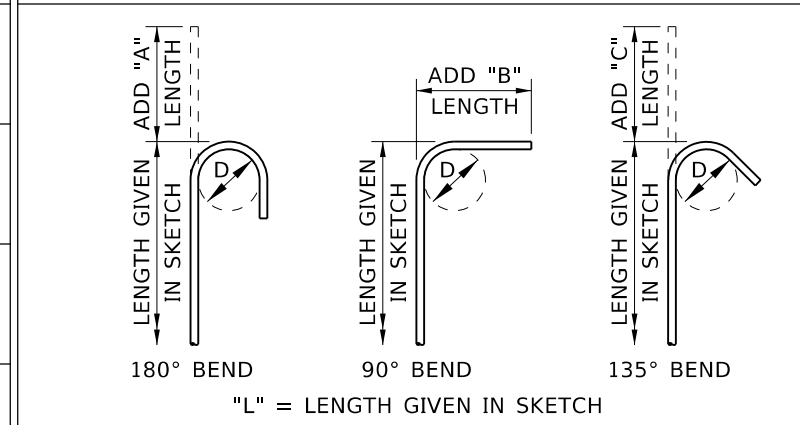
MARK	LOCATION	BAR SIZE	COAT	NO. OF BARS	BAR TYPE	BAR SET	LENGTH a	LENGTH b	LENGTH c	LENGTH d	LENGTH e	ANGLE θ	ANGLE Φ	TOTAL LENGTH
AF1	ABUT. 1 FTG.	6	N	52	1		6'-2"							320'-8"
AF2	ABUT. 1 FTG.	5	N	14	1		25'-9 1/2"							361'-1"
AF3	ABUT. 1 FTG.	6	N	52	2		4'-1 1/2"	1'-0"						267'-0 1/2"
AF4	ABUT. 1 FTG.	4	N	22	1		3'-6"							77'-0"
AW1	ABUT. 1 WALL	6	N	52	1		6'-1"							317'-0 1/2"
AW2	ABUT. 1 WALL	5	N	26	4		1'-11"	1'-0"	1'-0"					101'-10"
AW3	ABUT. 1 WALL	5	N	12	1		25'-9 1/2"							309'-6"
AW4	ABUT. 1 WALL	4	N	72	3		2'-0"							198'-0"
AW5	ABUT. 1 WALL	6	N	5	1		25'-9 1/2"							128'-11 1/2"
A1	ABUTMENT 2	8	N	4	1		25'-9 1/2"							103'-2"
A2	ABUTMENT 2	8	N	5	1		25'-9 1/2"							128'-11 1/2"
A3	ABUTMENT 2	5	N	35	6		3'-8"	4'-7"	4'-7"	0'-6"	0'-6"			484'-2"
A4	ABUTMENT 2	5	N	19	4		3'-8"	1'-0"	1'-0"					107'-8"
A5	ABUTMENT 2	6	N	10	1		25'-9 1/2"							257'-11"
A6	ABUTMENT 2	4	N	81	3		3'-9"							364'-6"
A7	ABUTMENT 2	6	N	61	1		7'-0"							427'-0"
A8	ABUTMENT 2	5	N	10	2		11'-8"	2'-0"						136'-10"
F1	PIER 1 FTG.	6	N	44	1		10'-8"							469'-4"
F2	PIER 1 FTG.	8	N	44	1		10'-8"							469'-4"
F3	PIER 1 FTG.	5	N	30	1		21'-8"							650'-0"
F4	PIER 1 FTG.	5	N	4	1		10'-8"							42'-8"
F5	PIER 1 FTG.	5	N	4	1		21'-8"							86'-8"
F6	PIER 1 FTG.	4	N	46	4		2'-4"	0'-8"	0'-8"					168'-8"
C1	PIER 1 COL.	9	N	60	2		20'-6"	1'-7"						1324'-8"
C1A	PIER 1 COL.	9	N	12	2		20'-6"	1'-7"						264'-11"
C2	PIER 1 COL.	9	N	6	2		20'-6"	1'-7"						132'-5 1/2"
C3	PIER 1 COL.	6	N	52	30	2	17'-2"	21'-2"						996'-8"
C4	PIER 1 COL.	6	N	52	35		4'-10"	2'-2"						566'-11 1/2"
C5	PIER 1 COL.	4	N	454	3		2'-3"							1362'-0"
PC1	PIER 1 CAP	5	N	26	4		4'-8"	3'-9"	3'-9"					316'-4"
PC2	PIER 1 CAP	5	N	52	2		3'-9"	1'-0"						247'-0"
PC3	PIER 1 CAP	5	N	8	1		25'-9 1/2"							206'-4"
PC4	PIER 1 CAP	7	N	8	1		25'-9 1/2"							206'-4"
PC5	PIER 1 CAP	7	N	8	1		25'-9 1/2"							206'-4"
PC6	PIER 1 CAP	8	N	18	1		6'-0"							108'-0"
PC7	PIER 1 CAP	5	N	16	4		4'-8"	1'-6"	1'-6"					122'-8"
PC8	PIER 1 CAP	5	N	8	4		4'-8"	1'-6"	1'-6"					61'-4"

BAR BEND DIAGRAMS



s = STANDARD END HOOK, STIRRUP HOOK, OR TIE HOOK DIMENSION

BEND DETAILS



BAR SIZE	STANDARD END HOOK DIMENSIONS			STIRRUP AND TIE HOOK DIMENSIONS		
	ALL GRADES			ALL GRADES		
	D	A	B	D	B	C
#3	2 1/4"	5"	6"	1 1/2"	4"	4"
#4	3"	6"	8"	2"	4 1/2"	4 1/2"
#5	3 3/4"	7"	10"	2 1/2"	6"	5 1/2"
#6	4 1/2"	8"	1'-0"	4 1/2"	1'-0"	8"
#7	5 1/4"	10"	1'-2"	5 1/4"	1'-2"	9"
#8	6"	11"	1'-4"	6"	1'-4"	10 1/2"
#9	9 1/2"	1'-3"	1'-7"			
#10	10 3/4"	1'-5"	1'-10"			
#11	1'-0"	1'-7"	2'-0"			
#14	1'-6 1/4"	2'-3"	2'-7"			
#18	2'-0"	3'-0"	3'-5"			

REINFORCEMENT NOTES

1. PROVIDE BEND DETAILS IN ACCORDANCE WITH THE LATEST ACI STANDARD PRACTICE AND AASHTO SPECIFICATIONS.
2. DIMENSIONS SHOWN IN THE "BAR BEND DIAGRAMS" ARE OUT TO OUT OF BEND POINTS, HOOKS, OR BAR ENDS, UNLESS NOTED OTHERWISE. PIN DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOK ON A BAR.
3. NO DEDUCTIONS FOR CURVATURE AT BENDS ARE MADE EXCEPT FOR THE ADJUSTMENTS INCLUDED IN THE ABOVE "ADD LENGTH" DIMENSIONS.
4. * INDICATES STIRRUP OR TIE BAR.
5. PROVIDE BARS THAT CONFORM TO AASHTO M31, GRADE 60, TYPE S.
6. A. PROVIDE EPOXY COATED BARS DESIGNATED "E" IN THE "COAT" COLUMN.
B. PROVIDE GLASS FIBER REINFORCED POLYMER COATED BARS DESIGNATED "G" IN THE "COAT" COLUMN.
7. BAR WEIGHTS ONLY INCLUDE REINFORCING STEEL PAID FOR UNDER THE PAY ITEMS 503-010A, 503-015A, 503-020A & 576-005A. OTHER REINFORCING STEEL NOT LISTED IS INCIDENTAL TO OTHER PAY ITEMS.

REVISIONS		
NO.	DATE	DESCRIPTION

DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	CADD FILE NAME
DETAILED D. FOSTER	30786_bdt1_d39.dgn
DWG. CHECKED G. GRIFFIN	DRAWING DATE: JULY 2025
CORRECTIONS D. FOSTER	



DAVID EVANS AND ASSOCIATES INC.

ENGLISH

PROJECT NO.

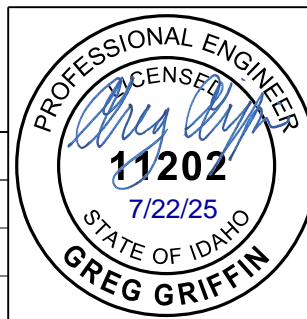
30786

METAL REINFORCEMENT (1 OF 3)

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS

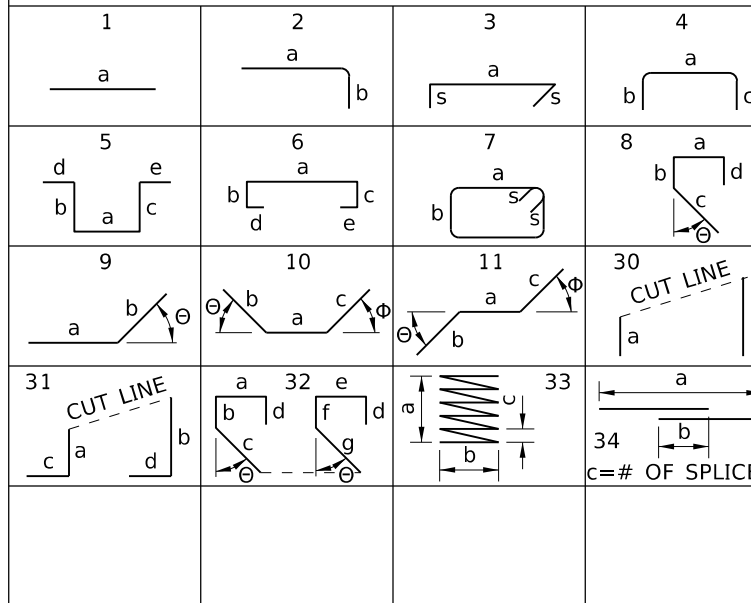
BRIDGE KEY NO. 30786	
COUNTY SHOSHONE	KEY NO. 30786
BRIDGE DWG. NO. -	SHEET 39 OF 41



SUBSTRUCTURE

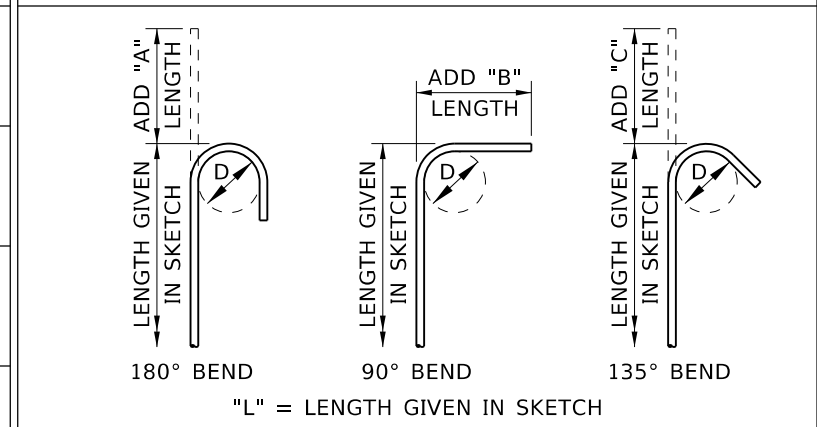
MARK	LOCATION	BAR SIZE	COAT	NO. OF BARS	BAR TYPE	BAR/SET	LENGTH a	LENGTH b	LENGTH c	LENGTH d	LENGTH e	ANGLE θ	ANGLE ϕ	TOTAL LENGTH
W1	WING 1	5	N	18	1		4'-9 1/2"							86'-3"
W2	WING 1	4	N	11	1		8'-2 1/2"							90'-2"
W2A	WING 1	4	N	3	1		4'-0"							12'-0"
W1	WING 2	5	N	18	1		4'-9 1/2"							86'-3"
W2	WING 2	4	N	11	1		8'-2 1/2"							90'-2"
W2A	WING 2	4	N	3	1		4'-0"							12'-0"
W1	WING 3	5	N	7	1		12'-2"							85'-2"
W1A	WING 3	5	N	5	1		8'-2"							40'-10"
W2	WING 3	6	N	7	1		12'-2"							85'-2"
W2A	WING 3	6	N	5	1		8'-2"							40'-10"
W3	WING 3	4	N	10	30	5	10'-6"	10'-8"						105'-9 1/2"
W3A	WING 3	4	N	8	30	4	5'-4"	5'-5 1/2"						43'-2"
W1	WING 4	5	N	7	1		12'-2"							85'-2"
W1A	WING 4	5	N	5	1		8'-2"							40'-10"
W2	WING 4	6	N	7	1		12'-2"							85'-2"
W2A	WING 4	6	N	5	1		8'-2"							40'-10"
W3	WING 4	4	N	10	30	5	10'-6"	10'-8"						105'-9 1/2"
W3A	WING 4	4	N	8	30	4	5'-4"	5'-5 1/2"						43'-2"
R1	RET. WALL 1	4	N	20	1		18'-2"							363'-4"
R2	RET. WALL 1	4	N	19	31	1	10'-7"	10'-3"	0'-8"	0'-8"				210'-6"
R3	RET. WALL 1	6	N	37	31	1	10'-7"	10'-3"	1'-0"	1'-0"				422'-3 1/2"
R4	RET. WALL 1	7	N	37	1		7'-8"							283'-8"
R5	RET. WALL 1	4	N	20	1		18'-2"							363'-4"
R6	RET. WALL 1	4	N	19	1		7'-8"							145'-8"

BAR BEND DIAGRAMS



s = STANDARD END HOOK, STIRRUP HOOK, OR TIE HOOK DIMENSION

BEND DETAILS



BAR SIZE	STANDARD END HOOK DIMENSIONS			STIRRUP AND TIE HOOK DIMENSIONS		
	ALL GRADES			ALL GRADES		
	D	A	B	D	B	C
#3	2 1/4"	5"	6"	1 1/2"	4"	4"
#4	3"	6"	8"	2"	4 1/2"	4 1/2"
#5	3 3/4"	7"	10"	2 1/2"	6"	5 1/2"
#6	4 1/2"	8"	1'-0"	4 1/2"	1'-0"	8"
#7	5 1/4"	10"	1'-2"	5 1/4"	1'-2"	9"
#8	6"	11"	1'-4"	6"	1'-4"	10 1/2"
#9	9 1/2"	1'-3"	1'-7"			
#10	10 3/4"	1'-5"	1'-10"			
#11	1'-0"	1'-7"	2'-0"			
#14	1'-6 1/4"	2'-3"	2'-7"			
#18	2'-0"	3'-0"	3'-5"			

REINFORCEMENT NOTES

1. PROVIDE BEND DETAILS IN ACCORDANCE WITH THE LATEST ACI STANDARD PRACTICE AND AASHTO SPECIFICATIONS.
2. DIMENSIONS SHOWN IN THE "BAR BEND DIAGRAMS" ARE OUT TO OUT OF BEND POINTS, HOOKS, OR BAR ENDS, UNLESS NOTED OTHERWISE. PIN DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOK ON A BAR.
3. NO DEDUCTIONS FOR CURVATURE AT BENDS ARE MADE EXCEPT FOR THE ADJUSTMENTS INCLUDED IN THE ABOVE "ADD LENGTH" DIMENSIONS.
4. * INDICATES STIRRUP OR TIE BAR.
5. PROVIDE BARS THAT CONFORM TO AASHTO M31, GRADE 60, TYPE S.
6. A. PROVIDE EPOXY COATED BARS DESIGNATED "E" IN THE "COAT" COLUMN.
B. PROVIDE GLASS FIBER REINFORCED POLYMER COATED BARS DESIGNATED "G" IN THE "COAT" COLUMN.
7. BAR WEIGHTS ONLY INCLUDE REINFORCING STEEL PAID FOR UNDER THE PAY ITEMS 503-010A, 503-015A, 503-020A & 576-005A. OTHER REINFORCING STEEL NOT LISTED IS INCIDENTAL TO OTHER PAY ITEMS.

REVISIONS		
NO.	DATE	DESCRIPTION

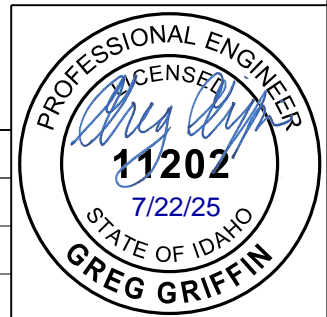
DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	CADD FILE NAME
DETAILED D. FOSTER	30786_bdt1_d40.dgn
DWG. CHECKED G. GRIFFIN	DRAWING DATE: JULY 2025
CORRECTIONS D. FOSTER	


DAVID EVANS AND ASSOCIATES INC.

ENGLISH
PROJECT NO. 30786

METAL REINFORCEMENT (2 OF 3)
239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

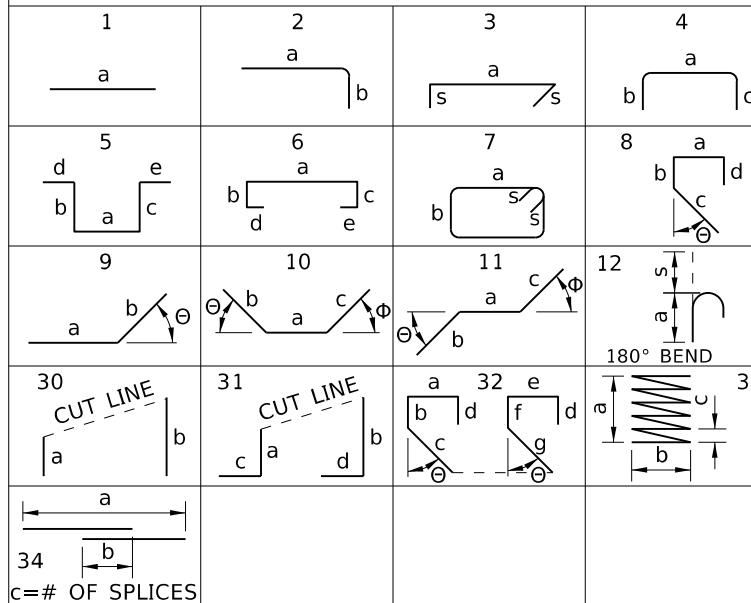
BRIDGE PLANS
BRIDGE KEY NO. 30786
COUNTY SHOSHONE KEY NO. 30786
BRIDGE DWG. NO. SHEET 40 OF 41



SUPERSTRUCTURE

MARK	LOCATION	BAR SIZE	COAT	NO. OF BARS	BAR TYPE	BARS/ SET	LENGTH a	LENGTH b	LENGTH c	LENGTH d	LENGTH e	ANGLE θ	ANGLE Φ	TOTAL LENGTH
S1	DECK	5	E	240	1		25'-9 1/2"							6190'-0"
S2	DECK	5		232	1		25'-9 1/2"							5983'-8"
S3	DECK	6	E	956	12		9'-0"							9241'-4"
T1	DECK TOP	5	E	27	1		35'-6"							958'-6"
T1A	DECK TOP	5	E	54	1		60'-0"							3240'-0"
T1B	DECK TOP	5	E	27	1		40'-3"							1086'-9"
T2	DECK BOT	5		27	1		40'-6"							1093'-6"
T2A	DECK BOT	5		27	1		50'-0"							1350'-0"
T2B	DECK BOT	5		54	1		60'-0"							3240'-0"
T2C	DECK BOT	5		27	1		45'-4"							1224'-0"
T3	P1 DECK TOP	8	E	27	1		60'-0"							1620'-0"
T3A	P1 DECK TOP	8	E	26	1		60'-0"							1560'-0"
T4	APPR SLAB	4	G	50	1		5'-0"							250'-0"
AD1	ABUT. 1 DIAPH.	6	E	2	1		25'-9 1/2"							51'-7"
AD2	ABUT. 1 DIAPH.	4		24	5		1'-3"	5'-0"	4'-2"	0'-4 1/2"	0'-4 1/2"			268'-6"
AD3	ABUT. 1 DIAPH.	4		24	3		5'-0"							138'-6"
AD4	ABUT. 1 DIAPH.	4		24	3		1'-3"							48'-0"
AD5	ABUT. 1 DIAPH.	6		6	1		23'-8 1/2"							142'-3"
AD6	ABUT. 1 DIAPH.	4		6	1		23'-8 1/2"							142'-3"
AD7	ABUT. 1 DIAPH.	4	E	24	2		5'-0"	2'-6"						180'-0"
PD1	PIER 1 DIAPH.	9		4	1		25'-9 1/2"							103'-2"
PD2	PIER 1 DIAPH.	9		18	1		9'-2"							165'-0"
PD2A	PIER 1 DIAPH.	9		27	1		6'-8"							180'-0"
PD3	PIER 1 DIAPH.	9		8	1		25'-9 1/2"							206'-4"
PD4	PIER 1 DIAPH.	9		1	1		25'-9 1/2"							25'-9 1/2"
PD5	PIER 1 DIAPH.	6		60	3		3'-9"							325'-0"
PD5A	PIER 1 DIAPH.	6		46	3		3'-0"							214'-8"
PD6	PIER 1 DIAPH.	5		44	4		3'-8"	3'-0"	3'-0"					425'-4"
PD6A	PIER 1 DIAPH.	5		6	4		3'-9"	1'-8"	0'-6"					35'-6"
PD6B	PIER 1 DIAPH.	5		6	4		3'-7"	1'-8"	0'-6"					34'-4 1/2"
PD6C	PIER 1 DIAPH.	5		6	4		1'-7 1/2"	0'-6"	0'-6"					15'-8 1/2"
PD7	PIER 1 DIAPH.	5		22	4		2'-11"	4'-9"	4'-9"					273'-2"
PD7A	PIER 1 DIAPH.	5		6	2		4'-10 1/2"	0'-6"						32'-3"
E1	ABUT. 2 DIAPH.	6	E	4	1		25'-9 1/2"							103'-2"
E2	ABUT. 2 DIAPH.	5		34	2		5'-11"	2'-6"						286'-9"
E3	ABUT. 2 DIAPH.	5	E	28	2		6'-7"	2'-6"						254'-9"
E4	ABUT. 2 DIAPH.	5		7	1		25'-9 1/2"							180'-6 1/2"
E5	ABUT. 2 DIAPH.	5		27	1		6'-8"							180'-0"
E6	ABUT. 2 DIAPH.	5		18	1		9'-2"							165'-0"
E7	ABUT. 2 DIAPH.	5	E	26	2		10'-0"	2'-6"						325'-0"

BAR BEND DIAGRAMS



s = STANDARD END HOOK, STIRRUP HOOK, OR TIE HOOK DIMENSION

SUBSTRUCTURE BAR WEIGHT

BAR SIZE	LINEAR FEET	POUNDS PER FOOT	TOTAL WEIGHT
#3		0.376	
#4	3755'-3 1/2"	0.668	2,509
#5	3658'-7"	1.043	3,816
#6	4425'-10 1/2"	1.502	6,648
#7	696'-4"	2.044	1,423
#8	809'-5 1/2"	2.670	2,161
#9	1722'-1"	3.400	5,855
#10		4.303	
#11		5.313	
#14		7.550	
#18		13.600	
TOTAL WEIGHT			22,412

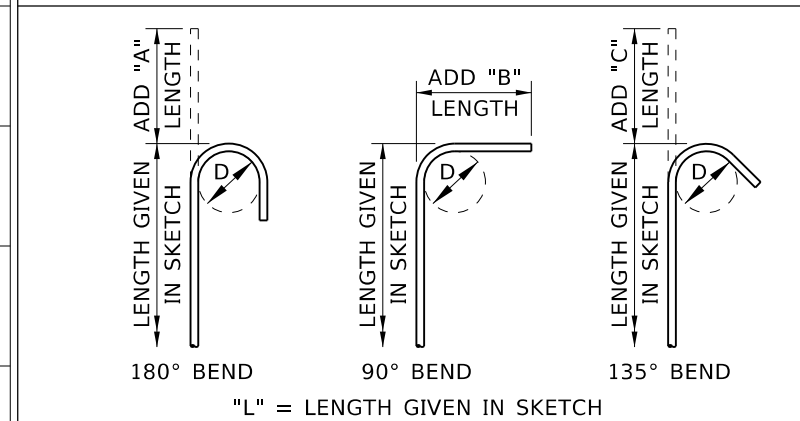
SUPERSTRUCTURE BAR WEIGHT

BAR SIZE	LINEAR FEET	POUNDS PER FOOT	TOTAL WEIGHT
#4	597'-3"	0.668	399
#5	14519'-9"	1.043	15,144
#6	681'-11"	1.502	1,024
#7		2.502	
#8		3.502	
#9	680'-3 1/2"	4.502	2,313
TOTAL WEIGHT			18,880

EPOXY COATED BAR WEIGHT

BAR SIZE	LINEAR FEET	POUNDS PER FOOT	TOTAL WEIGHT
#4	180'-0"	0.668	120
#5	12055'-0"	1.043	12,573
#6	9396'-1"	1.502	14,113
#7		2.502	
#8	3180'-0"	3.502	8,491
TOTAL WEIGHT			35,297

BEND DETAILS



BAR SIZE	STANDARD END HOOK DIMENSIONS			STIRRUP AND TIE HOOK DIMENSIONS		
	ALL GRADES			ALL GRADES		
	D	A	B	D	B	C
#3	2 1/4"	5"	6"	1 1/2"	4"	4"
#4	3"	6"	8"	2"	4 1/2"	4 1/2"
#5	3 3/4"	7"	10"	2 1/2"	6"	5 1/2"
#6	4 1/2"	8"	1'-0"	4 1/2"	1'-0"	8"
#7	5 1/4"	10"	1'-2"	5 1/4"	1'-2"	9"
#8	6"	11"	1'-4"	6"	1'-4"	10 1/2"
#9	9 1/2"	1'-3"	1'-7"			
#10	10 3/4"	1'-5"	1'-10"			
#11	1'-0"	1'-7"	2'-0"			
#14	1'-6 1/4"	2'-3"	2'-7"			
#18	2'-0"	3'-0"	3'-5"			

REINFORCEMENT NOTES

- PROVIDE BEND DETAILS IN ACCORDANCE WITH THE LATEST ACI STANDARD PRACTICE AND AASHTO SPECIFICATIONS.
- DIMENSIONS SHOWN IN THE "BAR BEND DIAGRAMS" ARE OUT TO OUT OF BEND POINTS, HOOKS, OR BAR ENDS, UNLESS NOTED OTHERWISE. PIN DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOK ON A BAR.
- NO DEDUCTIONS FOR CURVATURE AT BENDS ARE MADE EXCEPT FOR THE ADJUSTMENTS INCLUDED IN THE ABOVE "ADD LENGTH" DIMENSIONS.
- * INDICATES STIRRUP OR TIE BAR.
- PROVIDE BARS THAT CONFORM TO AASHTO M31, GRADE 60, TYPE S.
- A. PROVIDE EPOXY COATED BARS DESIGNATED "E" IN THE "COAT" COLUMN. B. PROVIDE GLASS FIBER REINFORCED POLYMER COATED BARS DESIGNATED "G" IN THE "COAT" COLUMN.
- BAR WEIGHTS ONLY INCLUDE REINFORCING STEEL PAID FOR UNDER THE PAY ITEMS 503-010A, 503-015A, 503-020A & 576-005A. OTHER REINFORCING STEEL NOT LISTED IS INCIDENTAL TO OTHER PAY ITEMS.

GFRP BAR LENGTH

BAR SIZE	LINEAR FEET PER BAR	NUMBER OF BARS	TOTAL LENGTH
#4	5'-0"	50	250'-0"

NO.	DATE	BY	DESCRIPTION

DESIGNED P. BARUWAL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G. GRIFFIN	CADD FILE NAME
DETAILED D. FOSTER	30786_bdt1_d41.dgn
DWG. CHECKED G. GRIFFIN	DRAWING DATE: JULY 2025
CORRECTIONS D. FOSTER	



DAVID EVANS AND ASSOCIATES INC.

ENGLISH

PROJECT NO.

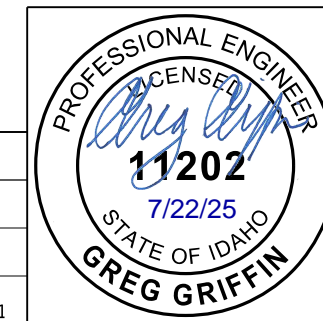
30786

METAL REINFORCEMENT (3 OF 3)

239' PRESTRESSED CONCRETE AND STEEL GIRDER BRIDGE
OLD RIVER RD OVER CDA RIVER RD AND CDA RIVER
STA. 5+44.10

BRIDGE PLANS

BRIDGE KEY NO. 30786	KEY NO. 30786
COUNTY SHOSHONE	SHEET 41 OF 41



IDAHO TRANSPORTATION DEPARTMENT



STANDARD DRAWINGS

APRIL 2023

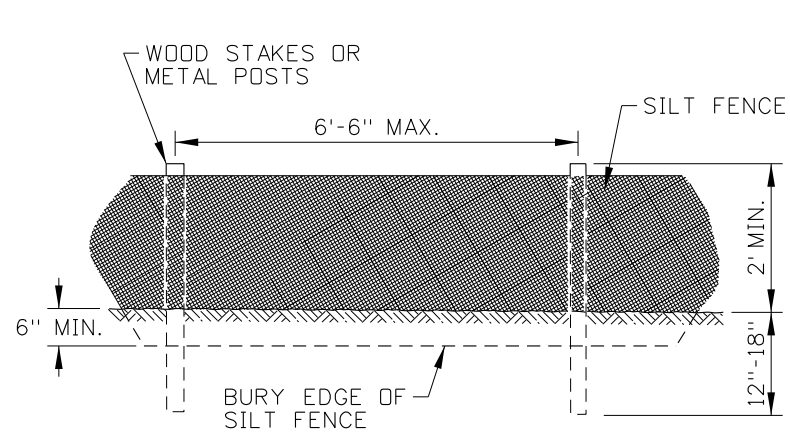
STANDARD DRAWINGS

APRIL 2023

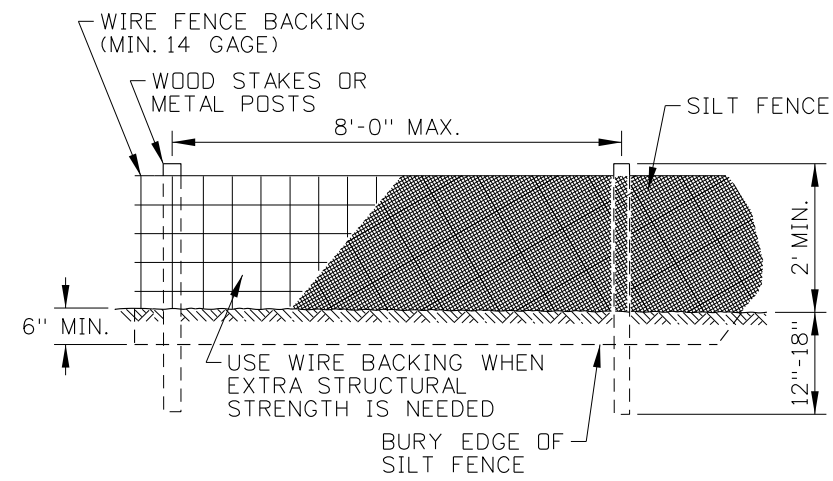
DRAWING NUMBER	DRAWING NAME
212-1	Erosion and Sediment Control - Example Applications
212-2	Temporary Erosion and Sediment Control - Slope Drains
212-3	Temporary Erosion and Sediment Control - Silt Fence, Fiber Wattle, and Compost Sock
212-4	Temporary Erosion and Sediment Control - Sediment Trap
212-5	Temporary Erosion and Sediment Control - Diversion Channel, Ditch, Swale, Dike, Berm, Waterbar, and Rolling Dip
212-6	Temporary Erosion and Sediment Control - Stabilized Construction Entrance and Vehicle Washdown
212-7	Temporary Erosion and Sediment Control - Inlet Protection
212-10	Permanent Erosion Control and Sediment Control - Gabion and Revet Mattress
212-11	Permanent Erosion Control and Sediment Control - Stone Filter Berms, Dams and Weirs
212-12	Permanent Erosion Control and Sediment Control - Slope and Channel Protection
212-15	Petroleum Storage Area
212-16	Temporary Concrete Washout
405-1	Rural Approaches
405-2	Mailbox Turnout
409-1	Portland Cement Concrete Pavement
409-2	Portland Cement Concrete Pavement Ramp Gore Details
411-1	Urban Concrete Pavement
411-2	Urban Concrete Pavement Manhole Collars
601-1	Pipe and Conduit Installation
605-1	Storm Sewer Pipe, 12" Thru 30" Slotted Drain
605-10	Manhole Type A
605-11	Manhole Type B
605-12	Manhole Types C & D
605-13	Manhole Frame, Cover, & Concrete Collar
605-20	Inlets & Catch Basins, Types 1, 2, & 3
605-21	Inlets & Catch Basins, Types 1A, 2A, & 3A
605-22	Inlets & Catch Basins, Types 4 & 5
605-23	Catch Basin, Type 6
605-24	Catch Basin, Type 7
605-25	Inlet, Type 8
605-26	Inlet Median Drain, Type 9
605-27	Catch Basin, Type 10
605-28	VANE GRATE INLET
605-30	Sediment Control Catch Basin
605-31	Sediment and Oil Trap Manhole
605-32	Sediment and Oil Trap Manhole (In Street)
605-35	Drywell
606-2	Edge Drain
607-1	Embankment Protector
607-2	Embankment Protector with Slotted Drain
608-1	Galvanized Steel Aprons for Pipe Culverts
608-2	Concrete Aprons for Pipe Culverts
608-3	Metal Safety Slope Apron
609-1	Culvert Inlet Headwall
609-2	Concrete Headwall for Single Pipe Culvert
609-3	Concrete Headwall for Twin Pipe Culvert
609-4	Concrete Headwall for Arch Pipe Culvert
609-5	Concrete Headwall for Siphons
609-6	Precast Concrete Headgate
610-1	Fences
610-2	Gates
610-3	Fence Braces
611-1	Cattle Guard Type A
611-2	Cattle Guard, Pavement Markings

DRAWING NUMBER	DRAWING NAME
612-1	31" W-Beam Guardrail
612-3	Guardrail Terminal Types 7 & 8
612-5	Guardrail Anchor
612-6	Guardrail Terminal, Buried-in-Backslope
612-7	Guardrail Terminal, Flared
612-8	Guardrail Terminal, Tangent
612-10	Guardrail Transition, Low Speed
612-11	Guardrail Transition, High Speed
612-18	Precast Concrete Barrier
612-20	Precast Concrete Barrier Terminals
612-24	F-Shape to New Jersey Shape Transition
612-25	F-Shape to Single Slope Transition
613-1	Bullnose Crash Cushion
614-1	Sidewalks
614-2	Driveways
614-3	Curb Ramps
615-1	Curb and Gutter
616-1	Punching Schedule for Type "B" or Type "E" Signs
616-2	Extruded Aluminum Signs
616-5	Breakaway Steel Sign Post Installation, Type A - Wide Flange
616-6	Breakaway Steel Sign Post Installation, Type B
616-7	Breakaway Steel Sign Post Installation, Type E
616-10	Breakaway Sign Posts, Type D
616-15	Route Marker Bracket Details
616-16	B Post and Brace Angle Detail
616-17	Route Sign
617-1	Delineators
617-2	Milepost Assemblies
618-1	Marker Post, Witness Posts, and Street Monuments
619-1	Light Pole Foundation Detail
628-1	Snow Poles
630-1	Pavement Markings
631-1	Rumble Strips
634-1	Mailboxes
634-2	Mailbox Snow Shield
656-1	Mast Arm Traffic Signal Poles
656-2	Frangible Cast Base Traffic Signal Poles
656-3	Mast Arm Signal Pole Foundation Detail
656-5	Signal Cabinet & Service Pedestal Foundation Details
656-6	Signal Cabinet Foundation Detail
656-10	Loop Detectors, 10 ft/sec ² Deceleration Rate
656-15	Pedestrian Pushbutton Placement
657-1	Flashing Beacons
706-6	Corrugated Metal Pipe Watertight Coupling Bands

