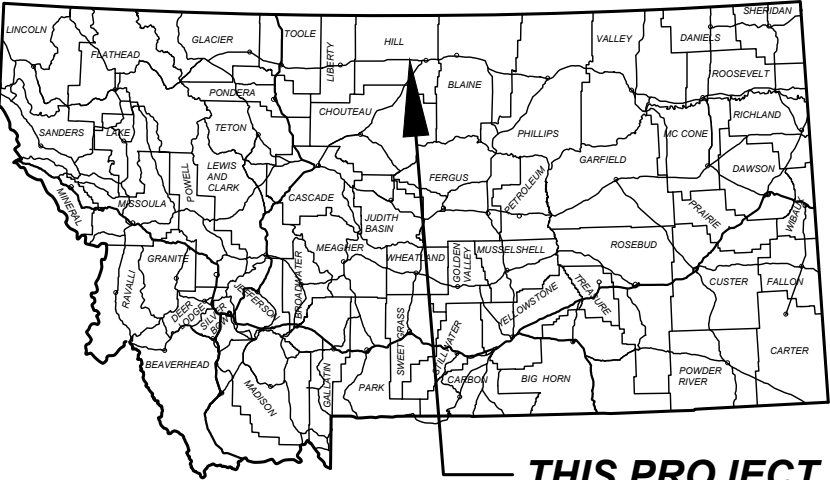


MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT NH 1-6(155)375
GRADING, DRAINAGE, & VEGETATED CONCRETE BLOCK MAT
US-2 EROSION REPAIR - HAVRE
HILL COUNTY

LENGTH 0.4 MILES



PROJECT DESIGN DATA

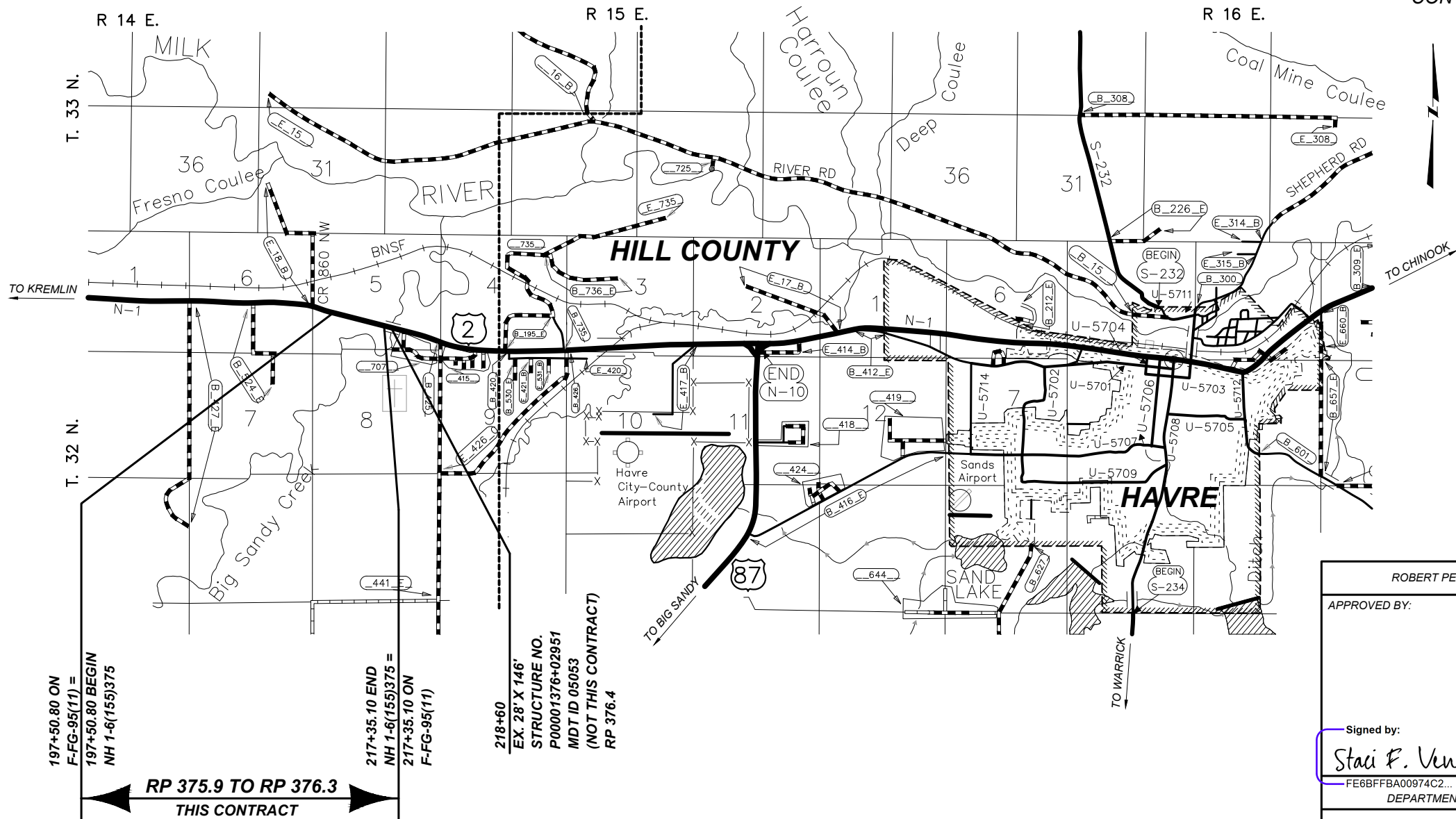
PRESENT N/A A.D.T. = N/A
LETTING N/A A.D.T. = N/A
DESIGN N/A A.D.T. = N/A
D.H.V. = N/A
TRUCKS = N/A
V. = 70 MPH
18 KIP ESAL'S = N/A
GROWTH RATE = N/A

ASSOCIATED PROJECT
AGREEMENT NUMBERS

R/W NH 1-6(151)375
I. C. NH 1-6(154)375
P. E. NH 1-6(148)375

PLANS PREPARED BY

ROBERT PECCIA & ASSOCIATES
3147 SADDLE DRIVE
P.O. BOX 5653
HELENA, MONTANA 59601
PHONE (406) 447-5000
WWW.RPA-ENG.COM



SURFACING SOURCES -
CONTRACTOR FURNISHED

ROBERT PECCIA AND ASSOCIATES	
APPROVED BY:	
Signed by:	6/9/2026
Staci F. Venner	
FE6BFFBA00974C2... MONTANA DEPARTMENT OF TRANSPORTATION	
Signed by:	
6/9/2026	
David Holien	
4EA8874BB4E5415	
DATE	

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TITLE SHEET

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CROSS SECTIONS

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200+07 PRIVATE APPROACH

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34-36

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

COMP. AGGREGATE WEIGHT

= 3700 LBS. PER CUBIC YARD

COMP. WEIGHT OF PL. MIX BIT. SURF.

= 3855 LBS. PER CUBIC YARD

ASPHALT CEMENT - COMM. MIX MISC.

= 6.2% OF PL. MIX BIT. SURF.

HYDRATED LIME

= 1.4% OF PL. MIX BIT. SURF.

BITUMINOUS MATERIAL

= 8.5 LBS. PER GAL.

EMULSIFIED ASPHALT - TACK (ALL OTHER SURFACES)

= 0.05 GAL. PER SQ. YARD (UNDILUTED)

EMULSIFIED ASPHALT - TACK (CONCRETE SURFACES)

= 0.10 GAL. PER SQ. YARD (UNDILUTED)

UTILITIES

CALL THE UTILITIES UNDERGROUND LOCATION CENTER (811) OR OTHER NOTIFICATION SYSTEM FOR THE MARKING AND LOCATION OF ALL LINES AND SERVICES BEFORE EXCAVATING. ALL CLEARANCES OR DEPTHS PROVIDED FOR UTILITIES ARE FROM EXISTING GROUND LINE.

