

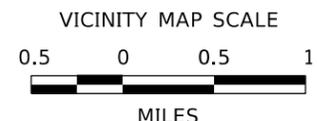
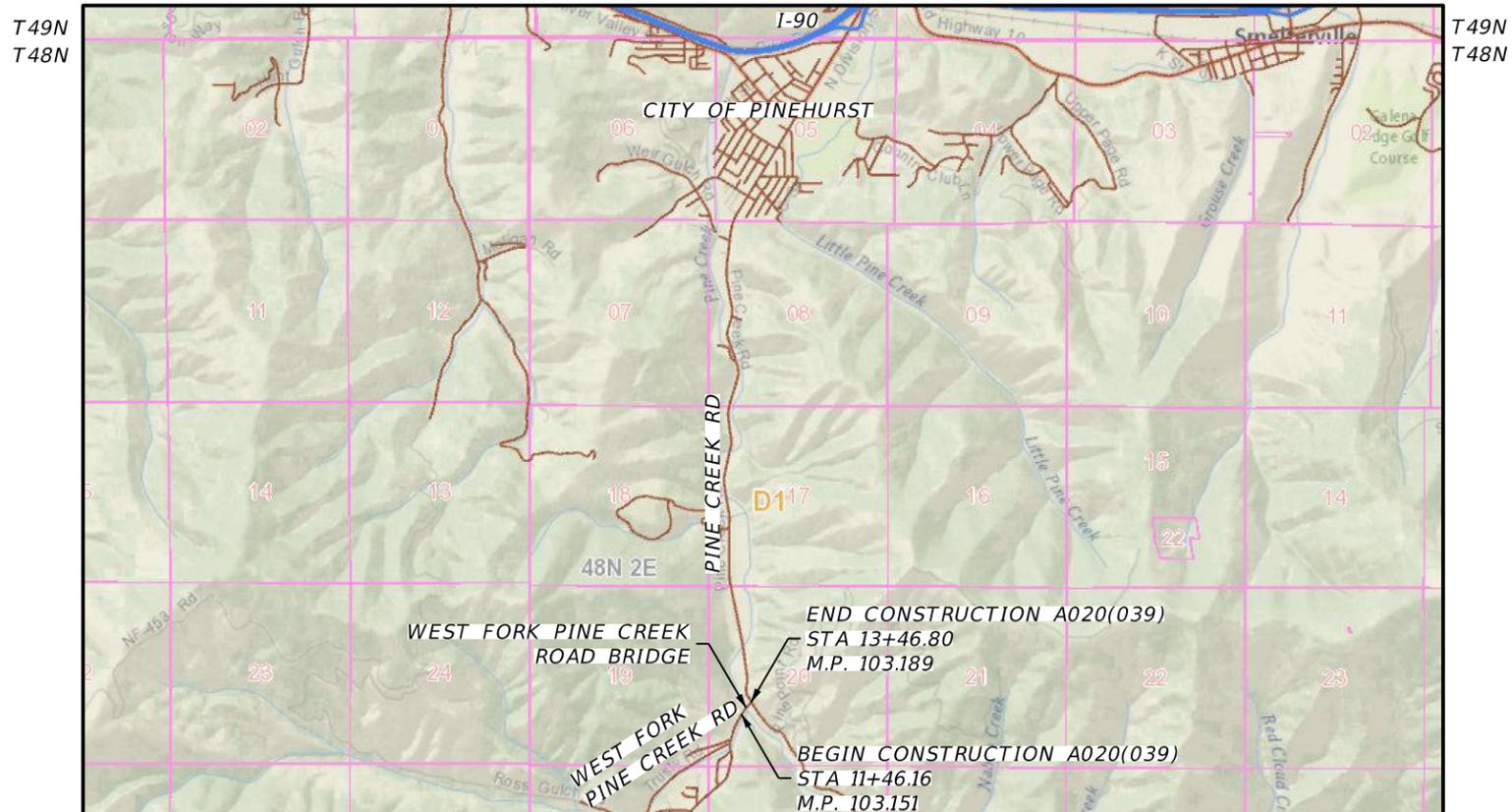
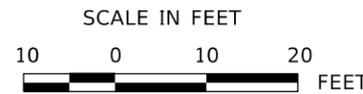
INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
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2	CONTROL PLAN
3	PROJECT CLEARANCE SUMMARY
4	ROADWAY SUMMARY
5	DEMO SHEET
6	PLAN SHEET
7	ROADWAY DETAILS
8	DEWATERING DETAILS
9	RIPRAP DETAIL
10	POLLUTION PREVENTION PLAN
11	SIGN ERECTION TABLE
12	SIGN & PAVEMENT MARKINGS PLAN
13	SIGN DETAIL
14	TEMPORARY TRAFFIC CONTROL PLAN
15 - 16	CONSTRUCTION STAGING
17 - 18	TRAFFIC CONTROL DETAIL
19	UTILITY PLAN
1 - 6	BRIDGE PLANS
1-18	ITD STANDARD DRAWINGS

IDAHO TRANSPORTATION DEPARTMENT

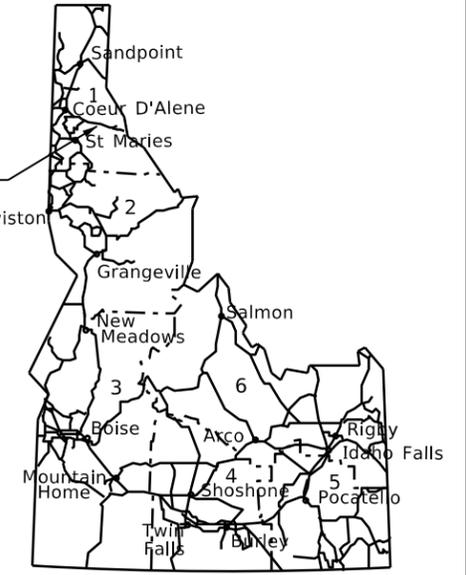
PLAN AND PROFILE OF PROPOSED WEST FORK PINE CREEK ROAD BRIDGE

FEDERAL AID PROJECT NO. A020(039) KEY NO. 20039 SHOSHONE COUNTY

FEBRUARY 2025



A020(039)
WEST FORK PINE CREEK
ROAD BRIDGE
SEGMENT CODE: 007470
STC-5750
M.P. 103.151 M.P. 103.189



DESIGN DESIGNATION		
ADT	2023	660
ADT	2045	1000
DHV	2023	106
DHV	2045	161
D	60% 40%	
V	25 MPH	
TRUCKS:		
ADT	2023	66
ADT	2045	100
DHV	2023	106
DHV	2045	161

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 20039 TITL.DGN
DRAWING DATE: 17-FEB-2025

IDAHO TRANSPORTATION DEPARTMENT
YOUR Safety-YOUR Mobility-YOUR Economic Opportunity

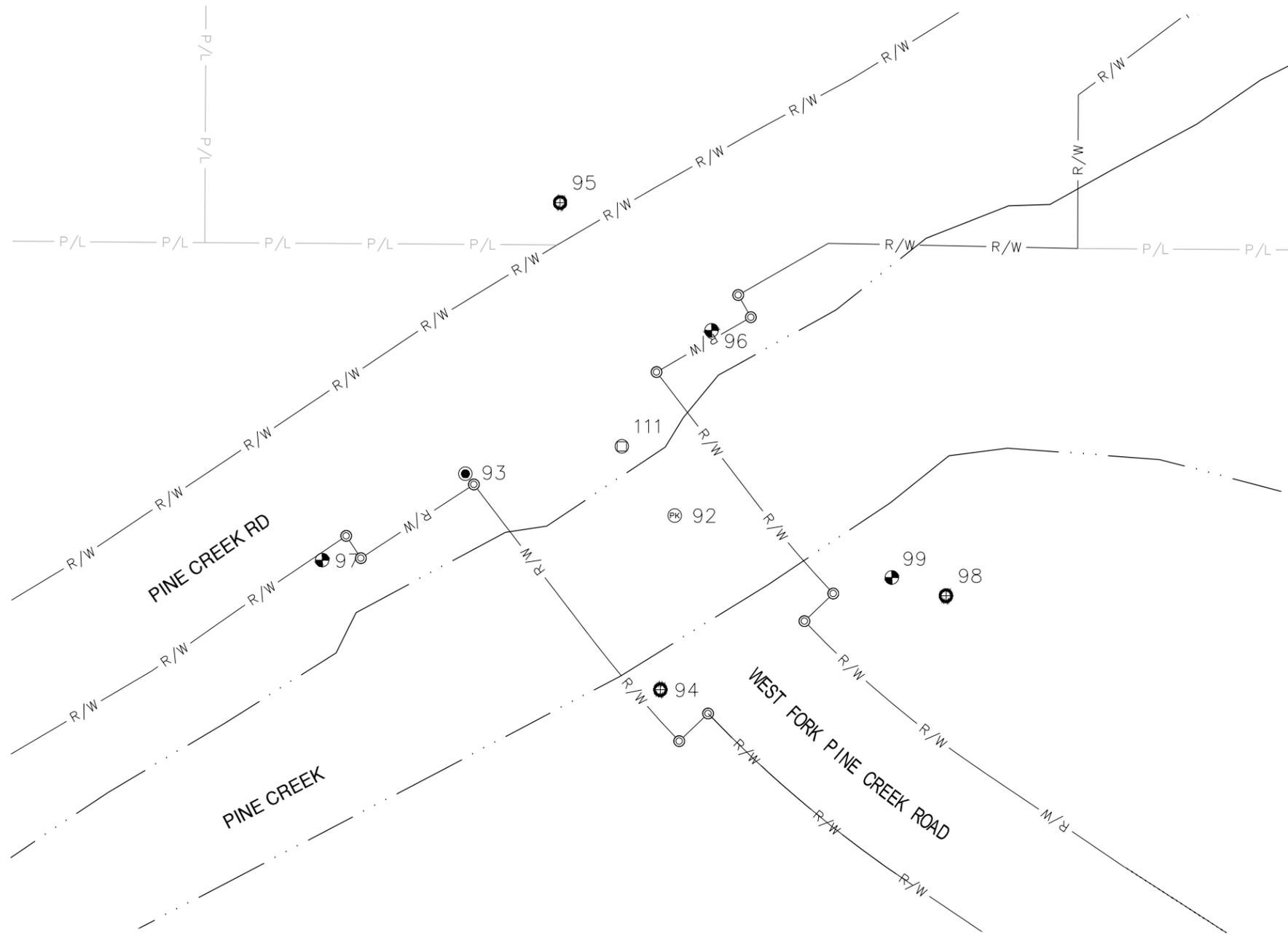
HMH engineering

PROJECT NO.
A020(039)

TITLE SHEET
WEST FORK PINE CREEK ROAD BRIDGE

ENGLISH
COUNTY SHOSHONE
KEY NUMBER 20039
SHEET 1 OF 19

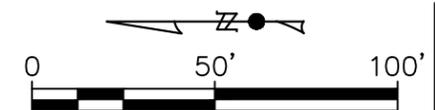
Monica Crider
Approved for Advertising
7/10/2025
Date Approved



Point Table					
Point #	Northing	Easting	Elevation	Notes	Symbol
92	2123448.7730	2503625.2540	2381.26	SET MAG NAIL SOUTH SIDE OF BRIDGE	⊗
93	2123527.4040	2503643.4420	2384.58	FOUND 5/8" REBAR RED PLASTIC CAP STAMPED MECKEL CONTROL POINT	●
94	2123454.2340	2503562.6590	2384.96	SET 60D NAIL IN NORTHWEST CORNER OF BRIDGE	⊕
95	2123491.8540	2503744.9840	2391.20	SET 60D NAIL IN NORTHWEST FACE OF 16" PINE TREE	⊕
96	2123435.0140	2503697.1440	2385.69	SET 2 1/2" ALUM CAP STAMPED HMH CONTROL	⊕
97	2123581.1320	2503611.1520	2383.19	SET 2 1/2" ALUM CAP STAMPED HMH CONTROL	⊕
98	2123347.0050	2503597.8080	2385.82	SET 60D NAIL IN NORTH FACE OF POWER POLE	⊕
99	2123367.3450	2503604.6380	2384.70	SET 2 1/2" ALUM CAP STAMPED HMH CONTROL	⊕
100	2125880.1220	2503310.9560	2358.85	FOUND 5/8" REBAR WITH PLASTIC CAP	●
101	2122191.9750	2504727.8300	2401.67	FOUND 5/8" REBAR WITH PLASTIC CAP	●
102	2122305.6100	2504394.0630	2395.60	FOUND 5/8" REBAR WITH PLASTIC CAP	●
110	2122965.6910	2503726.7420	2385.28	FOUND 5/8" REBAR WITH PLASTIC CAP CRACKED	●
111	2123468.6690	2503653.7090	2382.11	CHISELED MARK IN CORNER OF CURB	○

NOTES:

1. SURVEY DATA WAS ESTABLISHED BY GPS CONTROL COORDINATES DERIVED FROM NGS OPUS SOLUTIONS USING A REFERENCE FRAME OF NAD83 (2011)(EPOCH: 2010.000) ALL BEARINGS REFER TO IDAHO STATE PLANE COORDINATE SYSTEM OF 1983, WEST ZONE, (1103). UNITS ARE US SURVEY FT. DISTANCES HAVE BEEN CONVERTED FROM GRID TO GROUND USING A COMBINED ADJUSTMENT FACTOR (CAF) OF 1.0001599395 SCALED FROM AN ORIGIN POINT OF 0,0. A FALSE NORTHING OF 400.379 AND A FALSE EASTING OF 340.012 WAS APPLIED TO ALL COORDINATES SHOWN HEREON. ELEVATIONS SHOWN HEREON ARE BASED ON NAVD88 USING GEOID 18.
2. TOPOGRAPHIC AND BOUNDARY SURVEY WAS PERFORMED IN APRIL OF 2022.
3. PER IDAHO CODE TITLE 55, CHAPTER 16, PARAGRAPH 13, RESEARCH WAS COMPLETED AND SURVEY MONUMENTS WERE SEARCHED FOR.



DESCRIPTION				DESIGNED M.LEVESY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME D2120039 ROW CONTROL MAP DRAWING DATE August 2023	IDAHO TRANSPORTATION DEPARTMENT YOUR Safety→YOUR Mobility→YOUR Economic Opportunity HMH engineering	PROJECT NO.	CONTROL PLAN	English COUNTY SHOSHONE KEY NUMBER 20039 SHEET 2 OF 19	
NO.	DATE	BY	DESCRIPTION	DESIGN CHECKED G.SIEGFORD			A020(039)	WEST FORK PINE CREEK BRIDGE		
				DETAILED J.AULT						
				DRAWING CHECKED V.KLEMM						

CLEARANCES		+ CLEARED UNDER PROJECT NO.	+ APPROVAL DATE
PROJECT STANDARDS		A020(039)	01/11/2023
CHARTER APPROVAL <input checked="" type="checkbox"/> AASHTO <input type="checkbox"/> 3R <input type="checkbox"/> 1R <input type="checkbox"/> STATE		N/A	N/A
<input type="checkbox"/> PM <input type="checkbox"/> OTHER _____		N/A	N/A
DESIGN EXCEPTIONS: _____		N/A	N/A
PUBLIC HEARING WAIVER _____		A020(039)	02/07/2024
PUBLIC HEARING DATE (Latest hearing date held or scheduled for opportunity) _____		N/A	N/A
DESIGN APPROVAL _____		A020(039)	03/12/2024
RECLAMATION PLAN APPROVAL NO(S) _____		N/A	N/A
AIRPORT _____		N/A	N/A
Land Survey Monument Search and Documentation (I.C.55-1613) _____		A020(039)	04/02/2024
R/W CERTIFICATE: Issued by <input checked="" type="checkbox"/> HQ <input type="checkbox"/> DISTRICT _____		A020(039)	06/18/2025
TRIBAL LANDS: <input type="checkbox"/> AGREEMENT REQUIRED <input type="checkbox"/> SPECIAL PROVISIONS FOR CONTRACT PROPOSAL _____		N/A	N/A
BRIDGE PS & E _____		A020(039)	03/20/2025
ENVIRONMENTAL DECISION: TYPE <input checked="" type="checkbox"/> CAT-EX <input type="checkbox"/> FONSI <input type="checkbox"/> ROD _____		A020(039)	02/29/2024
ENVIRONMENTAL RE-EVALUATION _____		A020(039)	03/13/2025
PERMITS			+ EXPIRATION DATE
IDAHO DEPARTMENT OF WATER RESOURCES PERMIT NO(S) <u>594-20229</u>		A020(039)	03/01/2024
US ARMY CORPS OF ENGINEERS 404 PERMIT NO(S) <u>CENWW-2024-00038</u>		A020(039)	03/05/2024
OTHER <u>SHOSHONE COUNTY FLOODPLAIN DEVELOPMENT PERMIT</u>		A020(039)	04/22/2024
DEQ SECTION 401 WATER QUALITY CERTIFICATION _____ <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
NPDES GENERAL PERMIT/SWPPP REQUIRED _____ <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
POLLUTION PREVENTION PLAN REQUIRED _____ <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
AGREEMENTS (List Appropriate Name)			
LOCAL: CITY _____		N/A	N/A
COUNTY _____		N/A	N/A
HIGHWAY DISTRICT _____		N/A	N/A
ROAD CLOSURE AND MAINTENANCE _____		N/A	N/A
STATE/LOCAL CONSTRUCTION <u>SHOSHONE COUNTY</u>		A020(039)	06/09/2025
IRRIGATION DISTRICT(S): Crossing Agreement Required _____ <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (Signatures Required on either Structure Drawing or Bridge Sheet)			
UTILITIES: List all Utilities shown on plans		RETAIN & PROTECT	
Co. <u>AVISTA</u>	<input checked="" type="checkbox"/>	N/A	N/A
Co. <u>PINEHURST WATER DISTRICT</u>	<input checked="" type="checkbox"/>	N/A	N/A
Co. <u>SUDDENLINK</u>	<input checked="" type="checkbox"/>	N/A	N/A
Co. <u>ZIPLY FIBER</u>	<input type="checkbox"/>	05/22/2024	N/A
Co. _____	<input type="checkbox"/>	N/A	N/A
Co. _____	<input type="checkbox"/>	N/A	N/A
Co. _____	<input type="checkbox"/>	N/A	N/A
RAILROAD List all Railroads encroached upon		+ AGREEMENT	
		+ AGREEMENT FOR	EFFECTIVE DATE
Co. _____		N/A	N/A
Co. _____		N/A	N/A

ESTIMATING BASIS

TACK:
CSS-1 Emulsified Asphalt for Tack Coat @ 0.05 Gallon/sy

PAVING:
PG 64-28 ASPHALT CEMENT FOR SUPERPAVE HMA PAVEMENT CLASS SP-3 @ 5.8% BY WEIGHT OF MIX AND ANTI-STRIPPING ADDITIVE AT 0.5% BY WEIGHT

AGGREGATE:
SILVER VALLEY RD SAFETY IMPROVEMENTS: KN 22399 USED FOR ESTIMATING BASIS:

1/2" AGGREGATE @ 148.0 LB/CF FOR PLANT MIX CLASS SP-3 INCLUDING ASPHALT ADDITIVES

3/4" AGGREGATE @ 146.0 LB/CF FOR BASE TYPE A INCLUDING 7% MOISTURE

SURFACE SMOOTHING:
PAVEMENT SMOOTHNESS SPECIFIED BY STAIGHTEDGE

+ ENTER "N/A" WHEN NOT APPLICABLE
 ++ LPA PROJECTS - DATE ENTERED BY ROADWAY DESIGN WHEN PROJECT SENT TO PS&E.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED M. LEVESEY
DESIGN CHECKED G.E. SIEGFORD
DETAILED M. LEVESEY
DRAWING CHECKED G.E. SIEGFORD

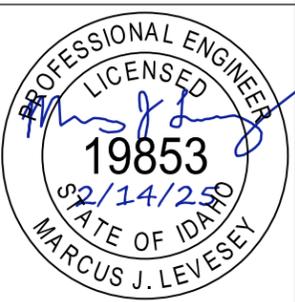
SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME 20039 PCS.DGN
 DRAWING DATE: 17-FEB-2025

IDAHO TRANSPORTATION DEPARTMENT
 YOUR Safety→YOUR Mobility→YOUR Economic Opportunity
HMH engineering

PROJECT NO.
A020(039)

PROJECT CLEARANCE SUMMARY
WEST FORK PINE CREEK ROAD BRIDGE

ENGLISH
 COUNTY SHOSHONE
 KEY NUMBER 20039
 SHEET 3 OF 19



T.48N, R.02E, B.M.

LOG LOCATION DATA			
POINT	STATION	OFFSET	DESC
A1	12+09.02	11.73' LT	SAWCUT
A2	12+09.02	11.65' RT	SAWCUT
A3	13+27.58	41.74' RT	SAWCUT
A4	13+30.29	76.21' RT	SAWCUT
A5	13+33.24	48.09' LT	SAWCUT
A6	13+40.51	69.72' LT	SAWCUT

1
 PI STA 11+78.64
 Δ 19°00'11" RT
 T 71.13'
 L 140.96'
 R 425.00'
 N. 2123404.9804'
 E. 2503549.6242'

BEGIN PROJECT A020(039)
 Sta. 12+05.02
 N=2123420.1032
 E=2503573.0096

END PROJECT A020(039)
 Sta. 13+40.79
 N=2123504.3946
 E=2503679.3731

BEGIN BRIDGE
 STA 12+28.74

END BRIDGE
 STA 12+98.89

BRIDGE WORK
 SEE BRIDGE
 PLAN

N52°32'26"E

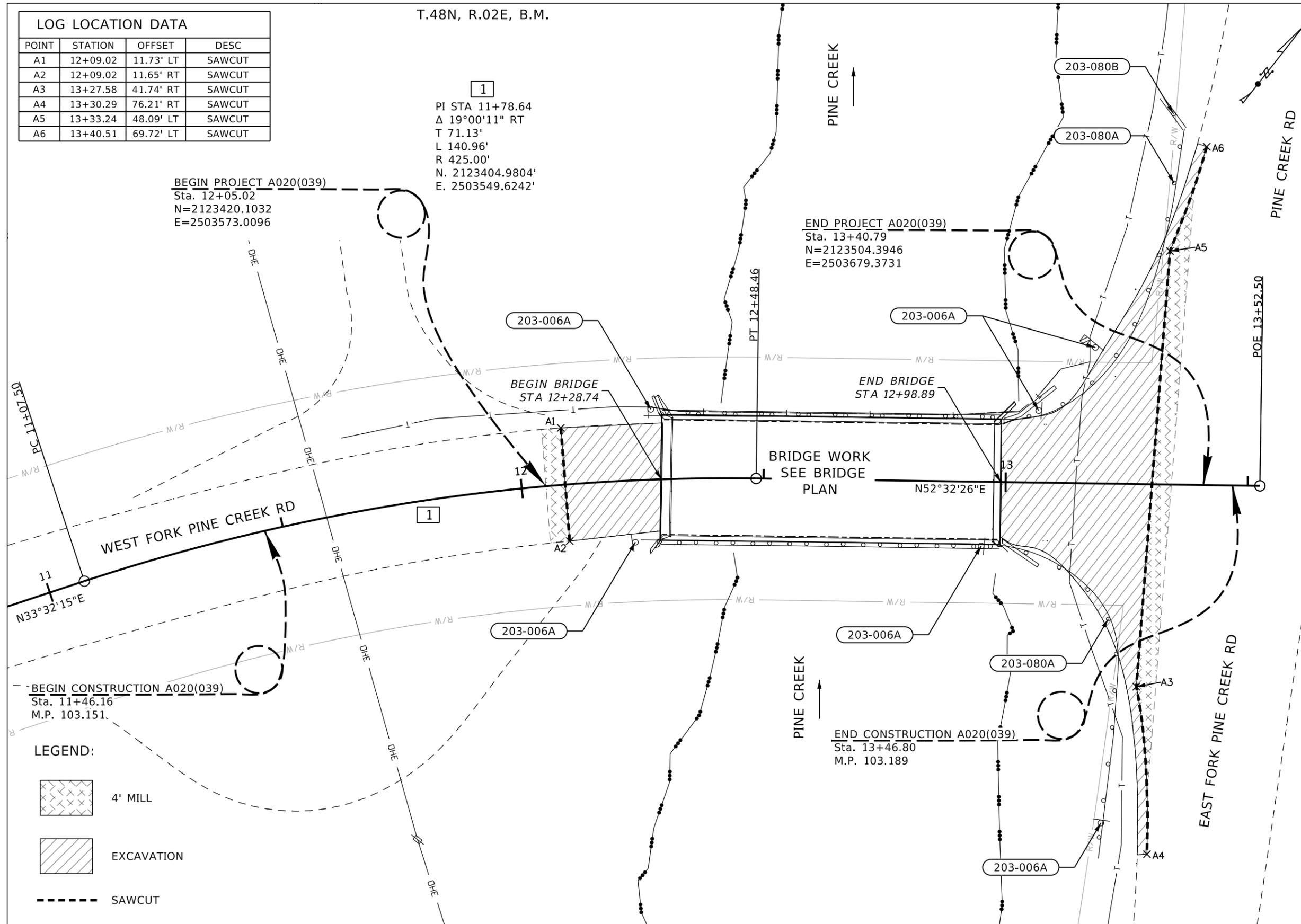
BEGIN CONSTRUCTION A020(039)
 Sta. 11+46.16
 M.P. 103.151

END CONSTRUCTION A020(039)
 Sta. 13+46.80
 M.P. 103.189

LEGEND:

-  4' MILL
-  EXCAVATION
-  SAWCUT

- 203-006A REMOVAL OF SIGN
 1 EACH STA 12+22.95, 12.76' RT
 1 EACH STA 12+27.23, 14.49' LT
 1 EACH STA 12+95.13, 13.23' RT
 1 EACH STA 13+06.60' 14.85' LT
 1 EACH STA 13+18.12' 28.02' LT
 1 EACH STA 13+20.69' 69.92' RT
- 203-080A REMOVAL OF GUARDRAIL
 79.0 FT STA 12+99.00 TO 13+23.80 RT
 78.0 FT STA 12+99.00 TO 13+35.85 LT
- 203-080B REMOVAL OF BARRIER
 8 FT STA 13+30.70 TO 13+36.17 LT



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED M. LEVESEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME 20039 DEMO.dgn DRAWING DATE: 17-FEB-2025
DESIGN CHECKED G.E. SIEGFORD	
DETAILED M. LEVESEY	
DRAWING CHECKED G.E. SIEGFORD	

IDAHO TRANSPORTATION DEPARTMENT
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HMH engineering

PROJECT NO. A020(039)

DEMO SHEET WEST FORK PINE CREEK ROAD BRIDGE
--

ENGLISH
COUNTY SHOSHONE
KEY NUMBER 20039
SHEET 5 OF 19



LOG LOCATION DATA			
POINT	STATION	OFFSET	DESC
A1	12+05.02	11.76' RT	EOP
A2	12+05.02	11.73' LT	EOP

T.48N, R.02E, B.M.

① GUARDRAIL LOW SPEED TRANSITION MAY BE NESTED WHERE WINGWALL INTERFERES WITH POST LOCATION

①
 PI STA 11+78.64
 Δ 19°00'11" RT
 T 71.13'
 L 140.96'
 R 425.00'
 N. 2123404.9804'
 E. 2503549.6242'

BEGIN PROJECT A020(039)
 Sta. 12+05.02
 N=2123420.1032
 E=2503573.0096

END PROJECT A020(039)
 Sta. 13+40.79
 N=2123504.3946
 E=2503679.3731

BEGIN BRIDGE
 STA 12+28.74

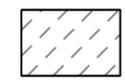
END BRIDGE
 STA 12+98.89

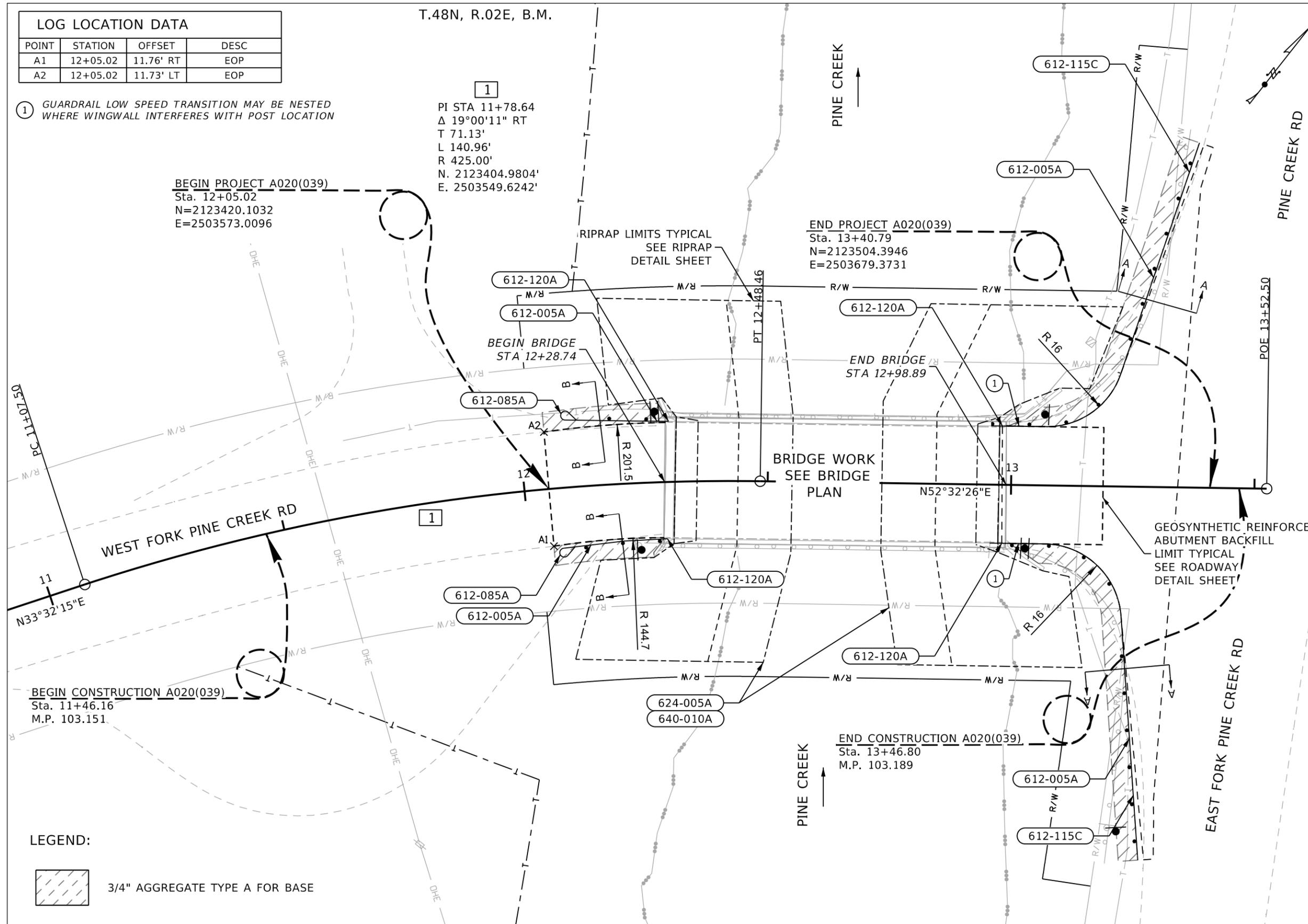
BRIDGE WORK
 SEE BRIDGE
 PLAN

BEGIN CONSTRUCTION A020(039)
 Sta. 11+46.16
 M.P. 103.151

END CONSTRUCTION A020(039)
 Sta. 13+46.80
 M.P. 103.189

LEGEND:

 3/4" AGGREGATE TYPE A FOR BASE



- 612-005A W-BEAM GUARDRAIL
 21.5 FT
 STA 12+07.04 TO 12+29.06 RT
 21.5 FT
 STA 12+09.40 TO 12+29.99 LT
 82.0 FT
 STA 12+95.73 TO 13+37.67 LT
 86.0 FT
 STA 12+95.76 TO 13+27.12 RT
- 612-085A GUARDRAIL TERMINAL
 TYPE 8
 1 EACH
 STA 12+06.23, 13.6' RT
 1 EACH
 STA 12+08.72, 15.1' LT
- 612-115C GUARDRAIL TERMINAL,
 TANGENT
 1 EACH
 STA 13+27.12, 76.47' RT
 1 EACH
 STA 13+37.67, 70.64' LT
- 612-120A GUARDRAIL TRANSITION,
 LOW SPEED
 1 EACH
 STA 12+29.06, 11.61' RT
 1 EACH
 STA 12+29.99, 13.39' LT
 1 EACH
 STA 12+98.25, 11.98' RT
 1 EACH
 STA 12+95.73, 12.04' LT
- 624-005A LOOSE RIPRAP, CLASS IX
 396.5 CY
 STA 12+07.76 TO 12+55.13
 394.5 CY
 STA 12+93.00 TO 12+22.48
- 640-010A RIPRAP/EROSION CONTROL
 GEOTEXTILE
 391.0 SY
 STA 12+07.76 TO 12+55.13
 389.0 SY
 STA 12+93.00 TO 12+22.48

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED M. LEVESEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G.E. SIEGFORD	CADD FILE NAME 20039 PLAN.dgn
DETAILED M. LEVESEY	DRAWING DATE: 17-FEB-2025
DRAWING CHECKED G.E. SIEGFORD	

**IDAHO
TRANSPORTATION
DEPARTMENT**

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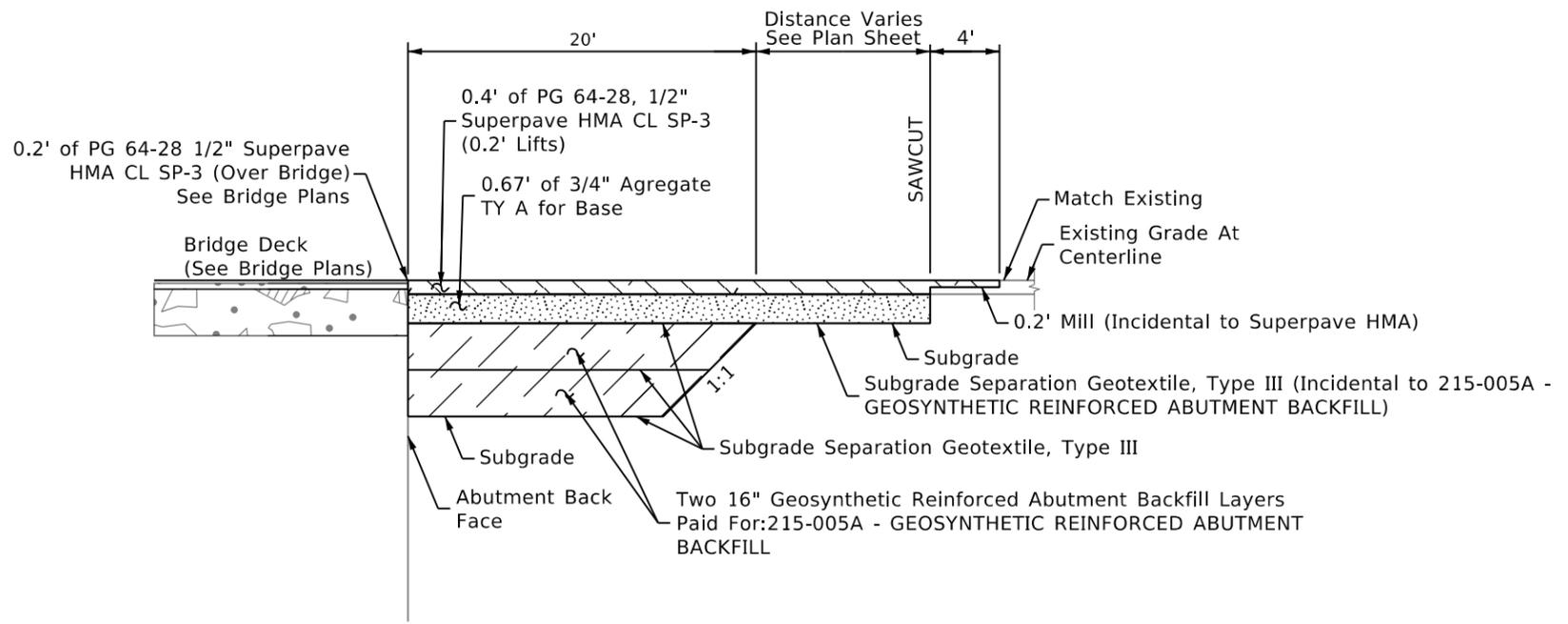
HMH engineering

PROJECT NO.
A020(039)

