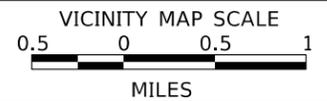
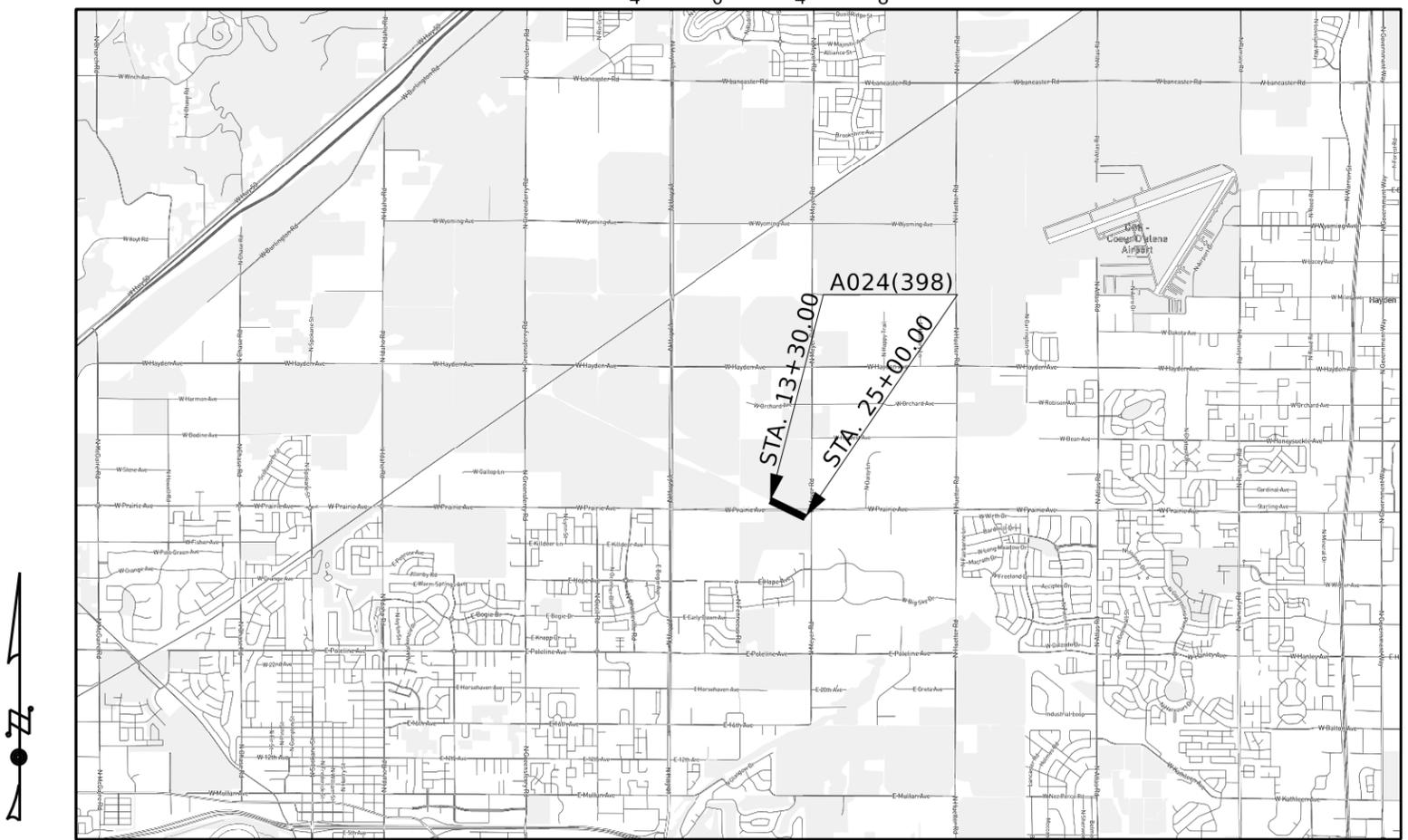
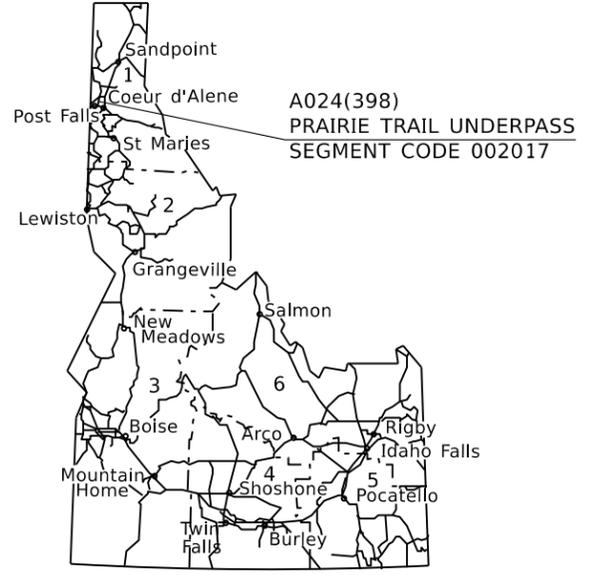
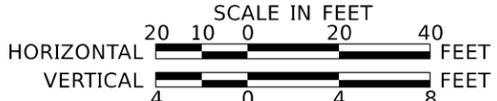


INDEX OF SHEETS	
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5	PROJECT CLEARANCE SUMMARY
6	ROADWAY SUMMARY
7	SIGNING ERECTION SPECIFICATIONS
8	STORM SEWER SUMMARY
9-11	PLAN AND PROFILE
12-15	ROADWAY DETAILS
16-17	POLLUTION PREVENTION PLAN
18-19	WALL PLAN AND PROFILE
20	ILLUMINATION MATERIALS
21	ILLUMINATION PLAN
22	ILLUMINATION DETAILS
23-24	TRAFFIC CONTROL PLAN
25-26	UTILITY PLAN
27-31	UNDERPASS DETAILS
1-15	ITD STANDARD DRAWINGS

# IDAHO TRANSPORTATION DEPARTMENT

## PLAN AND PROFILE OF PROPOSED PRAIRIE TRAIL UNDERPASS POST FALLS HD FEDERAL AID PROJECT NO. A024(398) KEY NO. 24398 KOOTENAI COUNTY

JULY 2025



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: 24398\_TITL\_001.dgn  
DRAWING DATE: NOVEMBER 2024

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

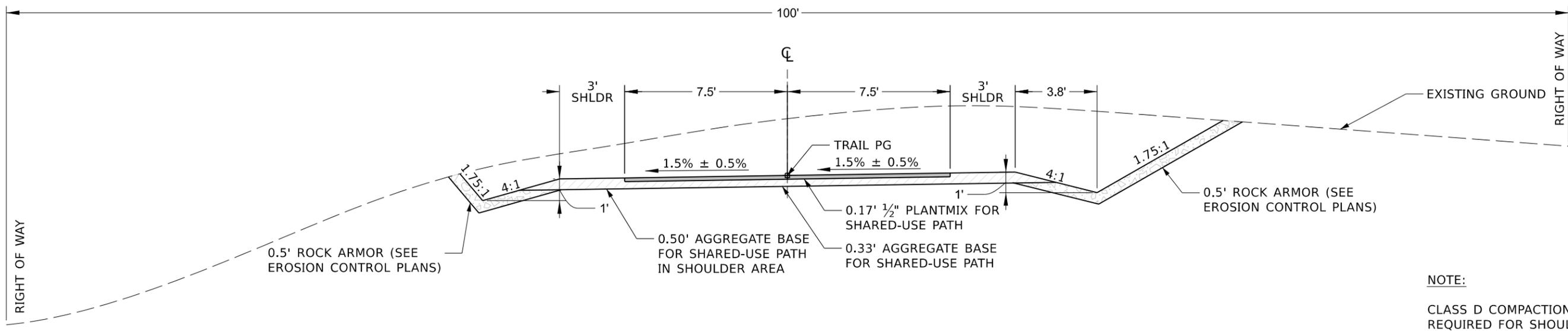
**J-U-B ENGINEERS, INC.**

PROJECT NO.  
**A024(398)**

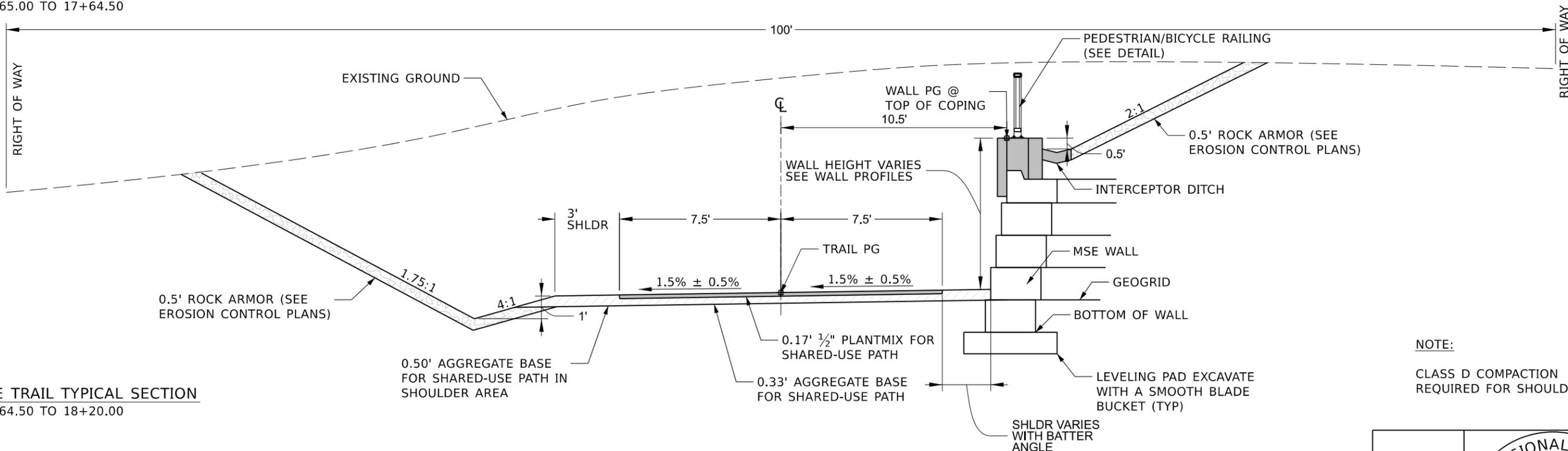
TITLE SHEET  
**PRAIRIE TRAIL UNDERPASS  
POST FALLS HD**

**ENGLISH**  
COUNTY: KOOTENAI  
KEY NUMBER: 24398  
SHEET 1 OF 31

*Monica Crider*  
Approved for Advertising  
**10/16/2025**  
Date Approved



**PRAIRIE TRAIL TYPICAL SECTION**  
STA 13+65.00 TO 17+64.50



**PRAIRIE TRAIL TYPICAL SECTION**  
STA 17+64.50 TO 18+20.00

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB
DESIGN CHECKED KPS
DETAILED BPRR
DRAWING CHECKED KPS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
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DRAWING DATE: NOVEMBER 2024

**IDAHO  
TRANSPORTATION  
DEPARTMENT**

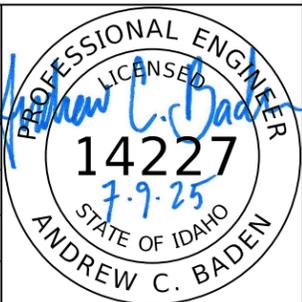
YOUR Safety → YOUR Mobility → YOUR Economic Opportunity

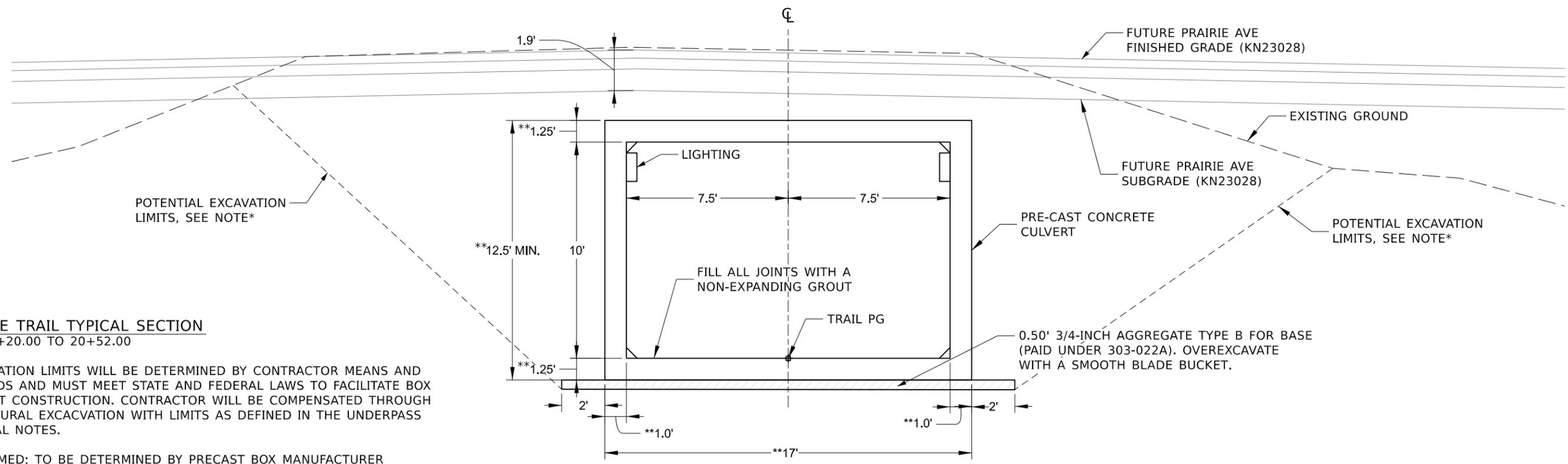
**J-U-B ENGINEERS, INC.**

PROJECT NO.
A024(398)

TYPICAL SECTION
PRAIRIE TRAIL UNDERPASS POST FALLS HD

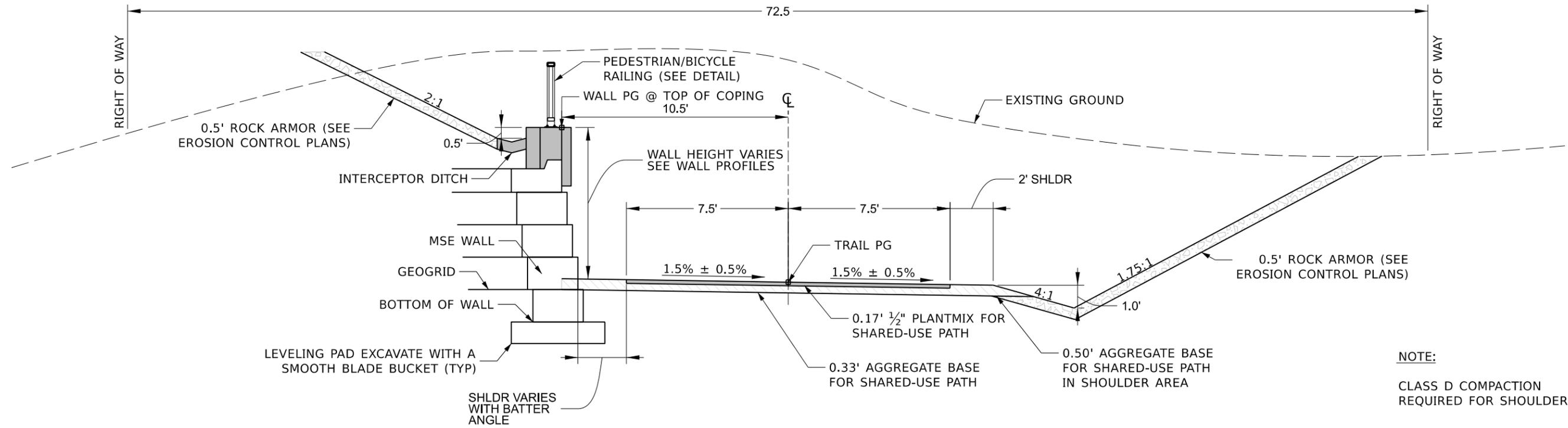
<b>ENGLISH</b>
COUNTY KOOTENAI
KEY NUMBER 24398
SHEET 2 OF 31





**PRAIRIE TRAIL TYPICAL SECTION**  
STA 18+20.00 TO 20+52.00

\*EXCAVATION LIMITS WILL BE DETERMINED BY CONTRACTOR MEANS AND METHODS AND MUST MEET STATE AND FEDERAL LAWS TO FACILITATE BOX CULVERT CONSTRUCTION. CONTRACTOR WILL BE COMPENSATED THROUGH STRUCTURAL EXCAVATION WITH LIMITS AS DEFINED IN THE UNDERPASS GENERAL NOTES.  
\*\*ASSUMED; TO BE DETERMINED BY PRECAST BOX MANUFACTURER



**PRAIRIE TRAIL TYPICAL SECTION**  
STA 20+52.00 TO 21+30.00

NOTE:  
CLASS D COMPACTION  
REQUIRED FOR SHOULDERS

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  CADD FILE NAME 24398_TYP_001.dgn  DRAWING DATE: NOVEMBER 2024
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DETAILED BPRR	
DRAWING CHECKED KPS	

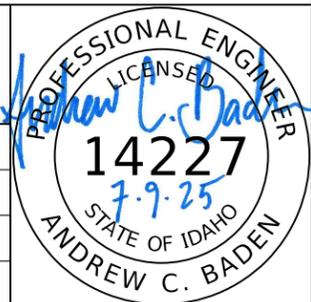
**IDAHO**  
**TRANSPORTATION**  
**DEPARTMENT**  
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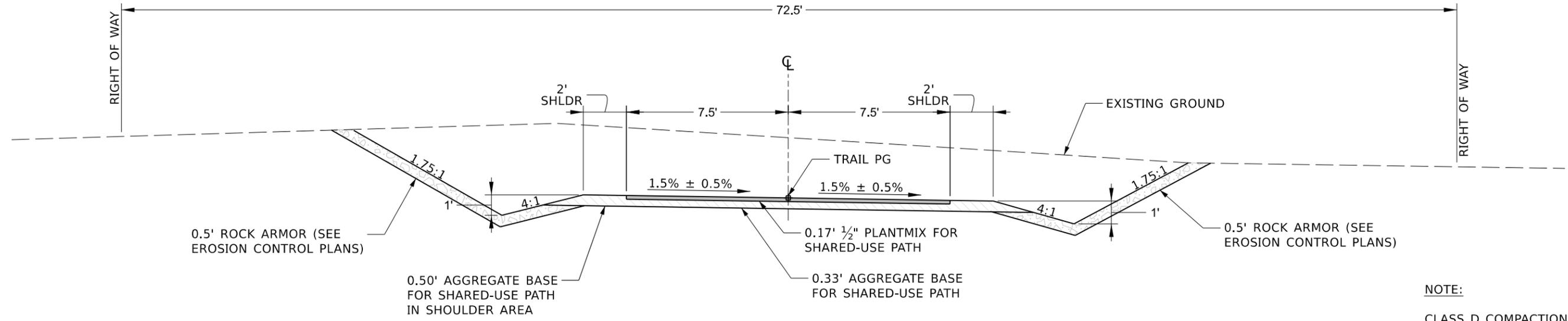
**J-U-B ENGINEERS, INC.**

PROJECT NO.	A024(398)
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TYPICAL SECTION	PRAIRIE TRAIL UNDERPASS POST FALLS HD
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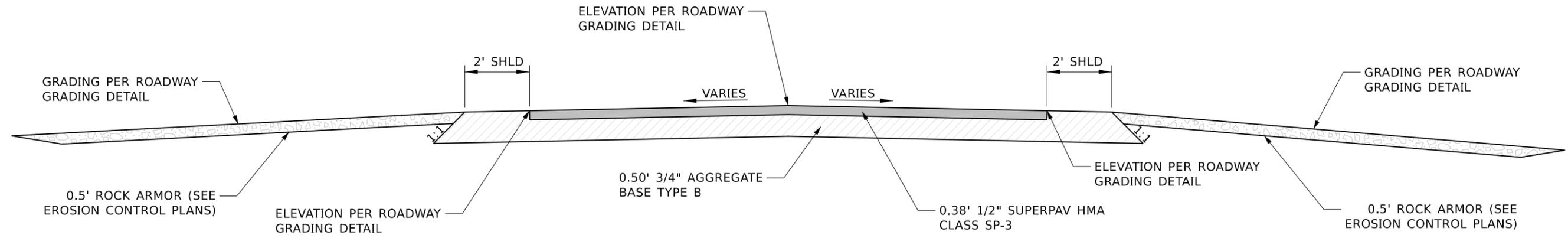
ENGLISH
COUNTY KOOTENAI
KEY NUMBER 24398
SHEET 3 OF 31





**PRAIRIE TRAIL TYPICAL SECTION**  
STA 21+30.00 TO 24+80.00

**NOTE:**  
CLASS D COMPACTION  
REQUIRED FOR SHOULDERS



**PRAIRIE AVE TYPICAL SECTION**  
SURFACE REPAIR

**NOTE:**  
CLASS D COMPACTION REQUIRED  
FOR SHOULDERS

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED  
ACB  
DESIGN CHECKED  
KPS  
DETAILED  
BPRR  
DRAWING CHECKED  
KPS

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PRINTS ONLY  
CADD FILE NAME  
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DRAWING DATE:  
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**IDAHO  
TRANSPORTATION  
DEPARTMENT**

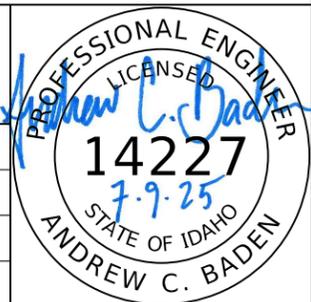
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**J-U-B ENGINEERS, INC.**

PROJECT NO.  
  
A024(398)

TYPICAL SECTION  
  
PRAIRIE TRAIL UNDERPASS  
POST FALLS HD

**ENGLISH**  
COUNTY  
KOOTENAI  
KEY NUMBER  
24398  
SHEET 4 OF 31



CLEARANCES

PROJECT STANDARDS  
 CHARTER APPROVAL  AASHTO  3R  1R  STATE  
 PP  OTHER \_\_\_\_\_  
 DESIGN EXCEPTIONS: \_\_\_\_\_

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

+ CLEARED UNDER PROJECT NO.	+ APPROVAL DATE
N/A	N/A
A024(398)	02/13/2025
N/A	N/A
A024(398)	05/27/2025
N/A	N/A
N/A	N/A
A024(398)	12/05/2022
A024(398)	05/28/2025
N/A	N/A
N/A	N/A
A024(398)	02/06/2025
A024(398)	05/29/2025

ESTIMATING BASIS

CLASS A COMPACTION FOR THIS PROJECT EXCEPT WHERE CLASS D IS SPECIFIED

PAVING:  
 SUPERPAVE HMA CLASS SP-3 WITH 1/2" AGGREGATE AT 145 PCF  
 PG 58-28 BINDER AT 5.5% BY WEIGHT OF MIX.  
 (ESTIMATED)  
 A MINIMUM 0.5% ANIT-STRIP ADDITIVE IS ESTIMATED FOR THIS PROJECT

AGGREGATE:  
 3/4-INCH AGGREGATE TYPE B FOR BASE AT 148 PCF, INCLUDING 7% MOISTURE CONTENT.

CSS-1 DILUTED EMULSIFIED ASPHALT TO BE PLACED ABOVE COMPACTED BASE AND BETWEEN SEPARATE ASPHALT LIFTS ESTIMATED AT 0.08 GAL/SY.

DUST ABATEMENT:  
 750 MG BASED ON AN APPLICATION RATE OF 0.5 GAL/SY OF SUBGRADE AND A TOTAL OF 3 APPLICATIONS PER DAY OVER A CONSTRUCTION PERIOD OF 60 DAYS.

SMOOTHNESS:  
 ASPHALT SURFACE SMOOTHNESS TO CONFORM TO STRAIGHTEDGE REQUIREMENTS PER SECTION 405.03 OF THE 2023 ITD SSHC.

PERMITS

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

		+ EXPIRATION DATE
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

AGREEMENTS (List Appropriate Name)

LOCAL: CITY \_\_\_\_\_  
 COUNTY \_\_\_\_\_  
 HIGHWAY DISTRICT \_\_\_\_\_  
 ROAD CLOSURE AND MAINTENANCE \_\_\_\_\_  
 STATE/LOCAL CONSTRUCTION POST FALLS HIGHWAY DISTRICT

N/A	N/A
A024(398)	07/14/2025

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

UTILITIES: List all Utilities shown on plans

Co.	UTILITY	RETAIN & PROTECT
Co.	AVISTA - ELECTRIC	<input checked="" type="checkbox"/>
Co.	AVISTA - GAS	<input type="checkbox"/>
Co.	ZIPLY FIBER - FIBER	<input checked="" type="checkbox"/>
Co.	ROSS POINT WATER DISTRICT - WATER	<input checked="" type="checkbox"/>
Co.	UNITS WATER DISTRICT - WATER	<input type="checkbox"/>
Co.	_____	<input type="checkbox"/>
Co.	_____	<input type="checkbox"/>

+ APPROVAL DATES		+ AGREEMENT NO.
UTILITY HEARING WAIVER	AGREEMENT	
01/10/2025		
01/10/2025		
01/15/2025		
12/30/2024		
01/31/2025		

RAILROAD List all Railroads encroached upon

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

+ 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 ACB  
 DETAILED BPRR  
 DRAWING CHECKED KPS  
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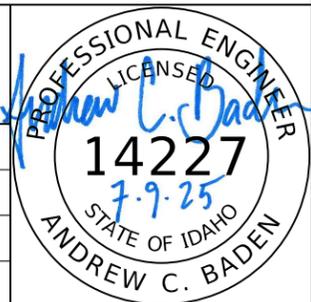
IDAHO TRANSPORTATION DEPARTMENT  
 YOUR Safety → YOUR Mobility → YOUR Economic Opportunity

J-U-B ENGINEERS, INC.

PROJECT NO.  
 A024(389)

PROJECT CLEARANCE SUMMARY  
 PRAIRIE TRAIL UNDERPASS  
 POST FALLS HD

ENGLISH  
 COUNTY KOOTENAI  
 KEY NUMBER 24389  
 SHEET 5 OF 31



SHEET NUMBER																				
STATION - STATION				9	10	11	16	17												
ITEM NO.	ITEM	UNIT	TOTAL	12+50 TO 17+50	17+50 TO 22+50	22+50 TO 25+00	10+50 TO 22+50	22+50 TO 27+50												
201-005A	CLEARING & GRUBBING	ACRE	1.17																	
203-075A	REMOVAL OF FENCE	FT	454		324	130														
205-005A	EXCAVATION	CY	7,732																	
205-040A	GRANULAR BORROW	CY	635																	
205-060A	WATER FOR DUST ABATEMENT	MG	750																	
208-005A	INTERCEPTOR DITCH	FT	134.5		134.5															
210-005A	STRUCTURE EXCAVATION SCHEDULE NO. 1	CY	2685																	
210-010A	STRUCTURE EXCAVATION SCHEDULE NO. 2	CY	483																	
210-015A	COMPACTING BACKFILL	CY	635																	
212-011A	FIBER WATTLE	FT	1440				1157	283												
212-020A	SILT FENCE	FT	647				546	101												
212-095A	INLET PROTECTION	EACH	7				7													
212-105A	WATER AND POLLUTION	CA	3000																	
303-022A	3/4" AGGREGATE TYPE B FOR BASE	TON	313																	
401-020A	CSS-1 DILUTED EMULSIFIED ASPHALT FOR TACK COAT	GAL	36																	
405-435A	SUPERPAVE HMA PAVEMENT INCLUDING ASPHALT & ADDITIVES CLASS SP-3 (NMAS 1/2", PG 64-28)	TON	112																	
504-035A	PEDESTRIAN / BICYCLE RAILING (MODIFIED)	FT	226		226															
574-005A	ANTI-GRAFFITI COATING	SF	14050																	
578-005A	PRECAST CONCRETE CULVERT	LS	1		1															
586-005A	UTILITY CONDUIT	LS	1																	
605-025A	12" STORM SEWER PIPE	FT	162	26	136															
605-520A	CATCH BASIN TYPE 3	EACH	4	1	3															
605-655A	DRYWELL (DOUBLE DEPTH, 1000 GAL.)	EACH	3	2	1															
616-010A	SIGN TYPE B-1	SF	15.0																	
616-040J	STEEL SIGN POST TYPE E-1	FT	43.5																	
619-010A	ILLUMINATION TYPE 2	LS	1																	
626-010A	TEMPORARY TRAFFIC CONTROL SIGNS	SF	351																	
626-040A	BARRICADE TYPE 3	EACH	5																	
626-050A	DRUMS	EACH	10																	
626-100A	MISCELLANEOUS TEMPORARY TRAFFIC CONTROL ITEMS	CA	5000																	
626-115A	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)	DAY	14																	
626-116A	TEMPORARY CONCRETE BARRIER	FT	300																	
626-118A	TEMPORARY CRASH CUSHION	EACH	4																	
630-025A	LONGITUDINAL PAVEMENT MARKING - WATERBORNE	FT	590		590															
675-005A	SURVEY	LS	1																	
675-010A	DIRECTED SURVEYING	CA	15000																	
677-005A	RECORD DRAWINGS	LS	1																	
S501-15A	RETAINING WALL, CAST-IN-PLACE HEADWALL	SF	112		112															
S501-17A	MSE RETAINING WALL	SF	2020		2020															
S501-18A	COPING FOR MSE WALL	FT	185		185															
S600-45A	WATER LINE (2" PE SERVICE)	FT	254		254															
S637-10A	AGGR BASE FOR SHARED-USE PATH	TON	559																	
S637-15A	PLANTMIX FOR SHARED-USE PATH	TON	164																	
S900-50A	CONTINGENCY AMOUNT - MISCELLANEOUS WORK	CA	15000																	
S913-05A	SP ROCK ARMOR	CY	725				655	70												
Z629-05A	MOBILIZATION	LS	1																	

<b>REVISIONS</b> <table border="1"> <thead> <tr> <th>NO.</th><th>DATE</th><th>BY</th><th>DESCRIPTION</th></tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				NO.	DATE	BY	DESCRIPTION																	DESIGNED ACB DESIGN CHECKED KPS DETAILED BPRR DRAWING CHECKED KPS	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME 24398_RDSM_001.dgn DRAWING DATE: NOVEMBER 2024	<b>IDAHO TRANSPORTATION DEPARTMENT</b> YOUR Safety → YOUR Mobility → YOUR Economic Opportunity <b>J-U-B ENGINEERS, INC.</b>	PROJECT NO. A024(398)	ROADWAY SUMMARY PRAIRIE TRAIL UNDERPASS POST FALLS HD	ENGLISH COUNTY KOOTENAI KEY NUMBER 24398 SHEET 6 OF 31	
NO.	DATE	BY	DESCRIPTION																											

SIGN ASSEMBLY NO.	STATION LT. OR RT.	RAMP NO.	FOUNDATION SIZE	POST TYPE	NO. OF POSTS	POST SPACING	APPROX. LENGTH OF 1st POST	APPROX. LENGTH OF 2nd POST	POST LENGTH ABOVE FINISH SHOULDER	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
1	13+50.00, 11.0' RT		8x8x36	E-1	1		7'-3"		6'-3"	3'-6"	4'-0"	B-1	R2-1	18" x 24"	3.0	YELLOW			SPEED 15 MPH
2	15+00.00, 11.0' RT		8x8x36	E-1	1		7'-3"		6'-3"	3'-6"	4'-0"	B-1	CW-1	18" x 18"	2.3	WHITE			UNDERPASS
3	16+50.00, 11.0' RT		8x8x36	E-1	1		7'-3"		6'-3"	3'-6"	4'-0"	B-1	W12-2	18" x 18"	2.3	YELLOW			10'-0" LOW CLEARANCE
4	22+00.00, 11.0' LT		8x8x36	E-1	1		7'-3"		6'-3"	3'-6"	4'-0"	B-1	W12-2	18" x 18"	2.3	YELLOW			10'-0" LOW CLEARANCE
5	23+50.00, 11.0' LT		8x8x36	E-1	1		7'-3"		6'-3"	3'-6"	4'-0"	B-1	CW-1	18" x 18"	2.3	WHITE			UNDERPASS
6	25+00.00, 11.0' LT		8x8x36	E-1	1		7'-3"		6'-3"	3'-6"	4'-0"	B-1	R2-1	18" x 24"	3.0	YELLOW			SPEED 15 MPH

CONSTRUCT SIGNS IN ACCORDANCE TO THE LATEST FHWA'S PUBLICATION OF STANDARD HIGHWAY SIGNS (SHS) AND SUPPLEMENT, THE IDAHO SUPPLEMENT TO THE SHS OR AS SPECIFIED.

COLUMN C, DISTANCE FROM EDGE OF SHOULDER TO CENTER LINE OF FIRST POST  
 COLUMN E, THE HEIGHT ABOVE THE EDGE OF FINISHED SHOULDER TO THE BOTTOM OF LOWEST SIGN.

POST LENGTHS SHOWN ARE APPROXIMATE. DETERMINE FINAL VALUES IN THE FIELD PRIOR TO FABRICATION

REVISIONS			
NO.	DATE	BY	DESCRIPTION

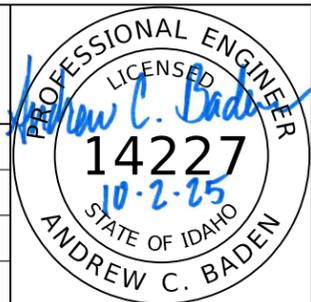
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**IDAHO TRANSPORTATION DEPARTMENT**  
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**J-U-B ENGINEERS, INC.**

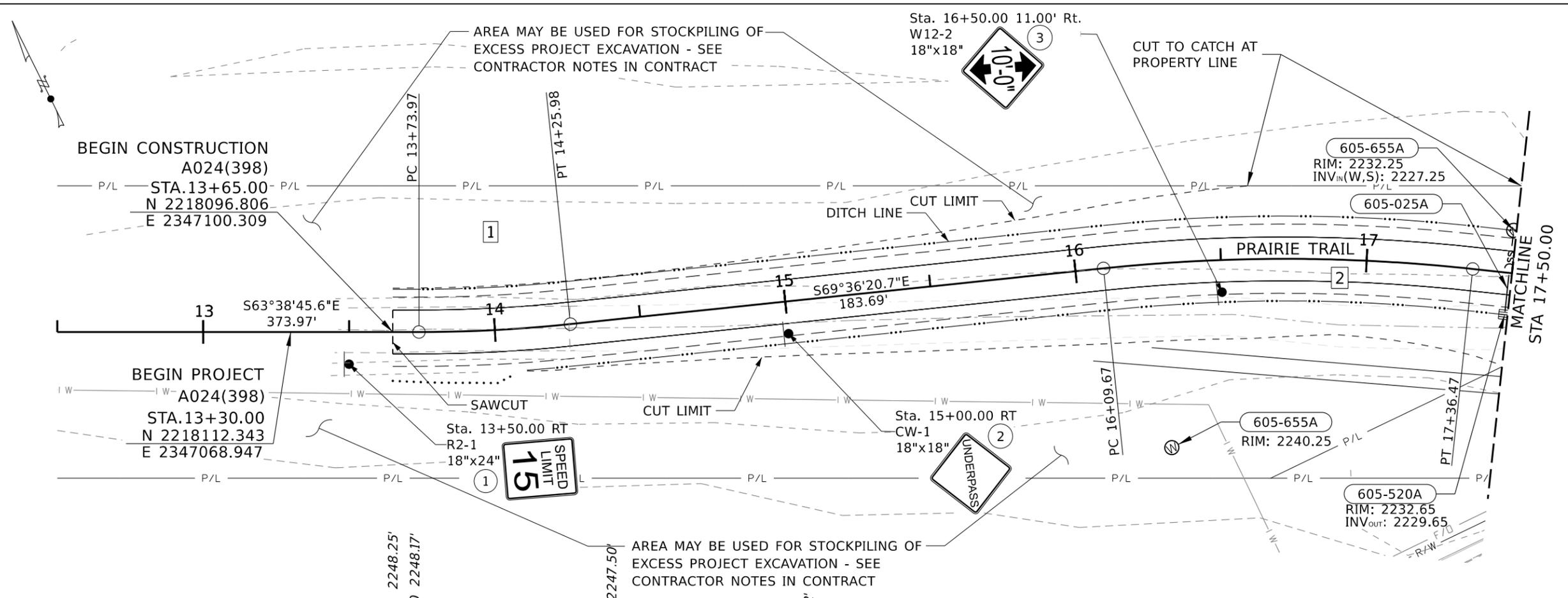
PROJECT NO.	A024(398)
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SIGNING ERECTION SPECIFICATIONS	PRAIRIE TRAIL UNDERPASS POST FALLS HD
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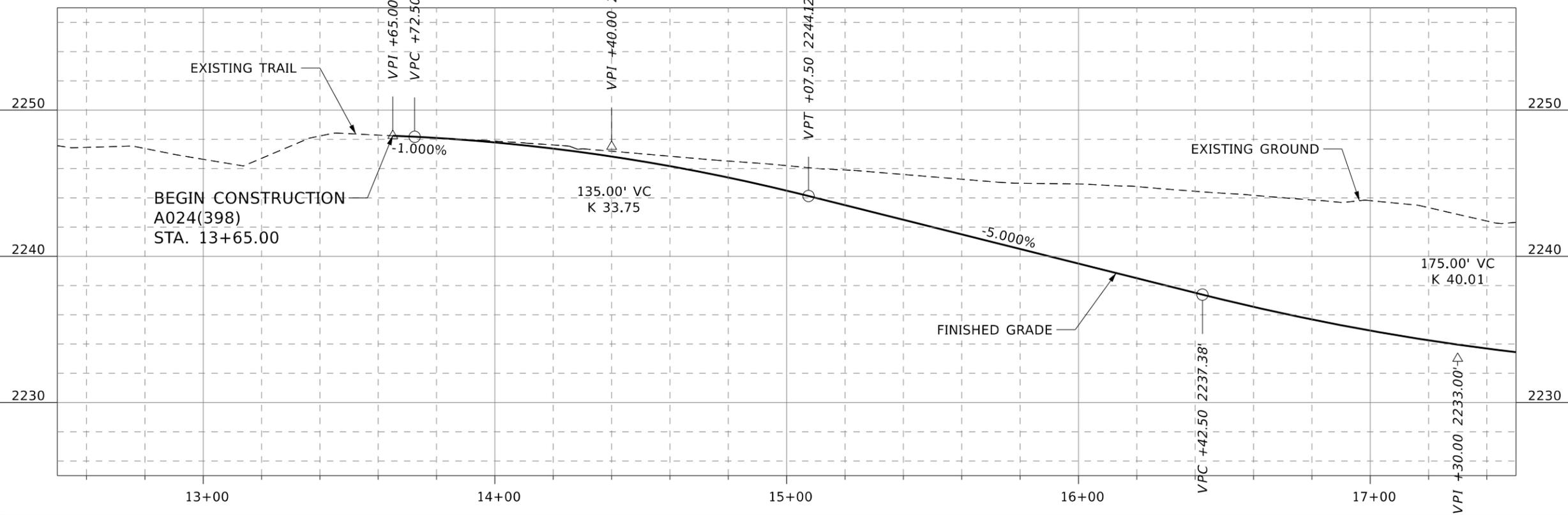
ENGLISH
COUNTY KOOTENAI
KEY NUMBER 24398
SHEET 7 OF 31







- 605-025A 12" STORM SEWER PIPE**  
26.00 FT 17+49.00, 13.4' Rt to 12.65' Lt
- 605-520A CATCH BASIN TYPE 3**  
1.00 EACH 17+49.00, 14.4' Rt
- 605-655A DRYWELL (DOUBLE DEPTH)**  
1.00 EACH 16+28.00, 63.25' Rt  
1.00 EACH 17+49.00, 14.65' Lt