PUBLIC LAND SURVEY MONUMENTS

ALL MONUMENTS TO BE REMOVED AND RELOCATED OR RESET BY STATE FORCES.

WETLANDS

WETLANDS EXIST ADJACENT TO THE ROADWAY AND MAY EXIST BEYOND THE PROJECT LIMITS. WETLAND AREAS AND PERMANENT WETLAND IMPACT AREAS WITHIN THE PROJECT LIMITS HAVE BEEN DELINEATED AND ARE SHOWN ON THE PLANS. ANY ACTION IMPACTING WETLAND AREAS OUTSIDE OF THE PERMANENT IMPACT AREAS SHOWN IS THE RESPONSIBILITY OF THE CONTRACTOR.

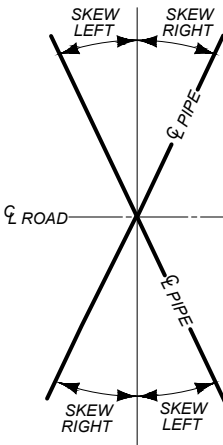


DELINEATED WETLAND AREAS



PERMANENT IMPACTED AREAS

SKEW DIAGRAM



WETLAND DELINEATION TABLE					
WETLAND DESIGNATION	STATION		WETLAND AREA (acres)		REMARKS
			DELINEATED AREA	PERMANENT IMPACTED AREA	
	FROM	TO			
WL 1 #	206+50	207+05	0.003		US-2 RT., BIG SANDY CREEK BANK
WL 2 #	207+55	207+70	0.002		US-2 RT., BIG SANDY CREEK BANK
WL 3 #	217+05	218+40	0.022	0.004	US-2 LT., BIG SANDY CREEK BANK
WL 4 #	218+25	219+30	0.023		US-2 RT., BIG SANDY CREEK BANK
WL 5 #	218+15	219+20	0.014		US-2 LT. & RT., BIG SANDY CREEK BANK
TOTAL			0.07	0.01	

AREA OF EXISTING WETLAND EXTENDS BEYOND PLAN LIMITS.

CENTERLINE COORDINATE TABLE - US-2				
STATION	DESCRIPTION	NORTHING OR Y COORDINATE	EASTING OR X COORDINATE	REMARKS
187+00.00	BP	1,570,985.918	1,890,723.439	
197+50.80	POT	1,570,702.964	1,891,735.426	BEG. PROJECT
217+35.10	POT	1,570,168.642	1,893,646.433	END PROJECT
219+32.65	EP	1,570,115.446	1,893,836.690	

CENTERLINE COORDINATE TABLE - DITCH				
STATION	DESCRIPTION	NORTHING OR Y COORDINATE	EASTING OR X COORDINATE	REMARKS
100+00.00	BP	1,570,743.306	1,891,746.716	BEG. DITCH
102+13.21	PI	1,570,702.319	1,891,955.954	
103+04.96	PI	1,570,677.603	1,892,044.309	
116+53.05	PC	1,570,317.827	1,893,343.507	
116+77.81	PI	1,570,311.221	1,893,367.362	
117+02.31	PT	1,570,310.630	1,893,392.108	
118+66.42	PC	1,570,306.712	1,893,556.171	
119+21.95	PI	1,570,305.386	1,893,611.684	
119+76.70	PT	1,570,319.942	1,893,665.271	
120+03.00	POT	1,570,326.836	1,893,690.649	END DITCH
120+48.43	EP	1,570,338.745	1,893,734.490	

PROFILE NAME: PRO-DITCH

CENTERLINE COORDINATE TABLE - PRIVATE APPROACH				
STATION	DESCRIPTION	NORTHING OR Y COORDINATE	EASTING OR X COORDINATE	REMARKS
10+00.00	BP	1,570,634.031	1,891,981.915	
10+15.60	POT	1,570,649.071	1,891,986.057	BEG. PRIVATE APP.
10+48.06	PC	1,570,680.366	1,891,994.676	
10+67.81	PI	1,570,699.405	1,891,999.920	
10+87.33	PT	1,570,719.153	1,892,000.057	
11+02.36	POT	1,570,734.182	1,892,000.162	END PRIVATE APP.
11+24.94	EP	1,570,756.766	1,892,000.319	

PROFILE NAME: PRO-PRIV APP

CENTERLINE COORDINATE TABLE - FARM FIELD APPROACH				
STATION	DESCRIPTION	NORTHING OR Y COORDINATE	EASTING OR X COORDINATE	REMARKS
40+00.00	BP	1,570,436.775	1,892,687.452	
40+15.70	POT	1,570,451.893	1,892,691.688	BEG. FARM FIELD APP.
40+85.70	POT	1,570,519.297	1,892,710.576	END FARM FIELD APP.
41+00.00	EP	1,570,533.067	1,892,714.434	

PROFILE NAME: FARM FIELD 2 PR

APPROACHES (FOR INFORMATION ONLY)													
US-2 STATION	TYPE	linear feet				EXISTING SURFACE	feet		PROPOSED SURFACE	tons	cu. yards	gallons	REMARKS
		WIDTH	RADIUS		LENGTH		PMS THK.	CAC THK.		COMM. PLANT MIX MISC.	CRUSHED AGG. COURSE	EMULS. ASPHALT TACK COAT	
			LEFT	RIGHT									
200+07	PRIVATE	24	25	25	86.8	PAVED APRON & GRAVEL	0.20	0.60	PAVE TO 68', GRAVEL TO LENGTH	29	65	12	LT., TAPER TO EX. 13.5' WIDTH, SEE DETAIL SHEET
207+39	FARM FIELD	24	25	25	70.0	GRAVEL	0.20	0.60	PAVE 12' APRON, GRAVEL TO LENGTH	9	55	4	LT., SEE DETAIL SHEET
TOTAL										38	120	16	

SHEET NO.

2

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NOTES & CENTERLINE
COORDINATE TABLE

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

NH 1-6(155)375

UPN

10388000

DESIGNED BY
M. JOHNSON

REVIEWED BY
J. SMITH

CHECKED BY
S. VENNEN

APR. 2026
APR. 2026
APR. 2026

MONTANA
Department of Transportation

ROAD PLANS

4/15/2026 8:15 AM

CONTROL DIAGRAM & ABSTRACT

SHEET NO.