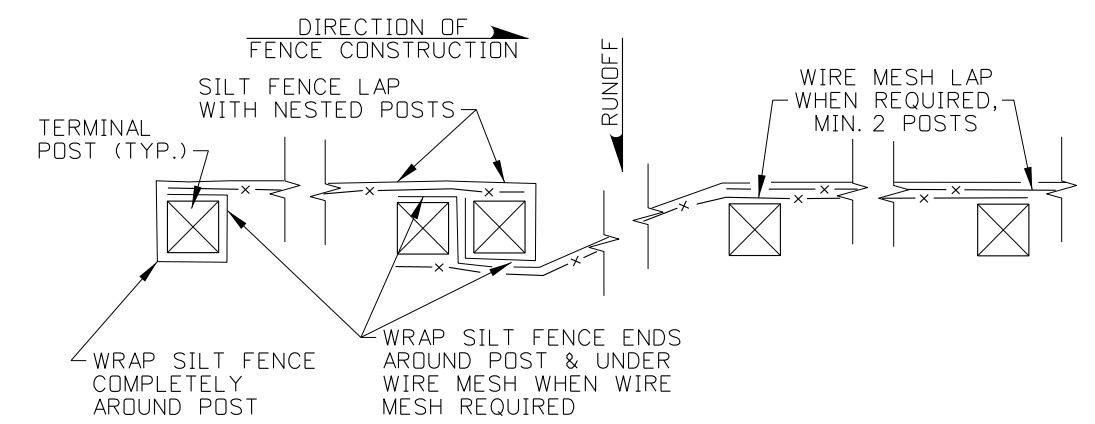
INDIVIDUAL STANDARD DRAWINGS AND AN ELECTRONIC BOOK OF ALL STANDARD DRAWINGS ARE AVAILABLE ON THE ITD WEBSITE



SILT FENCE (NO WIRE BACKING)



SILT FENCE (WIRE BACKING)



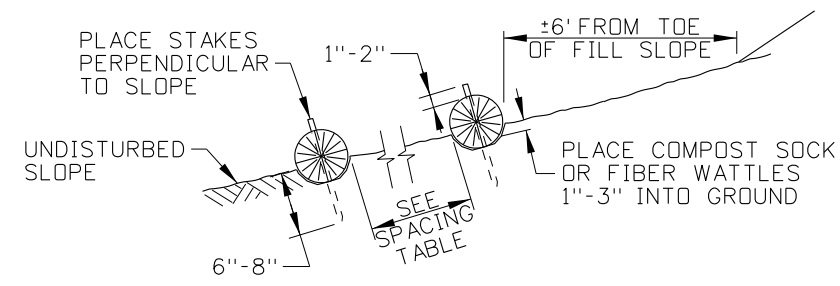
SILT FENCE LAP DETAIL

SLOPE	WATTLE SIZE			
	6"	9"	12"	20"
1:1	5 FT	10 FT	15 FT	20 FT
2:1	10 FT	20 FT	30 FT	40 FT
3:1	15 FT	30 FT	45 FT	60 FT
4:1 OR FLATTER	20 FT	40 FT	60 FT	80 FT

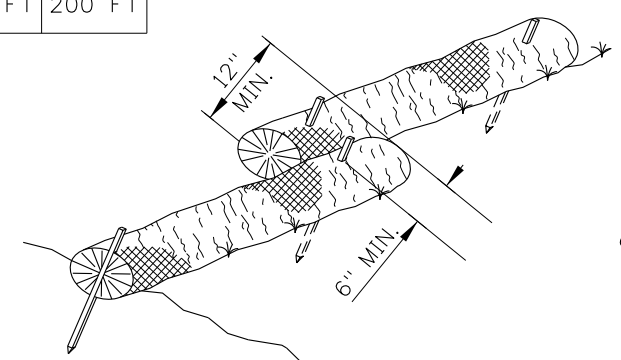
SLOPE	SOIL TYPE		
	SILTY	CLAYS	SANDY
1:1	50 FT	75 FT	100 FT
2:1	75 FT	100 FT	125 FT
4:1	100 FT	125 FT	150 FT
10:1 OR FLATTER	125 FT	150 FT	200 FT

NOTES

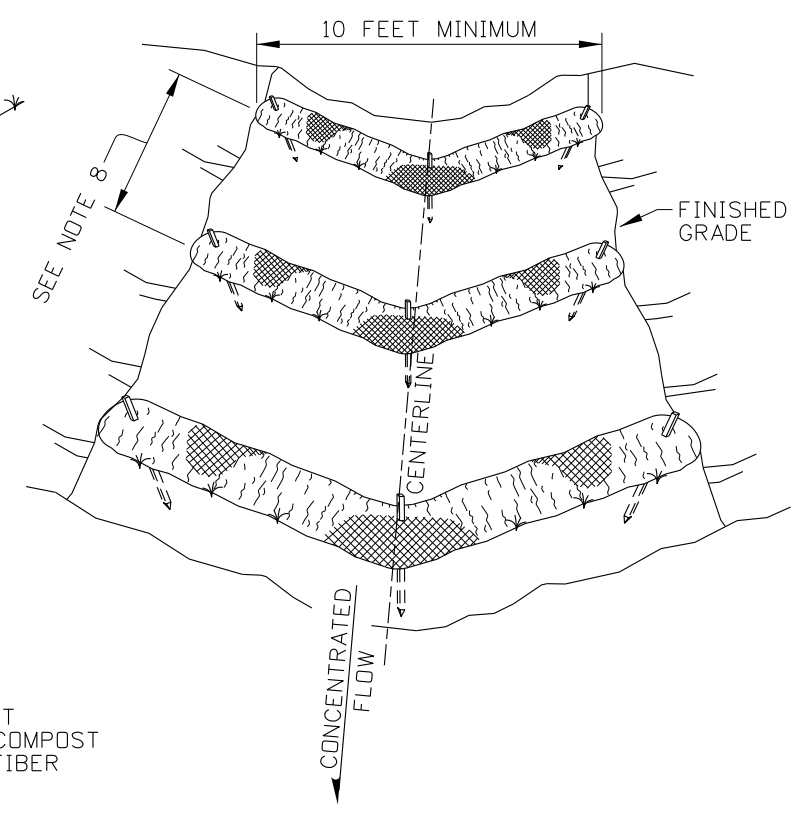
- SEE THE GENERAL NOTES FOR EROSION CONTROL STANDARD DRAWINGS ON 212-1.
- THE NEED FOR TEMPORARY SEDIMENT CONTROL DEVICES ARE DETERMINED BY SITE DESIGN. SPACE SILT FENCES, COMPOST SOCKS, AND FIBER WATTLES IN ACCORDANCE WITH THE SILT FENCE SPACING TABLE AND FIBER WATTLE & COMPOST SOCK SPACING TABLE.
- INSTALL TEMPORARY SEDIMENT CONTROL BARRIERS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND SPECIFICATIONS. THE DIMENSIONS SHOWN ARE GENERAL GUIDELINES.
- PLACE SEDIMENT BARRIERS TO FOLLOW THE SLOPE CONTOURS. USE EITHER METAL POSTS OR WOOD STAKES.
- ENSURE RUNOFF PASSES THROUGH THE SILT FENCE AND NOT AROUND THE FENCE.
- GROUND SILT FENCES WITH WIRE MESH IN ACCORDANCE WITH THE GROUNDING DETAIL SHOWN ON STANDARD DRAWING 610-1.
- EXTEND OR JOIN SILT FENCE USING SILT FENCE LAP WITH NESTED POSTS.
- SPACE CHECK DAMS ACCORDING TO THE HEIGHT OF THE DAM AND THE SLOPE OF THE CHANNEL SO THE BACKWATER FROM THE DOWNSTREAM DAM REACHES THE TOE OF THE UPSTREAM DAM.
- ON SLOPES, TURN THE ENDS OF EACH ROW OF COMPOST SOCKS AND FIBER WATTLES UPSLOPE TO PREVENT RUNOFF FROM FLOWING AROUND THE SOCK OR WATTLE.
- REMOVE SEDIMENT FROM THE UPSLOPE SIDE OF SILT FENCES, COMPOST SOCKS, AND FIBER WATTLES WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE BARRIER.
- DRAWING NOT TO SCALE.



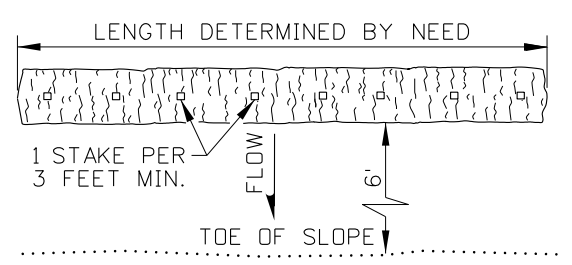
COMPOST SOCK AND FIBER WATTLE SIDE VIEW



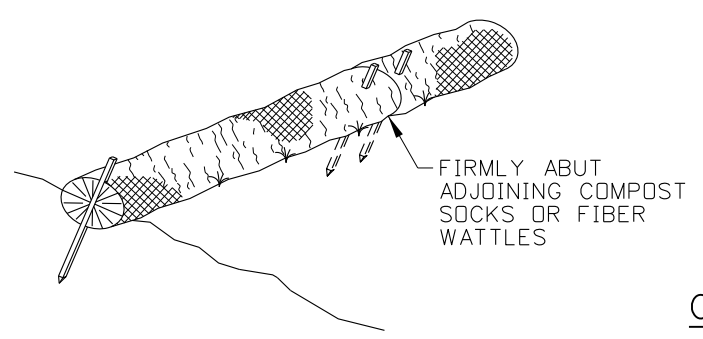
COMPOST SOCK AND FIBER WATTLE OVERLAPPING DETAIL



COMPOST SOCK AND FIBER WATTLE TEMPORARY CHECK DAM DETAIL



COMPOST SOCK AND FIBER WATTLE PLAN VIEW




COMPOST SOCK AND FIBER WATTLE ABUTTING DETAIL

NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	09-93	MSM	6	01-13	RDL			
2	12-94	MSM	7	03-21	TWF			
3	06-96	GFK						
4	10-10	KEH						
5	10-11	KEH						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME: 212-03_0421.dgn
 DRAWING DATE: APRIL, 1993

IDAHO TRANSPORTATION DEPARTMENT



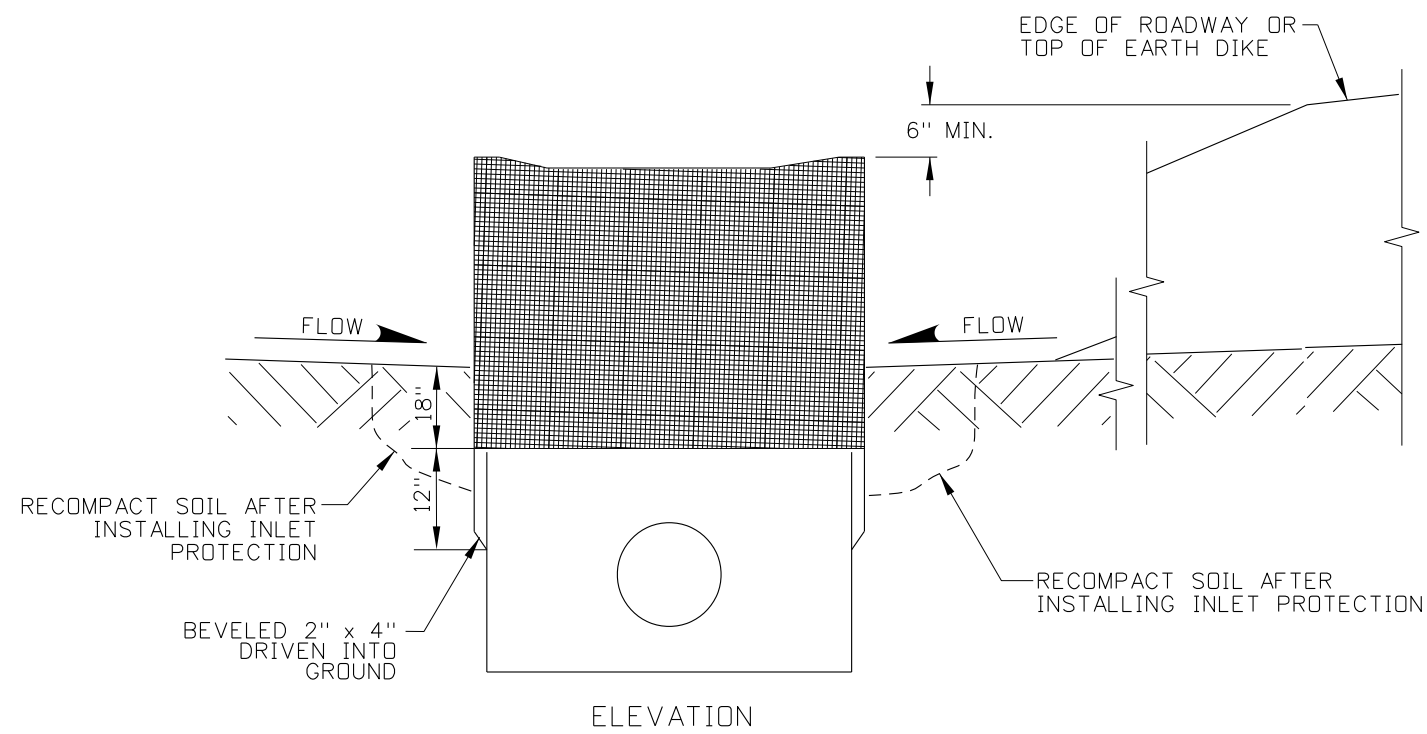
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
 DESIGN/TRAFFIC SERVICES ENGINEER

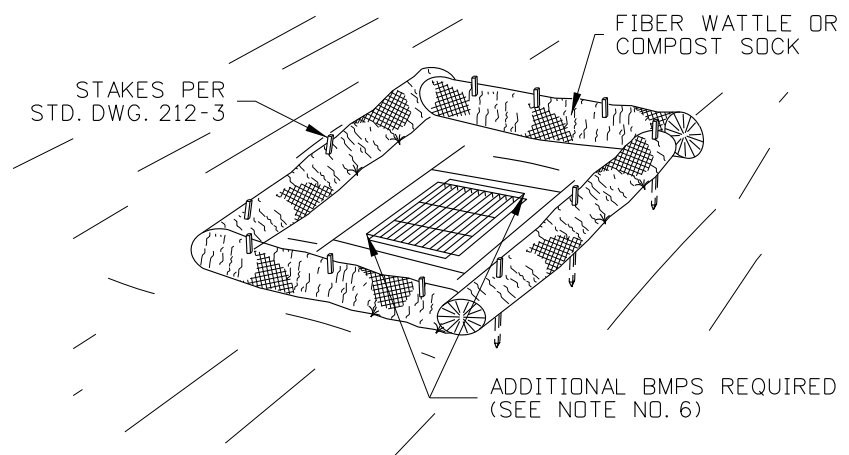
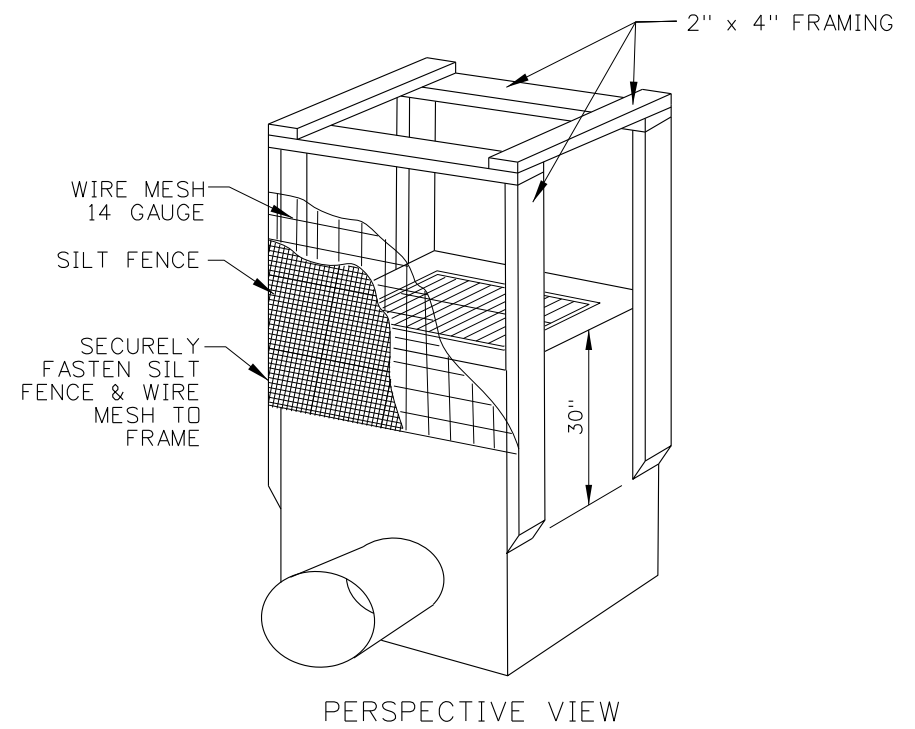
STANDARD DRAWING
TEMPORARY EROSION AND SEDIMENT CONTROL
 SILT FENCE, FIBER WATTLE, AND COMPOST SOCK
 REQUIRES STD. DWG. 212-1

English
 STANDARD DRAWING NO.
212-3
 SHEET 1 OF 1

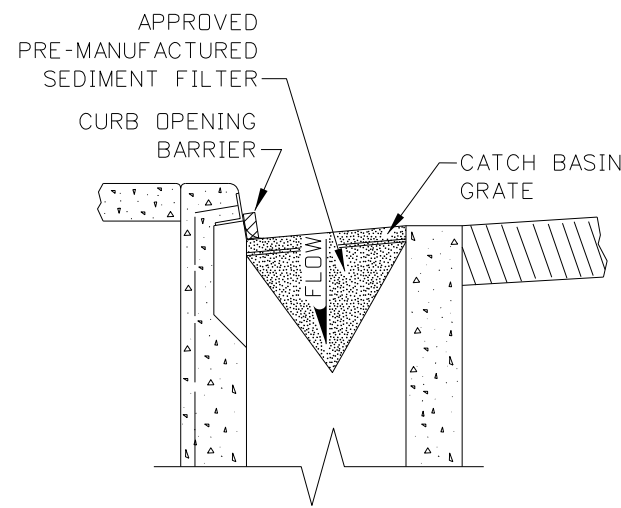
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho



FRAMED WIRE/FABRIC FILTER



FIBER WATTLE FILTER



PRE-MANUFACTURED SEDIMENT FILTER FOR INLET GRATE

NOTES

1. SEE THE GENERAL NOTES FOR EROSION CONTROL STANDARD DRAWINGS ON 212-1.
2. REMOVE TRASH, DEBRIS, DUFF, AND MATERIALS THAT MAY INTERFERE WITH THE INLET OR CATCH BASIN PROTECTION FUNCTION PRIOR TO PLACEMENT AND DAILY THEREAFTER OR AS NEEDED.
3. ADJUST TO ENSURE EFFECTIVENESS.
4. FRAMED WIRE/FABRIC FILTER AND FIBER WATTLE FILTERS ARE INTENDED TO BE USED ON STRUCTURES NOT PRESENTLY SURROUNDED BY PAVEMENT.
5. ENSURE WATER DISCHARGING FROM THE INLET MEETS APPLICABLE WATER QUALITY STANDARDS.
6. USE IN CONJUNCTION WITH OTHER INLET PROTECTION DEVICES, NOT AS THE SOLE BMP. SEE SECTION SC-6 IN THE BMP MANUAL.
7. DRAWING NOT TO SCALE.

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	10-10	KEH						
2	10-11	KEH						
3	01-13	RDL						
4	03-21	TWF						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME: 212-07_0421.dgn
 DRAWING DATE: JUNE, 1996

IDAHO TRANSPORTATION DEPARTMENT



BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
 DESIGN/TRAFFIC SERVICES ENGINEER

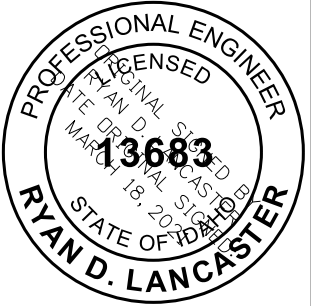
STANDARD DRAWING
TEMPORARY EROSION AND SEDIMENT CONTROL INLET PROTECTION
 REQUIRES STD. DWG. 212-1

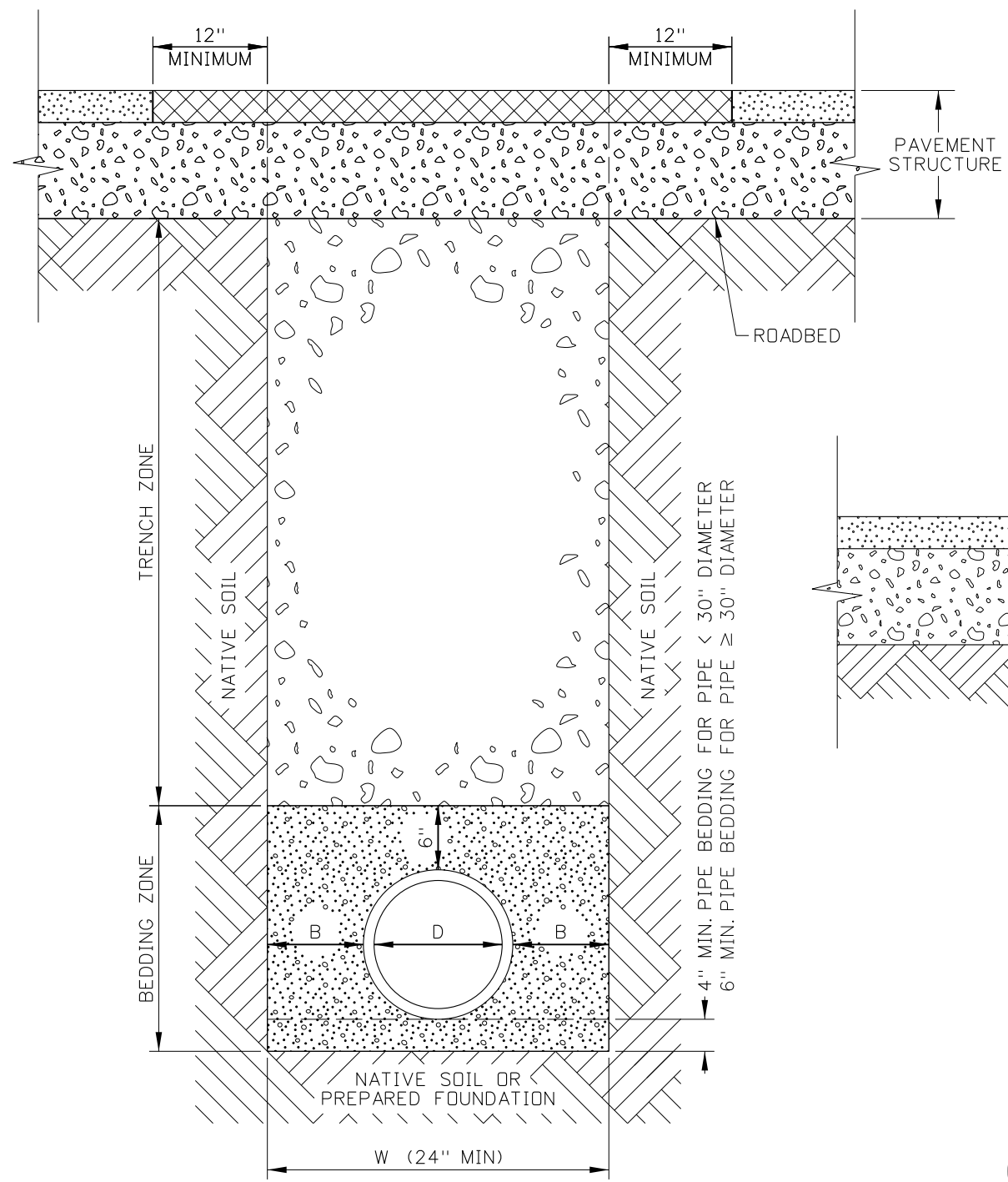
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

English

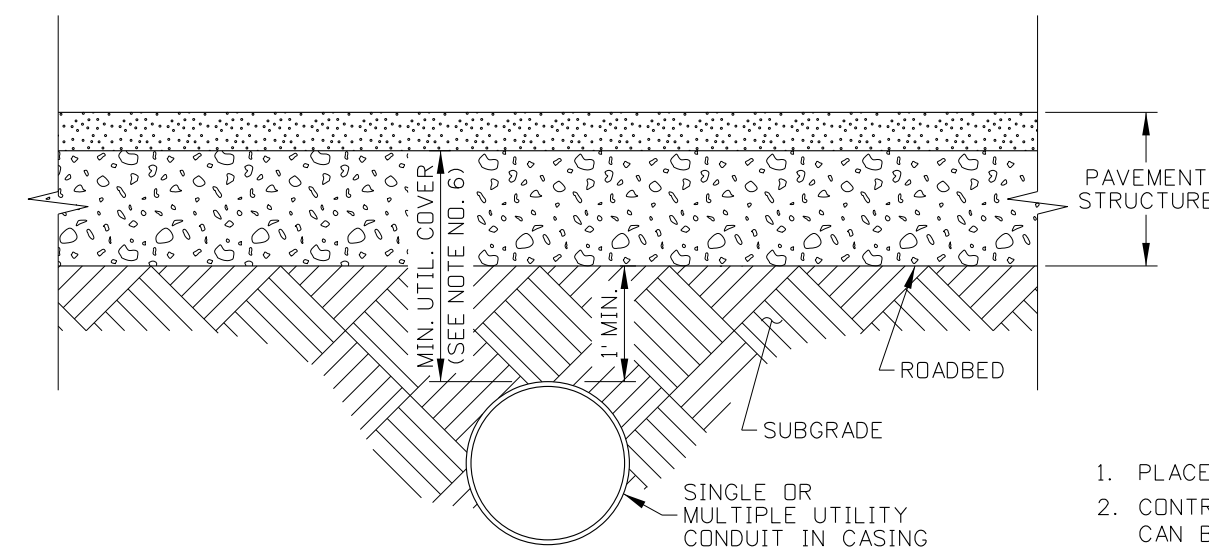
STANDARD DRAWING NO.
212-7

SHEET 1 OF 1

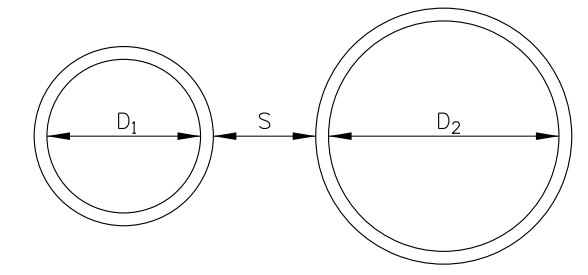




TRENCHING



JACKING, DRIVING, OR BORING



MULTIPLE PIPE INSTALLATION DETAIL
(SEE NOTE NO. 4)

MATERIALS AND COMPACTION TABLE				
PIPE LOCATION	BEDDING ZONE		TRENCH ZONE	
	MATERIAL REQUIREMENT	COMPACTION REQUIREMENT	MATERIAL REQUIREMENT	COMPACTION REQUIREMENT
INSIDE ROADWAY PRISM	COARSE AGGREGATE FOR CONCRETE SIZE NO. 1, NO. 2A, OR NO. 2B (SUBSECTION 703.02)	ENGINEER ACCEPTANCE	3/4" AGGREGATE FOR BASE (SUBSECTION 703.04) (SEE NOTE NO. 1)	CLASS A COMPACTION (SECTION 205) OR 95% OF IT-74
OUTSIDE ROADWAY PRISM	COARSE AGGREGATE FOR CONCRETE SIZE NO. 1, NO. 2A, OR NO. 2B (SUBSECTION 703.02)	ENGINEER ACCEPTANCE	GRANULAR BORROW OR NATIVE MATERIALS WITH MAXIMUM SIZE OF 6" AND FREE FROM WOOD WASTE OR DELETERIOUS MATERIALS. (SEE NOTE NO. 1)	CLASS D COMPACTION (SECTION 205)

MINIMUM DIMENSION TABLE (SEE NOTE NOS. 3 AND 4)		
D (INCHES)	B (INCHES)	S (INCHES)
≤ 6	10	24
7 TO 15	12	24
16 TO 30	18	24
> 30	24	GREATER OF 24 OR D/2

NOTES

1. PLACE MATERIAL IN ACCORDANCE WITH SECTION 210.
2. CONTROLLED DENSITY FILL (CDF) IN ACCORDANCE WITH SECTION 522 CAN BE USED IF APPROVED BY THE ENGINEER.
3. LOOSE LIFT THICKNESS DIRECTLY ON TOP OF PIPE MAY BE INCREASED WITH APPROVAL TO PREVENT DAMAGE TO PIPE DURING COMPACTION.
4. WHEN TWO DIFFERENT DIAMETER PIPES ARE INSTALLED, USE THE LARGER D DIMENSION TO DETERMINE THE S DIMENSION.
5. WHEN THE PIPE DIAMETER IS 36 INCHES OR GREATER AND THE PIPE IS INSTALLED DURING EMBANKMENT CONSTRUCTION, USE B DIMENSION EQUAL TO THE PIPE DIAMETER.
6. PROVIDE THE FOLLOWING MINIMUM COVER DEPTHS:
 WATER: 4'
 LIQUID OR GAS PETROLEUM: 4'
 ELECTRICAL MAIN LINE: 4'
 COMMUNICATIONS OR ELECTRONICS: 2'
 UTILITY OWNERS AND LOCAL PUBLIC AGENCIES MAY HAVE DIFFERENT MINIMUM COVER DEPTHS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE REQUIRED COVER DEPTHS.
7. PERFORM TRENCHING PER OSHA REQUIREMENTS.
8. DO NOT DISTURB THE INSTALLED PIPE OR CONDUIT, OR LEAVE VOIDS WHEN USING TRENCH BOXES OR SHIELDS.
9. DRAWINGS NOT TO SCALE.

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	12-15	RDL	6	03-21	TWF			
2	03-16	RDL						
3	06-17	RDL						
4	06-18	HEB						
5	11-18	TWF						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME: 601-1_0421.dgn
 DRAWING DATE: MAY 2014

IDAHO TRANSPORTATION DEPARTMENT



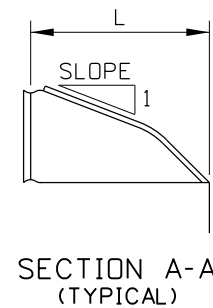
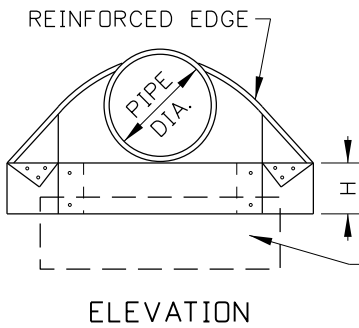
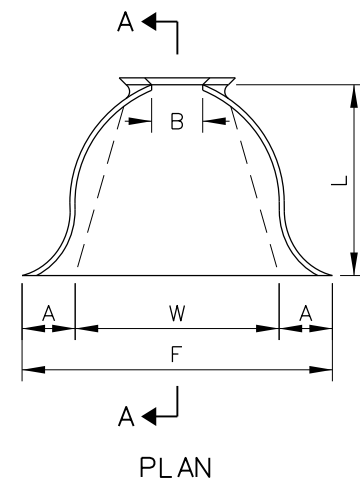
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
 DESIGN/TRAFFIC SERVICES ENGINEER

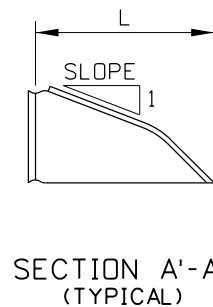
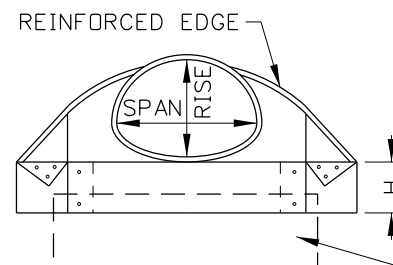
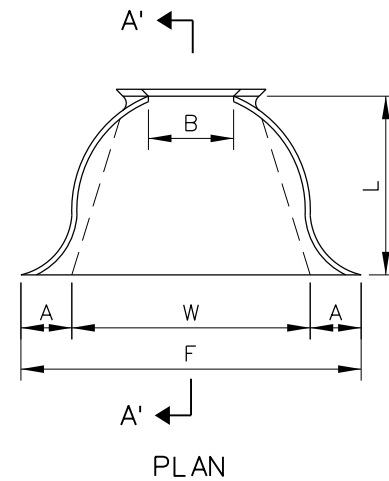
STANDARD DRAWING
PIPE AND CONDUIT INSTALLATION

English
 STANDARD DRAWING NO.
601-1
 SHEET 1 OF 1

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho



APRON FOR ROUND METAL PIPE
(GALVANIZED STEEL)



APRON FOR METAL ARCH PIPE
(GALVANIZED STEEL)

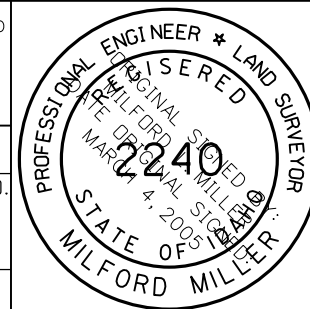
DIMENSIONS TABLE									
PIPE DIA.	THICK-NESS (1000'S)	ALL DIMENSIONS ARE IN INCHES						APPROX. SLOPE	BODY
		A (MIN.)	B	H (MIN.)	F (MIN.)	L ±2"	W (MAX.)		
12	0.064	5	7	6	22	21	24	2 1/2:1	1 PC.
15	0.064	7	8	6	28	26	30	2 1/2:1	1 PC.
18	0.064	7	10	6	34	31	36	2 1/2:1	1 PC.
21	0.064	8	12	6	40	36	42	2 1/2:1	1 PC.
24	0.064	9	13	6	46	41	48	2 1/2:1	1 PC.
30	0.079	13	16	8	55	51	60	2 1/2:1	1 PC.
36	0.079	11	19	9	70	60	72	2 1/2:1	2 PC.
42	0.109	15	25	10	82	69	84	2 1/2:1	2 PC.
48	0.109	17	29	12	88	78	90	2 1/2:1	2 PC.
54	0.109	17	33	12	100	84	102	2:1	2 PC.
60	0.109	17	36	12	112	87	114	2 1/2:1	3 PC.
66	0.109	17	39	12	118	87	120	2 1/2:1	3 PC.
72	0.109	17	44	12	120	87	126	2 1/2:1	3 PC.
78	0.109	17	48	12	130	87	132	2 1/2:1	3 PC.
84	0.109	17	52	12	136	87	138	2 1/2:1	3 PC.