PLAN SHEET
**WEST FORK PINE CREEK
ROAD BRIDGE**

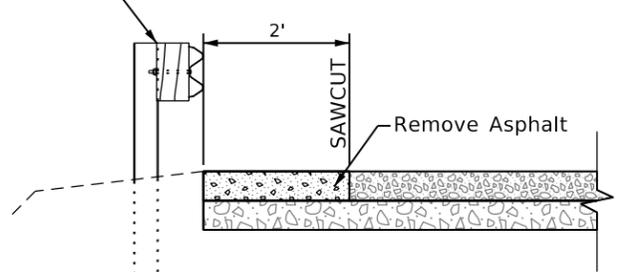
ENGLISH
 COUNTY SHOSHONE
 KEY NUMBER 20039
 SHEET 6 OF 19



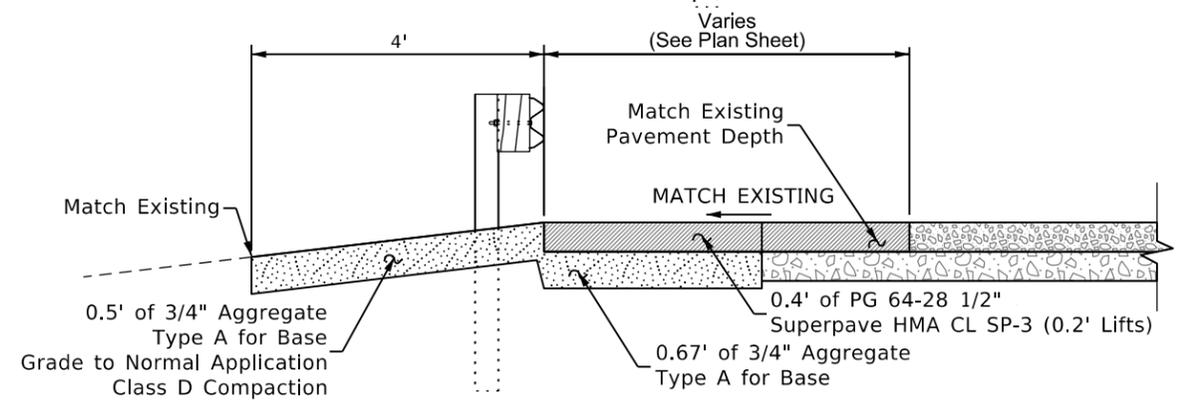


APPROACH WORK TYPICAL SECTION VIEW
 EAST SIDE SHOWN, WEST SIDE SIMILAR
 N.T.S

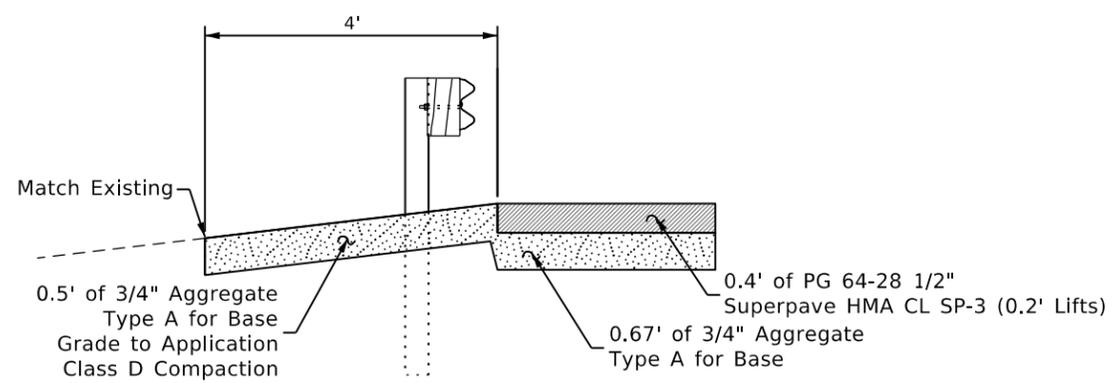
DEMOLITION



IMPROVEMENTS



SECTION A-A
 N.T.S



SECTION B-B
 N.T.S

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	M. LEVESEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME 20039 DETL.dgn DRAWING DATE: 17-FEB-2025
DESIGN CHECKED	G.E. SIEGFORD	
DETAILED	M. LEVESEY	
DRAWING CHECKED	G.E. SIEGFORD	

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

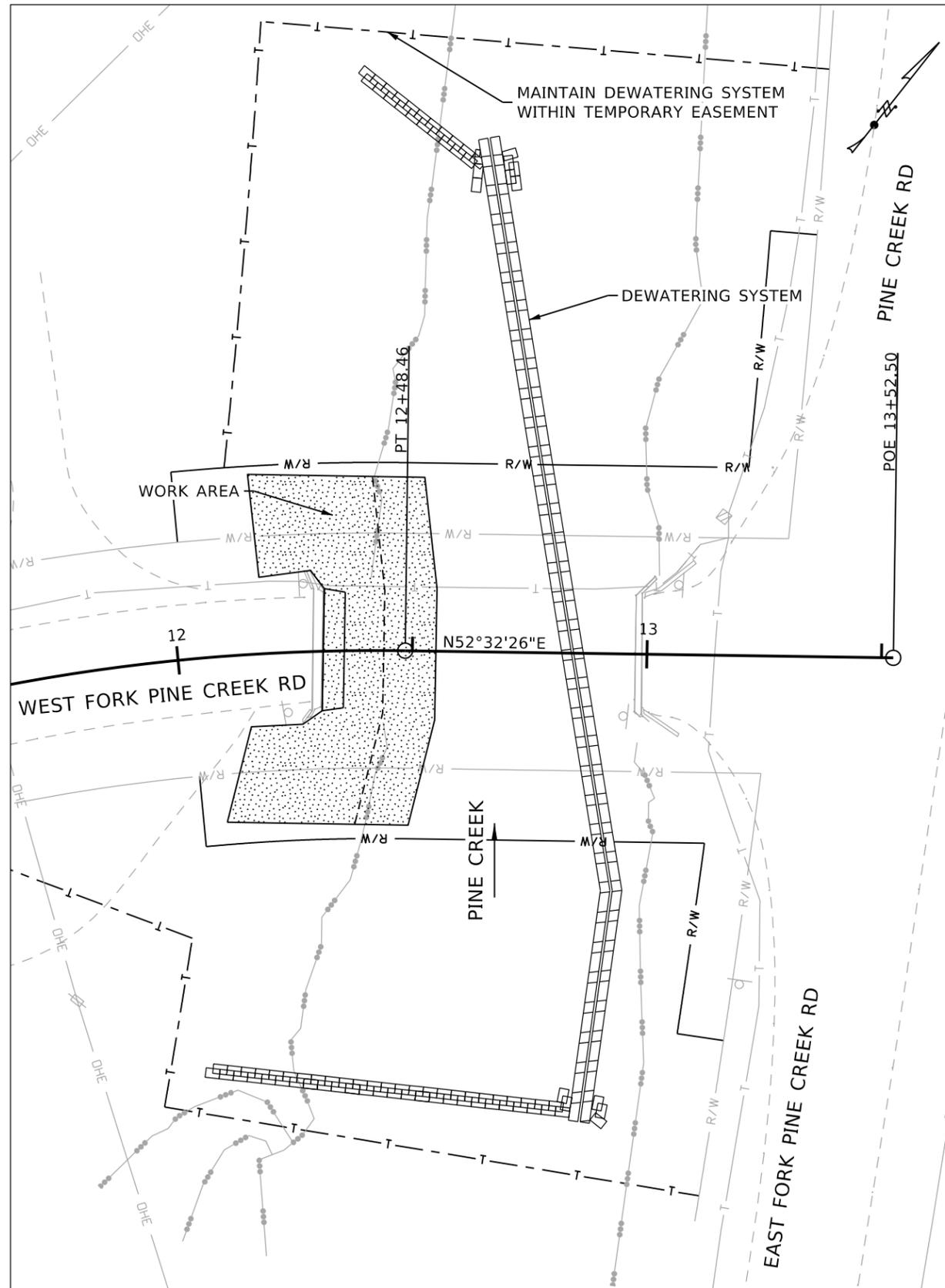
HMH engineering

PROJECT NO.	A020(039)
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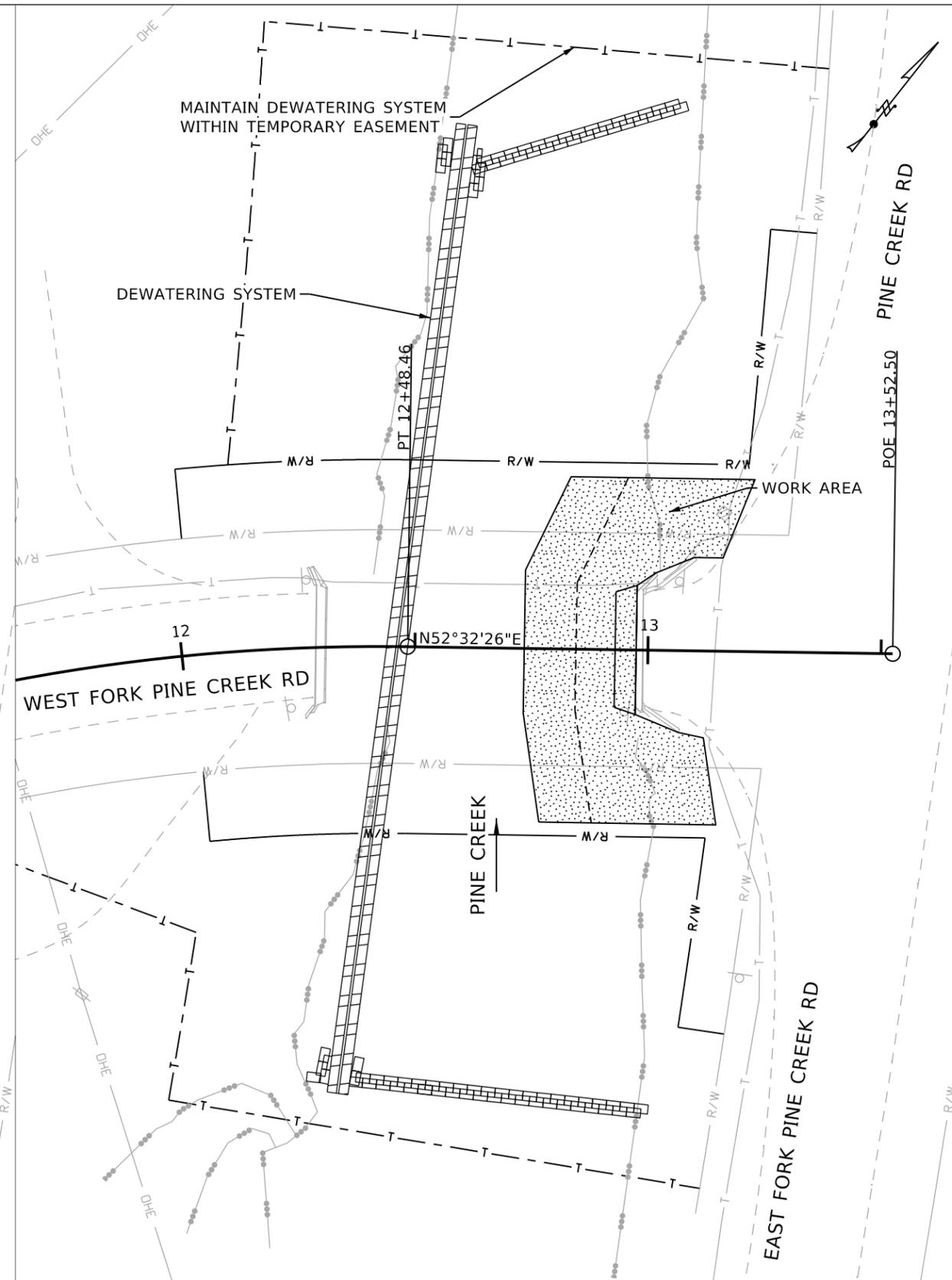
ROADWAY DETAILS	WEST FORK PINE CREEK ROAD BRIDGE
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ENGLISH
COUNTY SHOSHONE
KEY NUMBER 20039
SHEET 7 OF 19





Stage 1
N.T.S



Stage 2
N.T.S

NOTE:
Dewatering system shown for illustration purposes only. Contractor to comply with section 560-DEWATERING FOUNDATION

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED M. LEVESEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G.E. SIEGFORD	
DETAILED M. LEVESEY	CADD FILE NAME 20039 DETL.dgn
DRAWING CHECKED G.E. SIEGFORD	DRAWING DATE: 17-FEB-2025

IDAHO
TRANSPORTATION
DEPARTMENT

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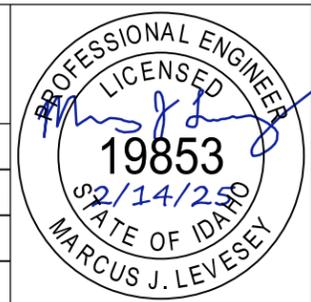
HMH engineering

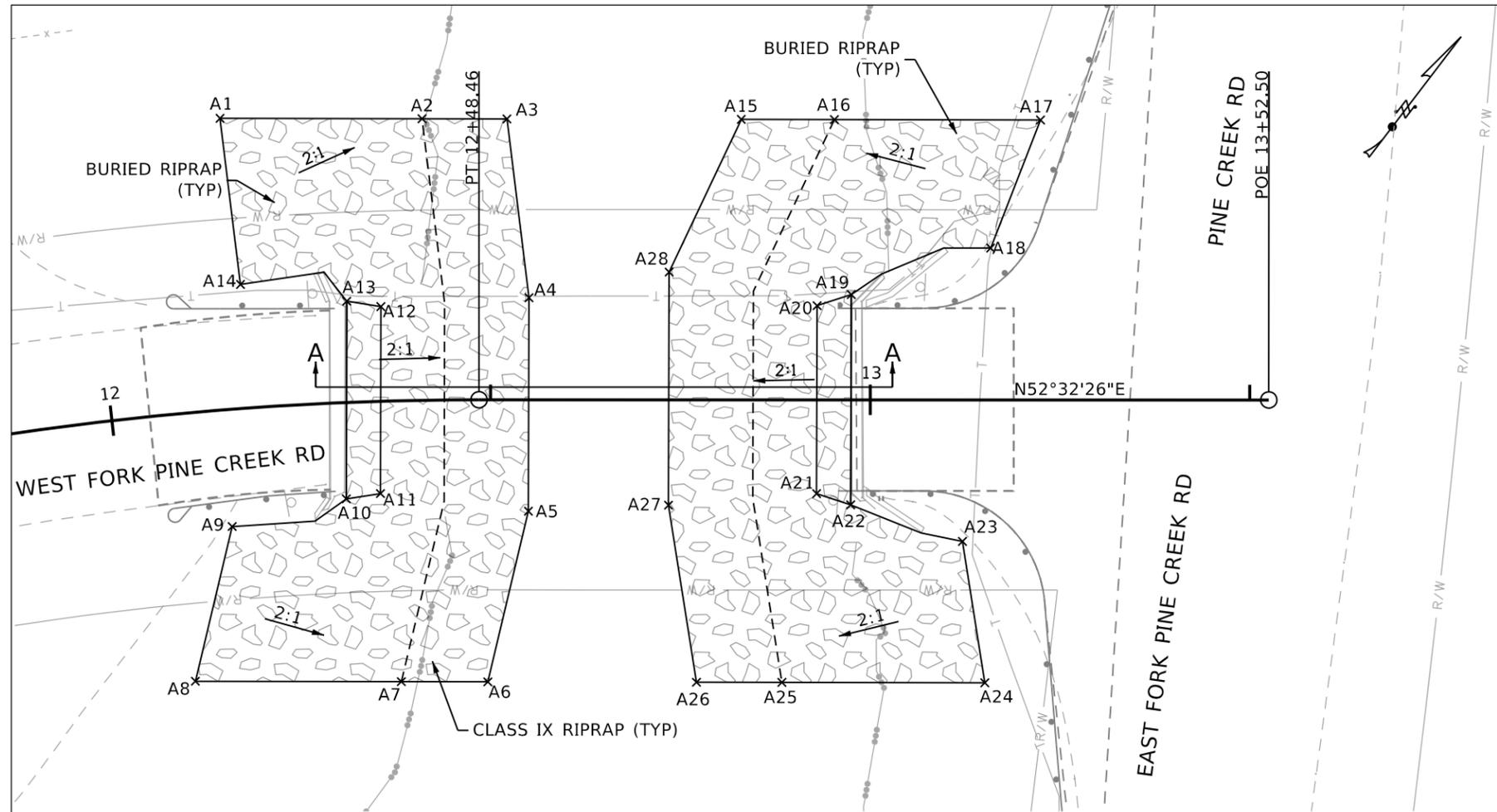


PROJECT NO.	A020(039)
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DEWATERING DETAILS	WEST FORK PINE CREEK ROAD BRIDGE
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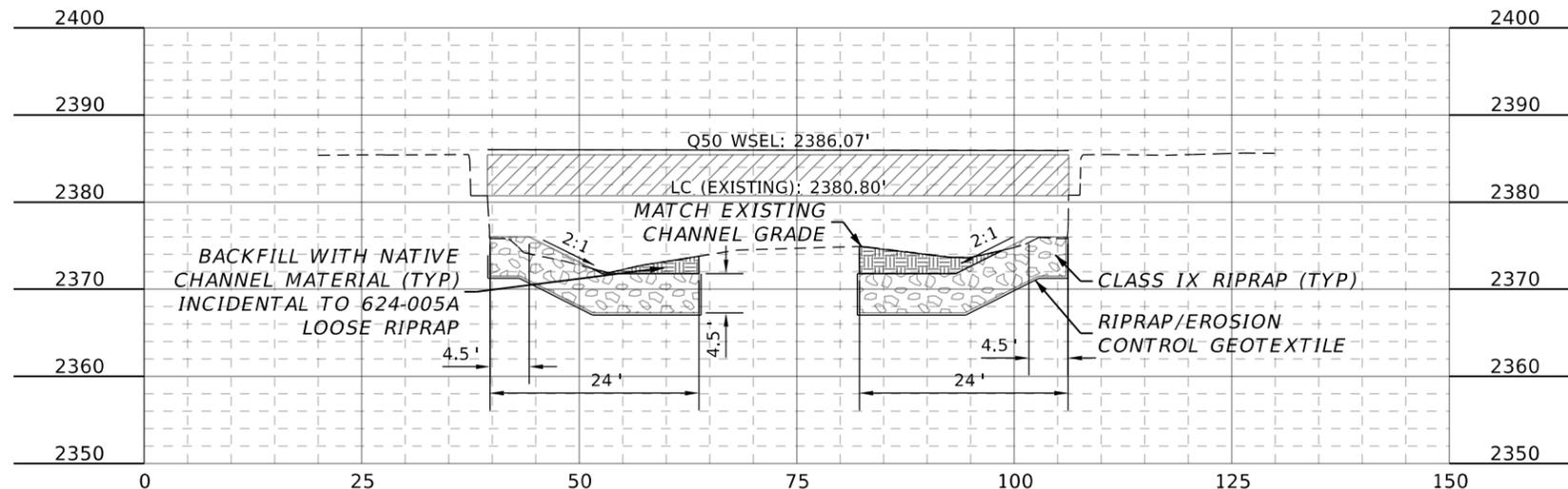
ENGLISH	
COUNTY	SHOSHONE
KEY NUMBER	20039
SHEET	8 OF 19



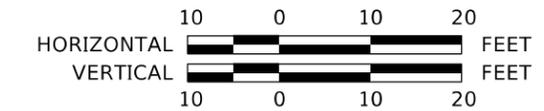


LOG LOCATION DATA				
POINT	STATION	OFFSET	ELEV	DESC
A1	12+17.13	38.25' LT	2384.80	RIPRAP
A2	12+41.55	37.01' LT	2371.80	RIPRAP
A3	12+52.14	36.93' LT	2371.80	RIPRAP
A4	12+55.04	13.42' LT	2371.80	RIPRAP
A5	12+54.97	14.65' RT	2371.80	RIPRAP
A6	12+49.68	37.11' RT	2371.80	RIPRAP
A7	12+37.35	36.91' RT	2371.80	RIPRAP
A8	12+07.68	35.23' RT	2384.30	RIPRAP
A9	12+14.69	15.38' RT	2384.85	RIPRAP
A10	12+30.43	12.77' RT	2376.00	RIPRAP
A11	12+35.10	12.14' RT	2376.00	RIPRAP
A12	12+35.90	12.43' LT	2376.00	RIPRAP
A13	12+31.62	13.33' LT	2376.00	RIPRAP
A14	12+18.17	16.28' LT	2384.80	RIPRAP
A15	12+83.01	36.87' LT	2371.80	RIPRAP
A16	12+95.43	36.97' LT	2371.80	RIPRAP
A17	13+22.41	36.81' LT	2384.40	RIPRAP
A18	13+15.85	19.96' LT	2385.00	RIPRAP
A19	12+97.48	13.82' LT	2376.00	RIPRAP
A20	12+92.99	12.39' LT	2376.00	RIPRAP
A21	12+92.93	12.33' RT	2376.00	RIPRAP
A22	12+97.43	13.80' RT	2376.00	RIPRAP
A23	13+12.15	18.60' RT	2385.40	RIPRAP
A24	13+15.10	37.20' RT	2385.20	RIPRAP
A25	12+88.36	37.15' RT	2371.80	RIPRAP
A26	12+77.12	37.13' RT	2371.80	RIPRAP
A27	12+73.43	13.85' RT	2371.80	RIPRAP
A28	12+73.49	16.88' LT	2371.80	RIPRAP

ELEVATIONS ARE TO TOP OF FINISHED RIPRAP



NOTE:
 REMOVE EXISTING STONES LESS THAN D50 BY VISUAL INSPECTION.
 INCIDENTAL TO 624-005A LOOSE RIPRAP
 MATERIAL/EXCAVATION FOR ACCESS IS THE RESPONSIBILITY OF THE CONTRACTOR



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED F. HALL	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME 20039 DETL.dgn DRAWING DATE: 17-FEB-2025
DESIGN CHECKED J. SHAW	
DETAILED F. HALL	
DRAWING CHECKED J. SHAW	

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PROJECT NO.	A020(039)
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RIPRAP DETAIL	WEST FORK PINE CREEK ROAD BRIDGE
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ENGLISH
COUNTY SHOSHONE
KEY NUMBER 20039
SHEET 9 OF 19



T.48N, R.02E, B.M.

1

PI STA 11+78.64
 Δ 19°00'11" RT
 T 71.13'
 L 140.96'
 R 425.00'
 N. 2123404.9804'
 E. 2503549.6242'

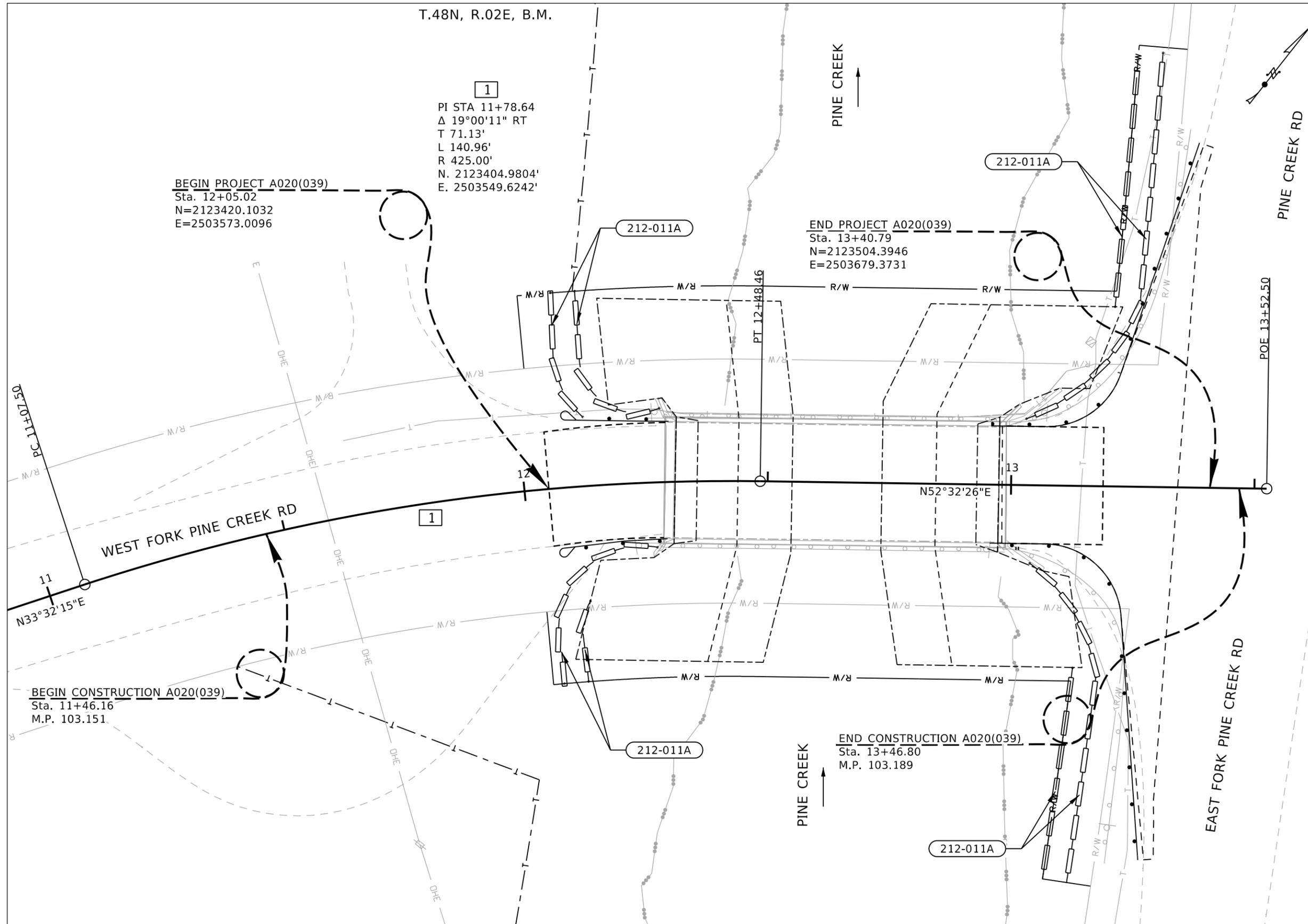
BEGIN PROJECT A020(039)
 Sta. 12+05.02
 N=2123420.1032
 E=2503573.0096

END PROJECT A020(039)
 Sta. 13+40.79
 N=2123504.3946
 E=2503679.3731

BEGIN CONSTRUCTION A020(039)
 Sta. 11+46.16
 M.P. 103.151

END CONSTRUCTION A020(039)
 Sta. 13+46.80
 M.P. 103.189

212-011A	FIBER WATTLE
41.5 FT	STA 12+04.69 TO STA 12+26.94 RT
17.0 FT	STA 12+10.21 TO STA 12+11.89 RT
25.0 FT	STA 12+08.50 TO STA 12+12.99 LT
36.5 FT	STA 12+13.07 TO STA 12+28.22 LT
70.5 FT	STA 13+04.07 TO STA 13+12.57 RT
43.5 FT	STA 13+07.62 TO STA 13+13.16 RT
85.5 FT	STA 13+02.97 TO STA 13+29.93 LT
50.5 FT	STA 13+20.85 TO STA 13+24.80 LT



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED M. LEVESEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME 20039 SWPP.dgn DRAWING DATE: 17-FEB-2025
DESIGN CHECKED G.E. SIEGFORD	
DETAILED M. LEVESEY	
DRAWING CHECKED G.E. SIEGFORD	

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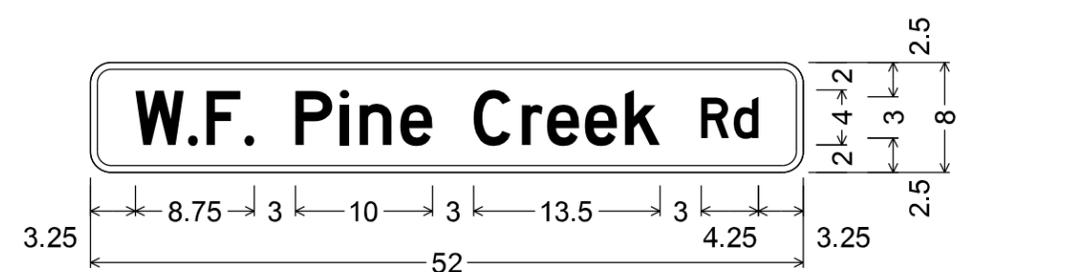
PROJECT NO.	A020(039)
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POLLUTION PREVENTION PLAN	WEST FORK PINE CREEK ROAD BRIDGE
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ENGLISH	
COUNTY	SHOSHONE
KEY NUMBER	20039
SHEET	10 OF 19

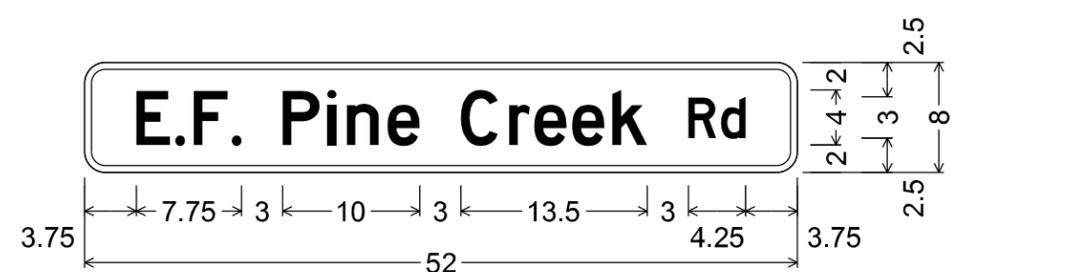


SIGN ASSEMBLY NO.	STATION LT. OR RT.		RAMP NO.	FOUNDATION SIZE	POST TYPE	NO. OF POST	POST SPACING	APPROX. LENGTH OF 1ST POST	APPROX. LENGTH OF 2ND POST	C	E	SIGN TYPE	SIGN DETAIL NUMBERS	SIGN SIZE W" x H"			APPROX. SQ. FT. OF SIGN	SIGN BACKGROUND COLOR	SIGN BRACKETS & BRACE ANGLES WEIGHT (LBS)	BRACKET NO.	REMARKS
	W	X												H							
1	12+27.23	LEFT		4.0'	D-2	1		13.5'			7.00'	B	R2-1	24	X	30	5.0	WHITE	0.0		SPEED LIMIT 25
											4.00'	B	OM3-L	12	X	36	3.0	YELLOW	0.0		OBJECT MARKER
2	12+23.50	RIGHT		3.5'	D-1	1		10.5'			4.00'	B	OM3-R	12	X	36	3.0	YELLOW	0.0		OBJECT MARKER
3	13+06.78	LEFT		3.5'	D-1	1		10.5'			4.00'	B	OM3-R	12	X	36	3.0	YELLOW	0.0		OBJECT MARKER
4	13+03.00	RIGHT		4.0'	D-2	1		15.0'			10.17'	B	D3-1	52	X	8	2.9	GREEN	0.0		E.F. PINE CREEK RD
											10.17'	B	D3-1	52	X	8	2.9	GREEN	0.0		E.F. PINE CREEK RD
											9.50'	B	D3-1	52	X	8	2.9	GREEN	0.0		W.F. PINE CREEK RD
											9.50'	B	D3-1	52	X	8	2.9	GREEN	0.0		W.F. PINE CREEK RD
											7.00'	B	R1-2	30	X	30	3.1	RED	0.0		YIELD
											4.00'	B	OM3-L	12	X	36	3.0	YELLOW	0.0		OBJECT MARKER
5	13+22.53	RIGHT		3.5'	D-1	1		13.0'			7.00'	B	R2-1	24	X	30	5.0	WHITE	0.0		SPEED LIMIT 35



Identifier : D3-1◇;
 1.500" Radius, 0.500" Border, White on Green;
 [W.F.] D 2K; [Pine] D 2K; [Creek] D 2K;
 [Rd] D 2K;
 Table of widths and spaces.

3.250	W	3.625	0.250	0.750	0.625	F	2.500	0.250	0.750			
3.000	P	2.625	0.625	0.625	0.750	n	2.375	0.625	2.375			
3.000	C	2.625	0.875	1.500	0.375	e	2.250	0.500	2.250	0.625	k	2.500
3.000	R	2.125	0.250	1.875	3.250							



Identifier : D3-1◇;
 1.500" Radius, 0.500" Border, White on Green;
 [E.F.] D 2K; [Pine] D 2K; [Creek] D 2K;
 [Rd] D 2K;
 Table of widths and spaces.