3

CONTROL DIAGRAM
& ABSTRACT

CONTROL ABSTRACT

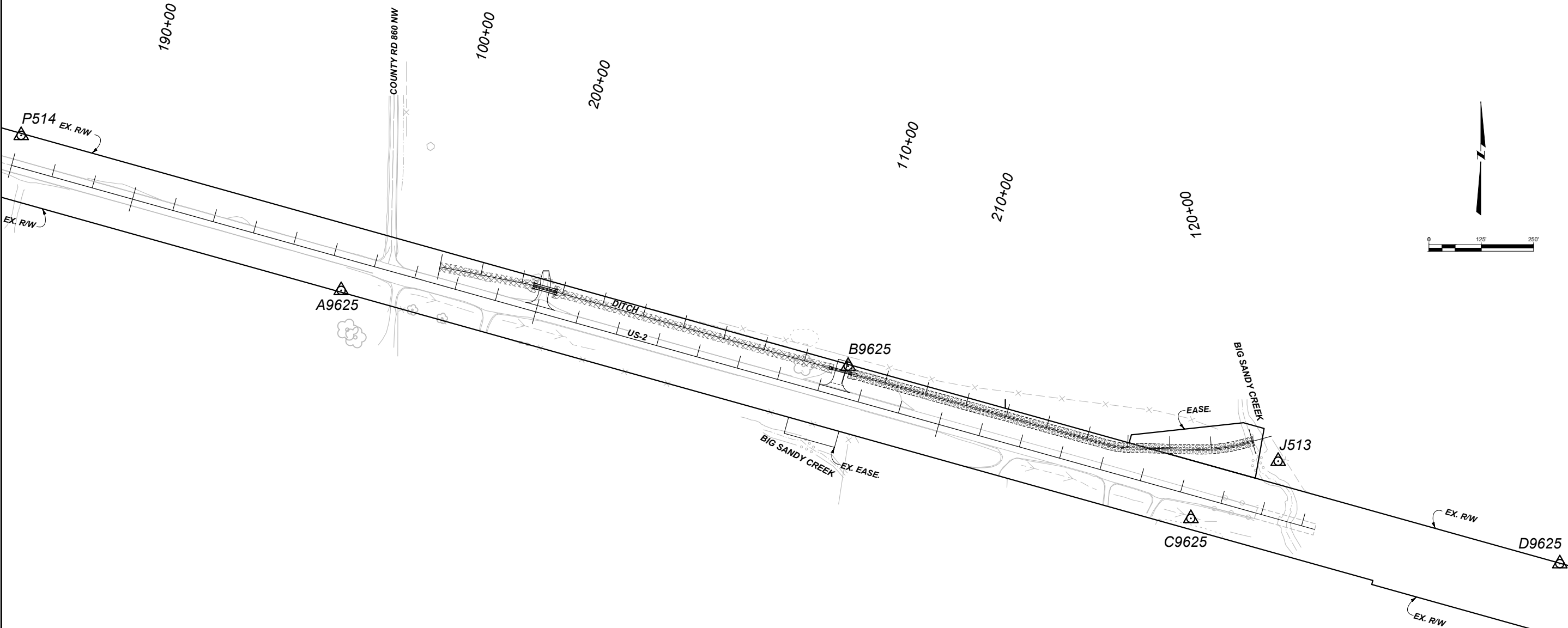
POINT NAME/NUMBER	N OR Y COORDINATE	E OR X COORDINATE	POINT ELEVATION	LOCATION AND DESCRIPTION
A9625	1,570,686.857	1,891,510.814	2,532.95	SET 2" MDT ALUMINUM CAP STAMPED "A9625, 2018" ON A 5/8" X 24" REBAR AT RP 375.94 RIGHT, 76' SOUTH OF PTW US-2, 128.5' WEST OF CENTERLINE OF APPROACH, 1' NORTH OF WITNESS POST.
B9625	1,570,505.810	1,892,722.018	2,512.50	SET 2" MDT ALUMINUM CAP STAMPED "B9625, 2018" ON A 5/8" X 24" REBAR AT RP 376.14 LEFT, 76' NORTH OF PTW US-2, 22' SOUTH OF EAST-WEST FENCE LINE ON NORTH EDGE OF PULLOUT, 1' SOUTH OF WITNESS POST.
C9625	1,570,141.906	1,893,540.840	2,507.70	SET 2" MDT ALUMINUM CAP STAMPED "C9625, 2018" ON A 5/8" X 24" REBAR AT RP 376.31 RIGHT, 54.5' SOUTH OF PTW US-2, 82.5' WEST OF TELEPHONE PEDESTAL, 97' EAST OF CENTERLINE OF APPROACH, 40' SOUTH OF WEST END OF EAST BOUND GUARDRAIL, 1' NORTH OF WITNESS POST.
D9625	1,570,033.714	1,894,422.241	2,540.28	SET 2" MDT ALUMINUM CAP STAMPED "D9625, 2018" ON A 5/8" X 24" REBAR AT RP 376.48 LEFT, 82' NORTH OF PTW US-2, 2' SOUTH OF EAST-WEST FENCE LINE, 121' NW OF "NARROW BRIDGE" SIGN, 1' SOUTH OF WITNESS POST.
J513	1,570,278.553	1,893,749.429	2,507.26	FOR ADDITIONAL INFORMATION SEE NGS DATA SHEET
P514	1,571,057.507	1,890,746.352	2,540.52	FOR ADDITIONAL INFORMATION SEE NGS DATA SHEET

NOTE:
THIS PROJECT IS ON THE MONTANA COORDINATE SYSTEM NAD83-2011.
NORTHING AND EASTING COORDINATES ARE EXPRESSED IN UNITS OF
INTERNATIONAL FEET AND ELEVATIONS ARE IN UNITS OF U.S. SURVEY FEET.

DIMENSIONS SHOWN ON THE PLANS ARE GRID. ALL SURVEY AND STAKING
REQUIRE THE USE OF A COMBINATION SCALE FACTOR (CSF) TO CONVERT GRID
DIMENSIONS TO GROUND DIMENSIONS (GRID DISTANCE / CSF = GROUND
DISTANCE). THE CSF FOR THIS PROJECT IS 0.99964038.

LEVEL DATUM SOURCE

GRID -- MONTANA COORDINATE SYSTEM NAVD 88
NAVD 88 (ELEVATIONS DERIVED FROM DIFFERENTIAL LEVELS HOLDING THE NGS
PUBLISHED ELEVATION AT P514.



PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

NH 1-6(155)375

UPN

10388000

DESIGNED BY
E. ULMER

APR. 2026

REVIEWED BY
J. SMITH

APR. 2026

CHECKED BY
S. VENNER

APR. 2026

10388000HYTRVZ01.DWG



ROAD PLANS

12/8/2025 11:27 AM

SUMMARY

GRADING				
STATION	cubic yards			REMARKS
	UNCL. EXC.	EXCESS EXC. #	EMB.+	
100+00.00				BEG. DITCH
	8,615		3,260	INCLUDES +20% TOPSOIL REPLACEMENT
120+03.00				END DITCH
10+15.60				BEG. 200+07 PRIVATE APP.
	20		290	INCLUDES GRADE TO DRAINS
11+02.36				END 200+07 PRIVATE APP.
40+15.70				BEG. 207+39 FARM FIELD APP.
	25		300	INCLUDES GRADE TO DRAINS
40+85.70				END 207+39 FARM FIELD APP.
TOTAL	8,660	# 4,810	# 3,850	

FOR INFORMATION ONLY.
NOTE: DITCH GRADING QUANTITIES INCLUDE EXC. FOR LOW PERMEABILITY BACKFILL AND TOPSOIL UNDER MA

SURFACING										
STATION		linear feet				FOR	AGGREGATE		BIT. MATERIAL	REMARKS
		GROSS	NET	+	-		tons	cubic yards	gallons	
							COMMERCIAL PLANT MIX - MISC.	CRUSHED AGGREGATE COURSE	EMULSIFIED ASPHALT - TACK COAT	
FROM	TO									
10+15.60	11+02.36	86.76	86.76			PRIVATE APP.	29	65	12	STA. 200+07 LT. ON US-2
40+15.70	40+85.70	70.00	70.00			FARM FIELD APP.	9	55	4	STA. 207+39 LT. ON US-2
TOTAL		~	~	~	~		38	120	16	

TOPSOIL & SEEDING								
STATION		cubic yards	acres					REMARKS
			SEED		FERTILIZER		CONDITION SEEDBED #	
FROM	TO	TOPSOIL SALVAGING & PLACING	NO. 1	NO. 2	NO. 1	NO. 2		
100+00.00	119+87.50		925	2.6		2.6		2.6
100+00.00	119+87.50	500		0.9		0.9	0.9	UNDER VCBM & ECB MATS IN LINED DITCH
TOTAL		1,425	2.6	0.9	2.6	0.9	3.5	

FOR INFORMATION ONLY, INCLUDED IN THE COST OF SEED.