- 1** PI 14+00.00  
Δ 05°57'35" LT  
T 26.03'  
L 52.01'  
R 500.00'  
N. 2218081.2691'  
E. 2347131.6712'
- 2** PI STA 16+73.31  
Δ 12°06'28" RT  
T 63.63'  
L 126.79'  
R 600.00'  
N. 2217986.0110'  
E. 2347387.8913'

REVISIONS			
NO.	DATE	BY	DESCRIPTION

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DESIGN CHECKED KPS  
DETAILED BPRR  
DRAWING CHECKED KPS

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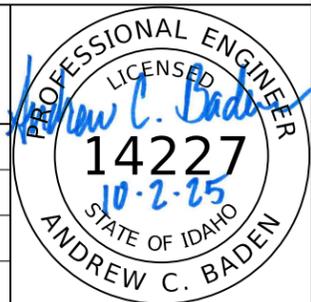
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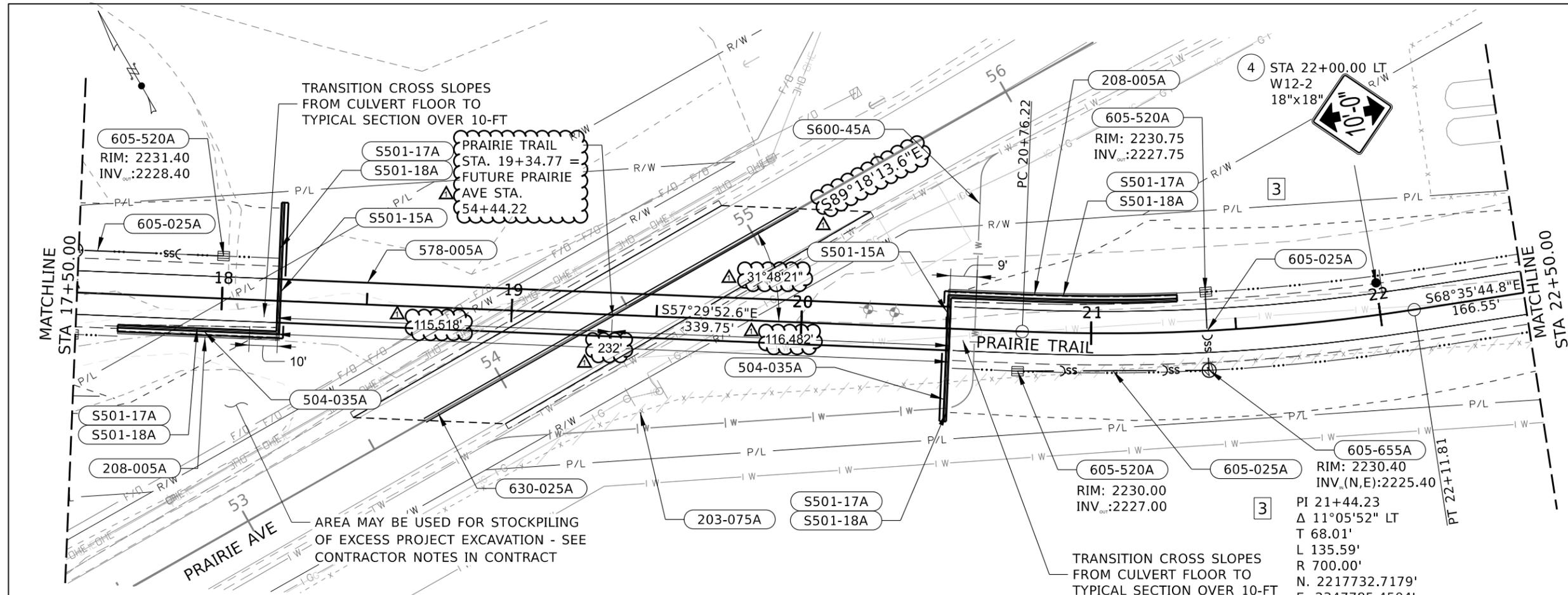
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PROJECT NO.  
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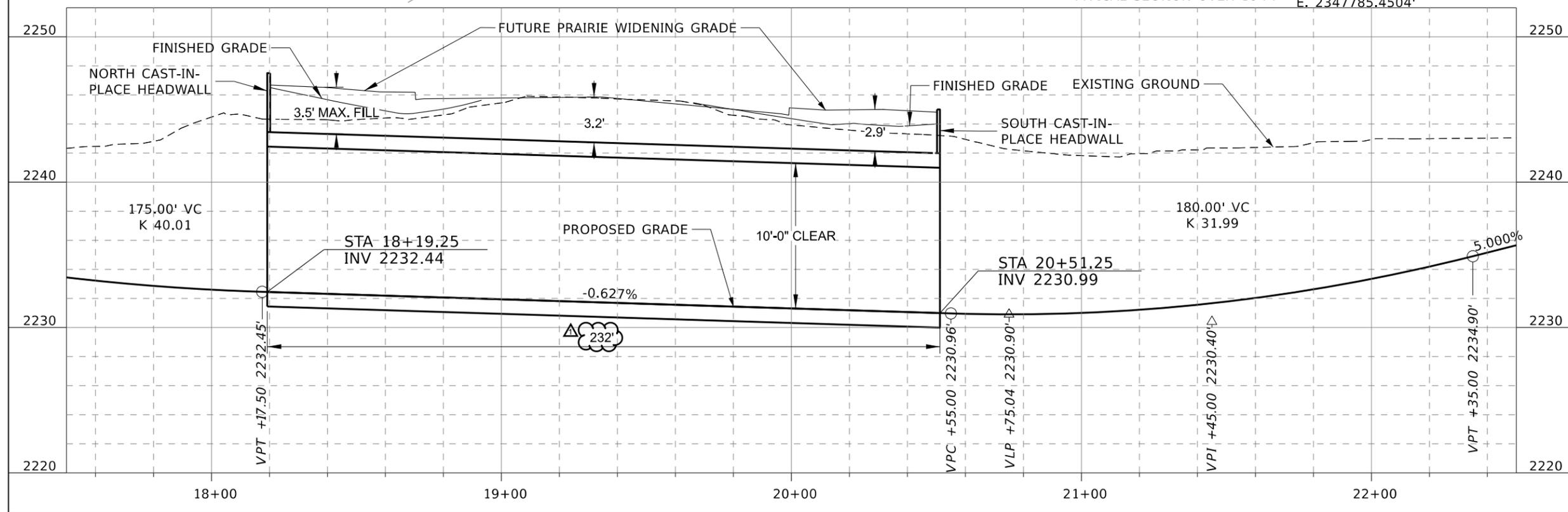
PLAN AND PROFILE  
**PRAIRIE TRAIL UNDERPASS  
POST FALLS HD  
STA. 12+50.00 TO STA. 17+50.00**

**ENGLISH**  
COUNTY KOOTENAI  
KEY NUMBER 24398  
SHEET 9 OF 31





- 203-075A REMOVAL OF FENCE**  
323.77 FT 19+31.55, 38.23' Rt to 22+50.00, 17.24' Rt
- 208-005A INTERCEPTOR DITCH**  
55.75 FT 17+64.50 to 18+20.25, 12.50' Rt  
78.75 FT 20+50.25 to 21+30.00, 12.50' Lt
- 504-035A PEDESTRIAN / BICYCLE RAILING (MODIFIED)**  
104.00 FT 17+60.00, 11.0' Ft to 18+19.75, 33.85' Lt  
122.00 FT 20+50.75, 32.0' Rt to 21+30.00, 11.0' Lt
- 578-005A PRECAST CONCRETE CULVERT**  
1.00 LS 18+19.25 to 20+51.25
- 605-025A 12" STORM SEWER PIPE**  
48.00 FT 17+51.00, 14.65' Lt to 17+99.00, 14.65' Lt  
64.00 FT 20+74.00, 13.65' Rt to 21+38.00, 13.65' Rt  
24.00 FT 21+40.00, 11.65' Rt to 12.35' Lt
- 605-520A CATCH BASIN TYPE 3**  
1.00 EACH 19+11.00, 14.65' Lt  
1.00 EACH 20+75.00, 13.65' Rt  
1.00 EACH 21+40.00, 13.35' Lt
- 605-655A DRYWELL (DOUBLE DEPTH, 1000 GAL.)**  
1.00 EACH 21+40.00, 13.65' Rt
- 630-025A LONGITUDINAL PAVEMENT MARKING - WATERBORNE**  
590.00 FT 18+71.69, 39.0' Rt to 19+97.07, 39.0' Lt
- S501-15A RETAINING WALL, CAST-IN-PLACE HEADWALL**  
65.00 SF 18+19.25, 8.50' Rt to 8.50' Lt  
47.00 SF 20+51.25, 8.50' Rt to 8.50' Lt
- S501-17A MSE RETAINING WALL**  
647.00 SF 17+64.50, 10.50' Rt to 18+19.25, 8.50' Rt  
324.00 SF 18+29.25, 8.5' Lt to 33.85' Lt  
249.00 SF 20+51.25, 32.0' Rt to 8.50' Rt  
800.00 SF 20+51.25, 8.50' Lt to 21+30.00, 10.5' Lt
- S501-18A COPING FOR MSE WALL**  
56.80 FT 17+64.50, 10.50' Rt to 18+19.25, 8.50' Rt  
25.90 FT 18+29.25, 8.5' Lt to 33.85' Lt  
23.40 FT 20+51.25, 32.0' Rt to 8.50' Rt  
78.90 FT 20+51.25, 8.50' Lt to 21+30.00, 10.5' Lt
- S600-45A WATER LINE (2" PE SERVICE)**  
254.00 FT 18+93.22, 46.4' Rt to 20+64.91, 60.7' Lt



REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	10/28/2025	D. Baden	Added: Bearing of Alignment; Skew Angle between Prairie ave and Prairie Trail; Additional dimensions; Updated Stations in sidebar

DESIGNED ACB	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED KPS	
DETAILED BPRR	CADD FILE NAME 24398_PLAN_002.dgn
DRAWING CHECKED KPS	DRAWING DATE: NOVEMBER 2024

**IDAHO TRANSPORTATION DEPARTMENT**

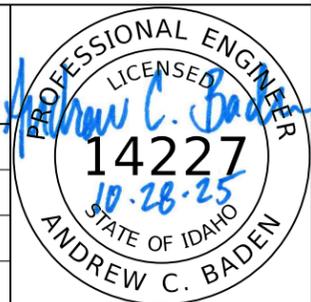
YOUR Safety → YOUR Mobility → YOUR Economic Opportunity

**J-U-B ENGINEERS, INC.**

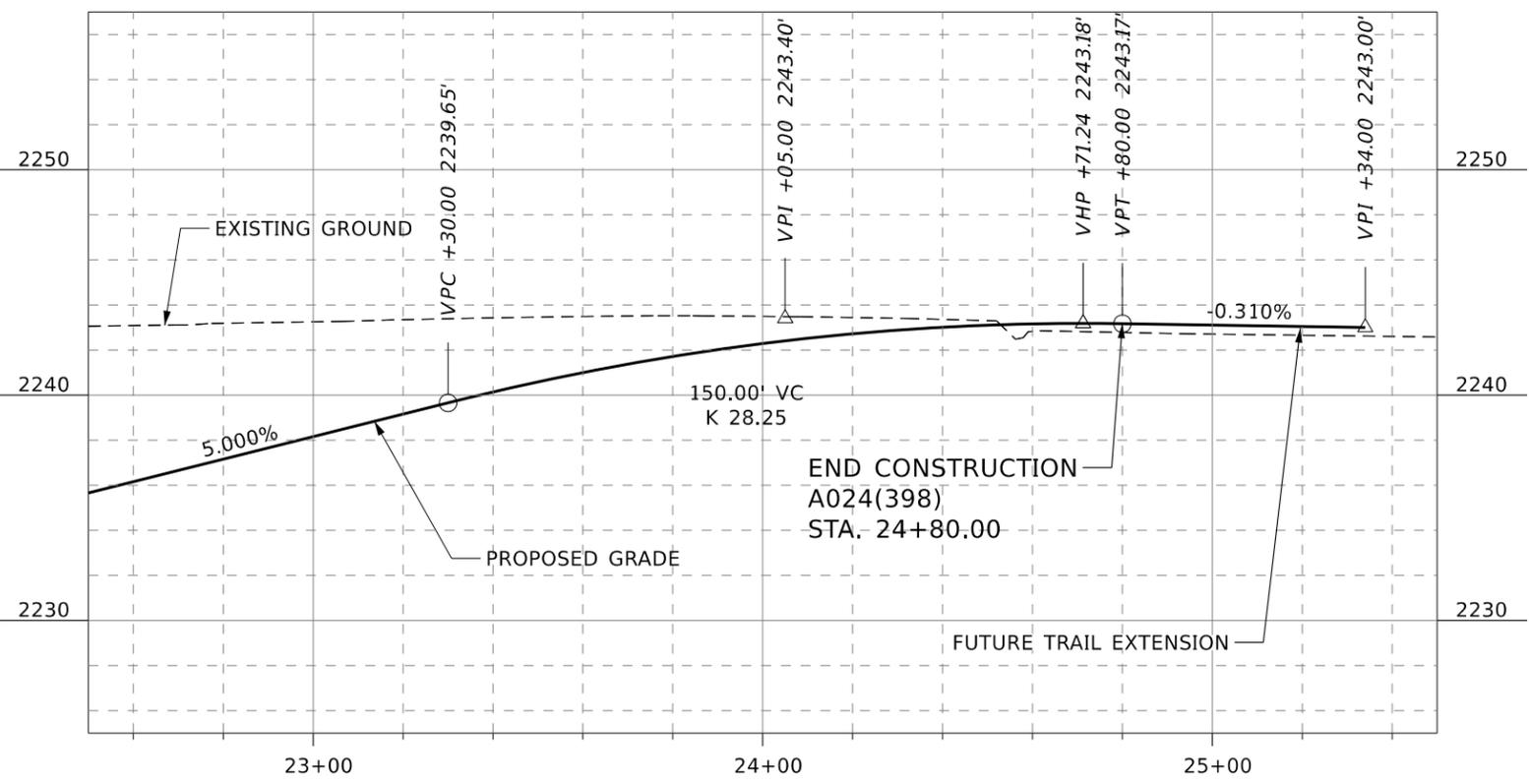
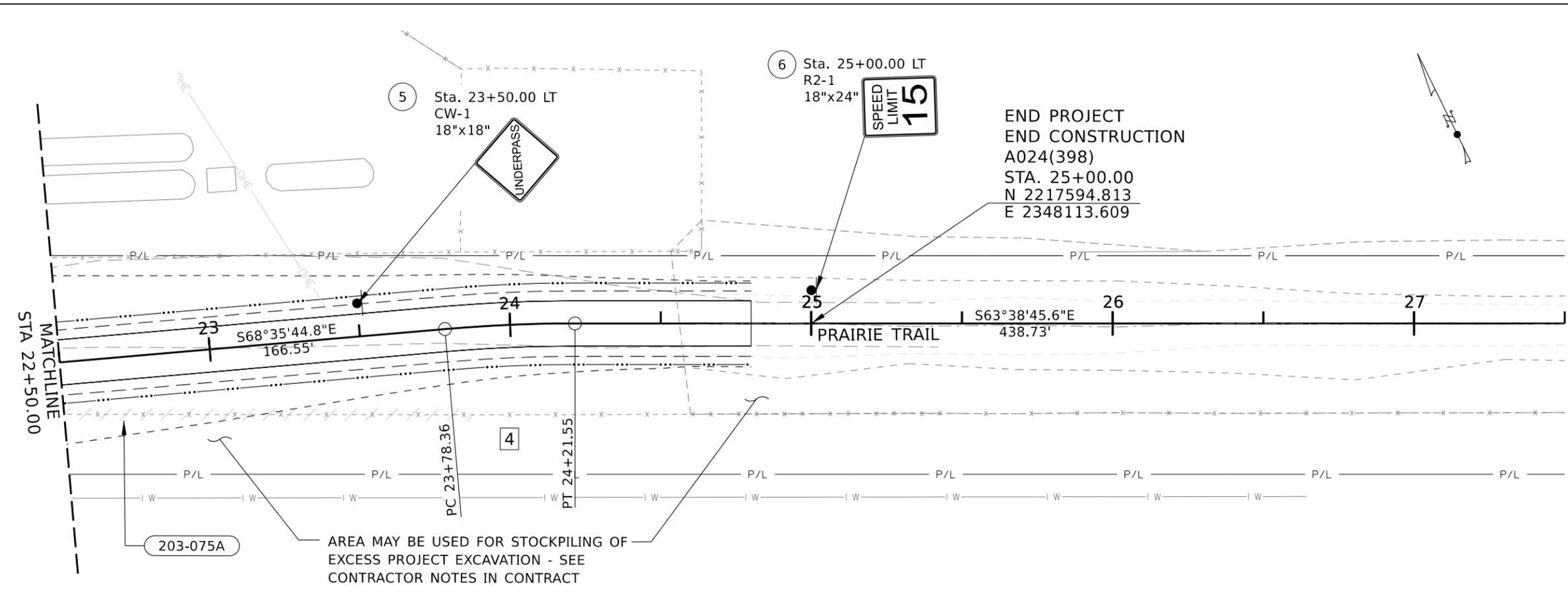
PROJECT NO. A024(398)

PLAN AND PROFILE  
PRAIRIE TRAIL UNDERPASS  
POST FALLS HD  
STA. 17+50.00 TO STA. 22+50.00

**ENGLISH**  
COUNTY KOOTENAI  
KEY NUMBER 24398  
SHEET 10 OF 31



**203-075A REMOVAL OF FENCE**  
 130.00 FT 22+50.00, 17.24' Rt to 23+80.00, 28.50' Rt



4 PI STA 23+99.97  
 Δ 04°56'59" RT  
 T 21.61'  
 L 43.19'  
 R 500.00'  
 N. 2217639.2312'  
 E. 2348023.9485'

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB  
 DESIGN CHECKED KPS  
 DETAILED BPRR  
 DRAWING CHECKED KPS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
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 DRAWING DATE: NOVEMBER 2024

**IDAHO TRANSPORTATION DEPARTMENT**

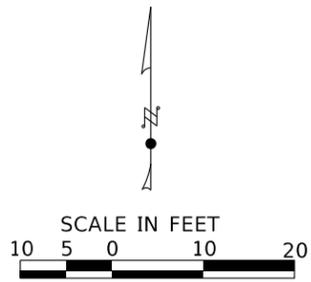
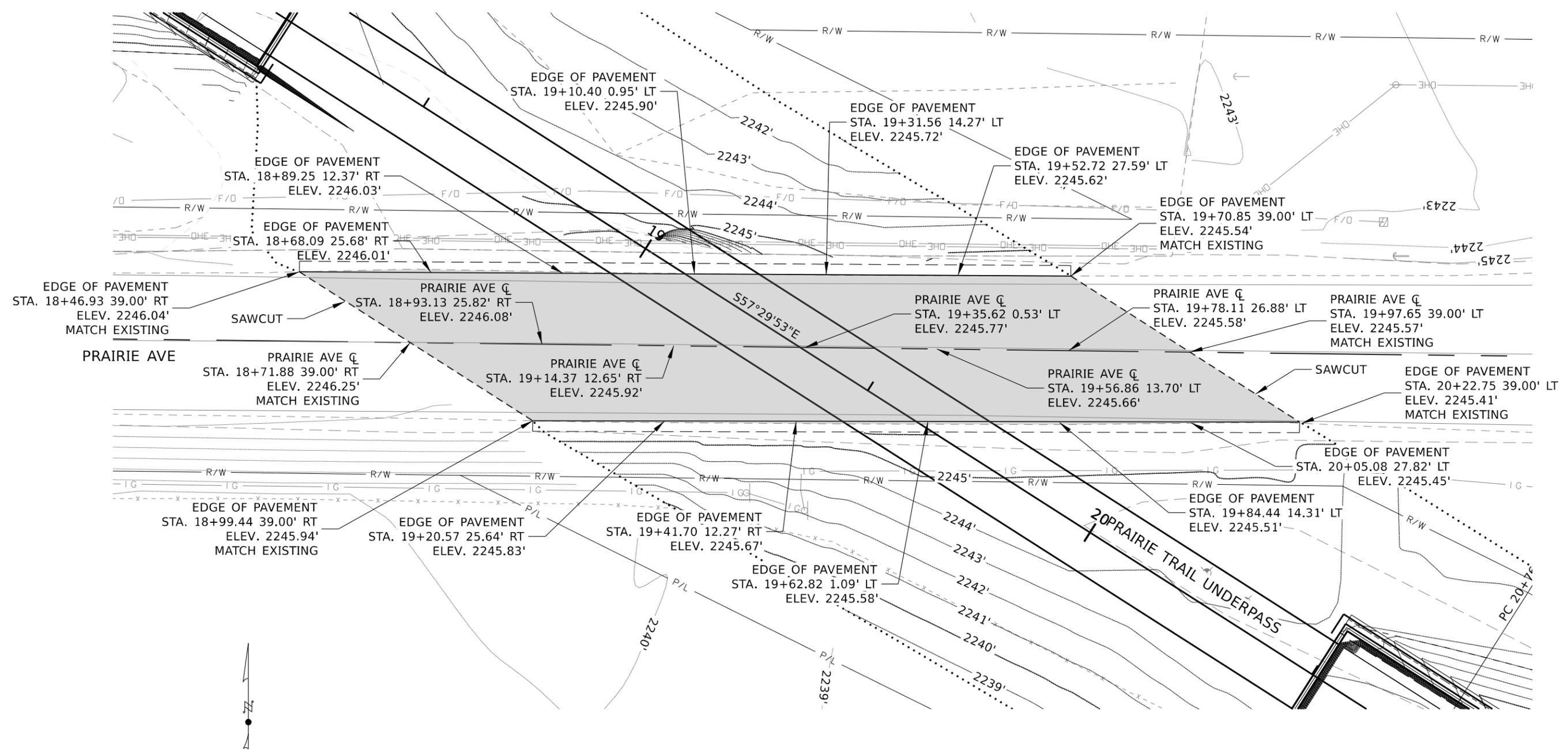
YOUR Safety → YOUR Mobility → YOUR Economic Opportunity

**J-U-B ENGINEERS, INC.**

PROJECT NO.  
**A024(398)**

PLAN AND PROFILE  
**PRAIRIE TRAIL UNDERPASS**  
 POST FALLS HD  
 STA. 22+50.00 TO STA. 27+50.000

**ENGLISH**  
 COUNTY KOOTENAI  
 KEY NUMBER 24398  
 SHEET 11 OF 31



**ROADWAY GRADING**  
PRAIRIE AVE SURFACE REPAIR

 SUPERPAVE HMA

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED KPS	CADD FILE NAME 24398_RDDT_101.dgn
DETAILED BPRR	DRAWING DATE: NOVEMBER 2024
DRAWING CHECKED KPS	

**IDAHO  
TRANSPORTATION  
DEPARTMENT**

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**J-U-B ENGINEERS, INC.**

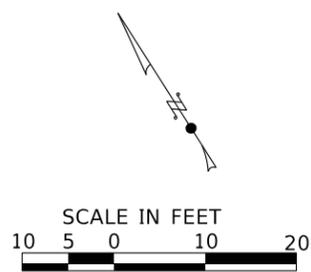
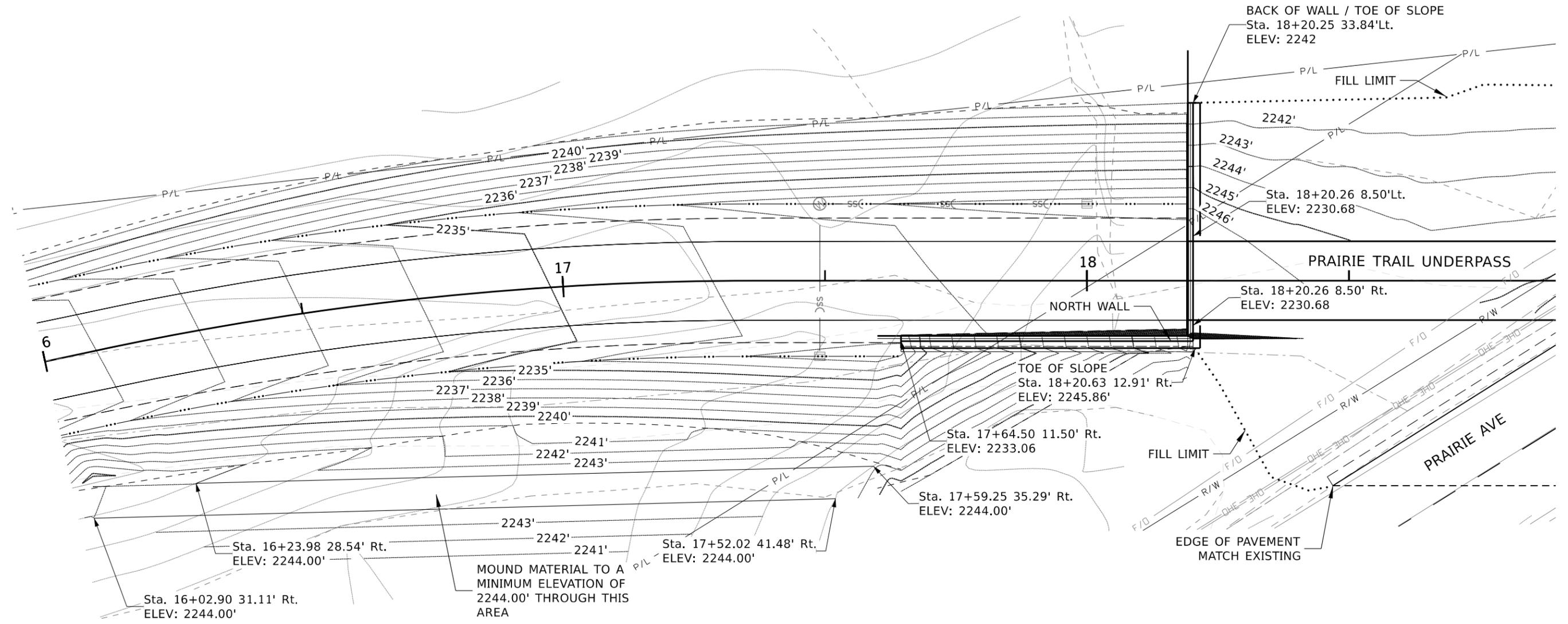


PROJECT NO.	A024(398)
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ROADWAY DETAILS	PRAIRIE TRAIL UNDERPASS POST FALLS HD
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ENGLISH
COUNTY KOOTENAI
KEY NUMBER 24398
SHEET 12 OF 31

PROFESSIONAL ENGINEER  
LICENSED  
*Andrew C. Baden*  
**14227**  
10-2-25  
STATE OF IDAHO  
ANDREW C. BADEN



**ROADWAY GRADING**  
NORTH SIDE OF PRAIRIE AVE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED  
ACB  
DESIGN CHECKED  
KPS  
DETAILED  
BPRR  
DRAWING CHECKED  
KPS

SCALES SHOWN  
ARE FOR 11" X 17"  
PRINTS ONLY  
CADD FILE NAME  
24398\_RDDT\_102.dgn  
DRAWING DATE:  
NOVEMBER 2024

**IDAHO  
TRANSPORTATION  
DEPARTMENT**



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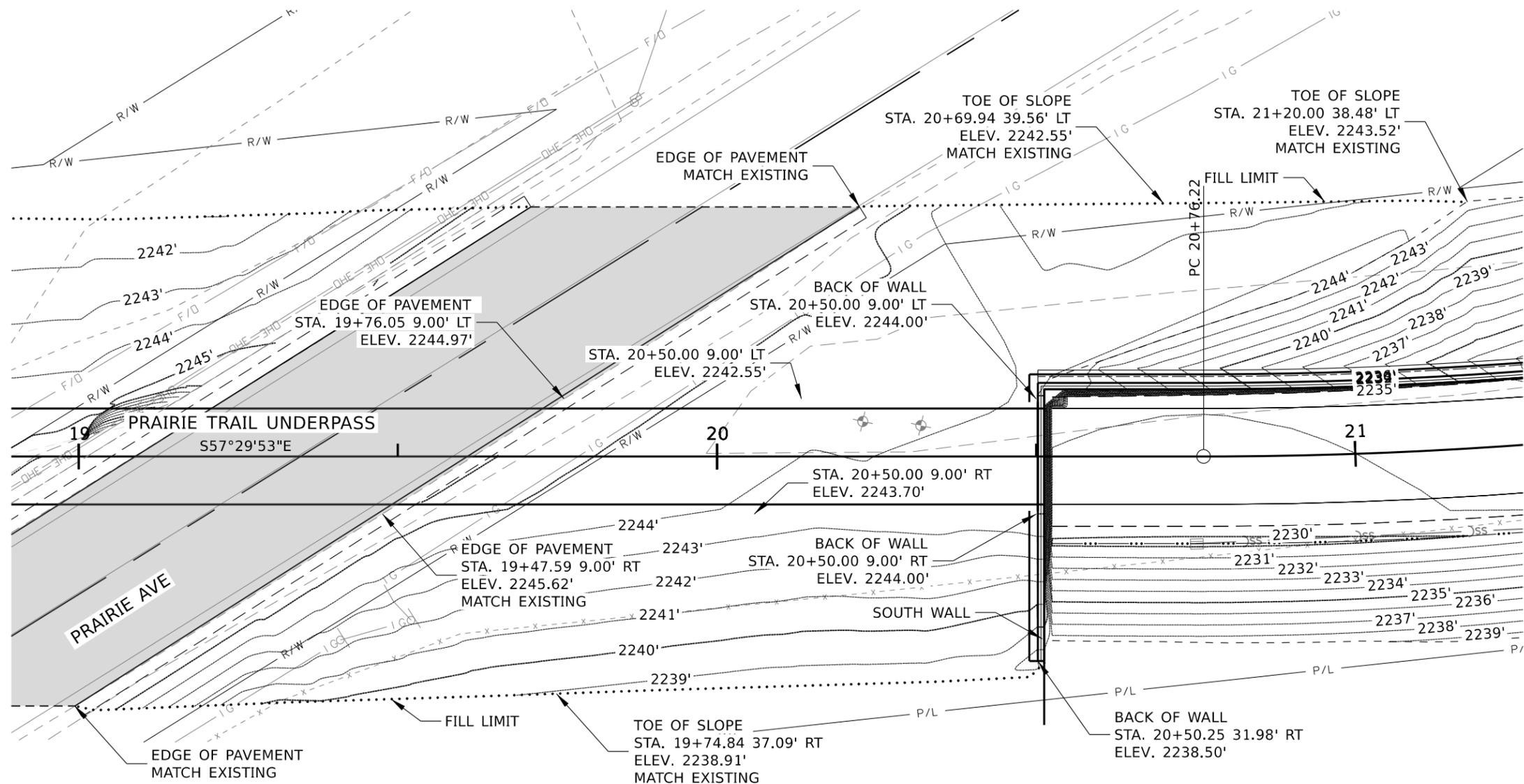
**J-U-B ENGINEERS, INC.**

PROJECT NO.  
**A024(398)**

ROADWAY DETAILS  
**PRAIRIE TRAIL UNDERPASS  
POST FALLS HD**

**ENGLISH**  
COUNTY  
KOOTENAI  
KEY NUMBER  
24398  
SHEET 13 OF 31

PROFESSIONAL ENGINEER  
LICENSED  
**14227**  
10-2-25  
STATE OF IDAHO  
ANDREW C. BADEN



**ROADWAY GRADING**  
SOUTH SIDE OF PRAIRIE AVE



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED  
ACB  
DESIGN CHECKED  
KPS  
DETAILED  
BPRR  
DRAWING CHECKED  
KPS

SCALES SHOWN  
ARE FOR 11" X 17"  
PRINTS ONLY  
CADD FILE NAME  
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DRAWING DATE:  
NOVEMBER 2024

**IDAHO  
TRANSPORTATION  
DEPARTMENT**



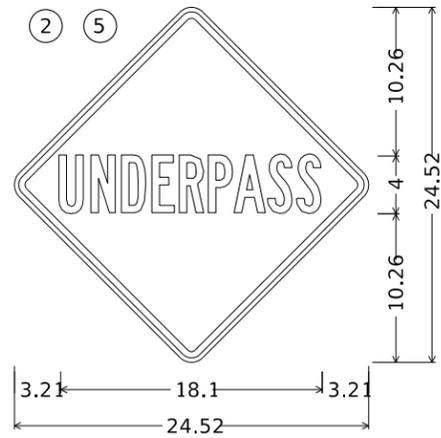
YOUR Safety→YOUR Mobility→YOUR Economic Opportunity

**J-U-B ENGINEERS, INC.**

PROJECT NO.  
  
A024(398)

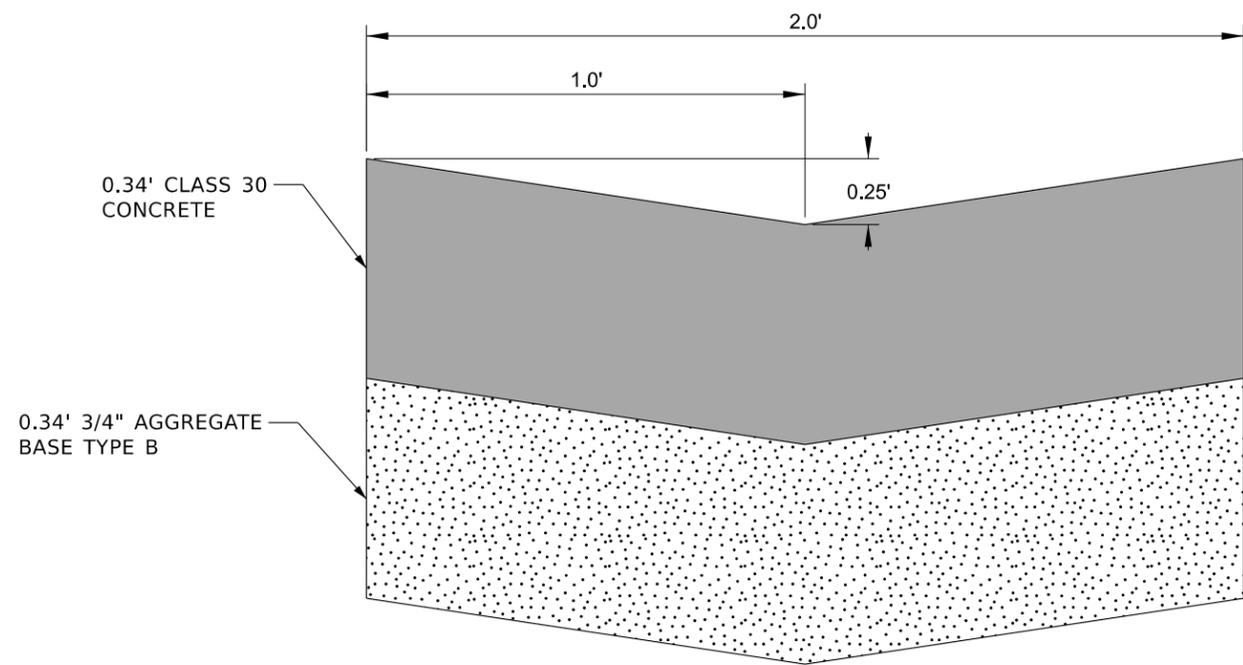
ROADWAY DETAILS  
  
PRAIRIE TRAIL UNDERPASS  
POST FALLS HD

**ENGLISH**  
COUNTY  
KOOTENAI  
KEY NUMBER  
24398  
SHEET 14 OF 31

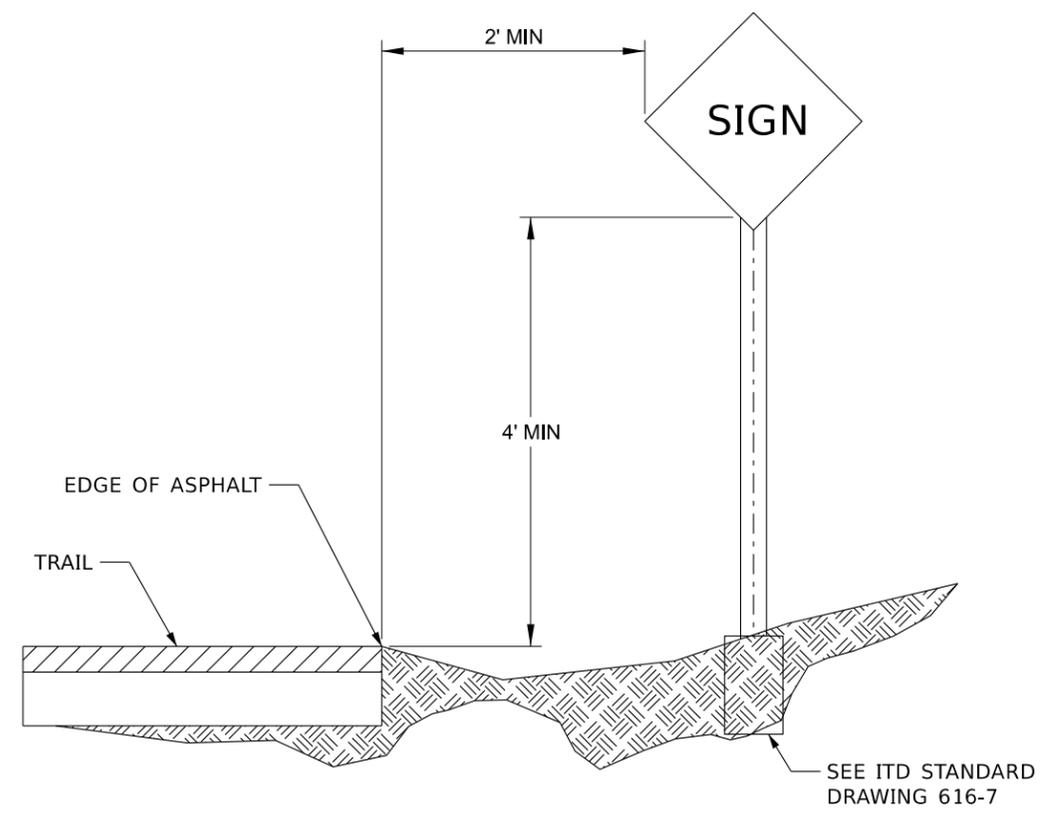


18.00" across sides 1.13" Radius, 0.44" Border, 0.31" Indent, Black on Yellow;  
 "UNDERPASS", B 2K 50% spacing;  
 Table of widths and spaces

3.21	U	1.72	0.44	N	1.72	0.44	D	1.72	0.38	E	1.52	0.32	R	1.72	0.32	P	1.72	0.12	A	2.16	0.16	S	1.72	0.20	S	1.72	3.21
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**NOTE:**  
 CONCRETE AND AGGREGATE  
 ARE INCIDENTAL TO THE  
 INTERCEPTOR DITCH PAY ITEM.