3.750	E	2.500	0.375	0.750	0.625	F	2.500	0.250	0.750			
3.000	P	2.625	0.625	0.625	0.750	n	2.375	0.625	2.375			
3.000	C	2.625	0.875	1.500	0.375	e	2.250	0.500	2.250	0.625	k	2.500
3.000	R	2.125	0.250	1.875	3.750							

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED M. LEVESEY
 DESIGN CHECKED G.E. SIEGFORD
 DETAILED M. LEVESEY
 DRAWING CHECKED G.E. SIEGFORD

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME 20039_SIGN.dgn
 DRAWING DATE: 17-FEB-2025

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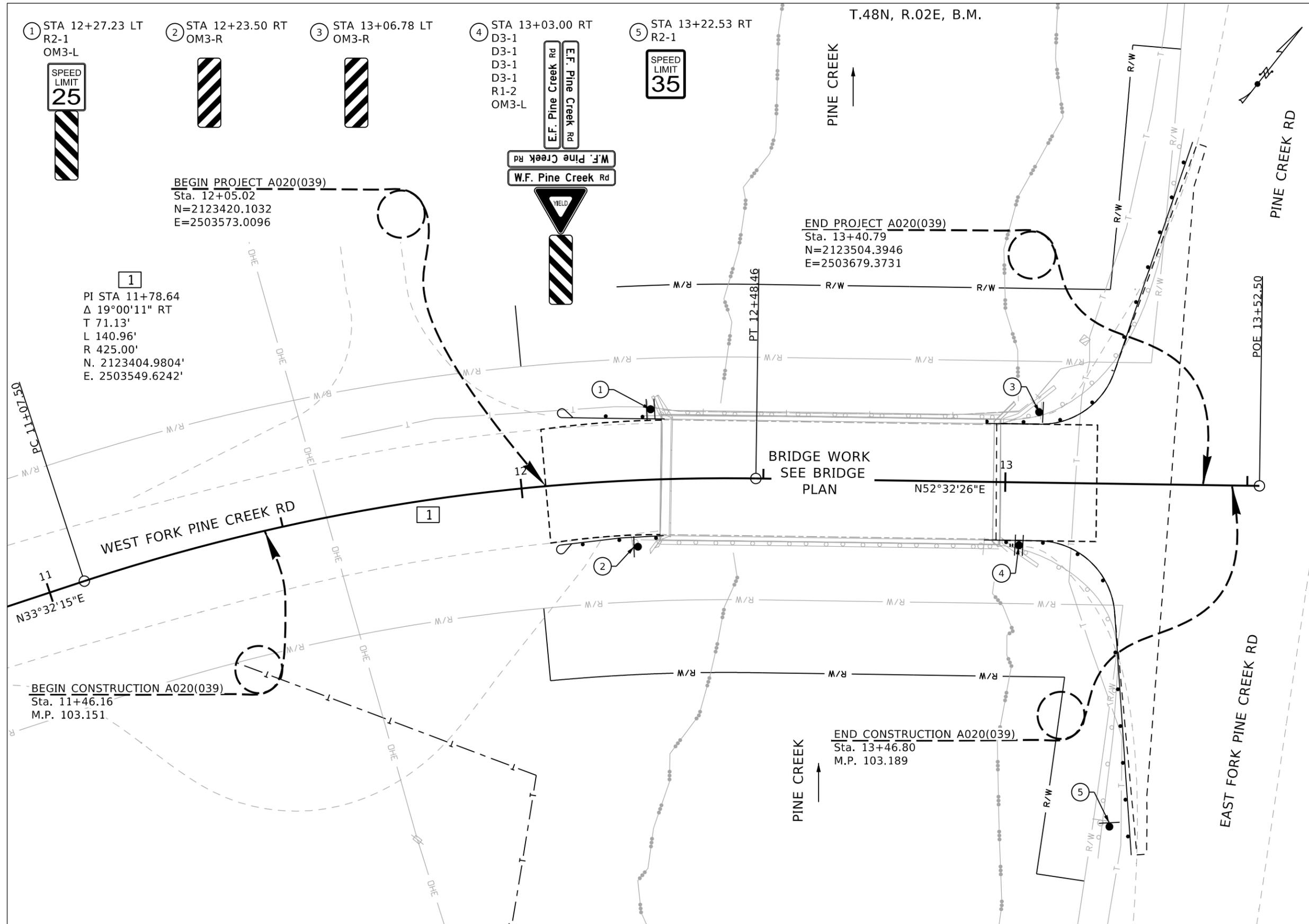
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PROJECT NO. A020(039)

SIGN ERECTION TABLE
 WEST FORK PINE CREEK ROAD BRIDGE

ENGLISH
 COUNTY SHOSHONE
 KEY NUMBER 20039
 SHEET 11 OF 19





REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED M. LEVESEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME 20039 SPM.dgn DRAWING DATE: 17-FEB-2025
DESIGN CHECKED G.E. SIEGFORD	
DETAILED M. LEVESEY	
DRAWING CHECKED G.E. SIEGFORD	

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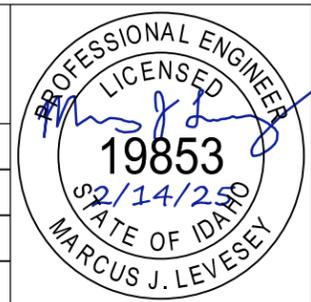


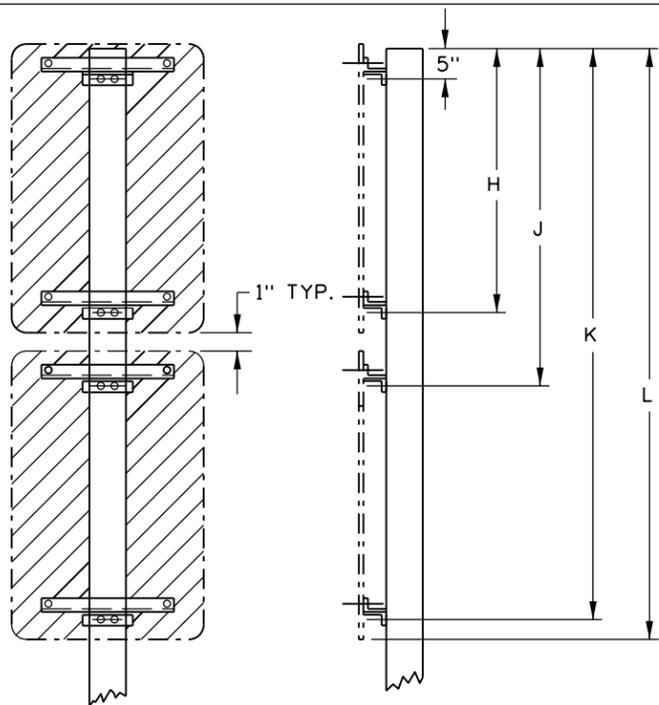
HMH engineering

PROJECT NO. A020(039)

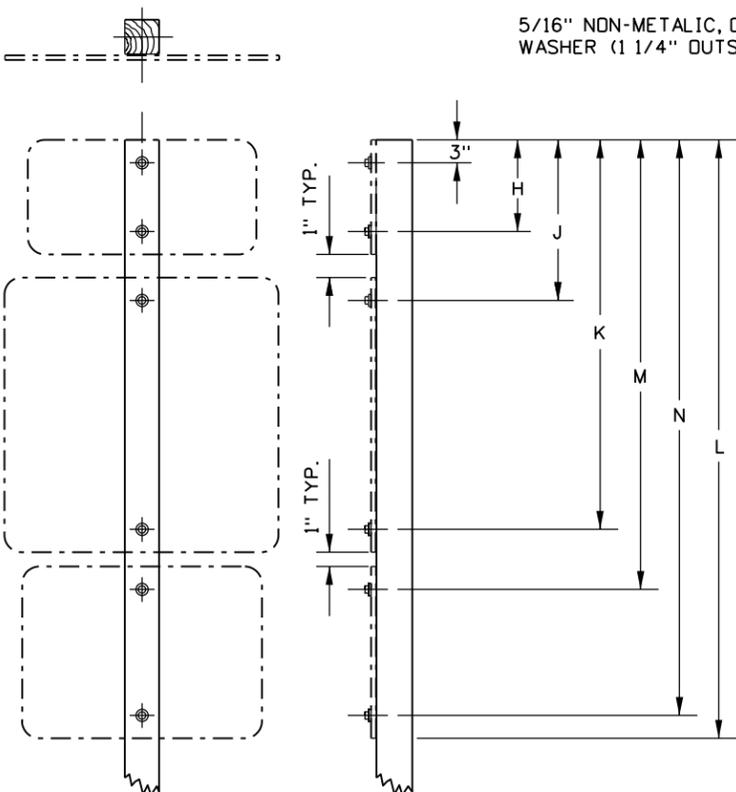
SIGN & PAVEMENT MARKINGS PLAN WEST FORK PINE CREEK ROAD BRIDGE
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ENGLISH
COUNTY SHOSHONE
KEY NUMBER 20039
SHEET 12 OF 19

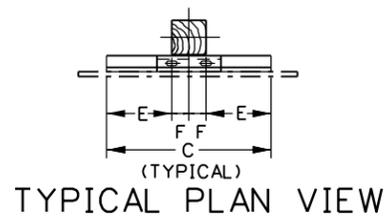




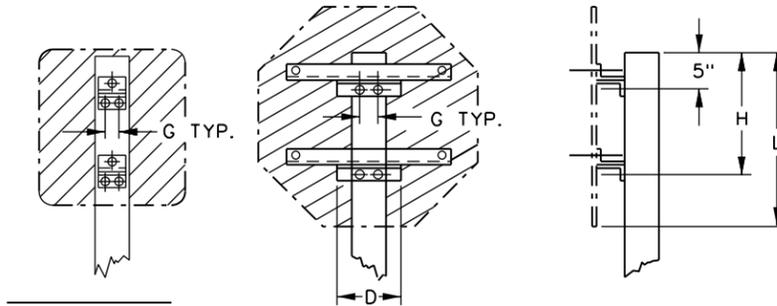
TYPICAL OF SIGNS MOUNTED WITH EIGHT BRACE ANGLES



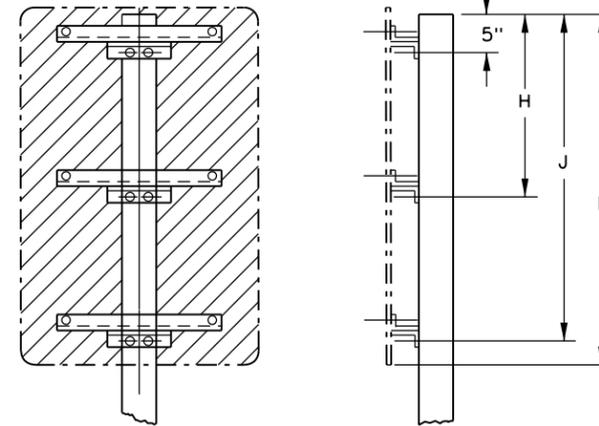
SIGNS MOUNTED w/o BRACE ANGLES



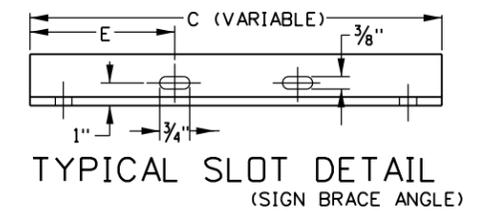
TYPICAL PLAN VIEW



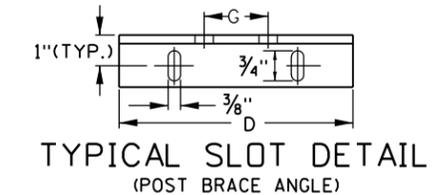
TYPICAL OF SIGNS MOUNTED WITH FOUR BRACE ANGLES



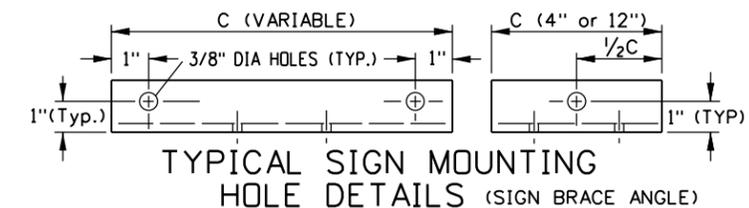
TYPICAL OF SIGN MOUNTED WITH SIX BRACE ANGLES



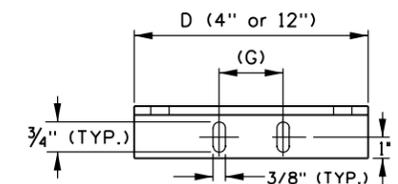
TYPICAL SLOT DETAIL (SIGN BRACE ANGLE)



TYPICAL SLOT DETAIL (POST BRACE ANGLE)



TYPICAL SIGN MOUNTING HOLE DETAILS (SIGN BRACE ANGLE)

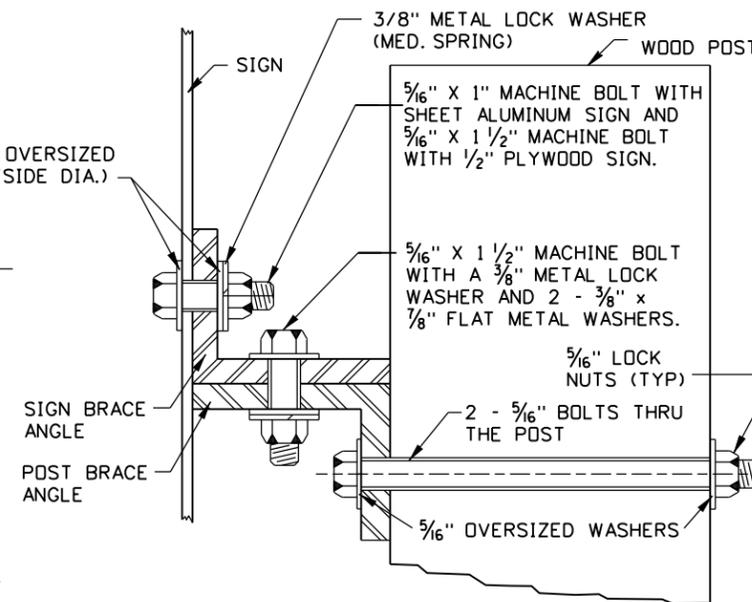


TYPICAL POST MOUNTING SLOT DETAILS (POST BRACE ANGLE)
NOTE: FOR 4" X 6" WOOD SIGN POSTS (G) DISTANCE IS 1 5/8".

SIGNS MOUNTED w/o BRACE ANGLES

BRACE ANGLE SPECIFICATIONS

SIGN DESCRIPTION	SIGN NO.	SIGN SIZE WDTX HGT.	C	D	E	F	G	H	J	K	TOTAL WT. OF BRACE ANGLE	L
WARNING SIGNS		48" DIAMOND	42"	12"	16"	5"	3"	25"	-	-	24.93LB'S	47"
		36" DIAMOND	26"	12"	8"	5"	3"	21"	-	-	17.54LB'S	36 1/2"
STOP	R1-1	48" x 48"	42"	12"	16"	5"	3"	25"	-	-	24.93LB'S	37"
STOP	R1-1	36" x 36"	26"	12"	8"	5"	3"	21"	-	-	17.54LB'S	29"
SPEED LIMIT	R2-1	36" x 48"	32"	12"	11"	5"	3"	25"	-	-	20.31LB'S	48"
SPEED LIMIT	R2-1	48" x 60"	32"	12"	11"	5"	3"	32"	59"	-	30.47LB'S	60"
DO NOT PASS	R4-1	36" x 48"	32"	12"	11"	5"	3"	47"	-	-	20.31LB'S	48"
PASS WITH CARE	R4-2	36" x 48"	32"	12"	11"	5"	3"	47"	-	-	20.31LB'S	48"
KEEP RIGHT	R4-7	48" x 60"	32"	12"	11"	5"	3"	32"	59"	-	30.47LB'S	60"
DO NOT ENTER	R5-1	36" x 36"	32"	4"	14 3/4"	1 1/4"	3"	35"	-	-	16.61LB'S	36"
EMERGENCY STOP	R8-7	48" x 36"	32"	12"	11"	5"	3"	35"	-	-	20.31LB'S	36"
TURN ARROW	W1-6	48" x 24"	32"	12"	11"	5"	3"	23"	-	-	20.31LB'S	24"
CURVE & ADVISORY		48" DIAMOND	42"	12"	16"	5"	3"	25"	-	-		
SPEED ASSEMBLY	W13-1P	24" x 24"	4"	4"	3/4"	1 1/4"	1 5/8"	-	53"	62"	32.32LB'S	53"



BRACE ANGLE ATTACHMENT DETAIL

NOTES:

- ALL BRACE ANGLES SHALL BE 1 3/4" x 1 3/4" x 1/4" @ 2.77 LBS/FT.
- SIGN BRACE ANGLES 4" OR 12" IN LENGTH SHALL HAVE ONE SIGN MOUNTING HOLE ONLY.
- SIGNS LESS THAN 36" x 36" MAY REQUIRE BRACE ANGLES.
- DRAWING NOT TO SCALE.

SIGN DESCRIPTION	SIGN NO.	SIGN SIZE WDTX HGT.	H	J	K	M	N	L
STOP	R1-1	30" x 30"	27"	-	-	-	-	30"
SPEED LIMIT	R2-1	24" x 30"	27"	-	-	-	-	30"
DO NOT PASS	R4-1	24" x 30"	27"	-	-	-	-	30"
PASS WITH CARE	R4-2	24" x 30"	27"	-	-	-	-	30"
KEEP RIGHT	R4-7	24" x 30"	27"	-	-	-	-	30"
DO NOT ENTER	R5-1	30" x 30"	27"	-	-	-	-	30"
ONE WAY	R6-1	36" x 12"	6"	-	-	-	-	12"
WRONG WAY	R5-1a	36" x 24"	21"	-	-	-	-	24"
CONFIRMING ROUTE SIGN	M1-1 THRU M1-5	24" x 24"	21"	-	-	-	-	24"
CARDINAL DIRECTION SIGN ASSEMBLY	M3-1 THRU M3-4	24" x 12"	10 1/2"	-	-	-	-	37"
	RTE. SIGN	24" x 24"	-	16"	34"	-	-	
TRAIL BLAZER ASSEMBLY	M4-5	24" x 12"	10 1/2"	-	-	-	-	
	RTE. SIGN	24" x 24"	-	16"	34"	-	-	53"
	ARROW	21" x 15"	-	-	-	-	39 1/2"	51 1/2"

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	M. LEVESEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	G.E. SIEGFORD	
DETAILED	M. LEVESEY	CADD FILE NAME 20039 DETL.dgn
DRAWING CHECKED	G.E. SIEGFORD	DRAWING DATE: 17-FEB-2025

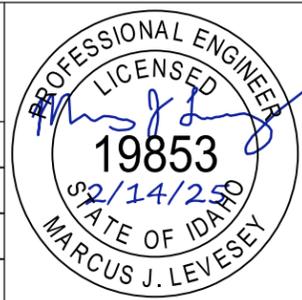
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PROJECT NO.	A020(039)
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SIGN DETAIL	WEST FORK PINE CREEK ROAD BRIDGE
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ENGLISH
COUNTY SHOSHONE
KEY NUMBER 20039
SHEET 13 OF 19



GENERAL NOTES TRAFFIC CONTROL DEVICES

1. MAINTAIN A MINIMUM 10' LANE AT ALL TIMES THROUGH THE WORK ZONE. FLAGGERS WILL BE USED APPROACHES WHEN VOLUMES REQUIRE IT OR AS DIRECTED BY THE ENGINEER. ALL FLAGGERS MUST HAVE TWO-WAY RADIOS ON THE PROJECT.
2. CONFORM TO ALL APPLICABLE PROVISIONS OF THE FHWA'S MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS ADOPTED BY THE STATE FOR FABRICATION AND INSTALLATION OF TRAFFIC CONTROL DEVICES.
3. USE CONTRACTOR APPROVED TRAFFIC CONTROL PLANS FOR MOUNTING CONFIGURATION, NUMBER OF SIGNS AND MINOR ADJUSTMENTS NEEDED FOR TRAFFIC CONTROL DEVICES, OR AS DIRECTED BY THE ENGINEER. PERIODICALLY CHECK THE OVERALL EFFECTIVENESS AND PLACEMENT OF THESE INSTALLATIONS UNDER BOTH NIGHT AND DAY CONDITIONS.
4. SPACING FOR ALL CHANNELIZATION DEVICES SHOULD NOT EXCEED A DISTANCE EQUAL TO THE POSTED SPEED LIMIT WHEN USED FOR TAPER CHANNELIZATION AND A DISTANCE OF TWICE THE POSTED SPEED LIMIT WHEN USED FOR TANGENT CHANNELIZATION.
5. MOUNT ALL SIGNS IN A HIGH PROFILE MANNER WITH 2 STANDARD FLAGS (SEE THE MUTCD, PART 6 FIG. 6F-1 & 6F-2). PLACE ALL SIGNS REMAINING UP FOR THE DURATION OF THE PROTECT ON GROUND MOUNTED POSTS.
6. ALL PORTABLE SIGN STANDS, FLAGS, TWO-WAY RADIOS, AND WARNING LIGHTS ARE CONSIDERED AS INCIDENTAL ITEMS PAID FOR UNDER ITEM 626-105A TEMPORARY TRAFFIC CONTROL MAINTENANCE.
7. COVER UP OR REMOVE ALL EXISTING SIGNING THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING. REPLACE SIGNS REMOVED DURING CONSTRUCTION PRIOR TO COMPLETION OF THE PROJECT. REPLACE ANY SIGNS DAMAGED DURING REMOVAL OR STORAGE AT CONTRACTOR'S EXPENSE.
8. ALL SIGN NUMBER DESIGNATIONS MATCH THOSE LISTED IN THE MUTCD, UNLESS OTHERWISE INDICATED.
9. REMOVE OR LAY DOWN SIGNS AND SIGN STANDS NOT IN USE OUTSIDE THE CLEARZONE.
10. IF A BUFFER SPACE IS USED, THE VALUES SHOWN IN TABLE 6C-2 MAY BE USED TO DETERMINE THE LENGTH OF THE LONGITUDINAL BUFFER SPACE.
11. IF THE SPEED IS BEING REDUCED BY MORE THAN 10 MPH, USE ADDITIONAL WARNING SIGNS PER THE MUTCD.

MERGING TAPER = AT LEAST L
SHIFTING TAPER = AT LEAST 0.5 L
SHOULDER TAPER (ST) = AT LEAST 0.33L
ONE LANE, TWO WAY TRAFFIC TAPER = 100' MAX.
DOWNSTREAM TAPER = 100' PER LANE

*SPEED (MPH)	DISTANCE (FT.)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

*Posted speed, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed

(40 MPH or Less)	(45 MPH or More)
$L = \frac{WS^2}{60}$	$L = WS$
W = WIDTH OF OFFSET IN FEET	W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED	S = POSTED SPEED

L = Merging Taper
 1/2 L = Shifting Taper
 1/3 L = Shoulder Taper

ROAD TYPE	DISTANCE BETWEEN SIGNS		
	A	B	C
RURAL	500'	500'	500'
URBAN (HIGH SPEED)	350'	350'	350'
URBAN (LOW SPEED)	100'	100'	100'



PLACE AT EACH END OF THE PROJECT LIMITS OF ALL THREE LOCATIONS

APPROXIMATE TRAFFIC CONTROL SIGN QUANTITIES							
SIGN NUMBER	DESCRIPTION	SIZE		AREA (SF)	QUAN	TOTAL AREA (SF)	
G20-2	END ROAD WORK	36	x 18	4.50	3	13.50	
R2-1	SPEED LIMIT (4-25) (35) (40)	24	x 30	5.00	6	30.00	
R2-6P	FINES HIGHER PLAQUE	24	x 24	4.00	3	12.00	
R10-6	STOP HERE ON RED	36	x 24	6.00	3	18.00	
W1-4	REVERSE CURVE	36	x 36	9.00	3	27.00	
W3-3 (o)	SIGNAL AHEAD	36	x 36	9.00	3	27.00	
W20-1	ROAD WORK AHEAD	36	x 36	9.00	3	27.00	
W20-4	ONE LANE ROAD AHEAD	36	x 36	9.00	3	27.00	
W20-7	FLAGGER	36	x 36	9.00	3	27.00	
SS-1	PEDESTRIANS REQUIRING ASSISTANCE WITH PASSAGE THROUGH PROJECT AREA TO CONTACT XXX-XXX-XXXX	30	x 24	5.00	3	15.00	
TEMPORARY TRAFFIC CONTROL SIGNS TOTAL (SF)						223.50	

SUBTOTAL: 223.50
 CONTINGENCY: 10%
 TOTAL: 246

TEMPORARY TRAFFIC CONTROL DEVICES			
BID ITEM	DESCRIPTION	UNIT	QUAN
626-010A	TEMPORARY TRAFFIC CONTROL SIGNS	SF	246
626-050A	DRUMS	EACH	24
626-092A	TEMPORARY PAVEMENT MARKING TAPE	FT	100
626-105A	TEMPORARY TRAFFIC CONTROL MAINTENANCE	HR	216
626-115B	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)	(3 EACH) DAY	477
626-120A	FLAGGER CONTROL	(2 PEOPLE) HR	432
626-130B	TEMPORARY TRAFFIC CONTROL SIGNAL	(3 EACH) DAY	456

SYMBOL LEGEND

- WORK ZONE
- TRAFFIC FLOW DIRECTION
- CONCRETE BARRIER
- TUBULAR MARKERS
- DRUMS
- BARRICADE TYPE III
- PORTABLE TRAFFIC SIGNAL
- SIGN
- TEMPORARY CRASH CUSHION

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED M. LEVESEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED G.E. SIEGFORD	
DETAILED M. LEVESEY	CADD FILE NAME 20039 TRCP.dgn
DRAWING CHECKED G.E. SIEGFORD	DRAWING DATE: 17-FEB-2025

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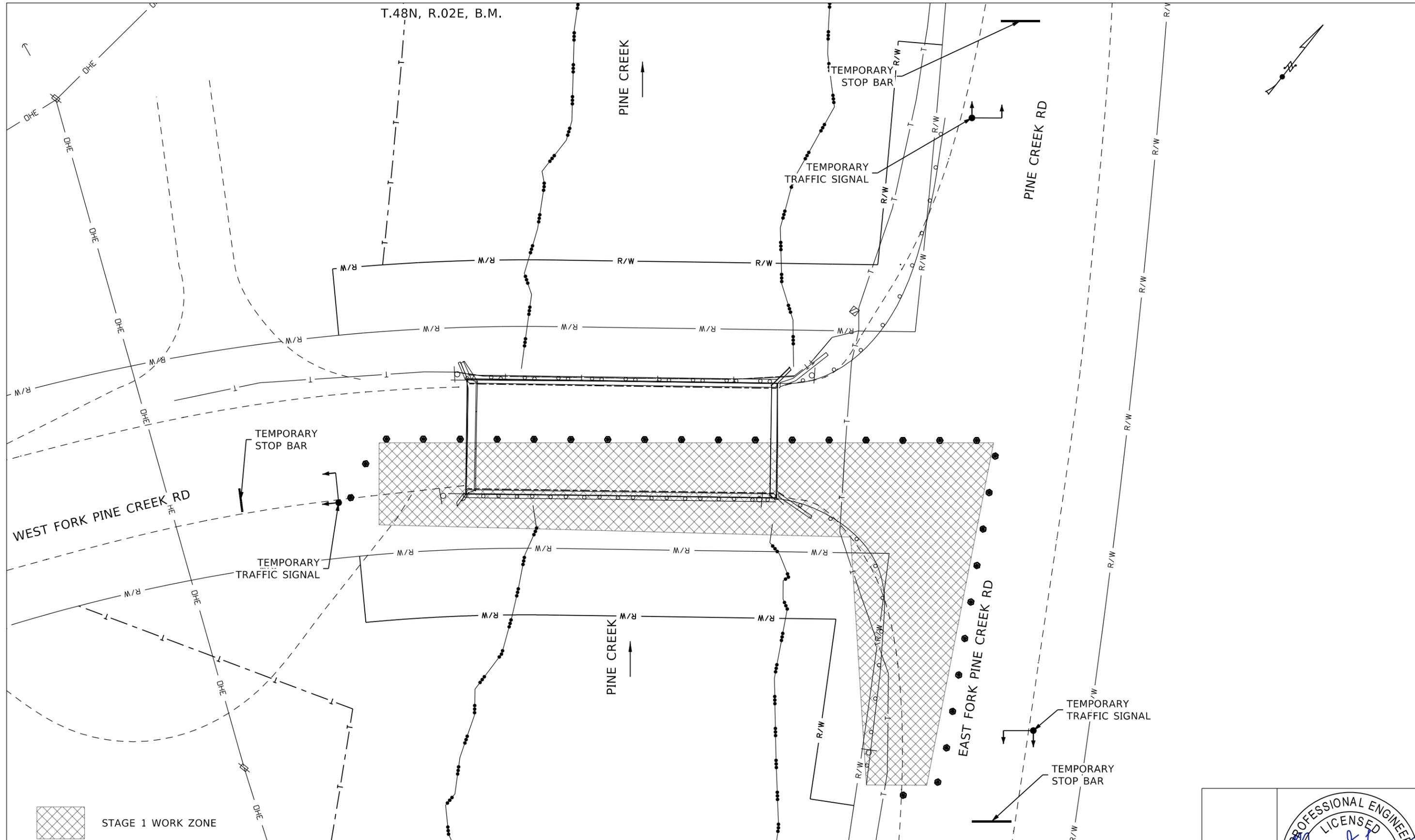
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PROJECT NO.	A020(039)
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TEMPORARY TRAFFIC CONTROL PLAN	WEST FORK PINE CREEK ROAD BRIDGE
--------------------------------	----------------------------------

ENGLISH
COUNTY SHOSHONE
KEY NUMBER 20039
SHEET 14 OF 19





 STAGE 1 WORK ZONE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	M. LEVESEY
DESIGN CHECKED	G.E. SIEGFORD
DETAILED	M. LEVESEY
DRAWING CHECKED	G.E. SIEGFORD

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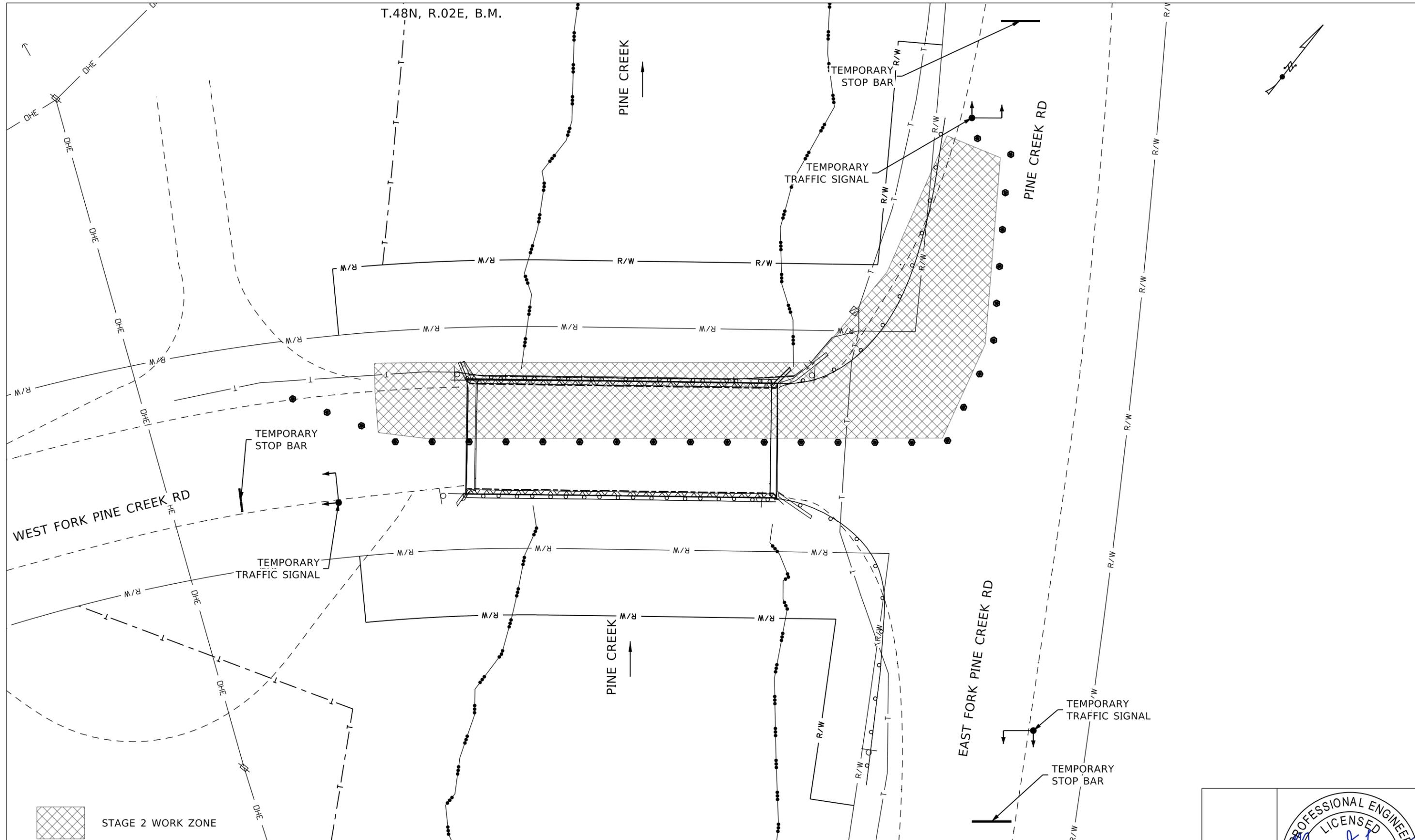
PROJECT NO.
A020(039)

CONSTRUCTION STAGING
WEST FORK PINE CREEK ROAD BRIDGE

ENGLISH
 COUNTY SHOSHONE
 KEY NUMBER 20039
 SHEET 15 OF 19

PROFESSIONAL ENGINEER
 LICENSED

19853
 02/14/25
 STATE OF IDAHO
 MARCUS J. LEVESEY



 STAGE 2 WORK ZONE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	M. LEVESEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	G.E. SIEGFORD	
DETAILED	M. LEVESEY	CADD FILE NAME 20039 TRCP.dgn
DRAWING CHECKED	G.E. SIEGFORD	DRAWING DATE: 17-FEB-2025

IDAHO
TRANSPORTATION
DEPARTMENT

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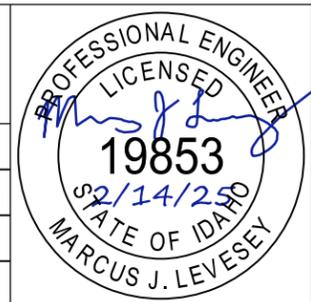
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PROJECT NO.	A020(039)
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CONSTRUCTION STAGING	WEST FORK PINE CREEK ROAD BRIDGE
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ENGLISH	
COUNTY	SHOSHONE
KEY NUMBER	20039
SHEET 16 OF 19	



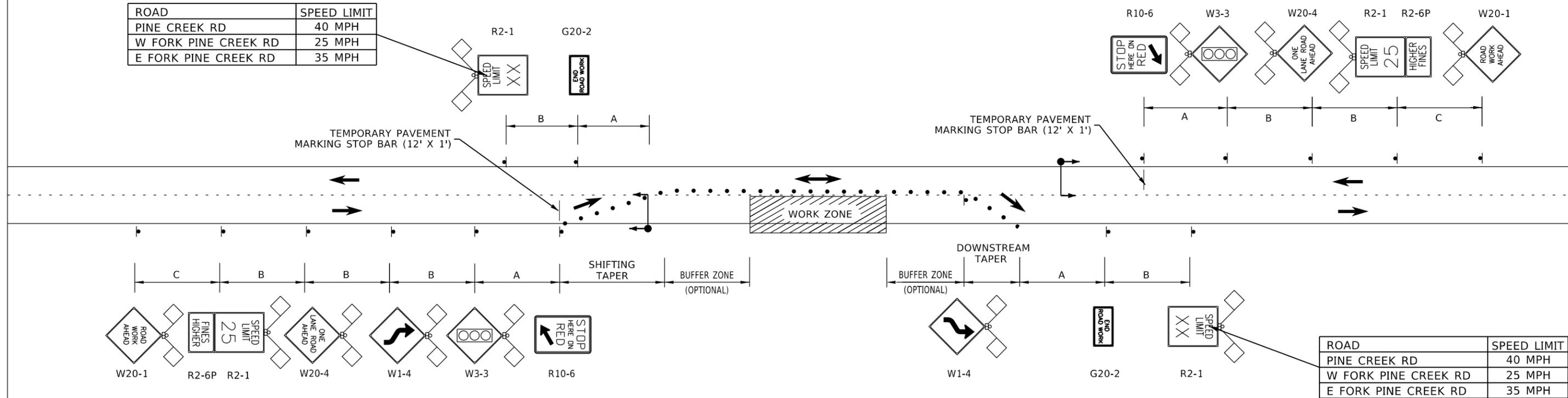
PROFESSIONAL ENGINEER
LICENSED
19853
02/14/25
STATE OF IDAHO
MARCUS J. LEVESEY

ROAD TYPE	DISTANCE BETWEEN SIGNS		
	A	B	C
RURAL	500'	500'	500'
URBAN (HIGH SPEED)	350'	350'	350'
URBAN (LOW SPEED)	100'	100'	100'

GENERAL NOTES THIS SHEET

1. THE SPACING OF CHANNELIZATION DEVICES SHALL NOT EXCEED A DISTANCE OF 1.0 TIMES THE POSTED SPEED LIMIT WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE EQUAL TO 2.0 TIMES THE POSTED SPEED LIMIT WHEN USED FOR TANGENT CHANNELIZATION.
2. WHEN CHANNELIZING DEVICES HAVE THE POTENTIAL OF LEADING VEHICULAR TRAFFIC OUT OF THE INTENDED VEHICULAR TRAFFIC SPACE THE CHANNELIZING DEVICES SHOULD BE EXTENDED A DISTANCE 2.0 TIMES THE SPEED LIMIT BEYOND THE END OF THE TRANSITION.
3. SHIFTED WORK ZONE MAY BE USED EITHER SIDE. SIGNING AS SHOWN IS FOR ONE DIRECTION.
4. IF A BUFFER SPACE IS USED, THE VALUES SHOWN IN TABLE 6C-2 MAY BE USED TO DETERMINE THE LENGTH OF THE LONGITUDINAL BUFFER SPACE.

ROAD	SPEED LIMIT
PINE CREEK RD	40 MPH
W FORK PINE CREEK RD	25 MPH
E FORK PINE CREEK RD	35 MPH



ROAD	SPEED LIMIT
PINE CREEK RD	40 MPH
W FORK PINE CREEK RD	25 MPH
E FORK PINE CREEK RD	35 MPH

TYPICAL SINGLE LANE SIGNALIZED OPERATION

N.T.S

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
M. LEVESEY
DESIGN CHECKED
G.E. SIEGFORD
DETAILED
M. LEVESEY
DRAWING CHECKED
G.E. SIEGFORD

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CADD FILE NAME 20039 TRCP.dgn
DRAWING DATE: 17-FEB-2025

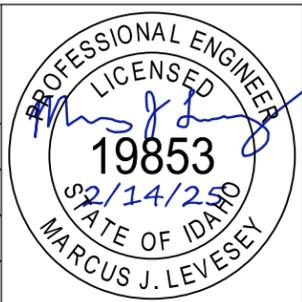
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PROJECT NO.
A020(039)

TRAFFIC CONTROL DETAILS
WEST FORK PINE CREEK ROAD BRIDGE

ENGLISH
COUNTY SHOSHONE
KEY NUMBER 20039
SHEET 17 OF 19



MUTCD TABLE 6C-2 STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

*SPEED (MPH)	DISTANCE (FT.)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

*Posted speed, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed

MUTCD TABLE 6C-3 TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

MERGING TAPER = AT LEAST L
SHIFTING TAPER = AT LEAST 0.5 L
SHOULDER TAPER (ST) = AT LEAST 0.33L
ONE LANE, TWO WAY TRAFFIC TAPER = 100' MAX.
DOWNSTREAM TAPER = 100' PER LANE

MUTCD TABLE 6C-4 FORMULAS FOR DETERMINING TAPER LENGTHS

(40 MPH or Less)	(45 MPH or More)
$L = \frac{WS^2}{60}$	$L = WS$
W = WIDTH OF OFFSET IN FEET	W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED	S = POSTED SPEED

L = Merging Taper
 1/2 L = Shifting Taper
 1/3 L = Shoulder Taper

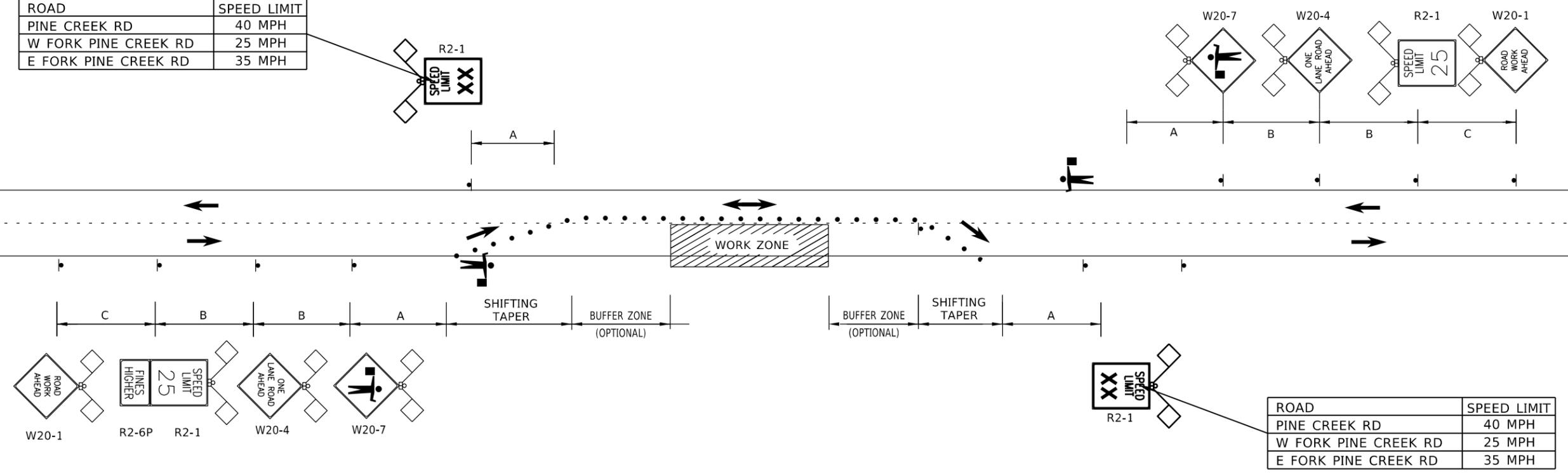
LEGEND

- ● ● ● ● DRUMS
- ■ ■ ■ ■ TUBULAR MARKERS
- ⊥ SIGN
- I TYPE III BARRICADE
- ➡ ARROW PANEL TYPE C

GENERAL NOTES THIS SHEET

1. THE SPACING OF CHANNELIZATION DEVICES SHALL NOT EXCEED A DISTANCE OF 1.0 TIMES THE POSTED SPEED LIMIT WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE EQUAL TO 2.0 TIMES THE POSTED SPEED LIMIT WHEN USED FOR TANGENT CHANNELIZATION.
2. WHEN CHANNELIZING DEVICES HAVE THE POTENTIAL OF LEADING VEHICULAR TRAFFIC OUT OF THE INTENDED VEHICULAR TRAFFIC SPACE THE CHANNELIZING DEVICES SHOULD BE EXTENDED A DISTANCE 2.0 TIMES THE SPEED LIMIT BEYOND THE END OF THE TRANSITION.
3. SHIFTED WORK ZONE MAY BE USED EITHER SIDE. SIGNING AS SHOWN IS FOR ONE DIRECTION.
4. IF A BUFFER SPACE IS USED, THE VALUES SHOWN IN TABLE 6C-2 MAY BE USED TO DETERMINE THE LENGTH OF THE LONGITUDINAL BUFFER SPACE.
5. IF THE SPEED IS BEING REDUCED BY MORE THAN 10 MPH, USE ADDITIONAL WARNING SIGNS PER THE MUTCD.