MISCELLANEOUS ITEMS				
STATION		each		REMARKS
		REMOVE MISC. ITEMS	REMOVE TREE	
FROM	TO			
10+73	10+83	1		EX. RETAINING WALL RT. ON PRIVATE APP.
10+85			2	SHRUBS LT. & RT. ON PRIVATE APP.
206+51			1	LT. ON US-2
TOTAL		1	3	

FENCING								
STATION		linear feet	each			linear feet		REMARKS
		FARM FENCE	FARM FENCE-PANEL FW	RIGHT OF WAY BREAKS #	DEADMAN	FARM GATE	REMOVE FENCE	
FROM	TO	TYPE F4W *				WIRE-TYPE G2		
US-2								
203+32.8	207+31.0	398	2					LT.
204+40	211+34						694	LT.
207+31.0	207+47.0					16		LT.
207+47.0	211+42.8	396	2					LT.
211+42.8	214+00.0	257		1				LT.
214+00.0	216+69.6	291	1					LT., END AT TOP OF CREEK BANK
216+25	216+46						20	LT., WITHIN EASEMENT ONLY
TOTAL		1,342	5	1	0	2	16	714

* THE LENGTH OF FENCE INCLUDES THE LENGTH OF PANELS.
FOR INFORMATION ONLY.

SHEET NO.

4

SUMMARIES

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

NH 1-6(155)375

UPN

10388000

DESIGNED BY

M. JOHNSON

APR. 2026

REVIEWED BY

J. SMITH

APR. 2026

CHECKED BY

S. VENNER

APR. 2026

10388000HYSUMZ01.DWG



ROAD PLANS

3/12/2026 7:45 AM

SUMMARY

DITCH #						
STATION		cubic yards	square yards		lump sum	REMARKS
		LOW PERMEABILITY BACKFILL Θ	EROSION CONTROL BLANKET *	VEGETATED CONCRETE BLOCK MAT Δ	TEMPORARY SHORING	
			HIGH PERF.			
FROM	TO					
100+00.00	102+36.00	185	560			ECB LINED DITCH, INCL. WIDENING AT APP. PIPES
102+78.00	109+70.00	515	1,560			ECB LINED DITCH, INCL. WIDENING AT APP. PIPES
110+09.50	119+87.50	1,225				VCBM LINED DITCH INCL. WIDENING AT APP. PIPE
110+09.50	120+03.00			2,944		VCBM LINED DITCH INCL. WIDENING AT APP. PIPE
119+39.00	119+87.50		130			RT. SIDE SLOPE ALONG VCBM LINED DITCH
119+39.00	119+87.50		90			LT. SIDE SLOPE ALONG VCBM LINED DITCH
					1	COFFERDAM AT BIG SANDY CREEK
TOTAL		1,925	2,340	2,944	1	

SEE DETAIL SHEETS.
Θ QUANTITIES BASED ON NEAT-LINE DIMENSIONS SHOWN IN THE CROSS SECTIONS & DITCH TYPICAL SECTIONS.
Δ QUANTITIES INCL. TURNDOWNS ON BOTH SIDES OF DITCH. VCBM OVERLAP SEAMS, ANCHOR TRENCHES, U-ANCHORS, AND PERCUSSION ANCHORS ARE INCIDENTAL AND NOT MEASURED FOR PAYMENT.
* QUANTITIES FOR ANCHORS, CHECK SLOTS, AND SPLICES ARE INCIDENTAL AND NOT MEASURED FOR PAYMENT.

VCBM ROLL SCHEDULE *							
STATION	NUMBER OF ROLLS #	ROLL WIDTH # (feet)	ROLL LENGTH # (feet)	ROLL AREA # (square feet)	U-ANCHORS Δ (each)	CROSS PLATE PERCUSSION ANCHORS Δ (each)	REMARKS
110+09.50 TO 110+27.50	2	10' WITH EXTENSIONS Θ	28	560	28		VCBM PERPENDICULAR TO DITCH FLOW
110+27.50 TO 119+39.00	92	10' WITH EXTENSIONS Θ	26	23,920	1,196		VCBM PERPENDICULAR TO DITCH FLOW
119+39.00 TO 120+03.00	2	10' WITH EXTENSIONS Θ	72	1,440		216	VCBM PARALLEL TO DITCH FLOW ON CREEK BANK
	1	8'	72	576			
TOTAL	97	~	198	26,496	1,224	216	

* FOR INFORMATION ONLY.
Δ U-ANCHORS AND CROSS PLATE PERCUSSION ANCHORS INCLUDED IN THE COST OF THE VCBM.
CONTRACTOR TO VERIFY ROLL SIZE AND MATERIAL QUANTITIES PRIOR TO ORDERING.
Θ EXTENSIONS ARE 24" WIDE UNDERLAYMENT WITH 24" WIDE GEOGRID ON EACH ROLL.

APPROACH PIPE									
STATION	linear feet			END SECTIONS		linear feet	SKEW ANGLE	CULVERT IN PL. in x ft	REMARKS
	RCPA		REMOVE PIPE CULVERT			HEIGHT OF COVER			
	CLASS 4								
	36" EQ. DIA.	48" EQ. DIA.		LEFT	RIGHT				
200+07 LT.			29					24 x 29.2 RCP DR.	= 10+78 ON APP.
200+07 LT.			24					12 x 23.8 CMP DR.	= 10+84 ON APP.
200+07 LT.	2 AT 58			FETS	FETS	0.9	4° RT.		NEW DOUBLE 43 3/4" x 26 5/8" RCPA = 10+59 ON APP.
207+39 LT.		56		FETS	FETS	1.0			NEW 58 1/2" x 36" RCPA = 40+60 ON APP.
TOTAL	116	56	53	~	~	~	~	~	

CULVERTS			
STATION	cu. yards	CULVERT IN PL. in x ft	REMARKS
	FILL AND ABANDON PIPE		
206+58	6	24 x 50 RCP DR.	BURIED
TOTAL	6	~	

SIGNING & DELINEATION			
MATERIAL	TOTAL	UNIT	REMARKS
SIGNS-ALUM REFL SHEET XI	5.5	SQ FT	REPLACE W14-3 NO PASSING SIGN AT 212+83 LT., 36" X 48" FLUORESCENT YELLOW
REMOVE SIGN	1	EACH	REMOVE EX. W14-3 NO PASSING SIGN
POLES-TREATED WOOD 4 IN	1	EACH	REPLACE W14-3, 6' OFFSET
DELINEATOR DESIGN A	4	EACH	ALONG NORTH SIDE OF US-2

SHEET NO.

5

SUMMARIES

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

NH 1-6(155)375

UPN

10388000

DESIGNED BY

M. JOHNSON
APR. 2026

REVIEWED BY

J. SMITH
APR. 2026

CHECKED BY

S. VENNER
APR. 2026

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ROAD PLANS

3/12/2026 7:45 AM

HYDRAULIC DATA SUMMARY

HYDRAULIC DATA SUMMARY *												
STATION	STREAM NAME (IF NAMED)	DRAINAGE AREA (mi ²)	SIZE/TYPE STRUCTURE ① ② ⑤	DESIGN FLOOD			BASE FLOOD (1%)		OVERTOPPING FLOOD ③ ④			REMARKS (FLOOD OF RECORD, Qp(max), etc.) ⑥
				MAGNITUDE (cfs)	FREQUENCY (%)	H.W. ELEV. (ft)	MAGNITUDE (cfs)	H.W. ELEV. (ft)	MAGNITUDE (cfs)	APPROX. FREQUENCY (%)	H.W. ELEV. (ft)	
200+07 LT.		0.64	DBL. 36" EQ. DIA. RCPA	35	10	2,511.98	69	2,512.66	44	4	2,512.26	OVERTOPS BASIN DIVIDE LT. AT US-2 STA. 199+72, 101.8' LT. DOES NOT IMPACT US-2 SHOULDER AT 2,516.57 FT.
207+39 LT.		0.64	48" EQ. DIA. RCPA	35	10	2,508.78	69	2,510.23	74	<1	2,510.47	OVERTOPS BASIN DIVIDE LT. AT US-2 STA. 207+39, 85.7' LT. DOES NOT IMPACT US-2 SHOULDER AT 2,512.94 FT.