DIMENSIONS TABLE										
PIPE-ARCH		THICK-NESS (1000'S)	ALL DIMENSIONS ARE IN INCHES						APPROX. SLOPE	BODY
SPAN IN.	RISE IN.		A (MIN.)	B	H (MIN.)	F (MIN.)	L ±2"	W (MAX.)		
17	13	0.064	5	9	6	28	20	50	2 1/2:1	1 PC.
21	15	0.064	6	11	6	34	24	58	2 1/2:1	1 PC.
24	18	0.064	7	12	6	40	28	63	2 1/2:1	1 PC.
28	20	0.064	7	16	6	46	32	70	2 1/2:1	1 PC.
35	24	0.079	9	16	6	58	39	85	2 1/2:1	1 PC.
42	29	0.079	11	18	8	73	46	104	2 1/2:1	1 PC.
49	33	0.109	12	21	9	82	53	117	2 1/2:1	2 PC.
57	38	0.109	16	26	10	88	62	130	2 1/2:1	2 PC.
64	43	0.109	17	30	12	100	79	142	2 1/4:1	2 PC.
71	47	0.109	17	36	12	112	77	156	2 1/4:1	2 PC.
77	52	0.109	17	36	12	124	77	167	2:1	3 PC.
83	57	0.109	17	44	12	130	77	179	2:1	3 PC.

NOTES

- ALL 3-PIECE BODIES (APRONS WITH PIPE DIA. 60 IN. & LARGER) TO HAVE 0.109 IN. SIDES AND 0.138 IN. CENTER PANELS. MULTIPLE PANEL BODIES TO HAVE LAP SEAMS WHICH ARE TO BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS.
- THE REINFORCED EDGES OF GALVANIZED STEEL APRONS, FOR ROUND METAL PIPE SIZES 60 IN. THROUGH 84 IN. AND FOR ARCH METAL PIPE SIZES 77x62 IN. THROUGH 83x57 IN., ARE TO BE SUPPLEMENTED BY GALVANIZED STIFFENER ANGLES. THE ANGLES ARE TO BE ATTACHED BY GALVANIZED BOLTS AND NUTS.
- ANGLE REINFORCEMENT WILL BE PLACED UNDER THE CENTER PANEL SEAMS ON ARCH PIPE SIZES 77x52 IN. THROUGH 83x57 IN.
- A GALVANIZED TOE PLATE IS AVAILABLE AS AN ACCESSORY. WHEN SPECIFIED IT SHALL BE THE SAME GAGE AS THE APRON.
- THE APRON SHALL BE CONNECTED TO PIPE BY USING EITHER CONNECTING BANDS, RODS, OR STRAPS.
- NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho



REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	09-64		6	06-84			
2	06-68		7	07-92	MSM		
3	04-70		8	11-01	MSM		
4	10-76		9	03-05	MSM		
5	07-78						

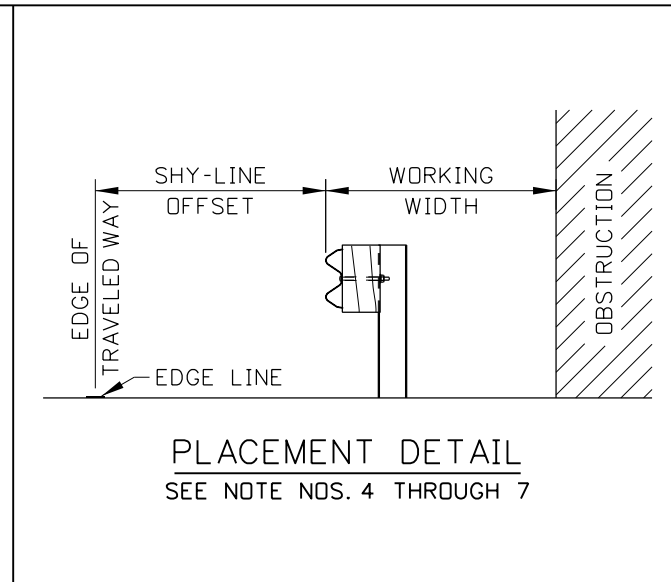
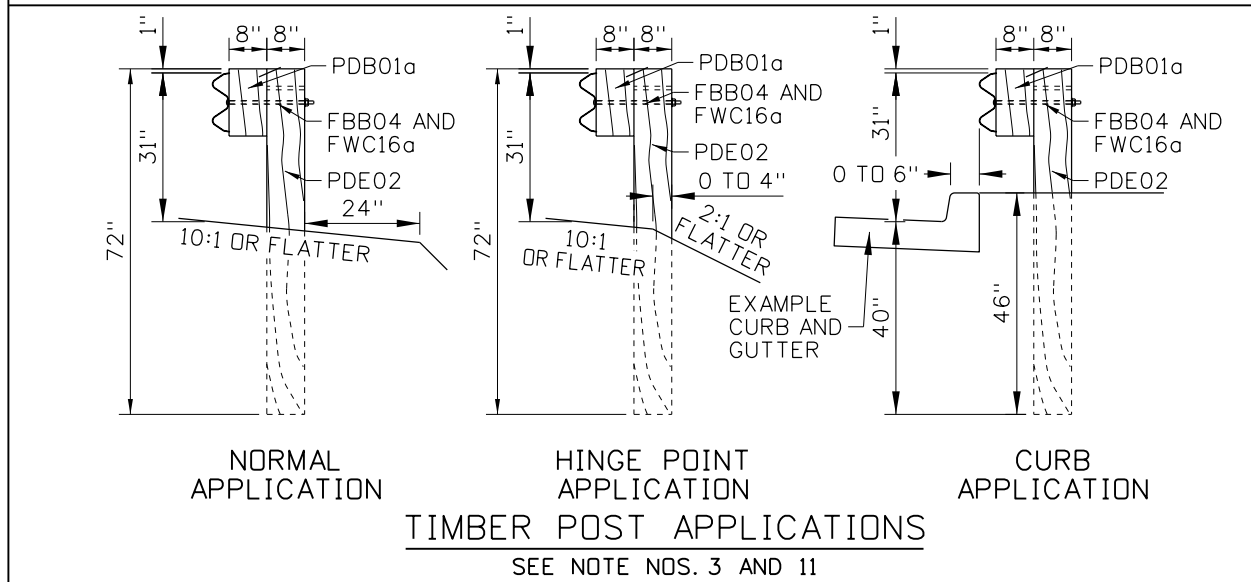
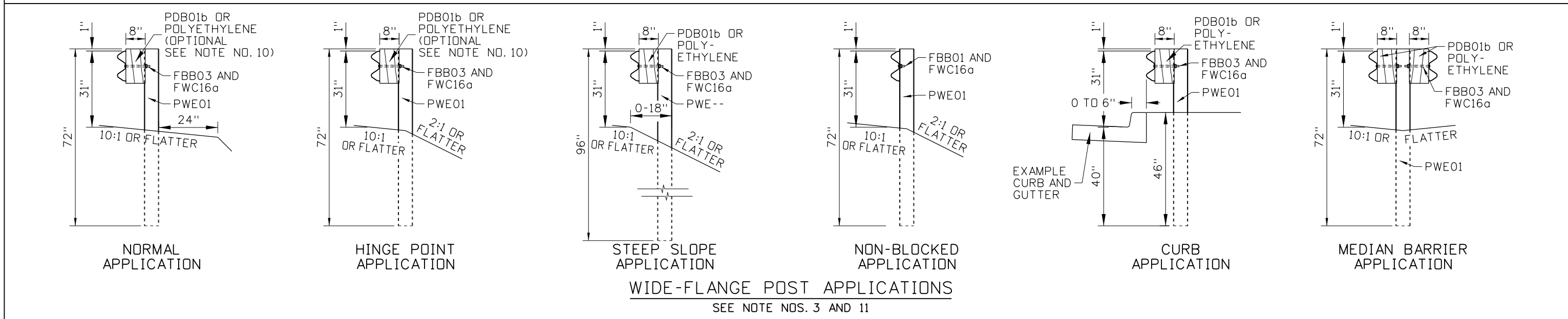
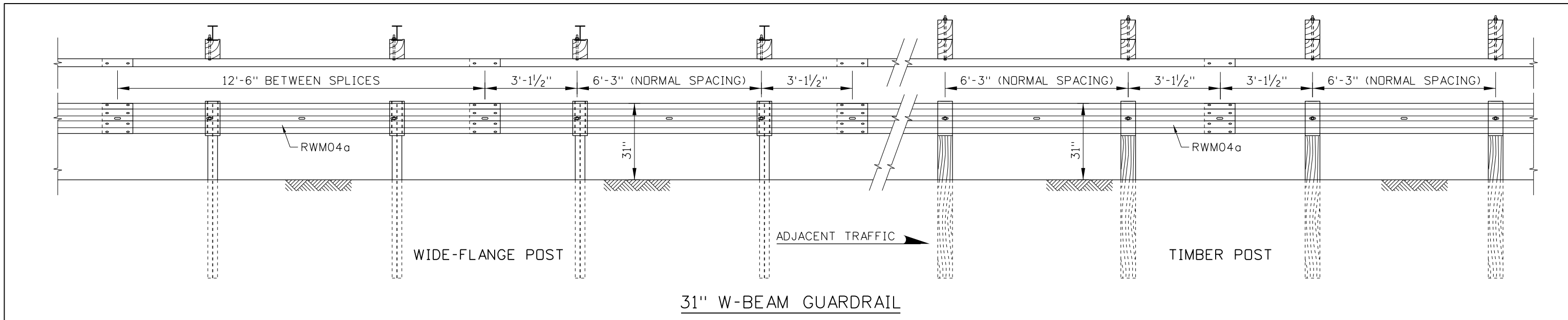
SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 608-1_0305.dgn
DRAWING DATE: APRIL, 1961

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: STEVEN HUTCHINSON
CHIEF ENGINEER

STANDARD DRAWING
GALVANIZED STEEL APRONS FOR PIPE CULVERTS

English
STANDARD DRAWING NO.
608-1
SHEET 1 OF 1



SHY-LINE OFFSET AND FLARE RATE TABLE

DESIGN SPEED (MPH)	SHY-LINE OFFSET (FT)	BARRIER FLARE RATE	
		INSIDE SHY LINE	AT OR BEYOND SHY LINE
80	12	30:1	15:1
70	9	30:1	15:1
60	8	26:1	14:1
55	7	24:1	12:1
50	6.5	21:1	11:1
45	6	18:1	10:1
40	5	16:1	8:1
30	4	13:1	7:1

DEFLECTION TABLE

APPLICATION	POST SPACING	WORKING WIDTH
NORMAL SPACING	6'-3"	54"
1/2 SPACING	3'-1 1/2"	46"
1/4 SPACING	1'-6 3/4"	38"
STEEP SLOPE	6'-3"	56"
HINGE POINT	6'-3"	78"
LONG SPAN	≤ 25'	96"

REVISIONS

NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	08-18	RDL						
2	03-19	RDL						
3	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 612-1_0420.dgn

DRAWING DATE: JUNE, 2017

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

31" W-BEAM GUARDRAIL

English

STANDARD DRAWING NO. 612-1

SHEET 1 OF 5

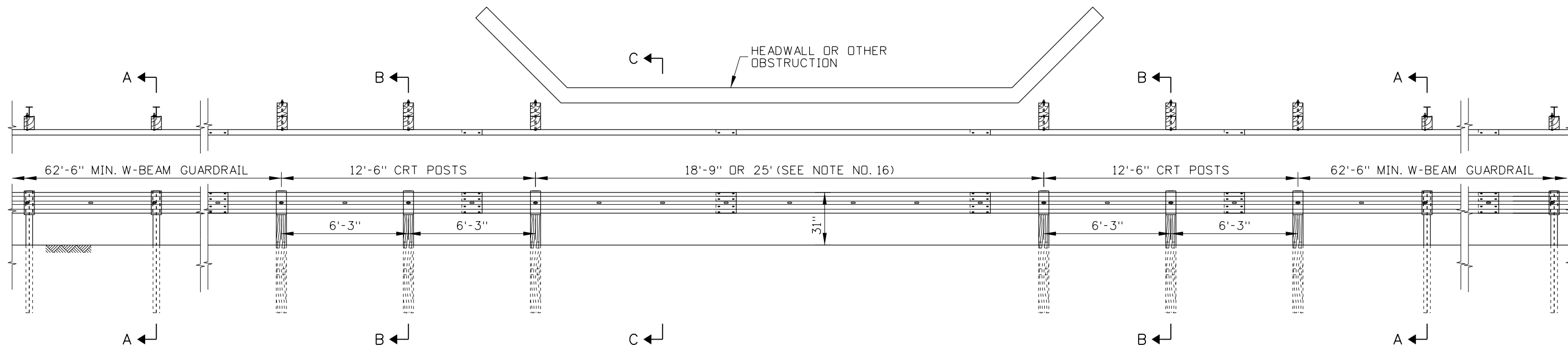
PROFESSIONAL ENGINEER

RYAN D. LANCASTER

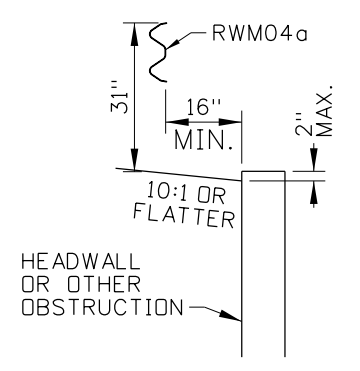
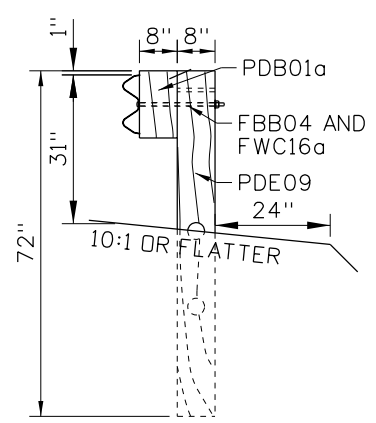
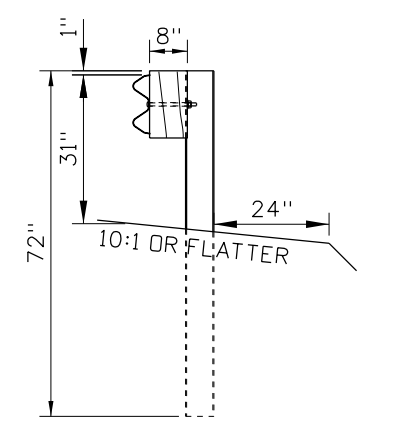
13683

STATE OF IDAHO

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho



31" LONG-SPAN APPLICATION
SEE NOTE NOS. 17 AND 18



REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	08-18	RDL						
2	03-19	RDL						
3	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 612-1_0420.dgn
DRAWING DATE: JUNE, 2017

IDAHO TRANSPORTATION DEPARTMENT



BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
31" W-BEAM GUARDRAIL

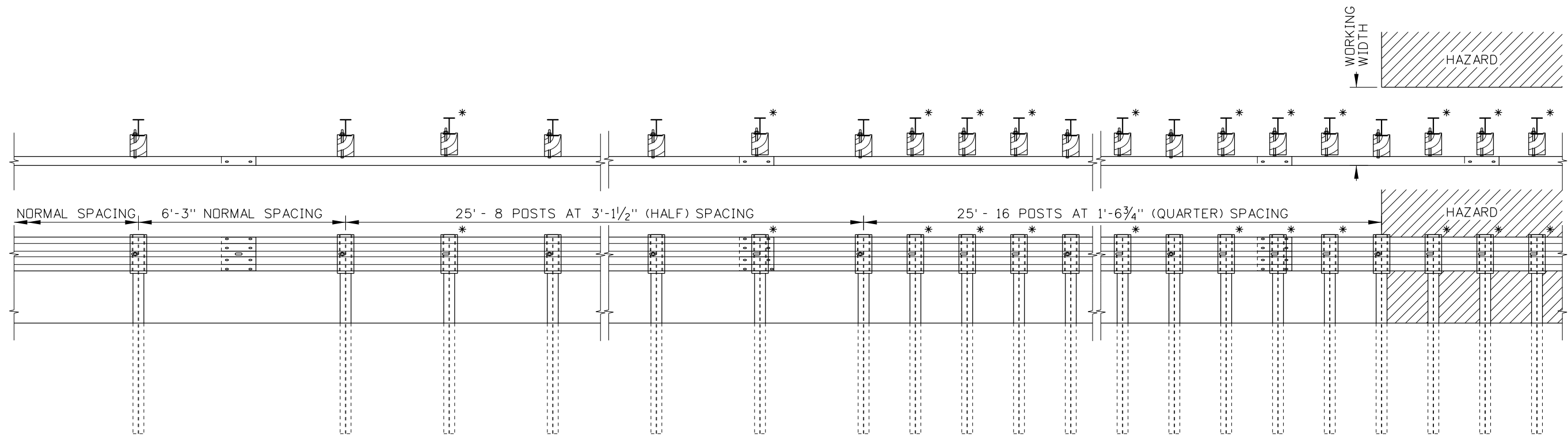
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

English

STANDARD DRAWING NO. 612-1

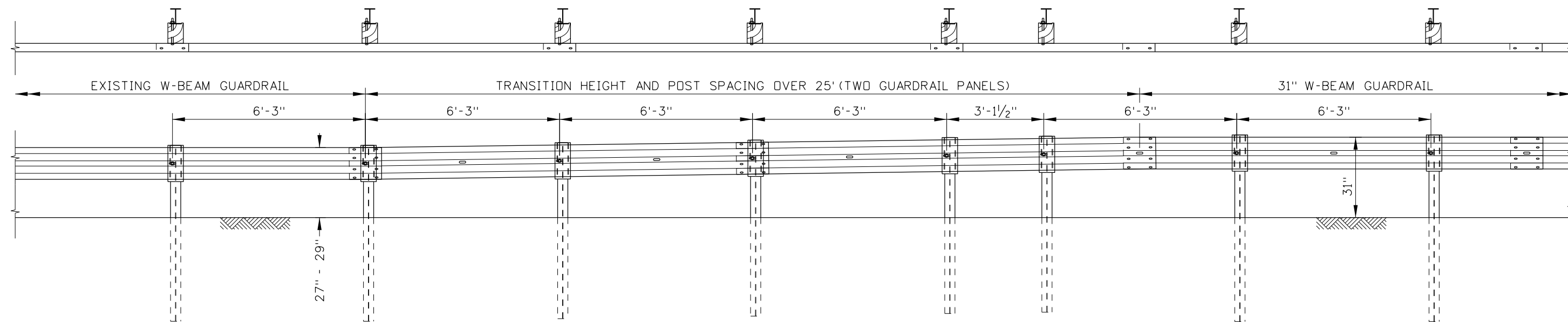
SHEET 2 OF 5

PROFESSIONAL ENGINEER
LICENSED
RYAN D. LANCASTER
13683
STATE OF IDAHO
MARCH 10, 2017



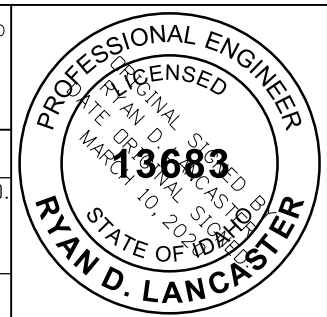
REDUCED POST SPACING
SEE NOTE NO. 7

LEGEND:
* EXTRA POSTS.
BOLT BLOCKOUT TO POST, BUT
DO NOT BOLT TO GUARDRAIL



TRANSITION TO 31" W-BEAM GUARDRAIL
SEE NOTE NO. 19

ORIGINAL STORED
AT: ITD,
Headquarters
3311 West State
Boise, Idaho



REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	08-18	RDL						
2	03-19	RDL						
3	03-20	RDL						

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME:
612-1_0420.dgn
DRAWING DATE:
JUNE, 2017

**IDAHO
TRANSPORTATION
DEPARTMENT**

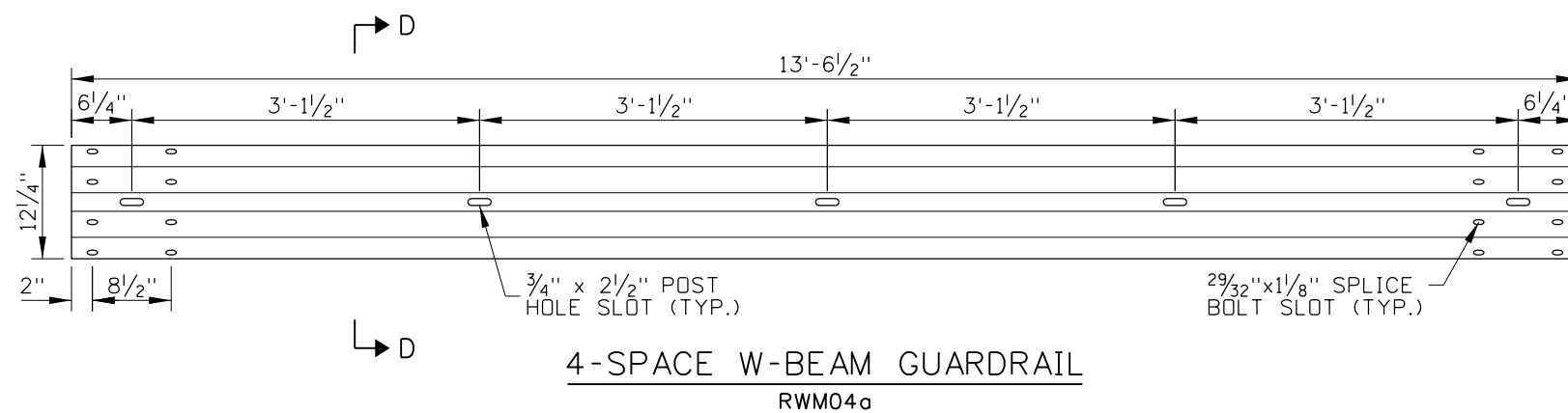


BOISE IDAHO

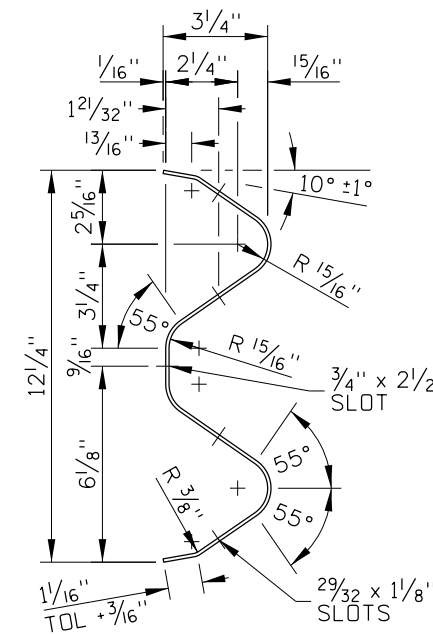
ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
31" W-BEAM GUARDRAIL

English
STANDARD DRAWING NO.
612-1
SHEET 3 OF 5

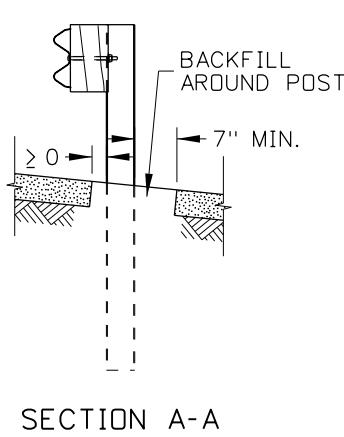
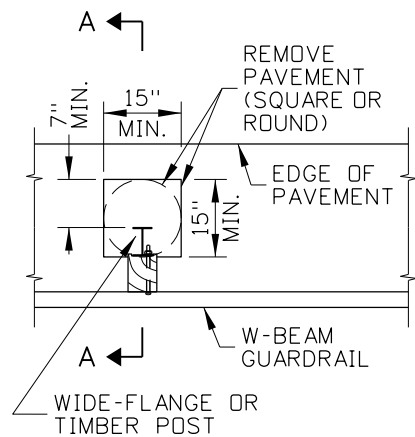


4-SPACE W-BEAM GUARDRAIL
RWM04a

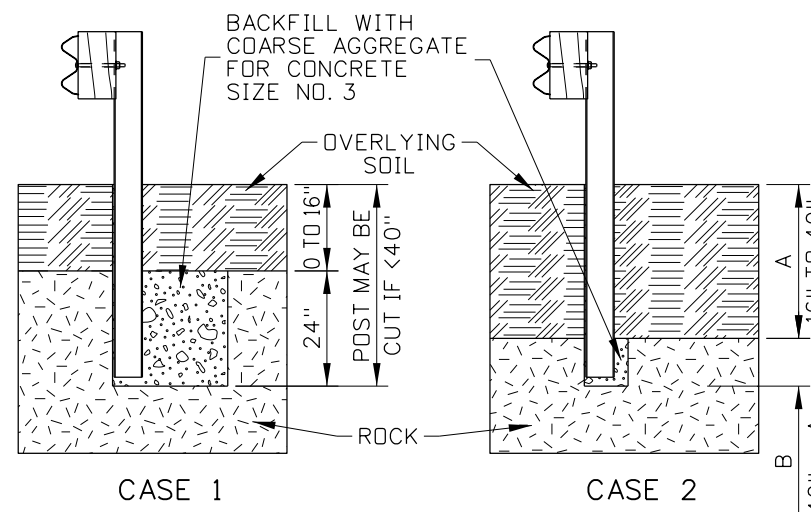


SECTION D-D

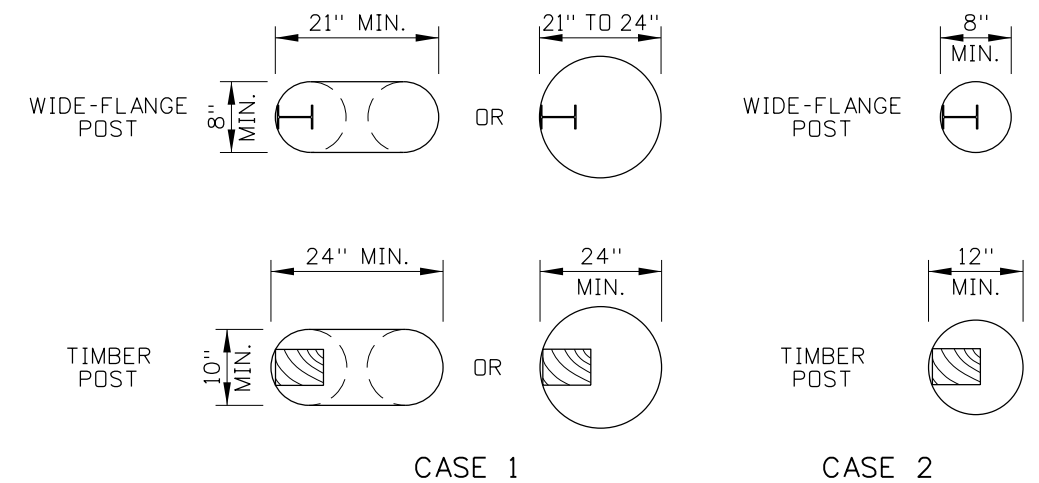
31" W-BEAM GUARDRAIL HARDWARE COMPONENTS TABLE		
COMPONENT DESCRIPTION	WIDE-FLANGE POST	TIMBER POST
4-SPACE W-BEAM GUARDRAIL	RWM04a	RWM04a
WIDE-FLANGE GUARDRAIL POSTS	PWE01, PWE--	-
TIMBER GUARDRAIL POSTS	-	PDE02
CRT TIMBER GUARDRAIL POST	-	PDE09
W-BEAM BLOCKOUT	PDB01b OR POLYETHYLENE	PDB01a
5/8" GUARDRAIL SPLICE BOLT AND RECESSED NUT	FBB01	FBB01
5/8" GUARDRAIL BOLT AND RECESSED NUT	FBB03	FBB04
5/8" PLAIN ROUND WASHER	FWC16a	FWC16a
16D GALVANIZED NAIL	-	N/A



GUARDRAIL POST IN PAVEMENT
SEE NOTE NO. 9



GUARDRAIL POST IN ROCK FORMATION
SEE NOTE NO. 9



REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	08-18	RDL						
2	03-19	RDL						
3	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 612-1_0420.dgn
DRAWING DATE: JUNE, 2017

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

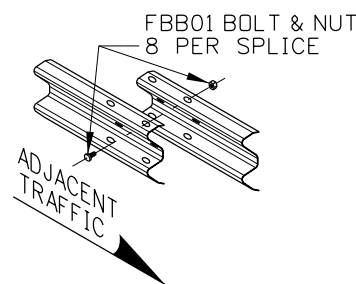
ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
31" W-BEAM GUARDRAIL

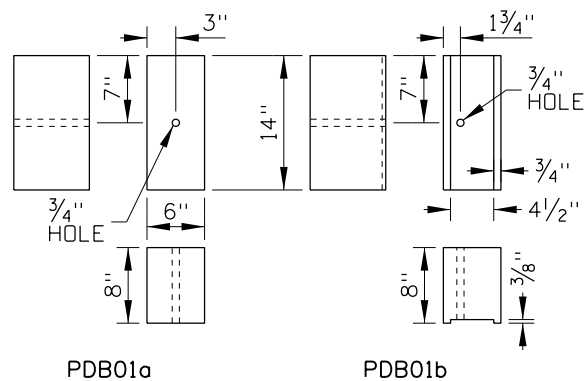
English
STANDARD DRAWING NO.
612-1
SHEET 4 OF 5

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

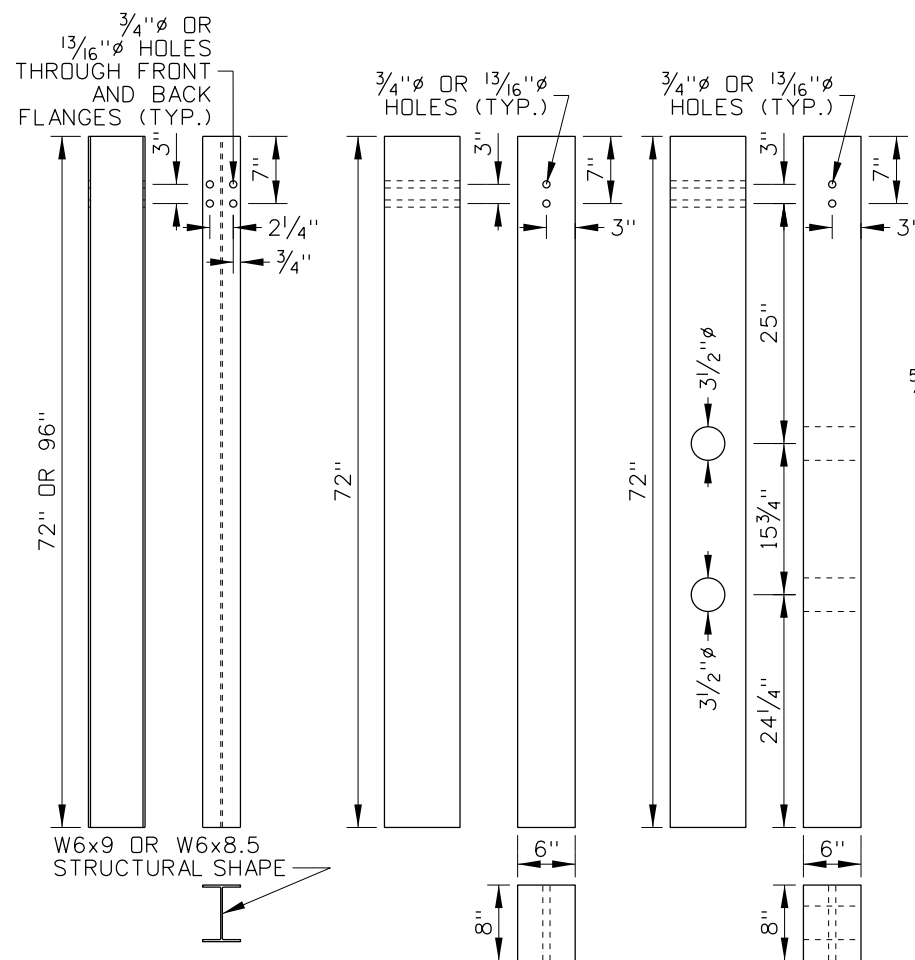
PROFESSIONAL ENGINEER
RYAN D. LANCASTER
13683
STATE OF IDAHO



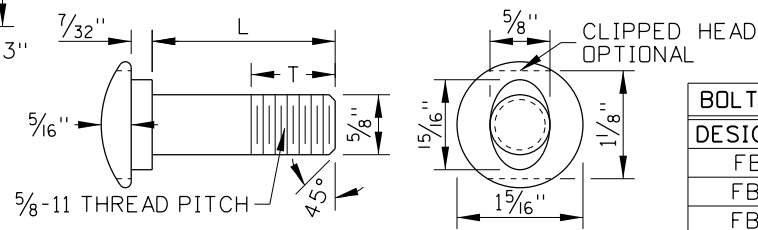
W-BEAM SPLICE DETAIL
SEE NOTE NO. 14



W-BEAM TIMBER BLOCKOUTS

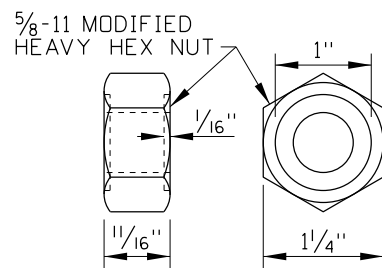


GUARDRAIL POSTS

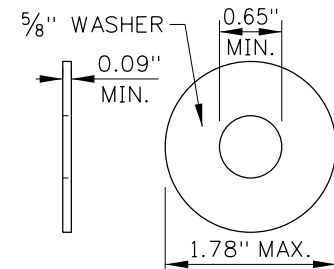


GUARDRAIL BOLT (BUTTON-HEADED)
FBB01, FBB03, FBB04

BOLT DIMENSION TABLE		
DESIGNATOR	L	T
FBB01	1 1/4"	1 1/8"
FBB03	10"	1 3/4"
FBB04	18"	4"



RECESSED NUT



PLAIN ROUND WASHER
FWC16a

NOTES

1. THE 31" W-BEAM GUARDRAIL SYSTEM SHOWN IS A MASH TEST LEVEL 3 BARRIER SYSTEM.
2. PROVIDE BARRIER HARDWARE AS SHOWN AND AS SPECIFIED IN THE PUBLICATION "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE." WHERE THE GUIDE AND PLANS CONFLICT, PROVIDE HARDWARE COMPONENTS AS SHOWN ON THE PLANS.
3. INSTALL GUARDRAIL AS SHOWN IN THE NORMAL APPLICATION UNLESS OTHERWISE INDICATED ON THE PROJECT PLANS. THE CURB APPLICATIONS CAN BE USED WITH ANY OF THE CURB AND GUTTER OR CURB TYPES SHOWN ON THE CURB AND GUTTER STANDARD DRAWING.
4. PLACE 31" W-BEAM GUARDRAIL AS FAR FROM THE TRAVELED WAY AS PRACTICAL. WHERE PRACTICAL PROVIDE THE SHY-LINE OFFSET DISTANCE SHOWN IN THE SHY-LINE OFFSET TABLE.
5. WHERE PRACTICAL, FLARE THE 31" W-BEAM GUARDRAIL AWAY FROM THE TRAVELED WAY. SEE THE SHY-LINE OFFSET AND FLARE RATE TABLE.
6. PROVIDE ADEQUATE DEFLECTION DISTANCE TO OBSTRUCTIONS BEHIND THE GUARDRAIL BY PROVIDING THE WORKING WIDTH SHOWN ON THE PLACEMENT DETAIL AND IN THE DEFLECTION TABLE.
7. DECREASE DEFLECTION BY REDUCING POST SPACING. INTRODUCE EACH REDUCTION IN POST SPACING OVER 25' OR MORE. DO NOT BOLT THE GUARDRAIL TO THE EXTRA POSTS.
8. WIDE-FLANGE OR TIMBER POSTS MAY BE USED UNLESS OTHERWISE INDICATED ON THE PROJECT PLANS. USE THE SAME POST MATERIAL FOR THE PROJECT LENGTH (EXCEPT IN THE 31" LONG-SPAN APPLICATION).
9. REMOVE PAVEMENT AND ROCK AROUND GUARDRAIL POSTS.
10. USE TIMBER OR POLYETHYLENE BLOCKOUTS WITH WIDE-FLANGE POSTS. USE TIMBER BLOCKOUTS WITH TIMBER POSTS. USE THE SAME BLOCKOUT MATERIAL FOR THE PROJECT LENGTH (EXCEPT IN THE 31" LONG-SPAN APPLICATION). THE WIDE-FLANGE POST NORMAL APPLICATION CAN BE CONSTRUCTED WITHOUT BLOCKOUTS IF INDICATED ON THE PROJECT PLANS OR IF APPROVED BY THE ENGINEER.
11. INSTALL THE BLOCKOUT AND W-BEAM GUARDRAIL USING THE HOLE 7" FROM THE TOP OF THE POST. THE HIGHER HOLE IS RESERVED FOR FUTURE GUARDRAIL HEIGHT ADJUSTMENT.
12. NAIL TIMBER BLOCKOUTS TO TIMBER POSTS TO RESTRICT BLOCK ROTATION. NAIL THROUGH THE SIDES OF THE BLOCKOUT AND POST.
13. WHEN WIDE-FLANGE POSTS ARE USED AND WHEN PRACTICAL, INSTALL THE BOLT (FBB03) ON THE UPSTREAM SIDE OF THE POST IN RELATION TO THE ADJACENT TRAFFIC.
14. SPLICE 31" W-BEAM GUARDRAIL BETWEEN POSTS. OVERLAP SPLICES SO THAT THE EXPOSED W-BEAM EDGE IS DOWNSTREAM OF THE ADJACENT TRAFFIC.
15. BEGIN AND END 31" W-BEAM GUARDRAIL WITH A TERMINAL, ANCHOR, OR TRANSITION. CONSTRUCT TERMINALS OR TRANSITIONS USING THE SAME POST MATERIAL AS THE GUARDRAIL WHEN PRACTICAL. SOME ANCHORS AND TERMINALS ARE ONLY AVAILABLE WITH TIMBER OR WIDE-FLANGE POSTS.
16. DELINEATE GUARDRAILS WITH TYPE 9 DELINEATORS. SEE THE DELINEATOR STANDARD DRAWING FOR DELINEATOR SPACING.
17. ONE POST CAN BE OMITTED WITHOUT OTHER MODIFICATION IF APPROVED BY THE ENGINEER. THE LONG-SPAN APPLICATION CAN BE USED WHERE TWO POSTS (18'-9" SPAN) OR THREE POSTS (25' SPAN) ARE OMITTED.
18. WHEN THE LONG-SPAN APPLICATION (18'-9", OR 25') IS USED, INSTALL THREE CRT TIMBER POSTS (PDE09) WITH TIMBER BLOCKOUTS ADJACENT TO THE UPSTREAM AND DOWNSTREAM ENDS OF THE UNSUPPORTED SECTION. DO NOT NEST THE 4-SPACE W-BEAM GUARDRAIL IN THE UNSUPPORTED SECTION. INSTALL AT LEAST 62'-6" OF 31" W-BEAM GUARDRAIL UPSTREAM AND DOWNSTREAM OF THE CRT POSTS.
19. WHEN CONNECTING TO EXISTING GUARDRAIL, TRANSITION THE GUARDRAIL HEIGHT TO 31". REPLACE THE EXISTING W-BEAM GUARDRAIL IF THE TOP OF GUARDRAIL HEIGHT IS LESS THAN 27".
20. DRAWING NOT TO SCALE.