ROAD	SPEED LIMIT
PINE CREEK RD	40 MPH
W FORK PINE CREEK RD	25 MPH
E FORK PINE CREEK RD	35 MPH



TYPICAL SINGLE LANE FLAGGING OPERATION

N.T.S

REVISIONS

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DESIGNED	M. LEVESEY	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
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DETAILED	M. LEVESEY	CADD FILE NAME 20039 TRCP.dgn
DRAWING CHECKED	G.E. SIEGFORD	DRAWING DATE: 17-FEB-2025

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PROJECT NO.	A020(039)
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TRAFFIC CONTROL DETAIL	WEST FORK PINE CREEK ROAD BRIDGE
------------------------	----------------------------------

ENGLISH

COUNTY	SHOSHONE
KEY NUMBER	20039
SHEET	18 OF 19



T.48N, R.02E, B.M.

PINE CREEK ↑

PINE CREEK ↑

1
 PI STA 11+78.64
 Δ 19°00'11" RT
 T 71.13'
 L 140.96'
 R 425.00'
 N. 2123404.9804'
 E. 2503549.6242'

BEGIN PROJECT A020(039)
 Sta. 12+05.02
 N=2123420.1032
 E=2503573.0096

END PROJECT A020(039)
 Sta. 13+40.79
 N=2123504.3946
 E=2503679.3731

BEGIN CONSTRUCTION A020(039)
 Sta. 11+46.16
 M.P. 103.151

END CONSTRUCTION A020(039)
 Sta. 13+46.80
 M.P. 103.189

BRIDGE WORK
 SEE BRIDGE
 PLAN

N52°32'26"E

- 1** RETAIN AND PROTECT
- 2** ABANDON ZIPLY FIBER CABLE
- 3** ABANDON ZIPLY FIBER JUNCTION BOX
- 4** ADJUST/RELOCATE HANDHOLE BY ZIPLY FIBER AT COMPANY EXPENSE

CALL BEFORE YOU DIG
 811 or 800-626-4950

REVISIONS			
NO.	DATE	BY	DESCRIPTION

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 DESIGN CHECKED G.E. SIEGFORD
 DETAILED M. LEVESEY
 DRAWING CHECKED G.E. SIEGFORD

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME 20039 UTIL.dgn
 DRAWING DATE: 17-FEB-2025

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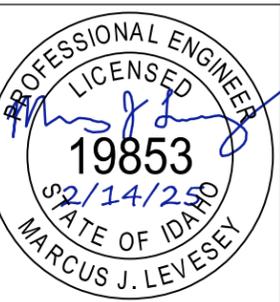


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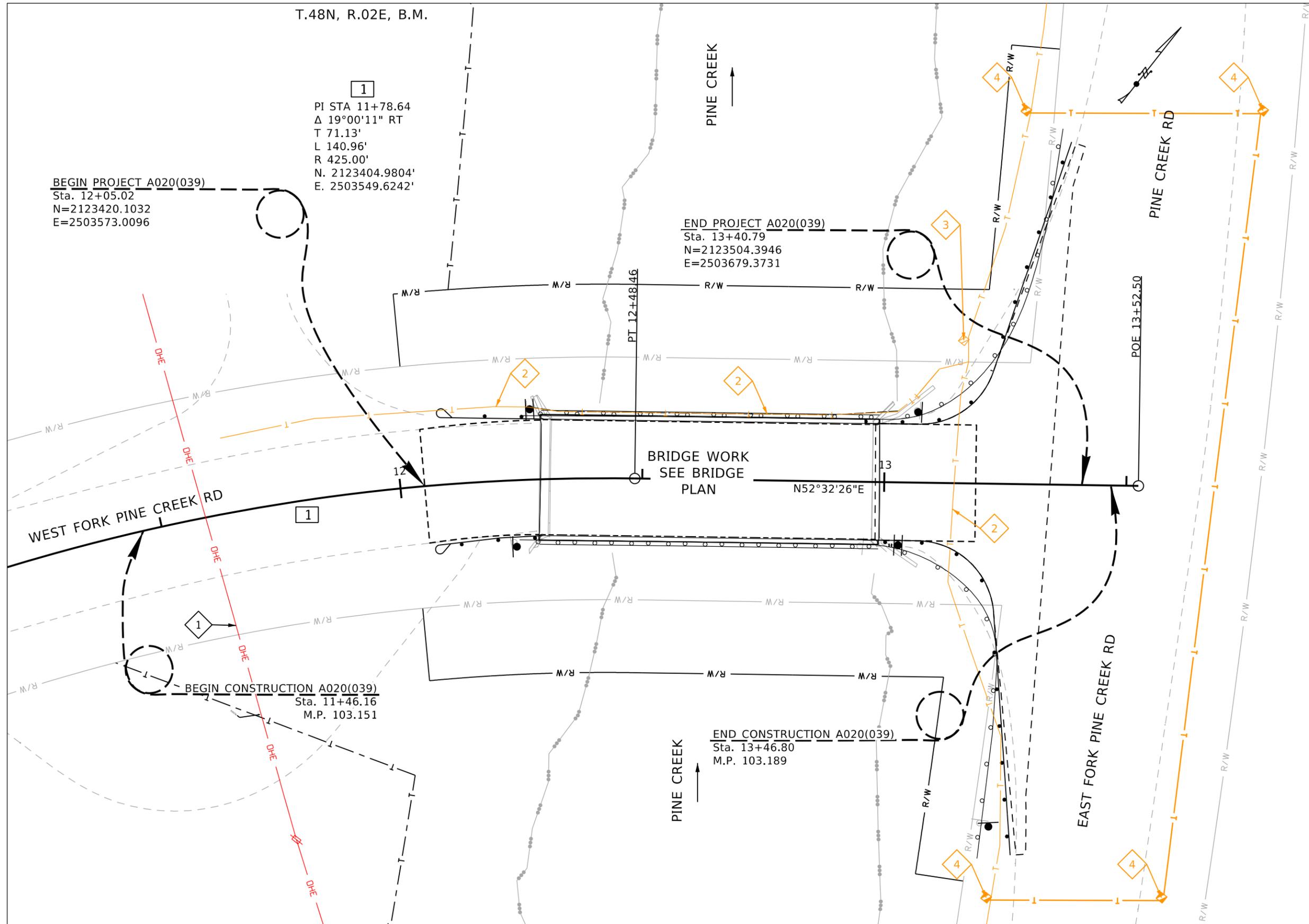
PROJECT NO.
A020(039)

UTILITY PLAN
WEST FORK PINE CREEK ROAD BRIDGE

ENGLISH
 COUNTY SHOSHONE
 KEY NUMBER 20039
 SHEET 19 OF 19

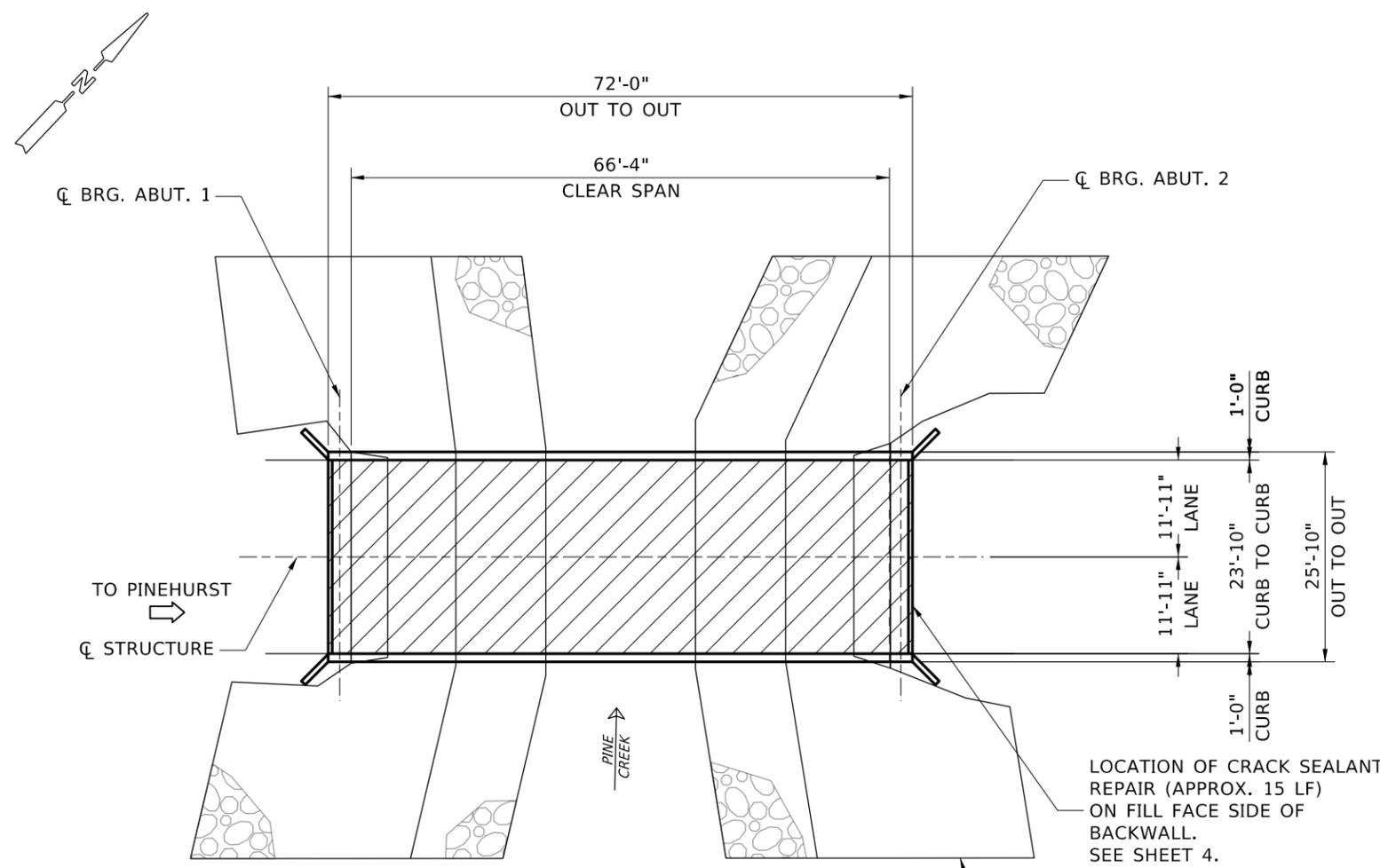


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 LICENSED
19853
 02/14/25
 STATE OF IDAHO
 MARCUS J. LEVESEY

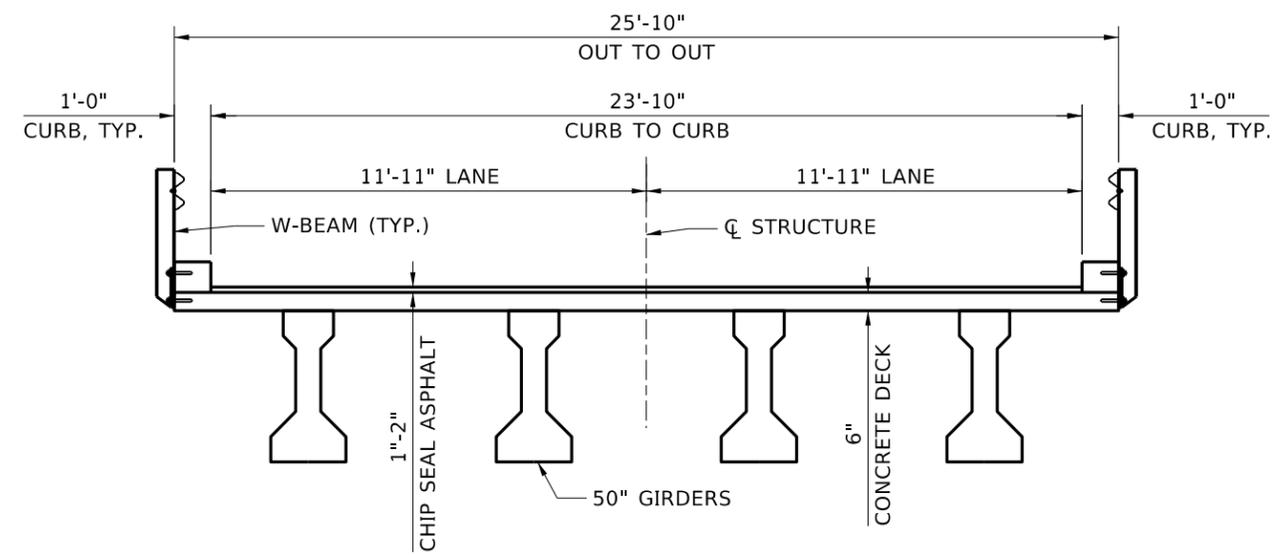


- SCOPE OF WORK**
1. ADD CONCRETE UNDER PILE CAPS.
 2. REMOVE EXISTING ASPHALT OVERLAY.
 3. ADD CONCRETE PARAPETS.
 4. PLACE WATERPROOF MEMBRANE.
 5. PLACE ASPHALT OVERLAY.
 6. INSTALL NEW ASPHALTIC EXPANSION JOINT SYSTEM.
 7. PAINT STEEL RESTRAINER ANGLES AT GIRDER BEARINGS.

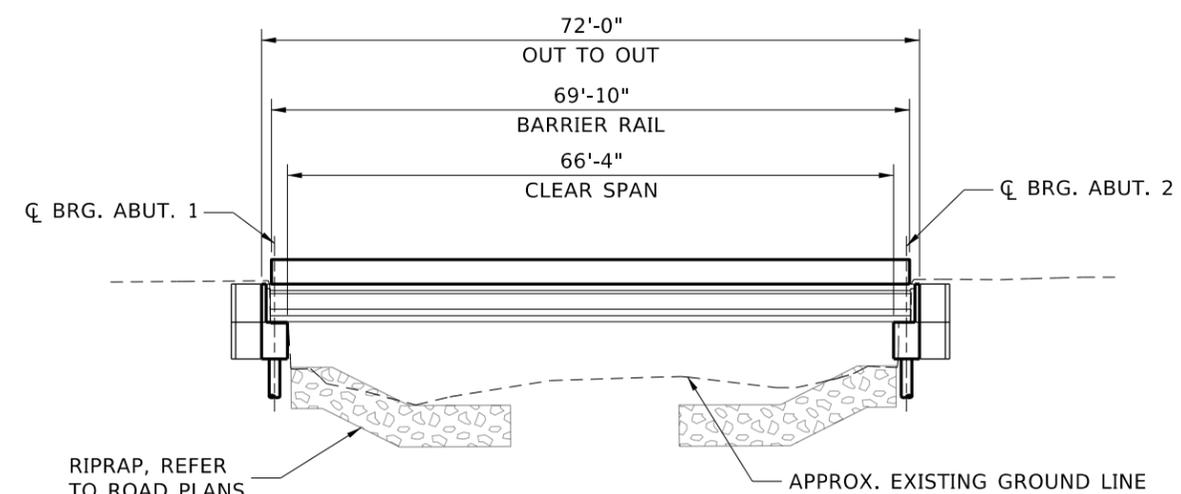
 LIMIT OF ASPHALT OVERLAY



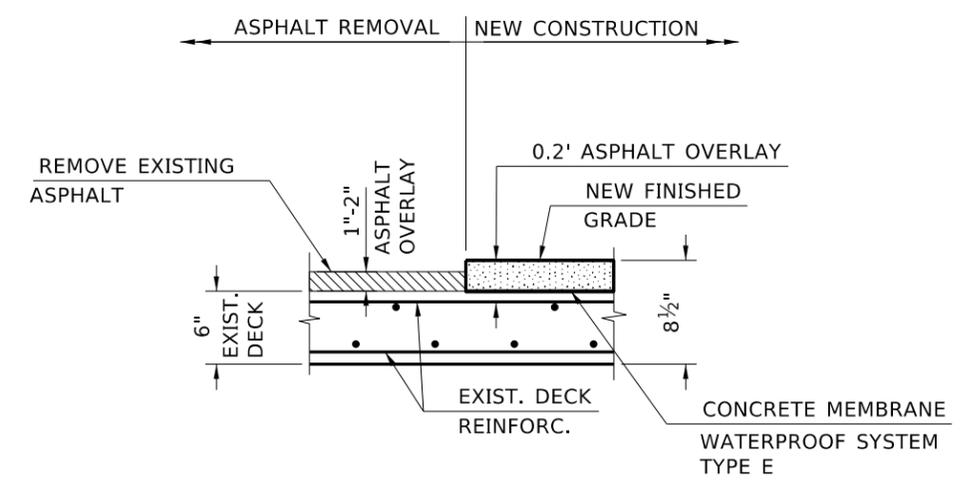
PLAN VIEW
1"=20'-0"



TYPICAL SECTION
1"=5'-0"



ELEVATION VIEW
1"=20'-0"



ASPHALT REMOVAL AND OVERLAY DETAIL
N.T.S.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED G.GILLIN	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME DX\prj\XXXX\ProjDev\Bridg\Plans 20039_SIPC_001.DGN DRAWING DATE: MARCH 2024
DESIGN CHECKED K.YAKAWICH	
DETAILED P.STETSON	
DWG. CHECKED G.GILLIN	
CORRECTIONS	

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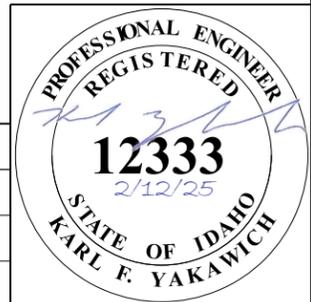
GREAT WEST ENGINEERING

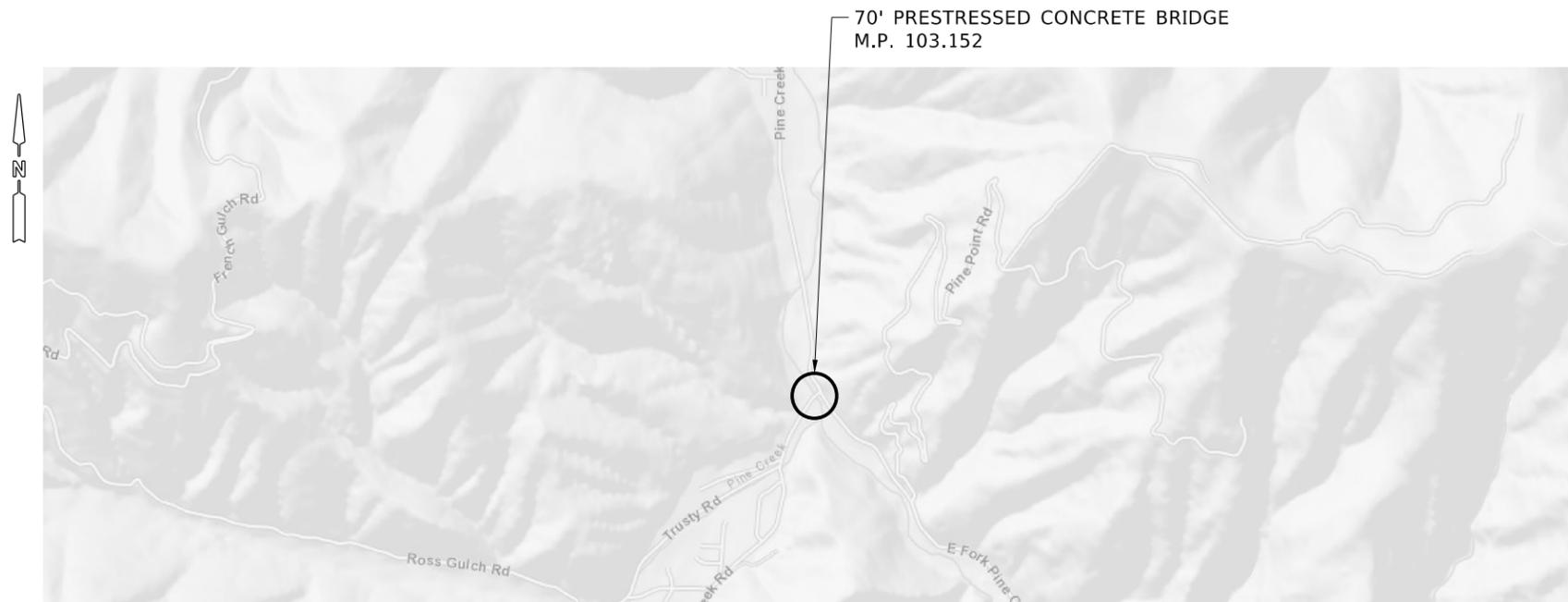
ENGLISH
PROJECT NO.
A020(039)

SITUATION AND LAYOUT

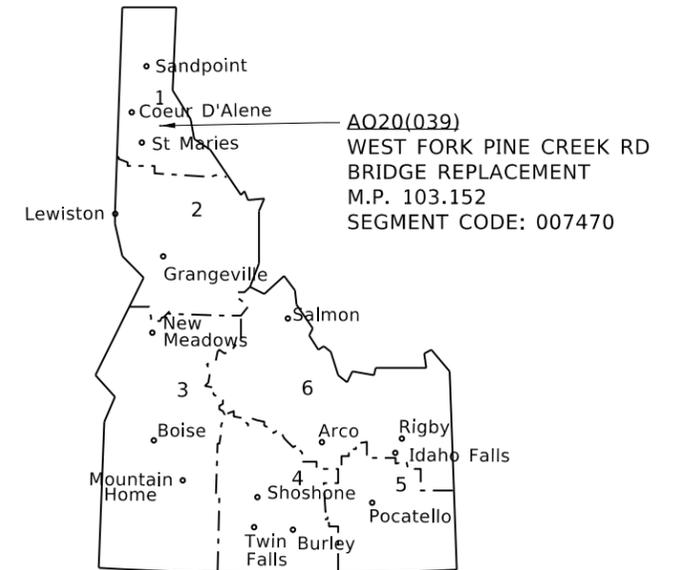
**70' CONCRETE BRIDGE
WEST FORK PINE CREEK ROAD
SHOSHONE CO.**

BRIDGE PLANS	
BRIDGE KEY NO. 20460	KEY NO. 20039
COUNTY SHOSHONE	SHEET 1 OF 6
BRIDGE DWG. NO. 18357-A	





VICINITY MAP
NTS



SHEET INDEX

SITUATION AND LAYOUT	1
SHEET INDEX, QUANTITIES & VICINITY MAP	2
CONSTRUCTION SEQUENCE	3
MISCELLANEOUS DETAILS	4
BRIDGE BARRIER DETAILS	5
METAL REINFORCEMENT	6

TRAFFIC DATA

CONSTRUCTION YEAR 2025	
AADT	660
CAADT	59.4
9.0 %	
FUTURE YEAR 2038	
AADT	990
CAADT	120
9.5 %	

QUANTITIES

203-080A	REMOVAL OF MISCELLANEOUS ITEMS (BRIDGE RAIL)	139.7	FT
+502-025A	CONCRETE CL 40-A (PILE CAPS)	12.0	CY
+502-310A	CONCRETE CL 40AF SCH. NO. 2 (PARAPETS)	9.7	CY
+503-020A	EPOXY COATED METAL REINFORCEMENT (PARAPETS)	2,571	LB
+511-005A	CONCRETE WATERPROOF SYSTEM TYPE E	222	SY
560-005A	DEWATERING FOUNDATION	1	LS
+565-005A	ASPHALTIC PLUG EXPANSION JOINT SYSTEM	17.2	CF
+580-005A	REMOVAL OF ASPHALT OVERLAY	187.6	SY
587-005A	PAINTING STRUCTURAL STEEL (GIRDER RESTRAINER ANGLES, APPROX. 14 SF)	1	LS

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 SUPPLEMENTAL SPECIFICATIONS UNLESS NOTED OTHERWISE. EXISTING BRIDGE DESIGN IS IN ACCORDANCE WITH (AASHO SPECIFICATIONS OF 1953).

PLAN DIMENSIONS

THE DIMENSIONS SHOWN ARE FROM ON SITE MEASUREMENTS. FIELD VERIFY DIMENSIONS OF THE EXISTING STRUCTURE BEFORE ORDERING MATERIALS. PLANS FOR THE EXISTING STRUCTURE ARE NOT AVAILABLE.

CONSTRUCTION

EXERCISE CARE DURING REMOVAL OPERATIONS TO PREVENT DAMAGE TO THE PORTIONS OF THE STRUCTURE AND REINFORCING STEEL THAT ARE TO BE RETAINED. ANY CONCRETE OVERBREAK OR DAMAGE OUTSIDE THE LIMITS DESIGNATED IN THE PLANS MUST BE REMOVED, FORMED, AND REPLACED AT THE CONTRACTOR'S EXPENSE.

REPLACE DAMAGED REINFORCING STEEL BEYOND DESIGNATED LIMITS AT THE CONTRACTOR'S EXPENSE. ALL MATERIALS REMOVED FROM STRUCTURES BECOMES THE CONTRACTOR'S PROPERTY AND MUST BE DISPOSED OF PROPERLY.

TRAFFIC DURING CONSTRUCTION WILL BE IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN. NO DEBRIS IS ALLOWED TO FALL (ONTO THE ROADWAY OR INTO THE WATERWAY) BELOW.

INCIDENTAL ITEMS

ALL ITEMS SHOWN OR NOTED ON PLANS WHICH ARE NOT SPECIFICALLY BID ITEMS ARE CONSIDERED INCIDENTAL ITEMS. THE COST OF FURNISHING AND INSTALLING ALL INCIDENTAL ITEMS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS, UNLESS NOTED OTHERWISE.

REVISIONS			
NO.	DATE	BY	DESCRIPTION
△			
△			
△			
△			

DESIGNED
G.GILLIN

DESIGN CHECKED
K.YAKAWICH

DETAILED
P.STETSON

DWG. CHECKED
G.GILLIN

CORRECTIONS

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

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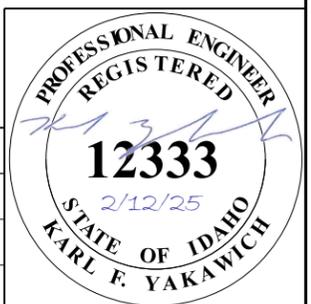
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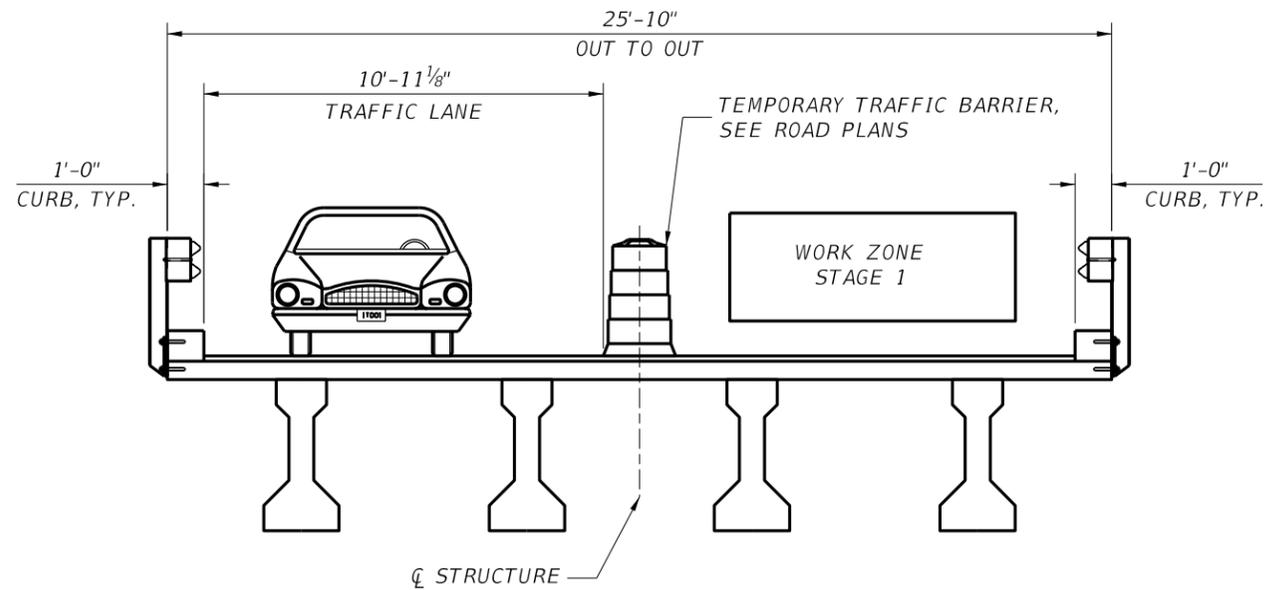
A020(039)

SHEET INDEX, QUANTITIES, AND VICINITY MAP

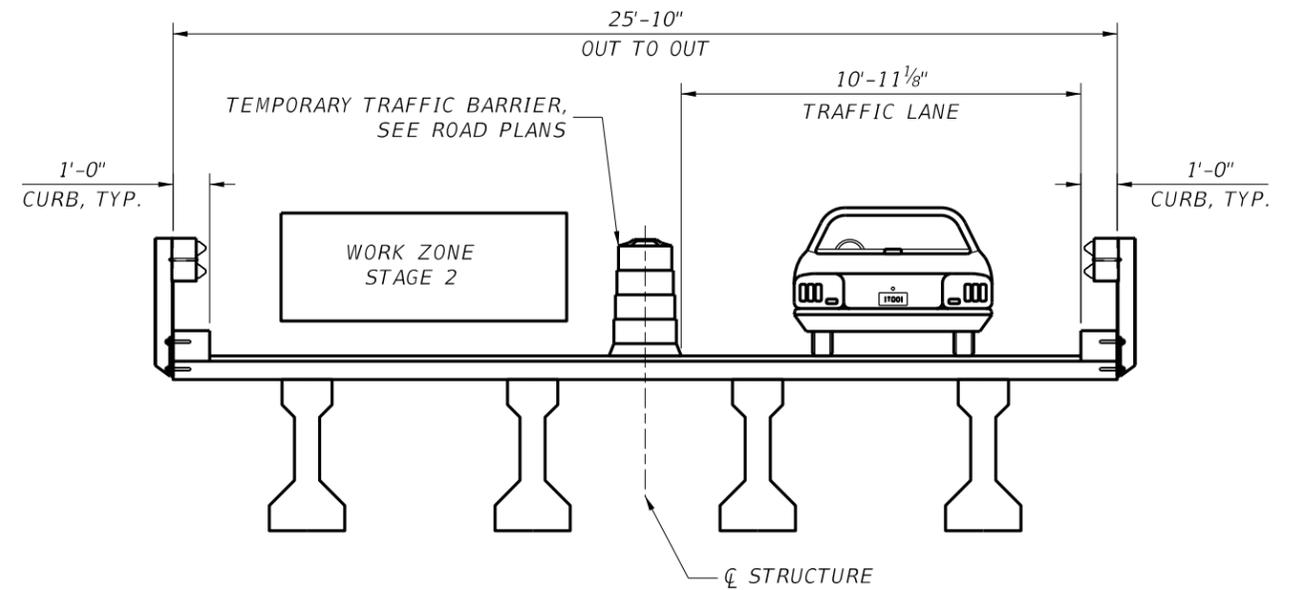
**70' CONCRETE BRIDGE
WEST FORK PINE CREEK ROAD
SHOSHONE CO.**

BRIDGE PLANS	
BRIDGE KEY NO. 20460	
COUNTY SHOSHONE	KEY NO. 20039
BRIDGE DWG. NO. 18357-A	SHEET 2 OF 6





STAGE 1 CONSTRUCTION
NO SCALE



STAGE 2 CONSTRUCTION
NO SCALE

REVISIONS			
NO.	DATE	BY	DESCRIPTION
▲			
▲			
▲			
▲			

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DESIGN CHECKED
K.YAKAWICH
DETAILED
P.STETSON
DWG. CHECKED
G.GILLIN
CORRECTIONS

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20039_BRIS_003.DGN
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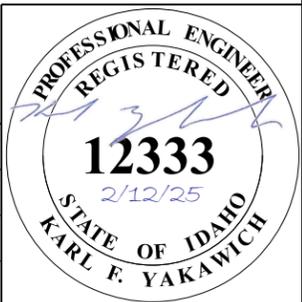
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ENGLISH
PROJECT NO.
A020(039)

CONSTRUCTION SEQUENCE
70' CONCRETE BRIDGE
WEST FORK PINE CREEK ROAD
SHOSHONE CO.

BRIDGE PLANS
BRIDGE KEY NO.
20460
COUNTY SHOSHONE
KEY NO. 20039
BRIDGE DWG. NO. 18357-A
SHEET 3 OF 6





EAST ABUTMENT
NTS

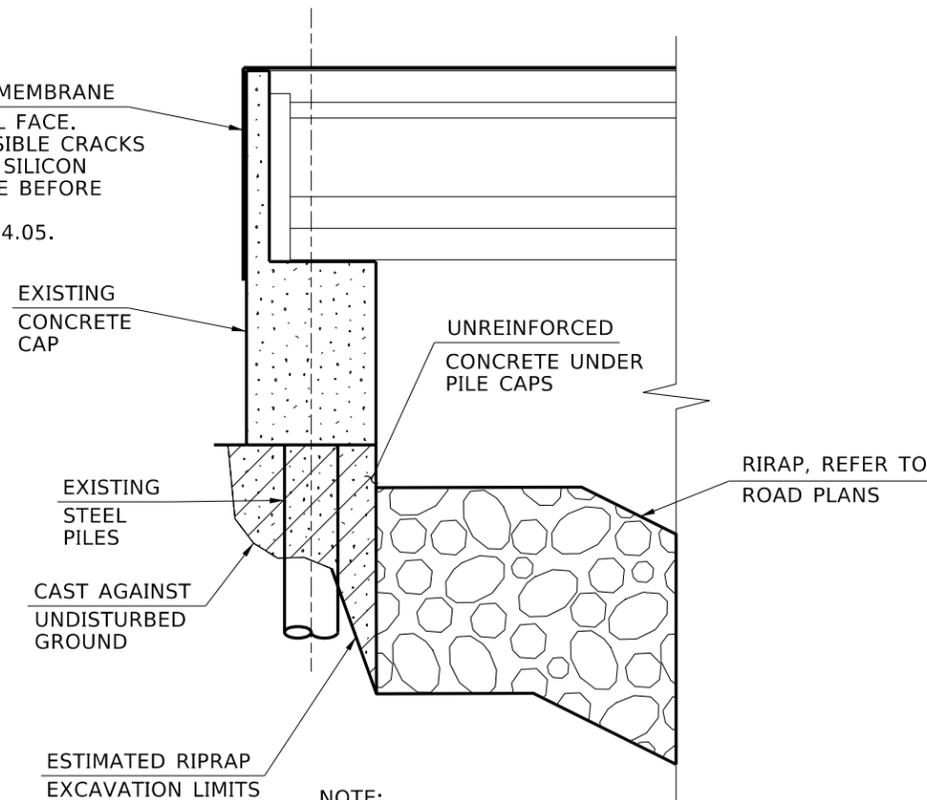
NOTE:
VIEW OF EAST PILE CAP/ABUTMENT.
REMOVAL OF BOULDERS UNDER
CAP NOT REQUIRED.