**SIGN PLACEMENT DETAIL**  
 N.T.S.

**208-005A INTERCEPTOR DITCH**  
 N.T.S.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB
DESIGN CHECKED KPS
DETAILED BPRR
DRAWING CHECKED KPS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 24398_SNDT_001.dgn
DRAWING DATE: NOVEMBER 2024

**IDAHO**  
**TRANSPORTATION**  
**DEPARTMENT**  
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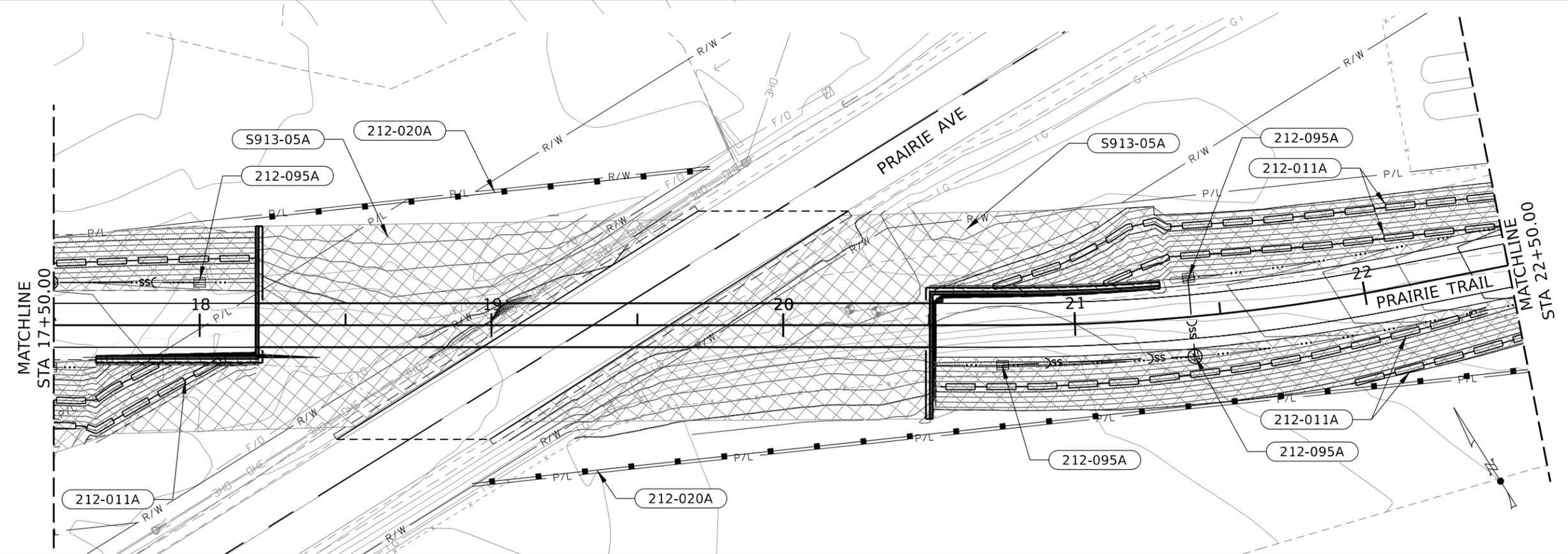
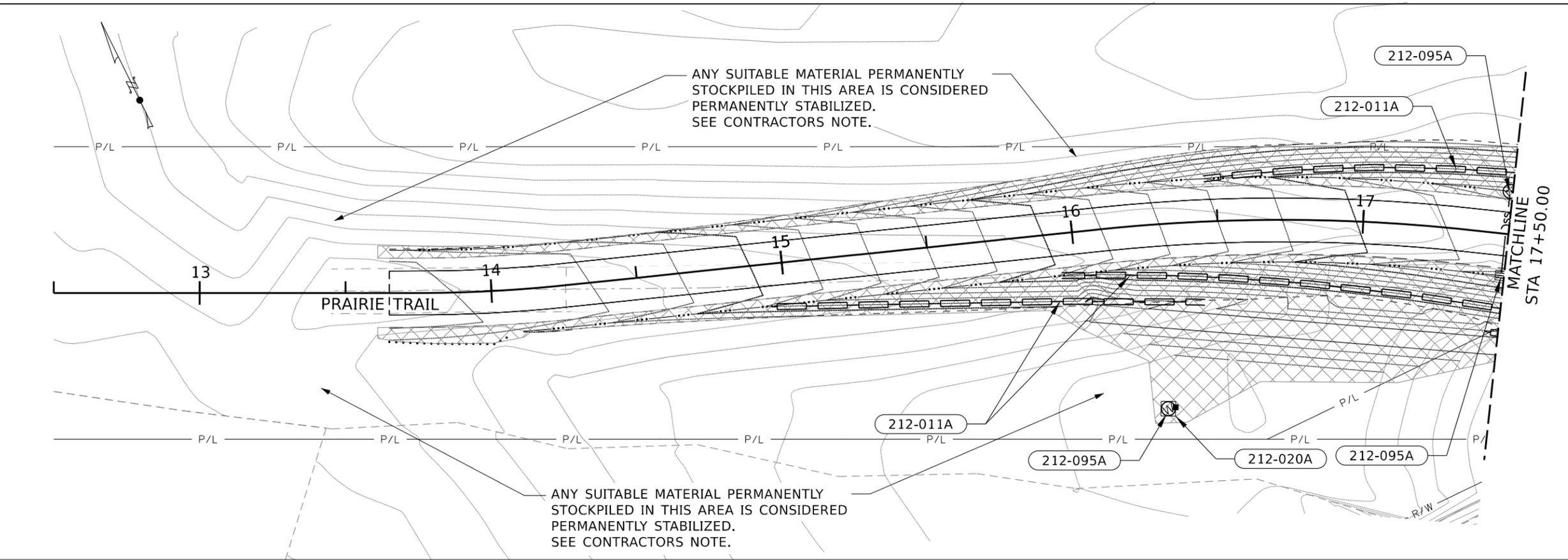


**J-U-B ENGINEERS, INC.**

PROJECT NO.
A024(398)

ROADWAY DETAILS
PRAIRIE TRAIL UNDERPASS
POST FALLS HD

<b>ENGLISH</b>
COUNTY KOOTENAI
KEY NUMBER 24398
SHEET 15 OF 31



**212-011A FIBER WATTLE**

149.00 FT 14+95.00, 14.65' Rt to 16+423.00, 27.45' Rt  
 192.00 FT 15+95.00, 14.40' Rt to 17+87.50, 12.50' Rt  
 176.00 FT 16+46.00, 14.60' Lt to 18+19.00, 22.95' Lt  
 69.00 FT 17+45.50, 33.95' Rt to 18+07.65, 11.50' Rt  
 190.00 FT 20+53.80, 21.00' Rt to 22+40.00, 13.60' Lt  
 180.00 FT 20+70.20, 12.50' Lt to 22+50.00, 24.2' Lt  
 140.00 FT 21+08.85, 12.55' Lt to 22+50.00, 13.75' Lt  
 61.00 FT 21+90.00, 29.75' Rt to 22+50.00, 25.00' Rt

**212-020A SILT FENCE**

20.00 FT 16+25.60, 65.5' Rt to 16+31.20, 61.0' Rt  
 161.00 FT 18+15.00, 36.05' Lt to 19+75.00, 53.30' Lt  
 365.00 FT 18+93.30, 54.10' Rt to 22+50.00, 36.20' Rt

**212-095A INLET PROTECTION**

1.00 EACH 16+28.11, 68.25' Rt  
 1.00 EACH 17+49.00, 14.4' Rt  
 1.00 EACH 17+49.00, 14.65' Lt  
 1.00 EACH 19+11.00, 14.65' Lt  
 1.00 EACH 20+75.00, 13.65' Rt  
 1.00 EACH 21+40.00, 13.35' Lt  
 1.00 EACH 21+40.00, 13.65' Rt

**S913-05A SP ROCK ARMOR**

377.00 CY 13+61.00 Lt & Rt to 19+65.00, 39.30' Lt  
 278.00 CY 18+42.00, 39.15' Rt to 22+50.00 Lt & Rt

NOTE:  
 CONSTRUCT FIBER WATTLES FOR TEMPORARY SLOPE STABILIZATION WHEN SLOPES ARE EXPECTED TO REMAIN UNPROTECTED FOR 14 OR MORE DAYS PRIOR TO ROCK ARMOR PLACEMENT. REMOVE FIBER WATTLES PRIOR TO ROCK ARMOR PLACEMENT

 ROCK ARMOR (S913-05A) 6-INCH DEPTH

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB  
 DESIGN CHECKED KPS  
 DETAILED BPRR  
 DRAWING CHECKED KPS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
 CADD FILE NAME 24398\_ERCO\_001.dgn  
 DRAWING DATE: NOVEMBER 2024

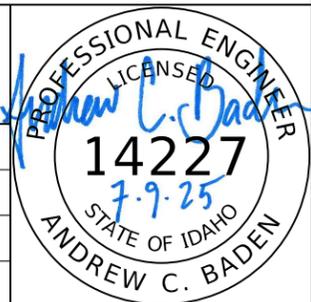
**IDAHO TRANSPORTATION DEPARTMENT**  
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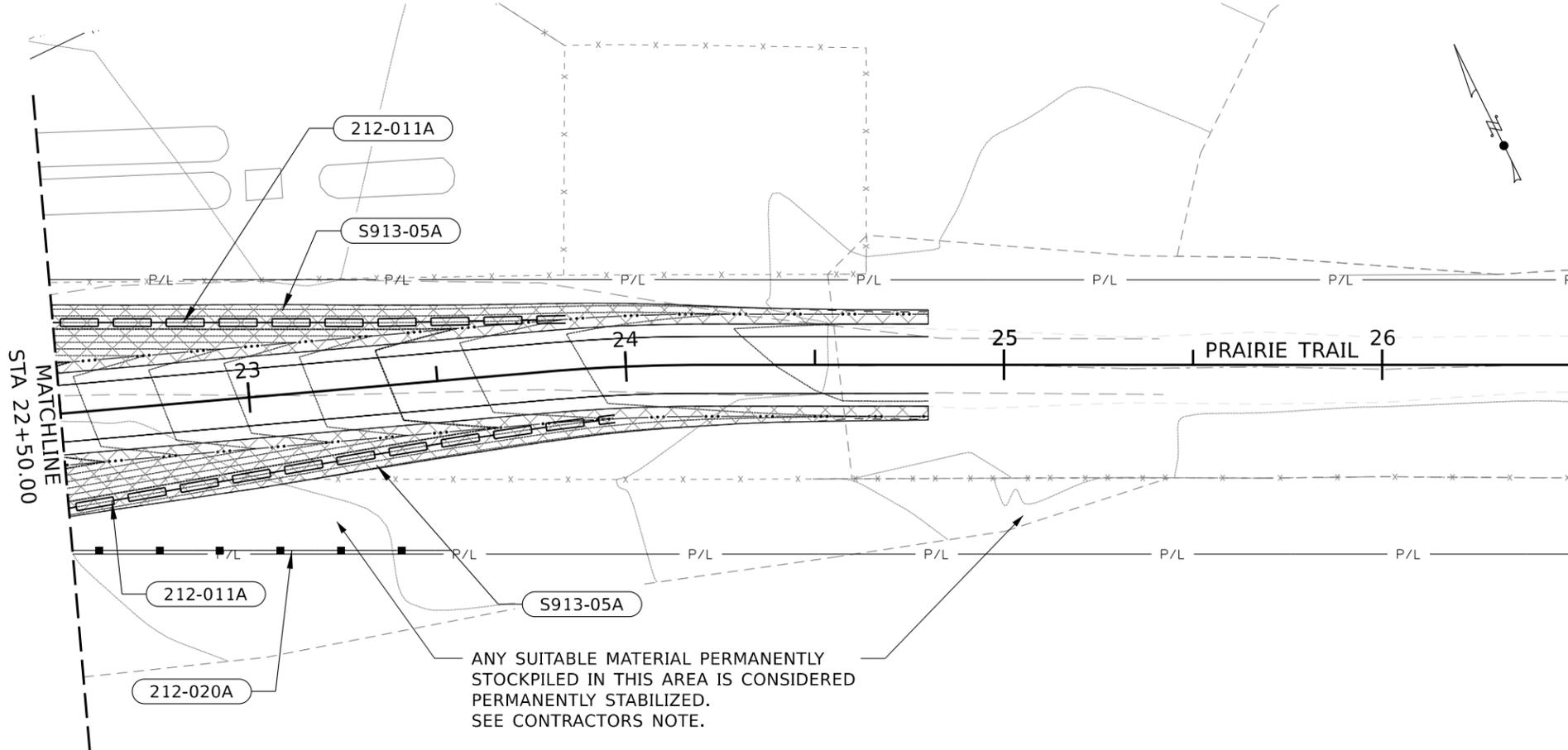
**J-U-B ENGINEERS, INC.**

PROJECT NO.  
 A024(398)

POLLUTION PREVENTION PLAN  
 PRAIRIE TRAIL UNDERPASS  
 POST FALLS HD  
 STA. 12+50.00 TO STA. 22+50.00

**ENGLISH**  
 COUNTY KOOTENAI  
 KEY NUMBER 24398  
 SHEET 16 OF 31





- 212-011A FIBER WATTLE**  
 136.00 FT 22+50.00, 24.20' Lt to 23+85.00, 13.35' Lt  
 147.00 FT 22+50.00, 25.00' Rt to 23+96.40, 13.65' Rt
  
- 212-020A SILT FENCE**  
 101.00 FT 22+50.00, 36.20' Rt to 23+50.00, 44.85' Rt
  
- S913-05A SP ROCK ARMOR**  
 32.00 CY 22+50.00 Lt to 24+80.00 Lt  
 38.00 CY 22+50.00 Rt to 24+80.00 Rt

NOTE:  
 CONSTRUCT FIBER WATTLES FOR TEMPORARY SLOPE STABILIZATION WHEN SLOPES ARE EXPECTED TO REMAIN UNPROTECTED FOR 14 OR MORE DAYS PRIOR TO ROCK ARMOR PLACEMENT. REMOVE FIBER WATTLES PRIOR TO ROCK ARMOR PLACEMENT



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED  
ACB  
 DESIGN CHECKED  
KPS  
 DETAILED  
BPRR  
 DRAWING CHECKED  
KPS

SCALES SHOWN  
ARE FOR 11" X 17"  
PRINTS ONLY  
 CADD FILE NAME  
24398\_ERCO\_002.dgn  
 DRAWING DATE:  
NOVEMBER 2024

**IDAHO  
TRANSPORTATION  
DEPARTMENT**

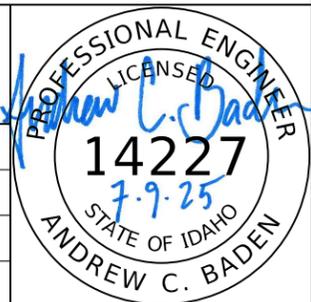
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**J-U-B ENGINEERS, INC.**

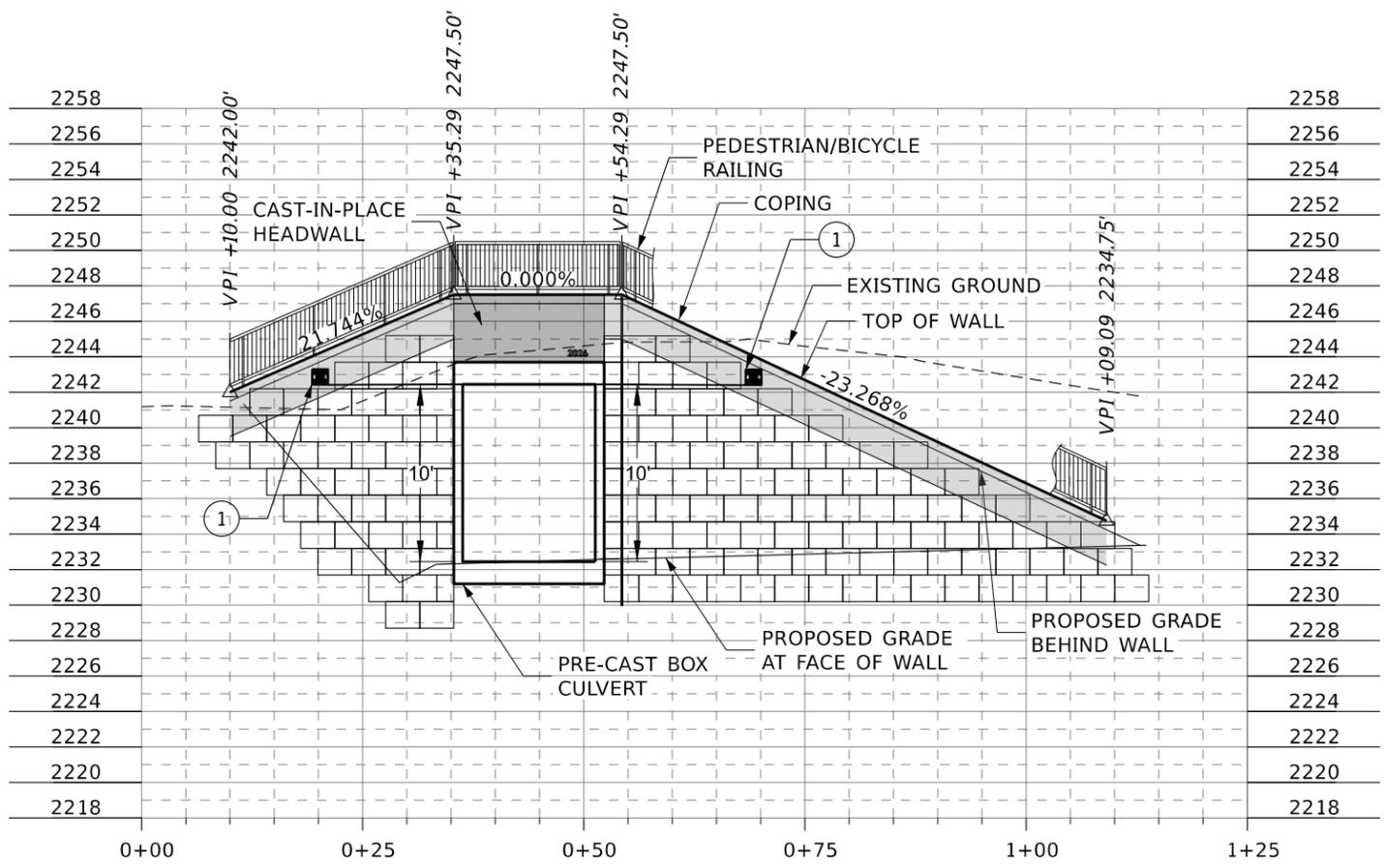
PROJECT NO.  
  
A024(398)

POLLUTION PREVENTION PLAN  
 PRAIRIE TRAIL UNDERPASS  
 POST FALLS HD  
 STA. 22+50.00 TO STA. 26+50.00

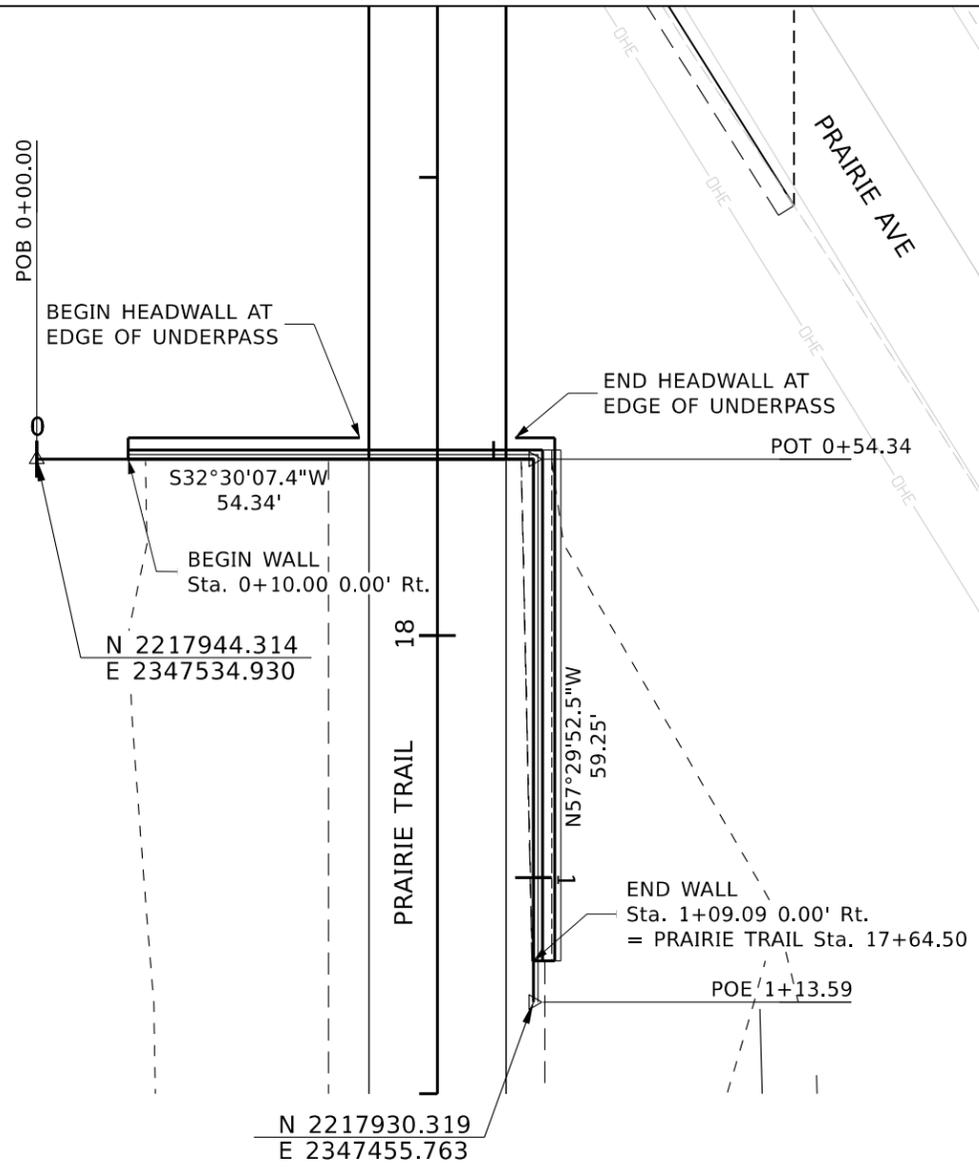
**ENGLISH**  
 COUNTY  
KOOTENAI  
 KEY NUMBER  
24398  
 SHEET 17 OF 31



① MOUNT WALLPACK LIGHT TO COPING. LOCATE WALLPACK 10-FT ABOVE TRAIL ELEVATION AND WHERE CONDUIT WILL NOT CONFLICT WITH WALL BLOCK AND COPING REINFORCEMENT.



**NORTH WALL PROFILE VIEW**



**NORTH WALL PLAN VIEW**

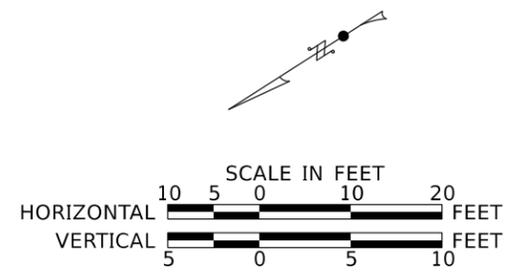
**NORTH MSE WALLS**

THE FOLLOWING TABLE SUMMARIZES THE SOIL INFORMATION TO BE USED IN THE NORTH WALL DESIGN. OTHER INFORMATION NEEDED FOR THE WALL DESIGN CAN BE FOUND IN THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY STRATA DATED DECEMBER 18, 2024 AVAILABLE AT THE DISTRICT RESIDENT'S OFFICE.

NORTH MSE WALL DESIGN PARAMETERS				
SOIL	MOIST UNIT WEIGHT (PCF)	COHESION (PSF)	FRINCTION ANGLE (DEGREES)	FACTORED BEARING CAPACITY (PSF)
WALL REINFORCED ZONE BACKFILL	*	*	*	N/A
RETAINED SOIL	135	0	34	N/A
FOUNDATION SOIL - POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM)	128	0	32	**

\* TO BE DETERMINED BY THE CONTRACTOR

\*\* REFER TO TABLE 5 OF THE FINAL GEOTECHNICAL ENGINEERING REPORT FOR THE PRAIRIE TRAIL UNDERPASS - ITD PROJECT NO. A024(398); KEY NO. 24398 PREPARED BY STRATA DATED DECEMBER 18, 2024 FOR FACTORED BEARING CAPACITY VALUES BASED ON THE WIDTH OF THE REINFORCING ZONE.



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB  
 DESIGN CHECKED KPS  
 DETAILED BPRR  
 DRAWING CHECKED KPS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
 CADD FILE NAME 24398\_WALL\_001.dgn  
 DRAWING DATE: NOVEMBER 2024

**IDAHO TRANSPORTATION DEPARTMENT**  
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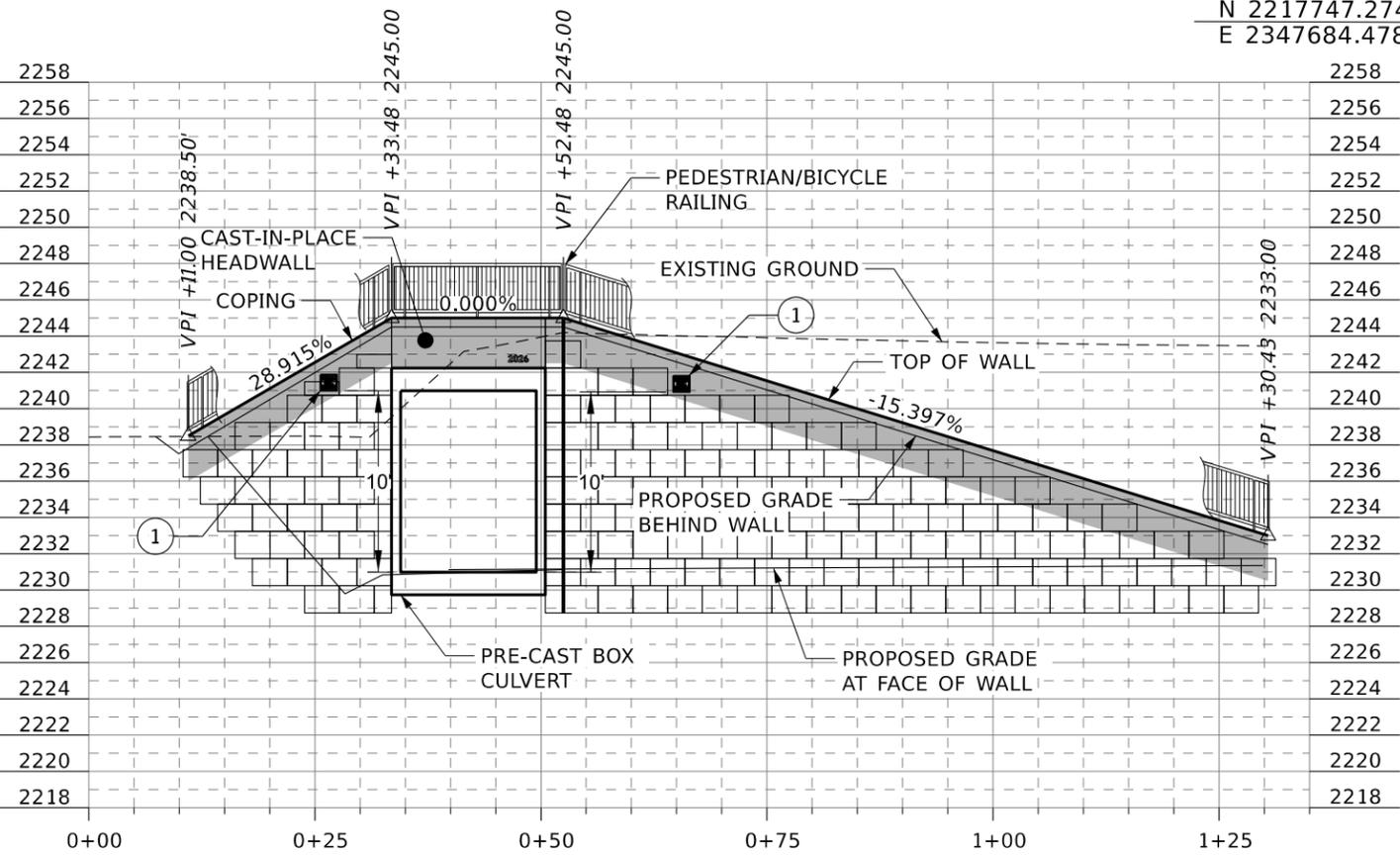
**J-U-B ENGINEERS, INC.**

PROJECT NO. A024(398)

NORTH WALL PLAN AND PROFILE  
 PRAIRIE TRAIL UNDERPASS  
 POST FALLS HD

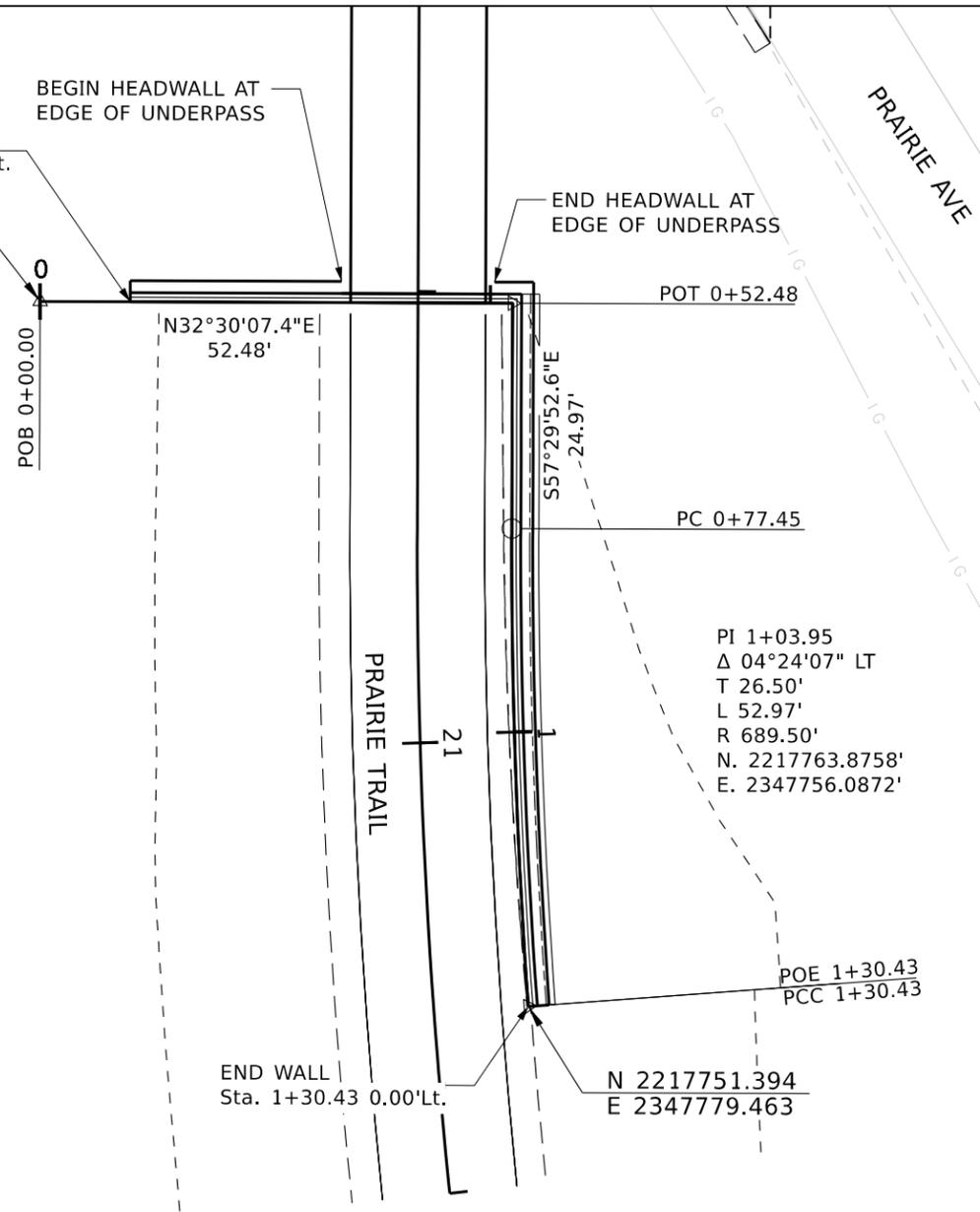
**ENGLISH**  
 COUNTY KOOTENAI  
 KEY NUMBER 24398  
 SHEET 18 OF 31

① MOUNT WALLPACK LIGHT TO COPING. LOCATE WALLPACK 10-FT ABOVE TRAIL ELEVATION AND WHERE CONDUIT WILL NOT CONFLICT WITH WALL BLOCK AND COPING REINFORCEMENT.



SOUTH WALL PROFILE VIEW

BEGIN WALL  
Sta. 0+10.00 0.00' Rt.  
N 2217747.274  
E 2347684.478



SOUTH WALL PLAN VIEW

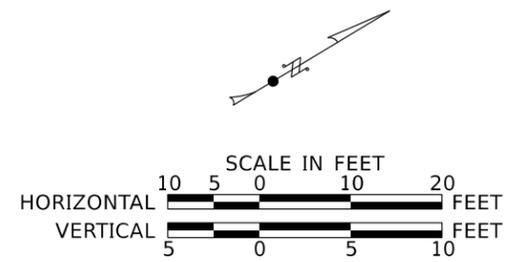
**SOUTH MSE WALLS**

THE FOLLOWING TABLE SUMMARIZES THE SOIL INFORMATION TO BE USED IN THE SOUTH WALL DESIGN. OTHER INFORMATION NEEDED FOR THE WALL DESIGN CAN BE FOUND IN THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY STRATA DATED DECEMBER 18, 2024 AVAILABLE AT THE DISTRICT RESIDENT'S OFFICE.

SOUTH MSE WALL DESIGN PARAMETERS				
SOIL	MOIST UNIT WEIGHT (PCF)	COHESION (PSF)	FRINCTION ANGLE (DEGREES)	FACTORED BEARING CAPACITY (PSF)
WALL REINFORCED ZONE BACKFILL	*	*	*	N/A
RETAINED SOIL	135	0	34	N/A
FOUNDATION SOIL - SILTY GRAVEL WITH SAND AND COBBLES (GM)	135	0	35	**

\* TO BE DETERMINED BY THE CONTRACTOR

\*\* REFER TO TABLE 5 OF THE FINAL GEOTECHNICAL ENGINEERING REPORT FOR THE PRAIRIE TRAIL UNDERPASS - ITD PROJECT NO. A024(398); KEY NO. 24398 PREPARED BY STRATA DATED DECEMBER 18, 2024 FOR FACTORED BEARING CAPACITY VALUES BASED ON THE WIDTH OF THE REINFORCING ZONE.



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED KPS	
DETAILED BPRR	
DRAWING CHECKED KPS	

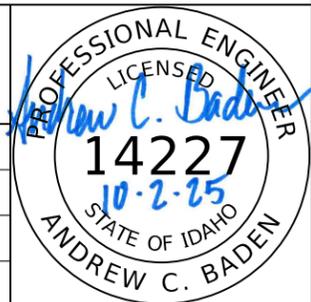
**IDAHO**  
**TRANSPORTATION**  
**DEPARTMENT**  
YOUR Safety→YOUR Mobility→YOUR Economic Opportunity

**J-U-B ENGINEERS, INC.**

PROJECT NO.	A024(398)
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SOUTH WALL PLAN AND PROFILE	PRAIRIE TRAIL UNDERPASS POST FALLS HD
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ENGLISH
COUNTY KOOTENAI
KEY NUMBER 24398
SHEET 19 OF 31



ITEM NO.	QUAN.	DESCRIPTION	ITEM	DESCRIPTION
		ILLUMINATION TYPE II (619-010A) ROADWAY LIGHTING		GENERAL ILLUMINATION NOTES
		MATERIALS TO BE FURNISHED AND INSTALLED BY CONTRACTOR		
1	1 EACH	<b>ELECTRICAL SERVICE PEDESTAL:</b> 100 AMP, 120/240 VOLT, ILLUMINATION ELECTRICAL SERVICE PEDESTAL PAD MOUNTED TYPE 1 SERVICE. TO BE MILBANK P/N# CP3B11113BWIDO3, MYERS POWER PRODUCTS MEUG20-M100w/TB-ITD (MOD) TYPE 1 PART # 5101906, OR APPROVED EQUAL.		
2	1 EACH	<b>FOUNDATION:</b> REINFORCED CONCRETE FOR SERVICE PEDESTAL WITH CONCRETE PAD. REFER TO TRAFFIC DETAIL SHEET TYPE 1 SERVICE FOR CONCRETE, REINFORCING STEEL QUANTITIES, AND DETAIL CONFIGURATIONS.		
3	14 EACH	<b>LUMINAIRE:</b> WALL PACK, LED, 4000K CCT. TO BE CREE-RUUD LIGHTING, INC. (FLD-304-40-YM-06-E-UL-SV-700-40K), COOPER/LUMARK, HOLOPHANE LIGHTING, LITHONIA LIGHTING, OR APPROVED EQUAL.		
4	4 EACH	<b>JUNCTION BOX:</b> COMPOSITE POLYMER CONCRETE SIZE C, 17" X 30" X 18" DEEP. WITH "LIGHTING" LOGO FOR LIGHTING BOXES OR APPROVED EQUAL. LOCATE OUTSIDE OF SIDEWALK AND ROADWAY.		
5	VAR	<b>MISCELLANEOUS ITEMS:</b> TO INCLUDE PLASTIC AND METAL CONDUIT, THWN WIRE AND THWN GROUND LIGHTING, WIRING OF POWER PEDESTAL, WIRE IDENTIFICATION MARKERS, SPLIT WIRE MESH SUPPORTS, AND VARIOUS OTHER ITEMS, HARDWARE AND FITTINGS NECESSARY TO COMPLETE THE SYSTEM AS DEPICTED IN THE PLANS.		
		UTILITY CONDUIT (586-005A) SPARE CONDUIT		
		MATERIALS TO BE FURNISHED AND INSTALLED BY CONTRACTOR		
6	1 LS	<b>SPARE CONDUIT:</b> SIZE, TYPE, AND LOCATION AS DEPICTED IN THE PLANS.		

REVISIONS			
NO.	DATE	BY	DESCRIPTION
△	11/13/25	A. Baden	Added Information Regarding Spare Conduit.

DESIGNED ACB	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED KPS	
DETAILED BPRR	CADD FILE NAME 24398_ILLMAT_001.dgn
DRAWING CHECKED KPS	DRAWING DATE: NOVEMBER 2024

**IDAHO  
TRANSPORTATION  
DEPARTMENT**

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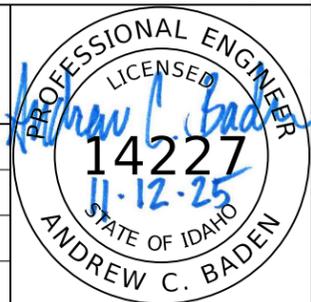
**J-U-B ENGINEERS, INC.**



PROJECT NO.	A024(398)
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ILLUMINATION MATERIALS	PRAIRIE TRAIL UNDERPASS POST FALLS HD
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<b>ENGLISH</b>
COUNTY KOOTENAI
KEY NUMBER 24398
SHEET 20 OF 31



PROFESSIONAL ENGINEER  
LICENSED  
**14227**  
11-12-25  
STATE OF IDAHO  
ANDREW C. BADEN



SERVICE CABINET SCHEDULE

ITEM	CLASS "B"
① MAIN BREAKER	(SEE SCHEDULE)
② CONTROL BREAKER	1P-15A 120/240 VOLT
③ TEST SWITCH	SPST-15A 120/240 VOLT
④ LIGHTING BRANCH BREAKER	2P-120/240 VOLT (SEE SCHEDULE)
⑤ SIGNAL CONTROL BREAKER	
⑥ DRY TRANSFORMER	NONE
⑦ LIGHTING CONTACTOR	8P (ANY COMBINATION)
⑧ FLASHER CONTROL BREAKER	

BREAKER RATING SCHEDULE

CLASS "B"	
ITEM	NO. OF LIGHTING CIRCUITS
MAIN BREAKER	100 AMP 2P
LIGHTING BRANCH BREAKER	30 AMP 2P
SIGNAL CONTROL BREAKER	
LIGHTING CONTACTOR	30 AMP 8P
SERVICE WIRE	NO. 3 THWN

NOTE

IDENTIFICATION LABELS SHALL BE REQUIRED FOR BRANCH BREAKERS. LIGHTING BRANCH BREAKER LABELS SHALL READ: "LIGHTING CIRCUIT NO. (SEE PLANS)."