NOTES:
* H.W. ELEVATIONS SHOWN ARE BASED UPON PEAK FLOW ANALYSIS UNLESS NOTED IN REMARKS COLUMN.
ADDITIONAL GUIDANCE ON THE HYDRAULIC DATA SUMMARY SHEET CAN BE FOUND IN SECTION 11.8.2 OF THE HYDRAULICS MANUAL.

- ① STRUCTURE SIZE OR TYPE AND RELATED HYDRAULIC DATA MAY NOT REFLECT CHANGES MADE DUE TO R/W OR OTHER CONSIDERATIONS (I.E. STOCKPASS ADDED, STRUCTURE SIZE OR TYPE CHANGED, ROAD GRADE CHANGED DURING CONSTRUCTION, ETC.)
- ② BRIDGE TOP LENGTH AND NUMBER OF SPANS OR BASE BID CULVERT SIZE AND SHAPE.
- ③ OVERTOPPING IS DEFINED AS FLOW OVER THE ROAD, FLOW THROUGH A SIGNIFICANT RELIEF STRUCTURE OR FLOW OVER THE BASIN DIVIDE WHICHEVER IS LOWER.
- ④ FOR THOSE CROSSINGS NOTED BY Qp(max) IN THE REMARKS COLUMN, OVERTOPPING DOES NOT OCCUR THROUGH THE Qp(max) EVENT. Qp(max) IS THE 200 YEAR EVENT FOR CULVERTS AND THE 500 YEAR EVENT FOR BRIDGES.
- ⑤ HEAD WATER ELEVATIONS MAY VARY SLIGHTLY DEPENDING UPON THE PIPE OPTION SELECTED.
- ⑥ NOTE ANY CULVERTS THAT WERE SIZED USING THE HEADWATER EXCEPTION PROCEDURE PER SECTION 11.3.1.3.2 OF THE HYDRAULICS MANUAL. (FORMERLY CALLED PM10.)

EXCEEDANCE PROBABILITY

25 YEAR	4% CHANCE
50 YEAR	2% CHANCE
100 YEAR	1% CHANCE
200 YEAR	0.5% CHANCE
500 YEAR	0.2% CHANCE

DESIGNED BY

C. VOERMANS

APR. 2026

REVIEWED BY

S. VENNER

APR. 2026

CHECKED BY

B. BELL

APR. 2026

10388000HYHDSZ01.DWG

11/29/2025 8:32 AM

MONTANA

Department of Transportation

ROAD PLANS

PROJECT NAME

US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

NH 1-6(155)375

UPN

10388000

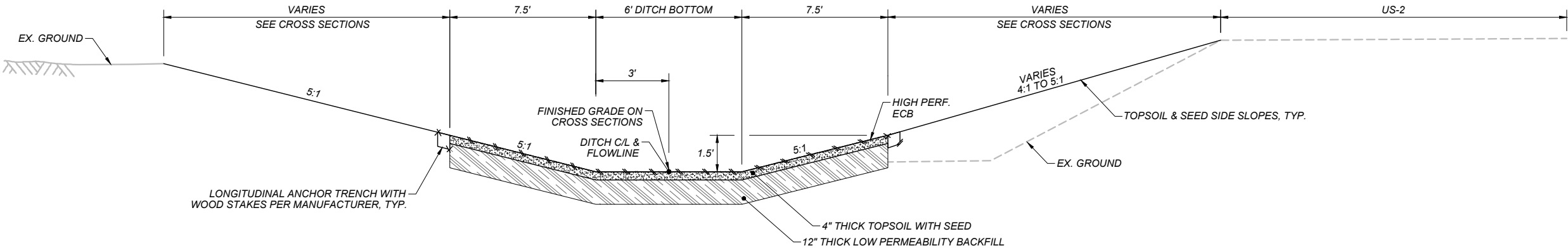
AWARD COPY
DETAIL

SHEET NO.

7

DITCH TYPICAL
SECTIONS

100+00.00 TO 100+50.00 DITCH TYP. NO. 1
(TRANS. ROADSIDE SLOPE FROM EXISTING 4:1 TO 5:1)



DITCH TYP. NO. 1

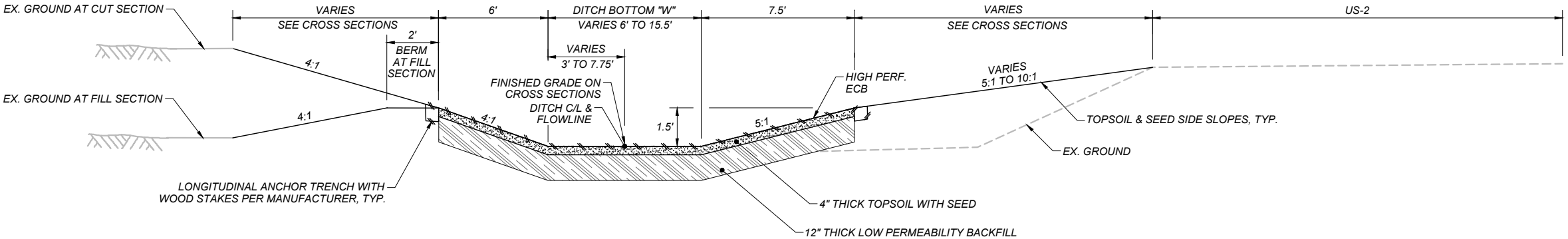
DITCH BOTTOM WIDTH

STATION	"W" (ft)	REMARKS
ECB LINED DITCH		
100+00.00	100+50.00	6
100+50.00	102+10.50	6
102+10.50	102+25.50	6 TO 15.5 TRANS. DITCH WIDTH
102+25.50	102+36.00	15.5
102+36.00	102+78.00	15.5 SEE NEW APP. PIPES
102+78.00	102+87.50	15.5
102+87.50	103+02.50	15.5 TO 6 TRANS. DITCH WIDTH
103+02.50	109+51.50	6
109+51.50	109+59.00	6 TO 8 TRANS. DITCH WIDTH
109+59.00	109+70.00	8
109+70.00	110+09.50	8 SEE NEW APP. PIPE

NOTES:

- STATIONING IS ALONG DITCH CENTERLINE.
- SEE CROSS SECTIONS FOR SLOPES, WIDTHS, AND BERM LOCATIONS.
- TOPSOIL AND SEED ALL DISTURBED AREAS PRIOR TO INSTALLING THE ECB.
- PROVIDE CHECK SLOTS IN ECB AT 25 FOOT INTERVALS. PROVIDE LONGITUDINAL ANCHOR TRENCHES ALONG BOTH EDGES. ANCHOR ECB WITH WOOD STAKES, DO NOT USE METAL STAPLES.
- CONTRACTOR TO VERIFY ECB ROLL SIZES AND MATERIAL QUANTITIES PRIOR TO ORDERING.