STEEL RESTRAINER ANGLE
TO BE PAINTED. TYPICAL
OF 16.

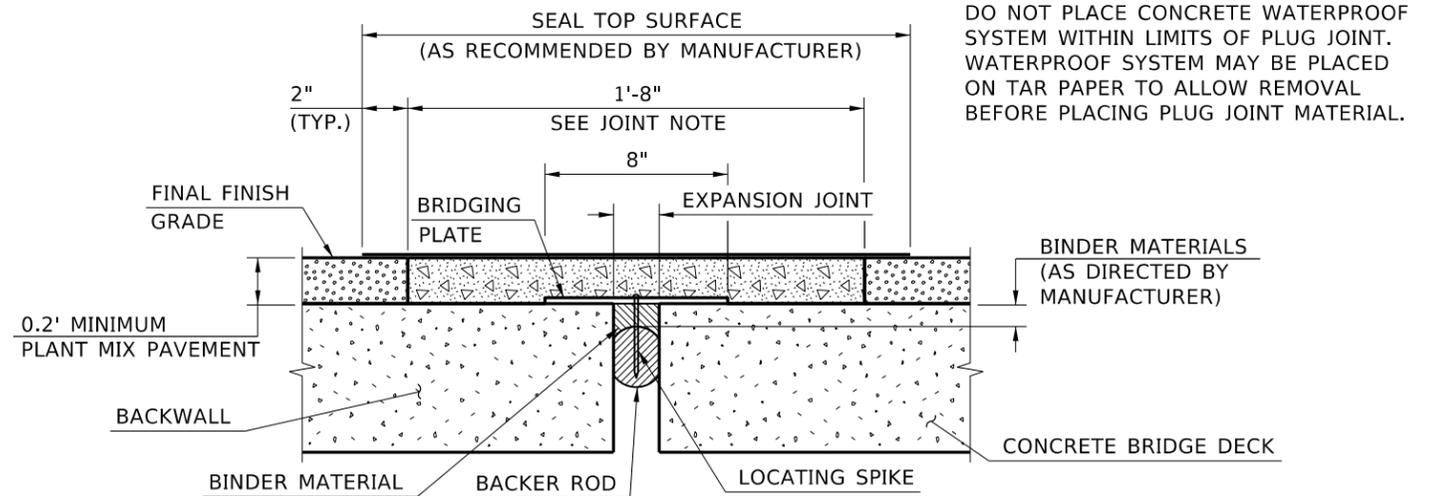
- NOTES:**
1. PAINT EXPOSED SURFACES OF EXISTING RESTRAINER ANGLES IN ACCORDANCE WITH 587 USING SYSTEM C IN ACCORDANCE WITH 627 TABLE 627.02-1.
 2. PROVIDE COLOR ACCEPTABLE TO THE ENGINEER FOR THE TOP COAT.

EXTEND WATERPOOF MEMBRANE
4-FT DOWN BACKWALL FACE.
CLEAN AND CAULK VISIBLE CRACKS
(APPROX 15 LF) WITH SILICON
SEALANT ON FILL FACE BEFORE
PLACING MEMBRANE.
REFER TO SECTION 704.05.



NOTE:
CONTRACTOR MAY UTILIZE
CLASS 40-A OR CLASS 40AF
CONCRETE UNDER PILE CAP.
ENSURE CONCRETE IS SELF
CONSOLIDATING AS VIBRATION
MAY NOT BE FEASIBLE.

CAP SECTION
NTS



JOINT NOTE:
DO NOT PLACE CONCRETE WATERPROOF
SYSTEM WITHIN LIMITS OF PLUG JOINT.
WATERPROOF SYSTEM MAY BE PLACED
ON TAR PAPER TO ALLOW REMOVAL
BEFORE PLACING PLUG JOINT MATERIAL.

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

REVISIONS			
NO.	DATE	BY	DESCRIPTION
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▲			
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DESIGN CHECKED K.YAKAWICH
DETAILED P.STETSON
DWG. CHECKED G.GILLIN
CORRECTIONS

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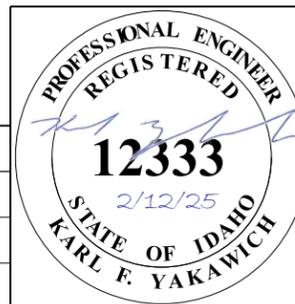
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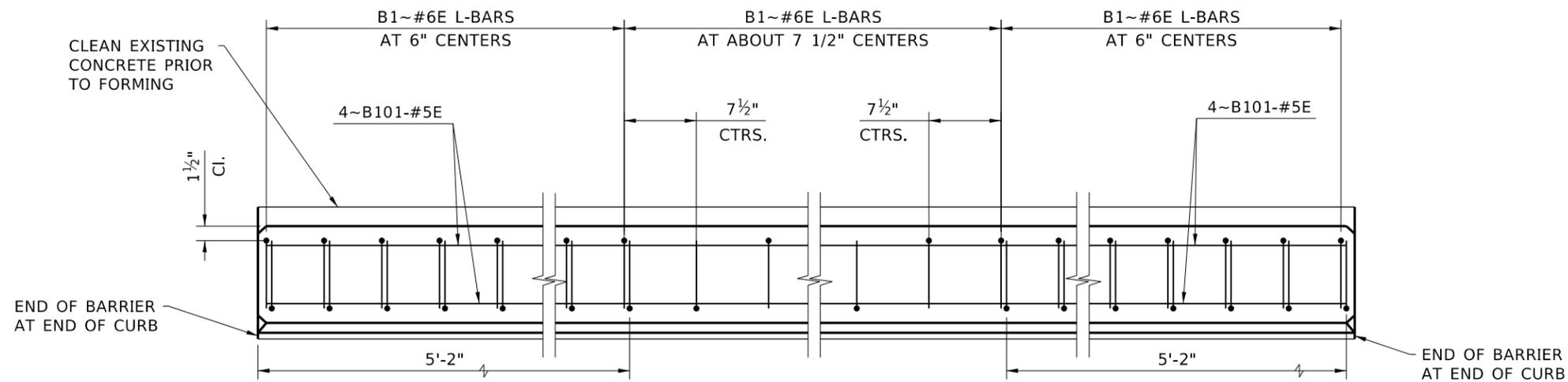
ENGLISH
PROJECT NO.
A020(039)

MISCELLANEOUS DETAILS

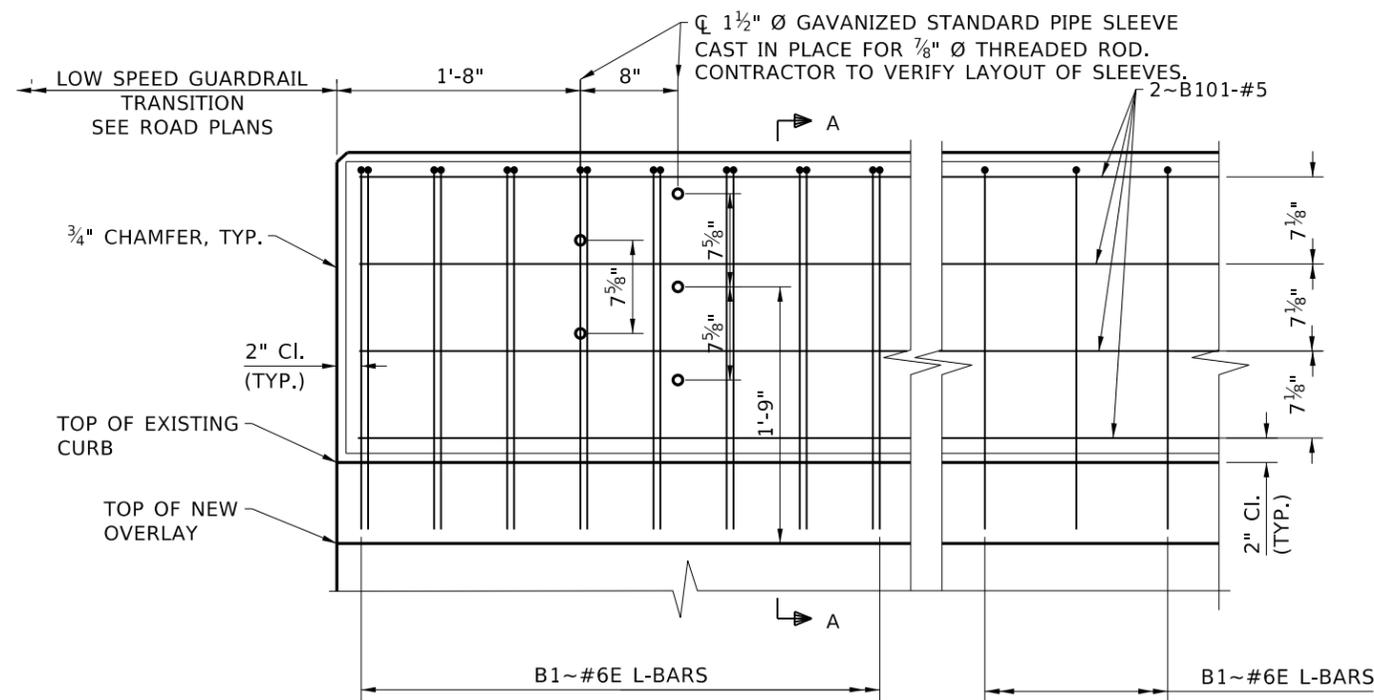
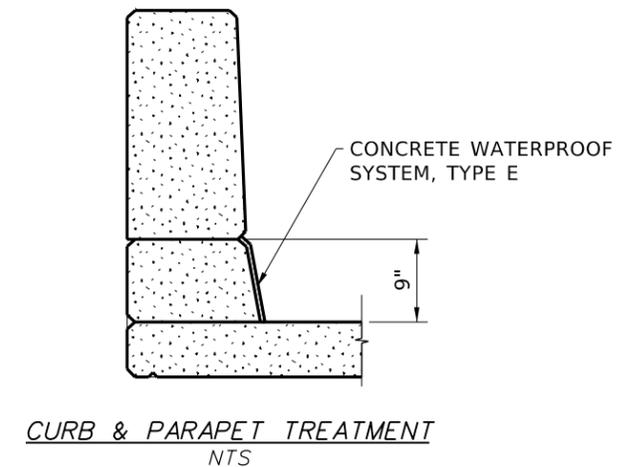
70' CONCRETE BRIDGE
WEST FORK PINE CREEK ROAD
SHOSHONE CO.

BRIDGE PLANS	
BRIDGE KEY NO. 20460	KEY NO. 20039
COUNTY SHOSHONE	SHEET 4 OF 6
BRIDGE DWG. NO. 18357-A	

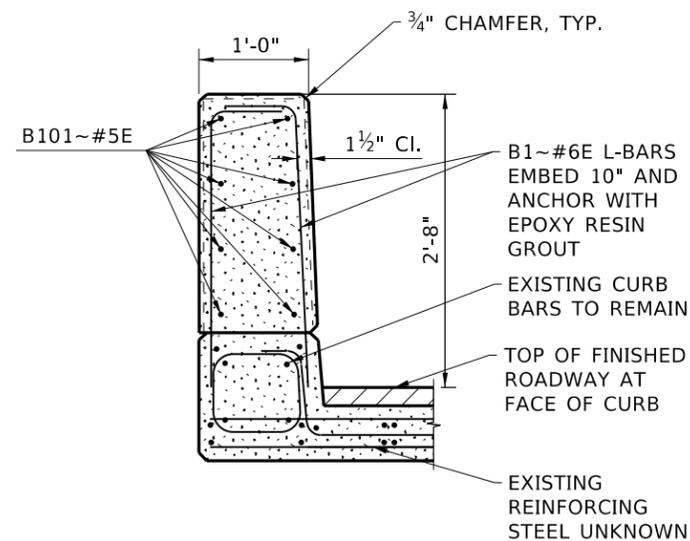




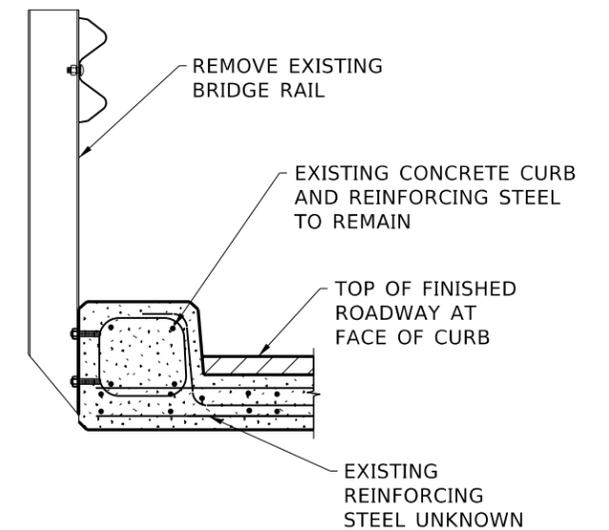
BARRIER REINFORCING STEEL PLACEMENT PLAN
LEFT SIDE OF STRUCTURE SHOWN



BARRIER REINFORCING STEEL PLACEMENT PLAN
LEFT SIDE OF STRUCTURE SHOWN



PROPOSED RAIL SECTION
NTS



EXISTING RAIL SECTION
NTS

REVISIONS			
NO.	DATE	BY	DESCRIPTION
▲			
▲			
▲			
▲			

DESIGNED
G.GILLIN
DESIGN CHECKED
K.YAKAWICH
DETAILED
P.STETSON
DWG. CHECKED
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BRIDGE BARRIER DETAILS
70' CONCRETE BRIDGE
WEST FORK PINE CREEK ROAD
SHOSHONE CO.

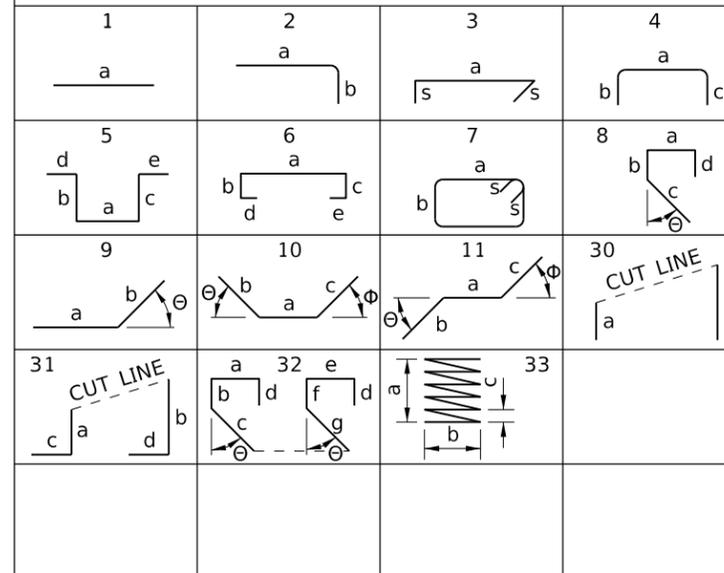
BRIDGE PLANS
BRIDGE KEY NO.
20460
COUNTY SHOSHONE
KEY NO. 20039
BRIDGE DWG. NO. 18357-A
SHEET 5 OF 6

PROFESSIONAL ENGINEER
REGISTERED
12333
2/12/25
STATE OF IDAHO
KARL F. YAKAWICH

SUPERSTRUCTURE

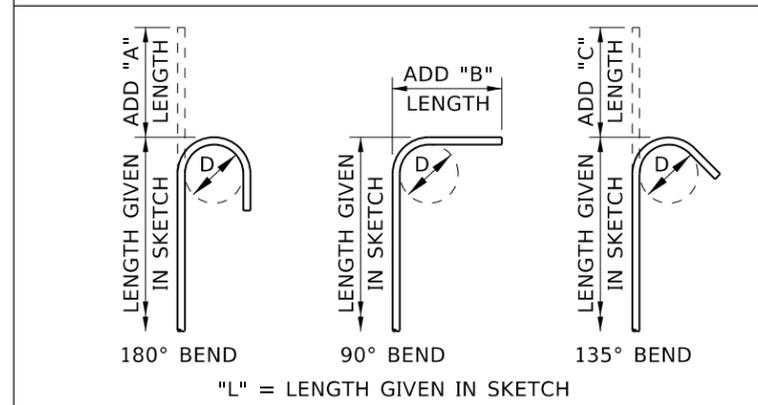
MARK	LOCATION	BAR SIZE	COAT	NO. OF BARS	BAR TYPE	BAR SET	LENGTH a	LENGTH b	LENGTH c	LENGTH d	LENGTH e	ANGLE θ	ANGLE φ	TOTAL LENGTH
B101	BARRIER	5	E	32	1		36'-8"							1173'-4"
B1	BARRIER	6	E	276	2		2'-7"	0'-8"						897'-0"

BAR BEND DIAGRAMS



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

BEND DETAILS



SUPERSTRUCTURE BAR WEIGHT

BAR SIZE	LINEAR FEET	POUNDS PER FOOT	TOTAL WEIGHT
#4		0.668	
#5		1.043	
#6		1.502	
#7		2.044	
TOTAL WEIGHT			

EPOXY COATED BAR WEIGHT

BAR SIZE	LINEAR FEET	POUNDS PER FOOT	TOTAL WEIGHT (LBS)
#4		0.668	
#5	1,173'-4"	1.043	1,224
#6	897'-0"	1.502	1,347
#7		2.044	
TOTAL WEIGHT			2,571

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 ACCORDING WITH THE LATEST ACI STANDARD PRACTICE AND AASHTO SPECIFICATIONS.
2. DIMENSIONS SHOWN IN THE "BAR BEND DIAGRAMS" ARE OUT TO OUT OF BEND POINTS OR HOOKS AND/OR END OF BARS 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.
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. ONLY REINFORCING STEEL TO BE PAID FOR UNDER THE BID ITEMS 503-005A, 503-010A, 503-015A & 503-020A IS SHOWN ON THIS SHEET. SEE OTHER SHEETS FOR REINFORCING STEEL INCLUDED IN OTHER PAY ITEMS.
8. VERIFY THE QUANTITY, SIZE, AND SHAPE OF THE BAR REINFORCEMENT AGAINST THE STRUCTURE DRAWINGS AND MAKE ANY NECESSARY CORRECTIONS BEFORE ORDERING, AS PER SUBSECTION 503.03 OF THE STANDARD SPECIFICATIONS.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED G.GILLIN	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED K.YAKAWICH	CADD FILE NAME DX\prj\XXXX\ProjDev\Bridg\Plans 20039_SIPC_006.DGN
DETAILED P.STETSON	DRAWING DATE: MARCH 2024
DWG. CHECKED G.GILLIN	
CORRECTIONS	

**IDAHO
TRANSPORTATION
DEPARTMENT**

YOUR Safety→YOUR Mobility→YOUR Economic Opportunity

GREAT WEST ENGINEERING

ENGLISH
PROJECT NO.
A020(039)

METAL REINFORCEMENT

70' CONCRETE BRIDGE
WEST FORK PINE CREEK ROAD
SHOSHONE CO.

BRIDGE PLANS

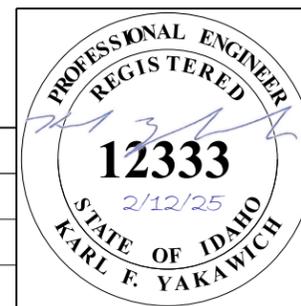
BRIDGE KEY NO.
20460

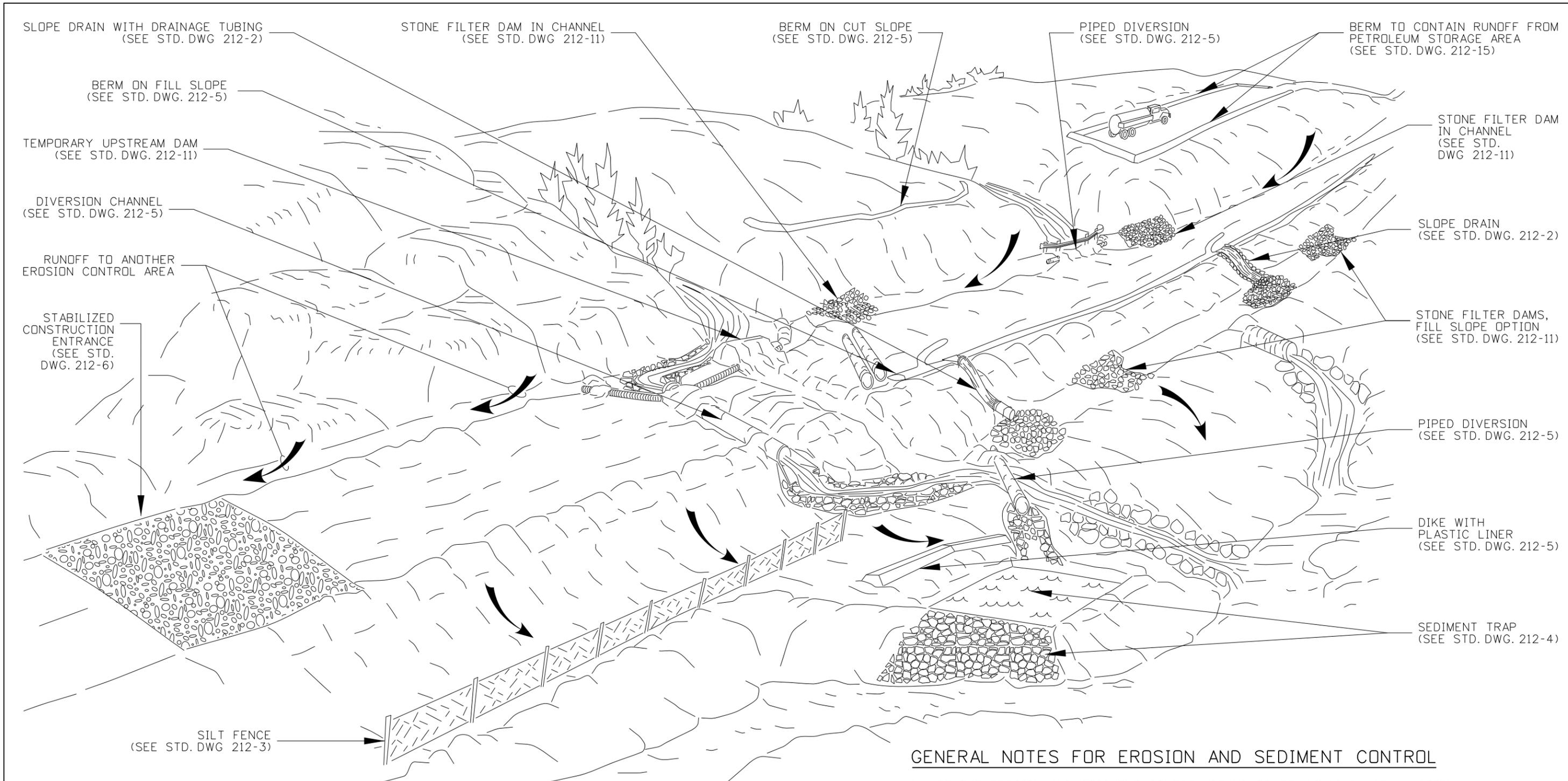
COUNTY
SHOSHONE

BRIDGE DWG. NO.
18357-A

KEY NO.
20039

SHEET
6 OF 6





GENERAL NOTES FOR EROSION AND SEDIMENT CONTROL

1. USE THE EROSION AND SEDIMENT CONTROL STANDARD DRAWINGS IN CONJUNCTION WITH THE ITD BEST MANAGEMENT PRACTICES MANUAL.
2. THE PLACEMENT OF EROSION CONTROL MEASURES IS SITE SPECIFIC. OBTAIN THE ENGINEER'S APPROVAL OF THE EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO INSTALLATION.
3. EROSION AND SEDIMENT CONTROL MEASURES PLACEMENT AND INSTALLATION MAY BE CONTROLLED BY THE NPDES, 404 PERMIT OR CONTRACT SPECIFICATIONS.
4. DRAWING NOT TO SCALE

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

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	9-93	MSM	6	12-16	RDL			
2	6-96	MSM	7	02-21	TWF			
3	10-10	KEH						
4	10-11	KEH						
5	12-12	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME: 212-01_0421.dgn
 DRAWING DATE: APRIL, 1993

IDAHO TRANSPORTATION DEPARTMENT

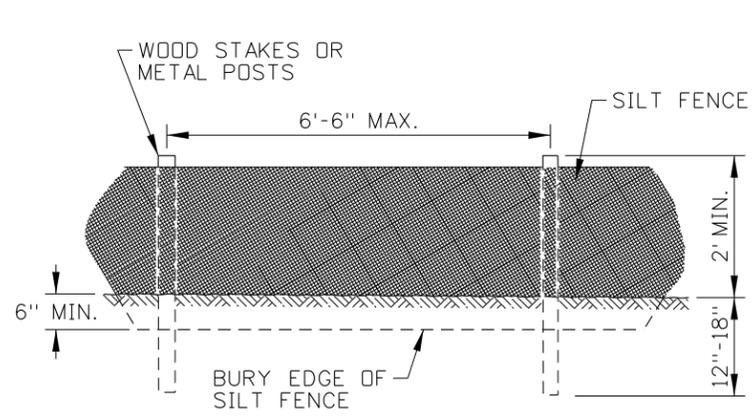


BOISE IDAHO

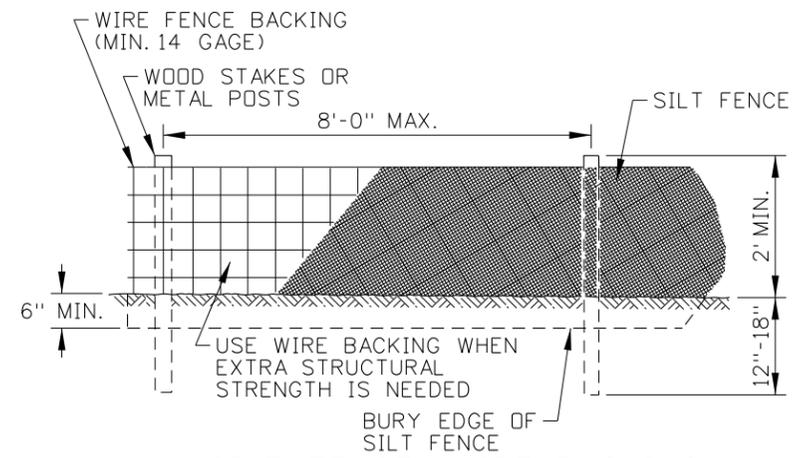
ORIGINAL SIGNED BY: KEVIN SABLAN
 DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
EROSION AND SEDIMENT CONTROL
 EXAMPLE APPLICATIONS

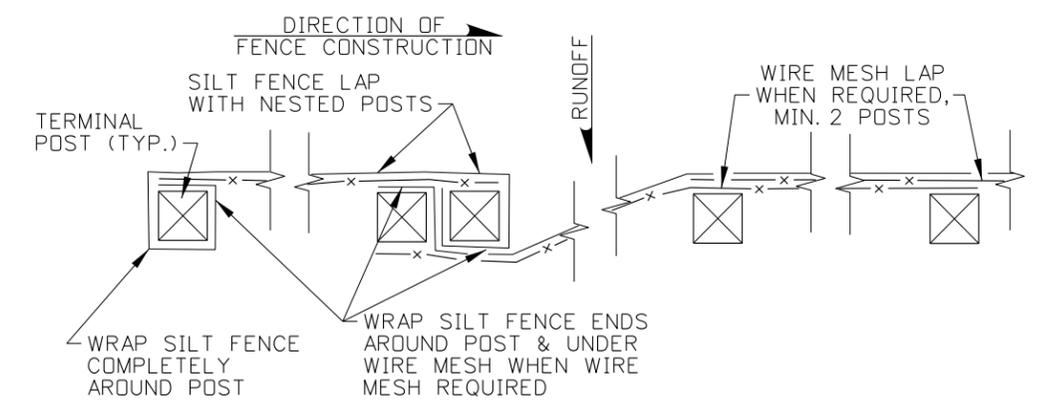
English
 STANDARD DRAWING NO.
 212-1
 SHEET 1 OF 1



SILT FENCE (NO WIRE BACKING)



SILT FENCE (WIRE BACKING)



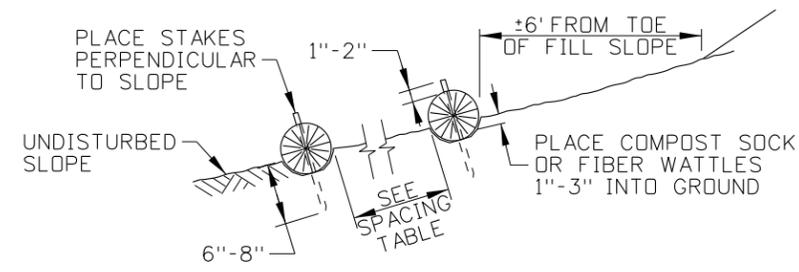
SILT FENCE LAP DETAIL

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

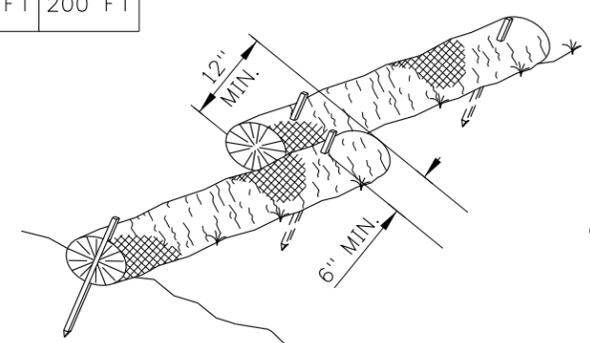
SLOPE	SOIL TYPE		
	SILTY	CLAYS	SANDY
1:1	50 FT	75 FT	100 FT
2:1	75 FT	100 FT	125 FT
4:1	100 FT	125 FT	150 FT
10:1 OR FLATTER	125 FT	150 FT	200 FT

NOTES

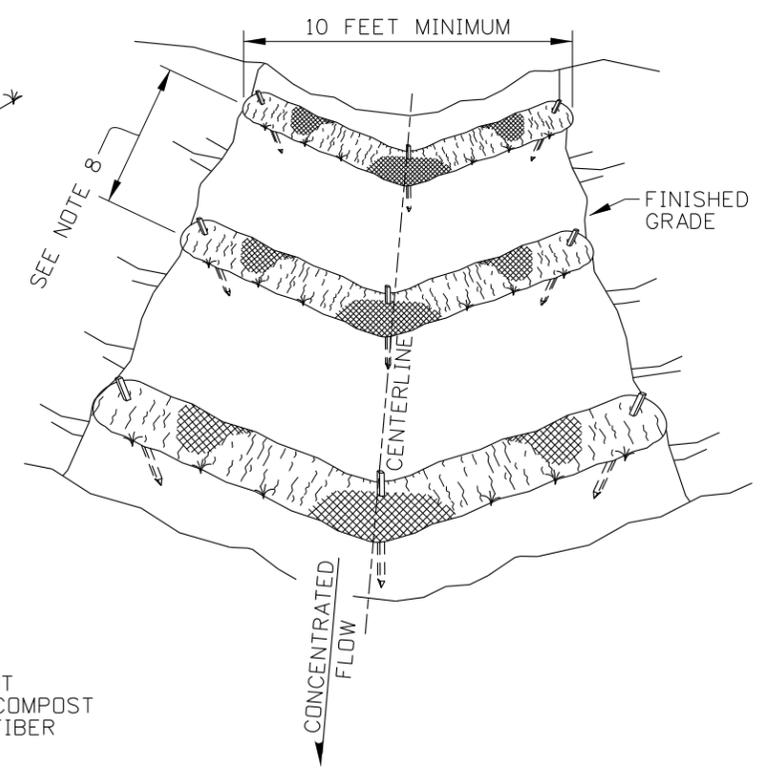
- SEE THE GENERAL NOTES FOR EROSION CONTROL STANDARD DRAWINGS ON 212-1.
- THE NEED FOR TEMPORARY SEDIMENT CONTROL DEVICES ARE DETERMINED BY SITE DESIGN. SPACE SILT FENCES, COMPOST SOCKS, AND FIBER WATTLES IN ACCORDANCE WITH THE SILT FENCE SPACING TABLE AND FIBER WATTLE & COMPOST SOCK SPACING TABLE.
- 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.