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	08-18	RDL						
2	03-19	RDL						
3	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 612-1_0420.dgn
DRAWING DATE: JUNE, 2017

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

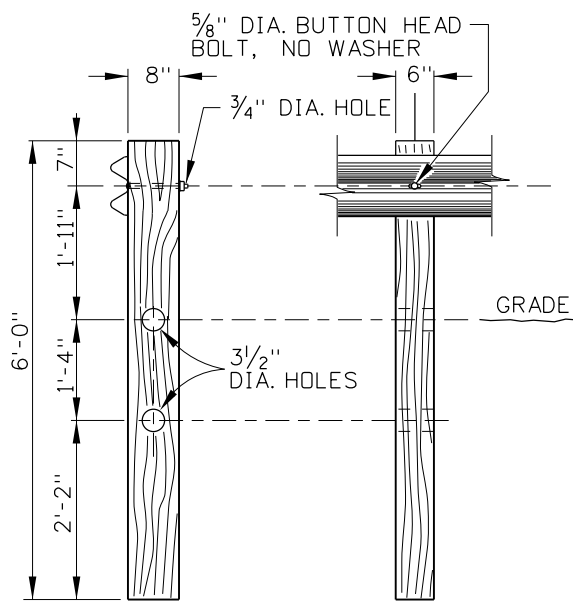
STANDARD DRAWING
31" W-BEAM GUARDRAIL

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

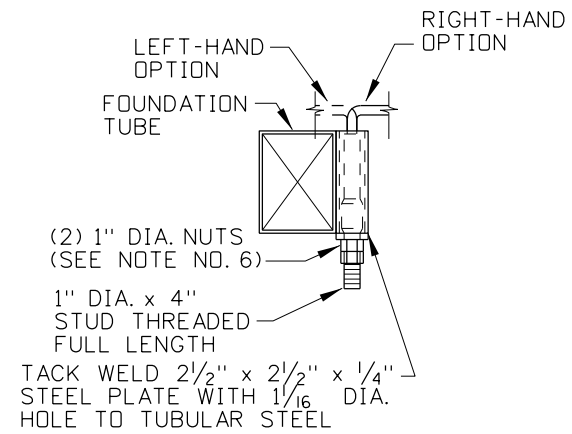
English

STANDARD DRAWING NO. **612-1**

SHEET 5 OF 5



MODIFIED CRT TIMBER POST



ANCHOR DETAIL
(SEE NOTE NO. 9)

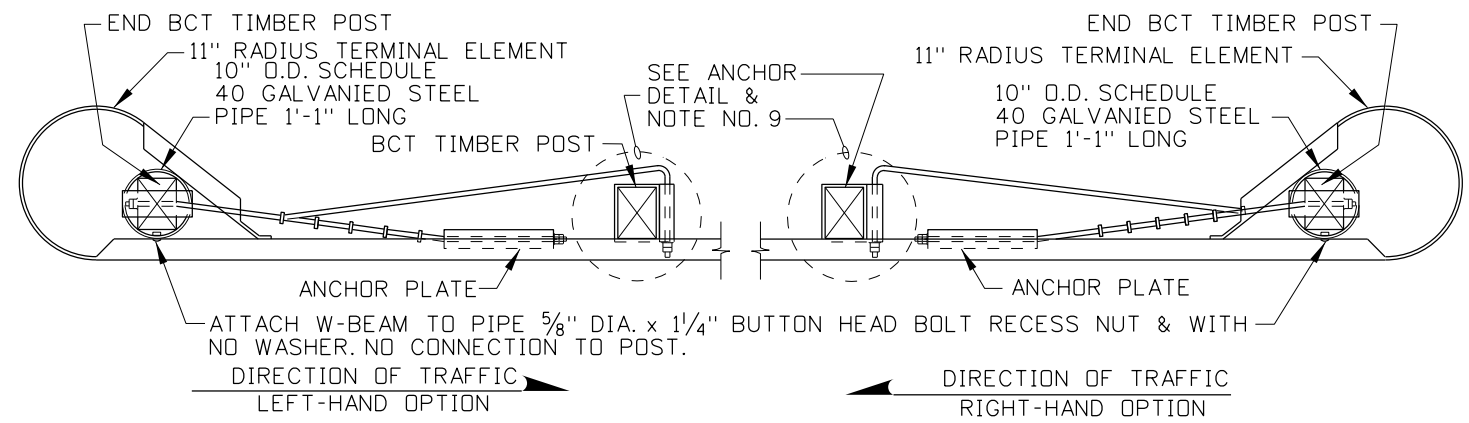


TABLE OF MAXIMUM TAPERS

DESIGN SPEED	TAPER
70	15:1
60	13:1
50	11:1
40	9:1

PLACEMENT TABLE

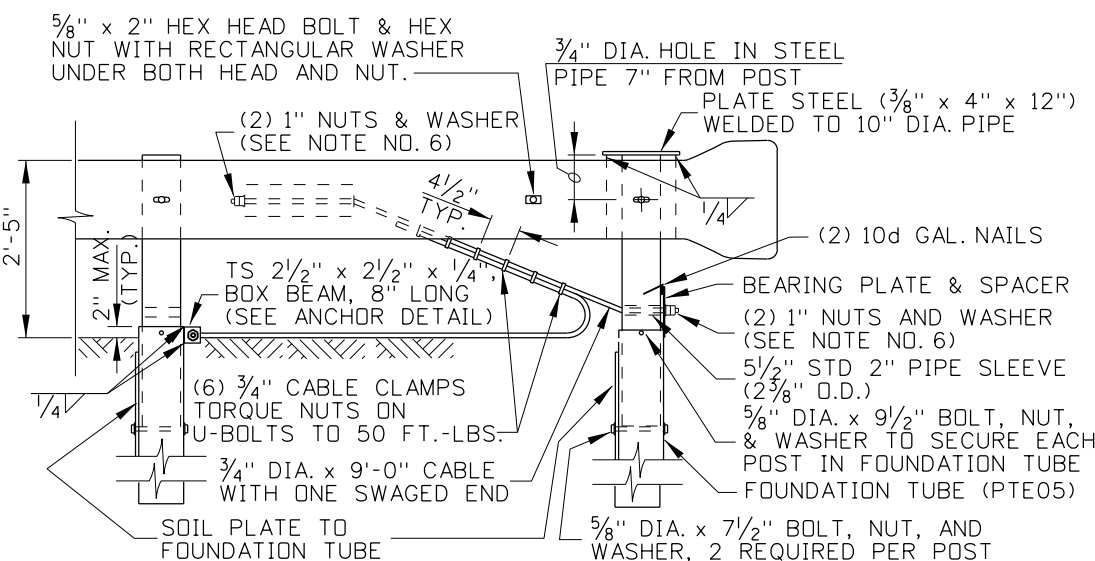
DELTA ANGLE	RAIL RADIUS	NO. RAIL SECTIONS	NO. CRT POSTS	AREA FREE OF FIXED OBJECTS	
				L	W
75° -105°	8'	1	5	25'	15'
75° -105°	16'	2	7	30'	15'
75° -105°	24'	3	9	40'	20'
75° -80°	32'	3	9	40'	20'
>80° -100°	32'	4	11	40'	20'
>100° -105°	32'	5	13	40'	20'

NOTES

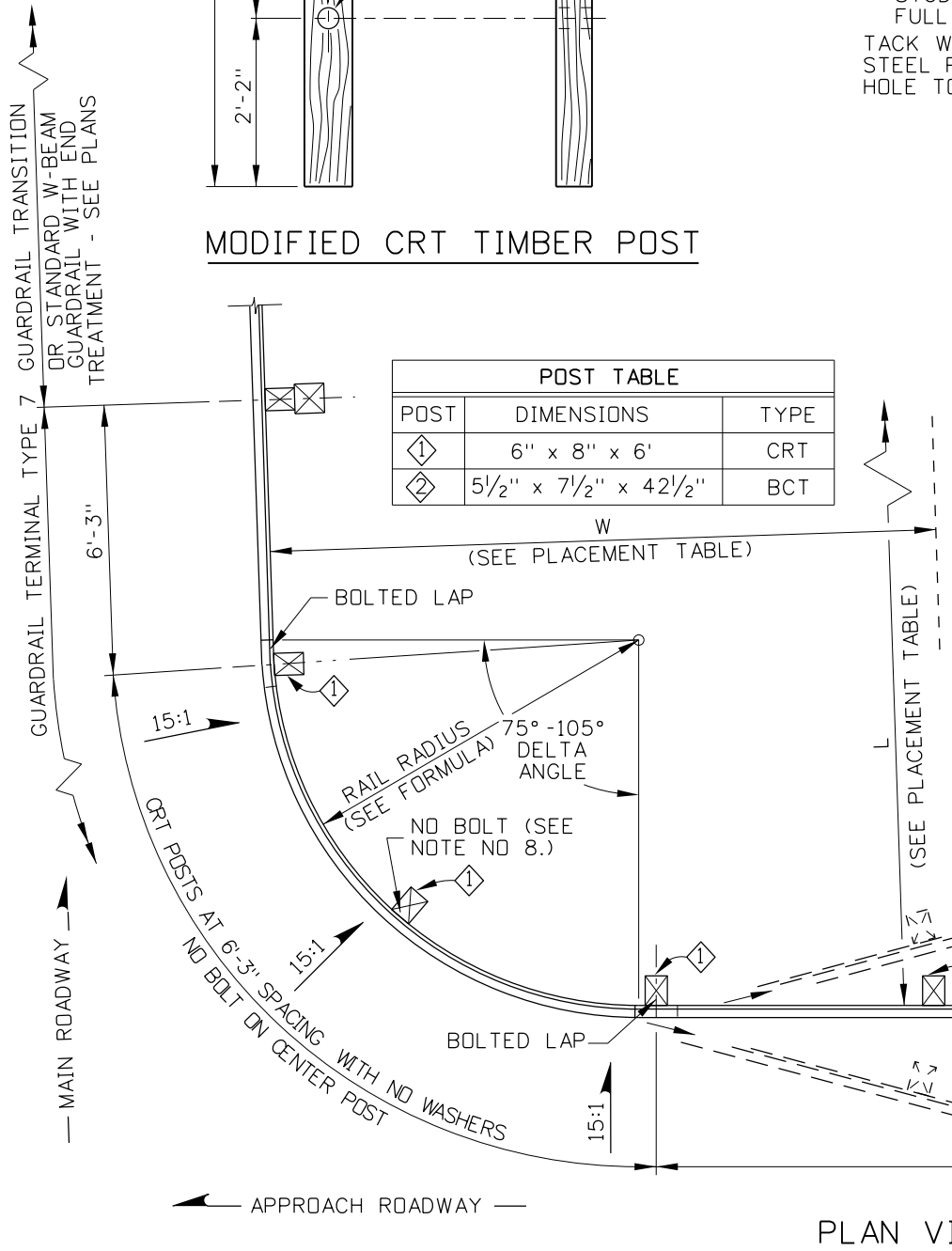
1. THE TYPE 8 TERMINAL SHALL ONLY BE USED OUTSIDE THE CLEAR ZONE OR WHEN THE APPROACH ROADWAY SPEED IS 35 MPH OR LESS. OTHERWISE AN APPROPRIATE NCHRP 350 TERMINAL IS REQUIRED.
2. THE GUARDRAIL ALONG THE APPROACH ROADWAY MAY BE ANGLED 15° TO EITHER SIDE OF THE PERPENDICULAR AXIS TO THE MAIN ROADWAY. HOWEVER, FLARE RATES ALONG ROADWAYS WITH 35 MPH OR GREATER SPEEDS MUST FOLLOW STANDARD TAPER RATES (SEE "TABLE OF MAXIMUM TAPERS").
3. THE ROADWAY IN FRONT THE CURVED PORTION OF THE TERMINAL SHALL BE 15:1 OR FLATTER. GRADE TERRAIN TO A 10:1 SLOPE OR FLATTER FOR 2' BEYOND THE GUARDRAIL POST, THEN A 2:1 OR FLATTER SLOPE. A 6:1 OR FLATTER SLOPE IS DESIRABLE. IF THE FILL HEIGHT IS GREATER THAN 30' OTHER SOLUTIONS SHOULD BE CONSIDERED. AN AREA FREE OF FIXED OBJECTS SHALL BE MAINTAINED BEHIND THE GUARDRAIL.
4. THIS DRAWING REQUIRES STANDARD DRAWING 612-1 AND IS SUBJECT TO THE W-BEAM GUARDRAIL INSTALLATION REQUIREMENTS AND HARDWARE/ACCESSORY SPECIFICATIONS.
5. ALL TERMINAL HARDWARE ITEMS SHALL MEET THE SPECIFICATIONS IN THE "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE" (CURRENT EDITION). ALL WELDING SHALL MEET THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY.
6. WHEN FASTENING THE CABLE ENDS THE OUTSIDE NUTS SHALL BE TORQUED AGAINST INSIDE NUTS A MINIMUM OF 100 FT.-LBS.
7. ALL CURVED GUARDRAIL SHALL BE SHOP BENT, FIELD BENDING WILL NOT BE ALLOWED.
8. ALL CURVED RAIL SECTIONS SHALL BE 12'-6" IN LENGTH AND BOLTED TO THE POSTS ONLY AT THE LAPS.
9. THE ANCHOR CABLE FROM POST #1 TO POST #2 MUST BE ATTACHED ON THE FAR SIDE OF THE FOUNDATION TUBE FOR LEFT-HAND INSTALLATIONS.
10. NOT TO SCALE.

POST TABLE

POST	DIMENSIONS	TYPE
①	6" x 8" x 6"	CRT
②	5 1/2" x 7 1/2" x 42 1/2"	BCT



ELEVATION
TERMINAL TYPE 8
(RIGHT-HAND OPTION SHOWN)



PLAN VIEW

REVISIONS

NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	05-90	GB	6	05-06	MSM			
2	04-93	MSM	7	11-06	MSM			
3	04-99	MSM	8	09-10	MGL			
4	03-03	MSM						
5	12-04	MSM						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 612-3_1010.dgn
DRAWING DATE: MAY, 1989

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

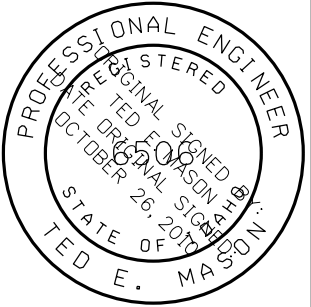
GUARDRAIL TERMINAL TYPES 7 & 8

REQUIRES STD. DWG. 612-1

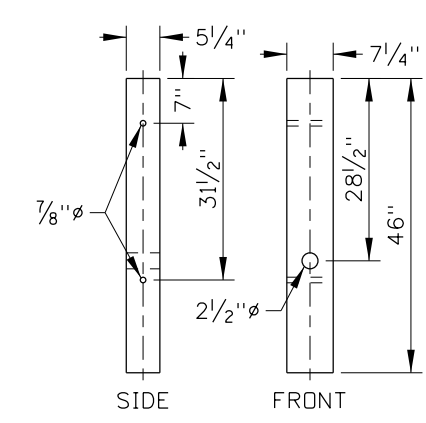
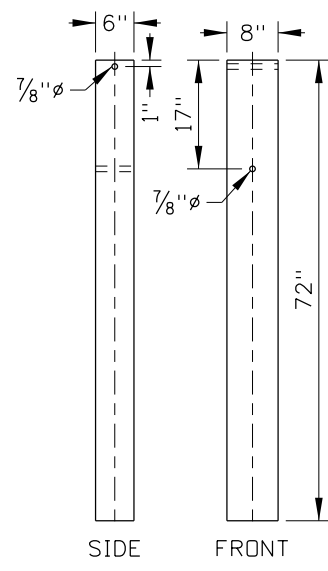
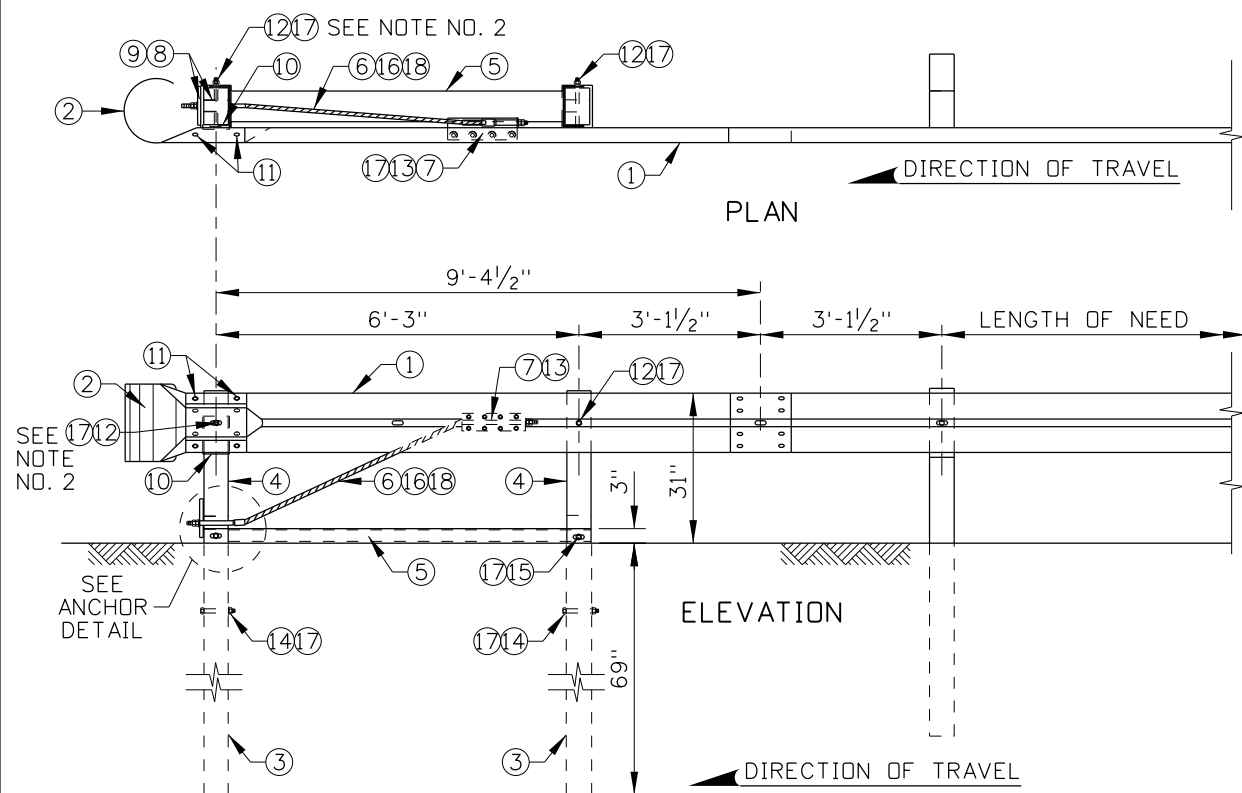
English

STANDARD DRAWING NO. **612-3**

SHEET 1 OF 1



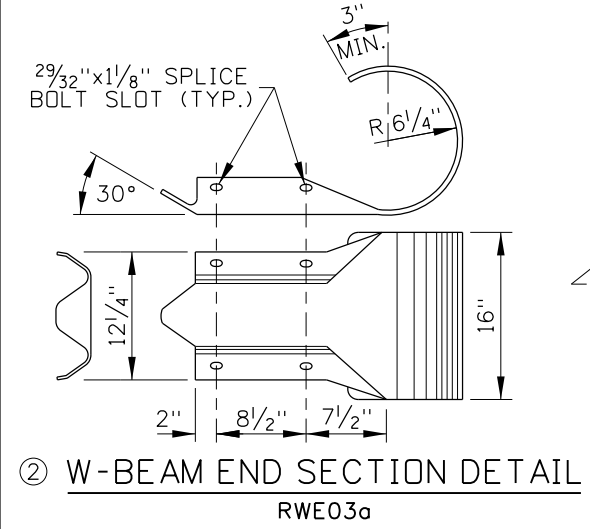
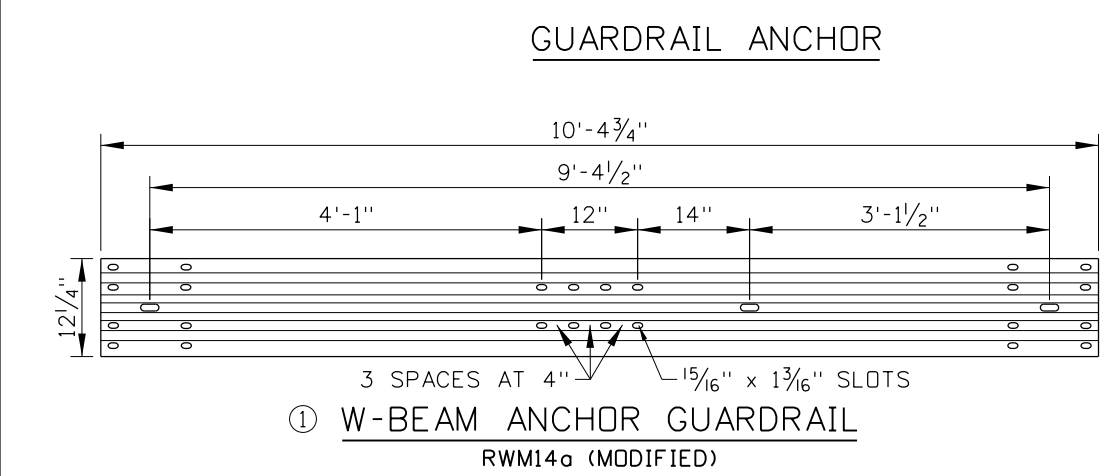
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho



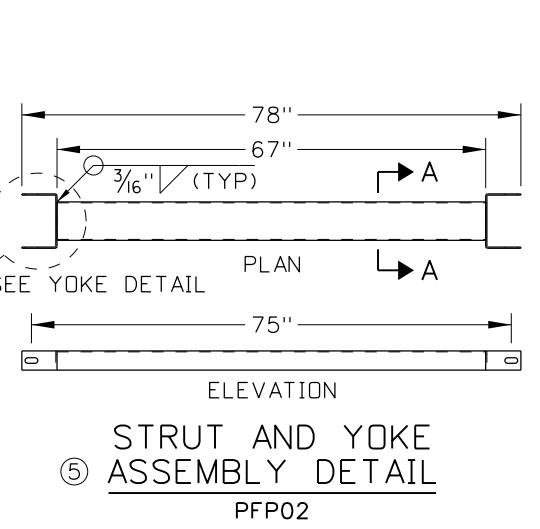
③ FOUNDATION TUBE DETAIL
PTE06

④ BCT TIMBER POST DETAIL
PDF--

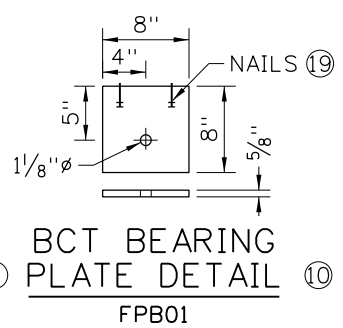
ANCHOR HARDWARE COMPONENTS TABLE			
ITEM NO.	COMPONENT DESCRIPTION	QTY.	TF-13 NAME
①	W-BEAM ANCHOR GUARDRAIL	1	RWM14a (MOD)
②	W-BEAM END SECTION (ROUNDED)	1	RWE03a
③	FOUNDATION TUBE	2	PTE06
④	BCT TIMBER POST	2	PDF--
⑤	STRUT AND YOKE ASSEMBLY	1	PFPO2
⑥	BCT CABLE ANCHOR ASSEMBLY	1	FCA01
⑦	GUARDRAIL ANCHOR BRACKET	1	FPA01
⑧	BCT POST SLEEVE	1	FMM02
⑨	BCT BEARING PLATE	1	FPB01
⑩	SHELF ANGLE BRACKET	1	FPP02
⑪	5/8" GUARDRAIL SPLICE BOLT AND RECESSED NUT	4	FBB01
⑫	10" GUARDRAIL BOLT & RECESSED NUT	2	FBB03
⑬	5/8" X 2" HEX HEAD BOLT & NUT	8	FBX16a
⑭	5/8" X 8" HEX HEAD BOLT & NUT	2	FBX16a
⑮	5/8" X 10" HEX HEAD BOLT & NUT	2	FBX16a
⑯	1" HEX NUTS	4	FNX24a
⑰	5/8" FLAT WASHER	22	FWC16a
⑱	1" FLAT WASHER	2	FWC24a
⑲	16D GALVANIZED NAIL	2	N/A



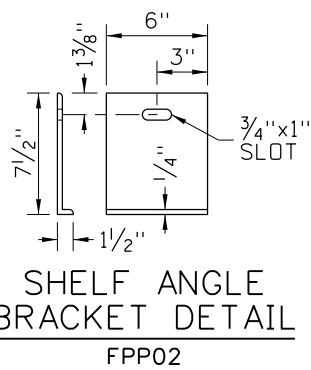
① W-BEAM ANCHOR GUARDRAIL
RWM14a (MODIFIED)



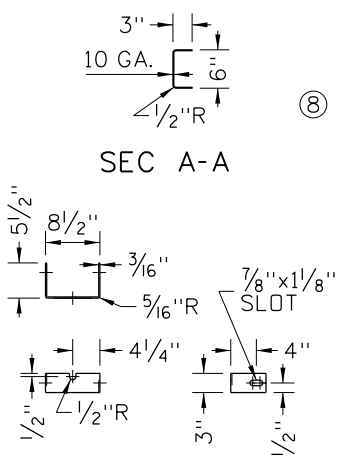
⑤ STRUT AND YOKE ASSEMBLY DETAIL
PFPO2



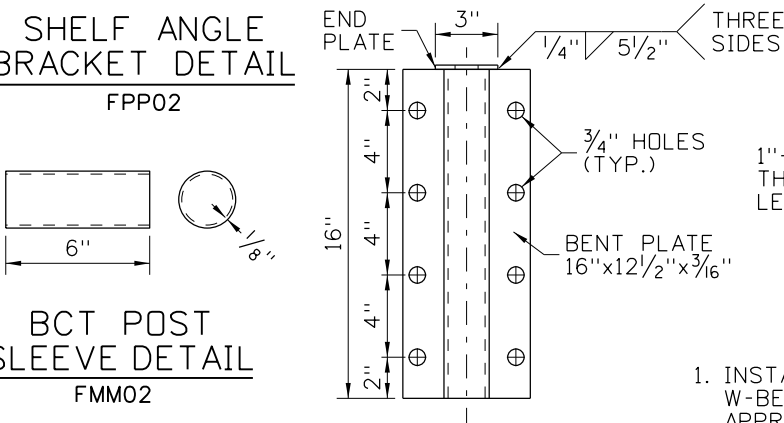
⑨ BCT BEARING PLATE DETAIL
FPB01



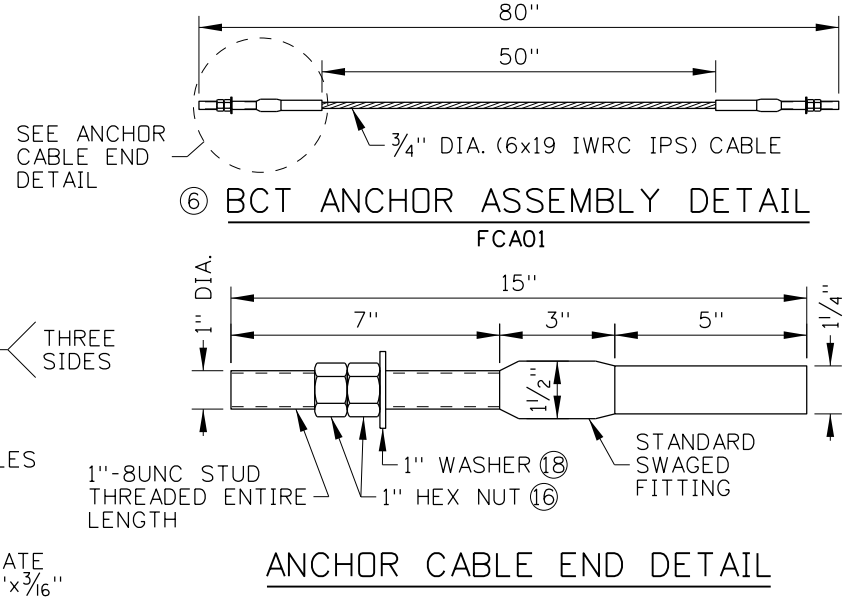
⑩ SHELF ANGLE BRACKET DETAIL
FPP02



⑧ BCT POST SLEEVE DETAIL
FMM02



⑦ GUARDRAIL ANCHOR BRACKET DETAIL
FPA01



- NOTES
1. INSTALL THE ANCHOR SYSTEM ON THE TRAILING END OF 31" W-BEAM GUARDRAIL, OUTSIDE OF THE CLEAR ZONE FOR APPROACHING TRAFFIC, OR BOTH.
 2. SUPPORT THE W-BEAM ANCHOR GUARDRAIL AT THE END POST WITH THE SHELF ANGLE BRACKET. DO NOT BOLT THE W-BEAM GUARDRAIL TO THE POST.
 3. ENSURE THAT THE FOUNDATION TUBES DO NOT EXTEND MORE THAN 3 3/4" ABOVE THE FINISHED GRADE.
 4. INSTALL AN EXTRA HEX NUT ON EACH END OF THE BCT CABLE ANCHOR ASSEMBLY.
 5. AFFIX A TYPE 3 OBJECT MARKER TO THE W-BEAM END SECTION WHEN THE ANCHOR IS USED ON AN UNDIVIDED HIGHWAY.
 6. DRAWING NOT TO SCALE.