100+50.00 TO 102+36.00 DITCH TYP. NO. 2
102+36.00 TO 102+78.00 SEE NEW APP. PIPES
102+78.00 TO 109+70.00 DITCH TYP. NO. 2
109+70.00 TO 110+09.50 SEE NEW APP. PIPE



DITCH TYP. NO. 2

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY
HILL COUNTY

PROJECT ID
NH 1-6(155)375

UPN
10388000

DESIGNED BY
M. JOHNSON

REVIEWED BY
J. SMITH

CHECKED BY
S. VENNEN

10388000HYTPZ01.DWG

MONTANA
Department of Transportation

ROAD PLANS

4/15/2026 1:54 PM

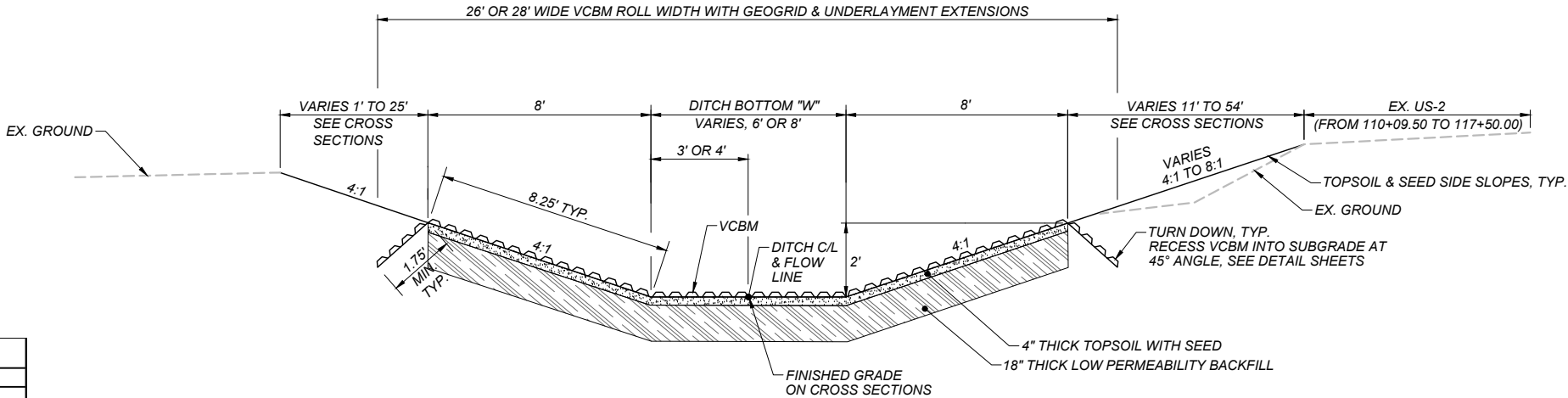
AWARD COPY
DETAIL

110+09.50 TO 119+39.00 DITCH TYP. NO. 3
PLACE VCBM PERPENDICULAR TO DITCH FLOW

SHEET NO.

8

DITCH TYPICAL
SECTIONS



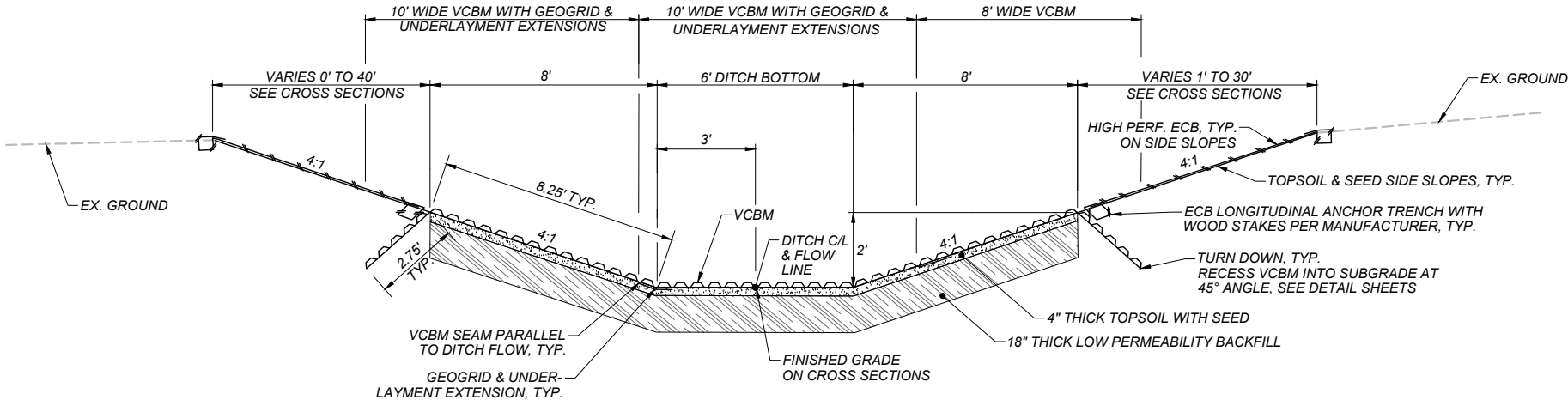
DITCH TYP. NO. 3

DITCH BOTTOM WIDTH			
STATION		"W" (ft)	REMARKS
VCBM LINED DITCH			
110+09.50	110+27.50	8	TRANS. DITCH WIDTH
110+27.50	120+03.00	6	

NOTES:

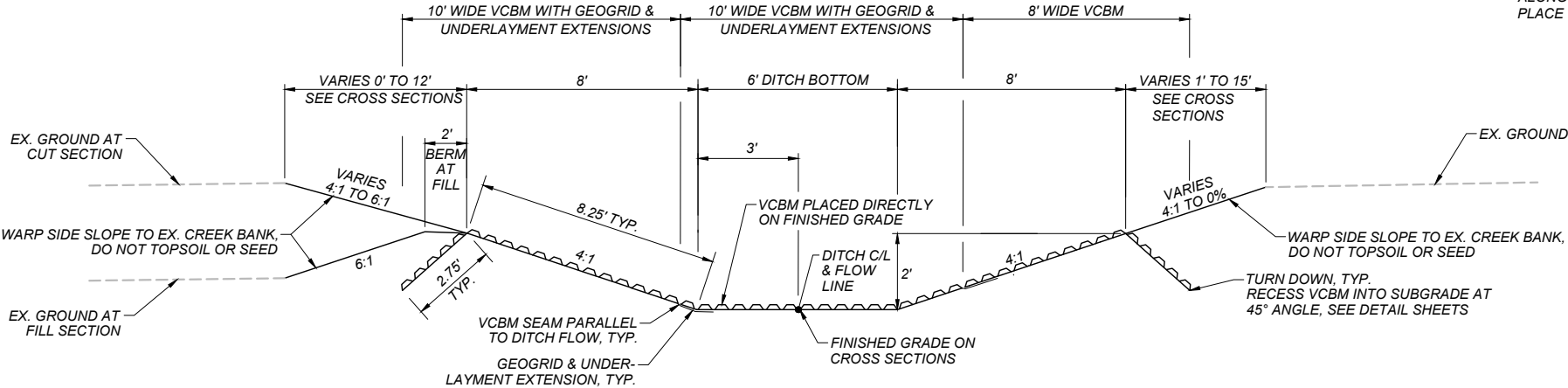
- STATIONING IS ALONG DITCH CENTERLINE.
- SEE CROSS SECTIONS FOR SLOPES, WIDTHS, AND BERM LOCATIONS.
- DO NOT TOPSOIL OR SEED BELOW THE ORDINARY HIGH WATER MARK (OHWM) AT STA. 119+87.50 TO 120+03.00, SEE TYP. NO. 5.
- SEE DETAIL SHEETS FOR ADDITIONAL VCBM REQUIREMENTS.
- CONTRACTOR TO VERIFY ECB & VCBM ROLL SIZES AND MATERIAL QUANTITIES PRIOR TO ORDERING.
- PROVIDE CHECK SLOTS IN ECB AT 25 FOOT INTERVALS. PROVIDE LONGITUDINAL ANCHOR TRENCHES ALONG BOTH EDGES. ANCHOR ECB WITH WOOD STAKES, DO NOT USE METAL STAPLES.