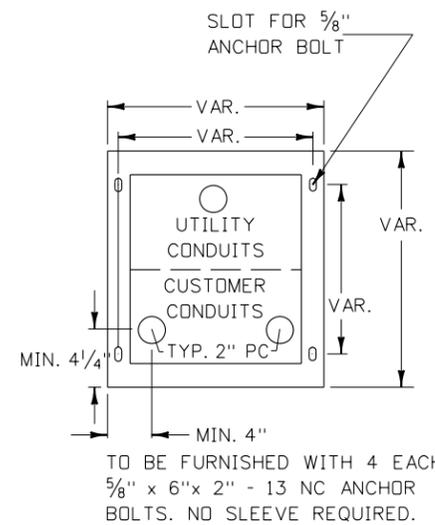
DRILL POLE CAP TO ACCEPT PHOTOELECTRIC CONTROL LOCKING TYPE RECEPTACLE (SIGNAL POLES ONLY)

ILLUMINATION POLES USE POLE TOP ADAPTER FOR THIS LOCATION

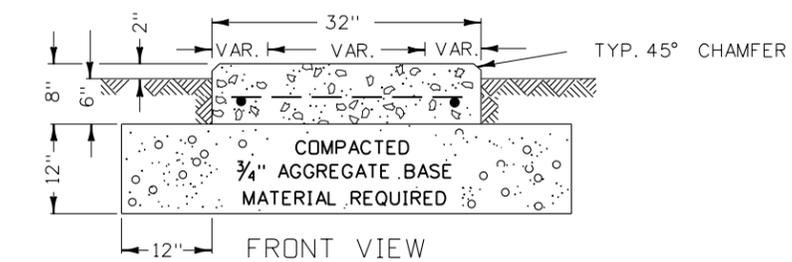
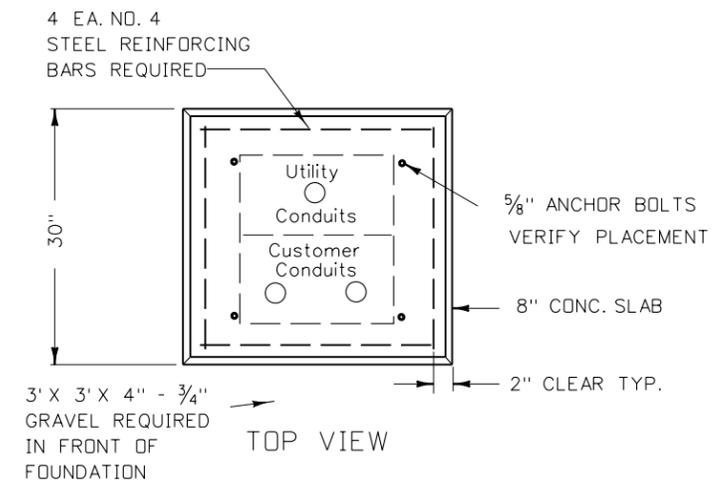
ALTERNATE LOCATION

POLE TOP MOUNTING FOR PHOTOELECTRIC CELL

PHOTOELECTRIC CELL TWIST LOCK RECEPTACLE REQUIRED. MOUNTED IN UPPER RIGHT SIDE OF CUSTOMER SECTION.

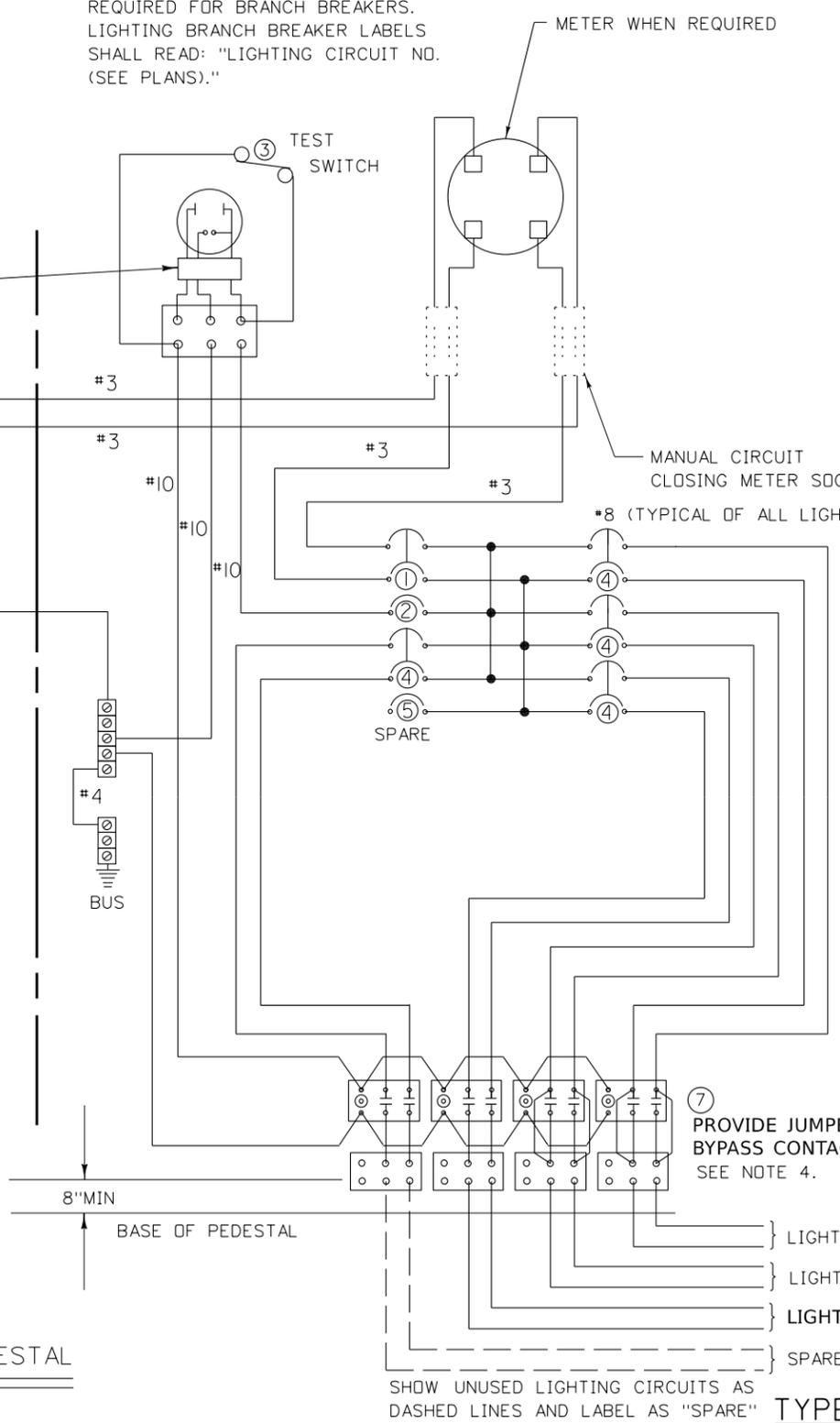
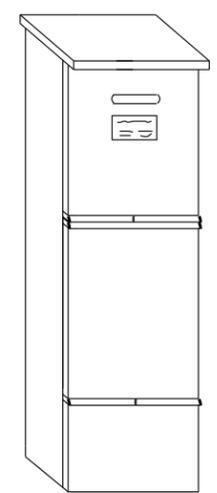


PEDESTAL FLANGE MOUNTING DETAIL



NARROW FOUNDATION

TYPICAL SERVICE PEDESTAL



NOTES:

- SERVICE CABINETS SHALL BE NEMA TYPE 3R. TO BE FURNISHED WITH A PADLOCK HASP.
- DEAD FRONT CONSTRUCTION IS REQUIRED ON ALL CABINETS.
- PLUG-IN TYPE BREAKERS SHALL BE USED ON "B" SERVICES. MAIN BREAKERS SHALL BE BOLT RETAINED.
- PRESSURE TYPE TERMINALS SHALL BE REQUIRED FOR #8 THROUGH #2 AWG. WIRE.
- ALL SERVICES SHALL BE U.L. LABELED FOR MAXIMUM 100 AMP BUS RATING, AND "APPROVED FOR SERVICE ENTRANCE EQUIPMENT."
- THE MAIN BREAKER LABEL SHALL BE MADE OF RED ON WHITE PLASTIC LAMINATE. THE BRANCH BREAKER LABELS SHALL BE MADE OF BLACK ON WHITE PLASTIC LAMINATE. THE LEGENDS SHALL BE ENGRAVED INTO THE STRIP SO AS TO PROVIDE RED OR BLACK LEGEND ON THE REQUIRED BACKGROUND. THE LABELS SHALL BE PERMANENTLY ATTACHED TO THE DEAD FRONT, NEXT TO THE CORRESPONDING BREAKERS.
- LIGHTING CONTACTORS, LIGHTING & SIGNAL BRANCH CIRCUIT BREAKERS TO BE FACTORY INSTALLED.
- BRANCH CIRCUIT WIRE, AND PHOTOELECTRIC CONTROL TO BE SUPPLIED BY THE CONTRACTOR.
- ALL BUSSING TO BE 100 AMP RATED.
- WIRING SHALL BE THWN/MTW 600V 90° C RATED.

TYPE I SERVICE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB
DESIGN CHECKED KPS
DETAILED BPRR
DRAWING CHECKED KPS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME td-03.dgn
DRAWING DATE: NOVEMBER 2024

**IDAHO TRANSPORTATION DEPARTMENT**

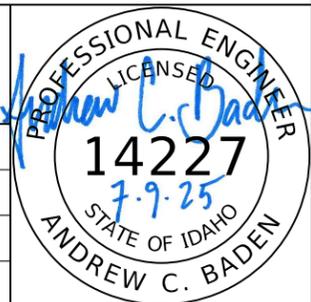
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**J-U-B ENGINEERS, INC.**

PROJECT NO.	A024(398)
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ILLUMINATION DETAIL	PRAIRIE TRAIL UNDERPASS POST FALLS HD
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ENGLISH
COUNTY KOOTENAI
KEY NUMBER 24398
SHEET 22 OF 31



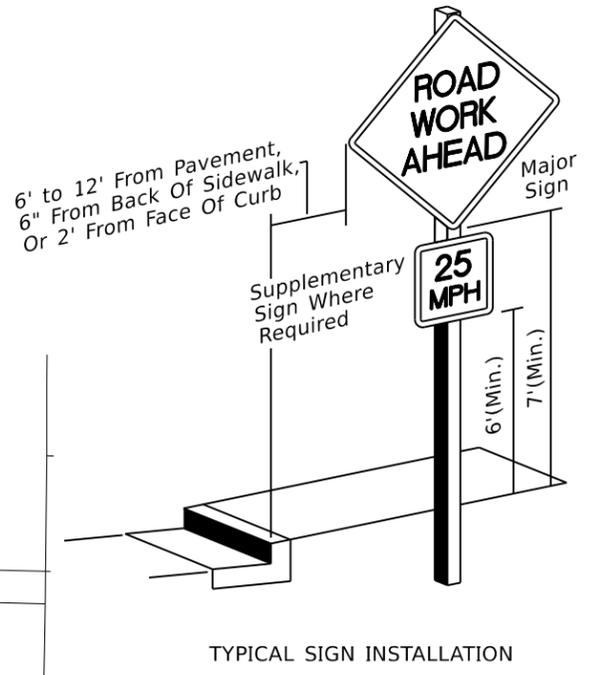
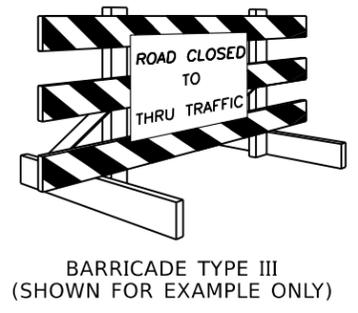
**SIGN SPACING = X (1)**

RURAL HIGHWAYS	60 / 65 MPH	800' ±
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ±(2)
URBAN STREETS	25 MPH OR LESS	100' ±(2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.  
 (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

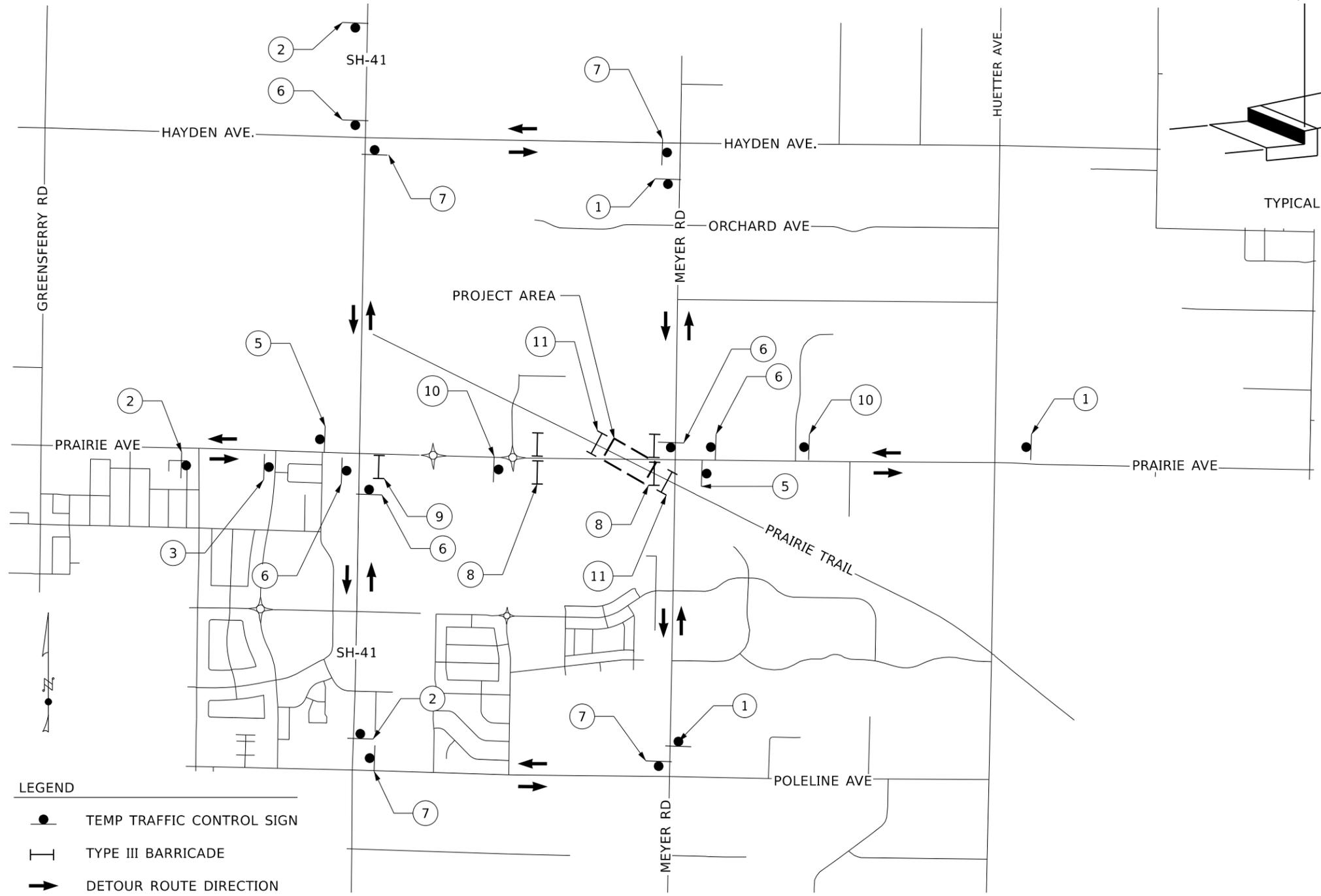
**GENERAL NOTES**

- ALL SIGNS TO BE BLACK TEXT ON ORANGE BACKGROUND UNLESS OTHERWISE NOTED.
- PLACE PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) IN BOTH DIRECTIONS ONE WEEK IN ADVANCE OF PRAIRIE AVE CLOSURE. PAID UNDER 626-115A.



**SIGN LEGEND**

1	PRAIRIE AVE CLOSED AT MEYER RD USE DETOUR	CUSTOM 6" FONT 'D' SERIES 88"X36" ADD FLAGS AND FLASHERS
2	PRAIRIE AVE CLOSED AT FENECUS RD USE DETOUR	
3	DETOUR AHEAD	W20-2 36"X36"
4	DETOUR ↑	M4-9S 30"X24"
5	END DETOUR	M4-8a 24"X18"
6	DETOUR ←	M4-9L 30"X24"
7	DETOUR →	M4-9R 30"X24"
8	ROAD CLOSED	R11-2 48"X30"
9	ROAD CLOSED TO THRU TRAFFIC	R11-4 60"X30"
10	ROAD CLOSED AHEAD	W20-3 36"X36"
11	TRAIL CLOSED	R11-2 (CUSTOM) 48"X30"



**LEGEND**

- TEMP TRAFFIC CONTROL SIGN
- ⊥ TYPE III BARRICADE
- ➔ DETOUR ROUTE DIRECTION

**REVISIONS**

NO.	DATE	BY	DESCRIPTION

DESIGNED ACB  
 DESIGN CHECKED KPS  
 DETAILED BPRR  
 DRAWING CHECKED KPS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
 CADD FILE NAME 24398\_TCP\_001.dgn  
 DRAWING DATE: NOVEMBER 2024

**IDAHO TRANSPORTATION DEPARTMENT**

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**J-U-B ENGINEERS, INC.**

PROJECT NO. A024(398)

TRAFFIC CONTROL PLAN  
 PRAIRIE TRAIL UNDERPASS  
 POST FALLS HD

ENGLISH  
 COUNTY KOOTENAI  
 KEY NUMBER 24398  
 SHEET 23 OF 31

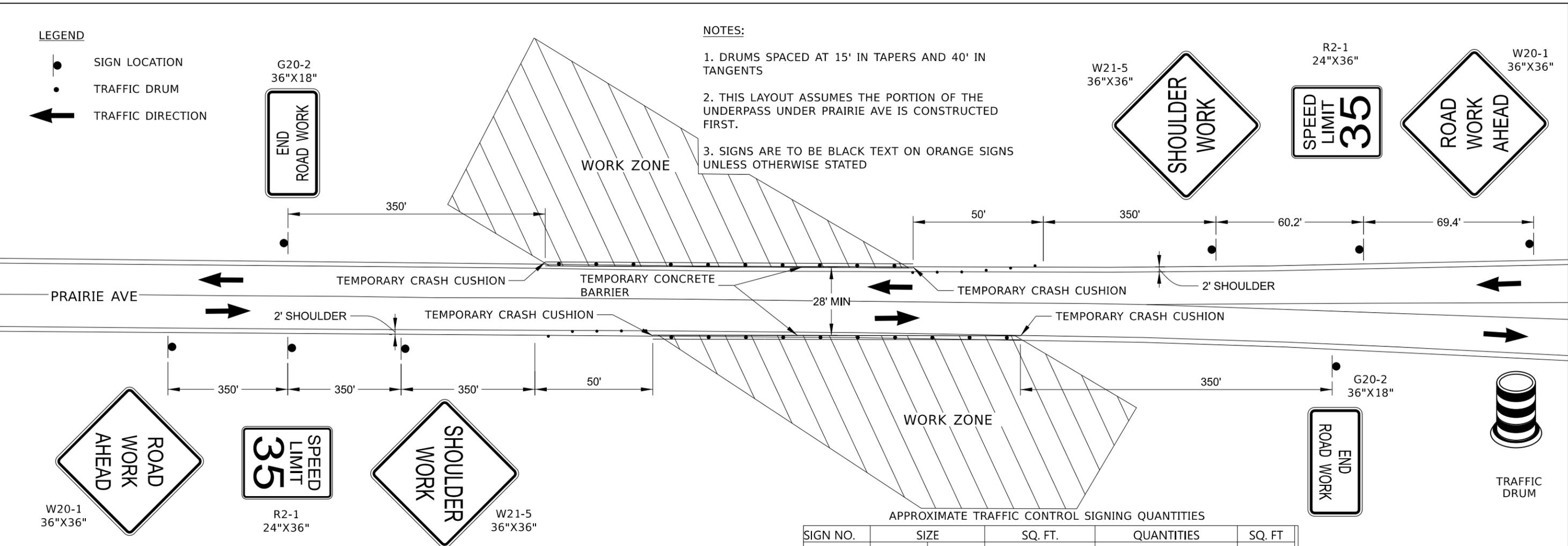
PROFESSIONAL ENGINEER  
 LICENSED  
 14227  
 7.9.25  
 STATE OF IDAHO  
 ANDREW C. BADEN

**LEGEND**

- SIGN LOCATION
- TRAFFIC DRUM
- TRAFFIC DIRECTION

**NOTES:**

1. DRUMS SPACED AT 15' IN TAPERS AND 40' IN TANGENTS
2. THIS LAYOUT ASSUMES THE PORTION OF THE UNDERPASS UNDER PRAIRIE AVE IS CONSTRUCTED FIRST.
3. SIGNS ARE TO BE BLACK TEXT ON ORANGE SIGNS UNLESS OTHERWISE STATED

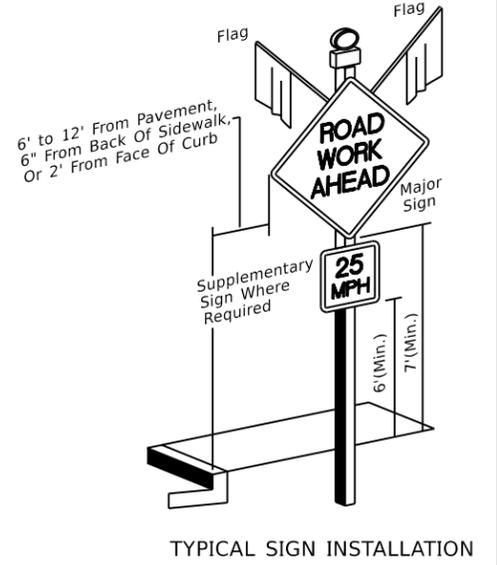


APPROXIMATE TRAFFIC CONTROL SIGNING QUANTITIES

SIGN NO.	SIZE	SQ. FT.	QUANTITIES	SQ. FT.	
G20-2	36	18	4.5	2	9
W21-5	36	36	9	2	18
W20-1	36	36	9	2	18
R2-1	24	36	6	2	12
CUSTOM 1	88	36	22	3	66
CUSTOM 2	88	36	22	3	66
W20-2	36	36	9	1	9
M4-9S	30	24	5	0	0
M4-8a	24	18	3	2	6
M4-9L	30	24	5	5	25
M4-9R	30	24	5	4	20
R11-2	48	30	10	2	20
R11-4	60	30	12.5	1	12.5
W20-3	36	36	9	2	18
R11-2	48	30	10	2	20
TOTAL				320	
WITH 10% CONTINGENCY				351	
BARRICADE TYPE 3			5	EA	
DRUMS			10	EA	
TEMPORARY CRASH CUSHION			4	EA	
TEMPORARY CONCRETE BARRIER			300	FT	
PORTABLE CHANGEABLE MESSAGE SIGN			14	DAY	

**GENERAL NOTES**

1. ALL TEMPORARY TRAFFIC CONTROL SIGNING AND DEVICES TO MEET OR EXCEED THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AS ADOPTED BY THE STATE.
2. UNLESS OTHERWISE NOTED, RETAIN AND PROTECT ALL EXISTING SIGNS. COVER ALL EXISTING SIGNS IN CONFLICT WITH TEMPORARY SIGNS WHILE CONSTRUCTION SIGNING IS IN EFFECT.
3. SUBMIT NEW TEMPORARY TRAFFIC CONTROL PLANS FOR APPROVAL IF THE TEMPORARY TRAFFIC CONTROL PLAN AS SHOWN DOES NOT CONFORM TO THE CONTRACTOR'S METHOD OF OPERATION, THE ENGINEER WILL REQUIRE 14 DAYS FOR REVIEW.
4. PLACE DETOUR SIGNAGE APPROACHING AND AT INTERSECTIONS SO AS NOT TO INTERFERE WITH EXISTING REGULATORY SIGNING.
5. PLACE ALL DETOUR SIGNING PRIOR TO DIVERSION OF TRAFFIC.
6. ADDITIONAL SIGNING MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
7. PLACE ALL DETOUR SIGNING ON WOOD POSTS COMPLYING WITH STANDARD DRAWING 616-10, EXCEPT THEY DO NOT NEED TO BE TREATED.
8. REMOVE DETOUR SIGNS MOUNTED ON TEMPORARY POSTS FROM THE PROJECT WHEN THEY ARE NOT APPLICABLE, AT NO ADDITIONAL COST TO THE HIGHWAY DISTRICT AND LHTAC.



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB  
 DESIGN CHECKED KPS  
 DETAILED BPRR  
 DRAWING CHECKED KPS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
 CADD FILE NAME 24398\_TCP\_002.dgn  
 DRAWING DATE: NOVEMBER 2024

**IDAHO TRANSPORTATION DEPARTMENT**  
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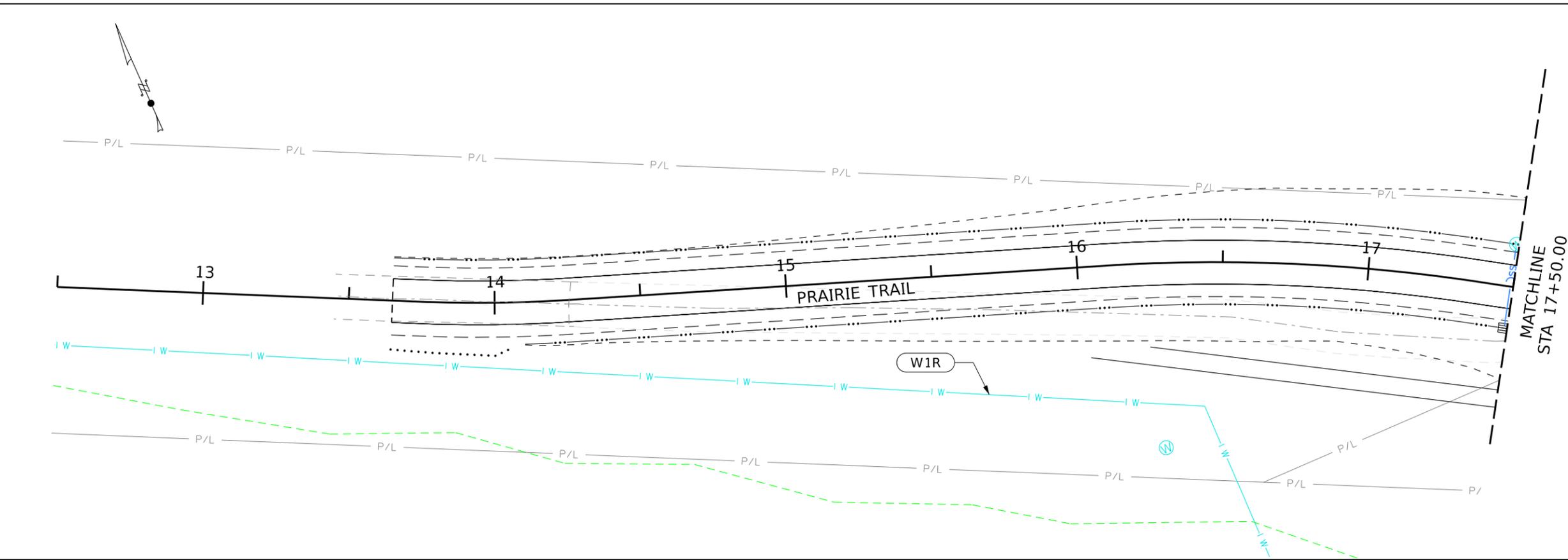
**J-U-B ENGINEERS, INC.**

PROJECT NO.  
**A024(398)**

TRAFFIC CONTROL PLAN  
**PRAIRIE TRAIL UNDERPASS  
 POST FALLS HD**

**ENGLISH**  
 COUNTY KOOTENAI  
 KEY NUMBER 24398  
 SHEET 24 OF 31

PROFESSIONAL ENGINEER  
 LICENSED  
**14227**  
 7.9.25  
 STATE OF IDAHO  
**ANDREW C. BADEN**



GENERAL NOTES:  
 UTILITY LOCATIONS ARE APPROXIMATE AND ARE BASED ON SOURCES OF VARYING ACCURACY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING UTILITY LOCATIONS AND PROTECTING THE UTILITIES IN PLACE. THE CONTRACTOR SHALL CALL ONE-CALL TO FIELD LOCATE ALL UTILITIES PRIOR TO ANY EXCAVATION ACTIVITIES.

**KEY**

UTILITY COMPANY

XOX ACTION REQUIRED

UNDERGROUND (1)  
 OVERHEAD (2)

**ACTION REQUIRED**

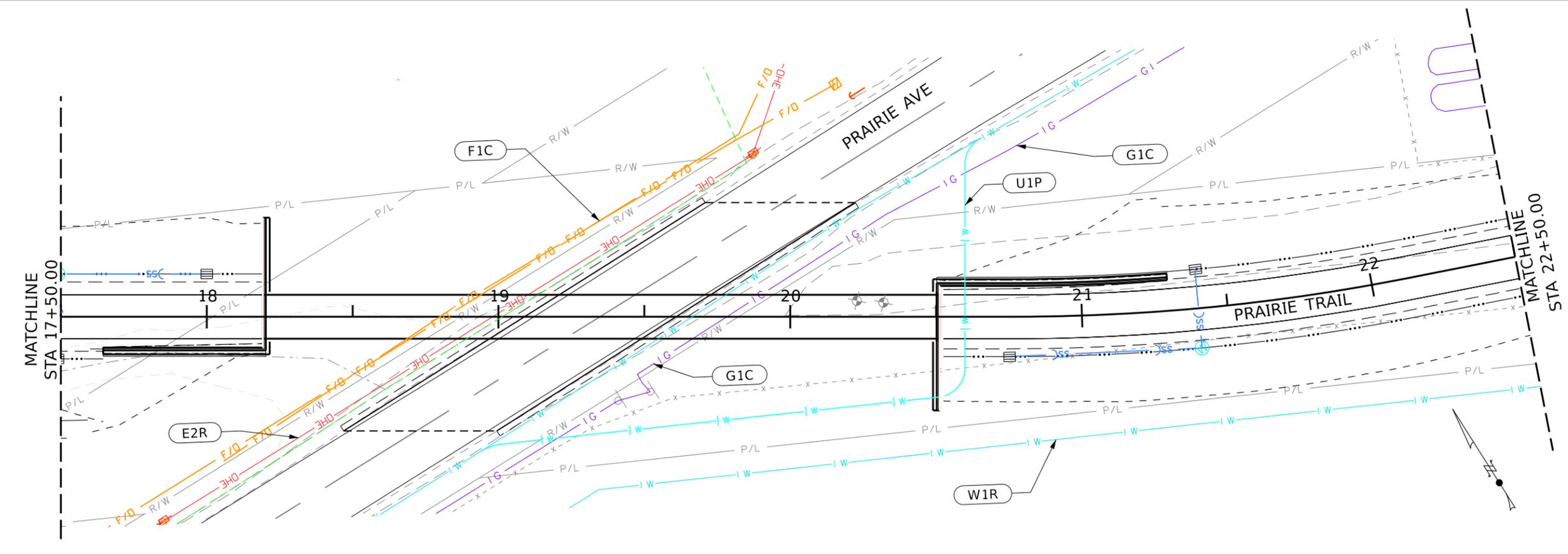
C = RELOCATE AT COMPANY EXPENSE  
 P = RELOCATE AT PROJECT EXPENSE  
 A = ADJUST TO GRADE AT COMPANY EXPENSE  
 R = RETAIN AND PROTECT  
 N = INSTALL NEW  
 E = REMOVE

**UTILITY COMPANY OR AGENCY**

E = AVISTA ELECTRIC  
 G = AVISTA GAS  
 F = ZIPLEY FIBER  
 S = CITY OF POST FALLS WASTEWATER  
 W = ROSS POINT WATER LINE  
 U = UNITS WATER DISTRICT

**LEGEND**

UNDERGROUND FIBER OPTIC — F/O —  
 OVERHEAD FIBER OPTIC — OHFO —  
 OVERHEAD ELECTRIC — OHE —  
 UNDERGROUND ELECTRIC — E —  
 STORM SEWER — SSS —  
 SEWER LINE — S —  
 WATER LINE — W —  
 GAS LINE — G —



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB  
 DESIGN CHECKED KPS  
 DETAILED BPRR  
 DRAWING CHECKED KPS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
 CADD FILE NAME 24398\_UTIL\_001.dgn  
 DRAWING DATE: NOVEMBER 2024

**IDAHO TRANSPORTATION DEPARTMENT**

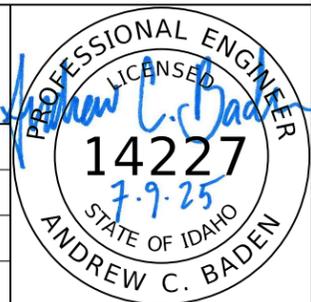
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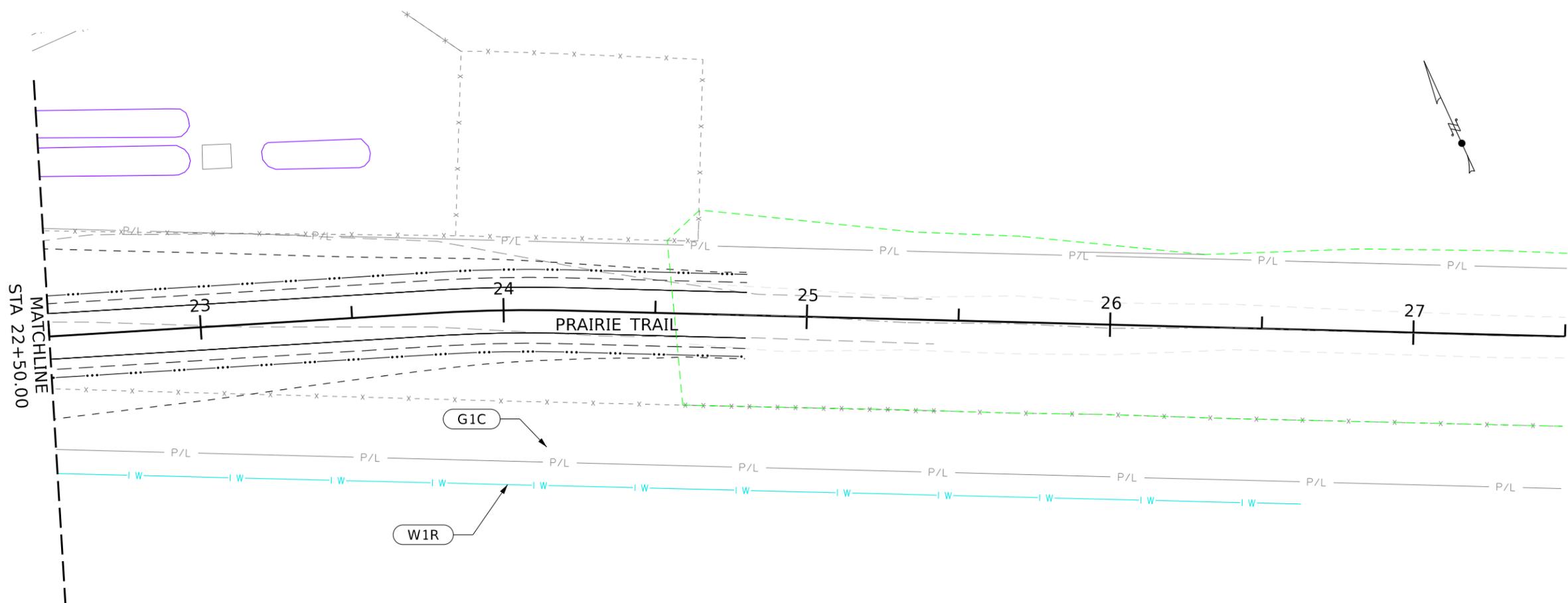
**J-U-B ENGINEERS, INC.**

PROJECT NO.  
 A024(398)

UTILITY PLAN  
 PRAIRIE TRAIL UNDERPASS  
 POST FALLS HD

**ENGLISH**  
 COUNTY KOOTENAI  
 KEY NUMBER 24398  
 SHEET 25 OF 31





**GENERAL NOTES:**  
 UTILITY LOCATIONS ARE APPROXIMATE AND ARE BASED ON SOURCES OF VARYING ACCURACY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING UTILITY LOCATIONS AND PROTECTING THE UTILITIES IN PLACE. THE CONTRACTOR SHALL CALL ONE-CALL TO FIELD LOCATE ALL UTILITIES PRIOR TO ANY EXCAVATION ACTIVITIES.

**KEY**

UTILITY COMPANY  
 XOX ← ACTION REQUIRED  
 UNDERGROUND (1)  
 OVERHEAD (2)

**ACTION REQUIRED**

C = RELOCATE AT COMPANY EXPENSE  
 P = RELOCATE AT PROJECT EXPENSE  
 A = ADJUST TO GRADE AT COMPANY EXPENSE  
 R = RETAIN AND PROTECT  
 N = INSTALL NEW  
 E = REMOVE

**UTILITY COMPANY OR AGENCY**

E = AVISTA ELECTRIC  
 G = AVISTA GAS  
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 S = CITY OF POST FALLS WASTEWATER  
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**LEGEND**

UNDERGROUND FIBER OPTIC — F/O —  
 OVERHEAD FIBER OPTIC — OHFO —  
 OVERHEAD ELECTRIC — OHE —  
 UNDERGROUND ELECTRIC — E —  
 STORM SEWER — SS —  
 SEWER LINE — —  
 WATER LINE — W —  
 GAS LINE — G —

REVISIONS			
NO.	DATE	BY	DESCRIPTION

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 DESIGN CHECKED KPS  
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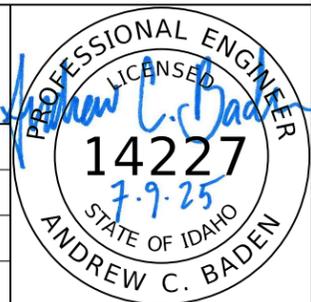
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**J-U-B ENGINEERS, INC.**



PROJECT NO.  
 A024(398)

UTILITY PLAN  
 PRAIRIE TRAIL UNDERPASS  
 POST FALLS HD

**ENGLISH**  
 COUNTY KOOTENAI  
 KEY NUMBER 24398  
 SHEET 26 OF 31



**DESIGN NOTES**

DESIGN SPECIFICATIONS

"AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS" 9th EDITION AND OCTOBER, 2023 ITD BRIDGE DESIGN LRFD MANUAL.