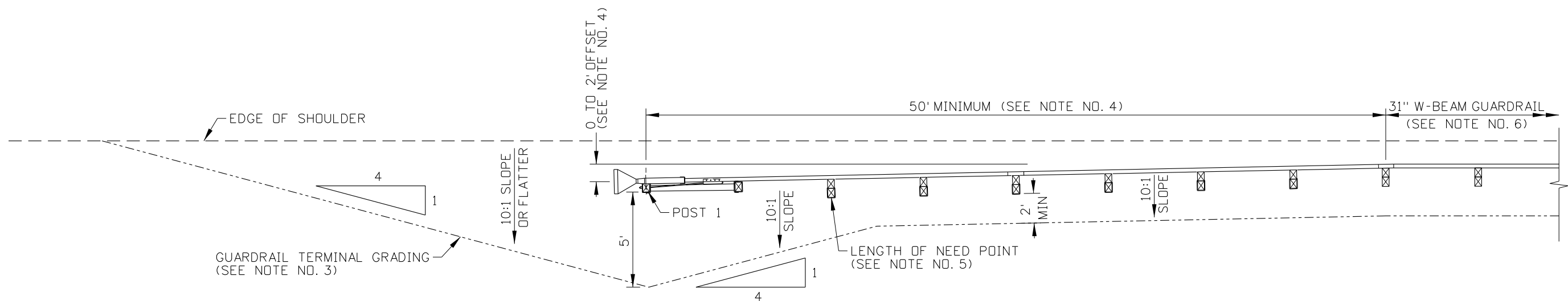
REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 612-5_0617.dgn
DRAWING DATE: JUNE, 2017

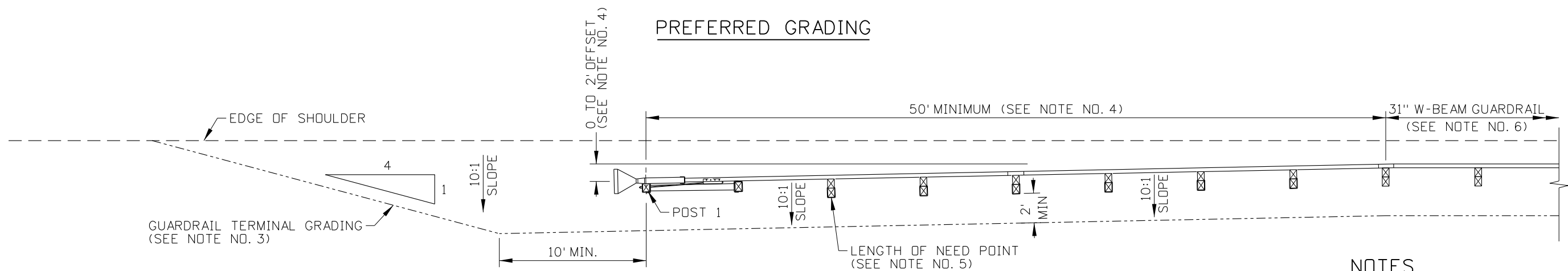
IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO
ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
GUARDRAIL ANCHOR

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho
English
STANDARD DRAWING NO. 612-5
SHEET 1 OF 1
PROFESSIONAL ENGINEER
RYAN D. LANCASTER
13683
STATE OF IDAHO
JULY 25, 2011



PREFERRED GRADING



ALTERNATIVE GRADING

NOTES

1. THE TANGENT TERMINAL SHOWN IS AN EXAMPLE ONLY. TANGENT TERMINAL DESIGNS VARY BY PRODUCT AND MANUFACTURER.
2. USE THE PREFERRED GRADING LAYOUT WHEN PRACTICAL. THE ALTERNATIVE GRADING LAYOUT MAY BE USED WHEN UPGRADING AN EXISTING TERMINAL WITH SITE LIMITATIONS. DISTANCES SHOWN FROM THE TERMINAL POSTS TO THE GRADING EXTENTS ARE MEASURED FROM THE BACK OF THE POST.
3. PROVIDE A 4:1 OR FLATTER SLOPE OUTSIDE OF THE GUARDRAIL TERMINAL GRADING EXTENTS WHERE PRACTICAL.
4. INSTALL THE TERMINAL IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS. REFER TO THE INSTRUCTIONS FOR SYSTEM LENGTH, OFFSET, NUMBER OF POSTS, POST SPACING, AND WHEN A TANGENT TERMINAL IS TO BE INSTALLED ON A HORIZONTAL CURVE.
5. VERIFY THE LENGTH OF NEED POINT WITH MANUFACTURER INSTRUCTIONS FOR A SPECIFIC PRODUCT. ELEMENTS OF THE GUARDRAIL TERMINAL DOWNSTREAM OF THE LENGTH OF NEED POINT CAN BE INCLUDED AS PART OF THE LENGTH OF NEED.
6. PROVIDE A MINIMUM OF 12'-6" OF 31" W-BEAM GUARDRAIL BETWEEN THE GUARDRAIL TERMINAL AND A GUARDRAIL TRANSITION.
7. IF THE TANGENT TERMINAL DESIGN USES AN ANCHOR CABLE, INSTALL AN EXTRA HEX NUT ON EACH END OF THE CABLE.
8. AFFIX A TYPE 3 OBJECT MARKER TO THE TERMINAL END SECTION.
9. DRAWING NOT TO SCALE.

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	08-18	RDL						
2	03-21	PBH						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 612-8_0421.dgn

DRAWING DATE: JUNE, 2017

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

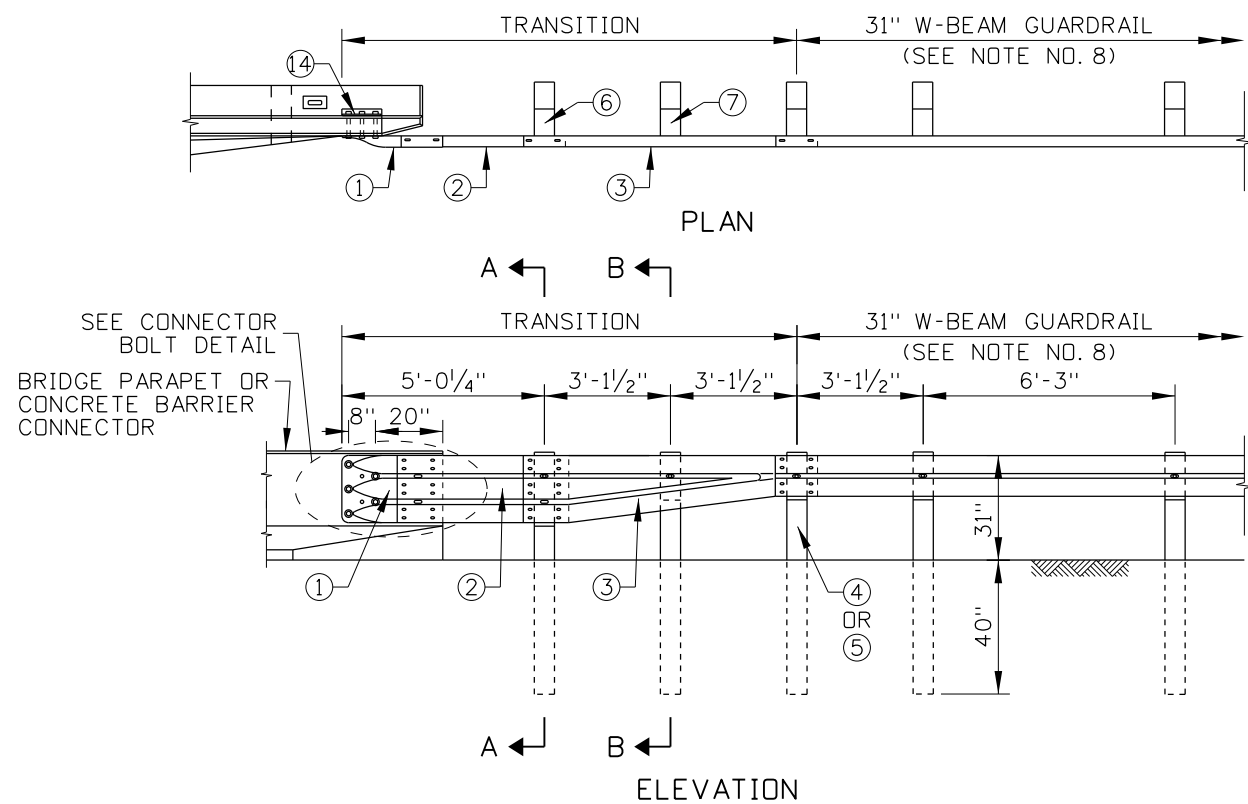
GUARDRAIL TERMINAL TANGENT

English

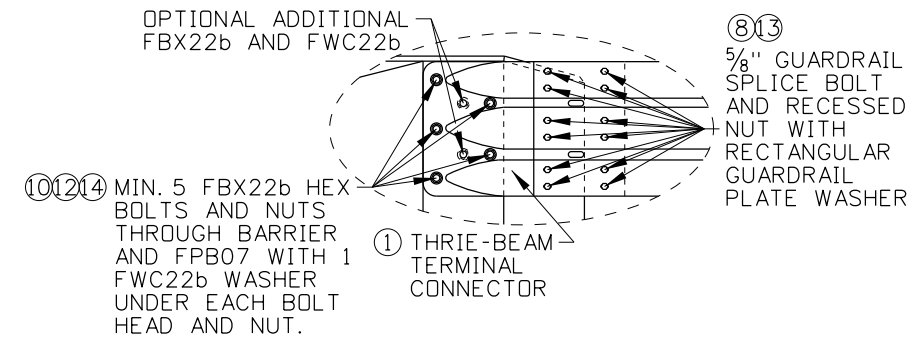
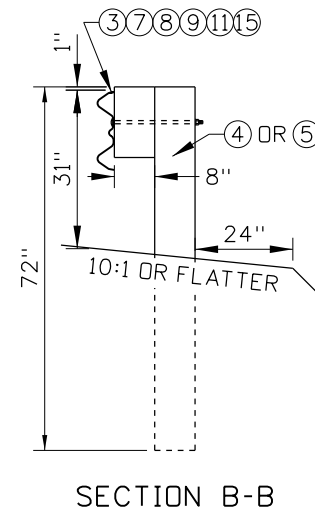
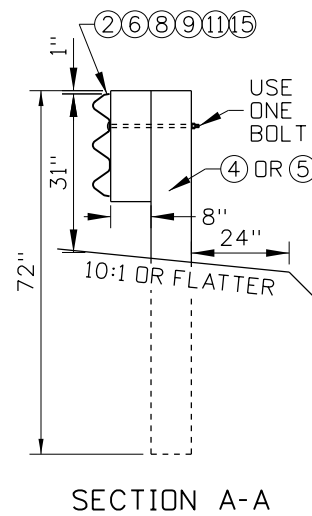
STANDARD DRAWING NO.
612-8

SHEET 1 OF 1

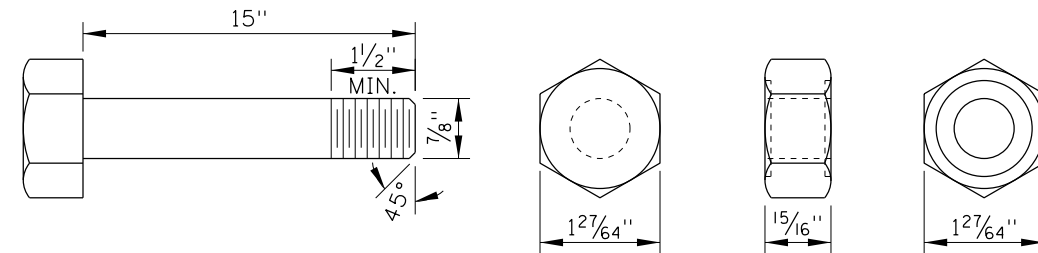
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho



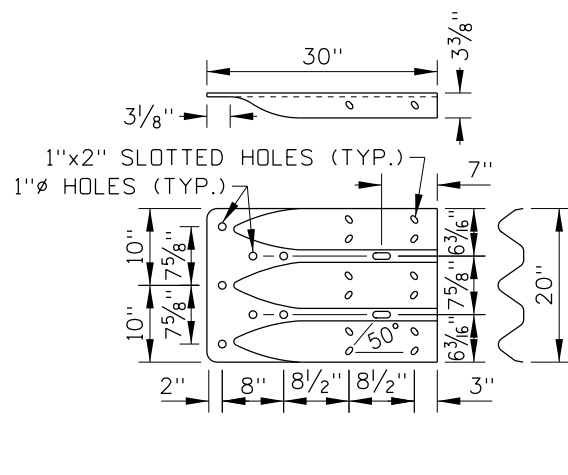
LOW SPEED GUARDRAIL TRANSITION



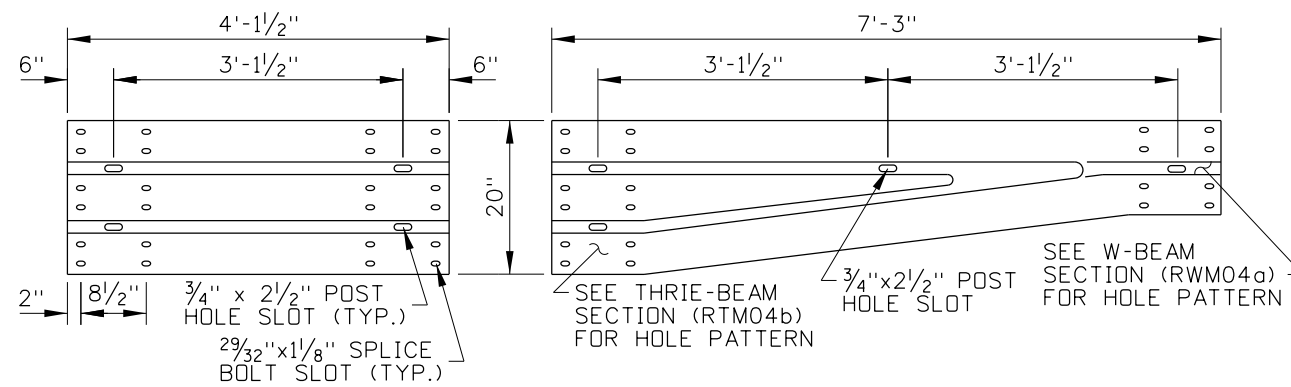
CONNECTOR BOLT DETAIL



**⑩ STRUCTURAL HEX BOLT AND NUT
FBX22b**

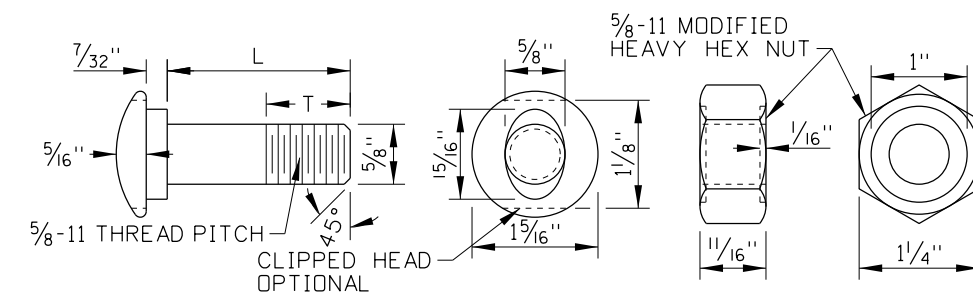


**① THRIE-BEAM
TERMINAL CONNECTOR
RTE01b (10 GAUGE)**



**② 4-SPACE THRIE-BEAM
GUARDRAIL
RTM04b (10 GAUGE)**

**③ ASYMMETRICAL W-THRIE
BEAM TRANSITION SECTION
RWT01b (10 GAUGE)**



**⑧⑨ GUARDRAIL BOLT AND RECESSED NUT
FBB01, FBB03, FBB04**

BOLT DIMENSION TABLE		
DESIGNATOR	L	T
FBB01	1 1/4"	1 1/8"
FBB03	10"	4"
FBB04	18"	4"

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	08-18	RDL					
2	02-20	RDL					

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 612-10_0420.dgn
DRAWING DATE: JUNE, 2017

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
**GUARDRAIL TRANSITION
LOW SPEED**

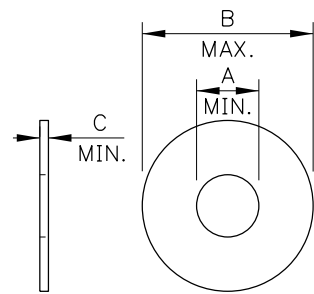
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

English

STANDARD DRAWING NO. 612-10

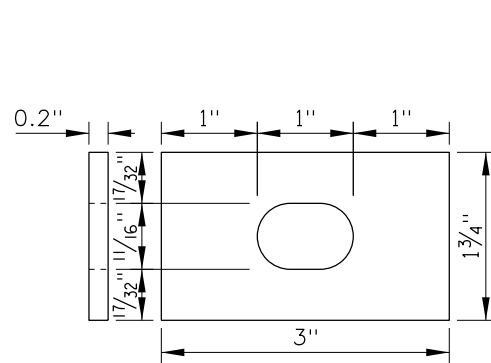
SHEET 1 OF 2

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LICENSED
13683
RYAN D. LANCASTER
STATE OF IDAHO

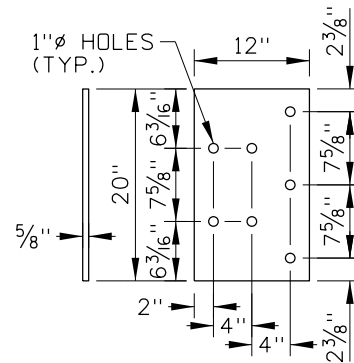


WASHER DIMENSION TABLE			
DESIGNATOR	A	B	C
FWC16a	0.649"	1.780"	0.090"
FWC22b	0.938"	1.780"	0.136"

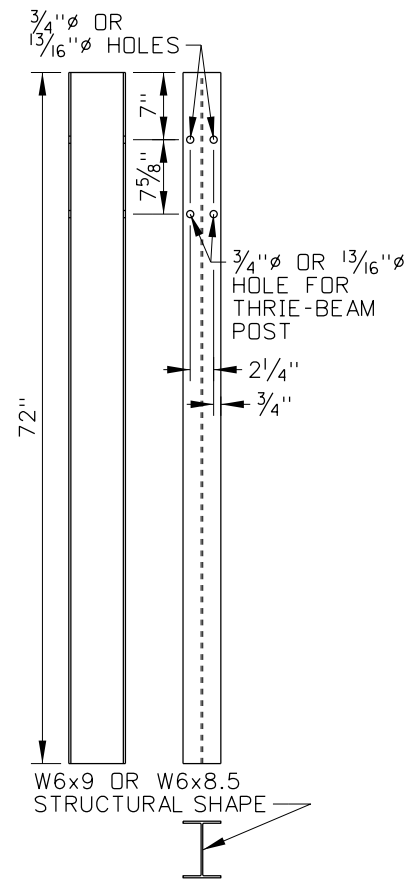
⑪⑫ ROUND WASHERS
FWC16a, FWC22b



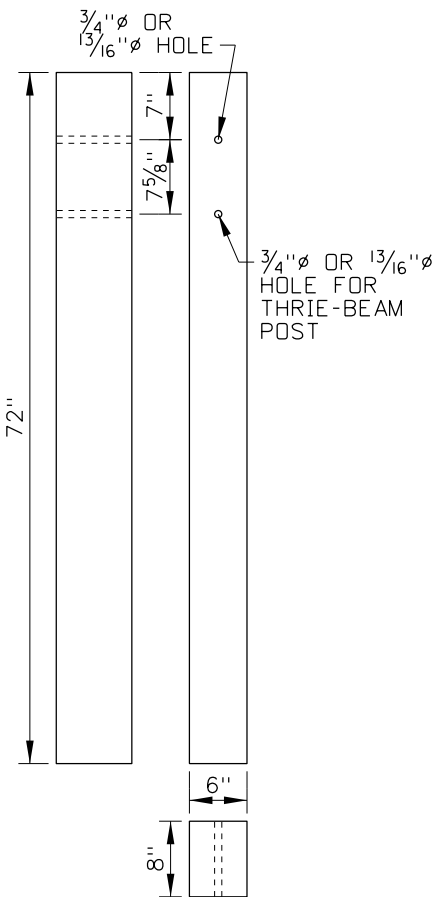
⑬ RECTANGULAR GUARDRAIL
PLATE WASHER
FWR03



⑭ THRIE-BEAM TERMINAL
CONNECTOR PLATE
FPB07

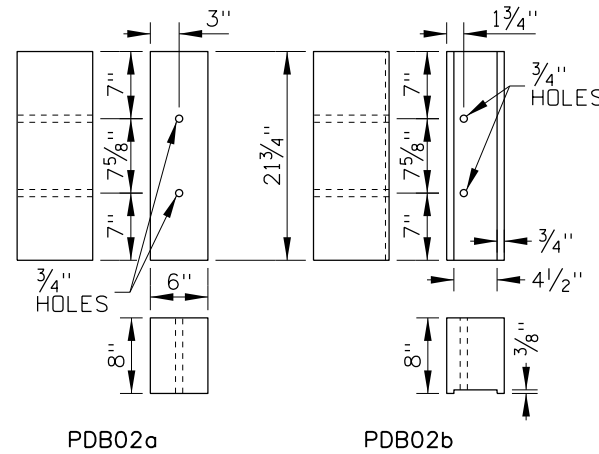


④ WIDE-FLANGE
PWE01

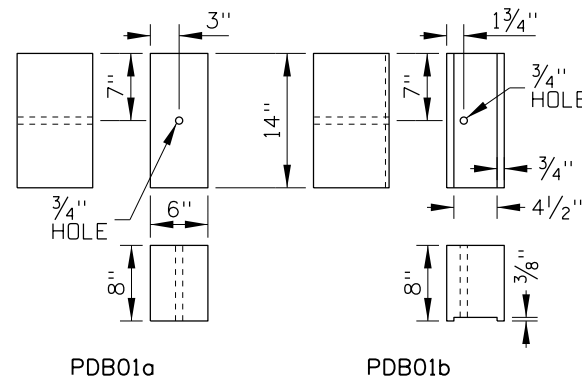


⑤ TIMBER
PDE02

GUARDRAIL POSTS



⑥ THRIE-BEAM TIMBER BLOCKOUTS



⑦ W-BEAM TIMBER BLOCKOUTS

LOW SPEED GUARDRAIL TRANSITION HARDWARE COMPONENTS TABLE				
ITEM NO.	COMPONENT DESCRIPTION	QTY.	WIDE-FLANGE POST	TIMBER POST
①	THRIE-BEAM TERMINAL CONNECTOR	1	RTE01b	RTE01b
②	4-SPACE THRIE-BEAM GUARDRAIL	1	RTM04b	RTM04b
③	ASYMMETRICAL W-THRIE BEAM TRANSITION SECTION	1	RWT01b	RWT01b
④	72" WIDE-FLANGE GUARDRAIL POST	3	PWE01	-
⑤	72" TIMBER GUARDRAIL POST	3	-	PDE02
⑥	THRIE-BEAM BLOCKOUT	1	PDB02b OR POLYETHYLENE	PDB02a
⑦	W-BEAM BLOCKOUT	2	PDB01b OR POLYETHYLENE	PDB01a
⑧	5/8" GUARDRAIL SPLICE BOLT AND RECESSED NUT	32	FBB01	FBB01
⑨	5/8" GUARDRAIL BOLT AND RECESSED NUT	3	FBB03	FBB04
⑩	7/8" X 15" STRUCTURAL HEX BOLT & NUT	5	FBX22b	FBX22b
⑪	5/8" PLAIN ROUND WASHER	3	FWC16a	FWC16a
⑫	7/8" HARDENED ROUND WASHER	10	FWC22b	FWC22b
⑬	RECTANGULAR GUARDRAIL PLATE WASHER	12	FWR03	FWR03
⑭	THRIE-BEAM TERMINAL CONNECTOR PLATE	1	FPB07	FPB07
⑮	16D GALVANIZED NAIL	6	-	N/A

NOTES

1. THE GUARDRAIL TRANSITION SHOWN IS A MASH TEST LEVEL 2 TRANSITION. USE THE TRANSITION ON HIGHWAYS WHERE THE POSTED SPEED LIMIT IS 40 MPH OR LESS AND WHERE A SEMI-RIGID GUARDRAIL, SUCH AS 31" W-BEAM GUARDRAIL, JOINS A RIGID BARRIER, SUCH AS A BRIDGE RAIL, BRIDGE PARAPET OR CONCRETE BARRIER.
2. PROVIDE BARRIER HARDWARE AS SHOWN AND AS SPECIFIED IN THE PUBLICATION "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE." WHERE THE GUIDE AND PLANS CONFLICT, PROVIDE HARDWARE COMPONENTS AS SHOWN ON THE PLANS.
3. WIDE-FLANGE OR TIMBER POSTS MAY BE USED UNLESS OTHERWISE INDICATED. USE THE SAME POST MATERIAL AS IN THE ADJOINING 31" W-BEAM GUARDRAIL.
4. USE TIMBER OR POLYETHYLENE BLOCKOUTS WITH WIDE-FLANGE POSTS. USE TIMBER BLOCKOUTS WITH TIMBER POSTS.
5. NAIL TIMBER BLOCKOUTS TO TIMBER POSTS TO RESTRICT BLOCK ROTATION.
6. WHEN WIDE-FLANGE POSTS ARE USED AND WHEN PRACTICAL, INSTALL THE BOLT (FBB03) ON THE UPSTREAM SIDE OF THE POST IN RELATION TO THE ADJACENT TRAFFIC.
7. OVERLAP SPLICES SO THAT THE EXPOSED W-BEAM EDGE IS DOWNSTREAM OF THE ADJACENT TRAFFIC.
8. PROVIDE A MINIMUM OF 12'-6" OF 31" W-BEAM GUARDRAIL BETWEEN THE GUARDRAIL TRANSITION AND A GUARDRAIL TERMINAL OR ANCHOR.
9. INSTALL RECTANGULAR GUARDRAIL PLATE WASHERS UNDER GUARDRAIL NUTS AT THE SPLICE BETWEEN THE THRIE-BEAM GUARDRAIL AND THRIE-BEAM TERMINAL CONNECTOR.
10. A CONNECTOR PLATE TO KEEP THE THRIE-BEAM TERMINAL CONNECTOR IN A VERTICAL PLANE IS OPTIONAL. SEE THE DETAIL ON THE HIGH SPEED GUARDRAIL TRANSITION STANDARD DRAWING.
11. DELINEATE THE TRANSITION. SEE THE DELINEATOR STANDARD DRAWING.
12. DRAWING NOT TO SCALE.

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	08-18	RDL						
2	02-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 612-10_0420.dgn
DRAWING DATE: JUNE, 2017

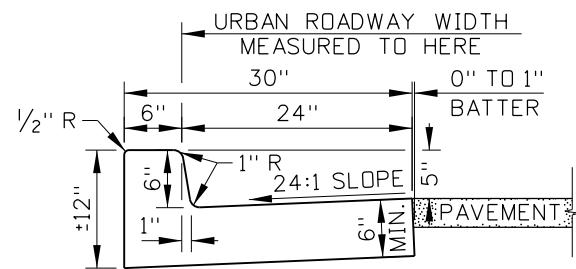
IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

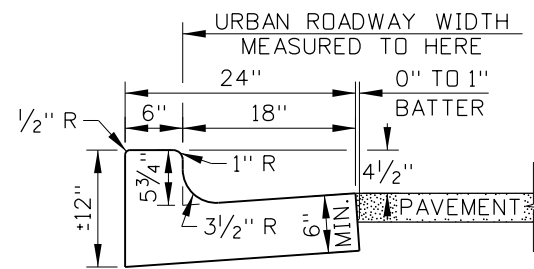
STANDARD DRAWING
GUARDRAIL TRANSITION
LOW SPEED

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho
English
STANDARD DRAWING NO. 612-10
SHEET 2 OF 2

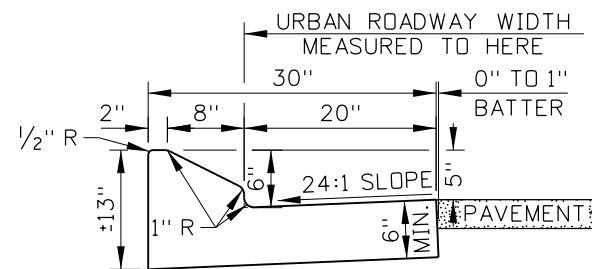
PROFESSIONAL ENGINEER
LICENSED
13683
RYAN D. LANCASTER
STATE OF IDAHO



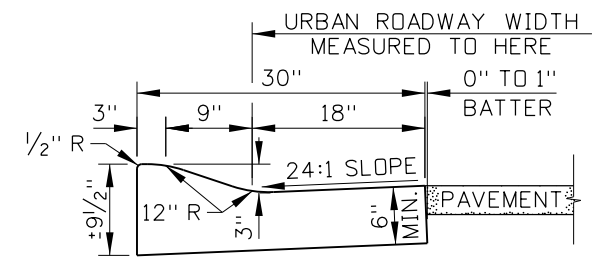
CURB AND GUTTER TYPE 1



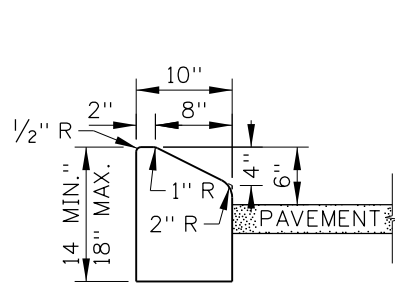
CURB AND GUTTER TYPE 2
(SEE NOTE NO. 4)



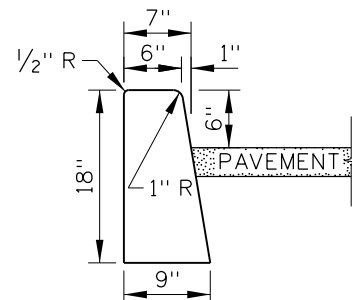
CURB AND GUTTER TYPE 3



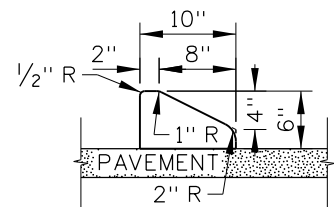
CURB AND GUTTER TYPE 4



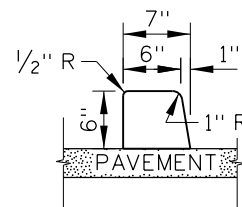
CURB TYPE 1



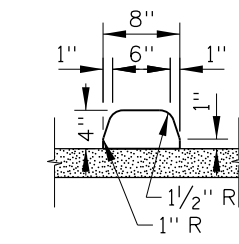
CURB TYPE 2



CURB TYPE 3
(SEE NOTE NO. 3)



CURB TYPE 4
(SEE NOTE NO. 3)



CURB TYPE 5
(SEE NOTE NO. 3)

NOTES

1. TRANSITION BETWEEN DIFFERENT TYPES OVER 10 FEET.
2. PROVIDE 4 INCHES OF AGGREGATE BASE UNDER CURB AND GUTTER, CURB, OR GUTTER UNLESS THE CURB IS PLACED ON PAVEMENT.
3. PORTLAND CEMENT CONCRETE CURB OR TRAFFIC SEPARATOR ON ASPHALT CONCRETE PAVEMENT:

PROVIDE A KEY IN THE PAVEMENT AT THE CENTERLINE OF THE CURB OR TRAFFIC SEPARATOR. SEE THE KEY DETAIL.

CONCRETE CURBS OR TRAFFIC SEPARATORS MAY BE PINNED TO THE PAVEMENT STRUCTURE IN LIEU OF THE KEY. DRILL THE PAVEMENT AND PLACE PINS BEFORE THE CURB OR TRAFFIC SEPARATOR IS CONSTRUCTED. SEE THE PIN DETAIL.

PORTLAND CEMENT CONCRETE CURB OR TRAFFIC SEPARATOR ON PORTLAND CEMENT CONCRETE PAVEMENT:

USE AN EPOXY BONDING AGENT. NO KEY IS NEEDED.

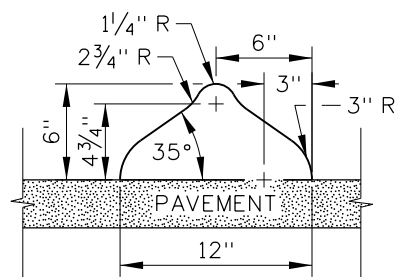
ASPHALT CONCRETE CURB OR TRAFFIC SEPARATOR ON ASPHALT CONCRETE PAVEMENT:

NO KEY IS NEEDED. ENSURE THAT THE CURB IS BONDED TO THE PAVEMENT.

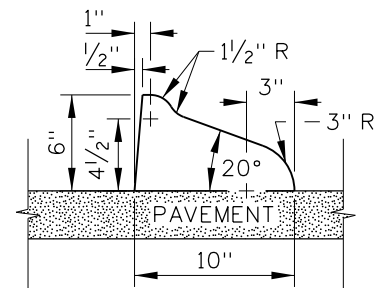
4. ENSURE THAT THE GUTTER SLOPE DOES NOT EXCEED 5 PERCENT AT CURB RAMPS.

5. TAPER THE LAST 6 FEET OF CURB AND GUTTER TYPES 1, 2, 3, AND 4 AND CURB TYPES 1 AND 2 DOWN TO A 1 INCH HEIGHT. TAPER CURB TYPES 3, 4, AND 5 AND TRAFFIC SEPARATORS TYPES 1 AND 2 DOWN TO A 1 INCH HEIGHT AT A 1:1 SLOPE.

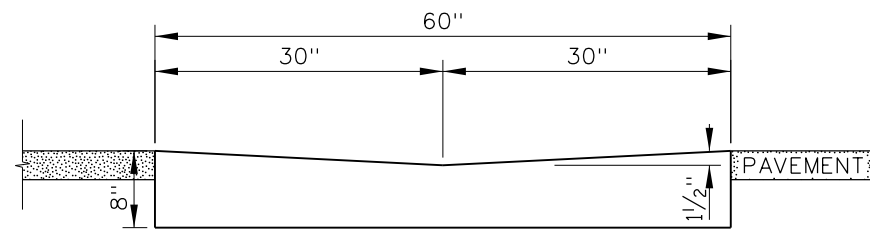
6. DRAWING NOT TO SCALE.