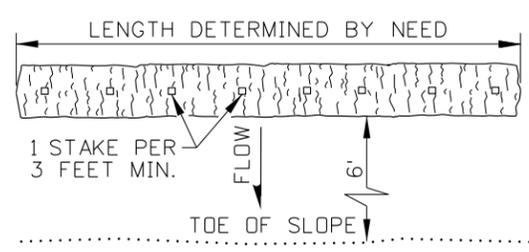
COMPOST SOCK AND FIBER WATTLE SIDE VIEW



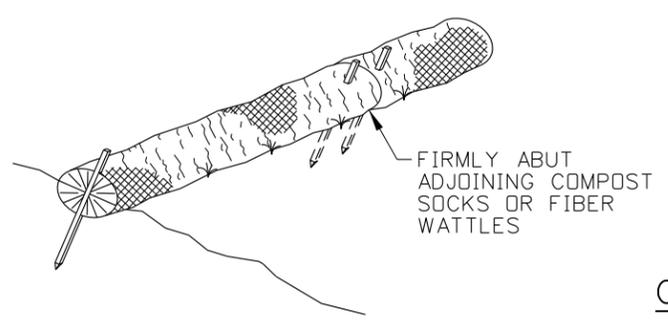
COMPOST SOCK AND FIBER WATTLE OVERLAPPING DETAIL



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
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 DRAWING DATE: APRIL, 1993

IDAHO TRANSPORTATION DEPARTMENT



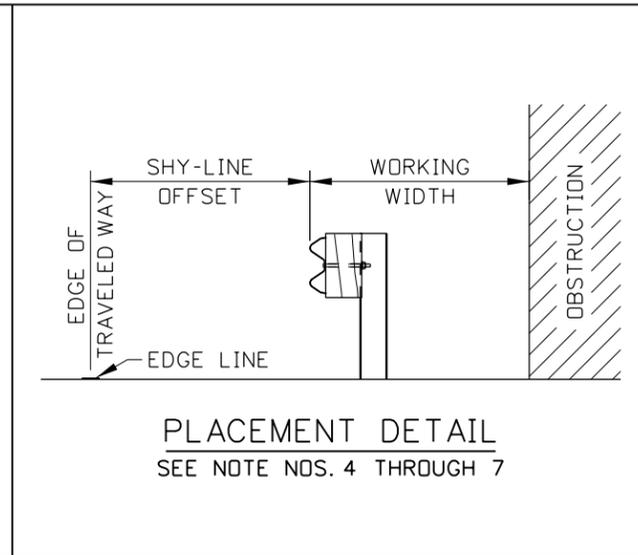
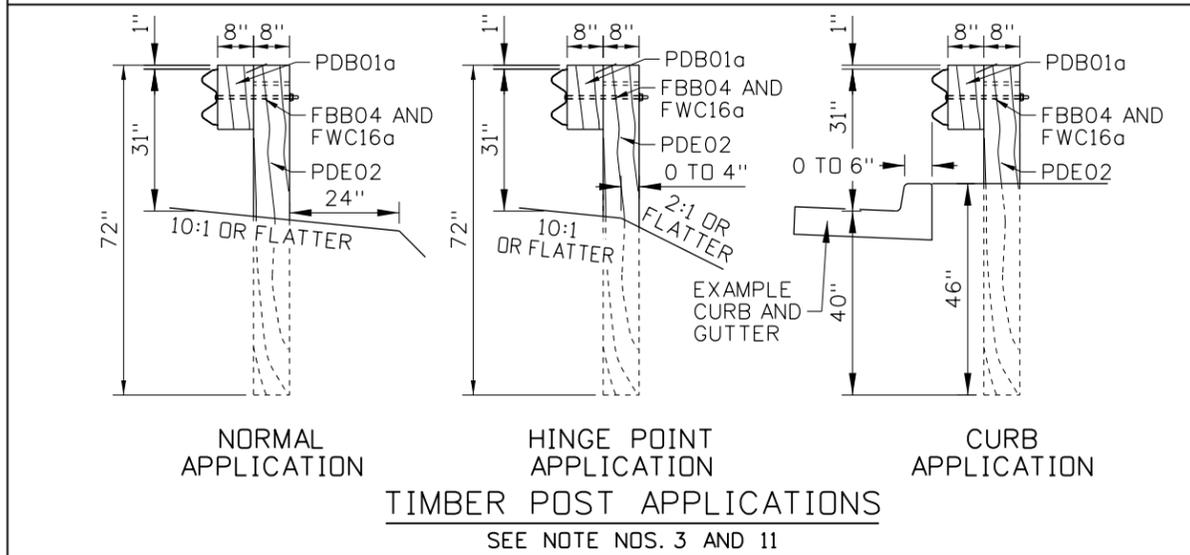
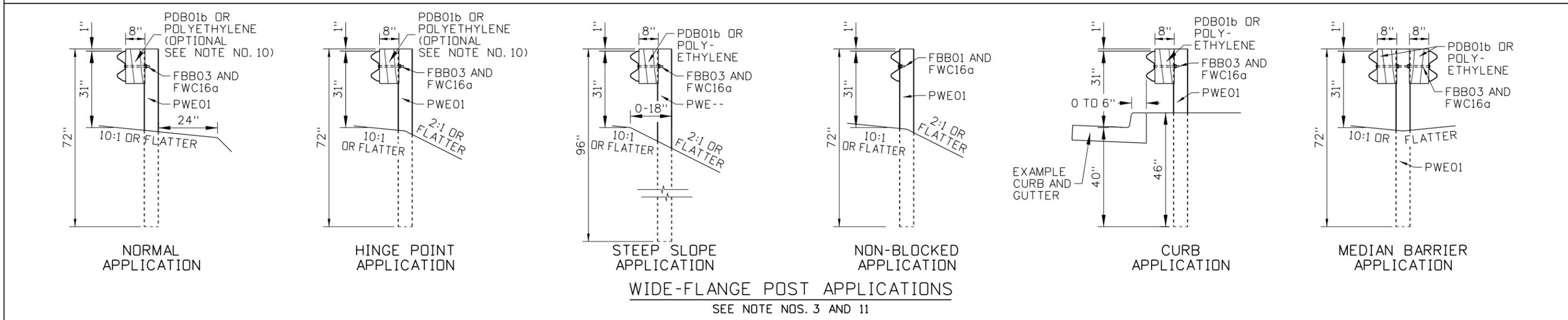
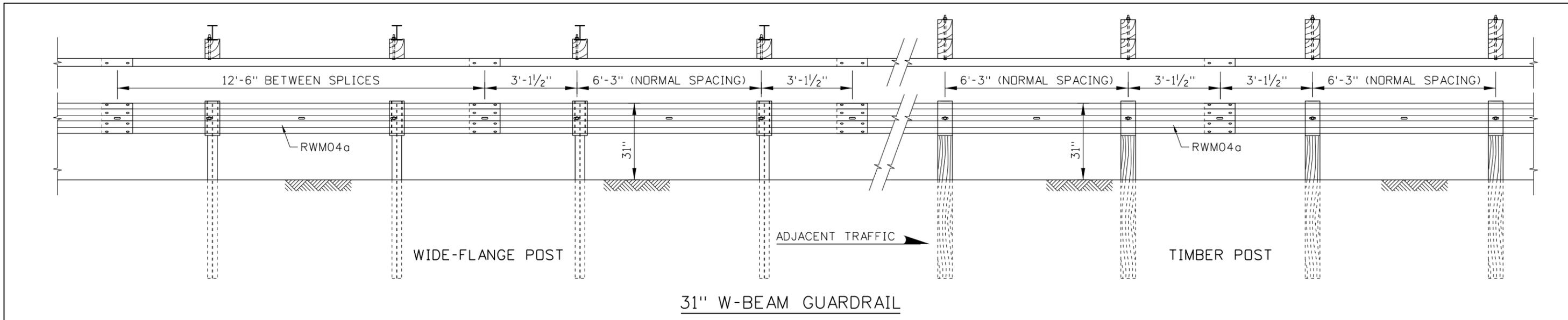
BOISE IDAHO

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



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

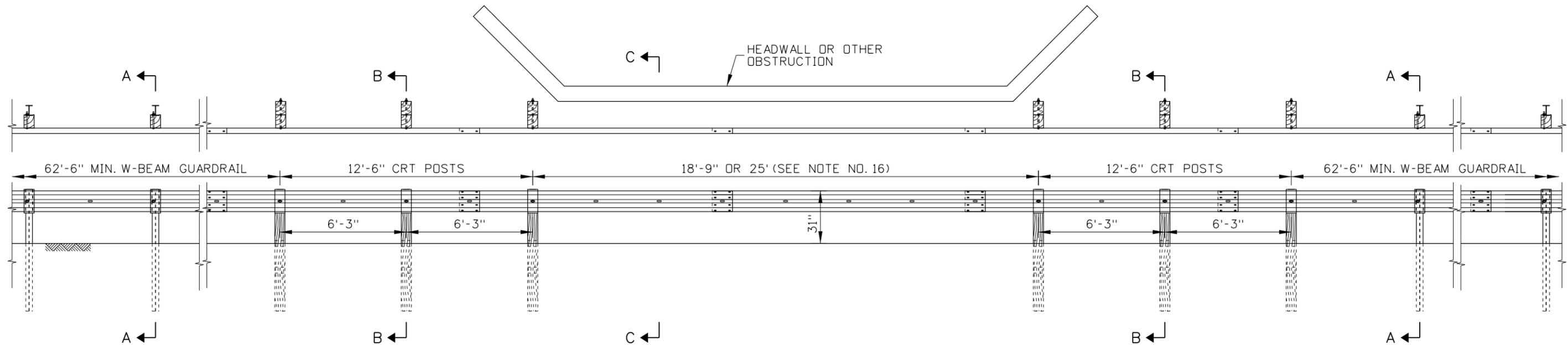
31" W-BEAM GUARDRAIL

English

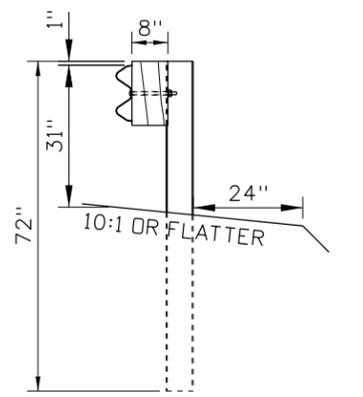
STANDARD DRAWING NO. 612-1

SHEET 1 OF 5

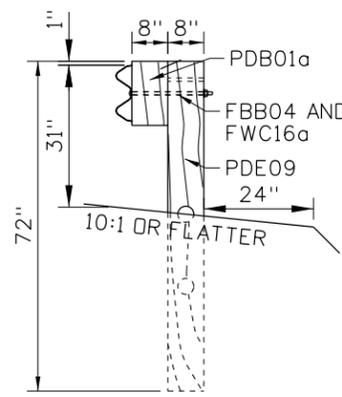




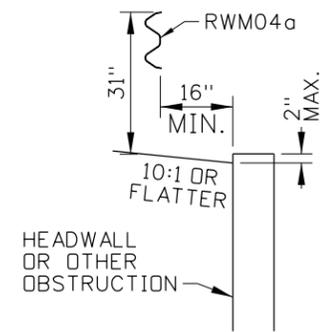
31" LONG-SPAN APPLICATION
SEE NOTE NOS. 17 AND 18



SECTION A-A
WIDE-FLANGE OR TIMBER POST



SECTION B-B



SECTION C-C

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



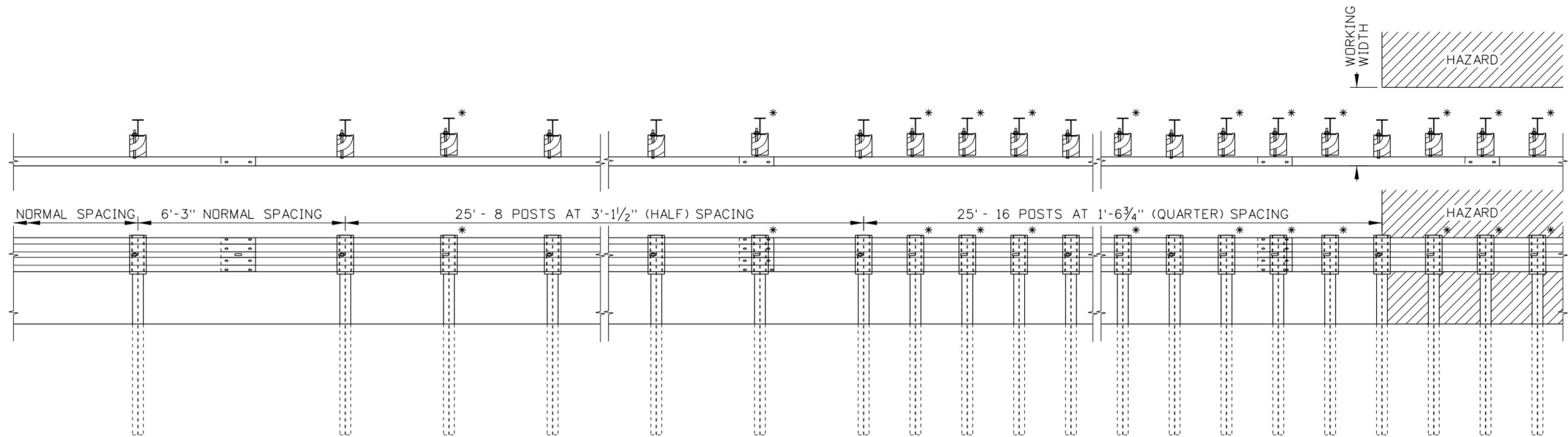
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
31" W-BEAM GUARDRAIL

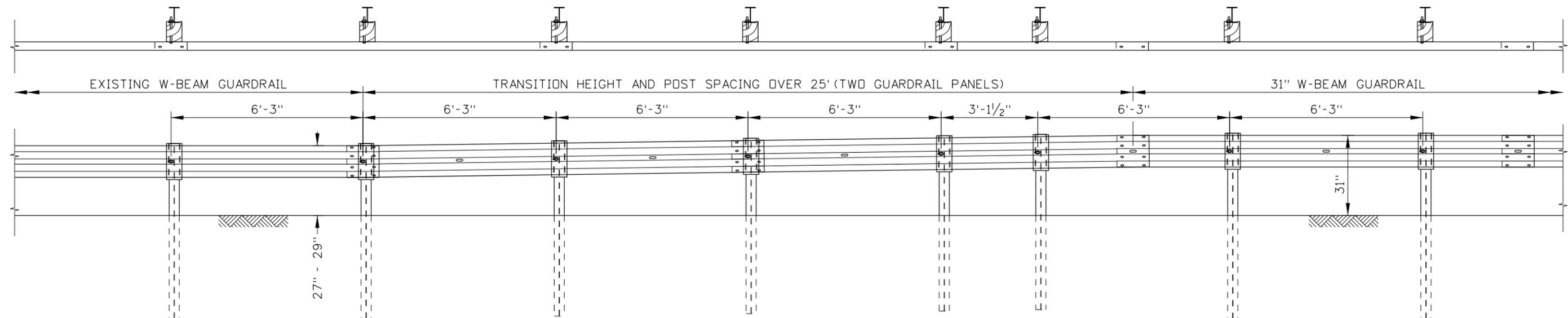
English
STANDARD DRAWING NO.
612-1
SHEET 2 OF 5

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



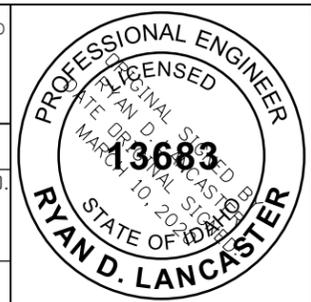
REDUCED POST SPACING
SEE NOTE NO. 7

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						

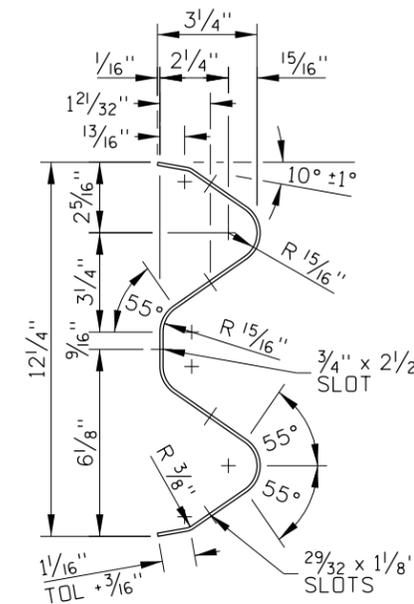
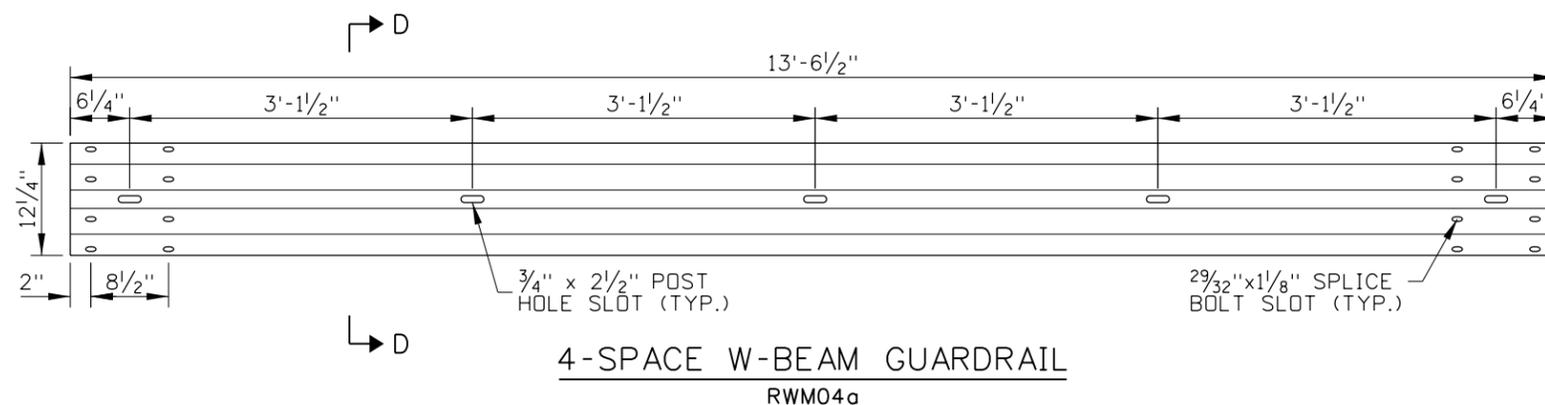
SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME:
612-1_0420.dgn
DRAWING DATE:
JUNE, 2017

**IDAHO
TRANSPORTATION
DEPARTMENT**
BOISE IDAHO

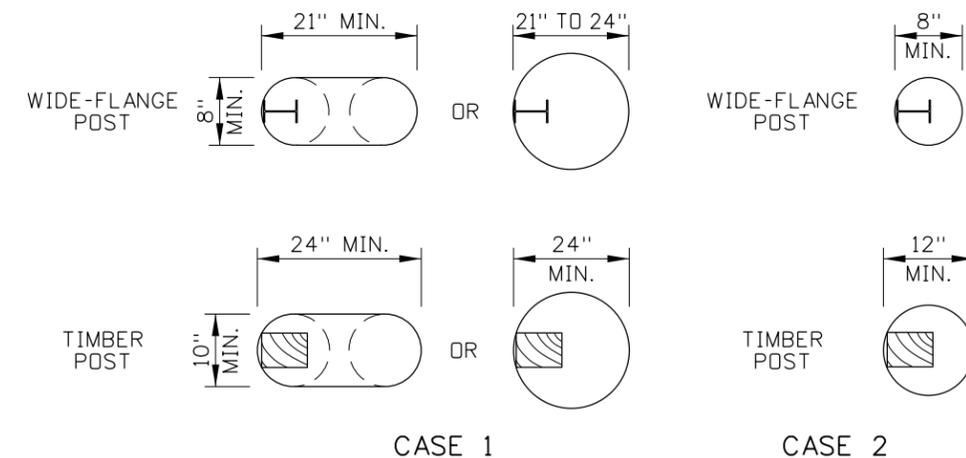
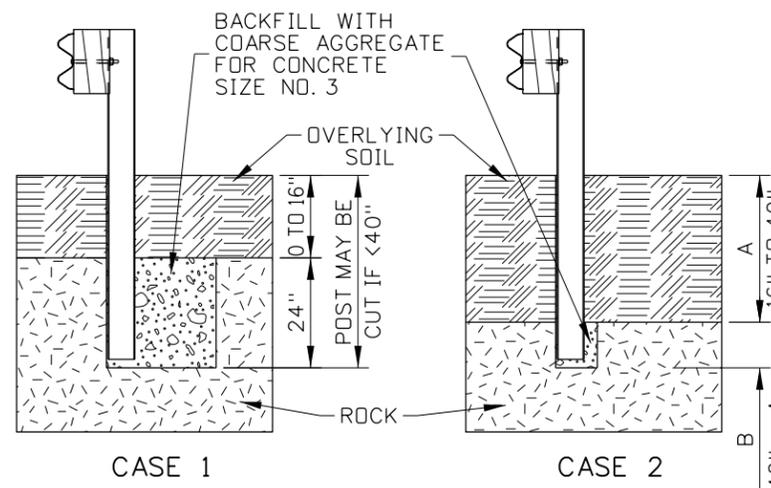
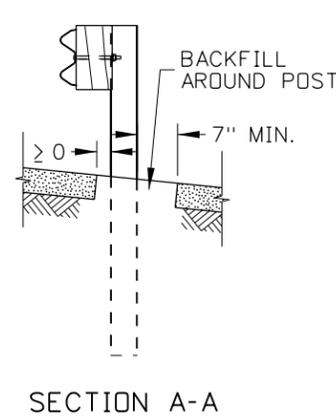
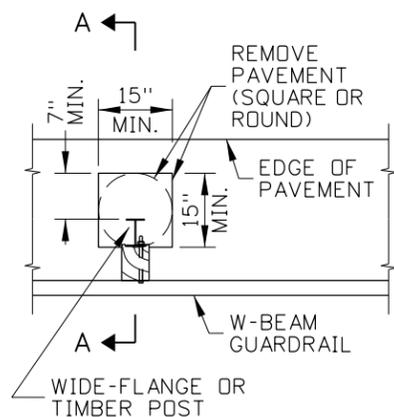
ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
31" W-BEAM GUARDRAIL

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



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

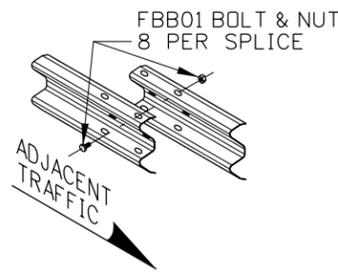
ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
31" W-BEAM GUARDRAIL

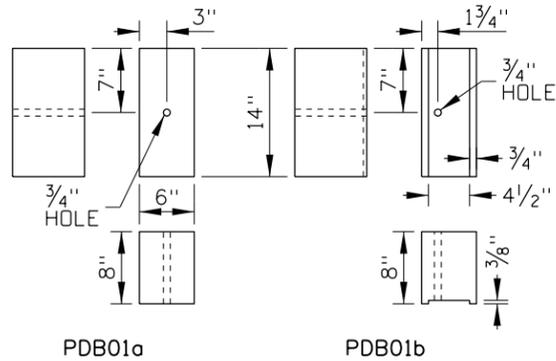
English
STANDARD DRAWING NO.
612-1
SHEET 4 OF 5

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

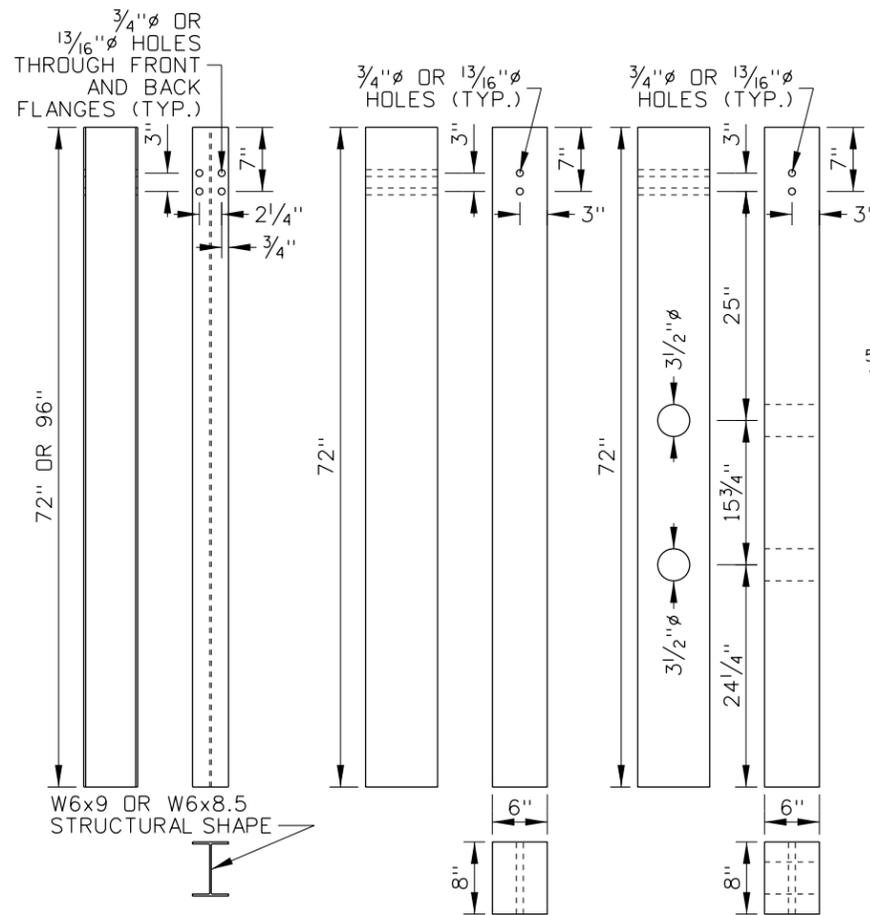
PROFESSIONAL ENGINEER
RYAN D. LANCASTER
13683
STATE OF IDAHO



W-BEAM SPLICE DETAIL
SEE NOTE NO. 14

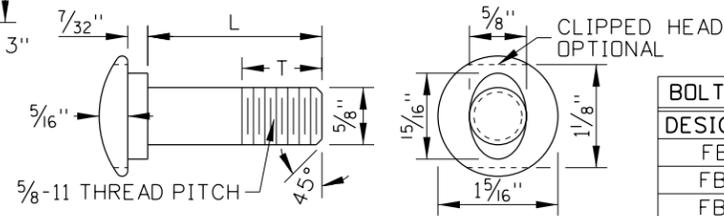


W-BEAM TIMBER BLOCKOUTS



WIDE-FLANGE PWE01, PWE--
TIMBER PDE02, PDE--
CRT TIMBER POST PDE09

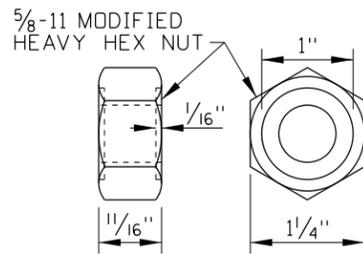
GUARDRAIL POSTS



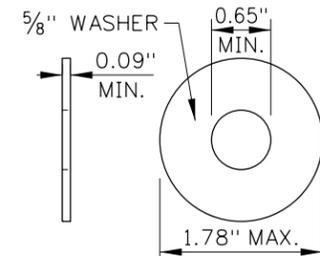
GUARDRAIL BOLT (BUTTON-HEADED)

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						

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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

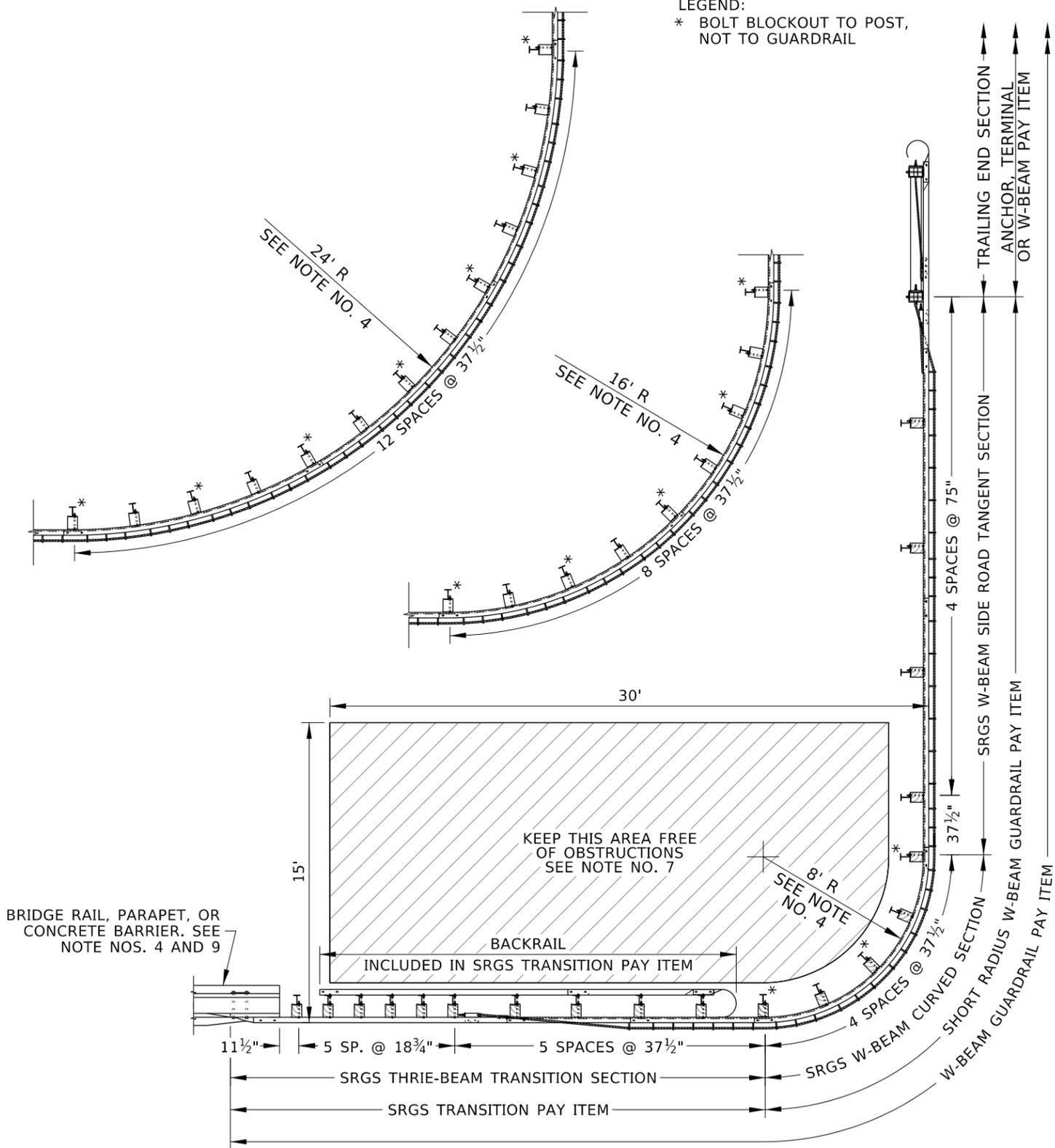
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

English

STANDARD DRAWING NO. 612-1

SHEET 5 OF 5

LEGEND:
 * BOLT BLOCKOUT TO POST,
 NOT TO GUARDRAIL



SHORT RADIUS W-BEAM GUARDRAIL SYSTEM (SRGS) OVERVIEW

ITEM NO.	COMPONENT DESCRIPTION	QUANTITIES			TF-13 NAME
		8' R	16' R	24' R	
①	THRIE-BEAM TERMINAL CONNECTOR	1	1	1	RTE01b
②	SRGS 8-SPACE THRIE-BEAM GUARDRAIL WITH HOLES AND SLOT	1	1	1	RTM20b
③	ASYMMETRICAL W-THRIE BEAM TRANSITION SECTION	1	1	1	RWT02
④	SRGS W-BEAM SPACER GUARDRAIL, WITH HOLES	1	1	1	RWM23b
⑤	SRGS CURVED 4-SPACE W-BEAM GUARDRAIL WITH HOLES	1	2	3	RWM24b
⑥	SRGS STRAIGHT 4-SPACE W-BEAM GUARDRAIL WITH HOLES	1	1	1	RWM25b (MOD.)
⑦	SRGS STRAIGHT 4-SPACE W-BEAM GUARDRAIL WITH HOLES & SLOT	1	1	1	RWM26b
⑧	SRGS 4-SPACE W-BEAM ANCHOR GUARDRAIL WITH HOLES	1	1	1	RWM27b
⑨	8-SPACE W-BEAM GUARDRAIL	1	1	1	RWM08b
⑩	W-BEAM SPACER GUARDRAIL	1	1	1	RWM01b (MOD.)
⑪	W-BEAM END END SECTION (ROUNDED), 12 GAUGE	1	1	1	RWE03a
⑫	72" WIDE-FLANGE GUARDRAIL POSTS	19	23	27	PWE01
⑬	W-BEAM BLOCKOUT	19	23	27	PDB01b OR POLYETHYLENE
⑭	BCT TIMBER POST	1	1	1	PDF04
⑮	FOUNDATION TUBE FOR MGS	1	1	1	PTE06
⑯	BCT POST SLEEVE	1	1	1	FMM02
⑰	BCT BEARING PLATE	1	1	1	FPB01
⑱	WIRE ROPE, 3/4" DIA. 6x19, LENGTH VARIES	2	2	2	RCM01
⑲	CABLE END FITTING	4	4	4	RCE03
⑳	SHORT GUARDRAIL ANCHOR BRACKET	3	3	3	FPA01a
㉑	1 1/4" GUARDRAIL SPLICE BOLT AND RECESSED NUT	76	84	92	FBB01
㉒	2" GUARDRAIL BOLT AND RECESSED NUT	11	11	11	FBB02
㉓	10" GUARDRAIL BOLT & RECESSED NUT	19	23	27	FBB03
㉔	EYE BOLT, 5/8" x 8" WITH 2 WASHERS AND 2 NUTS	37	49	61	FBE01a
㉕	5/8" x 1 1/2" HEX HEAD BOLT & NUT	12	12	12	FBX16a
㉖	5/8" x 8" HEX HEAD BOLT & NUT	1	1	1	FBX16a
㉗	5/8" x 10" HEX HEAD BOLT & NUT	1	1	1	FBX16a
㉘	5/8" FLAT WASHER	156	188	220	FWC16a
㉙	7/8" x 15" STRUCTURAL HEX HEAD BOLT & NUT	5	5	5	FBX22b
㉚	7/8" HARDENED ROUND WASHER	10	10	10	FWC22b
㉛	CONCRETE BARRIER TO THRIE-BEAM TRANSITION CONNECTOR PLATE	1	1	1	FPB--
㉜	THRIE-BEAM TRANSITION CONNECTOR PLATE	1	1	1	FPB07
㉝	RECTANGULAR GUARDRAIL PLATE WASHER	12	12	12	FWR03
㉞	16D GALVANIZED NAIL	2	2	2	N/A

SIDE ROAD

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

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 BOISE IDAHO



ORIGINAL SIGNED BY: MONICA CRIDER
 HIGHWAY DESIGN ENGINEER

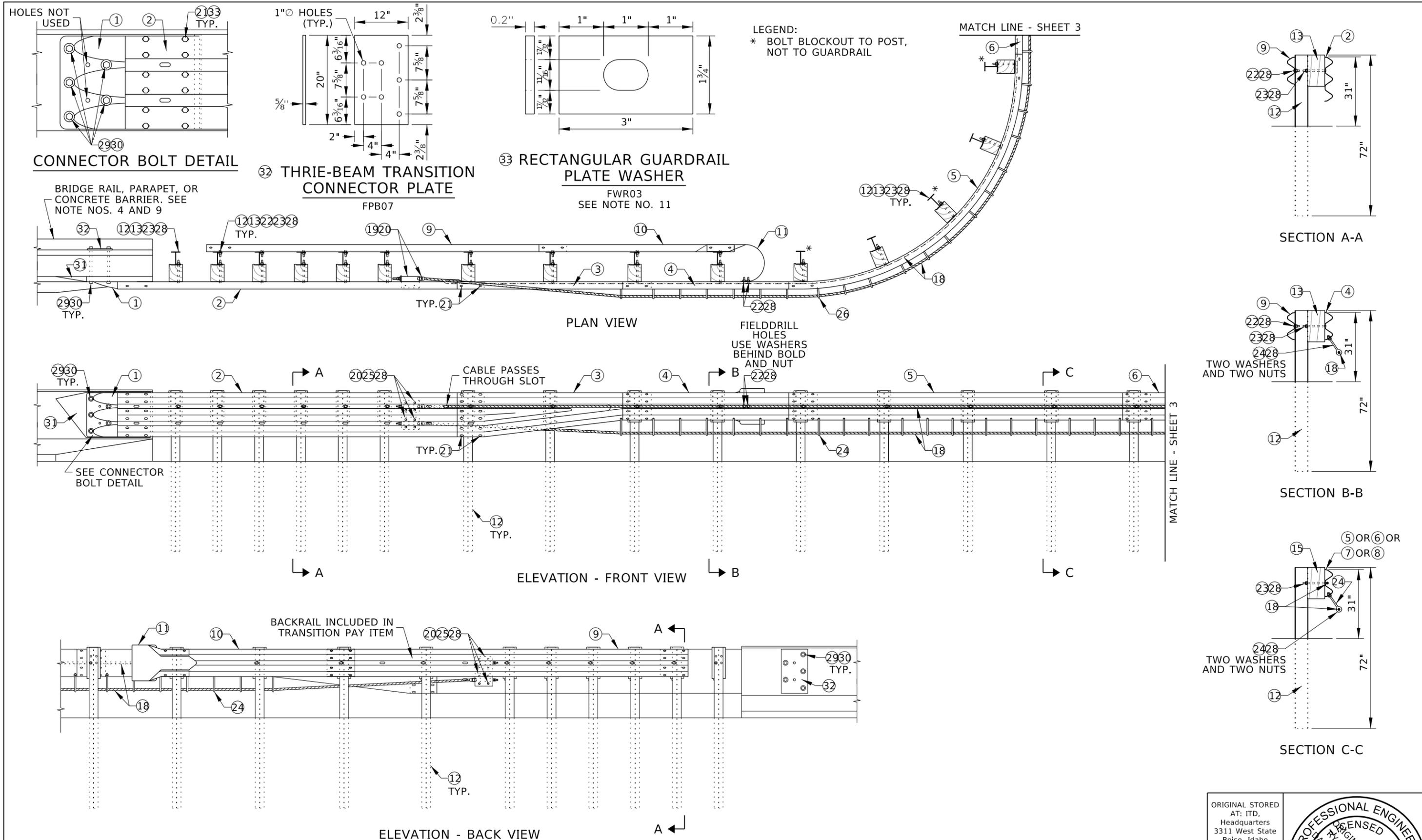
STANDARD DRAWING
SHORT RADIUS W-BEAM GUARDRAIL SYSTEM

ENGLISH
 STANDARD DRAWING NO. 612-3
 SHEET 1 OF 6

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

PROFESSIONAL ENGINEER
 RYAN D. LANCASTER
 APR 24, 2024





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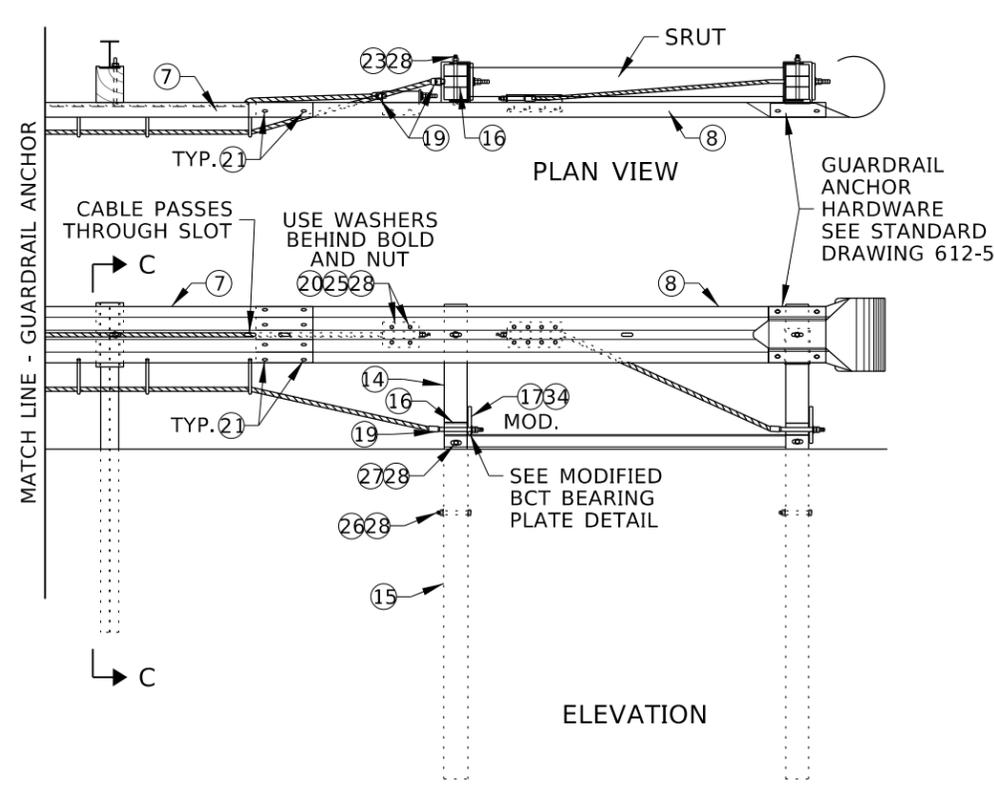
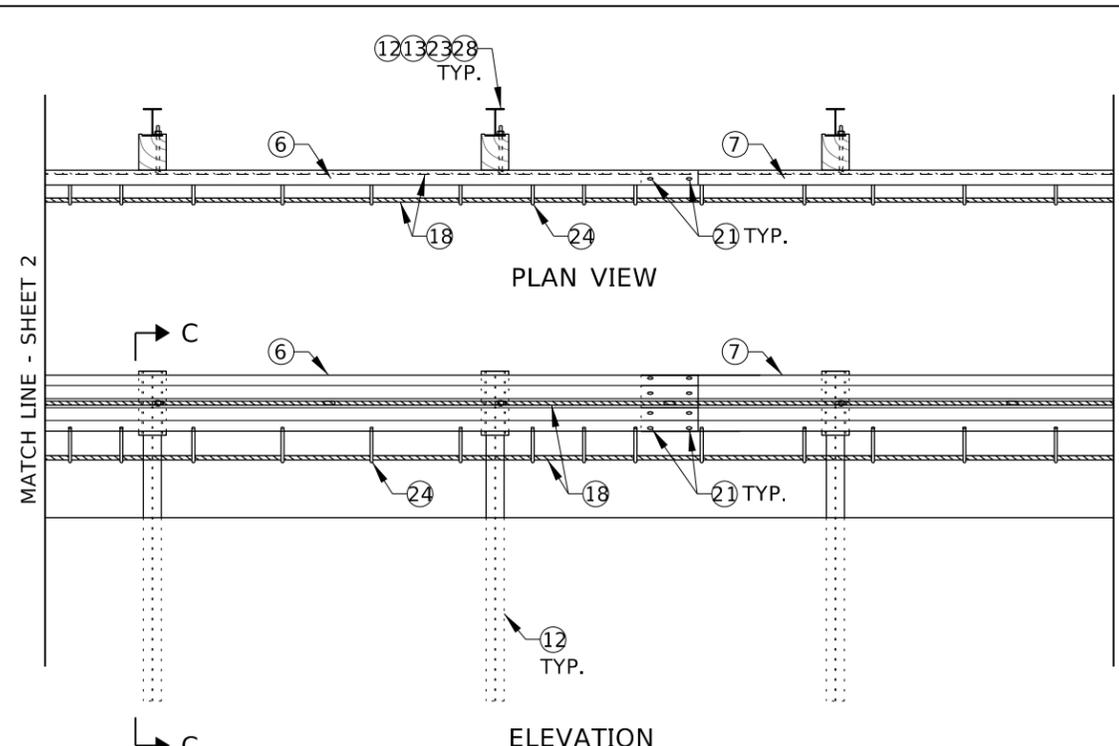
ORIGINAL SIGNED BY: MONICA CRIDER
 HIGHWAY DESIGN ENGINEER