DESIGN LOADS

PERMANENT LOADS

DC	UNIT WEIGHT CONCRETE .....	0.150 kcf
DW	FUTURE SURFACING .....	0.028 ksf
EV	UNIT WEIGHT OF SOIL .....	0.135 kcf
	FILL DEPTH .....	3.5 ft
EH	ACTIVE PRESSURE .....	0.034 kcf
	AT REST PRESSURE .....	0.059 kcf
	SOIL-STRUCTURE INTERACTION FACTOR ( $F_e$ OR $F_t$ ) .....	1.0
ES	EARTH LOAD SURCHARGE .....	3.5 ft
TRANSIENT LOADS		
LL	HL-93	
IM	DYNAMIC ALLOWANCE APPLIED TO TRUCK & TANDEM	
LS	LIVE LOAD SURCHARGE AT ABUTMENT .....	3.0 feet
	LIVE LOAD SURCHARGE AT WINGWALL .....	2.0 feet

CULVERT FOOTING DESIGN CAPACITIES

STRENGTH LIMIT STATE - BEARING

NOMINAL BEARING RESISTANCE  $q_n = 12$  ksf  
 RESISTANCE FACTOR  $\phi_b = 0.5$   
 FACTORED BEARING RESISTANCE  $q_R = q_n \phi_b = 6$  ksf

CULVERT SERVICE LIMIT STATE CAPACITIES

PRESUMPTIVE BEARING CAPACITY  $q_p = 3.2$  ksf  
 BASED UPON FOOTING SETTLEMENT = 1.0 inches OR LESS  
 RESISTANCE FACTOR  $\phi = 1.0$   
 FACTORED PRESUMPTIVE BEARING RESISTANCE  $\phi q_p = 3.2$  ksf

**GENERAL NOTES**

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

MATERIAL

CONCRETE: HEADWALLS - CLASS 40A .....	$f'_c = 4.00$ ksi
PRE-CAST BOX CULVERT - CLASS 40A .....	$f'_c = 4.00$ ksi
METAL REINFORCEMENT: AASHTO M31, GRADE 60 TYPE S .....	$f_y = 60.00$ ksi

PLAN DIMENSIONS AND ELEVATIONS

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

CONSTRUCTION

PROVIDE CONSTRUCTION JOINTS AT THE LOCATIONS SHOWN ON THE PLANS OR AS APPROVED.  
 APPLY CONCRETE WATERPROOF SYSTEM TYPE D TO THE TOP SLAB.  
 DO NOT EXCEED A DIFFERENCE OF 2 FEET IN ELEVATION OF THE BACKFILL MATERIAL ON BOTH SIDES OF THE STRUCTURE DURING BACKFILL OPERATIONS.  
 SET THE ROLLER IN THE STATIC MODE FOR COMPACTING THE ASPHALT WEARING SURFACE OVER THE CULVERT WHEN THE DEPTH OF FILL IS LESS THAN 3'.  
 ELEVATIONS BASED ON NAVD 88 DATUM.

INCIDENTAL ITEMS

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

FOR MSE WALL CAPACITIES, SEE GEOTECHNICAL ENGINEERING REPORT BY STRATA: PRAIRIE TRAIL UNDERPASS, KEY NUMBER 24398.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED KPS	
DETAILED BPRR	CADD FILE NAME b17_2b.dgn
DRAWING CHECKED KPS	DRAWING DATE: NOVEMBER 2024



**IDAHO  
TRANSPORTATION  
DEPARTMENT**

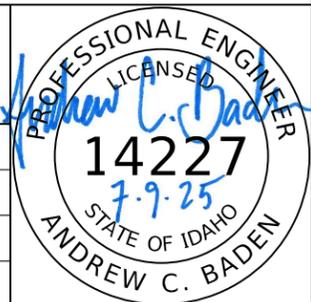
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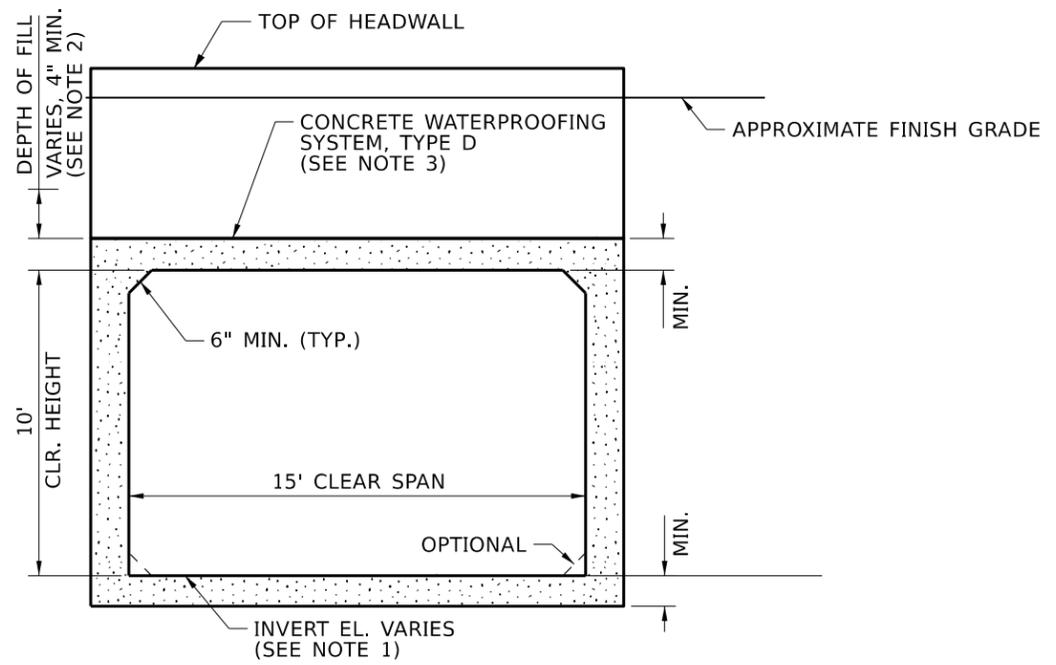
**J-U-B ENGINEERS, INC.**

PROJECT NO.	A024(398)
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GENERAL NOTES	PRAIRIE TRAIL UNDERPASS POST FALLS HD
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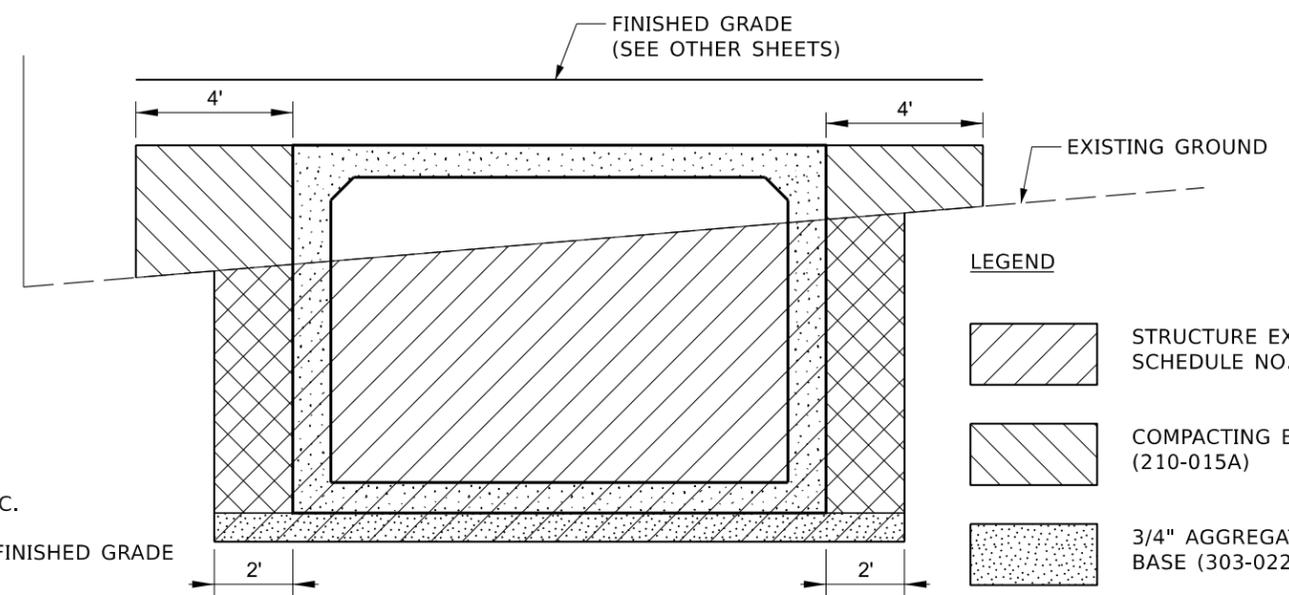
<b>ENGLISH</b>
COUNTY KOOTENAI
KEY NUMBER 24398
SHEET 27 OF 31



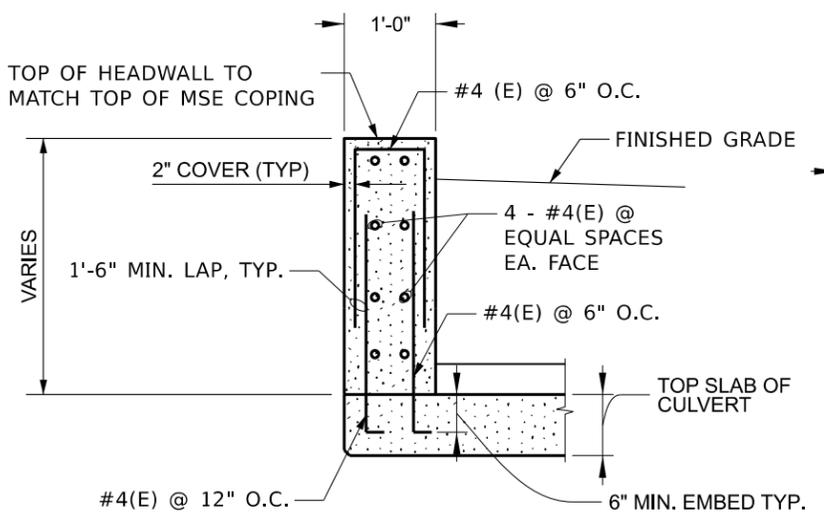


**TYPICAL PRECAST CROSS-SECTION**  
1/4" = 1'-0"

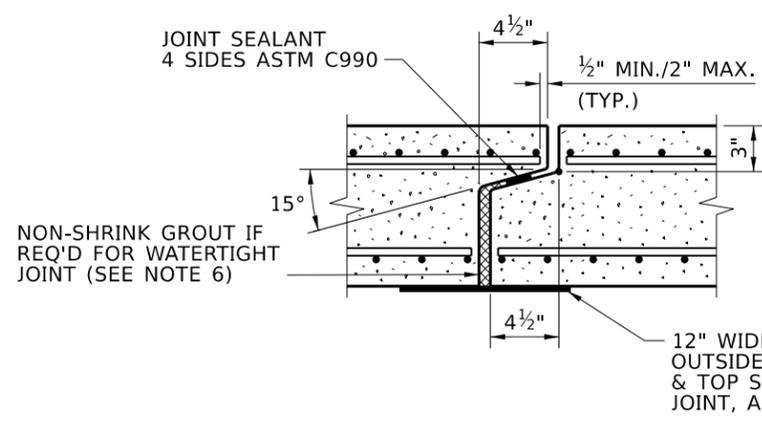
- NOTES**
1. SEE PLAN AND PROFILE SHEETS FOR ROADWAY ALIGNMENT AND PROFILE GRADE. COMPUTE DEPTH OF FILL FOR THE SELECTED PROPRIETARY PRECAST SYSTEM.
  2. APPLY WATERPROOFING SYSTEM, TYPE D TO TOP SLAB FROM FACE OF CURB TO FACE OF CURB.
  3. PROVIDE A PROPRIETARY PRECAST SYSTEM SELECTED FROM TYPICAL SECTION SHOWN OR APPROVED EQUAL AND INCLUDE DETAILS AS SHOWN BELOW OR APPROVED EQUAL.
  4. PROVIDE EITHER PRECAST OR CAST-IN-PLACE HEADWALL.
  5. PROVIDE WATERTIGHT JOINTS FOR PEDESTRIAN UNDERPASSES.
  6. PROVIDE DIMENSIONAL TOLERANCE IN ACCORDANCE WITH ASTM C1577 SECTION 12.
  7. HEADWALL REINFORCEMENT IS EPOXY COATED (E).
  8. FOR CULVERT AND MSE WALL ANALYSIS AND DESIGN, SEE GEOTECHNICAL ENGINEERING REPORT BY STRATA: PRAIRIE TRAIL UNDERPASS, KEY NUMBER 24398.



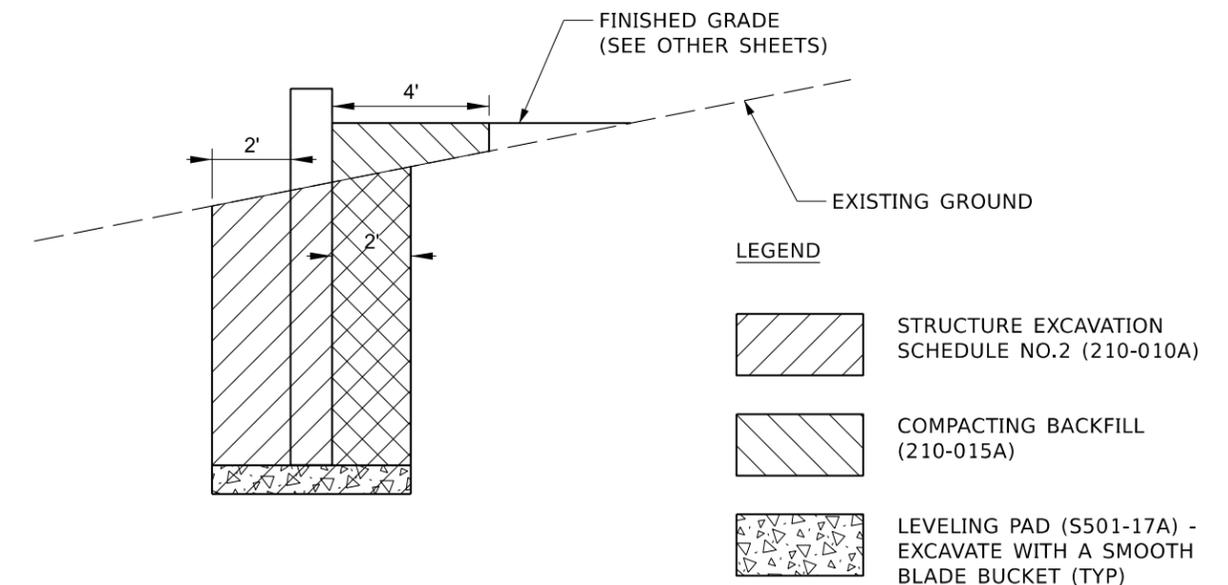
**CULVERT**



**HEADWALL DETAILS**  
N.T.S.



**WALL & SLAB JOINT**  
1" = 1'-0"



**MSE WALLS**

**EXCAVATION AND BACKFILL PAY LIMIT DETAIL**  
N.T.S.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB  
 DESIGN CHECKED KPS  
 DETAILED BPRR  
 DRAWING CHECKED KPS

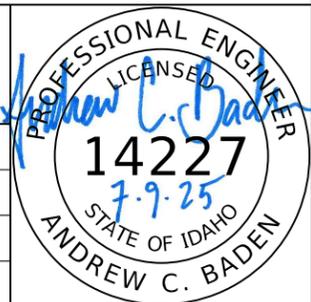
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 DRAWING DATE: NOVEMBER 2024

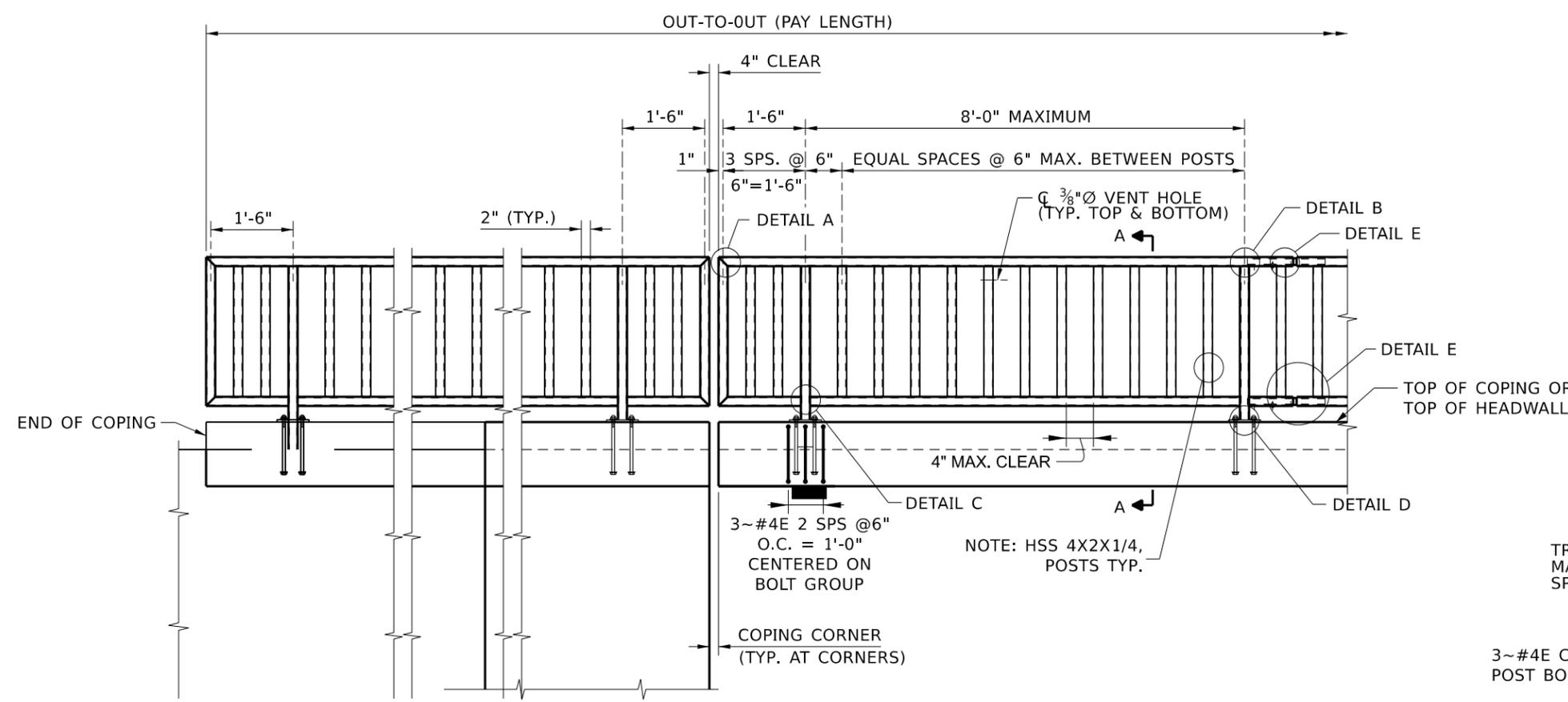
**IDAHO TRANSPORTATION DEPARTMENT**  
 YOUR Safety → YOUR Mobility → YOUR Economic Opportunity  
**J-U-B ENGINEERS, INC.**

PROJECT NO.  
**A024(398)**

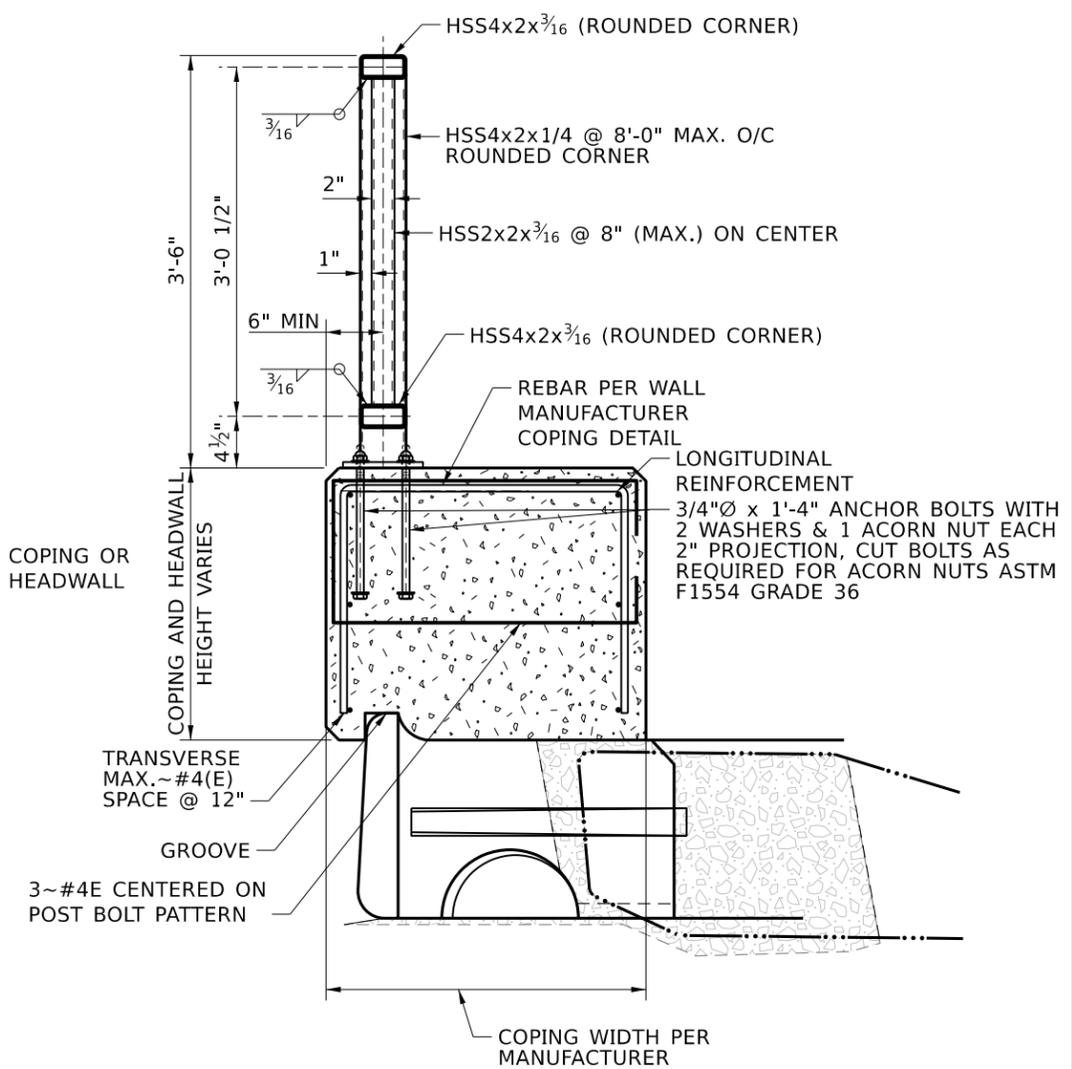
GENERAL NOTES  
**PRAIRIE TRAIL UNDERPASS  
 POST FALLS HD**

**ENGLISH**  
 COUNTY KOOTENAI  
 KEY NUMBER 24398  
 SHEET 28 OF 31

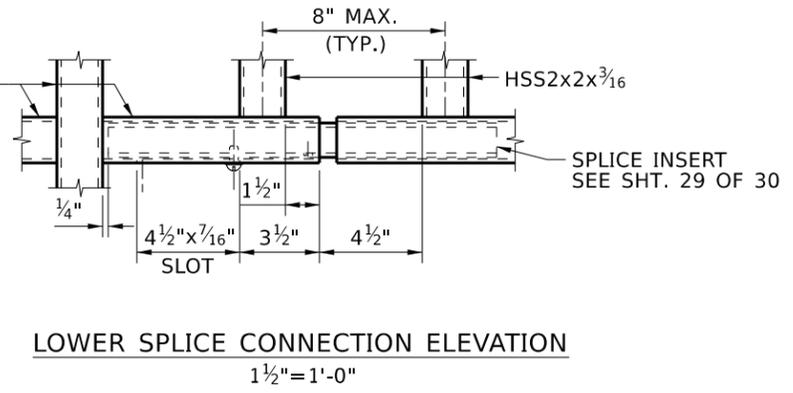
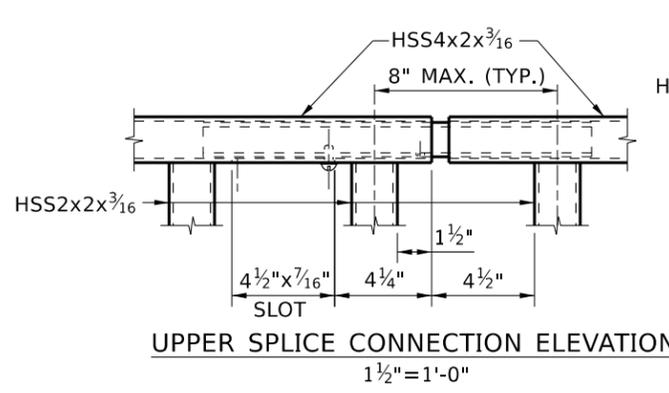




PARTIAL ELEVATION (UNFOLDED VIEW WITH CORNERS)  
N.T.S.



SECTION A-A  
N.T.S.



- NOTES:
1. COPING WIDTH, HEIGHT, AND SHAPE MAY VARY PER MANUFACTURER.
  2. COPING REINFORCEMENT SHALL BE EPOXY COATED.
  3. LONGITUDINAL REINFORCEMENT OF COPING MUST HAVE A MINIMUM OF #4 REINFORCEMENT AT MAX. 12-INCH SPACING AND HAVE CORNER REINFORCEMENT.
  4. MINIMUM TRANSVERSE REINFORCEMENT IS #4 CLOSED STIRRUPS AT 12-INCH MAX.
  5. CAST-IN-PLACE CONCRETE COPING SYSTEM MUST BE DESIGNED, FABRICATED, AND CONSTRUCTED TO RESIST ALL LATERAL AND VERTICAL FORCES FROM HAND RAILS AND BACKFILL IN ACCORDANCE WITH 9TH EDITION AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
  6. RAILING HAS BEEN MODIFIED FROM THE STANDARD ITD PEDESTRIAN/BICYCLE RAILING.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB  
 DESIGN CHECKED KPS  
 DETAILED BPRR  
 DRAWING CHECKED KPS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
 CADD FILE NAME b13\_4a.dgn  
 DRAWING DATE: NOVEMBER 2024

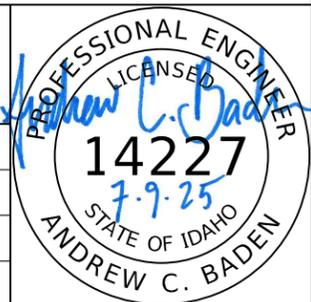
**IDAHO TRANSPORTATION DEPARTMENT**  
 YOUR Safety → YOUR Mobility → YOUR Economic Opportunity

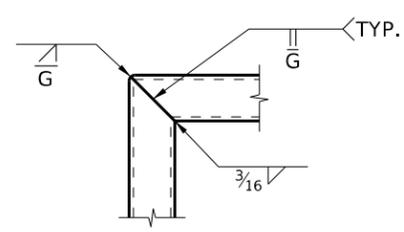
**J-U-B ENGINEERS, INC.**

PROJECT NO. A024(398)

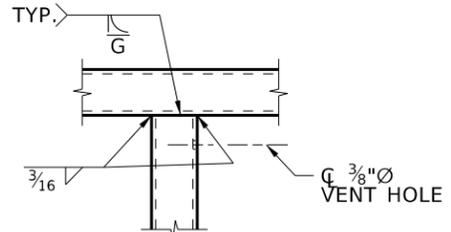
PEDESTRIAN/BICYCLE RAILING DETAILS  
 PRAIRIE TRAIL UNDERPASS  
 POST FALLS HD

ENGLISH  
 COUNTY KOOTENAI  
 KEY NUMBER 24398  
 SHEET 29 OF 31

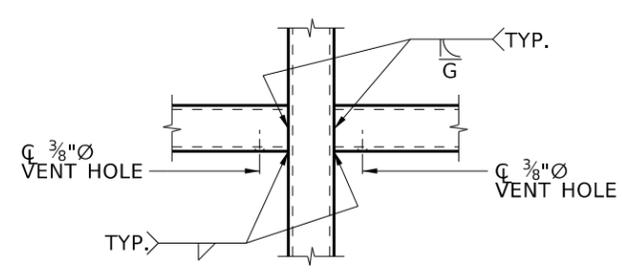




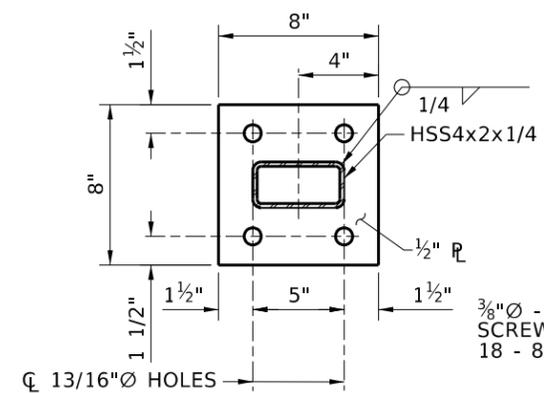
**DETAIL A**  
1 1/2"=1'-0"



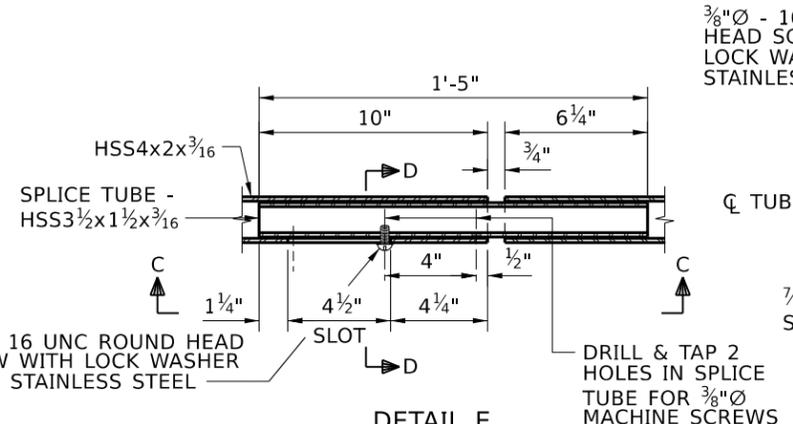
**DETAIL B**  
1 1/2"=1'-0"



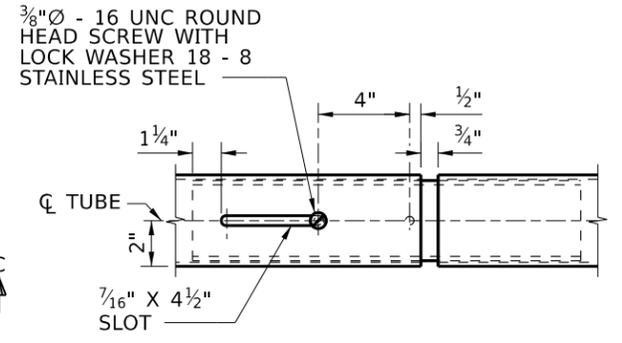
**DETAIL C**  
1 1/2"=1'-0"



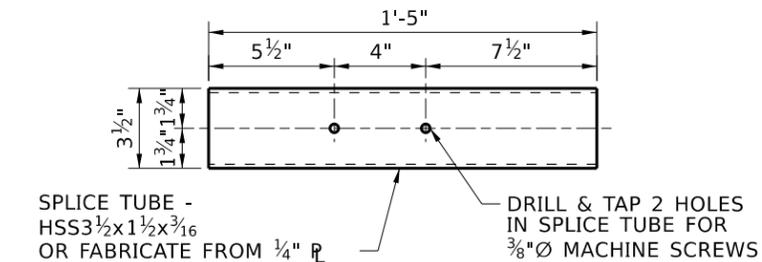
**DETAIL D**  
N.T.S.



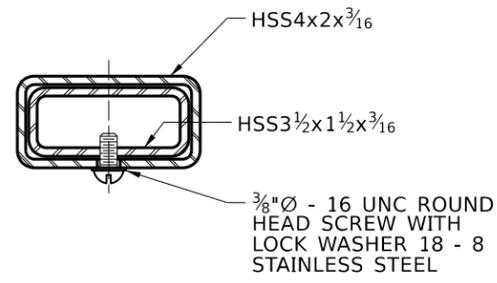
**DETAIL E**  
1 1/2"=1'-0"



**VIEW C-C**  
1 1/2"=1'-0"



**SPlice INSERT DETAILS**  
1 1/2"=1'-0"



**SECTION D-D**  
3"=1'-0"

**NOTES**  
**MATERIALS**

1. PROVIDE STRUCTURAL STEEL PLATES & SLEEVES IN ACCORDANCE WITH ASTM A709 GRADE 36.
  2. PROVIDE STRUCTURAL STEEL TUBING IN ACCORDANCE WITH ASTM A500 GRADE B OR ASTM A501.
  3. PROVIDE BOLT, ACORN NUTS, AND WASHER IN ACCORDANCE WITH ASTM A307.
  4. PROVIDE HEXAGONAL BOLTS AND NUTS IN ACCORDANCE WITH ANSI B18.2.1 AND B18.2.2.
  5. PROVIDE ROUND HEAD MACHINE SCREWS IN ACCORDANCE WITH ANSI B18.6.3.
  6. PROVIDE EPOXY COATED GRADE 60 TYPE S METAL REINFORCEMENT IN ACCORDANCE WITH 708.02.
  7. PROVIDE CONCRETE CLASS 40AF FOR CURB AND CLASS 40A FOR DRILLED POST HOLE.
- GALVANIZING/POWDER COATING**
8. GALVANIZE STEEL PARTS AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 AND ASTM A153.
  9. GALVANIZE ANCHOR BOLTS, NUTS, AND WASHERS IN ACCORDANCE WITH ASTM A153.
  10. THOROUGHLY CLEAN WELDED AREAS BEFORE GALVANIZING TO REMOVE SLAG OR OTHER MATERIAL THAT WOULD INTERFERE WITH THE ADHERENCE OF THE ZINC. REPAIR DAMAGED COATINGS IN ACCORDANCE WITH ASTM A780 AND ASTM A 123.
  11. PROVIDE GALVANIZED SURFACES FREE OF FINS, ABRASIONS, ROUGH OR SHARP EDGES, OR OTHER SURFACE DEFECTS.
  12. POWDER COAT THE RAILING SYSTEM AFTER GALVANIZING WITH A MINIMUM THICKNESS OF 3 MILS. THE COLOR WILL BE RAL 9005 (JET BLACK). SUBMIT A COLOR SAMPLE OF APPROVAL.
  13. PREPARE THE GALVANIZED SURFACES FOR POWDER COATING IN ACCORDANCE WITH ASTM D7803. SUBMIT POWDER COATING SHOP PROCEDURES FOR PREPARATION OF THE GALVANIZED SURFACES AND APPLICATION PROCESS OF THE POWDER COATING FOR APPROVAL.
  14. REPAIR SCRATCHES, PITS, AND OTHER DEFECTS IN ACCORDANCE WITH THE POWDER COATING MANUFACTURER'S WRITTEN INSTRUCTIONS.
- GALVANIZING AND ERECTION**
15. FABRICATE AND ERECT THE RAILING IN ACCORDANCE WITH THE CURRENT EDITION OF AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES AND ITD STANDARD SPECIFICATIONS.
  16. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH 504.01 F AND 105.02.
  17. CONSTRUCT RAILING CONFORMING TO THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE STRUCTURE, INSTALL POSTS NORMAL TO GRADE IN LONGITUDINAL DIRECTION AND VERTICAL IN TRANSVERSE DIRECTION.
  18. SAW OR MILL ENDS OF TUBE SECTIONS AT SPLICES. PROVIDE CUT ENDS THAT ARE TRUE, SMOOTH AND FREE FROM BURRS OR RAGGED EDGES.
  19. PROVIDE VENT HOLES FOR GALVANIZING AS REQUIRED AND SHOWN ON THE SHOP DRAWINGS. DRILL VENT HOLES AWAY FROM TRAFFIC FACE AND NOT ON THE TOP SURFACE OF THE HORIZONTAL TUBE.
  20. ATTACH EACH RAIL SECTION TO A MINIMUM OF TWO POSTS, BUT PREFERABLY THREE OR MORE. PROVIDE RAILING SYSTEM THAT IS CONTINUOUS. LOCATE EACH JOINT IN A RAIL LENGTH AT THE SAME POSITION IN THE SECTION AND SPLICE AS DETAILED.
  21. SUBMIT ALTERNATE SPLICE DETAILS FOR APPROVAL ON THE SHOP DRAWINGS.
- METHOD OF MEASUREMENT**
22. PAYMENT FOR "PEDESTRIAN/BICYCLE RAILING" IS PAY ITEM 504-035A. CONCRETE, METAL REINFORCEMENT, AND EPOXY-COATED REINFORCEMENT IS INCIDENTAL TO PAY ITEM 504-035A.
- ALTERNATE ALUMINUM RAILING**
23. AN ALTERNATE ALUMINUM RAIL THAT GENERALLY CONFORM TO THE GEOMETRY AND DESIGN CRITERIA OF THE STEEL RAIL MAY BE SUBSTITUTED, AT NO ADDITIONAL COST TO THE STATE. PROVIDE ALUMINUM RAILING IN ACCORDANCE WITH ASTM B221, ALLOY 6005-T5. REFER TO THE ALTERNATE PEDESTRIAN/BICYCLE RAIL SPECIAL PROVISION.

**APPROXIMATE QUANTITIES**

RAILING (RAILS, POSTS, BALUSTERS, PLATE) ..... 320 LBS. PER 8' SECTION

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED ACB	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  CADD FILE NAME b13_4b.dgn  DRAWING DATE: NOVEMBER 2024
DESIGN CHECKED KPS	
DETAILED BPRR	
DRAWING CHECKED KPS	

YOUR Safety → YOUR Mobility → YOUR Economic Opportunity

**IDAHO**  
**TRANSPORTATION**  
**DEPARTMENT**

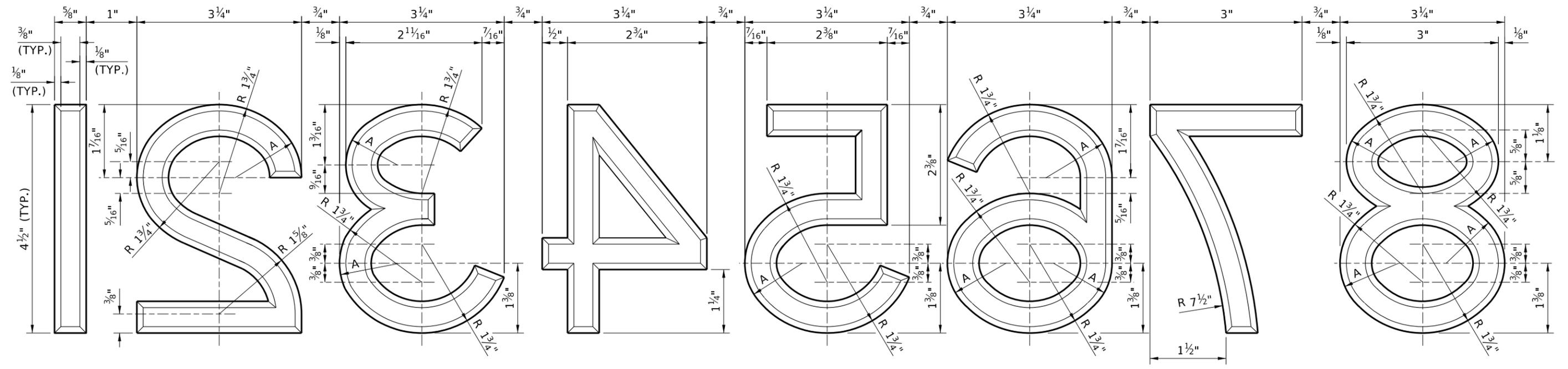


J-U-B ENGINEERS, INC.