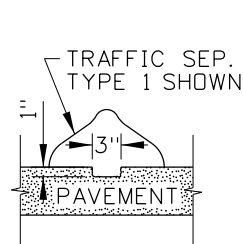
TRAFFIC SEPARATOR TYPE 1
(SEE NOTE NO. 3)



TRAFFIC SEPARATOR TYPE 2
(SEE NOTE NO. 3)



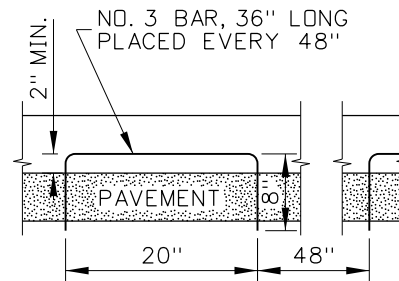
GUTTER TYPE 1



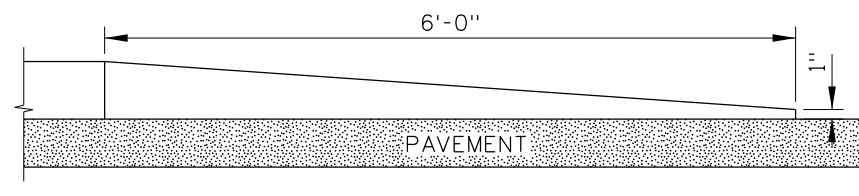
KEY DETAIL
(SEE NOTE NO. 3)



PIN DETAIL
(SEE NOTE NO. 3)

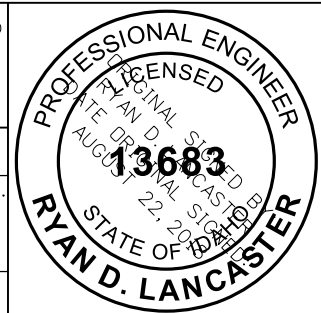


SECTION A-A



CURB TERMINUS DETAIL
(SEE NOTE NO. 5)

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho



REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	02-76		6	12-04	MSM	11	07-18	RDL
2	12-90	GB	7	06-05	MSM			
3	09-93	MSM	8	07-10	JAW			
4	12-94	MSM	9	11-14	RDL			
5	12-01	MSM	10	06-17	RDL			

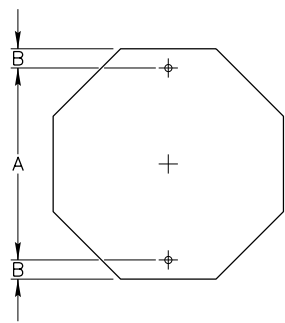
SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 615-1_0818.dgn
DRAWING DATE: APRIL, 1961

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

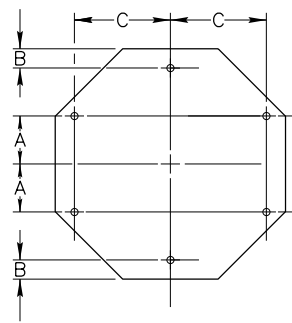
ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
CURB AND GUTTER

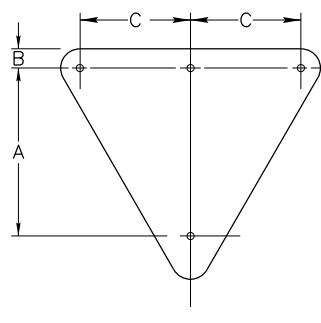
English
STANDARD DRAWING NO. 615-1
SHEET 1 OF 1



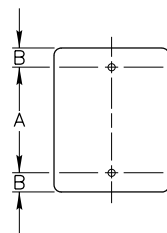
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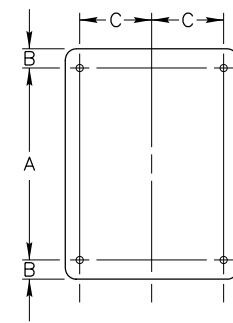
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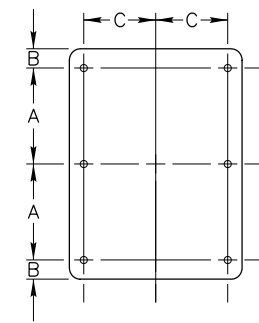
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60"X60"	35"	4"	23"



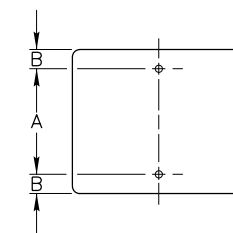
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12"X30"	24"	3"
12"X36"	32"	2"
18"X24"	18"	3"
24"X30"	24"	3"
24"X36"	30"	3"
30"X36"	30"	3"



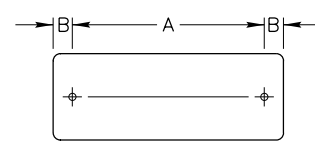
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60"X36"	30"	3"	21"



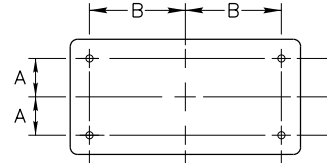
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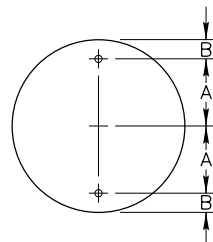
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24"X6"	3"	1 1/2"
24"X10"	7"	1 1/2"
24"X12"	9"	1 1/2"
24"X18"	15"	1 1/2"
24"X24"	18"	3"
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30"X30"	24"	3"
36"X24"	18"	3"
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42"X36"	30"	3"



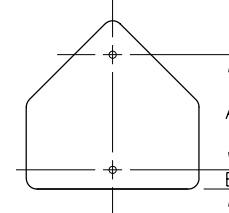
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54"X18"	48"	3"



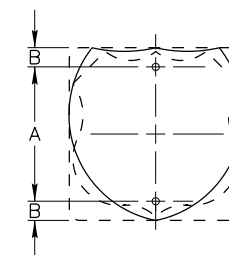
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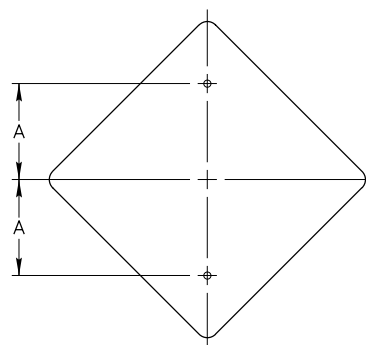
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48"	21"	3"



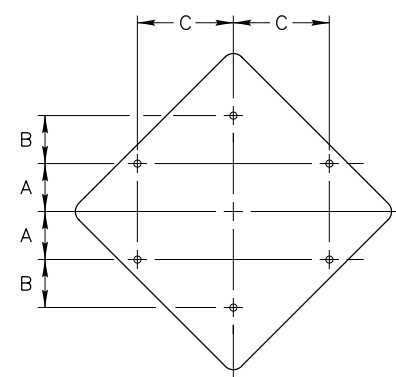
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36"X36"	24"	3"



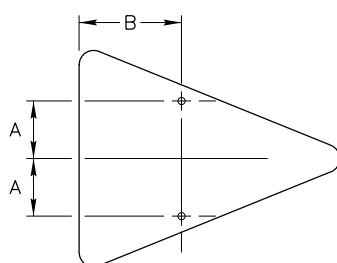
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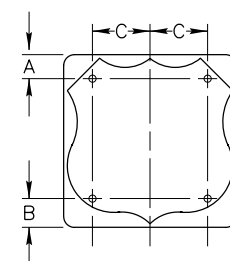
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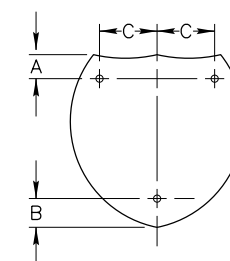
SIGN SIZE	A	B	C
36"X36"	8"	10"	12"
48"X48"	10"	—	20"



SIGN SIZE	A	B
36"X48"	9"	16"



SIGN SIZE	A	B	C
36"X36"	5"	6"	12"



SIGN SIZE	A	B	C
36"X36"	5"	6"	12"
45"X36"	5"	6"	16"

NOTES:

- ALL MOUNTING HOLES SHALL BE 3/8" DIAMETER.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	12-01	NQB						
2	06-07	HEB						
3	07-14	HEB						
4	05-17	HEB						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME: 616-1_0517.dgn
 DRAWING DATE: DECEMBER, 1994

IDAHO TRANSPORTATION DEPARTMENT

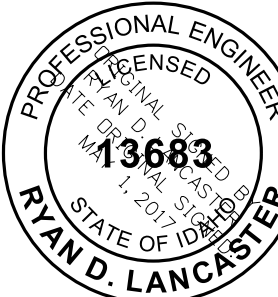


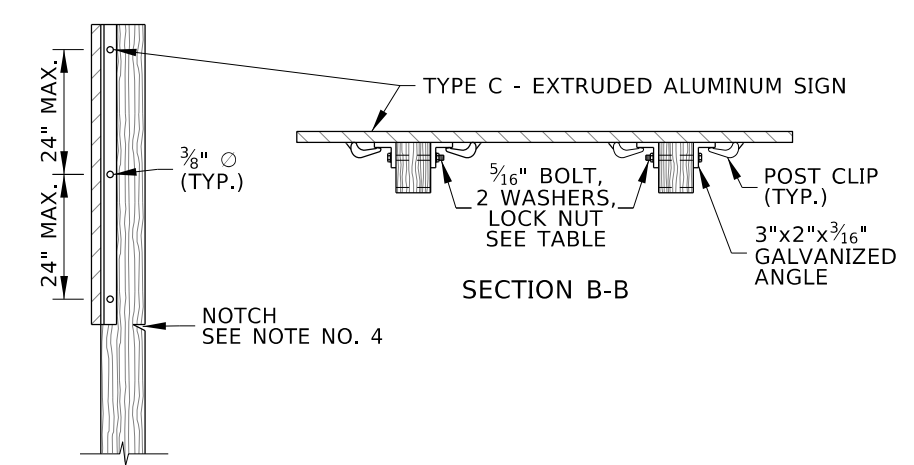
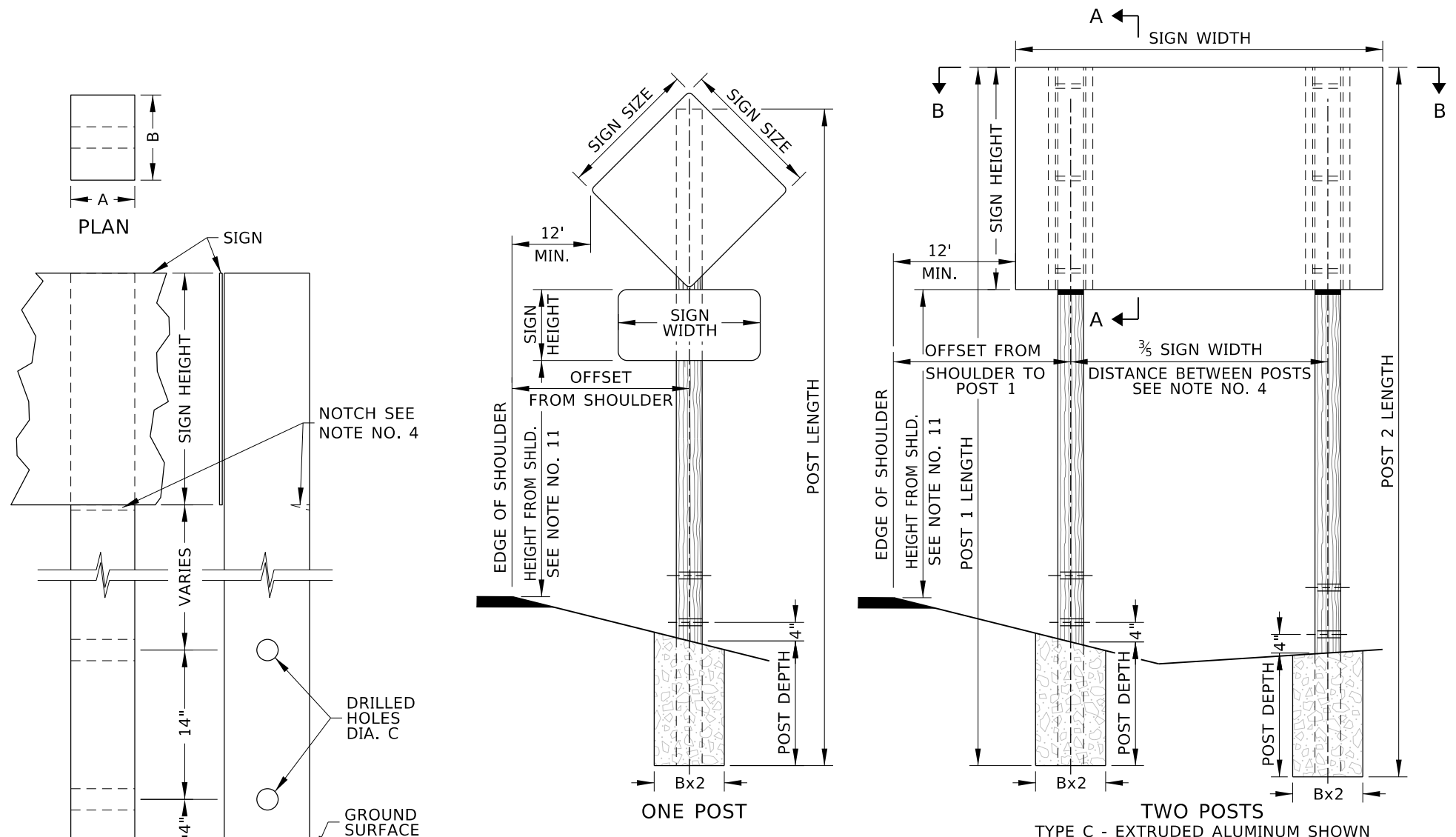
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
 DESIGN/TRAFFIC SERVICES ENGINEER

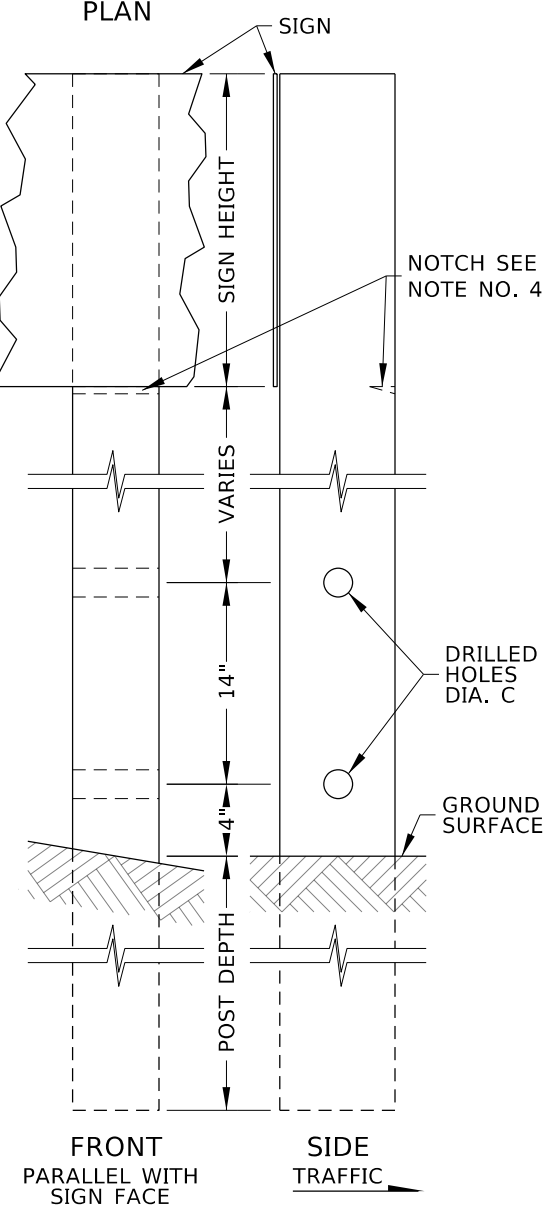
STANDARD DRAWING
PUNCHING SCHEDULE FOR TYPE "B" OR TYPE "E" SIGNS

English
 STANDARD DRAWING NO. **616-1**
 SHEET 1 OF 1

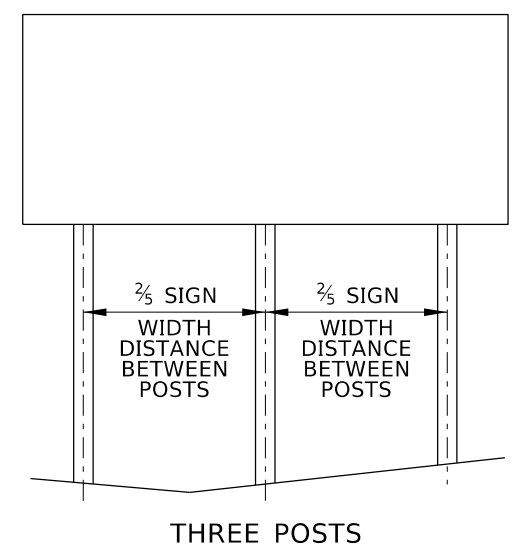
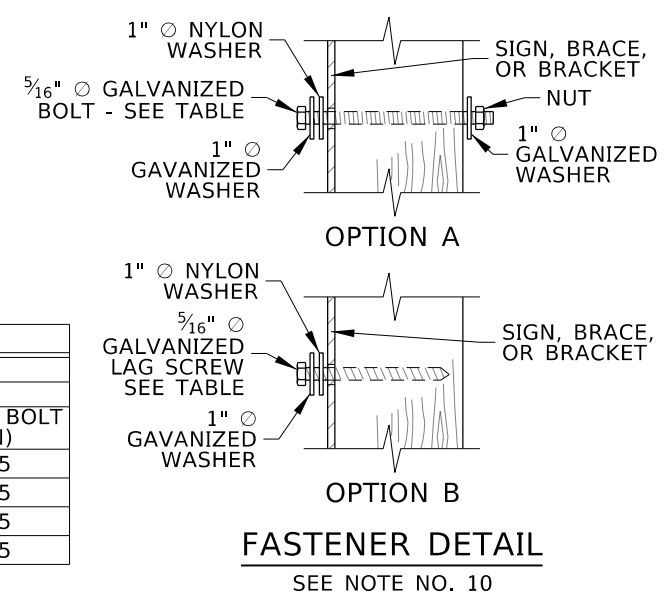




- ### NOTES
- USE TYPE D - WOOD POSTS - WITH TYPE B - SHEET ALUMINUM, TYPE C - EXTRUDED ALUMINUM PANEL, AND TYPE E - HDO PLYWOOD SIGNS.
 - SEE THE TRAFFIC MANUAL TO CALCULATE SIGN LOAD PER POST.
 - SEE PROJECT SIGN SUMMARY FOR SIGN ASSEMBLY DIMENSIONS.
 - USE ONE OR MORE TYPE D - WOOD POST. DO NOT MIX POST SIZES ON THE SAME SIGN ASSEMBLY. WHEN MULTIPLE POSTS ARE INSTALLED:
 - A. NOTCH THE BACK SIDE OF THE POSTS.
 - B. PROVIDE MORE THAN 3/5 SPACING BETWEEN POSTS FOR SIGNS THAT ARE NARROWER THAN 6'.
 - C. PROVIDE A MINIMUM 7' DISTANCE BETWEEN POST TYPES D-3 AND D-4.
 - POST 1 IS CLOSEST TO THE HIGHWAY, WHETHER INSTALLED ON THE RIGHT OR LEFT SIDE.
 - ALIGN POST SO DIMENSION B IS PARALLEL TO THE TRAFFIC DIRECTION. ENSURE DRILLED HOLES ARE PERPENDICULAR TO TRAFFIC DIRECTION.
 - PRE-DRILL OR FIELD DRILL D-2, D-3, AND D-4 POSTS. ENSURE THE BOTTOM DRILLED HOLE IS ABOVE AND WITHIN 4" OF THE GROUND SURFACE.
 - SIGNS CAN BE MOUNTED BACK-TO-BACK IF THE SHAPE OF STOP, YIELD, OR WARNING SIGNS ARE NOT SHIELDED.
 - SIGNS ARE INSTALLED WITH OR WITHOUT BRACES OR BRACKETS DEPENDENT ON SIGN SIZE AND APPLICATION.
 - TYPE B - SHEET ALUMINUM - OR TYPE E - HDO PLYWOOD - SIGNS CAN BE AFFIXED TO THE POST OR THROUGH BRACES OR BRACKETS. FOR TYPE C - EXTRUDED ALUMINUM SIGNS, AFFIX GALVANIZED ANGLE TO POST AND CLIP SIGN TO ANGLE.
 - INSTALL SIGNS AT THE FOLLOWING HEIGHTS:
 - A. IF INSTALLED IN A RURAL AREA, 5 FEET ABOVE THE PAVEMENT ELEVATION OR 4 FEET IF A SUPPLEMENTARY PLAQUE IS INSTALLED BELOW THE SIGN.
 - B. IF INSTALLED IN THE VICINITY OF A CURB OR IN A BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA WHERE PARKING OR PEDESTRIAN MOVEMENTS ARE LIKELY, 7 FEET ABOVE THE PAVEMENT ELEVATION OR 6 FEET IF A SUPPLEMENTARY PLAQUE IS INSTALLED BELOW THE SIGN. IF INSTALLED LOWER THAN 7 FEET, ENSURE SIGNS DO NOT PROJECT MORE THAN 4 INCHES INTO THE PEDESTRIAN FACILITY.
 - EXCAVATE POST HOLE TWICE AS LARGE AS DIMENSION B. BACKFILL AROUND POST IN ACCORDANCE WITH SECTION 210.
 - TYPE D - WOOD POSTS DO NOT NEED TO BE SHIELDED BY GUARDRAIL OR BARRIER. WHEN WOOD POSTS ARE INSTALLED BEHIND GUARDRAIL OR BARRIER, ENSURE THE POSTS ARE OUTSIDE OF THE GUARDRAIL OR BARRIER WORKING WIDTH.
 - WHEN THE SIGN IS INSTALLED ON A BACKSLOPE, ENSURE THE SIGN POST IS AT LEAST 5' HIGHER THAN THE GROUND SURFACE.
 - DRAWING NOT TO SCALE.



SIGN ASSEMBLY MEASUREMENTS



SIGN POST AND FOUNDATION TABLE									
POST TYPE	WOOD POST SIZE			MAXIMUM SIGN LOAD (SFxFT)	NOTCH DEPTH (IN)	POST DEPTH (FT)	FASTENERS		
	A (IN)	B (IN)	C (IN)				OPT. A (IN)	OPT. B (IN)	ANGLE BOLT (IN)
D-1	4	4	-	47	-	3.5	4.5	3	4.5
D-2	4	6	1 1/2	111	1 3/4	4	6.5	4	4.5
D-3	6	6	2	162	1 3/4	5	6.5	4	6.5
D-4	6	8	3	302	2 1/2	6	8.5	4	6.5

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	08-96	HEB						
2	12-13	HEB						
3	02-23	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME: 616-10_0423.dgn
 DRAWING DATE: NOVEMBER, 1991

IDAHO TRANSPORTATION DEPARTMENT
 YOUR Safety → YOUR Mobility → YOUR Economic Opportunity
 BOISE IDAHO

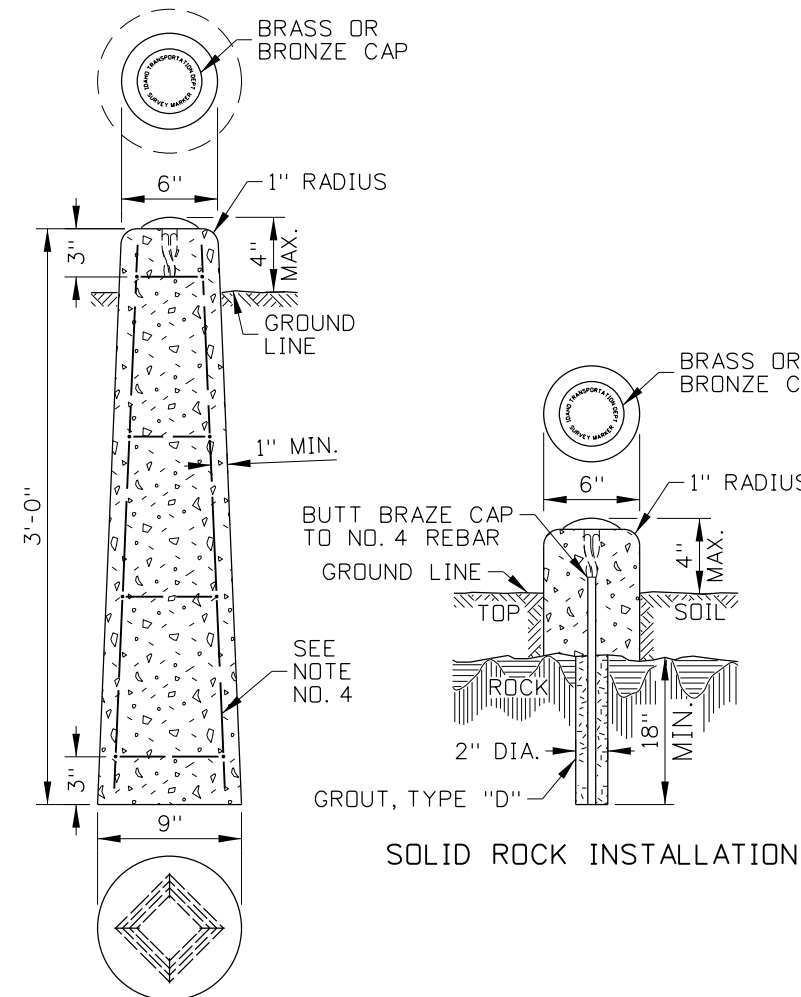
ORIGINAL SIGNED BY: MONICA CRIDER
 HIGHWAY DESIGN ENGINEER

STANDARD DRAWING
WOOD SIGN POST
 TYPE D - WOOD POST

ENGLISH
 STANDARD DRAWING NO.
616-10
 SHEET 1 OF 1

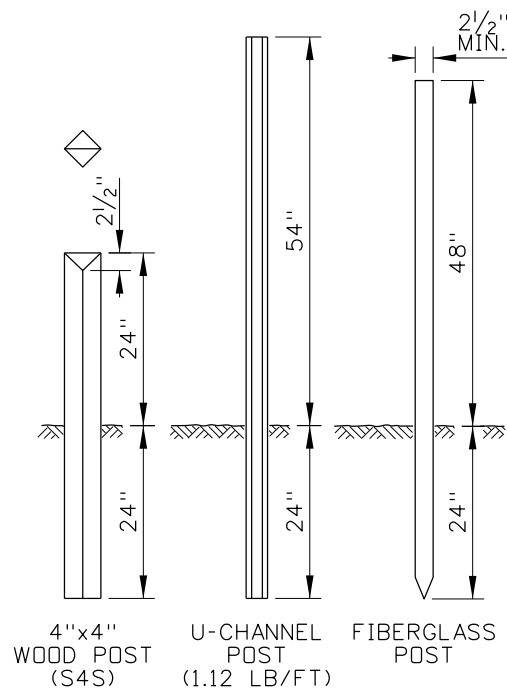
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER
 RYAN D. LANCASTER
 STATE OF IDAHO
 LICENSE NO. 3683

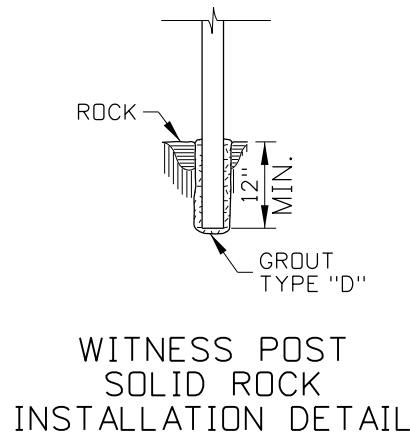


SOLID ROCK INSTALLATION

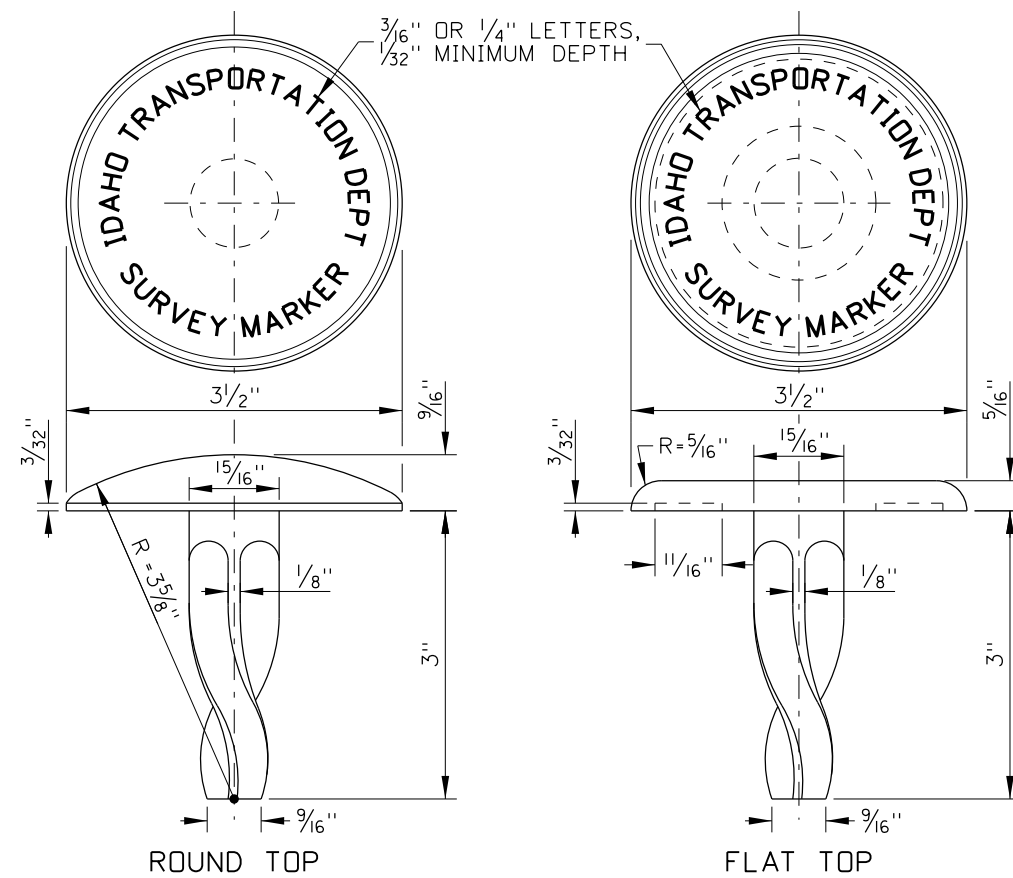
EARTH INSTALLATION
MONUMENT MARKER



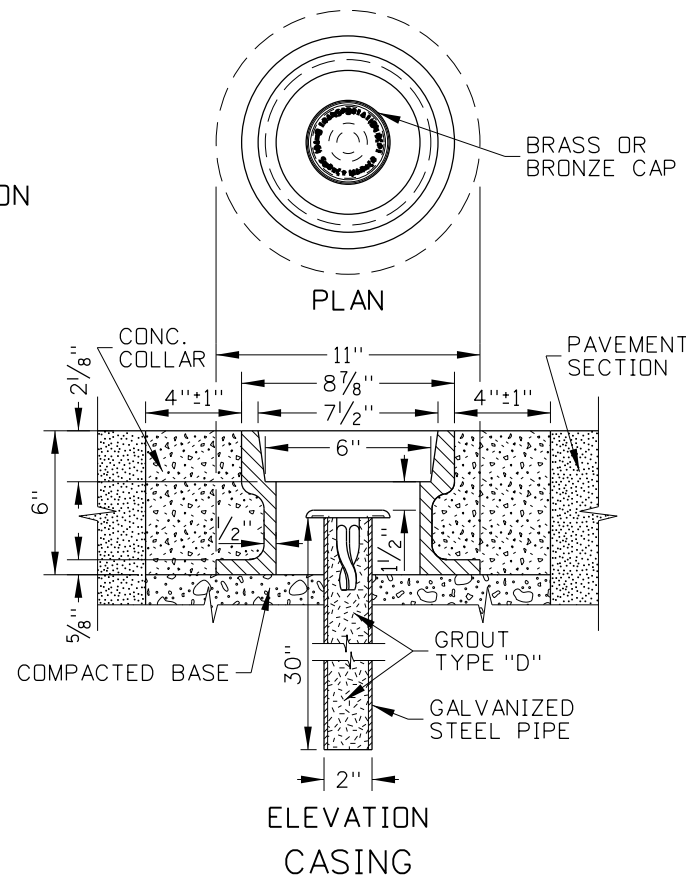
WITNESS POSTS



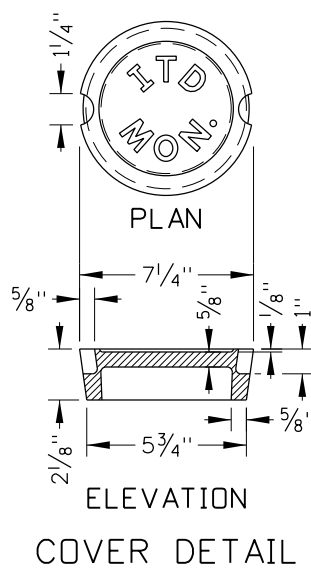
WITNESS POST
SOLID ROCK
INSTALLATION DETAIL



BRASS OR BRONZE CAP DETAILS



ELEVATION
CASING

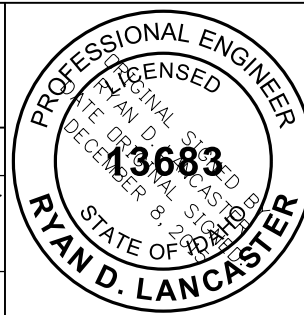


COVER DETAIL

NOTES

1. SURVEY MONUMENTS CAN BE PRECAST OR CAST-IN-PLACE. SET THE BRASS CAP IN THE TOP CENTER OF THE MONUMENT.
2. USE ROUND TOP MARKERS FOR VERTICAL CONTROL, HORIZONTAL CONTROL, OR BOTH. USE FLAT TOP MARKERS FOR HORIZONTAL CONTROL.
3. ENSURE THAT HORIZONTAL CONTROL MARKERS ARE PLACED WITHIN 1/2" OF THE POINT ESTABLISHED. THE VERTICAL CONTROL POINT IS THE HIGHEST POINT OF THE ROUND TOP CAP.
4. REINFORCE EARTH INSTALLATION MONUMENT MARKER WITH FOUR NO. 2 BARS, 33 1/2" LONG, AND PLACED AN EQUAL DISTANCE APART. TIE WITH NO. 8 WIRE AT 10" INTERVALS.
5. USE CASING WHEN THE MONUMENT IS PLACED IN PAVEMENT. THE MONUMENT MAY BE PLACED CLOSER TO THE GROUND OR IN CASING IN AREAS THAT ARE MOWED. OTHER CASING DESIGNS MAY BE USED WITH APPROVAL FROM THE ENGINEER.
6. MACHINE COVER AND CASING CONTACT SURFACES TO A TRUE BEARING ALL AROUND.
7. THE MONUMENT MARKER MAY BE USED AS A RIGHT-OF-WAY MARKER, PROJECT MARKER, REFERENCE MARKER, CONTROL POINT, OR PROPERTY CORNER.
8. STAMP THE MONUMENT CAP ACCORDING TO ITS PURPOSE. "ROW" FOR RIGHT-OF-WAY MARKER, "PRJ" FOR PROJECT MARKER, "REF" FOR REFERENCE MARKER, "CTL" FOR CONTROL POINT, OR "COR" FOR PROPERTY CORNER.
9. PLACE THE WITNESS POSTS AS CLOSE TO THE MARKERS AS PRACTICAL. WHEN SOLID ROCK IS ENCOUNTERED, GROUT THE WITNESS POST AS SHOWN IN THE WITNESS POST SOLID ROCK INSTALLATION DETAIL.
10. DRAWINGS NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho



REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	05-62		6	01-68		11	06-02
2	06-62		7	09-72		12	12-04
3	05-65		8	07-90	GB	13	11-06
4	09-66		9	09-93	MSM	14	12-12
5	04-67		10	05-95	MSM	15	11-15

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 618-1_1215.dgn
DRAWING DATE: APRIL, 1961