STANDARD DRAWING
SHORT RADIUS W-BEAM GUARDRAIL SYSTEM

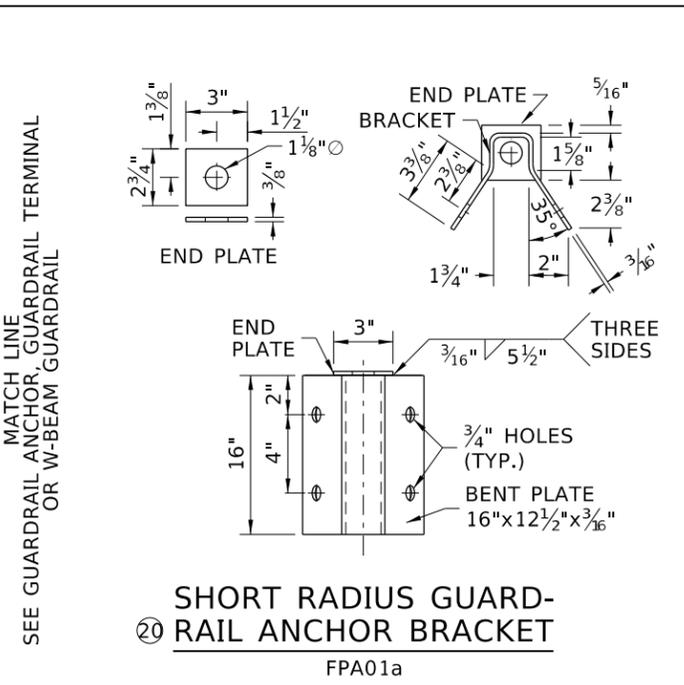
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 SHEET 2 OF 6

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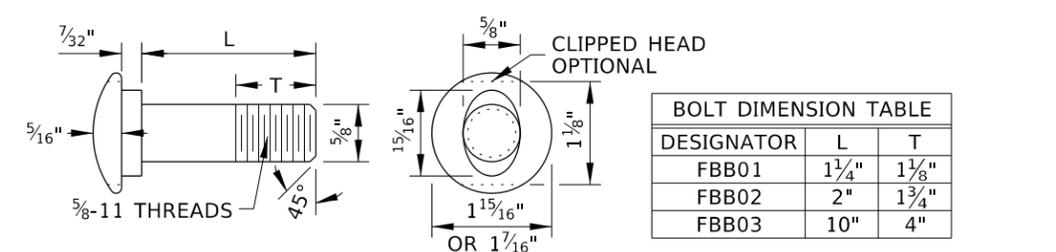
PROFESSIONAL ENGINEER
 LICENSED
 ORIGINAL SIGNED BY
 DATE ORIGINAL SIGNED
 APR 24, 2023
 STATE OF IDAHO
RYAN D. LANCASTER



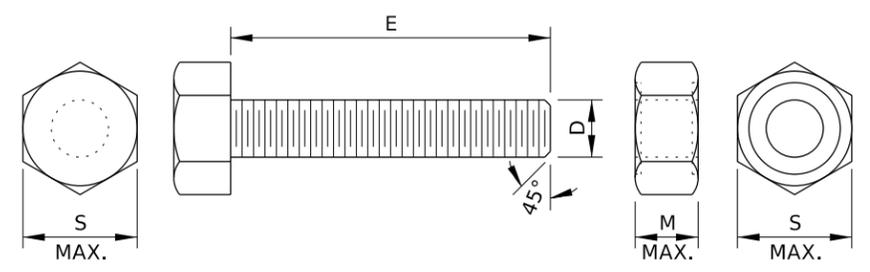
GUARDRAIL ANCHOR
SEE NOTE NO. 4



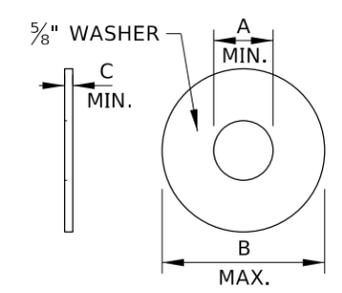
SHORT RADIUS GUARDRAIL ANCHOR BRACKET
FPA01a



GUARDRAIL BOLT
FBB01, FBB02, FBB03
USE WITH RECESSED NUT AND PLAIN ROUND WASHER (FWC16a)



HEX BOLT AND NUT
STRUCTURAL HEX BOLT AND NUT
FBX16a, FBX22b



WASHER DIMENSION TABLE				
DESIGNATOR	A	B	C	ANSI
FWC16a	1 1/16"	1 3/4"	1/8"	3/4"
FWC22b	1 5/16"	1 25/32"	0.136"	7/8"

PLAIN ROUND WASHER
HARDENED ROUND WASHER
FWC16a, FWC22b

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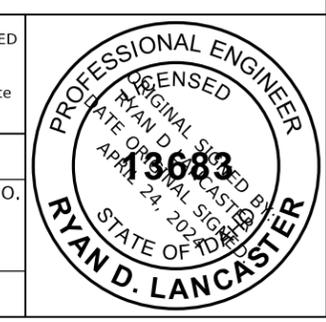
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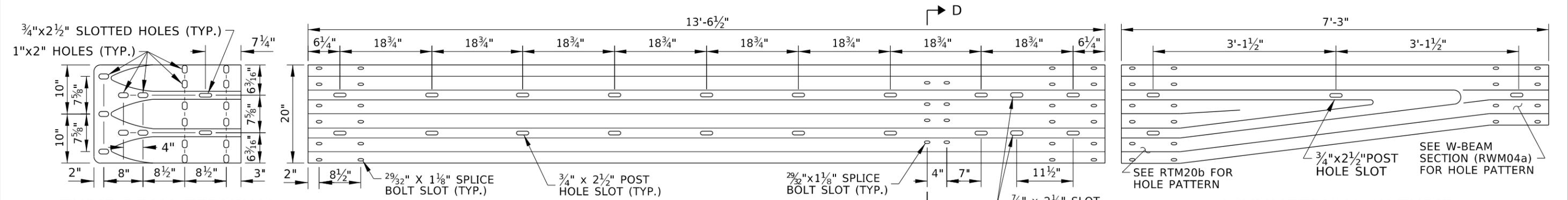
ORIGINAL SIGNED BY: MONICA CRIDER
HIGHWAY DESIGN ENGINEER

STANDARD DRAWING
SHORT RADIUS W-BEAM GUARDRAIL SYSTEM

ENGLISH
STANDARD DRAWING NO. 612-3
SHEET 3 OF 6

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

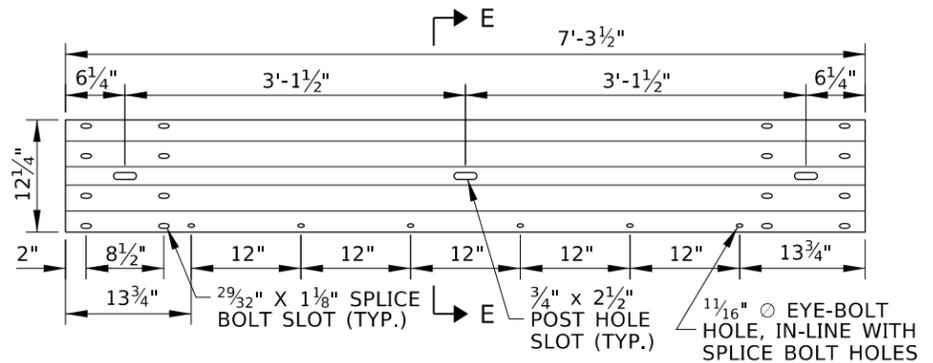




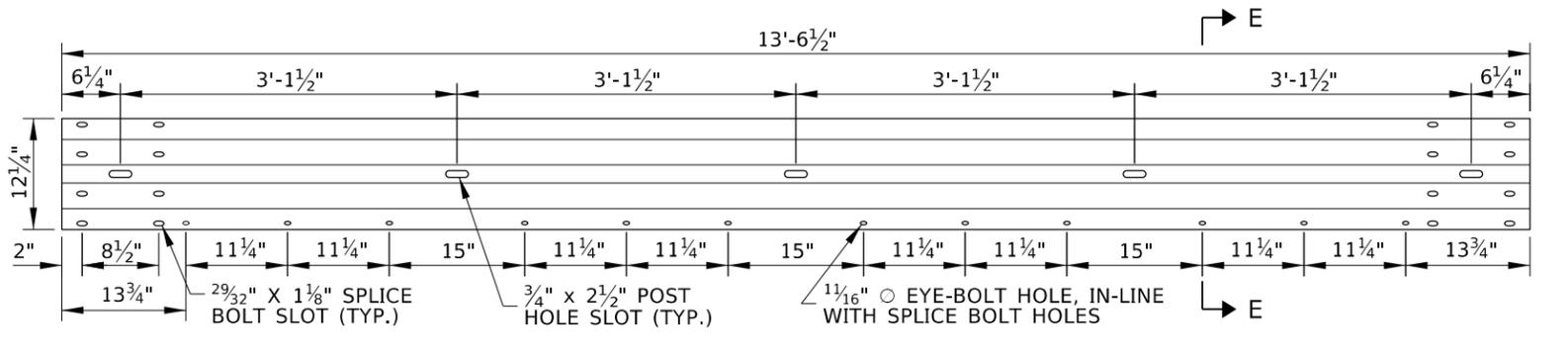
① THRIE-BEAM TERMINAL CONNECTOR
RTE01b

② SRGS 8-SPACE THRIE-BEAM GUARDRAIL WITH HOLES AND SLOT
RTM20b

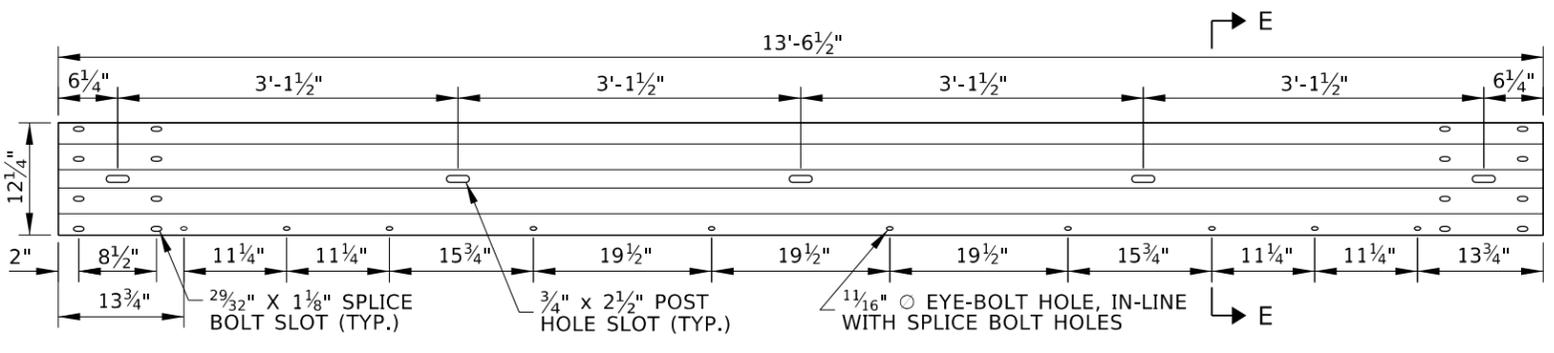
③ ASYMMETRICAL W-THRIE BEAM TRANSITION SECTION
RWT02
RIGHT-HAND OR LEFT-HAND CONFIGURATION
RIGHT-HAND SHOWN



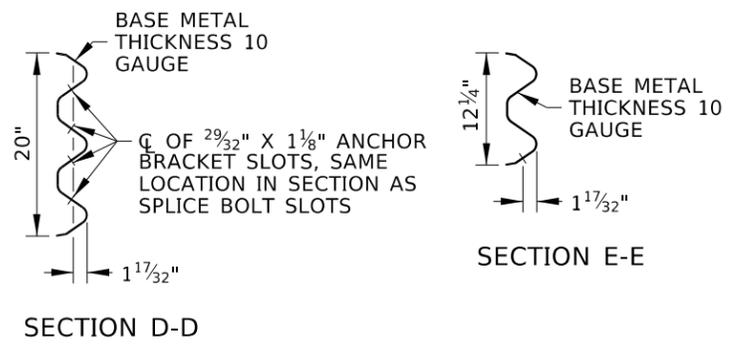
④ SRGS W-BEAM SPACER GUARDRAIL WITH HOLES
RWM23b



⑤ SRGS CURVED 4-SPACE W-BEAM GUARDRAIL WITH HOLES
RWM24b



⑥ SRGS STRAIGHT 4-SPACE W-BEAM GUARDRAIL WITH HOLES
RWM25b (MOD.)



REVISIONS								
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ORIGINAL SIGNED BY: MONICA CRIDER
HIGHWAY DESIGN ENGINEER

STANDARD DRAWING
SHORT RADIUS W-BEAM GUARDRAIL SYSTEM

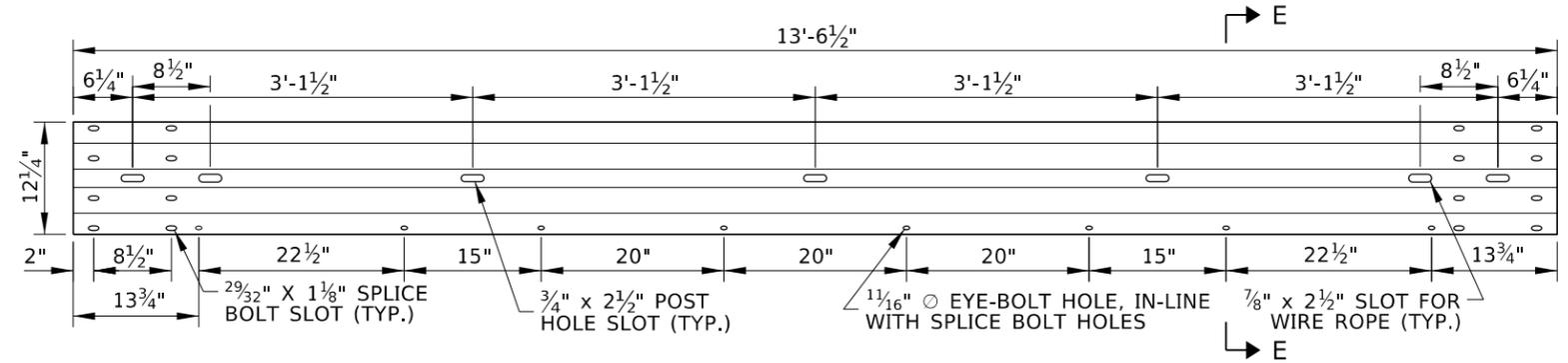
ENGLISH
STANDARD DRAWING NO. 612-3
SHEET 4 OF 6

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

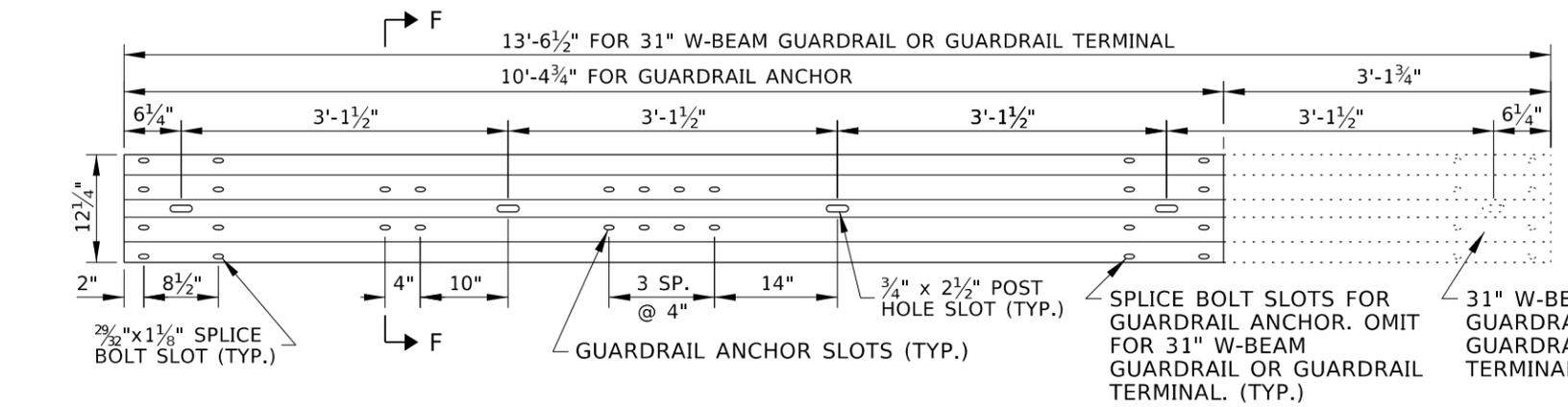
PROFESSIONAL ENGINEER
RYAN D. LANCASTER
APR 24, 2024
STATE OF IDAHO

NOTES

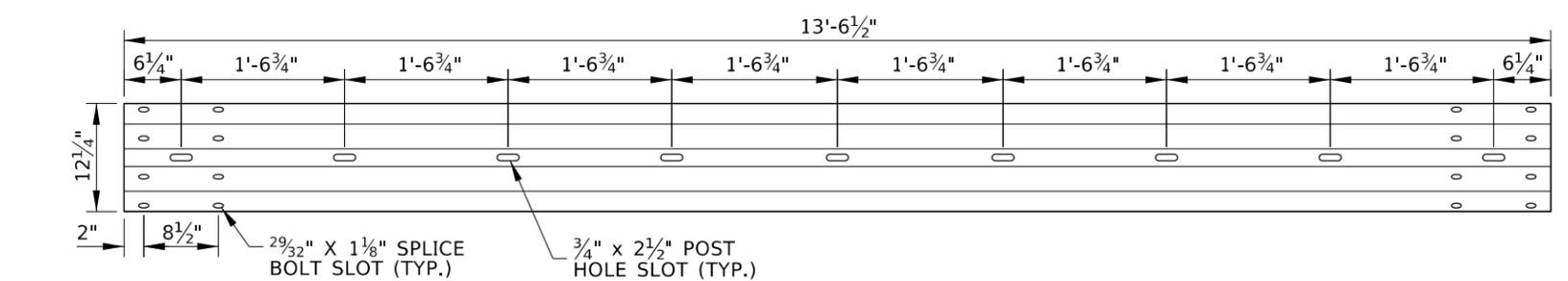
- THE SHORT RADIUS W-BEAM GUARDRAIL SYSTEM (SRGS) SHOWN IS A MASH TEST LEVEL 3 BARRIER SYSTEM. THE SYSTEM IS FOR SHIELDING HIGHWAY OR ROAD USERS FROM ROADSIDE AREAS WHERE A MAIN ROAD AND A SIDE ROAD INTERSECT IN CLOSE PROXIMITY TO A BRIDGE OR LOCATION THE LENGTH OF NEED CANNOT BE PROVIDED UPSTREAM OF THE HAZARD.
- 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.
- USE 10 GAUGE W-BEAM AND THRIE-BEAM UNLESS OTHERWISE NOTED. DRILL OR PUNCH HOLES AND SLOTS BEFORE GALVANIZING UNLESS OTHERWISE NOTED.
- THE SRGS SYSTEM CONSISTS OF FOUR SECTIONS (AND UP TO FOUR PAY ITEMS).
 - SRGS THRIE-BEAM TRANSITION: USE THE SRGS THRIE-BEAM TRANSITION WITH W-BEAM BACKRAIL (INCLUDED IN TRANSITION PAY ITEM) AS SHOWN. DO NOT SHORTEN THE TRANSITION. CURB IS NOT REQUIRED BENEATH THE THRIE-BEAM TRANSITION, BUT CAN BE ADDED (SEE THE GUARDRAIL TRANSITION, HIGH SPEED STANDARD DRAWING). THE FOLLOWING APPLY WHEN CONNECTING THE SRGS TO VARYING RIGID BARRIER CONNECTIONS:
 - BRIDGE RAIL OR PARAPET: SEE BRIDGE PLANS.
 - CAST-IN-PLACE CONCRETE BARRIER: USE THE CONCRETE BARRIER TO THRIE-BEAM TRANSITION CONNECTOR PLATE.
 - PRECAST CONCRETE BARRIER:
 - USE THE CONCRETE BARRIER TO THRIE-BEAM TRANSITION CONNECTOR PLATE.
 - CHAMFER THE FIRST 43 1/2" OF THE BARRIER THAT EXTENDS BEYOND THE FACE OF THE CURB BENEATH THE TRANSITION (SEE THE PRECAST CONCRETE BARRIER STD. DWG.).
 - USE ANCHOR PINS TO PIN DOWN THE FIRST THREE BARRIER SECTIONS.
 - SRGS W-BEAM CURVED SECTION: USE 8', 16', OR 24' RADII. DO NOT USE OTHER RADII. SHOP BEND CURVED W-BEAM. WHERE INDICATED, BOLT BLOCKOUT TO POST, BUT DO NOT BOLT THROUGH W-BEAM (RWM24b). DO NOT INSTALL CURB IN THE CURVED SECTION.
 - SRGS W-BEAM SIDE ROAD TANGENT SECTION: DO NOT SHORTEN OR MODIFY THE SIDE ROAD TANGENT SECTION. DO NOT INSTALL CURB IN THE SIDE ROAD TANGENT SECTION.
 - SRGS W-BEAM TRAILING-END CONSISTING OF A GUARDRAIL ANCHOR, A GUARDRAIL TERMINAL, OR CONTINUATION OF 31" W-BEAM GUARDRAIL ON THE SIDE ROAD.
 - ANCHOR: USE THE ANCHOR SYSTEM TO END THE SRGS WHEN THE ANCHOR IS OUTSIDE OF THE CLEAR ZONE FOR APPROACHING TRAFFIC ON THE MINOR ROAD. USE RWM27b.
 - GUARDRAIL TERMINAL: USE A CRASHWORTHY GUARDRAIL TERMINAL TO END THE SRGS WHEN APPROACHING TRAFFIC ON THE MINOR ROAD IS WITHIN THE CLEAR ZONE FOR THE MINOR ROAD. USE 10'-4 3/4" RWM27b.
 - 31" W-BEAM GUARDRAIL: EXTEND THE 31" W-BEAM GUARDRAIL WHEN GUARDRAIL CONTINUES ON THE MINOR ROAD. USE 13'-6 1/2" RWM27b.
- THE WIRE ROPES BEGIN IN THE SRGS THRIE-BEAM TRANSITION SECTION AND END IN THE TRAILING END SECTION. THE WIRE ROPES ARE PAID UNDER THE SHORT RADIUS W-BEAM GUARDRAIL PAY ITEM.
- TENSION THE FINISHED CABLE ASSEMBLIES UNTIL THE SLACK IS REMOVED.
- KEEP THE AREA BEHIND THE SRGS FREE OF RIGID OBJECTS. IN HIGH-SPEED (TL-3 SPEED) IMPACTS WITH THE SRGS, VEHICLES (MASH TL-3 SPECIFICATIONS) CAN ENTER INTO AN AREA MEASURED 15' FROM THE HIGHWAY OR MAIN ROAD AND 30' FROM THE SIDE ROAD.
- OVERLAP SPLICES SO THE EXPOSED W-BEAM EDGE IS DOWNSTREAM OF THE ADJACENT TRAFFIC ON THE HIGHWAY OR MAIN ROAD.
- IF THERE IS NO RIGID BARRIER ON THE HIGHWAY OR MAIN ROAD, THE SRGS SHOULD BE INSTALLED SYMMETRICALLY WITHOUT THE SRGS THRIE-BEAM TRANSITION. THE SECTION ALONG THE HIGHWAY OR MAIN ROAD SHOULD BE THE MIRROR IMAGE OF THE SIDE ROAD INSTALLATION.
- THE FOLLOWING APPLY TO THE CONCRETE BARRIER TO THRIE-BEAM TERMINAL CONNECTOR PLATE:
 - USE ASTM A36 STEEL. USE 3/16" THICK STEEL FOR PLATES P1 AND P2. USE 1/4" THICK STEEL FOR STIFFENERS S1 THROUGH S10.
 - WELD COMPONENTS WITH E60 ROD.
 - WELD STIFFENERS LOCATED ON THE OUTSIDE EDGES OF THE COVER PLATES WITH 3/16" CONTINUOUS BACK WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.
 - WELD STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATES WITH 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.
 - WELD RECTANGULAR AND TRIANGULAR COVER PLATES TOGETHER WITH A 3/16" CONTINUOUS BACK WELD ON BOTH SIDES.
 - GALVANIZE CONNECTOR PLATES AFTER PUNCHING AND ASSEMBLY.
- INSTALL RECTANGULAR GUARDRAIL PLATE WASHERS UNDER GUARDRAIL NUTS AT THE SPLICE BETWEEN THE THRIE-BEAM GUARDRAIL AND THRIE-BEAM TERMINAL CONNECTOR.
- DELINEATE THE SRGS WITH TYPE 9 DELINEATORS. SEE THE DELINEATOR STANDARD DRAWING FOR DELINEATOR SPACING.
- DRAWING NOT TO SCALE.



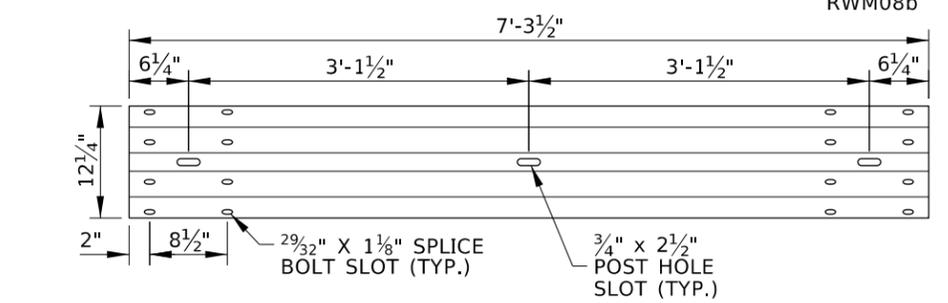
⑦ SRGS STRAIGHT 4-SPACE W-BEAM GUARDRAIL WITH HOLES AND SLOT
RWM26b



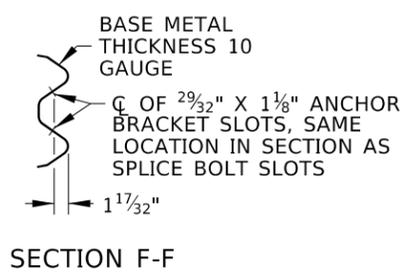
⑧ SRGS 4-SPACE W-BEAM GUARDRAIL WITH HOLES
RWM27b



⑨ 8-SPACE W-BEAM GUARDRAIL
RWM08b



⑩ W-BEAM SPACER GUARDRAIL
RWM01b (MOD.)



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

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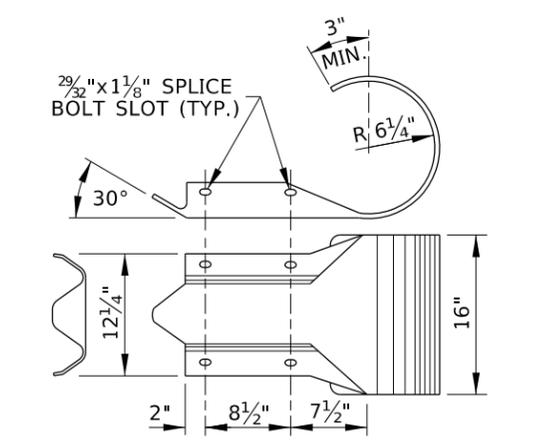
ORIGINAL SIGNED BY: MONICA CRIDER
HIGHWAY DESIGN ENGINEER

STANDARD DRAWING
SHORT RADIUS W-BEAM GUARDRAIL SYSTEM

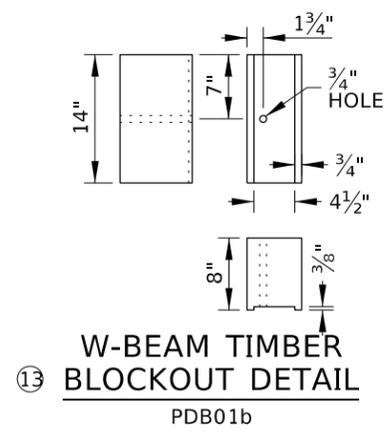
ENGLISH
STANDARD DRAWING NO. 612-3
SHEET 5 OF 6

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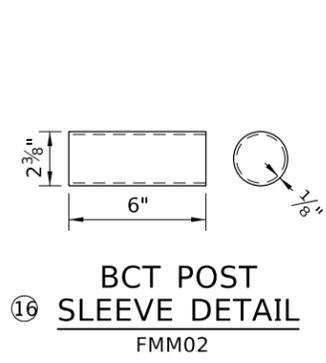




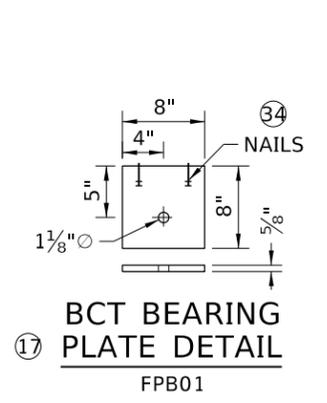
① **W-BEAM END SECTION DETAIL**
RWE03a



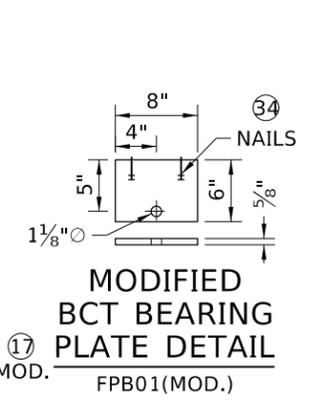
⑬ **W-BEAM TIMBER BLOCKOUT DETAIL**
PDB01b



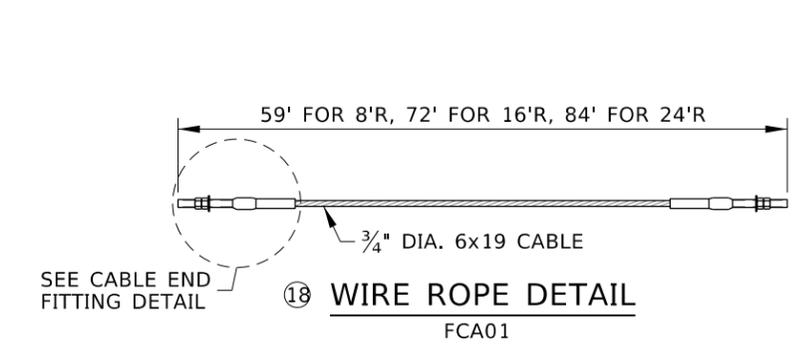
⑯ **BCT POST SLEEVE DETAIL**
FMM02



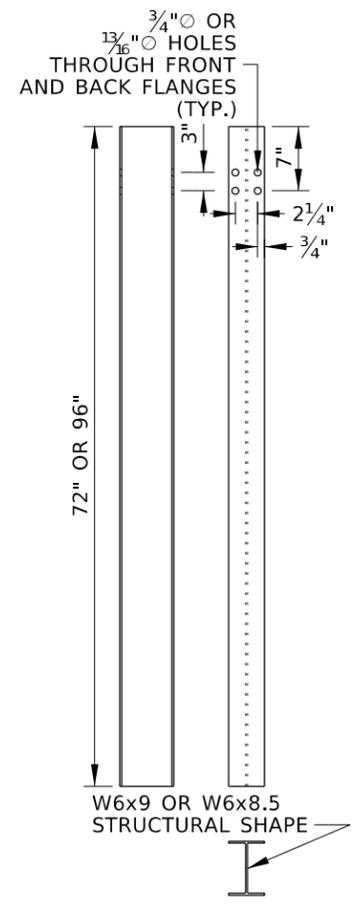
⑰ **BCT BEARING PLATE DETAIL**
FPB01



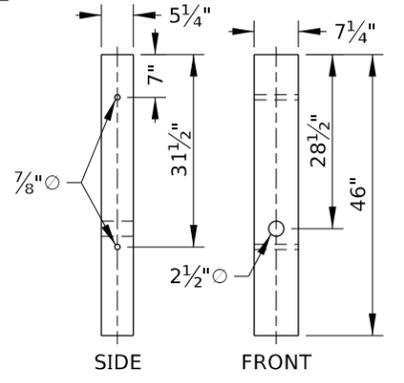
⑰ MOD. **BCT BEARING PLATE DETAIL**
FPB01(MOD.)