PROJECT NO.	A024(398)
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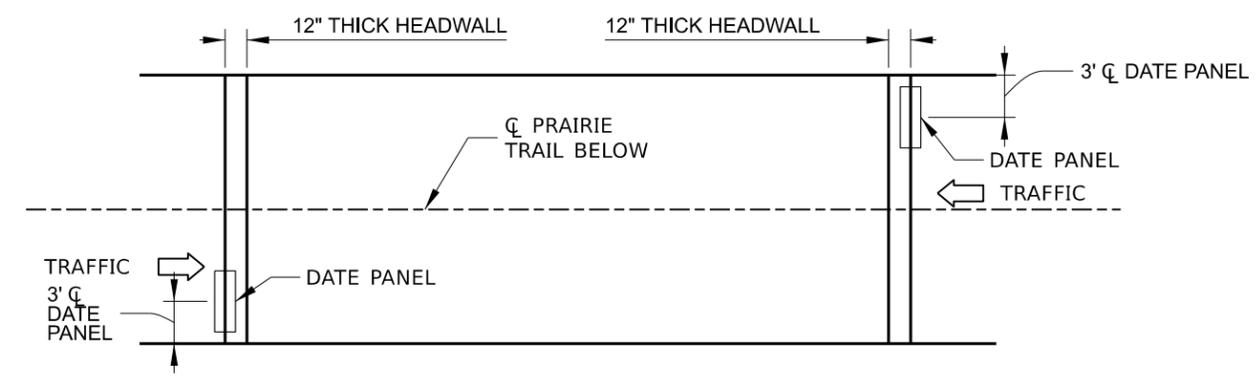
PEDESTRIAN/BICYCLE RAILING DETAILS	PRAIRIE TRAIL UNDERPASS POST FALLS HD
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<b>ENGLISH</b>
COUNTY KOOTENAI
KEY NUMBER 24398
SHEET 30 OF 31



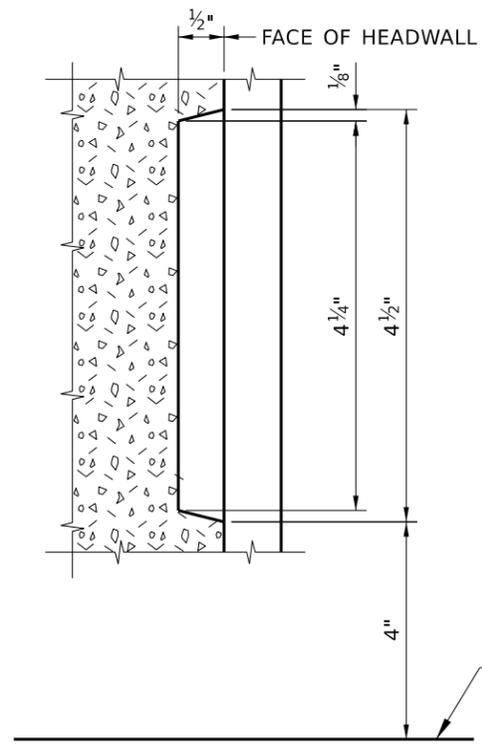
THE NUMBER "9" IS NOT SHOWN, BUT IS SIMILAR TO NUMBER "6".

A = RADIUS TO SUIT

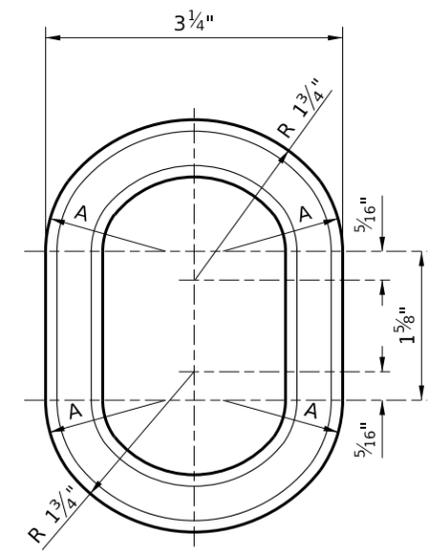


**DATE PANEL LOCATION**  
NTS  
(SEE PARAPET SHEET FOR DETAILS)

- GENERAL NOTES**
1. RECESS NUMBERS INTO THE DATE PANEL.
  2. DATE PANEL IS INCIDENTAL TO THE HEADWALL PAY ITEM.
  3. PLACE THE 4 DIGIT YEAR CONSTRUCTION COMPLETED ON EXPOSED FACE OF HEADWALL.

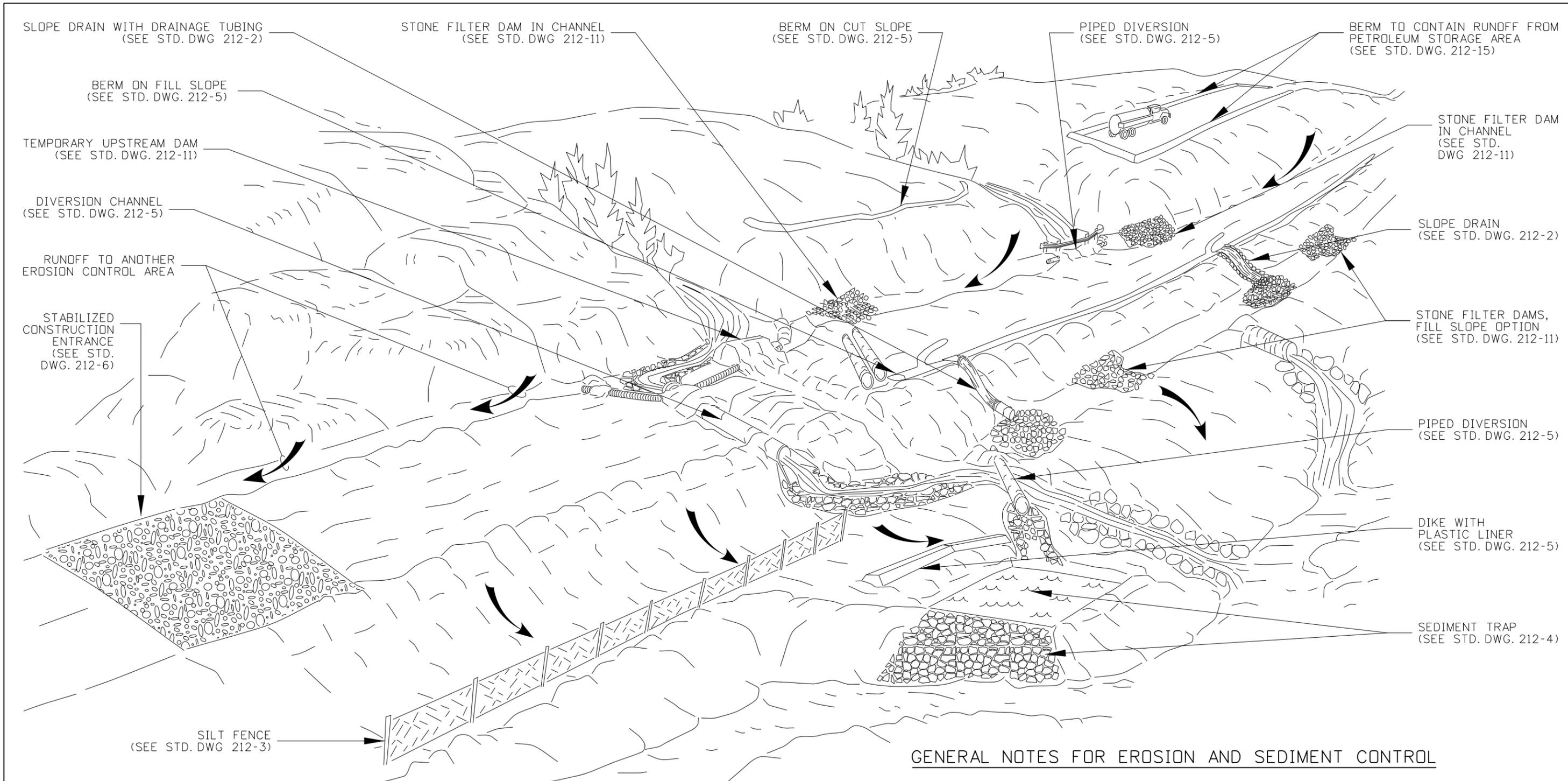


**END VIEW OF NUMERALS**  
SHOWING ATTACHMENT TO FORMS  
NTS



BOTTOM OF HEADWALL = TOP OF PRE-CAST CULVERT

<p><b>REVISIONS</b></p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				NO.	DATE	BY	DESCRIPTION																	<p>DESIGNED ACB</p> <p>DESIGN CHECKED KPS</p> <p>DETAILED BPRR</p> <p>DRAWING CHECKED KPS</p>	<p>SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY</p> <p>CADD FILE NAME b13 7.dgn</p> <p>DRAWING DATE: NOVEMBER 2024</p>	<p><b>IDAHO</b> <b>TRANSPORTATION</b> <b>DEPARTMENT</b></p> <p>YOUR Safety → YOUR Mobility → YOUR Economic Opportunity</p> <p><b>J-U-B ENGINEERS, INC.</b></p>	<p>PROJECT NO.</p> <p>A024(398)</p>	<p>DATE PANEL DETAILS</p> <p>PRAIRIE TRAIL UNDERPASS POST FALLS HD</p>	<p><b>ENGLISH</b></p> <p>COUNTY KOOTENAI</p> <p>KEY NUMBER 24398</p> <p>SHEET 31 OF 31</p>	<p>PROFESSIONAL ENGINEER LICENSED <i>Andrew C. Baden</i> <b>14227</b> 7.9.25 STATE OF IDAHO ANDREW C. BADEN</p>
NO.	DATE	BY	DESCRIPTION																											



**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**

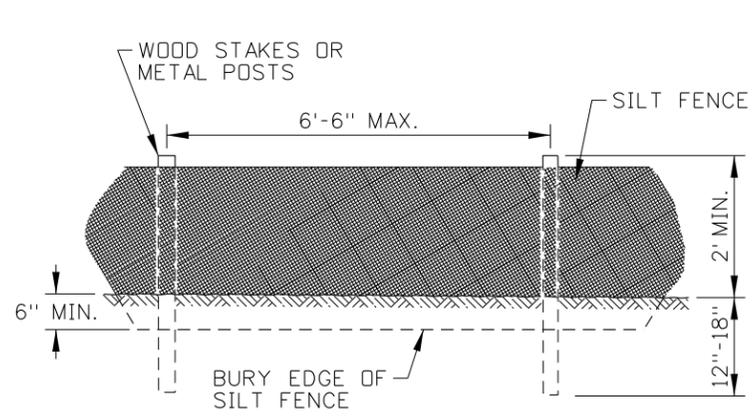


BOISE IDAHO

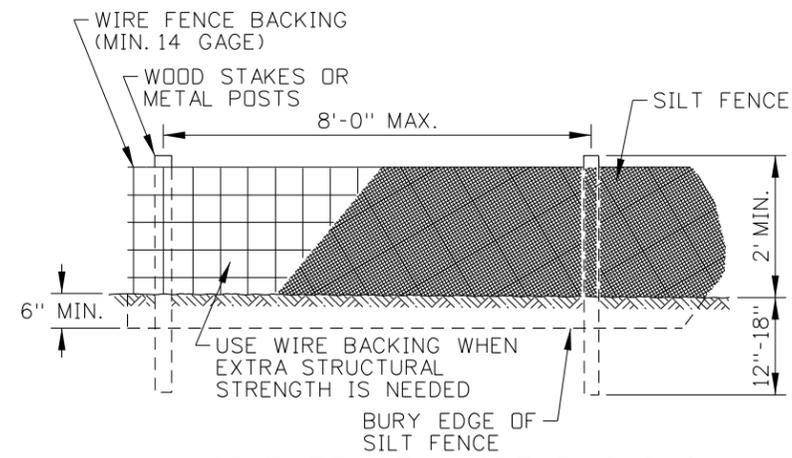
ORIGINAL SIGNED BY: KEVIN SABLAN  
 DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING  
**EROSION AND SEDIMENT CONTROL**  
 EXAMPLE APPLICATIONS

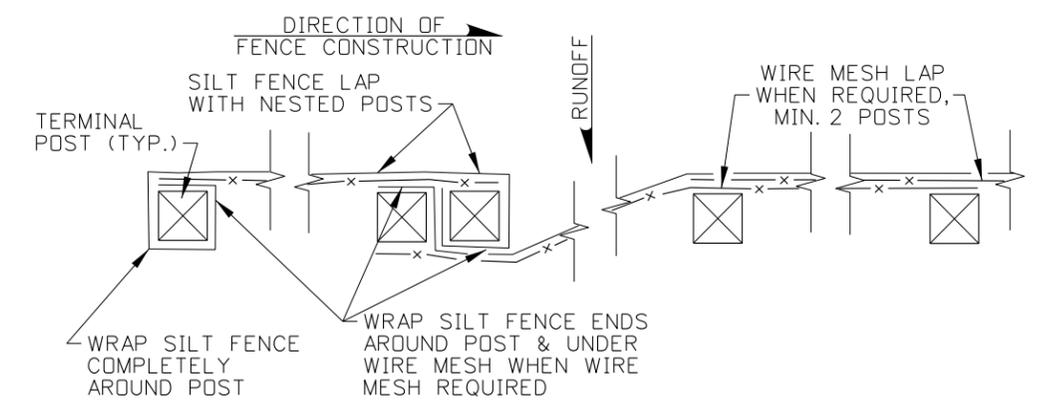
**English**  
 STANDARD DRAWING NO.  
 212-1  
 SHEET 1 OF 1



**SILT FENCE (NO WIRE BACKING)**



**SILT FENCE (WIRE BACKING)**



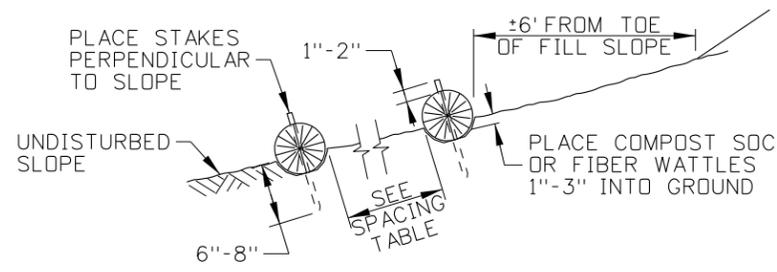
**SILT FENCE LAP DETAIL**

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

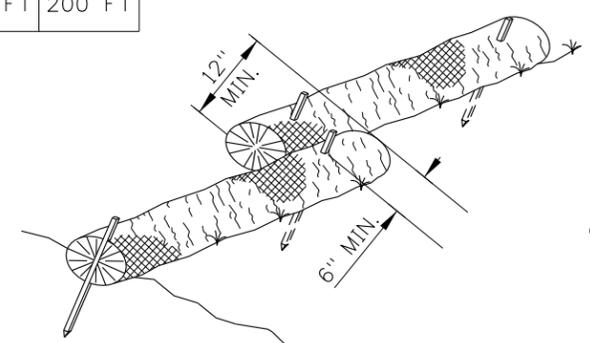
SLOPE	SOIL TYPE		
	SILTY	CLAYS	SANDY
1:1	50 FT	75 FT	100 FT
2:1	75 FT	100 FT	125 FT
4:1	100 FT	125 FT	150 FT
10:1 OR FLATTER	125 FT	150 FT	200 FT

**NOTES**

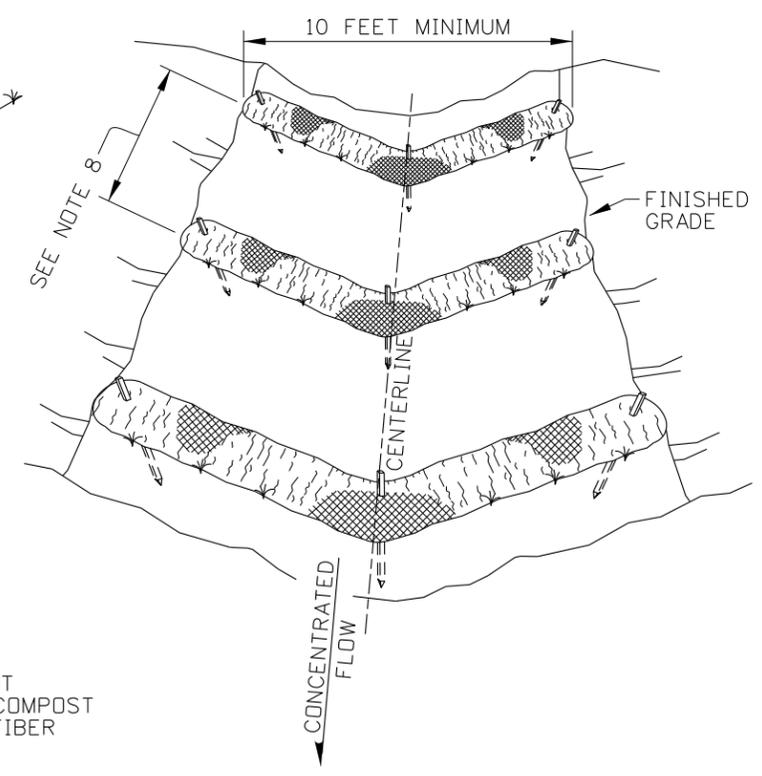
- SEE THE GENERAL NOTES FOR EROSION CONTROL STANDARD DRAWINGS ON 212-1.
- THE NEED FOR TEMPORARY SEDIMENT CONTROL DEVICES ARE DETERMINED BY SITE DESIGN. SPACE SILT FENCES, COMPOST SOCKS, AND FIBER WATTLES IN ACCORDANCE WITH THE SILT FENCE SPACING TABLE AND FIBER WATTLE & COMPOST SOCK SPACING TABLE.
-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



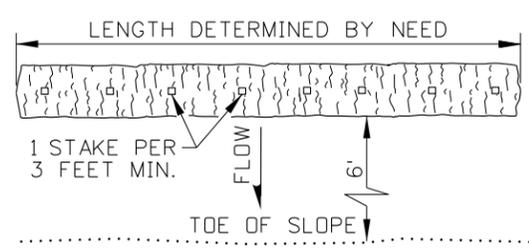
**COMPOST SOCK AND FIBER WATTLE SIDE VIEW**



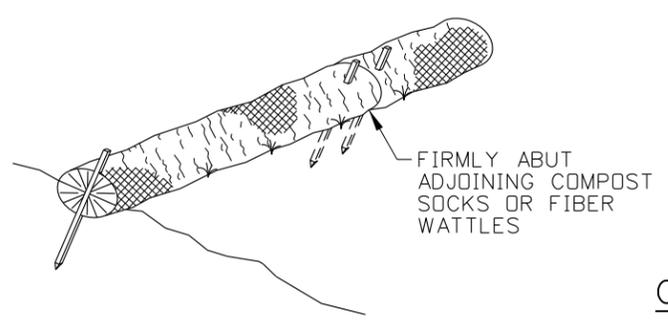
**COMPOST SOCK AND FIBER WATTLE OVERLAPPING DETAIL**



**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**

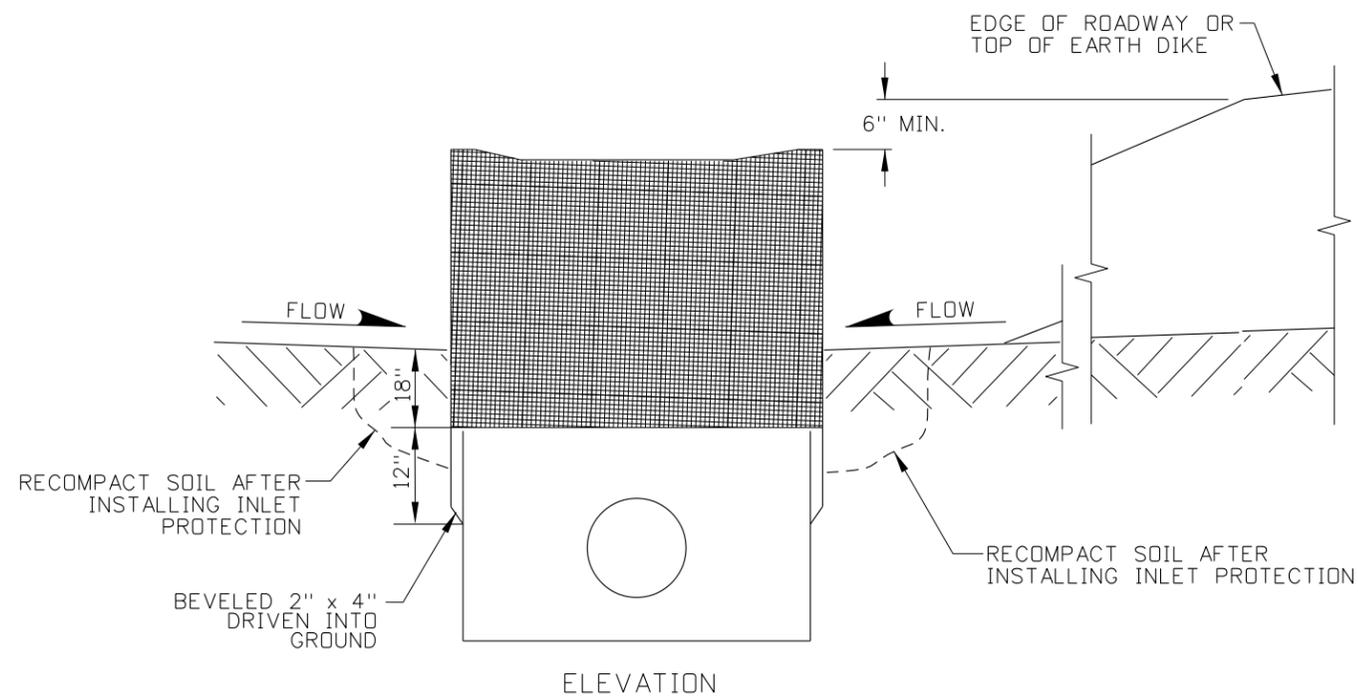
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN  
 DESIGN/TRAFFIC SERVICES ENGINEER

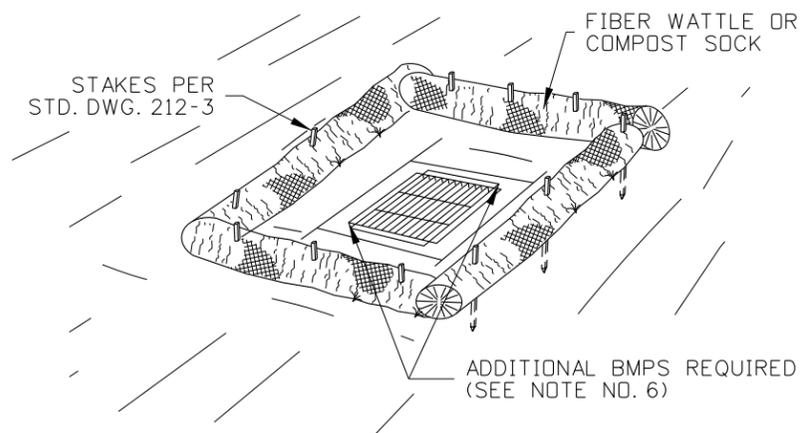
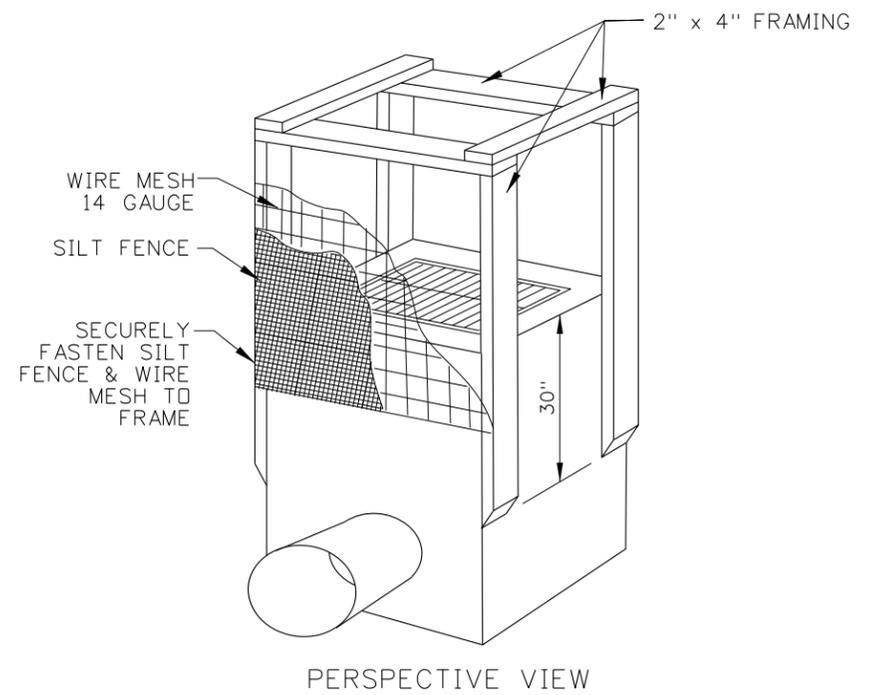
STANDARD DRAWING  
**TEMPORARY EROSION AND SEDIMENT CONTROL**  
 SILT FENCE, FIBER WATTLE, AND COMPOST SOCK  
 REQUIRES STD. DWG. 212-1

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

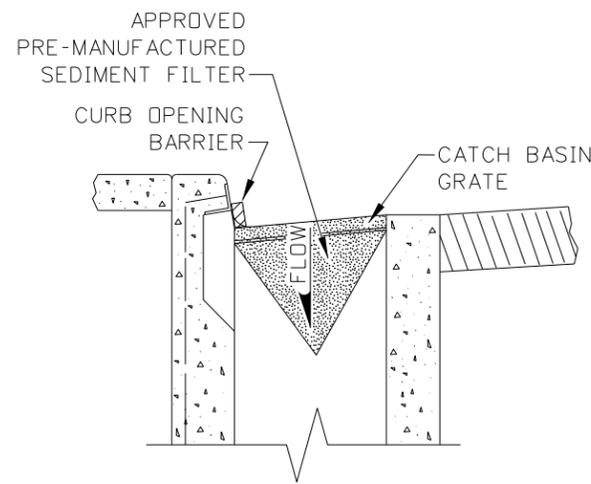
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho



**FRAMED WIRE/FABRIC FILTER**



**FIBER WATTLE FILTER**



**PRE-MANUFACTURED SEDIMENT FILTER FOR INLET GRATE**

**NOTES**

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

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

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

**IDAHO TRANSPORTATION DEPARTMENT**



BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN  
 DESIGN/TRAFFIC SERVICES ENGINEER

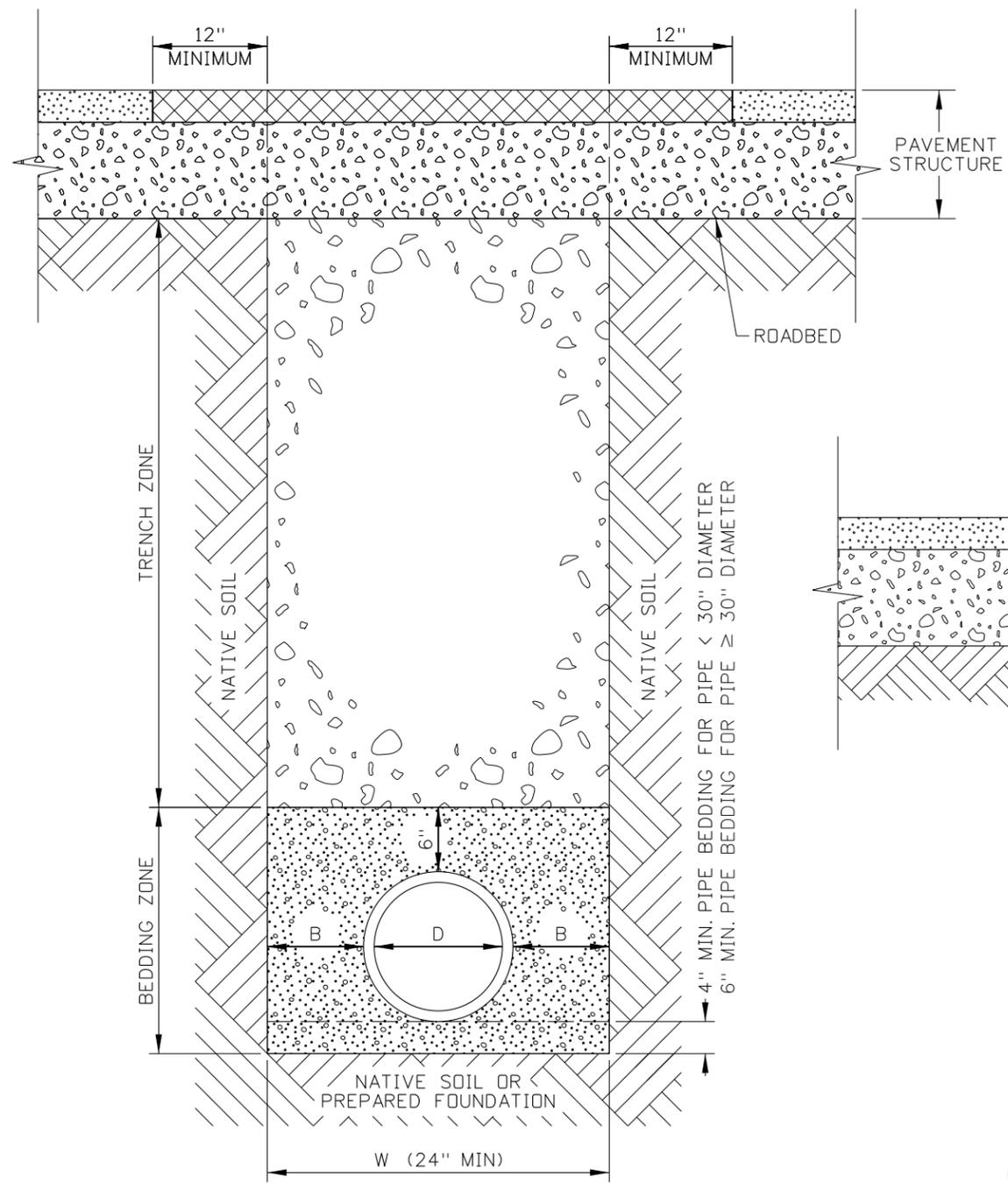
STANDARD DRAWING  
**TEMPORARY EROSION AND SEDIMENT CONTROL INLET PROTECTION**  
 REQUIRES STD. DWG. 212-1

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

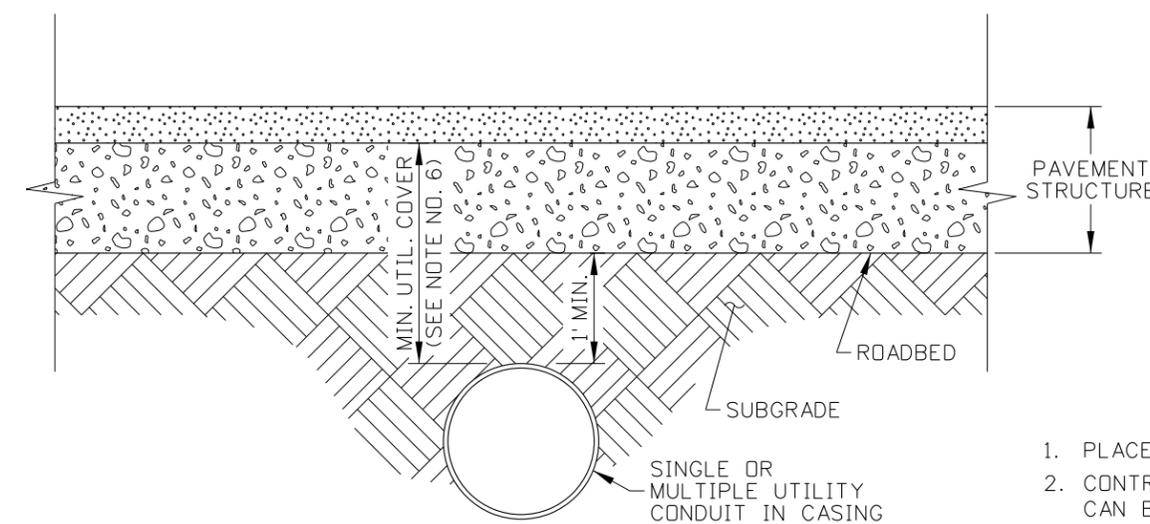
**English**

STANDARD DRAWING NO.  
**212-7**

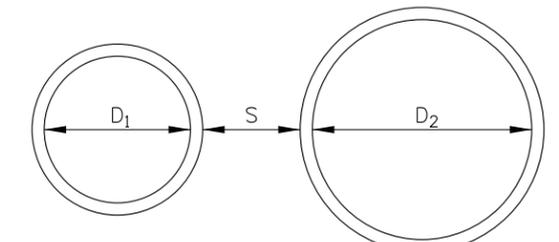
SHEET 1 OF 1



TRENCHING



JACKING, DRIVING, OR BORING



MULTIPLE PIPE INSTALLATION DETAIL  
(SEE NOTE NO. 4)

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

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

NOTES

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

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

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

**IDAHO TRANSPORTATION DEPARTMENT**



BOISE IDAHO

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 DESIGN/TRAFFIC SERVICES ENGINEER

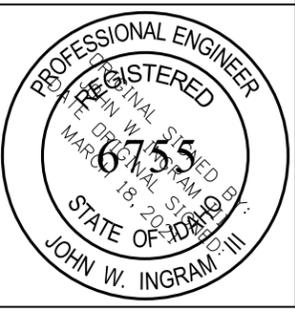
STANDARD DRAWING  
**PIPE AND CONDUIT INSTALLATION**

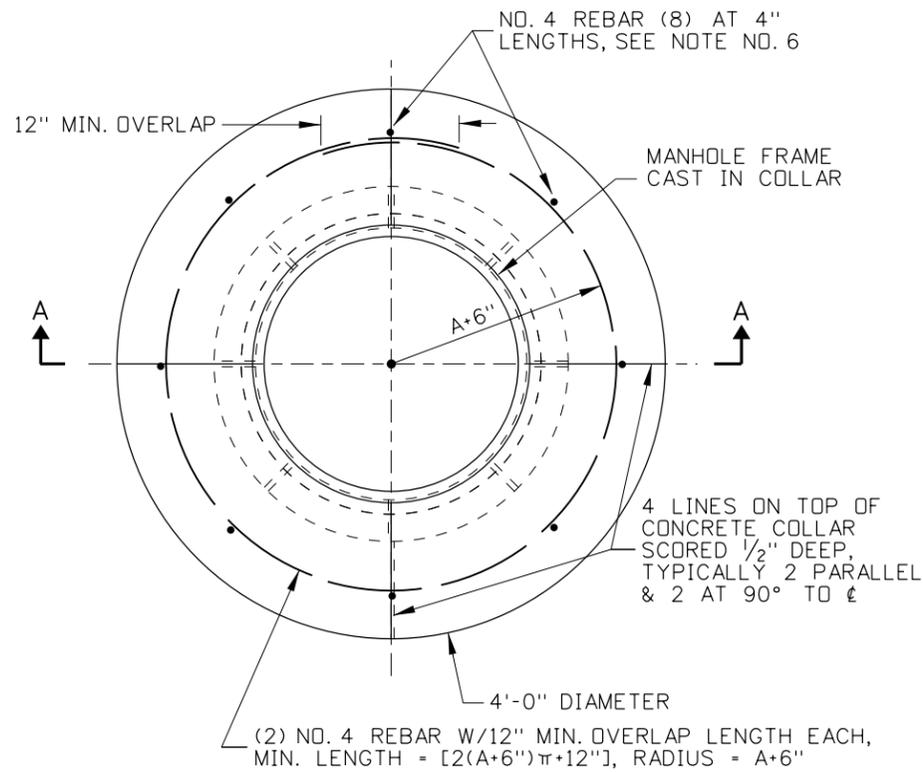
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

**English**

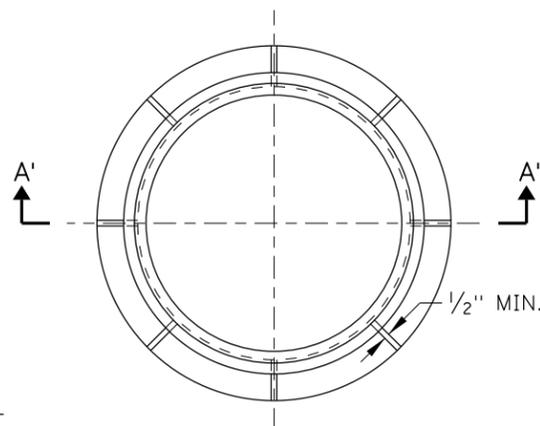
STANDARD DRAWING NO.  
**601-1**

SHEET 1 OF 1



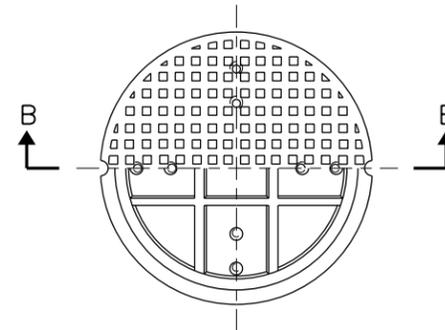


CONCRETE COLLAR PLAN



FRAME PLAN

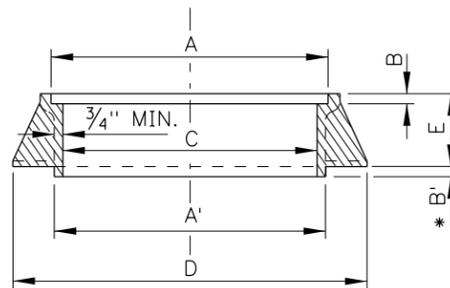
COVER PLAN - TOP HALF VIEW



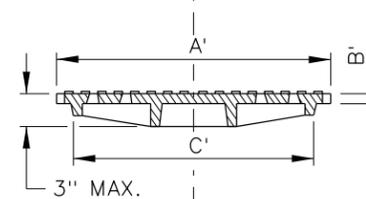
COVER PLAN - BOTTOM HALF VIEW

STANDARD MANHOLE FRAME BASIC DIMENSIONS	
A	24 1/8"
B	1"
C	21" MIN.
D	31" MIN.
E	5"
STANDARD MANHOLE COVER BASIC DIMENSIONS	
A'	23 7/8"
* B'	1"
C'	20"

\* B' MANHOLE FRAME BOTTOM TO FIT INSIDE ANOTHER FRAME LID OPENING



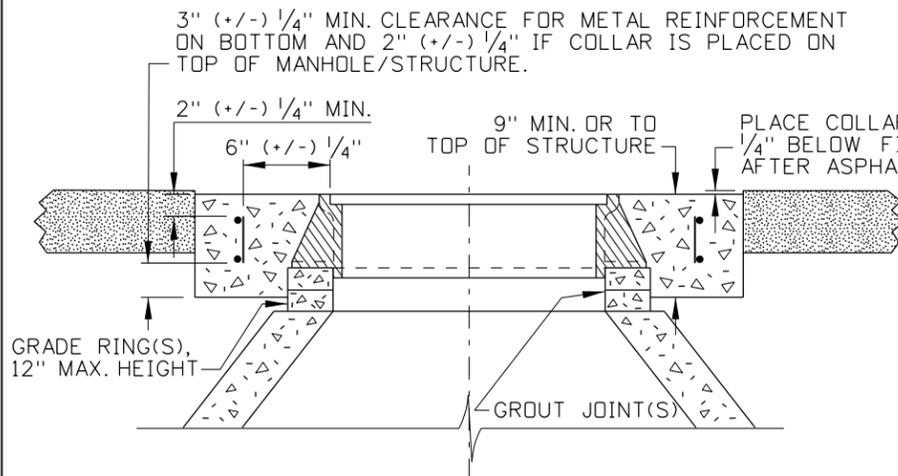
SECTION A-A



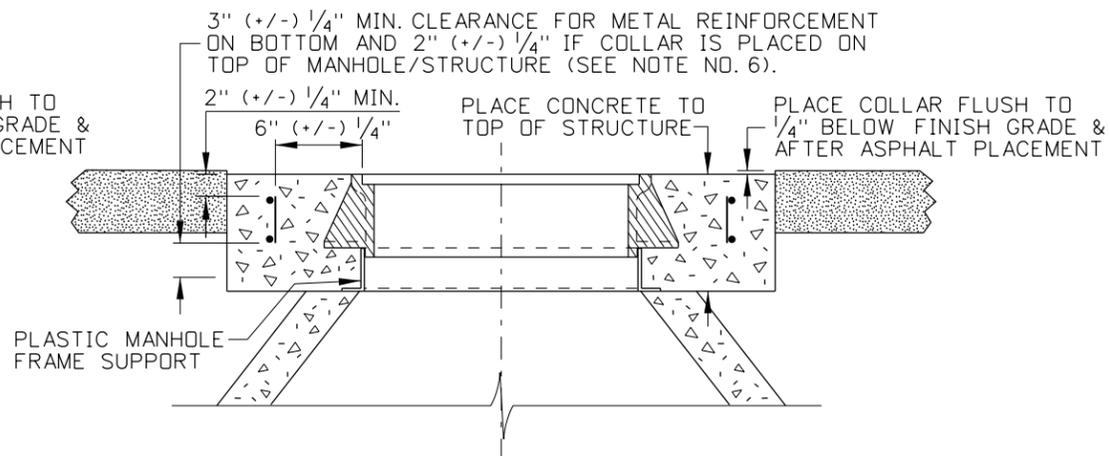
SECTION B-B

NOTES

1. THE MINIMUM WEIGHT OF THE FRAMES SHALL BE 150LBS. AND THE MINIMUM WEIGHT OF COVERS SHALL BE 110LBS. THESE FRAMES AND COVERS ARE TO BE USED IN ALL TRAFFIC AND NON-TRAFFIC AREAS.
2. FRAMES AND COVERS SHALL CONFORM TO AASHTO M 306-05 AND SHALL BE MADE OF CLASS 35B GRAY IRON.
3. THE LAYOUT AND DIMENSIONS OF THE WEBS ARE TYPICAL MINIMUMS. PROPRIETARY MANHOLE COVERS WITHOUT WEBS ARE ACCEPTABLE PROVIDED THEY MEET AASHTO M 306-05 AND MINIMUM WEIGHT REQUIREMENTS. ALL COVER DESIGNS SHALL BE PROVIDED WITH AN ANTI-SHIFT SKIRT THAT EXTENDS A MINIMUM OF 1" BELOW THE COVER SEAT.
4. THE SURFACE SHOWN IS FOR ILLUSTRATION ONLY. ANY SURFACE DESIGN, OTHER THAN SMOOTH, MAY BE USED UPON APPROVAL.
5. A CAST-IN-PLACE CONCRETE COLLAR SHALL BE PLACED AROUND THE MANHOLE FRAME UNLESS OTHERWISE DIRECTED. THE CONCRETE COLLAR SHALL MEET THE REQUIREMENTS OF SECTION 609 - MINOR STRUCTURES, OF THE CURRENT ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
6. THE CONCRETE COLLAR SHALL BE PLACED TO THE TOP OF THE MANHOLE/STRUCTURE OR HAVE A MINIMUM THICKNESS OF 9". WHEN THE CONCRETE COLLAR IS PLACED ON TOP OF A MANHOLE/STRUCTURE THE THICKNESS SHALL NOT BE LESS THAN THE "F DIMENSION" OF THE FRAME. THE VERTICAL METAL REINFORCEMENT LENGTHS MAY BE ADJUSTED WHEN THE COLLAR IS PLACED ON TOP OF A STRUCTURE/MANHOLE.
7. USE OF A PLASTIC MANHOLE FRAME SUPPORT, I.E. WHIRLY-GIG OR COMPARABLE DEVICE, IS AN ACCEPTABLE CONSTRUCTION OPTION.
8. NOT TO SCALE.