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

ORIGINAL SIGNED BY: TED E. MASON for
DESIGN/TRAFFIC SERVICES ENGINEER

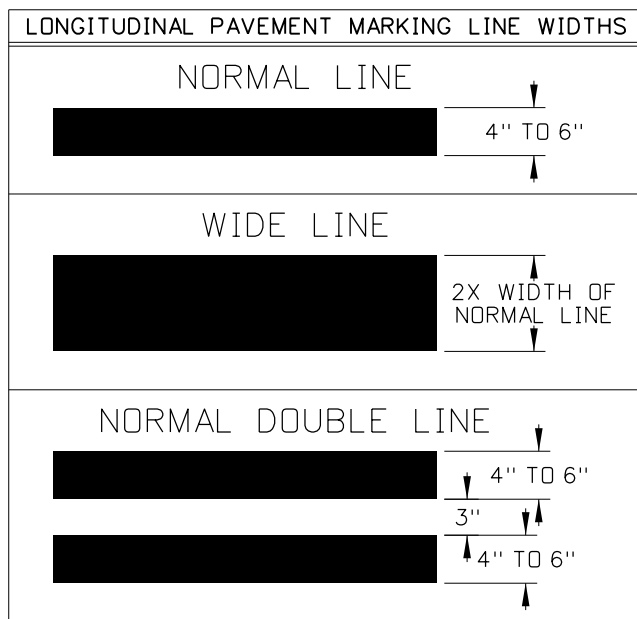
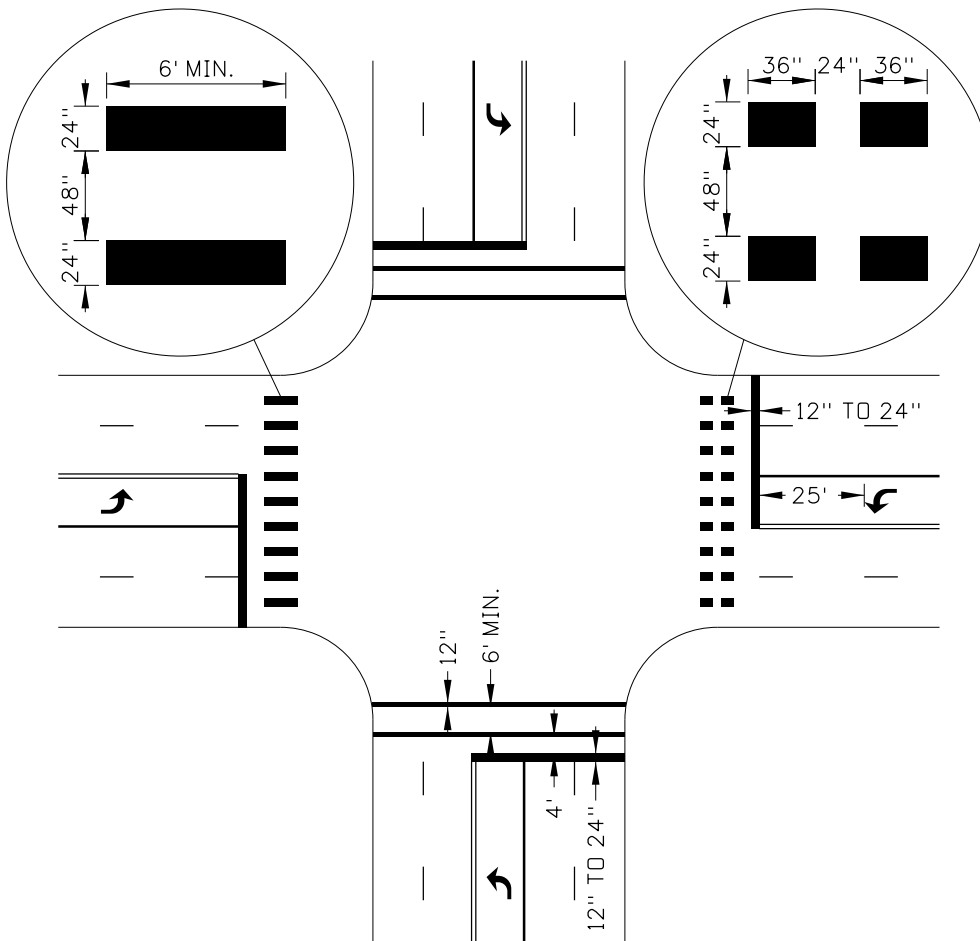
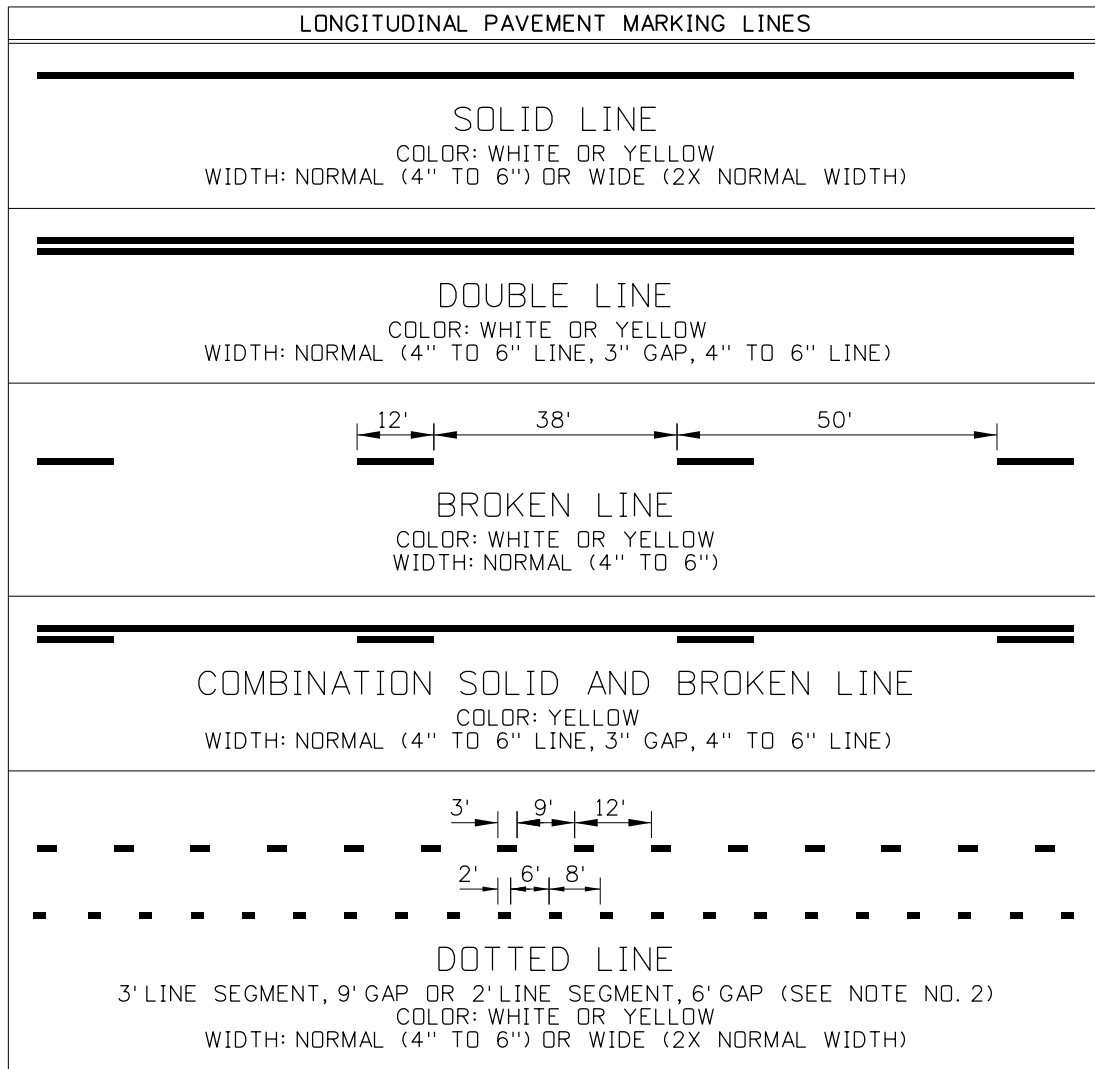
STANDARD DRAWING
MARKER POSTS,
WITNESS POSTS,
AND STREET MONUMENTS

English
STANDARD DRAWING NO.
618-1
SHEET 1 OF 1

NOTES

1. USE WHITE AND YELLOW PAVEMENT MARKINGS AS FOLLOWS:
 - WHITE:
 - A. THE SEPARATION OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
 - B. THE RIGHT-HAND EDGE OF THE HIGHWAY.
 - YELLOW:
 - A. THE SEPARATION OF TRAFFIC TRAVELING IN OPPOSITE DIRECTIONS.
 - B. THE LEFT-HAND EDGE DIVIDED HIGHWAYS, ONE-WAY STREETS, OR RAMP.
 - C. TWO-WAY LEFT-TURN LANES.
2. USE LONGITUDINAL PAVEMENT MARKINGS AS FOLLOWS:
 - A. USE SOLID LINES TO INDICATE THE LEFT OR RIGHT EDGE OF TRAVEL WAY OR TO DISCOURAGE LANE CHANGING.
 - B. USE DOUBLE LINES TO PROHIBIT PASSING OR LANE CHANGING.
 - C. USE BROKEN LINES TO INDICATE PASSING OR LANE CHANGING ARE PERMITTED. USE THE 12' LINE SEGMENT, 38' GAP PATTERN FOR ALL SPEEDS.
 - D. USE COMBINATION SOLID AND BROKEN LINES TO PROHIBIT PASSING IN ONE DIRECTION WHILE PERMITTING PASSING IN THE OPPOSITE DIRECTION OR TO INDICATE A TWO-WAY LEFT-TURN LANE.
 - E. USE DOTTED LINES AS FOLLOWS:
 - 3' LINE SEGMENT, 9' GAP:
 - I. TO SEPARATE A THROUGH LANE AND A LANE THAT BECOMES A MANDATORY EXIT OR TURN LANE (DROPPED LANE).
 - II. TO SEPARATE THROUGH LANES AND TURN LANES OR RAMPS.
 - III. TO SEPARATE A THROUGH LANE AND AN AUXILIARY LANE 2 MILES OR LESS IN LENGTH BETWEEN FREEWAY ENTRANCE RAMP AND EXIT RAMPS OR 1 MILE OR LESS IN LENGTH BETWEEN INTERSECTIONS.
 - 2' LINE SEGMENT, 6' GAP:
 - I. AS A LANE LINE EXTENSION THROUGH AN INTERSECTION.
3. USE 12' VEHICULAR TRAVEL LANES UNLESS OTHERWISE INDICATED. MEASURE LANE WIDTHS FROM THE CENTER OF LINE TO THE CENTER OF LINE.
4. THE PAVEMENT MARKING APPLICATION EXAMPLES PRESENTED SHOW COMMON APPLICATION. MODIFY AS NEEDED TO ACCOMMODATE OTHER SITUATIONS.
5. METHODS FOR DETERMINING TURN-LANE LENGTH ARE DESCRIBED IN THE ITD TRAFFIC MANUAL.
6. USE 15W FOR POSTED SPEED LIMITS OF 45 MPH OR GREATER. USE 8W FOR POSTED SPEED LIMITS OF 40 MPH OR LESS. W IS THE OFFSET WIDTH IN FEET.
7. USE DISTANCE L WHEN PRACTICAL. USE THE FOLLOWING EQUATION TO DETERMINE L:

$$L = WS$$
 WHERE:
 - W = OFFSET WIDTH IN FEET
 - S = POSTED SPEED LIMIT
8. USE LANE-USE ARROWS AND WORD PAVEMENT MARKINGS AS SHOWN. SOME MARKINGS ARE OPTIONAL.
 - A. USE TWO OR MORE LANE-USE ARROWS UNLESS THE TURN-LANE LENGTH IS LESS THAN 75 FEET. IF SHORTER THAN 75 FEET, THE DOWNSTREAM ARROW CAN BE OMITTED.
 - B. USE TWO-WAY LEFT-TURN ARROW MARKINGS NEAR THE BEGINNING OF A TWO-WAY LEFT-TURN LANE AND EVERY 1/2 MILE THEREAFTER.
9. BREAK EDGE AND LANE LINES AT INTERSECTIONS WITH MINOR ROADS. CONTINUE EDGE AND LANE LINES THROUGH DRIVEWAY APPROACHES.
10. ON TWO-LANE HIGHWAYS, PAINT THE CENTERLINE IN ONE DIRECTION IN ASCENDING STATION/MILEPOST DIRECTION AS SHOWN.
11. DRAWINGS NOT TO SCALE.



REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 630-1_0420.dgn

DRAWING DATE: DECEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

PAVEMENT MARKINGS

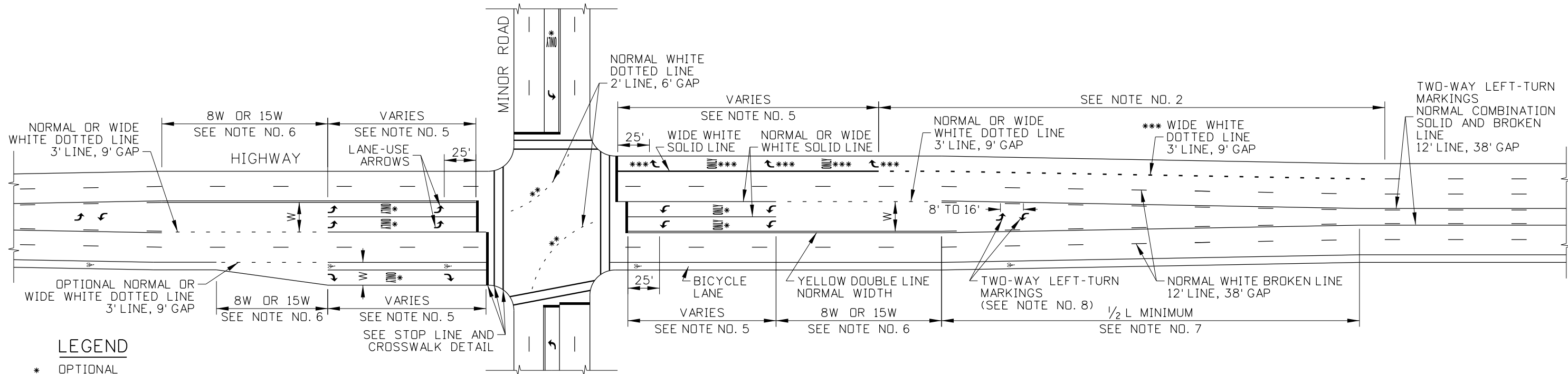
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

English

STANDARD DRAWING NO. 630-1

SHEET 1 OF 4

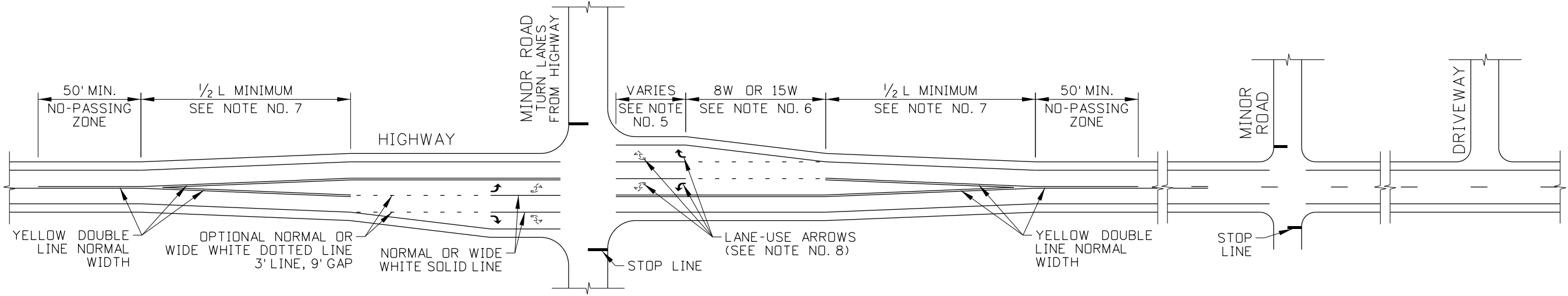
PROFESSIONAL ENGINEER
RYAN D. LANCASTER
13683
STATE OF IDAHO



EXAMPLE URBAN HIGHWAY PAVEMENT MARKINGS

LEGEND

- * OPTIONAL
- ** DOTTED LANE LINE EXTENSION (2' SEGMENT, 6' GAP)
- *** REQUIRED WHERE THROUGH LANE BECOMES MANDATORY TURN LANE



EXAMPLE RURAL HIGHWAY PAVEMENT MARKINGS

SEE NOTE NO. 9

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME: 630-1_0420.dgn
 DRAWING DATE: DECEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT



BOISE IDAHO

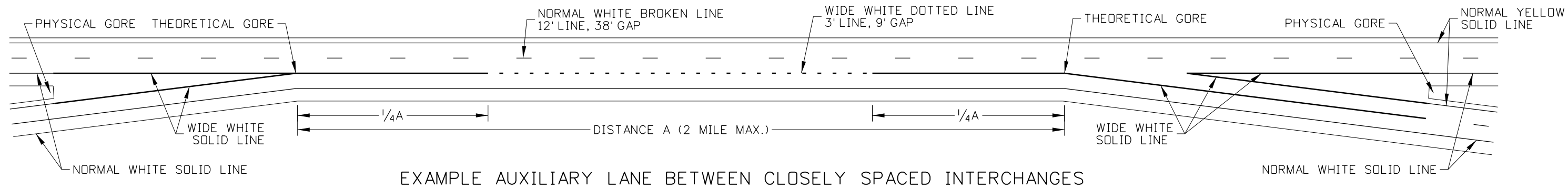
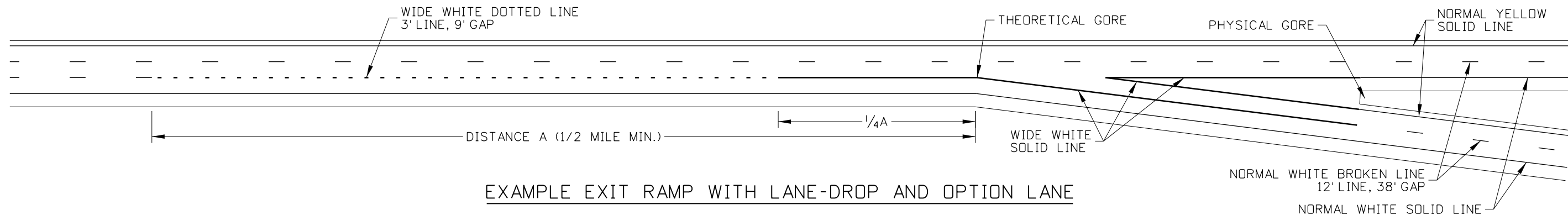
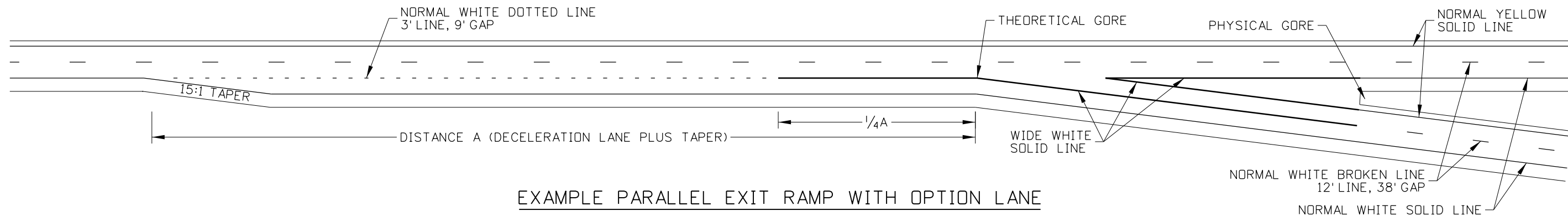
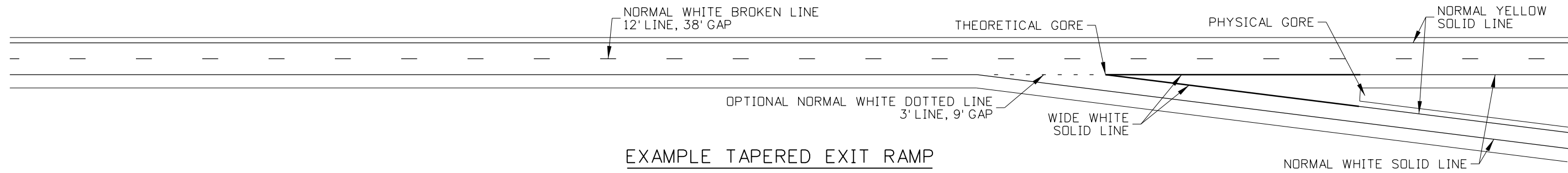
ORIGINAL SIGNED BY: KEVIN SABLAN
 DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
PAVEMENT MARKINGS

English
 STANDARD DRAWING NO.
630-1
 SHEET 2 OF 4

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER
 LICENSED
 13683
 RYAN D. LANCASTER
 STATE OF IDAHO



REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-20	RDL						

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME:
630-1_0420.dgn

DRAWING DATE:
DECEMBER, 2016

**IDAHO
TRANSPORTATION
DEPARTMENT**



BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

PAVEMENT MARKINGS

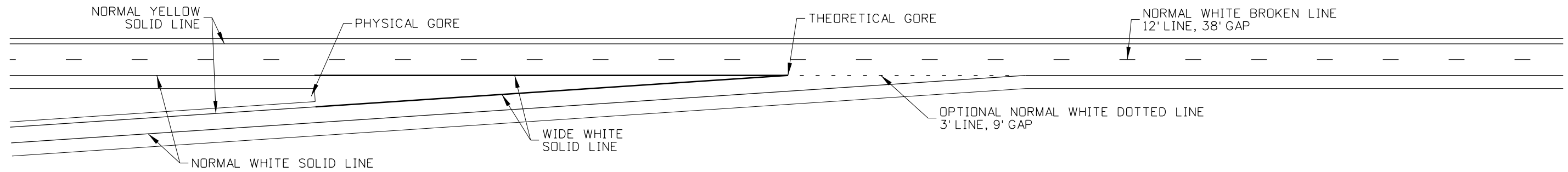
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AT: ITD,
Headquarters
3311 West State
Boise, Idaho

English

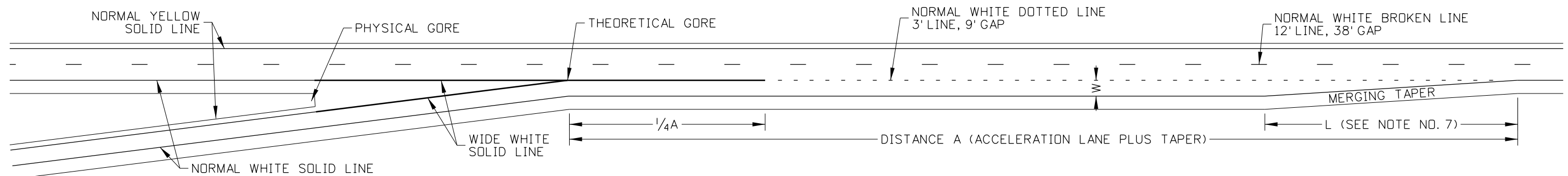
STANDARD DRAWING NO.
630-1

SHEET 3 OF 4

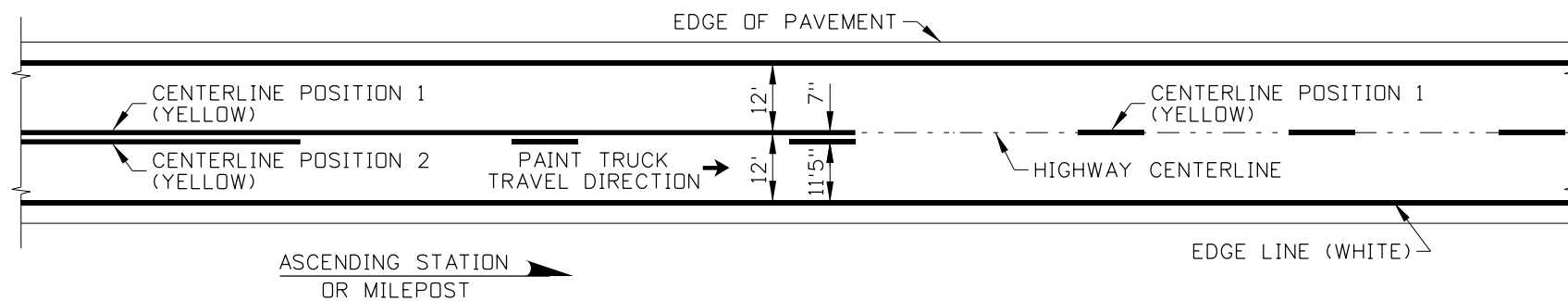
PROFESSIONAL ENGINEER
LICENSED
RYAN D. LANCASTER
13683
STATE OF IDAHO
MARCH 17, 2016



EXAMPLE TAPERED ENTRANCE RAMP

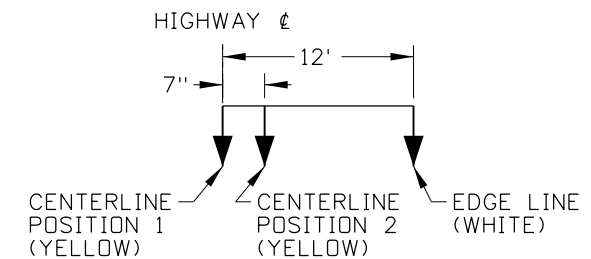


EXAMPLE PARALLEL ENTRANCE RAMP



PAVEMENT MARKINGS ON TWO-WAY HIGHWAYS

SEE NOTE NO. 10 AND PAINT TRUCK SETUP DETAIL



PAINT TRUCK SETUP DETAIL

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME: 630-1_0420.dgn
 DRAWING DATE: DECEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT



BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
 DESIGN/TRAFFIC SERVICES ENGINEER

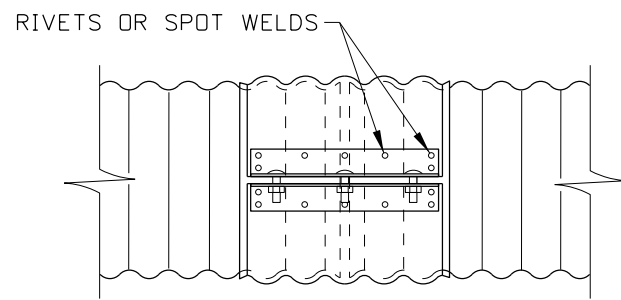
STANDARD DRAWING
PAVEMENT MARKINGS

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

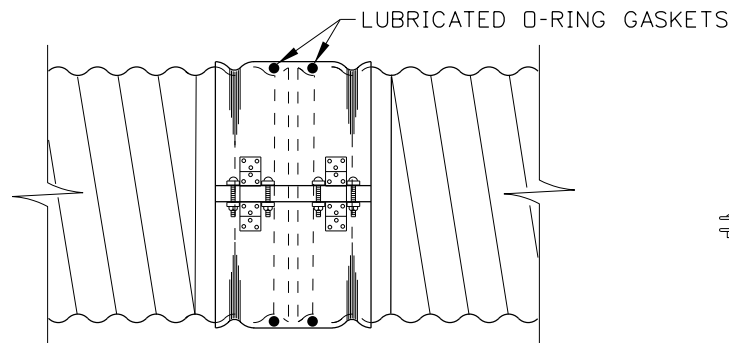
English

STANDARD DRAWING NO. 630-1

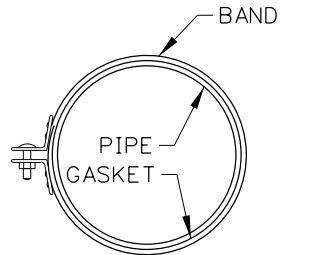
SHEET 4 OF 4



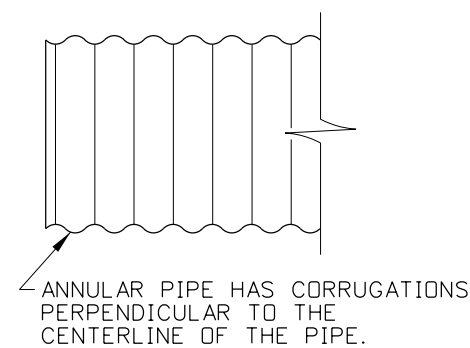
TYPES 1-A & 2-A
ANNULAR COUPLING BAND



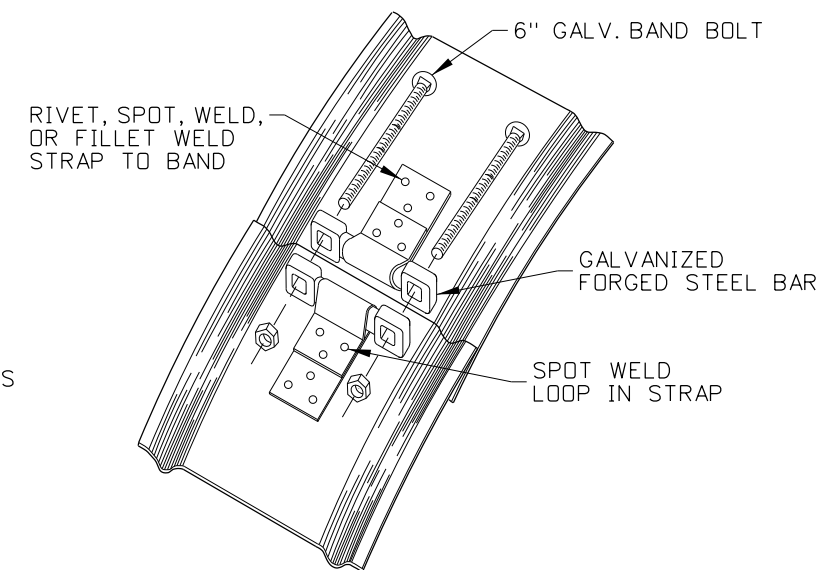
DOUBLE BAR AND STRAP-TYPE 3
HUGGER COUPLING BAND



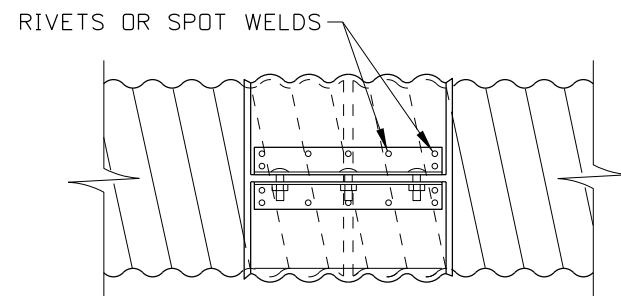
TYPE 1
SINGLE PIECE BAND



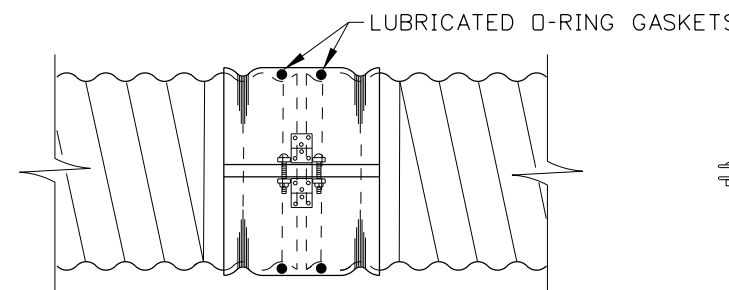
ANNULAR CMP



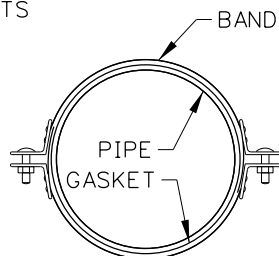
BAND TYPE 3
BAR & STRAP COUPLING
(SINGLE STRAP)



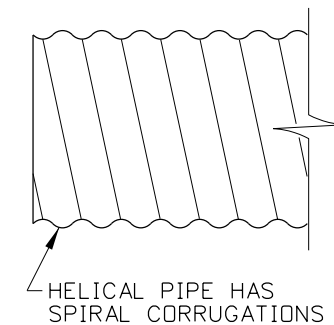
TYPES 1-B & 2-B
HELICAL COUPLING BAND



SINGLE BAR AND STRAP-TYPE 3
HUGGERL COUPLING BAND



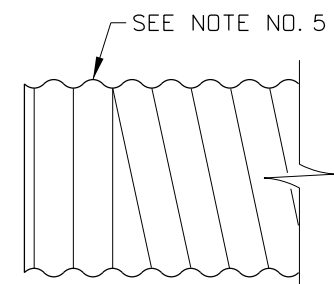
TYPE 2
TWO PIECE BAND



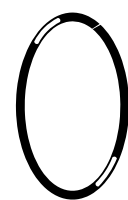
HELICAL CMP

NOTES

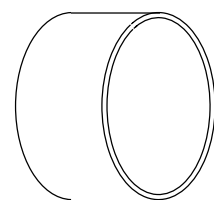
1. THE REFORMED ENDS OF HELICAL CORRUGATED METAL PIPE MADE TO ACCEPT ANNULAR COUPLING BANDS SHALL BE UNIFORM AND SMOOTH IN APPEARANCE. PIPE WITH IRREGULAR REFORMED ENDS ARE NOT ACCEPTABLE.
2. SLEEVE AND STRIP GASKETS FOR COUPLING BANDS TYPE 1-A AND 1-B SHALL EXCEED THE WIDTH OF THE BAND BY A MINIMUM OF 1/4" ON BOTH EDGES. THE GASKETS SHALL FIT SNUGLY AROUND THE PIPES PRIOR TO INSTALLATION OF THE BAND.
3. ALL WELDS AND/OR EXPOSED FERROUS METAL ON COUPLING BANDS AND BAND CONNECTING HARDWARE SHALL BE REPAIRED IN ACCORDANCE WITH AASHTO M 36.
4. STEEL BAND THICKNESS SHALL BE AT LEAST 1/2 THE THICKNESS OR GAUGE OF THE PIPE. ALUMINUM BANDS SHALL BE THE SAME THICKNESS AS THE PIPE.
5. THE JOINTS FOR SIPHONS AND SEWERS SHALL BE WATERTIGHT AND PRESSURE TESTED PRIOR TO ACCEPTANCE, AS REQUIRED IN THE STANDARD SPECIFICATIONS.
6. TO PREVENT GALVANIC ACTION WHEN BANDS AND PIPES ARE OF AN UNLIKE METAL, THE BANDS SHALL BE ASPHALT COATED.
7. GASKET MATERIALS ARE NOT TO BE ALTERED, SEWN, OR PATCHED. THE USE OF SEALANTS AND/OR LUBRICANTS WITH BAND GASKETS MUST BE AS THE MANUFACTURER SPECIFIES. THE QUALITY AND CHEMICAL COMPOSITION OF SEALANTS AND LUBRICANTS WILL BE AS THE MANUFACTURER REQUIRES. CONTACT THE MANUFACTURER FOR DETAILS.
8. SPOT WELDED OR FILLET WELDED STRAPS ON BANDS SHALL BE OF EQUAL STRENGTH TO RIVETED STRAPS.
9. ALL RECOMMENDATIONS IN THE PIPE COUPLING BAND TABLE ARE TO BE CONSIDERED MINIMAL.
10. NOT TO SCALE.