119+39.00 TO 119+87.50 DITCH TYP. NO. 4
ALONG EX. CREEK BANK ABOVE ORDINARY HIGH WATER MARK,
PLACE VCBM PARALLEL TO DITCH FLOW



DITCH TYP. NO. 4

119+87.50 TO 120+03.00 DITCH TYP. NO. 5
ALONG EX. CREEK BANK BELOW ORDINARY HIGH WATER MARK,
PLACE VCBM PARALLEL TO DITCH FLOW



DITCH TYP. NO. 5

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

NH 1-6(155)375

UPN

10388000

DESIGNED BY
M. JOHNSON

REVIEWED BY
J. SMITH

CHECKED BY
S. VENNER

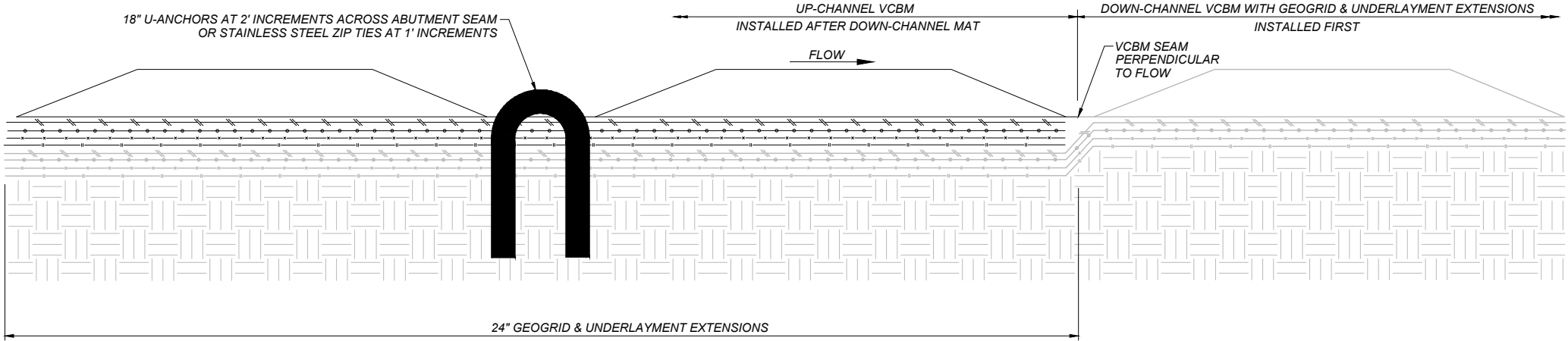
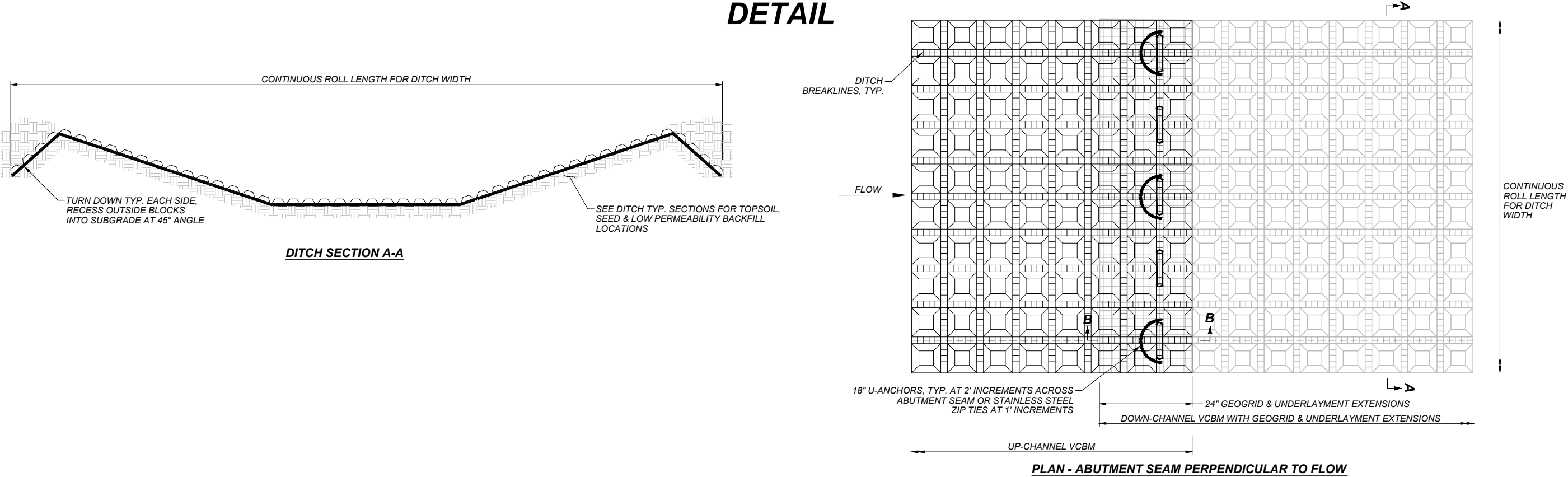
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MONTANA
Department of Transportation