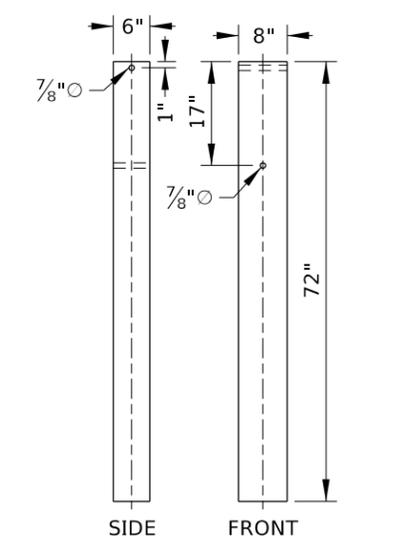
⑱ **WIRE ROPE DETAIL**
FCA01



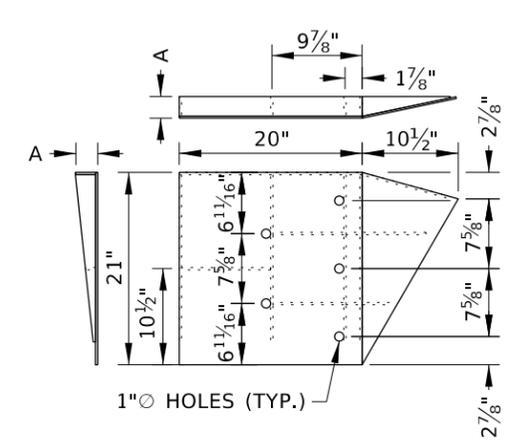
⑫ **72" WIDE-FLANGE GUARDRAIL POSTS**
PWE01



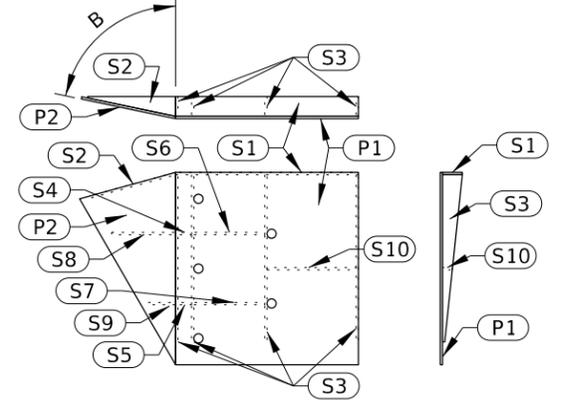
⑭ **BCT TIMBER POST DETAIL**
PDF04



⑮ **FOUNDATION TUBE DETAIL**
PTE06

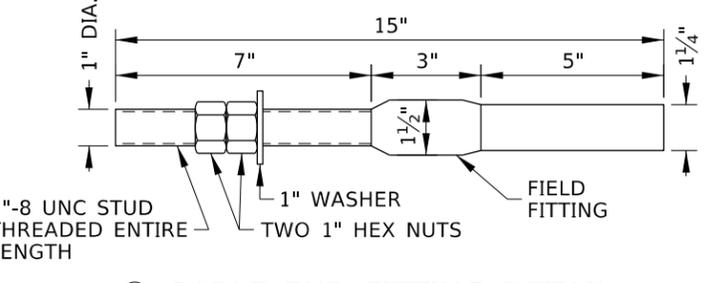


⑳ **CONCRETE BARRIER TO THREE-BEAM TRANSITION CONNECTOR PLATE**
FPB--, ASTM A36, SEE NOTE NO. 10

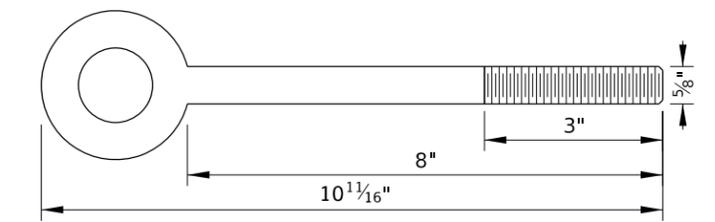


㉑ **CONNECTOR PLATE STIFFENER DETAIL**
SEE NOTE NO. 10

STIFFENER DIMENSION TABLE		
DIM.	F-SHAPE / NJ SHAPE	SINGLE SLOPE SHAPE
A	2 3/8"	4"
B	78°	69°
C	20"	20"
D	9 5/8"	9 5/8"
E	18 1/4"	18 1/4"
F	2 3/16"	3 13/16"
G	1 1/2"	1 1/2"
H	7 3/4"	7 3/4"
J	1 1/2"	2 7/16"
K	1 1/16"	1 1/8"
L	7"	7"
M	3"	3"
N	9 3/4"	9 3/4"
O	1 1/16"	1 13/16"



㉒ **CABLE END FITTING DETAIL**
RCE03 (WITH FNX24a AND FWC24a)



㉔ **EYE-BOLT AND RECESSED NUT**
FBE01a
USE WITH TWO (2) RECESSED NUTS AND TWO (2) PLAIN ROUND WASHERS (FWC16a)

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

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 612-3_0424.dgn
DRAWING DATE: APRIL 2024

IDAHO TRANSPORTATION DEPARTMENT
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BOISE IDAHO

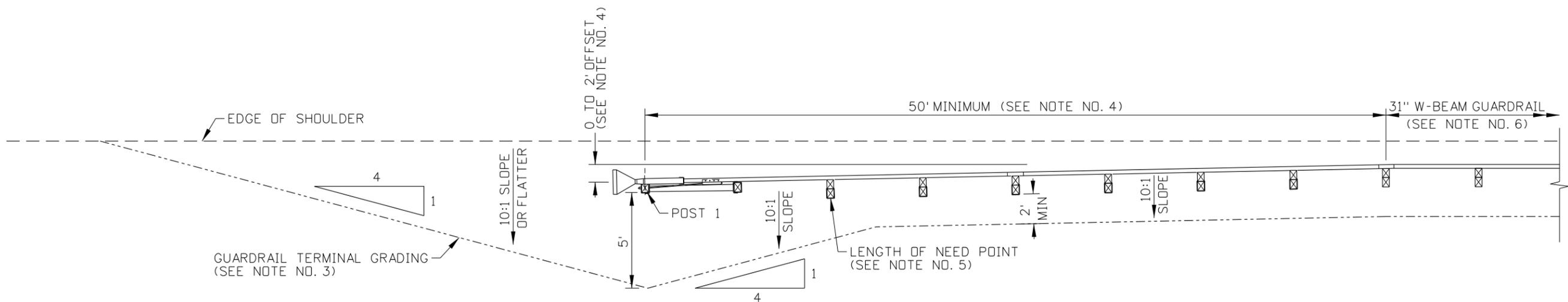
ORIGINAL SIGNED BY: MONICA CRIDER
HIGHWAY DESIGN ENGINEER

STANDARD DRAWING
SHORT RADIUS W-BEAM GUARDRAIL SYSTEM

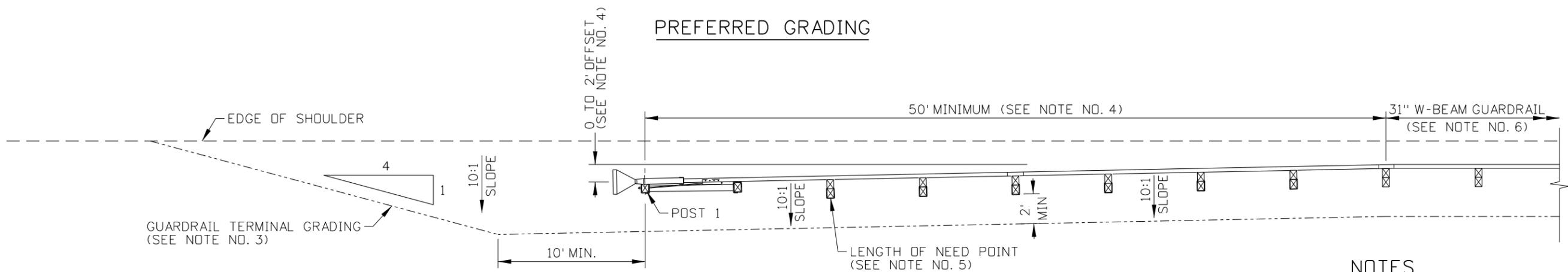
ENGLISH
STANDARD DRAWING NO. 612-3
SHEET 6 OF 6



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



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

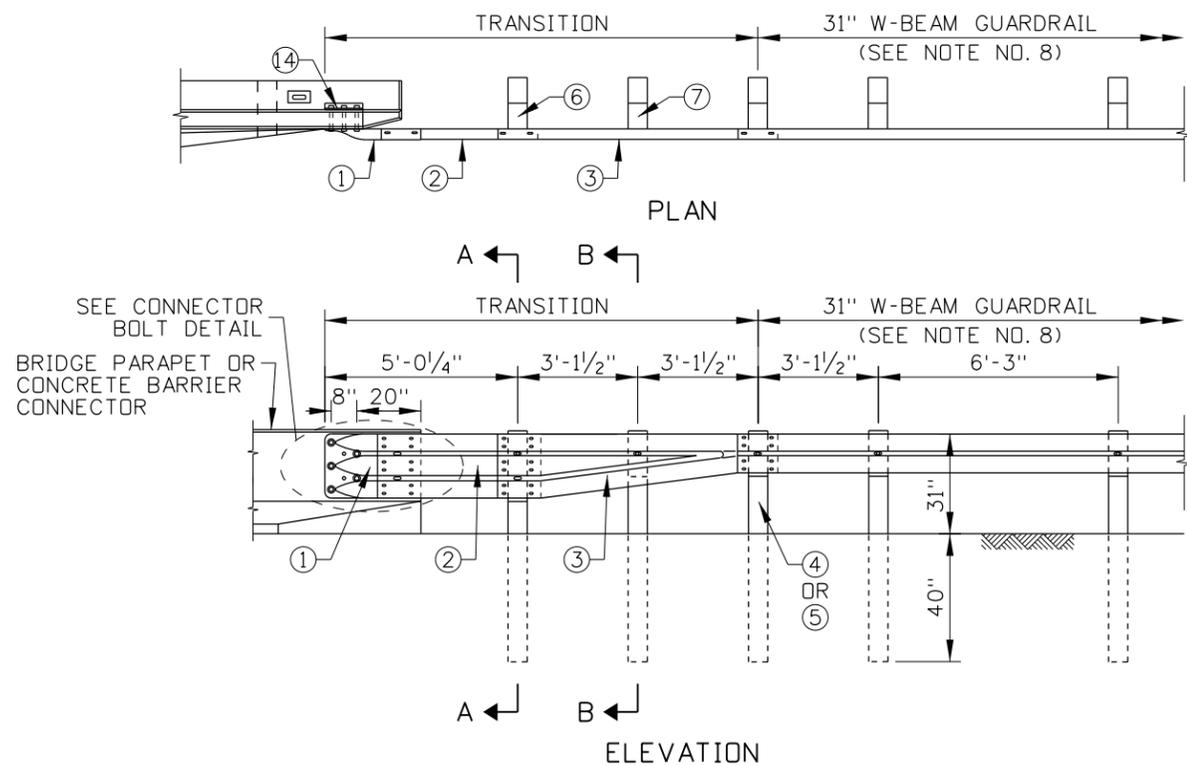
GUARDRAIL TERMINAL TANGENT

English

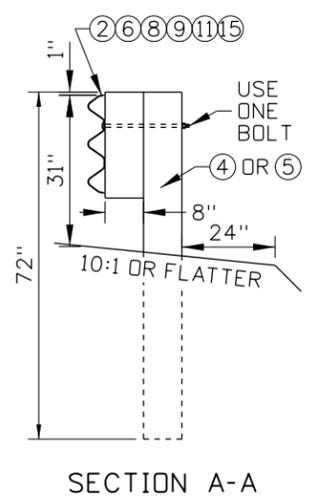
STANDARD DRAWING NO.
612-8

SHEET 1 OF 1

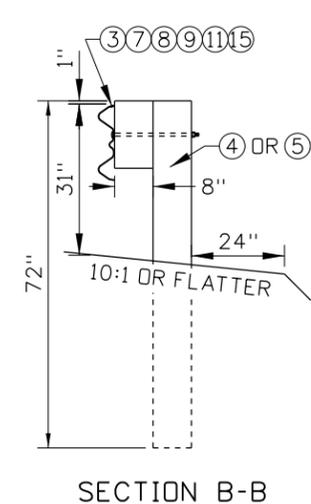
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho



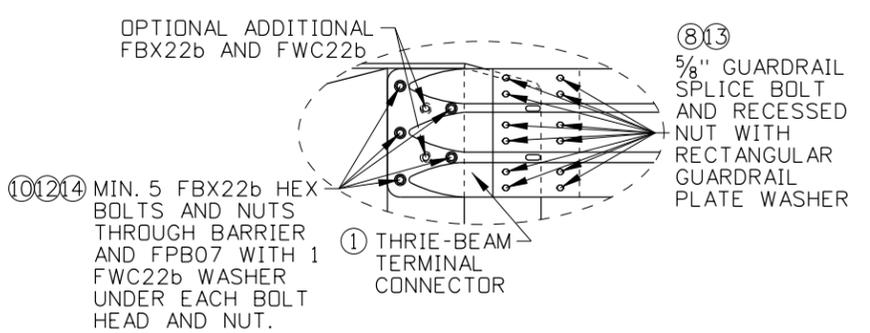
LOW SPEED GUARDRAIL TRANSITION



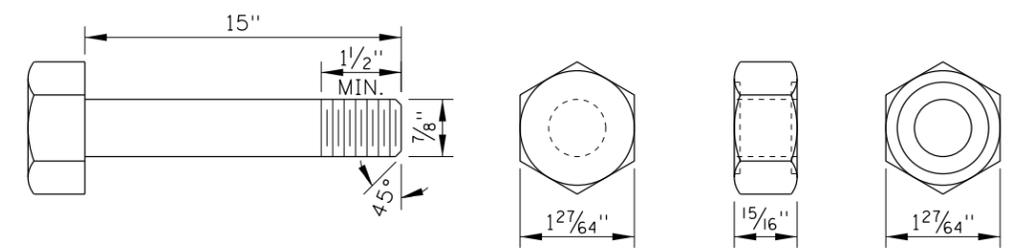
SECTION A-A



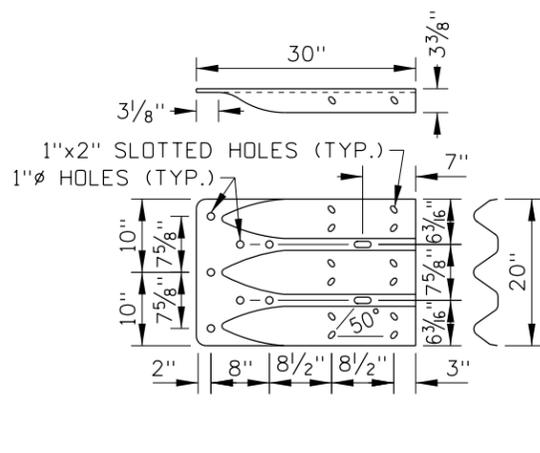
SECTION B-B



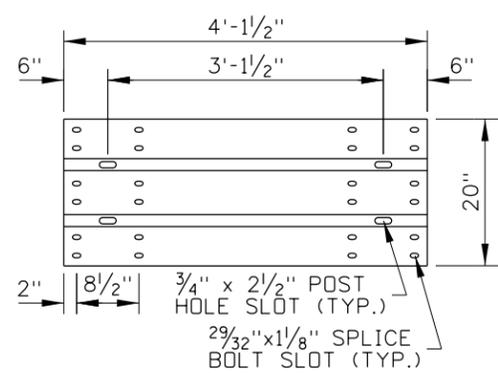
CONNECTOR BOLT DETAIL



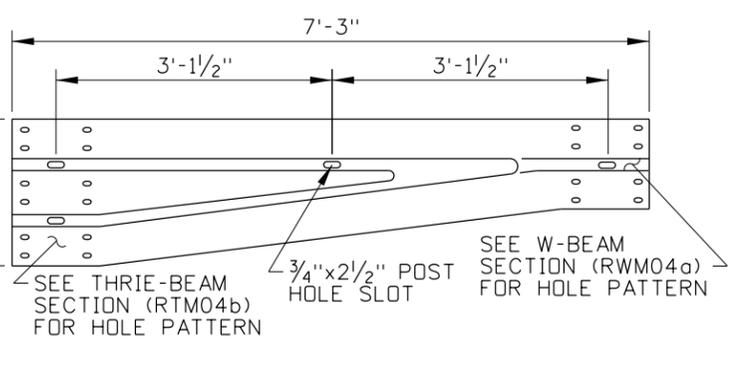
⑩ STRUCTURAL HEX BOLT AND NUT
FBX22b



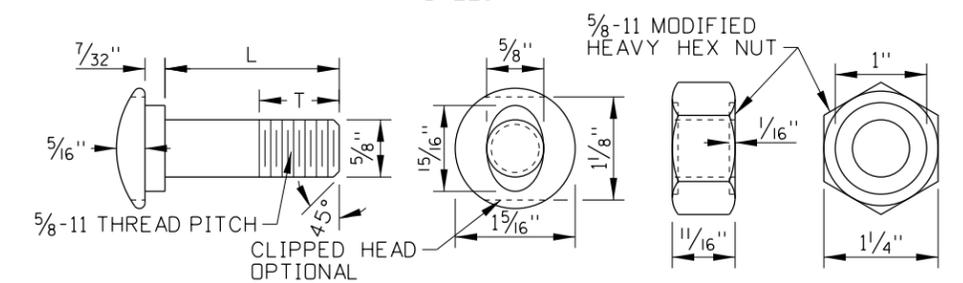
① THRIE-BEAM
TERMINAL CONNECTOR
RTE01b (10 GAUGE)



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

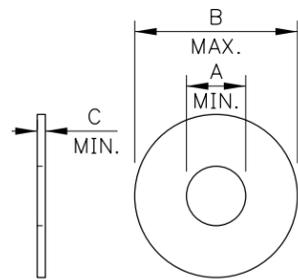
IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING
GUARDRAIL TRANSITION
LOW SPEED

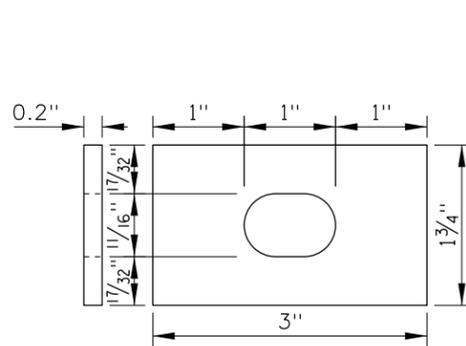
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho
English
STANDARD DRAWING NO. 612-10
SHEET 1 OF 2



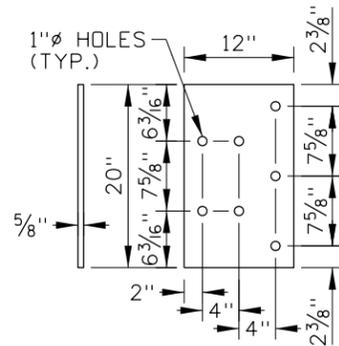


WASHER DIMENSION TABLE			
DESIGNATOR	A	B	C
FWC16a	0.649"	1.780"	0.090"
FWC22b	0.938"	1.780"	0.136"

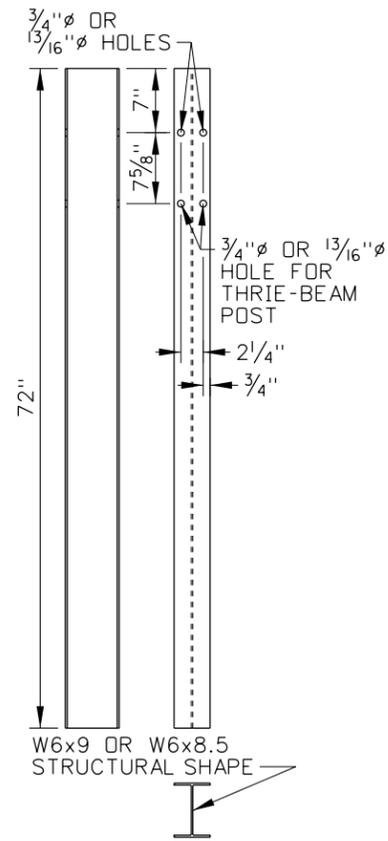
⑪⑫ ROUND WASHERS
FWC16a, FWC22b



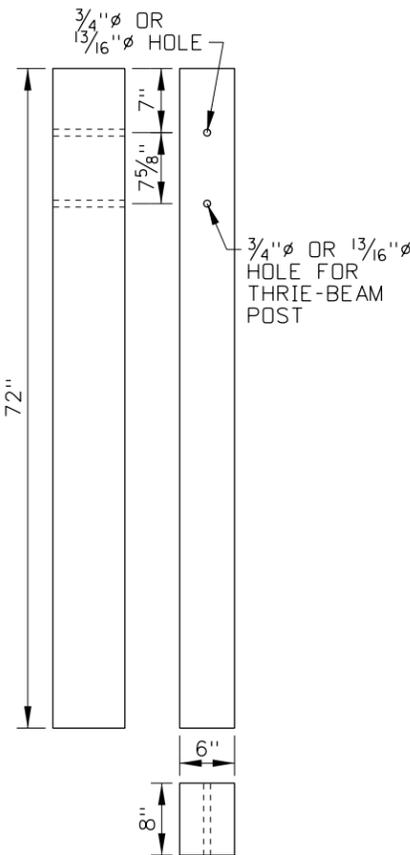
⑬ RECTANGULAR GUARDRAIL
PLATE WASHER
FWR03



⑭ THRIE-BEAM TERMINAL
CONNECTOR PLATE
FPB07

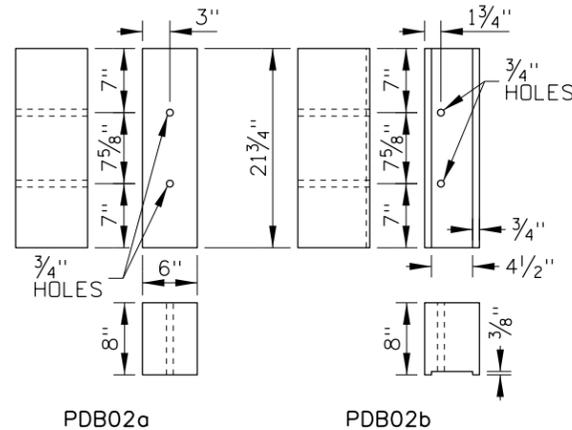


④ WIDE-FLANGE
PWE01

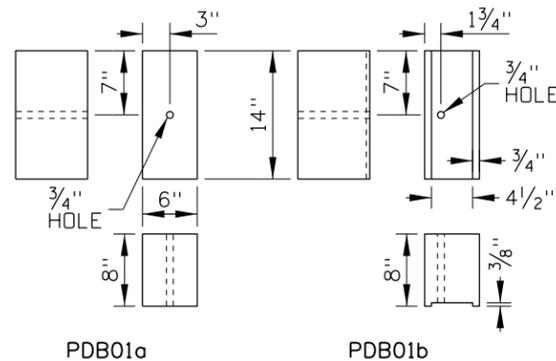


⑤ TIMBER
PDE02

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**

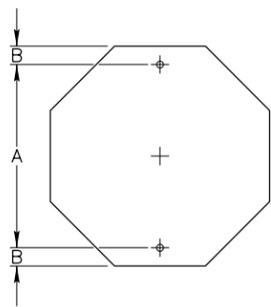
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

English

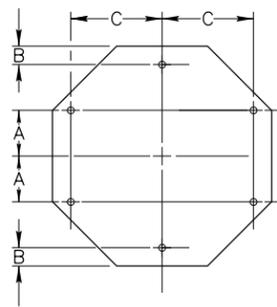
STANDARD DRAWING NO.
612-10

SHEET 2 OF 2

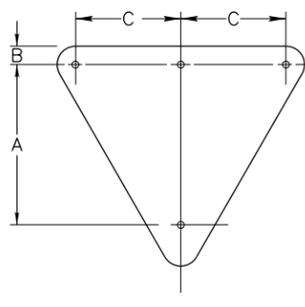
PROFESSIONAL ENGINEER
LICENSED
13683
RYAN D. LANCASTER
STATE OF IDAHO



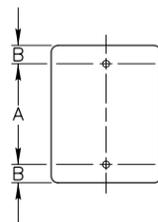
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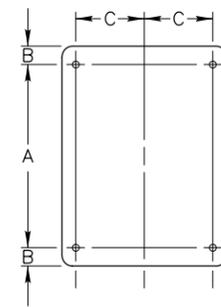
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48"X48"	10"	—	20"



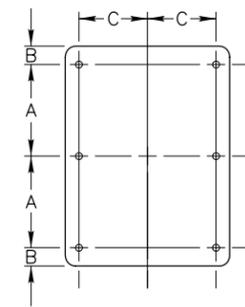
SIGN SIZE	A	B	C
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36"X36"	23"	3"	—
48"X48"	25"	3"	17"
60"X60"	35"	4"	23"



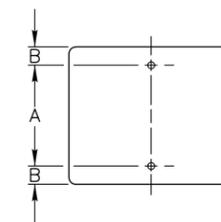
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12"X30"	24"	3"
12"X36"	32"	2"
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30"X36"	30"	3"



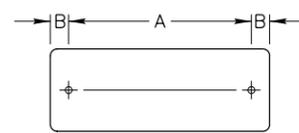
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60"X36"	30"	3"	21"



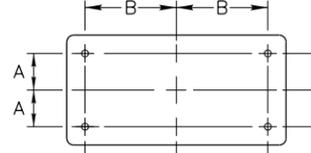
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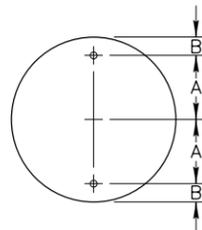
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24"X6"	3"	1 1/2"
24"X10"	7"	1 1/2"
24"X12"	9"	1 1/2"
24"X18"	15"	1 1/2"
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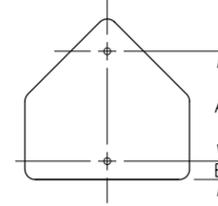
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54"X18"	48"	3"



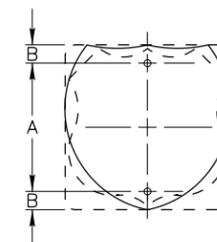
SIGN SIZE	A	B
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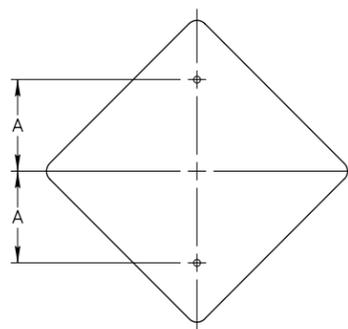
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48"	21"	3"



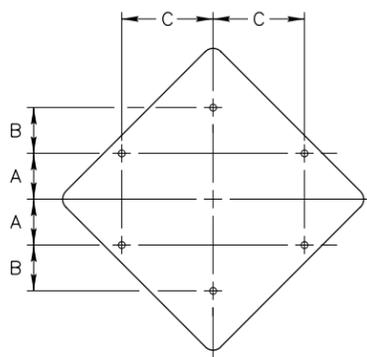
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36"X36"	24"	3"



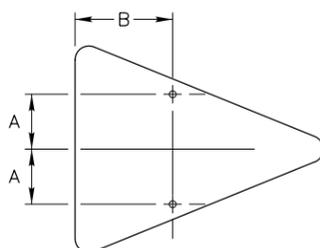
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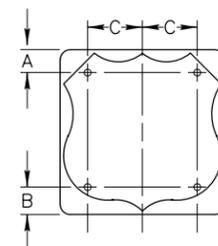
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24"X24"	12"
30"X30"	15"



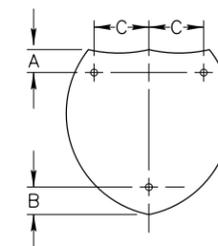
SIGN SIZE	A	B	C
36"X36"	8"	10"	12"
48"X48"	10"	—	20"



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



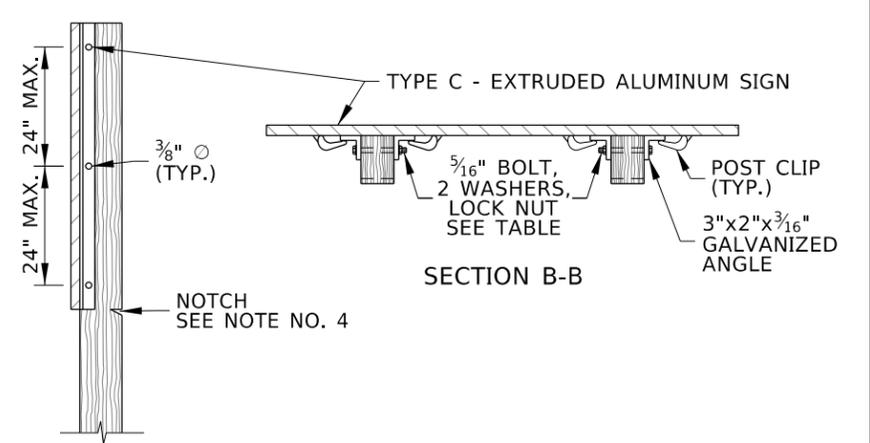
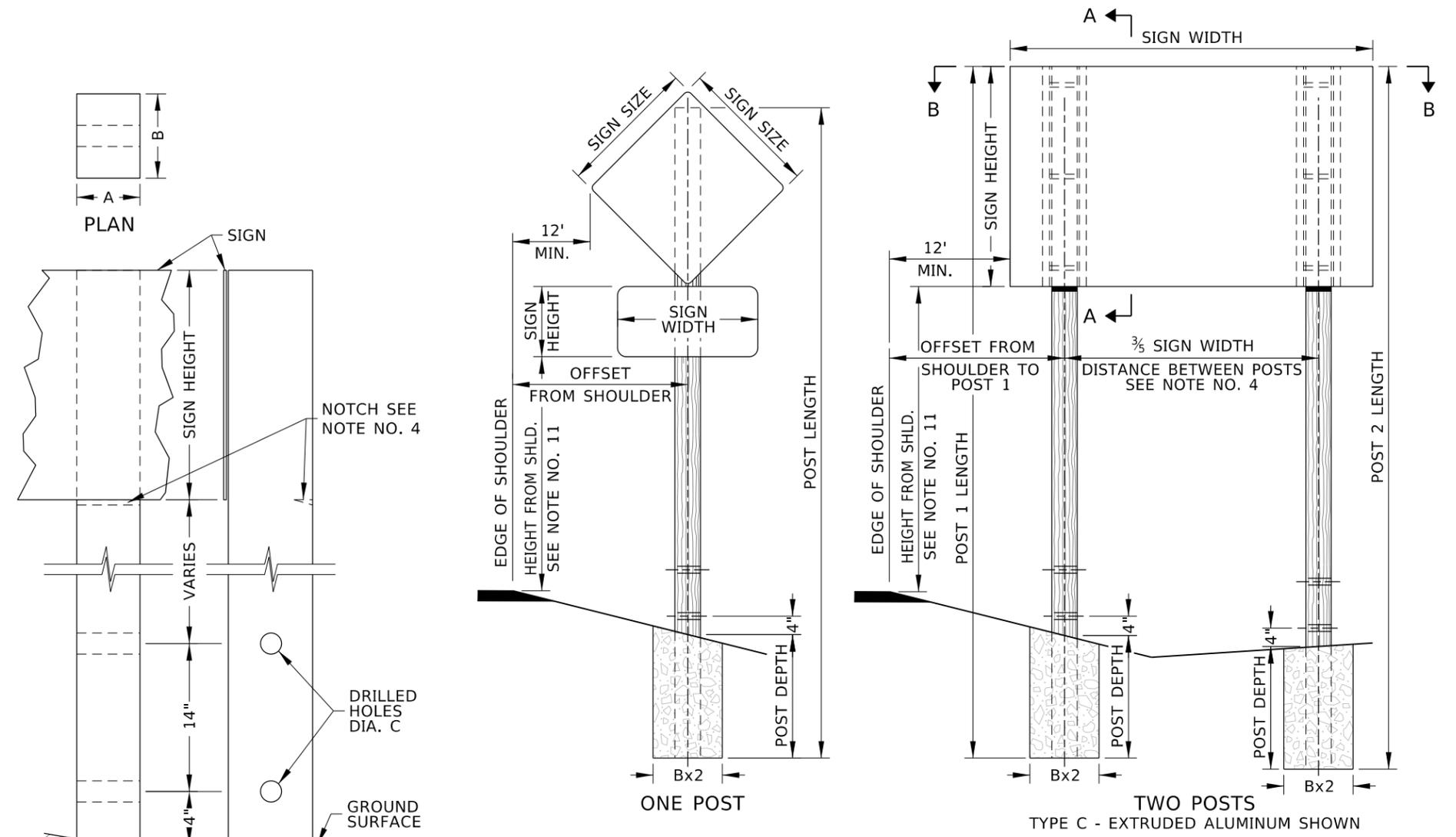
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN
 DESIGN/TRAFFIC SERVICES ENGINEER

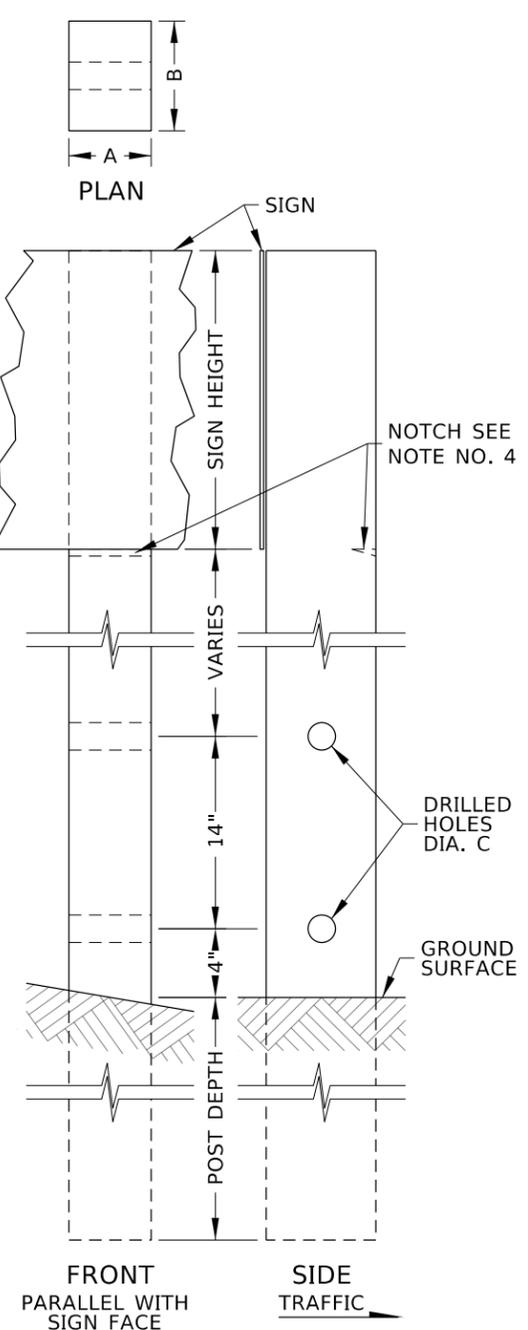
STANDARD DRAWING
PUNCHING SCHEDULE FOR TYPE "B" OR TYPE "E" SIGNS

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

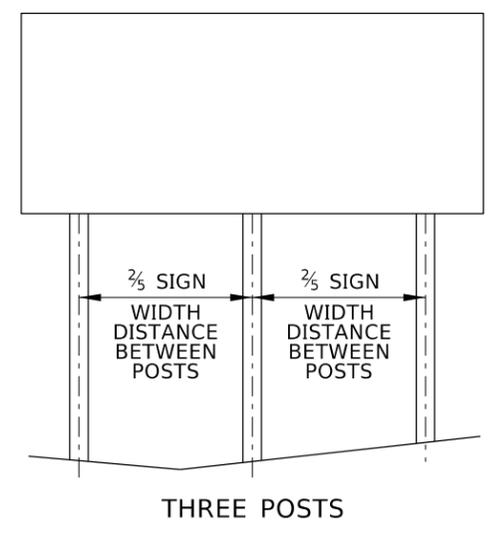
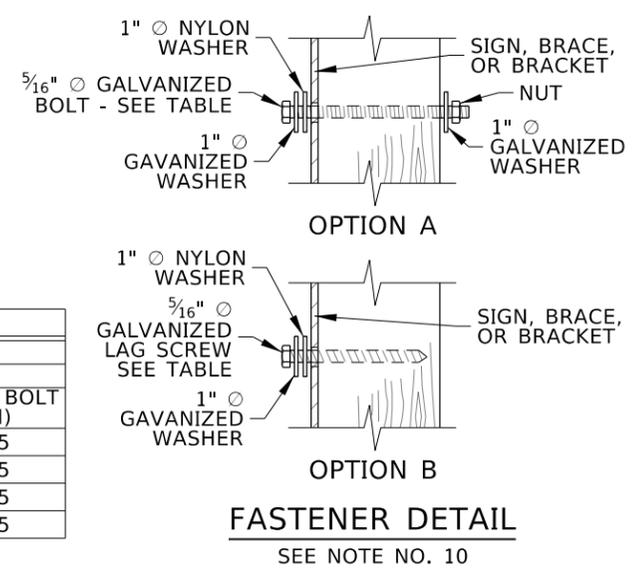
PROFESSIONAL ENGINEER
 LICENSED
 RYAN D. LANCASTER
 STATE OF IDAHO
 13683



- 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

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