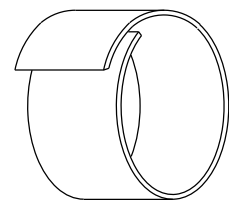
REFORMED HELICAL CMP



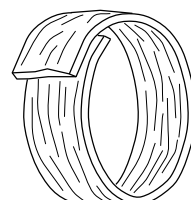
O-RING GASKET



SLEEVE GASKET



STRIP GASKET



MASTIC SEALANT GASKET

STANDARD CORRUGATED STEEL PIPE GASKET TYPES

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	02-76		6	03-05	MSM			
2	02-77							
3	09-93	MSM						
4	12-95	MSM						
5	06-02	MSM						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 706-6_0305.dgn
DRAWING DATE: APRIL, 1961

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO



ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: STEVEN HUTCHINSON
CHIEF ENGINEER

STANDARD DRAWING
CORRUGATED METAL PIPE
WATERTIGHT COUPLING BANDS

English
STANDARD DRAWING NO.
706-6
SHEET 1 OF 2

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PIPE COUPLING BAND TABLE						PIPE CORRUGATION STYLE			SIPHON	* CULVERT	IRRIGATION	SEWER	UNDERDRAIN
COUPLING TYPE	CORRUGATIONS	PIPE SIZE	COUPLING WIDTH	COUPLING BOLTS (NO.) DIA.	GASKET TYPE	ANNULAR PIPE	REFORMED HELICAL	HELICAL PIPE					
TYPE 1-A ANNULAR COUPLING BAND	1/2" x 1/4" & 2 3/8" x 1/2"	6"-10"	7" (1 PIECE)	(3) 3/8"	SLEEVE	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	12"-15"	7" (1 PIECE)	(3) 1/2"	SLEEVE	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	18"-24"	12" (1 PIECE)	(3) 1/2"	SLEEVE	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	30"-42"	24" (1 PIECE)	(5) 5/8"	SLEEVE	X	X		X	X		X	
TYPE 1-B HELICAL COUPLING BAND	1/2" x 1/4" & 2 3/8" x 1/2"	6"-10"	7" (1 PIECE)	(3) 3/8"	SLEEVE OR STRIP			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	12"-15"	7" (1 PIECE)	(3) 1/2"	SLEEVE OR STRIP			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	18"-24"	12" (1 PIECE)	(3) 1/2"	SLEEVE OR STRIP			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	30"-42"	24" (1 PIECE)	(5) 5/8"	SLEEVE OR STRIP			X	X	X		X	
TYPE 2-A ANNULAR COUPLING BAND	1/2" x 1/4" & 2 3/8" x 1/2"	6"-10"	7" (1 PIECE)	(4) 3/8"	SLEEVE, STRIP OR MASTIC	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	12"-15"	7" (1 PIECE)	(4) 3/8"	SLEEVE, STRIP OR MASTIC	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	18"-24"	12" (1 PIECE)	(6) 1/2"	SLEEVE, STRIP OR MASTIC	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	30"-42"	24" (1 PIECE)	(8) 1/2"	SLEEVE, STRIP OR MASTIC	X	X		X	X	X	X	
TYPE 2-B HELICAL COUPLING BAND	1/2" x 1/4" & 2 3/8" x 1/2"	6"-10"	7" (1 PIECE)	(4) 3/8"	SLEEVE, STRIP OR MASTIC			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	12"-15"	7" (1 PIECE)	(4) 3/8"	SLEEVE, STRIP OR MASTIC			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	18"-24"	12" (1 PIECE)	(6) 1/2"	SLEEVE, STRIP OR MASTIC			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	30"-42"	24" (1 PIECE)	(8) 1/2"	SLEEVE, STRIP OR MASTIC			X	X	X		X	
TYPE 3 HUGGER COUPLING BAND	2 3/8" x 1/2" & 3" x 1"	12"-48" (GALV.)	7 1/2" (STRAP)	(2) 6" x 1/2"	O-RING	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	54"-96" (GALV.)	10 1/2" (2 STRAP)	(4) 6" x 5/8"	O-RING	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	102"-144" (GALV.)	12" (3 STRAP)	(6) 6" x 7/8"	O-RING	X	X		X	X	X	X	

* WATERTIGHT BANDS ARE NOT REQUIRED ON CULVERT INSTALLATIONS UNLESS SPECIFIED BY THE PLANS OR SPECIAL PROVISIONS

ORIGINAL STORED
AT: ITD,
Headquarters
3311 West State
Boise, Idaho

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	02-76		6	03-05	MSM			
2	02-77							
3	09-93	MSM						
4	12-95	MSM						
5	06-02	MSM						

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME:
706-6_0305.dgn

DRAWING DATE:
APRIL, 1961

**IDAHO
TRANSPORTATION
DEPARTMENT**



BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)

ORIGINAL SIGNED BY: STEVEN HUTCHINSON
CHIEF ENGINEER

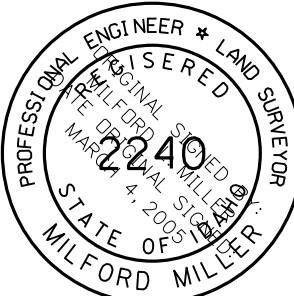
STANDARD DRAWING

**CORRUGATED METAL PIPE
WATERTIGHT COUPLING BANDS**

English

STANDARD DRAWING NO.
706-6

SHEET 2 OF 2



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LEGEND SHEET
3	TOTAL OWNERSHIP MAP
4	RIGHT-OF-WAY PLANS
5	SURVEY CONTROL SHEET

SHOSHONE COUNTY

PLAN AND PROFILE OF PROPOSED SILVER BRIDGE REPLACEMENT

KEY NO. 30786 SHOSHONE COUNTY

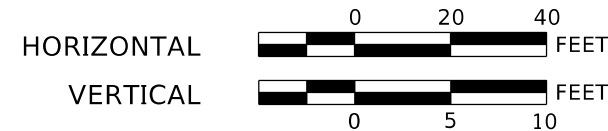
MARCH, 2025

KN 30786
SILVER BRIDGE
REPLACEMENT
STA 5+50



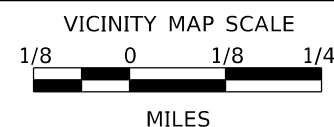
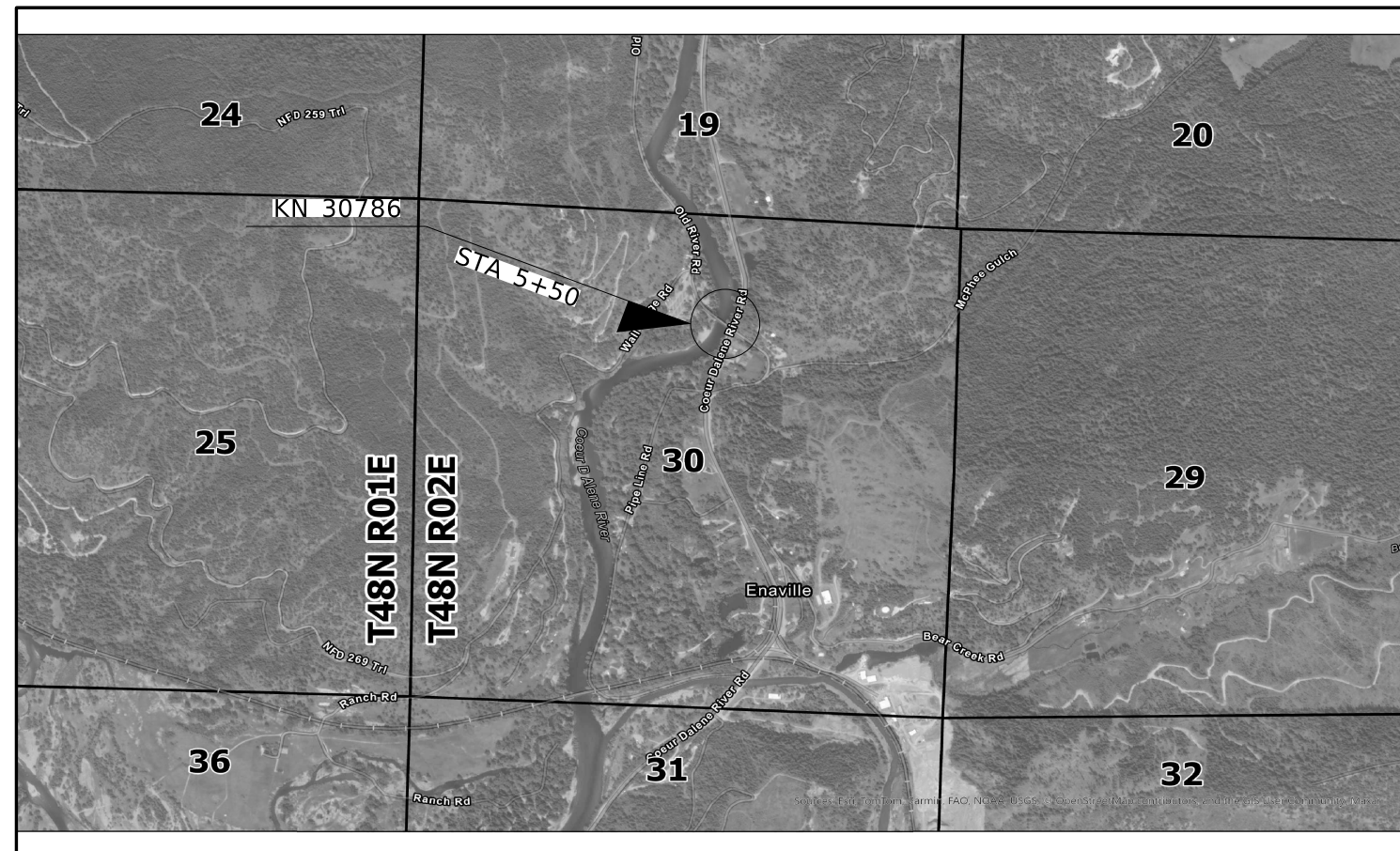
**FINAL
RIGHT-OF-WAY PLANS**

12/19/2025



PREVIOUS APPLICABLE PROJECTS
USDA IDAHO FOREST HIGHWAY SYSTEM PROJECT 9-E, DATED 1931
SHOSHONE COUNTY SILVER BRIDGE PROJECT 30785, DATED 1971

OFFICIAL R/W PLANS		
Submitted By:		
District Project Engineer / Consultant Surveyor	Date	
Recommended By:		
Project Manager	Date	
Approved By:		
District Engineer	Date	



December 19, 2025 2:12:36 PM p:\idaho\c-pw-bentley.com\deainc-pw-22\Documents\Projects\idaho\LHTAC\p\30786\Project_Development\Right-of-Way\30786 ROW TITL

REVISIONS			
NO.	DATE	BY	DESCRIPTION

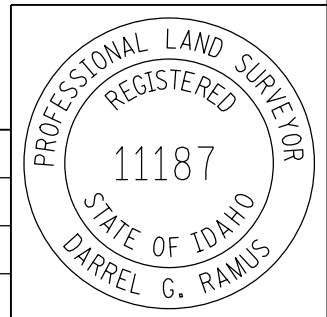
DESIGNED	J. GILLEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	D. GOWER	
DETAILED	J. GILLEY	CADD FILE NAME 30786 ROW TITL.dgn
DRAWING CHECKED	D. RAMUS	DRAWING DATE: 12/19/2025



DAVID EVANS AND ASSOCIATES INC.

PROJECT NO.	
TITLE SHEET	SILVER BRIDGE REPLACEMENT SHOSHONE COUNTY

ENGLISH
COUNTY SHOSHONE
KEY NUMBER 30786
SHEET 1 OF 5



December 19, 2025 2:12:43 PM p:\idaho\c-pw-bentley.com\deainc-pw-22\Documents\Projects\idaho\LHTAC\p\30786\Project_Development\Right-of-Way\30786 ROW LGND

EXISTING/PROPOSED	
	BUSH
	EMBANKMENT PROTECTOR
	DRAINAGE FLOW
	PIPE APRON
	CATCH BASIN
	DITCH BERM
	FOUND GPS CONTROL POINT
	MAILBOX
	MARSH
	MATERIAL SOURCE
	PHOTO CENTER
	RIPRAP
	SIPHON
	SPOT ELEVATION
	STOCKPILE SITE
	STUMP
	TREE
	WETLAND
	FLAG POLE
	IRRIGATION BOX
	SPRINKLER
	BUSH BOUNDARY
	CULTIVATION BOUNDARY
	TREE BOUNDARY
	EDGE OF PAVEMENT
	EDGE OF GRAVEL
	RAILROAD TRACKS
	TOP OF RAIL (RAILROAD)
	CONCRETE MONUMENT
	FOUND /SET BRASS OR ALLOY CAP AS NOTED
	FOUND IRON PIPE /SET IRON PIPE
	PK NAIL
	FOUND /PROPOSED RW MARKER
	FOUND /SET NUMBER 4 REBAR
	FOUND /SET NUMBER 5 REBAR
	FOUND /SET CONTROL POINT
	WILL SET AFTER ACQUISITION
	BARN
	BUILDING FOUNDATION
	HOUSE
	DECK
	SILO

EXISTING/PROPOSED	
	FOUND /SET QUARTER CORNER
	FOUND /SET SECTION CORNER
	STATE LINE
	TOWNSHIP AND RANGE LINE
	RESERVATION BOUNDARY
	SECTION LINE
	QUARTER SECTION LINE
	SIXTEENTH SECTION LINE
	COUNTY LINE
	CITY LIMITS
	TEMPORARY EASEMENT
	PERMANENT EASEMENT LINE
	RIGHT OF WAY LINE
	PURCHASED ACCESS CONTROL LINE
	INTERSTATE ACCESS CONTROL LINE
	PROPERTY LINE
	RAILROAD RIGHT OF WAY LINE
	SILT FENCE
	FIBER WATTLE
	SEDIMENT BASIN
	DIKE SWALE
	EROSION CONTROL BLANKET
	MULCH
	SEEDING PERMANENT
	SEEDING TEMPORARY
	CONCRETE PAVEMENT
	CONCRETE SLOPE PAVING
	INLET PROTECTION (INSERT)
	INLET PROTECTION (WATTLE)
	POLLUTION PREVENTION FLOW
	SAWCUT LINE
	REMOVAL OF BITUMINOUS SURFACE
	REMOVAL OF CONCRETE PAVEMENT
	COLD MILLING
	PERMANENT EASEMENT
	TEMPORARY EASEMENT

EXISTING/PROPOSED	
	RAILROAD PROTECTION DEVICE
	RAILROAD SIGNAL
	RAILROAD SWITCH
	GUY & ANCHOR
	ILLUMINATION JUNCTION BOX
	ITS JUNCTION BOX
	UNDERDECK LUMINAIRE
	ELECTRIC MANHOLE
	METER
	ELECTRIC POLE
	TRANSMISSION TOWER
	ELECTRIC VAULT
	FIRE HYDRANT
	RISER GAS OR OIL ETC.
	TELEPHONE OR LIGHT POLE
	MANHOLE
	DRY WELL
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC CABLE
	OVERHEAD FIBER OPTIC
	UNDERGROUND FIBER OPTIC
	OVERHEAD TELEPHONE
	UNDERGROUND TELEPHONE
	OVERHEAD TELEVISION
	UNDERGROUND TELEVISION CABLE
	WATER LINE
	GAS LINE
	OIL LINE
	PIPE BELL INDICATES FLOW DIRECTION
	IRRIGATION SIPHON
	IRRIGATION LINE
	SANITARY SEWER
	STORM SEWER
	UNDER DRAIN
	CONDUIT OR CASING
	ITS CONDUIT
	PLASTIC CONDUIT
	OVERHEAD TRAFFIC SIGNAL
	POINT NUMBERS FOR SURVEY MONUMENTS. SEE SURVEY CONTROL TABLE FOR DETAILS.

EXISTING/PROPOSED	
	HORIZONTAL ALIGNMENT CONTROL LINE
	CURB
	GUTTER
	COMBINATION CURB AND GUTTER
	CULVERT WITH APRONS
	METAL GUARDRAIL
	CONCRETE BARRIER
	FENCE
	GATE
	SNOW FENCE
	RETAINING WALL
	EXISTING GROUND (PROFILE GRADE LINE)
	TOE OF FILL (SLOPE LIMIT)
	TOP OF CUT (SLOPE LIMIT)
	ROAD CLOSURE
	DITCH BOTTOM (FLAT BOTTOM)
	DITCH BOTTOM (V-DITCH)
	TOE OF BASE LINE
	DELINEATOR TYPE 1
	DELINEATOR TYPE 2
	DELINEATOR TYPE 3
	DELINEATOR TYPE 4
	DELINEATOR TYPE 9
	TUBULAR MARKER
	SIGN SINGLE POST
	SIGN DOUBLE POST
	EMERGENCY VEHICLE PREEMPT DETECTOR
	LUMINAIRE POLE
	ELECTRONICS CABINET & SERVICE PEDESTAL
	CAMERA POLE WITH CAMERA
	AUTOMATIC TRAFFIC RECORDER
	SPLICE VAULT
	FIBER OPTIC MANHOLE
	ITS CABINET
	SERVICE PEDESTAL
	DYNAMIC MESSAGE SIGN & STRUCTURE
	TRAFFIC SIGNAL HEAD
	STOP BAR
	YIELD LINE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	J. GILLEY
DESIGN CHECKED	D. GOWER
DETAILED	J. GILLEY
DRAWING CHECKED	D. RAMUS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME 30786 ROW LGND.DGN

DRAWING DATE: 12/19/2025



PROJECT NO.

LEGEND

SILVER BRIDGE REPLACEMENT

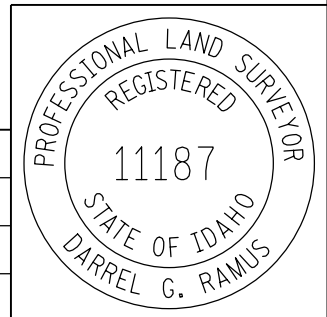
SHOSHONE COUNTY

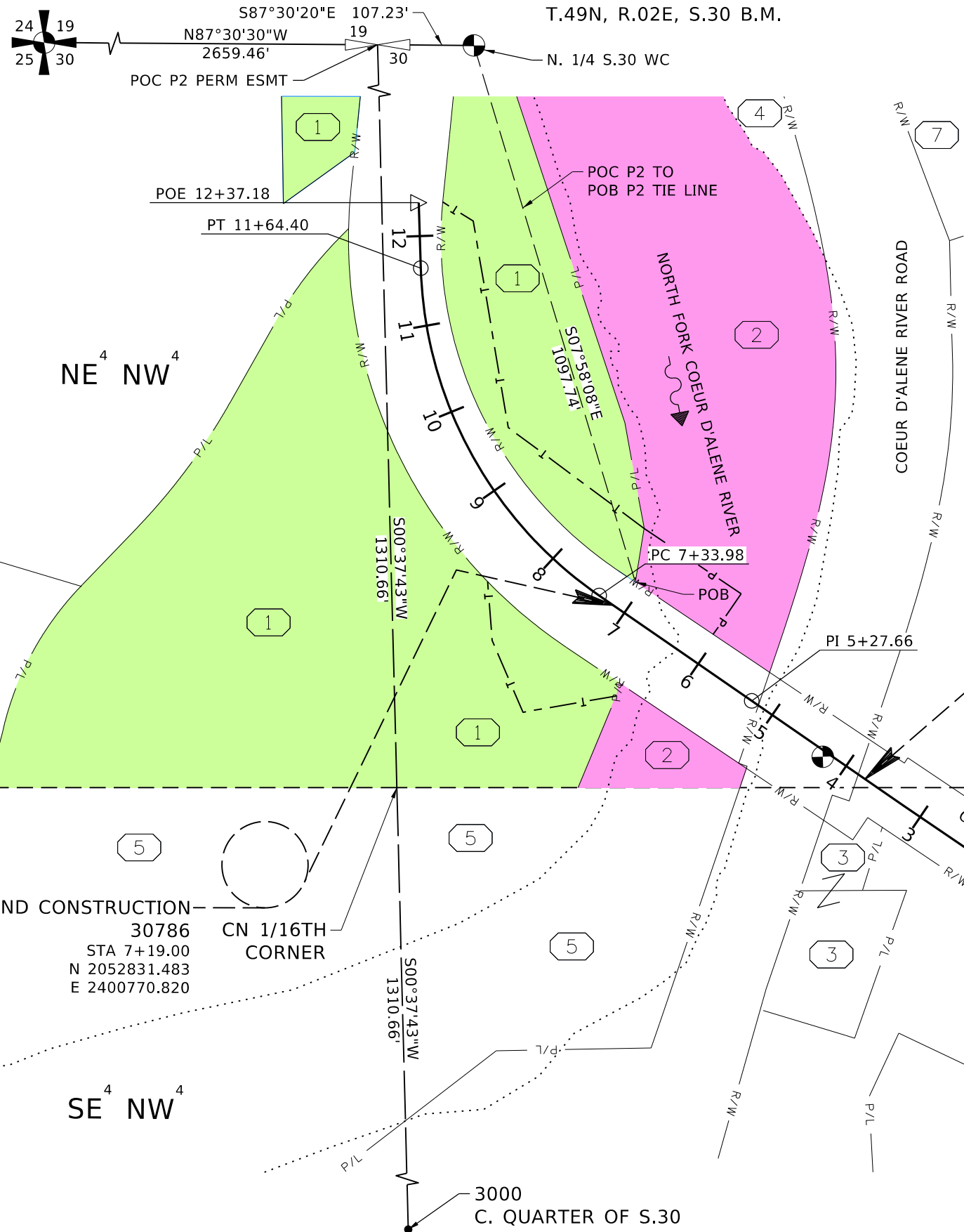
ENGLISH

COUNTY SHOSHONE

KEY NUMBER 30786

SHEET 2 OF 5





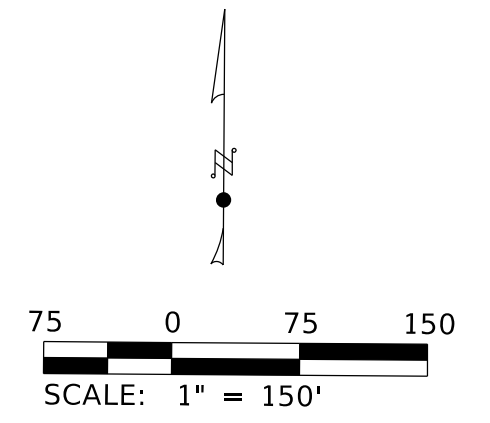
Parcel No.	Parcel I.D. No.	Record Owner	Total Ownership Assessed Ac.	Right of Way		Remainder		Easement	
				Req'd Ac.	Exist. Ac.	Left Ac.	Right Ac.	Perm. Ac.	Temp. Ac.
1		NORTH FORK CAMP LLC	8.650	0	0	0	0	0	0.651
2		AILIE KUISTI	***7.679	0	0	0	0	0.148	0
**3	INFO ONLY	MICHAEL T. & CHERYL L. THOMAS (CP)	0	0	0	0	0	0	0
**4	INFO ONLY	DAN & SHARON WALDO & GRANTOR TRUST	0	0	0	0	0	0	0
**5	INFO ONLY	MCMURRAY FAMILY TRUST	0	0	0	0	0	0	0
**6	INFO ONLY	DENNIS & FRANCES KUISTI FAMILY TRUST	0	0	0	0	0	0	0
**7	INFO ONLY	DAVID B. KUISTI & DENNIS S. KUISTI	0	0	0	0	0	0	0
**8	INFO ONLY	COLLEEN M. ROBERTS	0	0	0	0	0	0	0

** FOR INFORMATION PURPOSES ONLY
 *** APPROXIMATE CALCULATED ACREAGE BASED ON HISTORIC DEEDS AND RIVER BANK DERIVED FROM REMOTE SENSING DATA COLLECTED ON 4/25/2023

LEGEND

- SECTION LINE
- 1/4 SECTION LINE
- 1/16TH SECTION LINE
- ROAD RIGHT OF WAY
- EDGE OF WATER
- PROPOSED ALIGNMENT
- PROPOSED PERMANENT EASEMENT
- PROPOSED TEMPORARY EASEMENT

- FOUND ALLOY MONUMENT AS NOTED
- FOUND #5 REBAR AS NOTED
- FOUND #4 REBAR AS NOTED



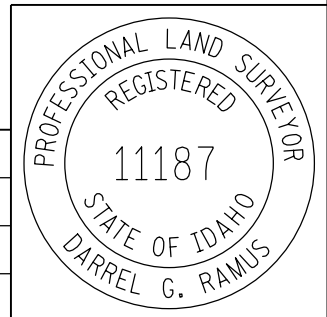
REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	J. GILLEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	D. GOWER	
DETAILED	J. GILLEY	CADD FILE NAME 30786 OMAP D01.dgn
DRAWING CHECKED	D. RAMUS	DRAWING DATE: 12/19/2025



PROJECT NO.	TOTAL OWNERSHIP MAP
	SILVER BRIDGE REPLACEMENT
	SHOSHONE COUNTY

ENGLISH
COUNTY SHOSHONE
KEY NUMBER 30786
SHEET 3 OF 5

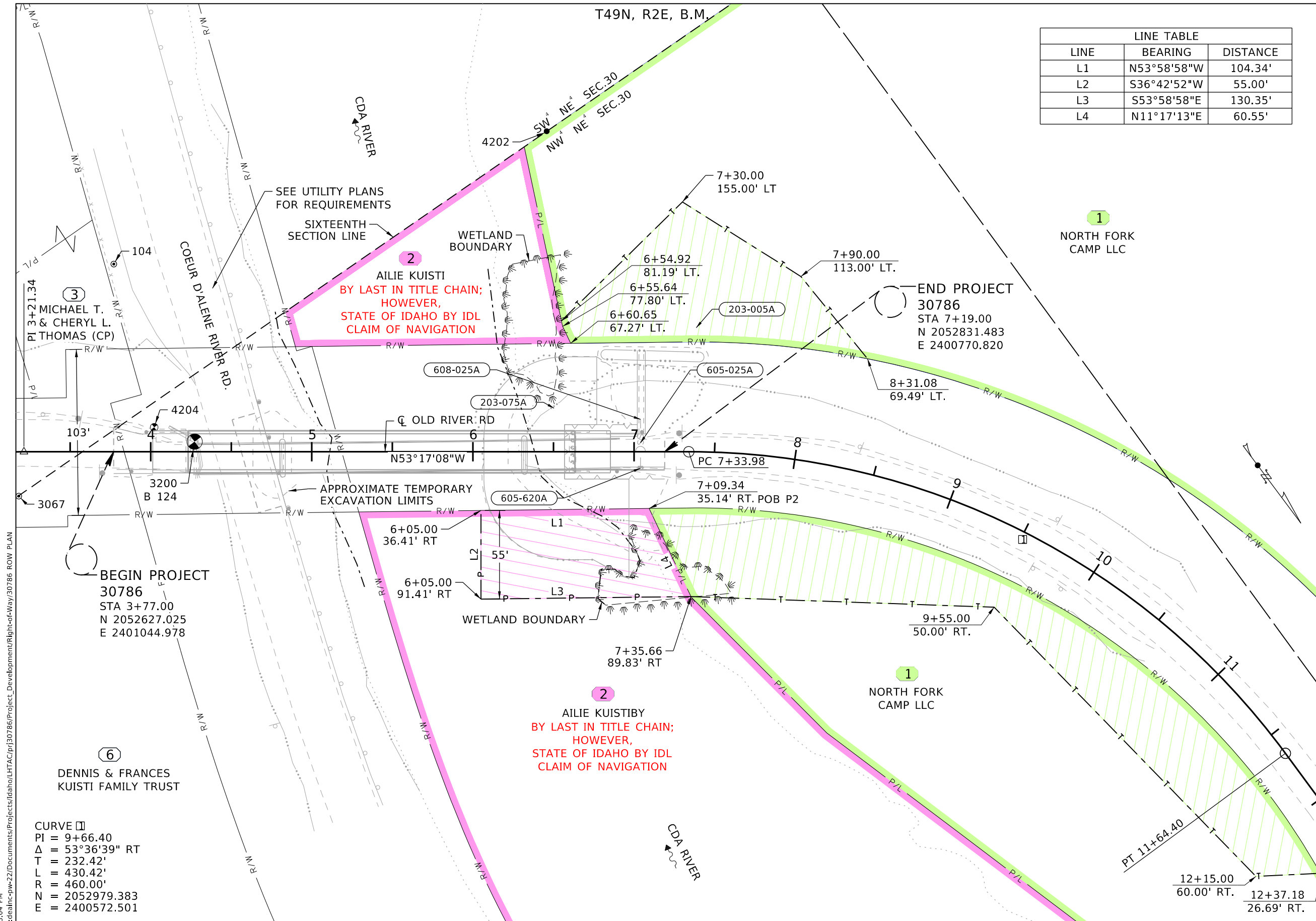


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T49N, R2E, B.M.

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N53°58'58"W	104.34'
L2	S36°42'52"W	55.00'
L3	S53°58'58"E	130.35'
L4	N11°17'13"E	60.55'

- 203-005A
1 LS **REMOVAL OF OBSTRUCTIONS**
STA 3+77.00, 20.84' LT TO
STA 7+24.00, 62.00' RT
- 203-075A
100 FT **REMOVAL OF FENCE**
STA 6+50.00, 27.40' LT TO
STA 7+42.00, 43.00' LT
- 605-025A
30 FT **12" STORM SEWER PIPE**
STA 7+04.00, 20.09' LT TO
STA 7+04.00, 9.50' RT
- 605-620A
1 EA **INLET TYPE 4**
STA 7+04.00, 11.00' RT
- 608-025A
1 EA **12" APRON FOR PIPE**
STA 7+04.00, 20.09' LT



2
AILIE KUISTI
BY LAST IN TITLE CHAIN;
HOWEVER,
STATE OF IDAHO BY IDL
CLAIM OF NAVIGATION

3
MICHAEL T.
& CHERYL L.
THOMAS (CP)
PI 3+21.34

6
DENNIS & FRANCES
KUISTI FAMILY TRUST

CURVE □
PI = 9+66.40
Δ = 53°36'39" RT
T = 232.42'
L = 430.42'
R = 460.00'
N = 2052979.383
E = 2400572.501

NOTES
1. REMOVAL OF OBSTRUCTIONS, 203-005A, INCLUDES BUT NOT LIMITED TO RELOCATING CAMPING TABLE AND FIREPIT OUTSIDE GRADING LIMITS.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

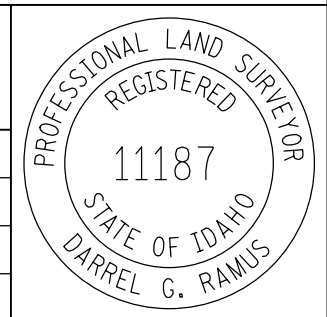
DESIGNED	J. GILLEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	D. GOWER	
DETAILED	J. GILLEY	CADD FILE NAME 30786 ROW PLAN.dgn
DRAWING CHECKED	D. RAMUS	DRAWING DATE: 12/19/2025



**DAVID EVANS
AND ASSOCIATES INC.**

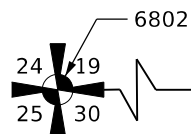
PROJECT NO.	RIGHT-OF-WAY PLAN SILVER BRIDGE REPLACEMENT SHOSHONE COUNTY
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ENGLISH
COUNTY SHOSHONE
KEY NUMBER 30786
SHEET 4 OF 5



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LOCATED WITHIN
SECTION 30
T.49N R.02E B.M.
SHOSHONE COUNTY, IDAHO



N87°30'30"W
2659.46'

SURVEYOR'S NOTES:
THE PURPOSE OF THIS SURVEY IS TO ASSIST IN THE DESIGN AND CONSTRUCTION ASSOCIATED WITH THE LOCAL HIGHWAY TECHNICAL ASSISTANCE COUNCIL (LHTAC) PROJECT 30786.

BASIS OF BEARING:
THE BASIS OF BEARING IS GRID NORTH PER THE WEST ZONE OF THE IDAHO STATE PLANE COORDINATE SYSTEM 2011 (EPSG 6453). THE CONVERGENCE ANGLE AT POINT 100 IS -0°22'20".

GROUND PROJECTION:
THE INVERSE OF A COMBINED SCALE FACTOR (CSF) OF 0.99984964 WAS APPLIED AT 0,0 TO CREATE A MODIFIED GROUND SYSTEM. A FALSE NORTHING OF -100000 AND FALSE EASTING OF -100000 WERE APPLIED TO EACH COORDINATE VALUE TO TRUNCATE THE SYSTEM.

ALL GROUND COORDINATES ARE MODIFIED FROM THE IDAHO STATE PLANE WEST ZONE, NAD83(2011) EPOCH 2010.

COORDINATES DISPLAYED HEREON ARE IN US SURVEY FEET.

BASIS OF ELEVATION AND COORDINATES:
THE VERTICAL DATUM USED HEREON IS BASED UPON NAVD88 COMPUTED USING GEOID 2018 CONUS.

ELEVATIONS WERE ESTABLISHED BY HOLDING THE PUBLISHED ELEVATION OF POINT 104 WHICH WAS VERIFIED BY DIFFERENTIAL LEVELING THROUGH THE NGS BENCHMARK B124 POINT 3200.

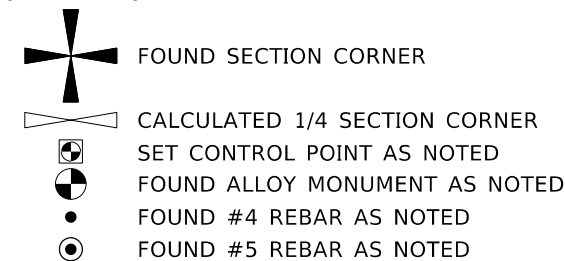
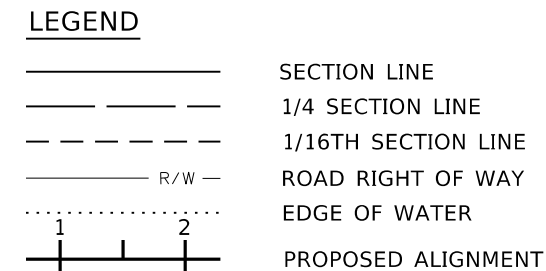
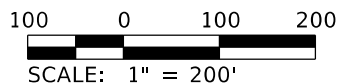
CONTROL FIELD WORK WAS PERFORMED MARCH 2023 THROUGH JULY 2023.

ALL DISTANCES SHOWN ARE GROUND DISTANCES IN US SURVEY FEET.

A STATIC CONTROL NETWORK WAS USED TO ESTABLISH HORIZONTAL POSITIONS ON CONTROL MONUMENTS TO SET THIS SURVEY. PRIMARY CONTROL POINTS (100-104).

STATE PLANE TO GROUND FROMULA:
(N * (1/CSF))-100000 = GROUND NORTHING (E * (1/CSF))-100000 = GROUND EASTING

GROUND TO STATE PLANE FROMULA:
(N + 100000) * (CSF) = STATE PLANE NORTHING (E + 100000) * (CSF) = STATE PLANE EASTING



NE⁴ NW⁴

NW⁴ NE⁴

SW⁴ NE⁴

PROJECT PRIMARY CONTROL TABLE					
POINT NO.	LOCAL GROUND COORDINATE SYSTEM (USFT)			DESCRIPTION	NOTES
	NORTHING	EASTING	ELEVATION		
100	2053252.03	2400547.47	2177.70	SET 5/8 INCH REBAR W/RPC "DEA CONTROL"	PRIMARY CONTROL
101	2054409.20	2400813.97	2180.10	SET 5/8 INCH REBAR W/RPC "DEA CONTROL"	PRIMARY CONTROL
102	2051880.33	2399440.62	2231.55	SET 5/8 INCH REBAR W/RPC "DEA CONTROL"	PRIMARY CONTROL
103	2051166.56	2400841.53	2176.23	SET 5/8 INCH REBAR W/RPC "DEA CONTROL"	PRIMARY CONTROL
104	2052533.73	2400975.27	2178.36	SET 5/8 INCH REBAR W/RPC "DEA CONTROL"	PRIMARY CONTROL

PROJECT COORDINATE TABLE - PLSS MONUMENTS					
POINT NO.	LOCAL GROUND COORDINATE SYSTEM (USFT)			DESCRIPTION	NOTES
	NORTHING	EASTING	ELEVATION		
3000	2051324.51	2400511.51	2173.98	FOUND 1/2 INCH REBAR WITH BROKEN CAP	CP&F 458269
3010	2052585.00	2401886.68	2301.44	FOUND 5/8 INCH REBAR W/ YPC WELCH COMER PLS12318	1/16TH CORNER, NO CP&F
3016	2053941.01	2400647.39	2169.96	FOUND 2-1/2 INCH ALUMINUM CAP (WC) MECKEL PLS 6374	CP&F 494187
3200	2052652.04	2401000.94	2203.34	FOUND BENCHMARK IN CONCRETE OF BRIDGE (B 124) 1958	NGS: B 124, PID: SV0112
6003	2053886.09	2401905.21	2617.51	FOUND 1/2 INCH REBAR W/ YPC DURTSCHI PLS 3814	1/16TH CORNER, NO CP&F
6802	2054061.30	2397883.32	2854.26	FOUND 3-1/4 INCH BRASS CAP BLM BAUER 1978	CP&F 488845

PRIMARY CONTROL POINT 102
~488 FEET SOUTH

PRIMARY CONTROL POINT 103
~1611 FEET SOUTHEAST

3043
FOUND PROPERTY MONUMENT
2' NW OF CALCULATED
POSITION OF 1/6TH CORNER

REVISIONS				DESIGNED	DESIGN CHECKED	DETAILED	DRAWING CHECKED	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY	CADD FILE NAME 30786 SCM_D01.dgn	DRAWING DATE: 12/19/2025
NO.	DATE	BY	DESCRIPTION							
				J. GILLEY	D. GOWER	J. GILLEY	D. RAMUS			



DAVID EVANS AND ASSOCIATES INC.

PROJECT NO. _____

SURVEY CONTROL SHEET
SILVER BRIDGE REPLACEMENT
SHOSHONE COUNTY

ENGLISH

COUNTY SHOSHONE
KEY NUMBER 30786
SHEET 5 OF 5