MANHOLE FRAME SUPPORTED WITH CONC. COLLAR RINGS (SEE NOTE NO. 6)



PLASTIC MANHOLE FRAME SUPPORT (SEE NOTE NO. 7)

SECTION A-A

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	06-61	NS	6	10-05	MSM		
2	02-74		7	06-07	MSM		
3	12-92	MSM	8	09-10	PLR		
4	05-95	MSM					
5	11-01	MSM					

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
 CADD FILE NAME: 605-13\_1010.dgn  
 DRAWING DATE: JUNE, 1961

IDAHO TRANSPORTATION DEPARTMENT



BOISE IDAHO

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

STANDARD DRAWING

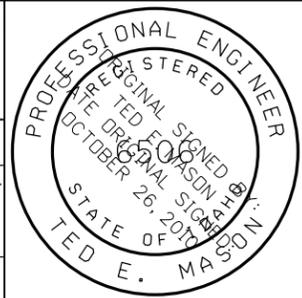
MANHOLE FRAME, COVER, & CONCRETE COLLAR

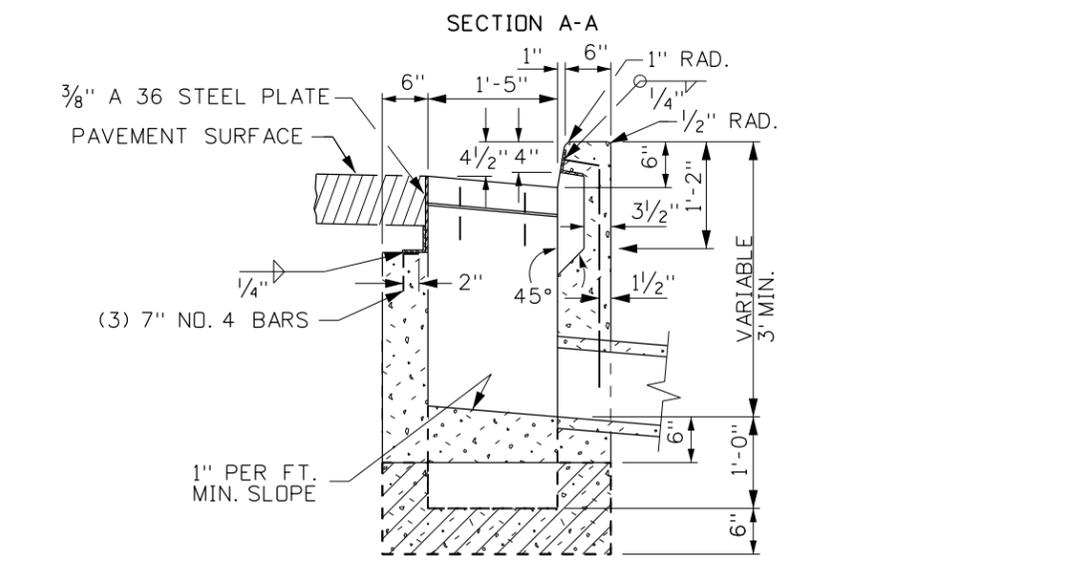
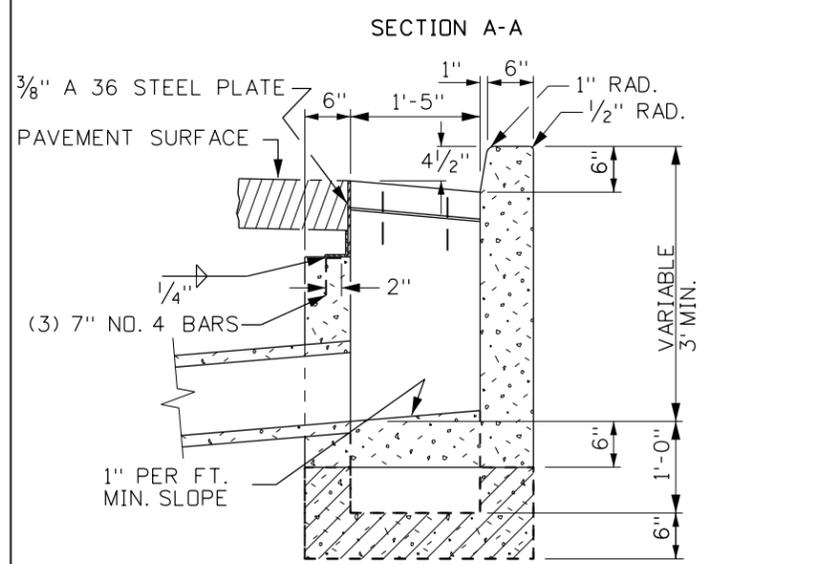
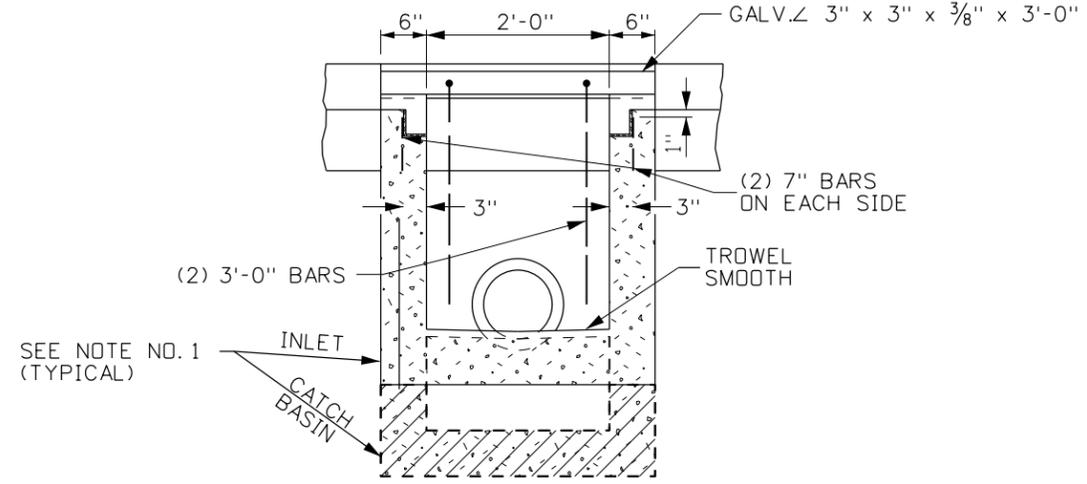
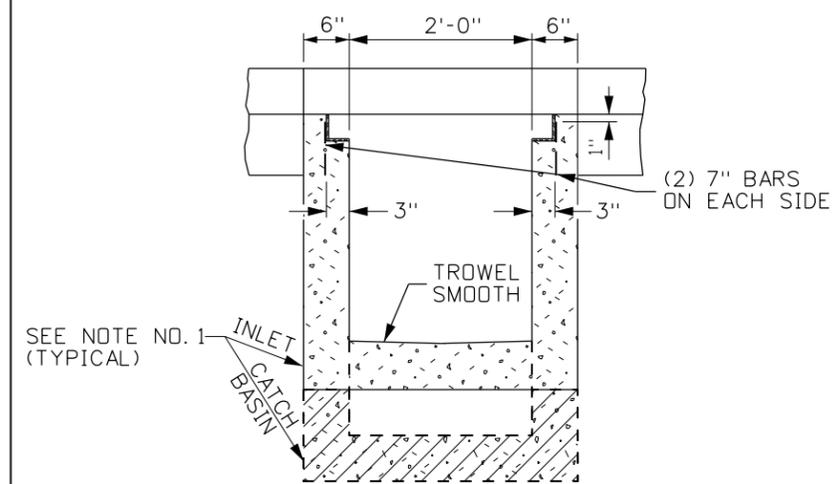
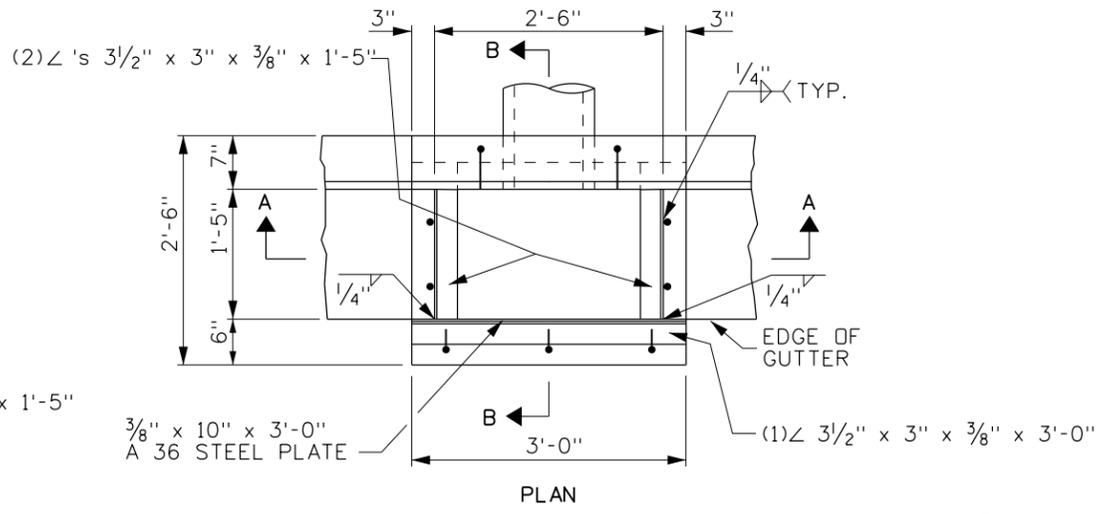
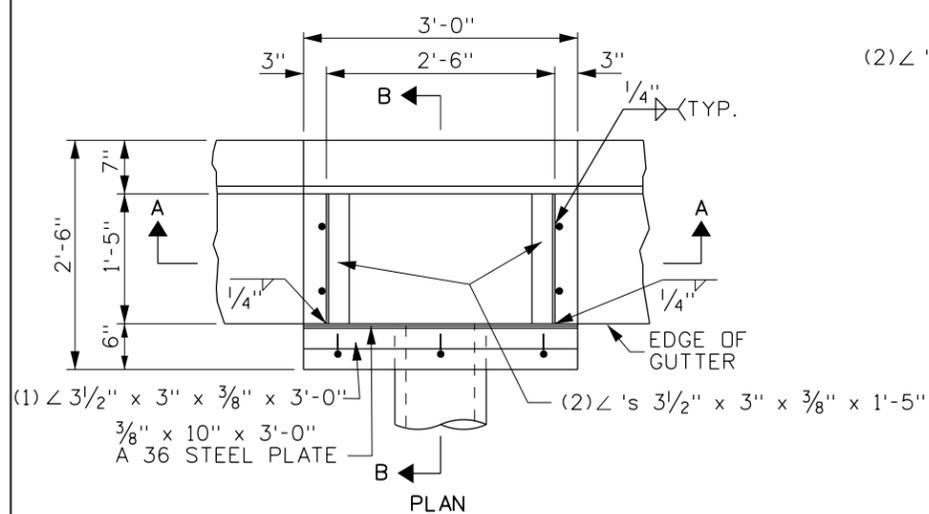
English

STANDARD DRAWING NO. 605-13

SHEET 1 OF 1

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





SECTION B-B  
INLET - TYPE 1  
CATCH BASIN - TYPE 1

SECTION B-B  
INLET - TYPE 2  
CATCH BASIN - TYPE 2

**NOTES**

- PATTERNS USED IN DRAWING:  
 INLET SECTIONS:   
 CATCH BASIN BOTTOMS:   
 PAVEMENT:
- INLETS AND CATCH BASINS MAY BE EITHER PRECAST OR CAST-IN-PLACE. PRECAST UNITS SHALL MEET THE REQUIREMENTS OF ASTM C 913. (PRIOR APPROVAL OF SHOP DRAWINGS WILL BE REQUIRED ON MODIFIED UNITS.)
- A 1" SIDE DRAFT IS ALLOWED FOR FORM REMOVAL.
- CAST-IN-PLACE INLETS AND CATCH BASINS SHALL CONFORM TO SECTION 609 - MINOR STRUCTURES OF THE CURRENT ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- THE GRADE LINE OF THE TOP INSIDE OF ANY PIPE SHALL ENTER AT A POINT NO LOWER THAN THE TOP INSIDE OF THE OUTLET PIPE.
- PIPES CAN ENTER OR LEAVE THE BOX IN ANY DIRECTION. ALL CONNECTIONS AND BROKEN AREAS SHALL BE GROUTED SMOOTH.
- STEEL ANGLES SHALL BE SET SO THAT EACH BEARING BAR OF PREFABRICATED GRATE SHALL HAVE FULL BEARING ON BOTH ENDS. THE FINISHED TOP OF CONCRETE SHALL BE EVEN WITH THE ANGLE/GRATE SURFACE. THE STRUCTURAL STEEL NEED NOT BE PAINTED BUT SHALL MEET THE REQUIREMENTS OF ASTM A 36.
- ALL METAL REINFORCEMENT USED SHALL BE NO. 4 BARS. THE METAL REINFORCEMENT SHALL BE SMOOTH CUT TO ACCOMMODATE PIPES.
- GRAY IRON CAST TO THE DIMENSIONS GIVEN FOR THE STEEL GRATES MAY BE USED. THE CASTINGS SHALL CONFORM TO AASHTO M306 CLASS 35B GRAY IRON CASTINGS.
- INLET/CATCH BASIN GRATES MAY EITHER BE RESISTANCE WELDED OR ARC WELDED. IN EITHER CASE THE GRATE SHALL BE TRUE AND FLUSH.
- GRATE B WILL BE USED ONLY WHEN SPECIFIED.
- NOT TO SCALE.

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	10-80		6	09-94	MSM	11	11-08
2	04-82		7	06-97	MSM		
3	03-84		8	06-01	MSM		
4	01-89	GB	9	11-04	MSM		
5	12-93	MSM	10	05-07	MSM		

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 605-20\_1108.dgn

DRAWING DATE: JULY, 1961

**IDAHO TRANSPORTATION DEPARTMENT**

BOISE IDAHO

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

ORIGINAL SIGNED BY: TOM COLE  
CHIEF ENGINEER

STANDARD DRAWING

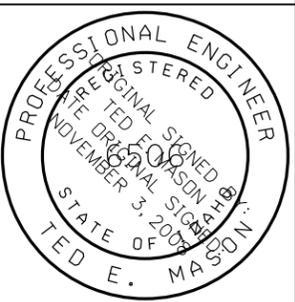
**INLETS & CATCH BASINS TYPES 1, 2, & 3**

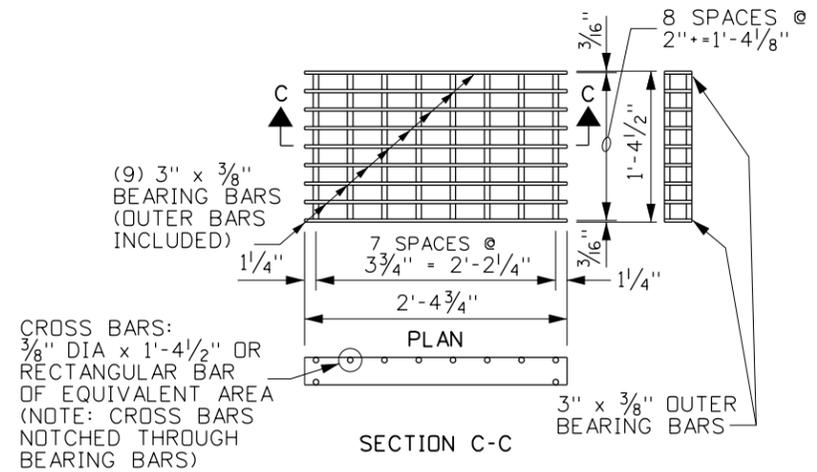
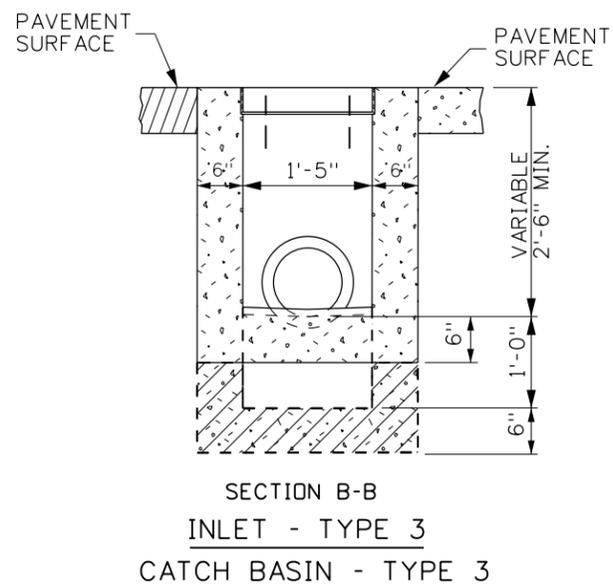
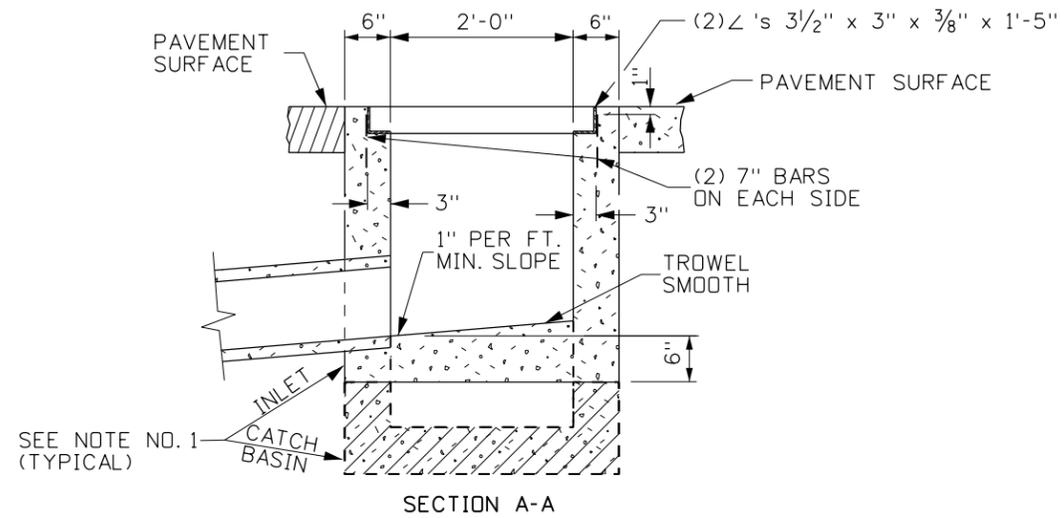
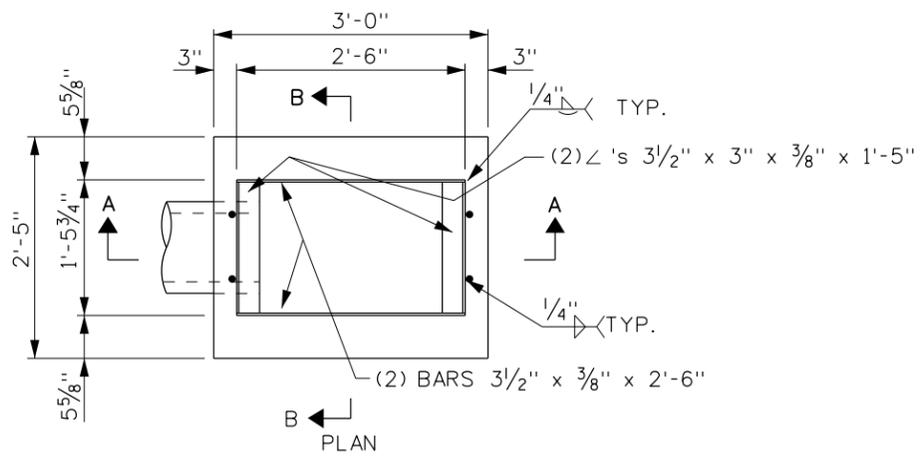
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

**English**

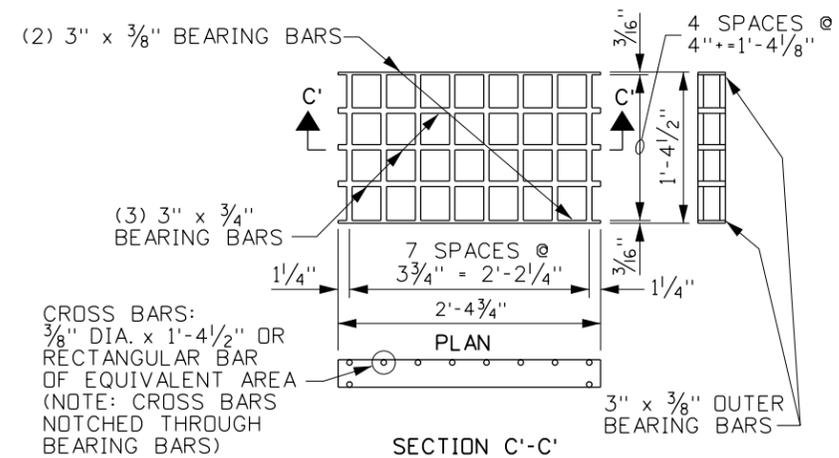
STANDARD DRAWING NO. **605-20**

SHEET 1 OF 2





(WEIGHT: APPROXIMATELY 88 LBS., SEE NOTE 9 & 10)



(WEIGHT: APPROXIMATELY 79 LBS., SEE NOTE 9 & 10)

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	10-80		6	09-94	MSM	11	11-08	JRV
2	04-82		7	06-97	MSM			
3	03-84		8	06-01	MSM			
4	01-89	GB	9	11-04	MSM			
5	12-93	MSM	10	05-07	MSM			

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CADD FILE NAME: 605-20\_1108.dgn  
DRAWING DATE: JULY, 1961

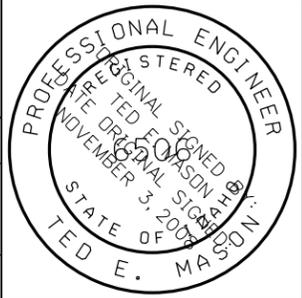
**IDAHO TRANSPORTATION DEPARTMENT**  
BOISE IDAHO

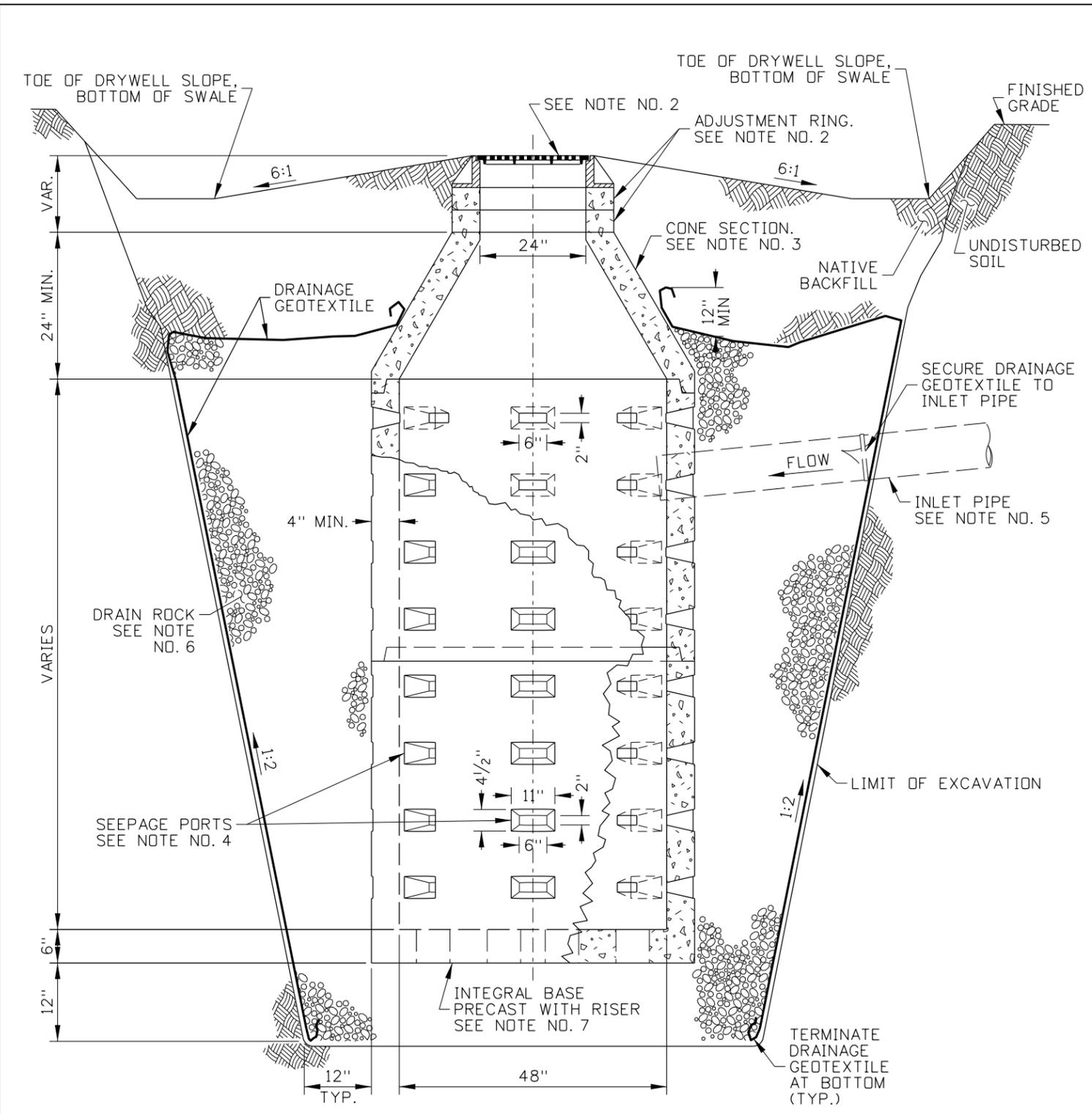
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ASSISTANT CHIEF ENGINEER (DEVELOPMENT)  
ORIGINAL SIGNED BY: TOM COLE  
CHIEF ENGINEER

STANDARD DRAWING  
**INLETS & CATCH BASINS TYPES 1, 2, & 3**

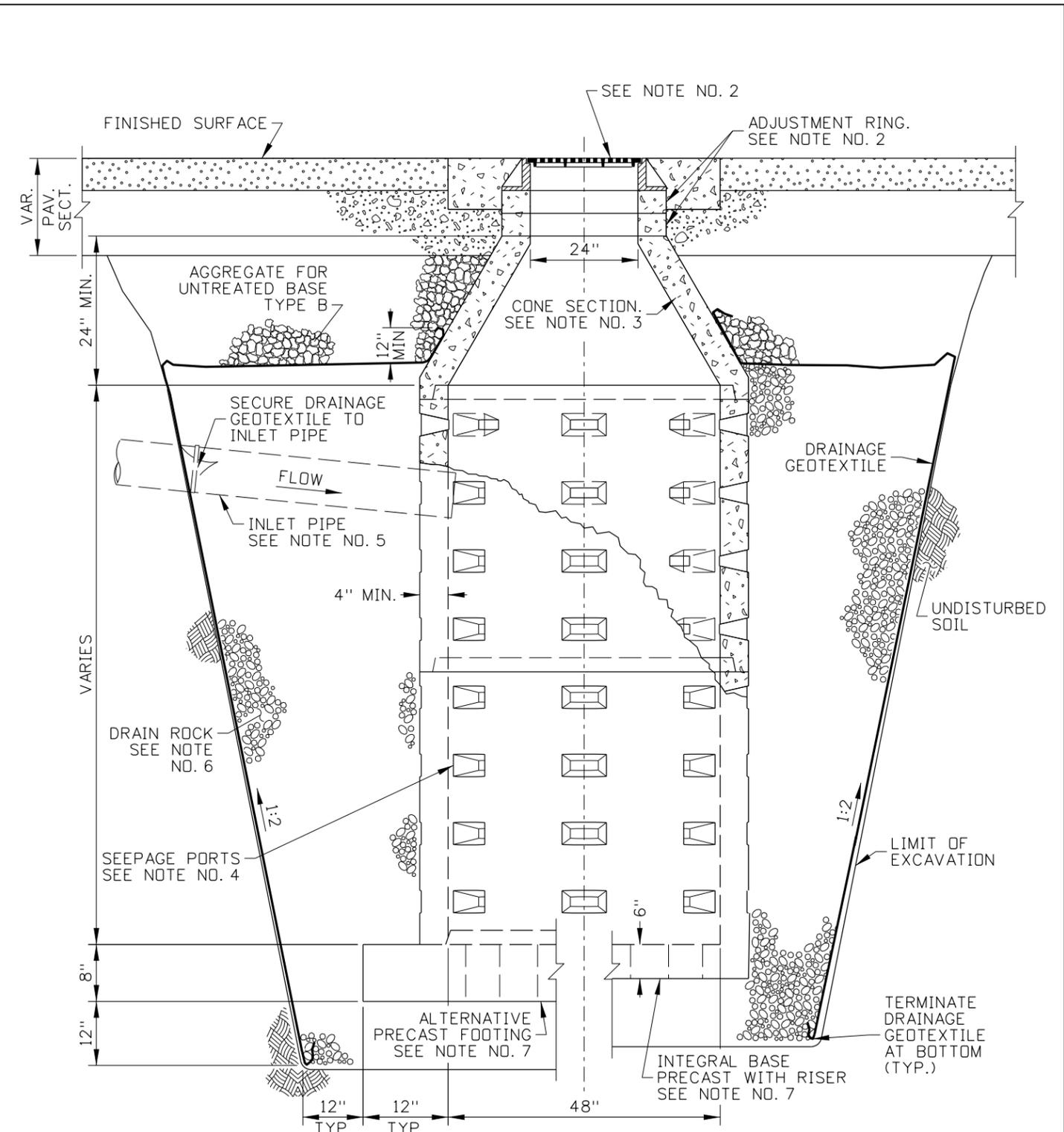
**English**  
STANDARD DRAWING NO. 605-20  
SHEET 2 OF 2

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





**DRYWELL IN DRAINAGE FEATURE**  
(SEE NOTE NO. 1)



**DRYWELL IN TRAVELED WAY**  
(SEE NOTE NO. 1)

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

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
 CADD FILE NAME: 605-35\_0422.dgn  
 DRAWING DATE: DECEMBER 2021

**IDAHO TRANSPORTATION DEPARTMENT**



BOISE IDAHO

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 DESIGN/TRAFFIC SERVICES ENGINEER

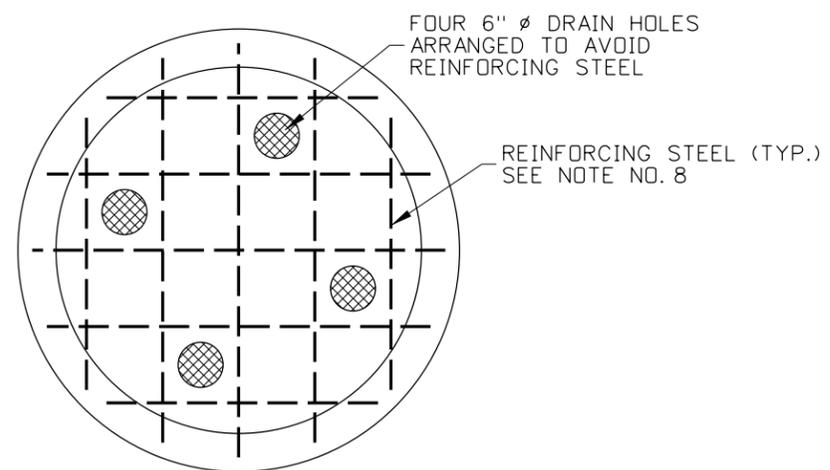
STANDARD DRAWING  
**DRYWELL**  
 REQUIRES STD. DWG. 605-13

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

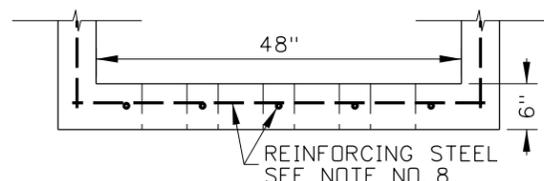
**English**

STANDARD DRAWING NO.  
**605-35**

SHEET 1 OF 2

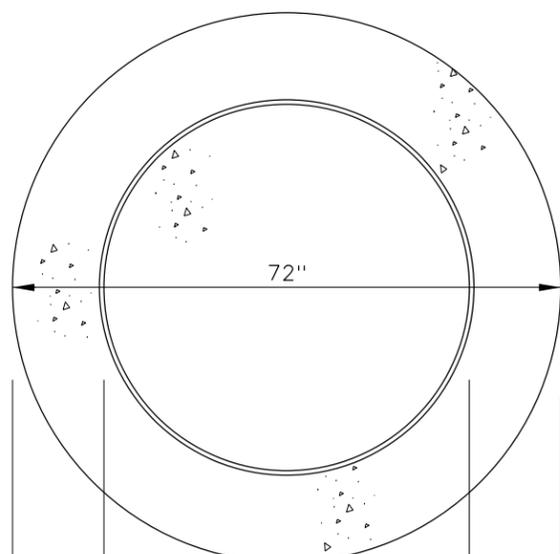


PLAN

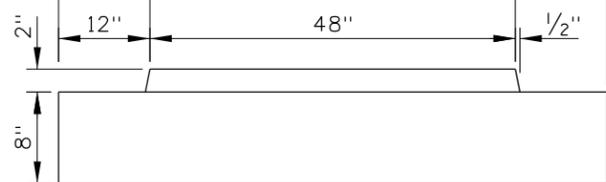


ELEVATION

INTEGRAL BASE DETAIL



PLAN



ELEVATION

ALTERNATIVE PRECAST FOOTING DETAIL

NOTES

1. DRYWELLS MAY BE INSTALLED IN DRAINAGE FEATURES, SUCH AS THE SWALE SHOWN, OR IN THE TRAVELED WAY.
2. SEE STANDARD DRAWING 605-13 FOR MANHOLE FRAME, MANHOLE COVER, MANHOLE COLLAR, AND MANHOLE ADJUSTMENT RINGS. USE CONCENTRIC OR ECCENTRIC MANHOLE CONE SECTION.
3. USE CONCENTRIC OR ECCENTRIC MANHOLE CONE SECTION.
4. SEEPAGE PORT ORIENTATION VARIES AMONG MANUFACTURERS. THE SEEPAGE PORT DIMENSIONS SHOWN ARE APPROXIMATE. ENSURE SEEPAGE PORTS ARE DISTRIBUTED EVENLY AROUND DRYWELL CIRCUMFERENCE.
5. IF INLET PIPE IS USED, CONNECT PIPE TO DRYWELL USING PRECAST HOLE OR CORE DRILLED HOLE AND FILL GAP BETWEEN PIPE AND DRYWELL WITH GROUT, TYPE B.
6. PROVIDE DRAIN ROCK, SIZE 4 OR 5 COARSE AGGREGATE FOR CONCRETE.
7. FOR DEPTHS OVER 16'-2", USE ALTERNATIVE PRECAST FOOTING.
8. PROVIDE REINFORCING STEEL THROUGHOUT DRYWELL. TO AVOID CLUTTER ON THE DRAWING REINFORCING STEEL IS ONLY SHOWN IN THE INTEGRAL BASE.
9. DRAWING NOT TO SCALE.

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

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

SCALES SHOWN  
ARE FOR 11" X 17"  
PRINTS ONLY

CADD FILE NAME:  
605-35\_0422.dgn

DRAWING DATE:  
DECEMBER 2021

**IDAHO  
TRANSPORTATION  
DEPARTMENT**



BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN  
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

**DRYWELL**

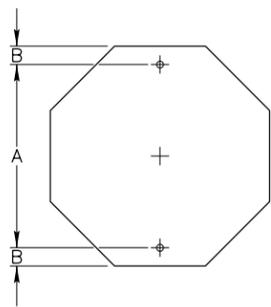
REQUIRES STD. DWG. 605-13

**English**

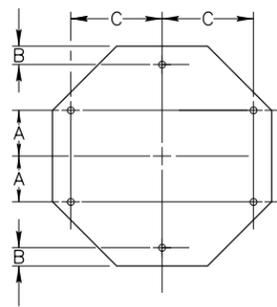
STANDARD DRAWING NO.  
**605-35**

SHEET 2 OF 2

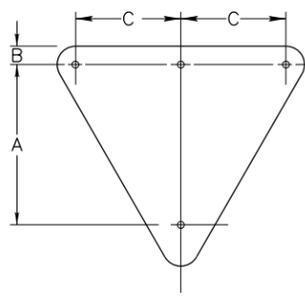
PROFESSIONAL ENGINEER  
LICENSED  
RYAN D. LANCASTER  
13683  
STATE OF IDAHO  
MECHANICAL ENGINEERING  
MAY 9, 2018



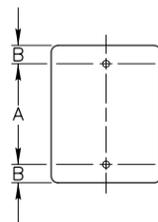
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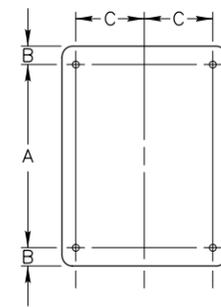
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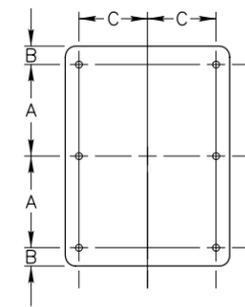
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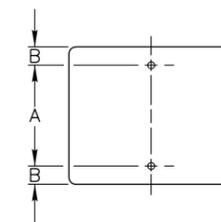
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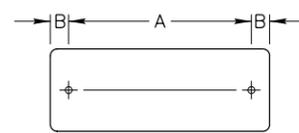
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48"X36"	30"	3"	15"
60"X36"	30"	3"	21"



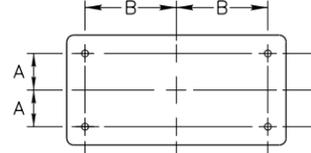
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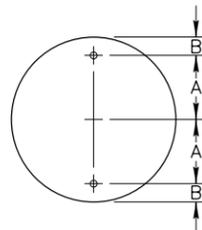
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21"X15"	12"	1 1/2"
24"X6"	3"	1 1/2"
24"X10"	7"	1 1/2"
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24"X18"	15"	1 1/2"
24"X24"	18"	3"
30"X18"	12"	3"
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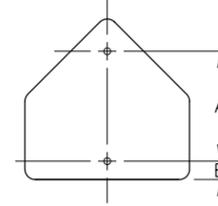
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54"X18"	48"	3"



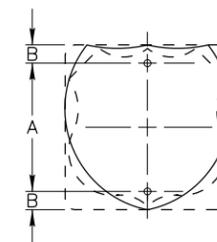
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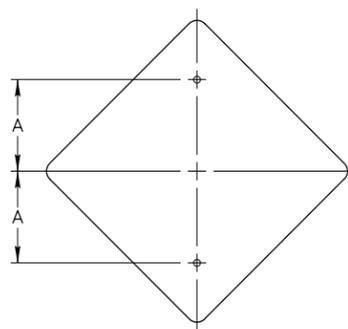
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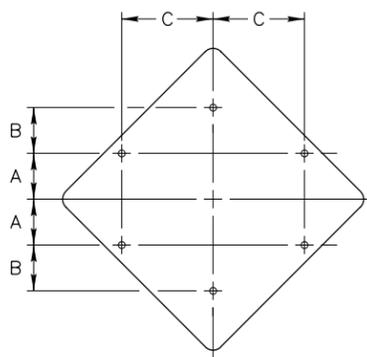
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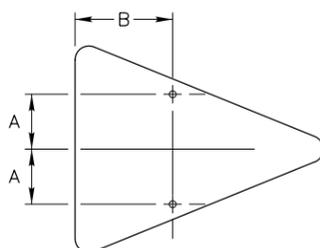
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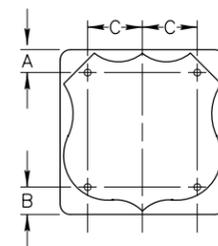
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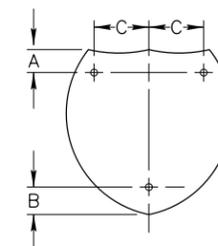
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48"X48"	10"	—	20"



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
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**



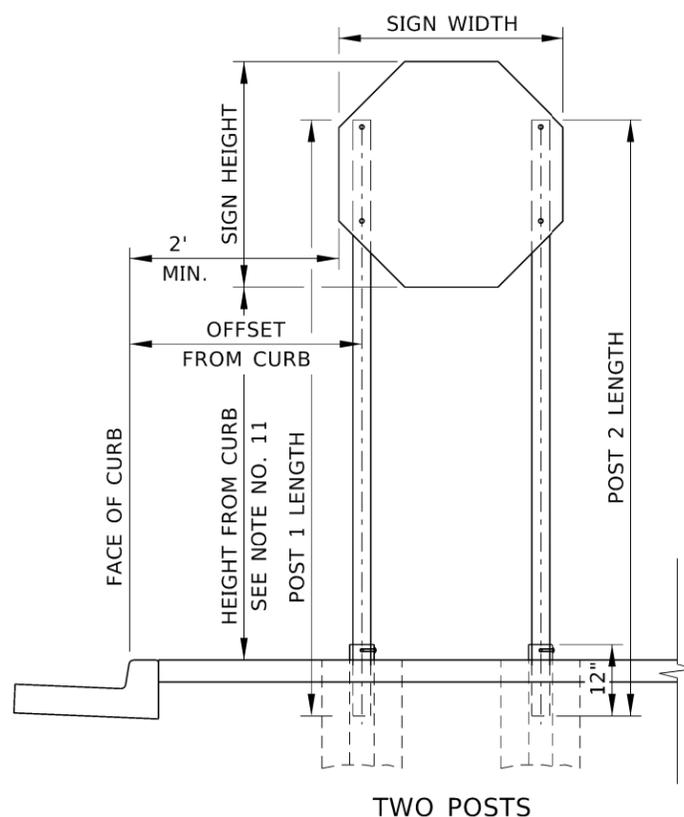
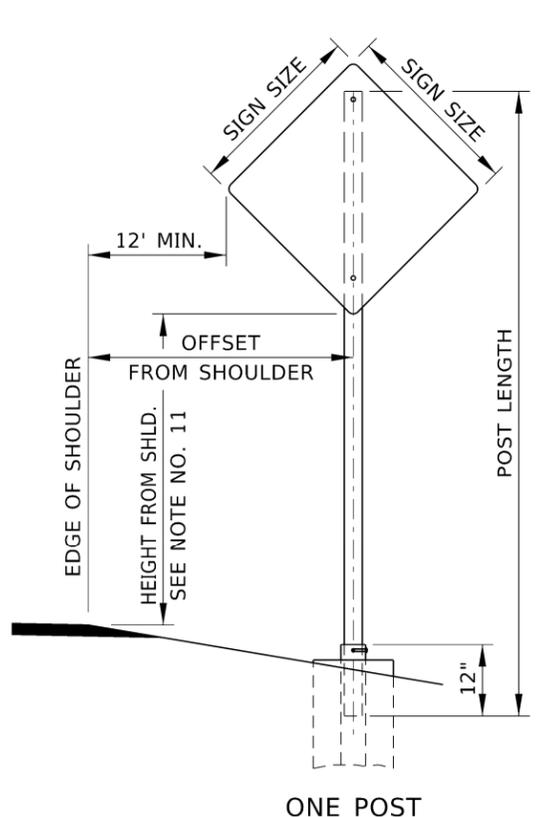
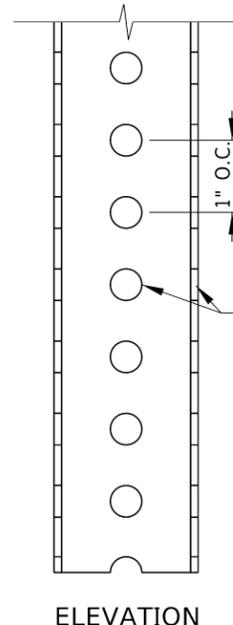
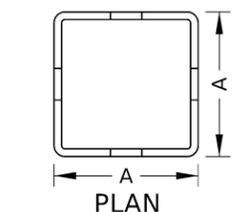
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN  
 DESIGN/TRAFFIC SERVICES ENGINEER

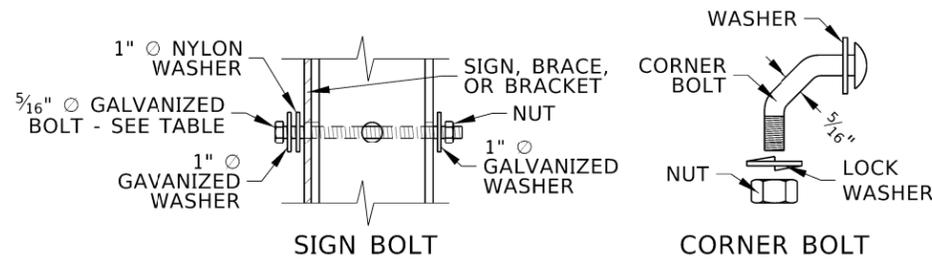
STANDARD DRAWING  
**PUNCHING SCHEDULE FOR TYPE "B" OR TYPE "E" SIGNS**

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

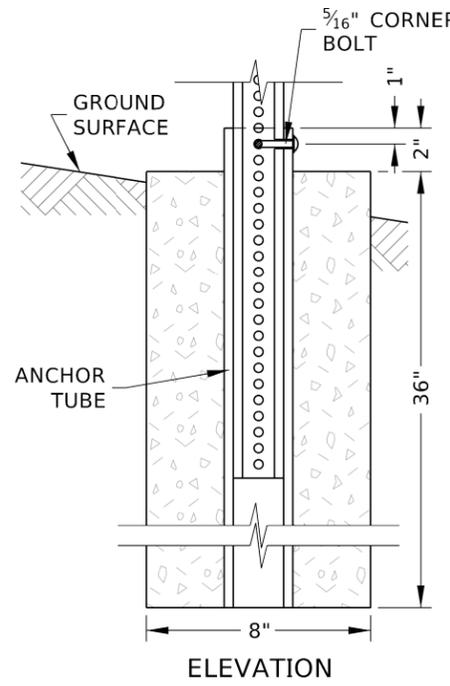
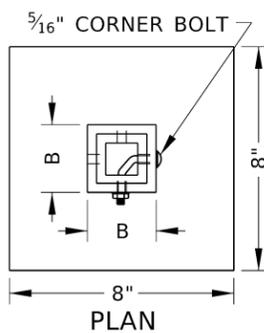
PROFESSIONAL ENGINEER  
 LICENSED  
 RYAN D. LANCASTER  
 STATE OF IDAHO  
 13683



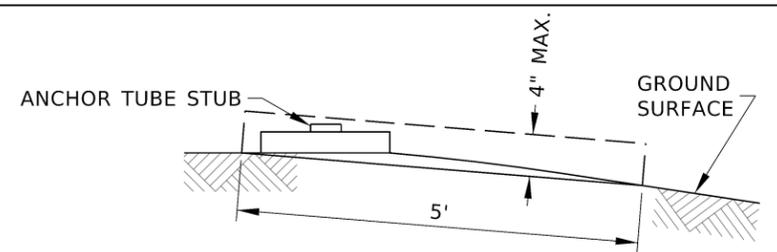
**SIGN ASSEMBLY MEASUREMENTS**



**FASTENER DETAILS**  
SEE NOTE NO. 10



**FOUNDATION**  
SEE NOTE NOS. 12 & 13



**FOUNDATION AND STUB HEIGHT DETAIL**  
SEE NOTE NO. 15

**NOTES**

1. USE TYPE E - PERFORATED STEEL TUBE POSTS - WITH TYPE B - SHEET ALUMINUM AND TYPE E - HDO PLYWOOD SIGNS.
2. SEE THE TRAFFIC MANUAL TO CALCULATE SIGN LOAD PER POST.
3. SEE PROJECT SIGN SUMMARY FOR SIGN ASSEMBLY DIMENSIONS.
4. USE ONE OR MORE TYPE E - PERFORATED STEEL TUBE POST. DO NOT MIX E-1 AND E-2 POSTS ON THE SAME SIGN ASSEMBLY.
5. POST 1 IS CLOSEST TO THE HIGHWAY, WHETHER INSTALLED ON THE RIGHT OR LEFT SIDE.
6. A BREAKAWAY DEVICE MUST BE INSTALLED IF THREE POSTS ARE USED. REFER TO THE ITD QUALIFIED PRODUCTS LIST FOR BREAKAWAY DEVICES.
7. TYPE E - PERFORATED STEEL TUBE POSTS - DO NOT NEED TO BE SHIELDED BY GUARDRAIL OR BARRIER. WHEN PERFORATED STEEL POSTS ARE INSTALLED BEHIND GUARDRAIL OR BARRIER, ENSURE THE POSTS ARE OUTSIDE OF THE GUARDRAIL OR BARRIER WORKING WIDTH.
8. SIGNS CAN BE MOUNTED BACK-TO-BACK IF THE SHAPE OF STOP, YIELD, OR WARNING SIGNS ARE NOT SHIELDED.
9. SIGNS ARE INSTALLED WITH OR WITHOUT BRACES DEPENDENT ON SIGN SIZE AND APPLICATION.
10. TYPE B - SHEET ALUMINUM - OR TYPE E - HDO PLYWOOD - SIGNS CAN BE AFFIXED TO THE POST OR THROUGH BRACES OR BRACKETS.
11. 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.
12. PRECAST FOUNDATION OR CAST FOUNDATION IN PLACE. ENSURE THE BOTTOM OF THE FOUNDATION IS KEPT OPEN TO DRAIN. IF THE ANCHOR TUBE IS PERFORATED, ENSURE THE INSIDE OF THE ANCHOR REMAINS OPEN.
13. IF SOLID BEDROCK IS ENCOUNTERED WITHIN THE FOUNDATION DEPTH, DRILL A 4.5 INCH VERTICAL HOLE AND SOCKET THE ANCHOR TUBE. FILL DRILLED HOLES WITH GROUT, TYPE B, CLASS 1. ENSURE THE INSIDE OF THE ANCHOR TUBE REMAINS OPEN. WHEN INSTALLED IN BEDROCK, ENSURE THE E-1 POST IS EMBEDDED 18 INCHES DEEP AND THE E-2 POST IS EMBEDDED 24 INCHES.
14. WHEN THE SIGN IS INSTALLED ON A BACKSLOPE, ENSURE THE SIGN POST IS AT LEAST 5' HIGHER THAN THE GROUND SURFACE.
15. ENSURE NO PART OF THE FOUNDATION OR SIGN POST STUB PROJECTS MORE THAN 4 IN. ABOVE ANY 5 FT. CHORD ALIGNED PERPENDICULARLY TO THE EDGE OF THE HIGHWAY BETWEEN A POINT ON THE GROUND SURFACE ON ONE SIDE OF THE SUPPORT TO A POINT ON THE GROUND SURFACE ON THE OTHER SIDE OF THE SUPPORT.
16. DRAWING NOT TO SCALE.

SIGN POST AND FOUNDATION TABLE										
POST TYPE	TYPE E PERFORATED STEEL TUBE POST		POST WEIGHT (LB/FT)	MAXIMUM SIGN LOAD (SFxFT)	FOUNDATION		ANCHOR TUBE		POST WEIGHT (LB/FT)	SIGN BOLT LENGTH (IN)
	PERFORATED STEEL TUBE POST SIZE A (IN)	GAUGE			SIZE (INxINxIN)	CONCRETE (CY)	B (IN)	GAUGE		
E-1	2	12	2.42	43	8x8x36	0.05	2 1/2 x 2 1/2	7	5.59	2 1/2
E-2	2 1/2	10	4.01	91	8x8x36	0.05	3x3	7	6.87	3

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY	
1	02-92	JEC	6	05-15	HEB				
2	12-94	HEB	7	12-16	HEB				
3	06-99	HEB	8	02-23	RDL				
4	12-01	NQB							
5	12-13	HEB							

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
 CADD FILE NAME: 616-7\_0423.dgn  
 DRAWING DATE: JULY, 1991

**IDAHO TRANSPORTATION DEPARTMENT**  
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 BOISE IDAHO

ORIGINAL SIGNED BY: MONICA CRIDER  
 HIGHWAY DESIGN ENGINEER

STANDARD DRAWING  
**STEEL SIGN POST AND FOUNDATION**  
 TYPE E - PERFORATED STEEL TUBE POST

**ENGLISH**  
 STANDARD DRAWING NO. 616-7  
 SHEET 1 OF 1

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

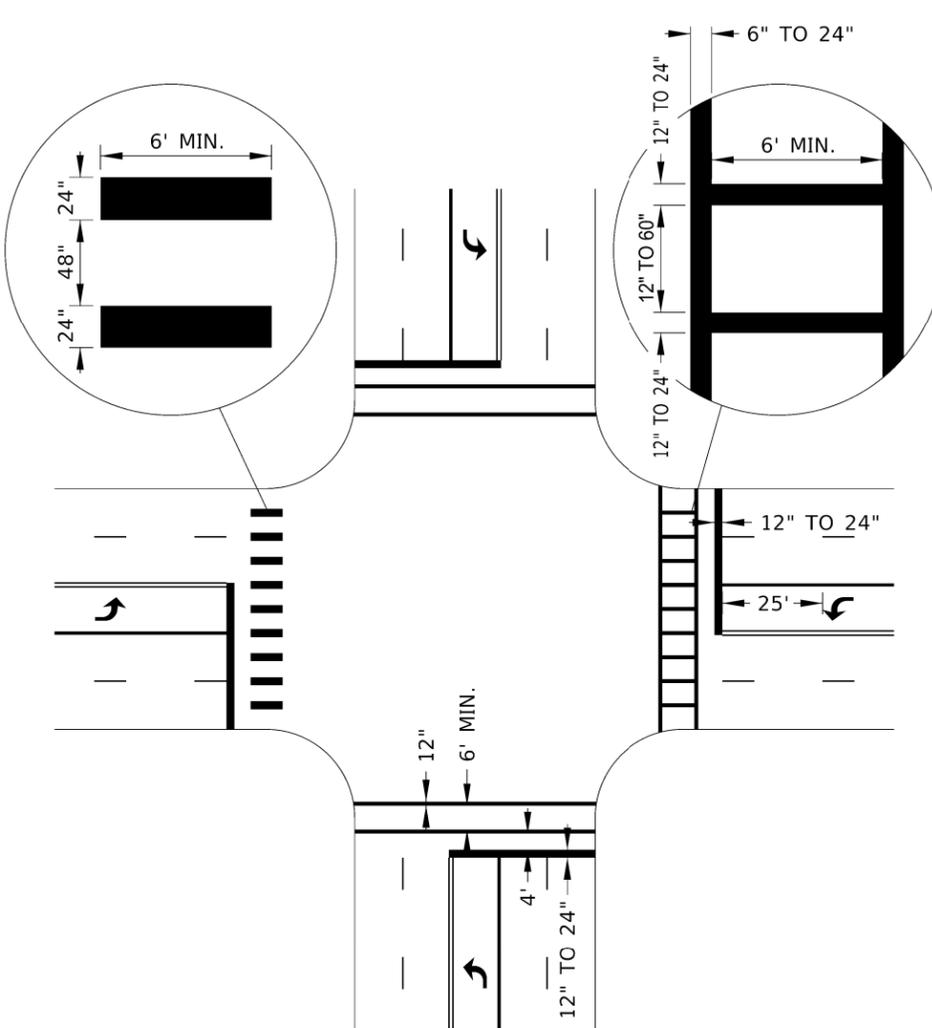
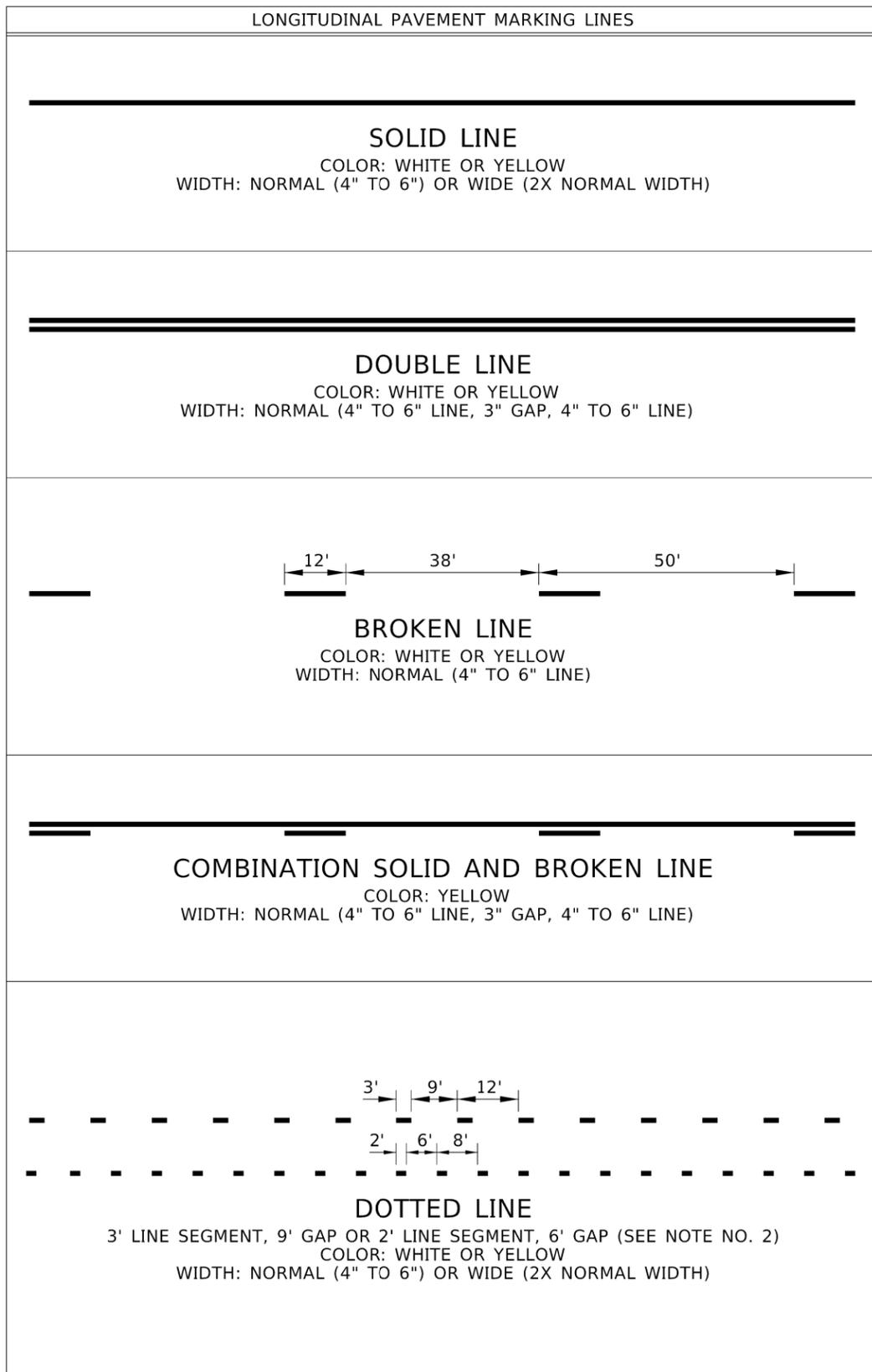
PROFESSIONAL ENGINEER  
 RYAN D. LANCASTER  
 LICENSE NO. 3683  
 STATE OF IDAHO

**NOTES**

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

40 MPH OR LESS SPEEDS	45 MPH OR MORE SPEEDS
$L = WS^2/60$	$L = WS$
$W =$ OFFSET WIDTH IN FEET	
$S =$ POSTED SPEED LIMIT, OFF-PEAK 85TH-PERCENTILE SPEED, OR OPERATING SPEED IN MPH	

  - A. ON PARALLEL ENTRANCE RAMPS, A TAPER LENGTH OF 300 FEET IS SUITABLE FOR DESIGN SPEEDS UP TO 70 MPH.
8. USE LANE-USE ARROWS AND WORD PAVEMENT MARKINGS AS SHOWN. SOME MARKINGS ARE OPTIONAL.
  - A. USE TWO OR MORE LANE-USE ARROWS UNLESS THE TURN-LANE LENGTH IS LESS THAN 75 FEET. IF SHORTER THAN 75 FEET, THE DOWNSTREAM ARROW CAN BE OMITTED.
  - B. USE TWO-WAY LEFT-TURN ARROW MARKINGS NEAR THE BEGINNING OF A TWO-WAY LEFT-TURN LANE AND EVERY 1/2 MILE THEREAFTER.
9. BREAK EDGE AND LANE LINES AT INTERSECTIONS WITH MINOR ROADS. CONTINUE EDGE AND LANE LINES THROUGH DRIVEWAY APPROACHES.
10. USE THE EXAMPLE EXIT RAMP WITH LANE-DROP WHEN THE LENGTH OF AN AUXILIARY DECELERATION LANE EXCEEDS 1/2 MILE.
11. ON TWO-LANE HIGHWAYS, PAINT THE CENTERLINE IN ONE DIRECTION IN ASCENDING STATION AND MILEPOST DIRECTION.
  - A. WHEN RUMBLE STRIPS ARE PRESENT OR AFTER PAVEMENT SURFACE TREATMENTS, ALTER PAINT TRUCK AND PAINT SECOND APPLICATION IN OPPOSITE DIRECTION.
12. DRAWINGS NOT TO SCALE.



**EXAMPLE STOP LINE AND CROSSWALK DETAIL**

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY	
1	03-20	RDL							
2	03-21	PBH							
3	03-25	RDL							

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 630-1\_0425.dgn

DRAWING DATE: DECEMBER, 2016

**IDAHO TRANSPORTATION DEPARTMENT**

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**BOISE IDAHO**



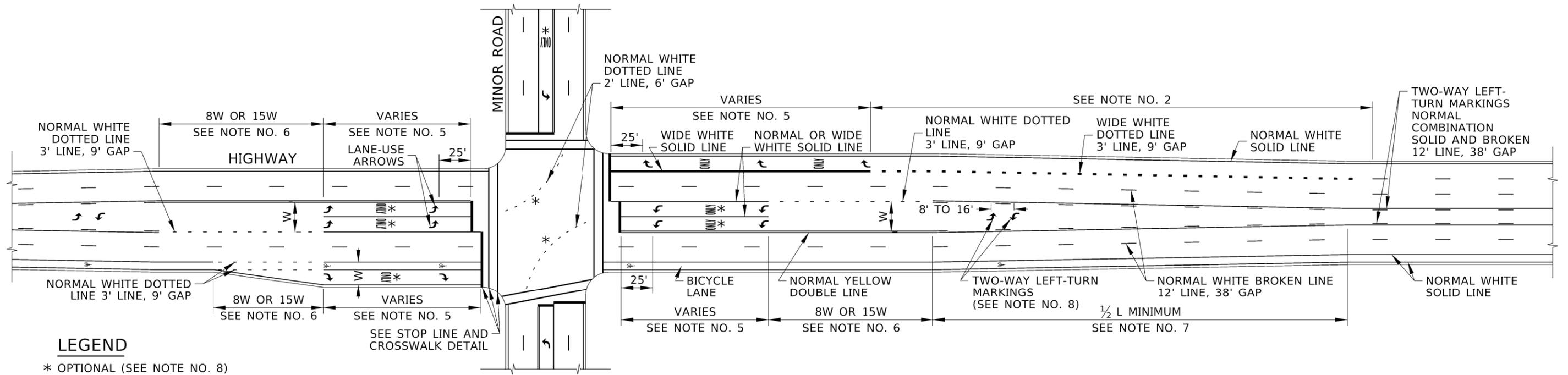
ORIGINAL SIGNED BY: MONICA CRIDER  
 HIGHWAY DESIGN ENGINEER

STANDARD DRAWING  
**PAVEMENT MARKINGS**

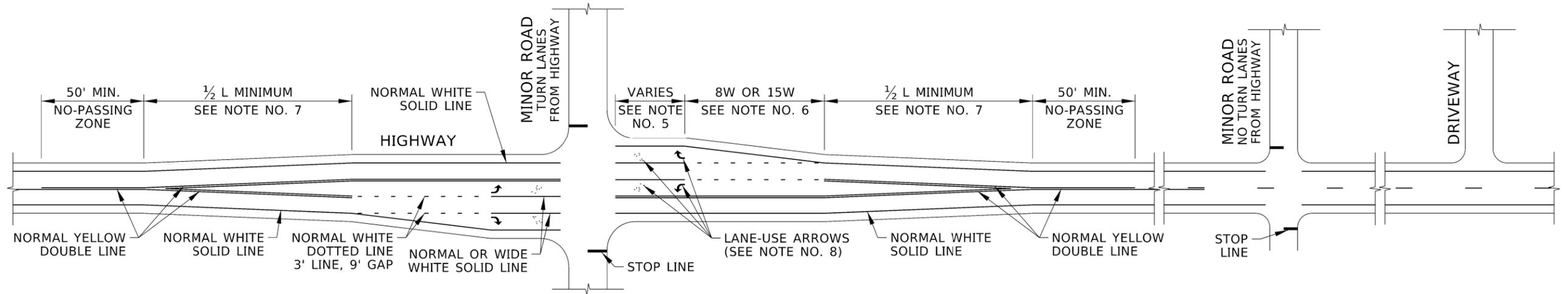
**ENGLISH**  
 STANDARD DRAWING NO.  
**630-1**  
 SHEET 1 OF 4

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





**EXAMPLE URBAN HIGHWAY PAVEMENT MARKINGS**



**EXAMPLE RURAL HIGHWAY PAVEMENT MARKINGS**

SEE NOTE NO. 9

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

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY	
1	03-20	RDL							
2	03-21	PBH							
3	03-25	RDL							

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
 CADD FILE NAME: 630-1\_0425.dgn  
 DRAWING DATE: DECEMBER, 2016

**IDAHO TRANSPORTATION DEPARTMENT**  
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 BOISE IDAHO

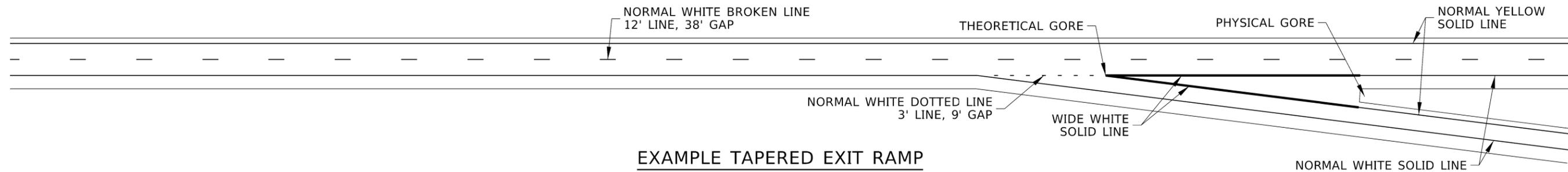


STANDARD DRAWING  
 PAVEMENT MARKINGS

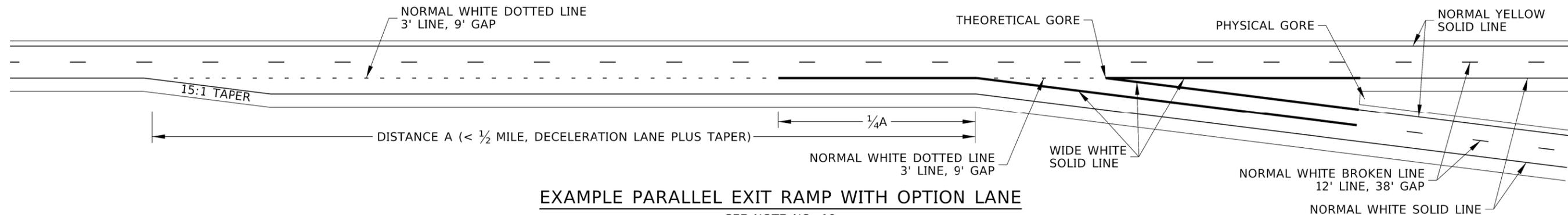
ORIGINAL SIGNED BY: MONICA CRIDER  
 HIGHWAY DESIGN ENGINEER

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

PROFESSIONAL ENGINEER  
 RYAN D. LANCASTER  
 LICENSE NO. 13683  
 STATE OF IDAHO

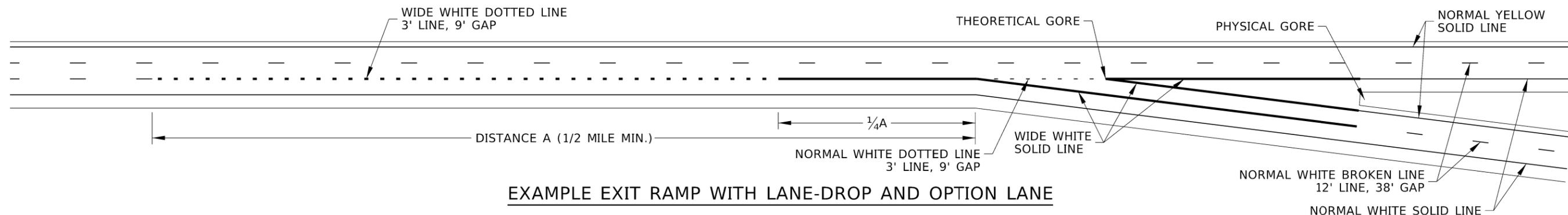


**EXAMPLE TAPERED EXIT RAMP**

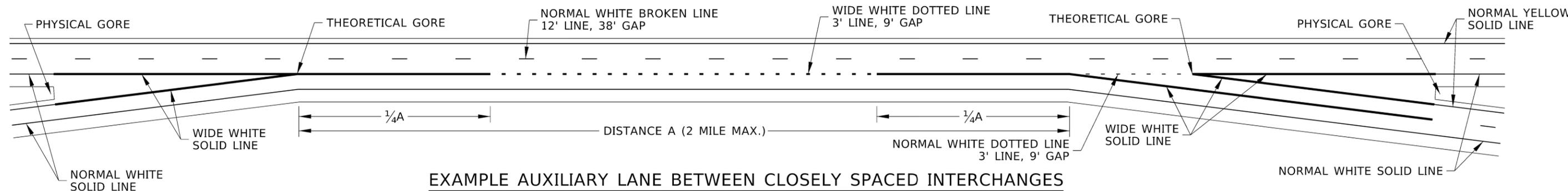


**EXAMPLE PARALLEL EXIT RAMP WITH OPTION LANE**

SEE NOTE NO. 10



**EXAMPLE EXIT RAMP WITH LANE-DROP AND OPTION LANE**



**EXAMPLE AUXILIARY LANE BETWEEN CLOSELY SPACED INTERCHANGES**

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

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY	
1	03-20	RDL							
2	03-21	PBH							
3	03-25	RDL							

SCALES SHOWN  
ARE FOR 11" X 17"  
PRINTS ONLY

CADD FILE NAME:  
630-1\_0425.dgn  
DRAWING DATE:  
DECEMBER, 2016

**IDAHO  
TRANSPORTATION  
DEPARTMENT**



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**BOISE IDAHO**

ORIGINAL SIGNED BY: MONICA CRIDER  
HIGHWAY DESIGN ENGINEER

STANDARD DRAWING

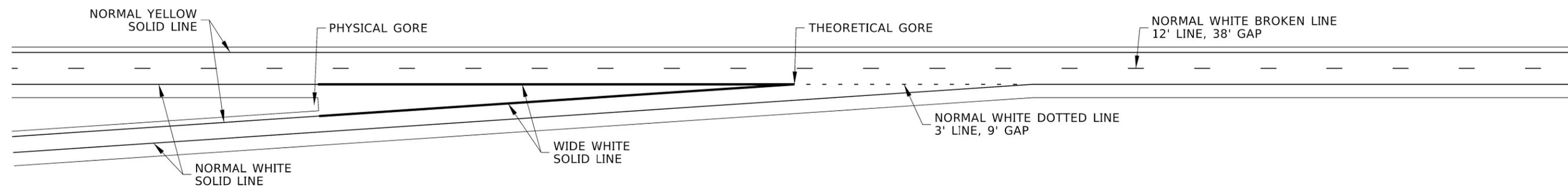
PAVEMENT MARKINGS

**ENGLISH**

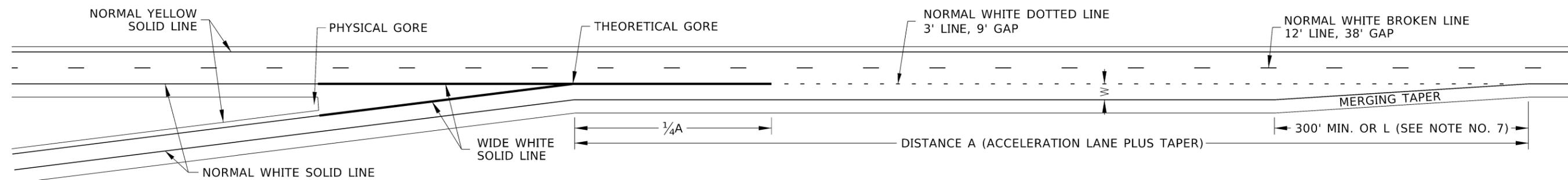
STANDARD DRAWING NO.

630-1

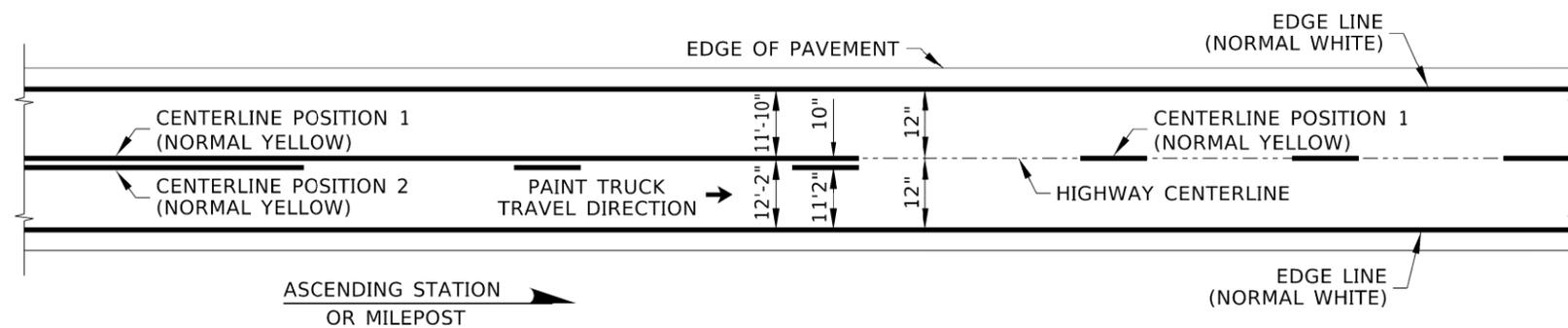
SHEET 3 OF 4



**EXAMPLE TAPERED ENTRANCE RAMP**

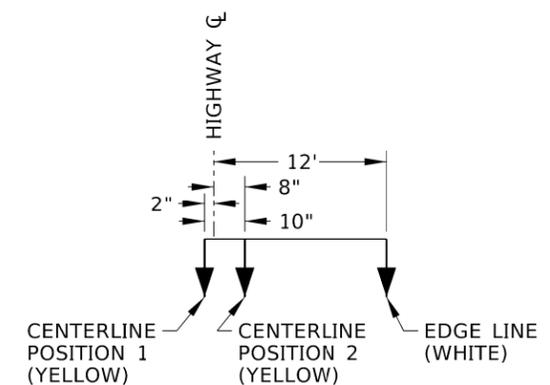


**EXAMPLE PARALLEL ENTRANCE RAMP**



**PAVEMENT MARKINGS ON TWO-WAY HIGHWAYS**

DIMENSIONS TO CENTER OF PAVEMENT MARKINGS  
SEE NOTE NO. 11 AND PAINT TRUCK SETUP DETAIL



**PAINT TRUCK SETUP DETAIL**

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY	
1	03-20	RDL							
2	03-21	PBH							
3	03-25	RDL							

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
CADD FILE NAME: 630-1\_0425.dgn  
DRAWING DATE: DECEMBER, 2016

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



ORIGINAL SIGNED BY: MONICA CRIDER  
HIGHWAY DESIGN ENGINEER

STANDARD DRAWING  
**PAVEMENT MARKINGS**

**ENGLISH**  
STANDARD DRAWING NO. 630-1  
SHEET 4 OF 4

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

PROFESSIONAL ENGINEER  
RYAN D. LANCASTER  
LICENSED  
STATE OF IDAHO  
APR 9, 2023