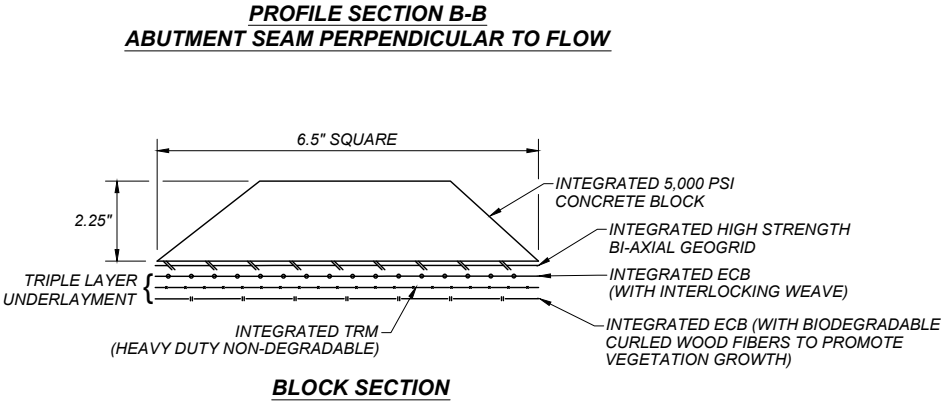
ROAD PLANS

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AWARD COPY
DETAIL

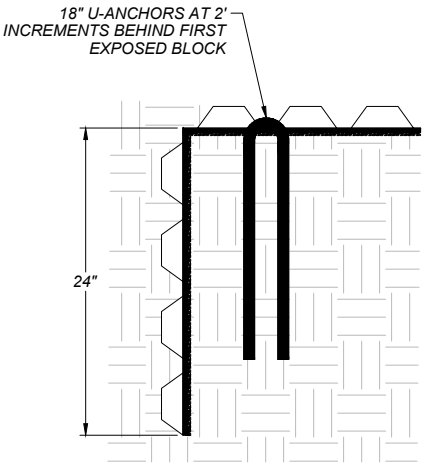


- NOTES:
1. PROVIDE A MANUFACTURER'S REPRESENTATIVE TO BE ONSITE FOR THE INSTALLATION.
 2. PREPARE SUBGRADE SURFACES SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, PROTRUSIONS, AND DEBRIS.
 3. PRIOR TO VCBM INSTALLATION, SEED AND FERTILIZE TOPSOIL WITH SITE SPECIFIC SEED MIX. SEE DITCH TYPICAL SECTIONS FOR LOCATIONS.
 4. INSTALL VCBM ROLLS THAT INCLUDE A GEOGRID EXTENSION AND UNDERLAYMENT EXTENSION.
 5. FOR OUTSIDE LONGITUDINAL EDGES OF THE DITCH, EMBED EDGE OF VCBM IN A MINIMUM 18" LONG, 45 DEGREE SECTION RECESSED INTO THE SUBGRADE.
 6. INSTALL MATS IN A CONTINUOUS SECTION ACROSS THE DITCH, INCLUDING AREAS PAST CREST OF SIDE SLOPES.
 7. BEGIN INSTALLATION AT THE DOWN FLOW END AND MOVE UP THE DITCH. INSTALL UP FLOW MATS OVER THE GEOGRID AND UNDERLAYMENT EXTENSIONS OF DOWN FLOW MATS. ENSURE EXTENSIONS ARE LAYING FLAT ON SUBGRADE AND UNDER ADJACENT MAT.
 8. INSTALL 18" U-ANCHORS IN 2' INCREMENTS BEHIND ANCHOR TRENCH AND ACROSS MAT ABUTMENT SEAMS. INSTALL U ANCHORS PERPENDICULAR TO FLOW DIRECTLY BEHIND FIRST BLOCK OF THE UP FLOW MAT. AN ALTERNATIVE TO THE 18" U-ANCHORS IS TO INSTALL 20" STAINLESS STEEL ZIP TIES IN 1' INCREMENTS ACROSS MAT ABUTMENT SEAM. INSTALL ZIP TIE PERPENDICULAR TO FLOW AND ENCOMPASS A MINIMUM OF THREE CORDS FROM EACH MAT.
 9. AT THE INITIAL LEADING EDGE OF THE DITCH, EMBED THE MAT 24" IN A VERTICAL ANCHOR TRENCH. AT THE ENDING EDGE OF THE DITCH, EMBED THE MAT 24" IN A VERTICAL ANCHOR TRENCH. FILL AND COMPACT ALL TRENCHES WITH SUITABLE BACKFILL.
 10. SEE SCHEDULE FOR ESTIMATED ROLL DIMENSIONS. CONTRACTOR TO VERIFY ROLL SIZES AND MATERIAL QUANTITIES PRIOR TO ORDERING.
 11. U-ANCHORS ARE #3 REBAR BENT IN U-SHAPE WITH 18" LONG LEGS.



**VCBM LINED DITCH
PERPENDICULAR TO FLOW**

STA. 110+09.50 TO 119+39.00



**LEADING & ENDING EDGE
ANCHOR TRENCH**

STA. 110+09.50 AND 119+39.00

SHEET NO.

9

VCBM LINED DITCH
PERPENDICULAR TO FLOW
DETAIL

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY
HILL COUNTY

PROJECT ID
NH 1-6(155)375

UPN
10388000

DESIGNED BY
M. JOHNSON
APR. 2026

REVIEWED BY
J. SMITH
APR. 2026

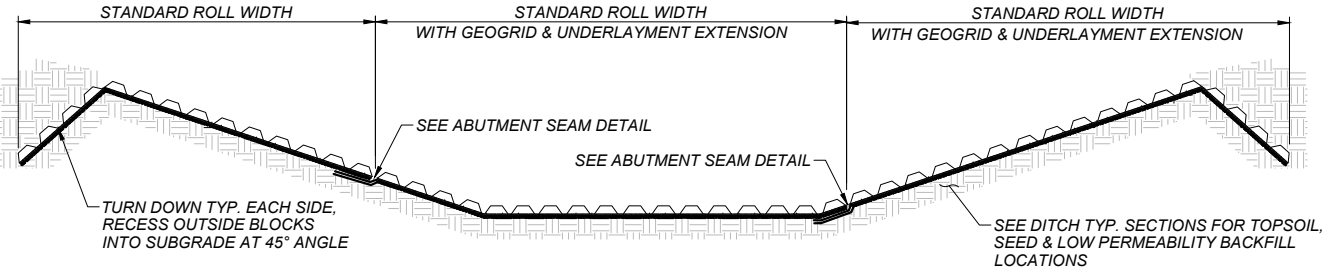
CHECKED BY
S. VENNER
APR. 2026

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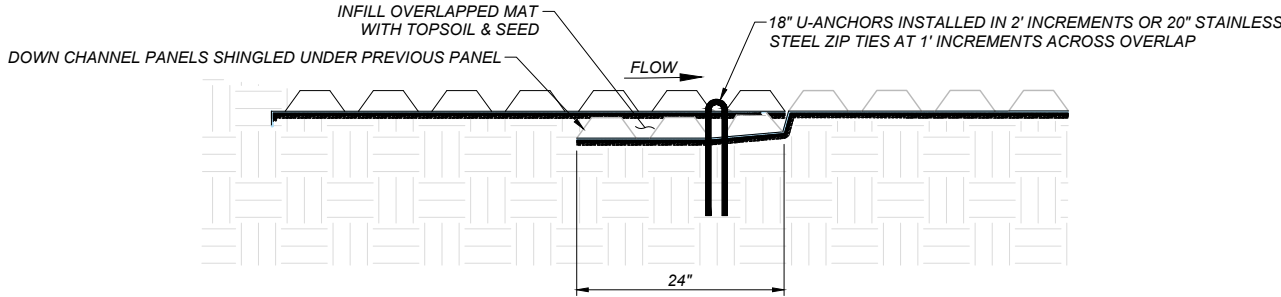


ROAD PLANS

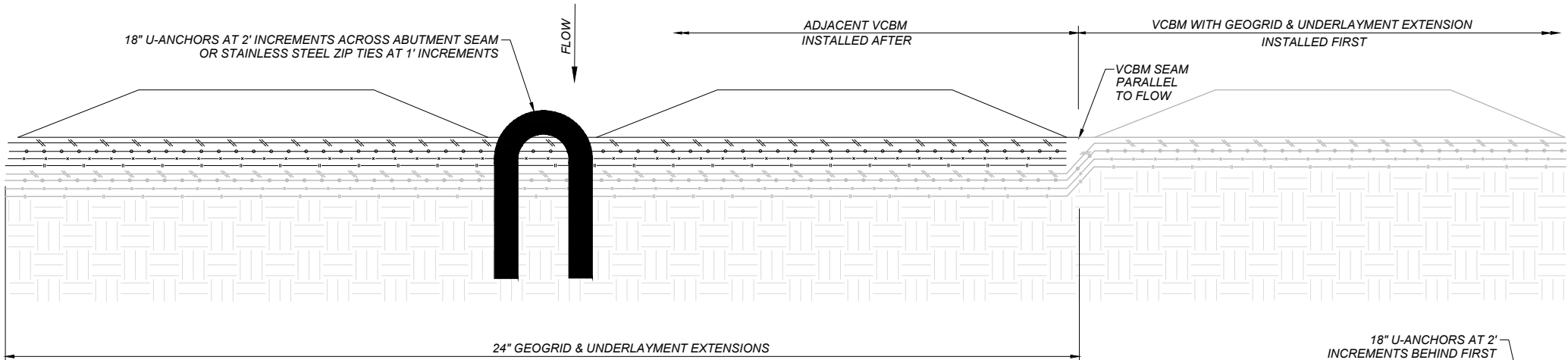
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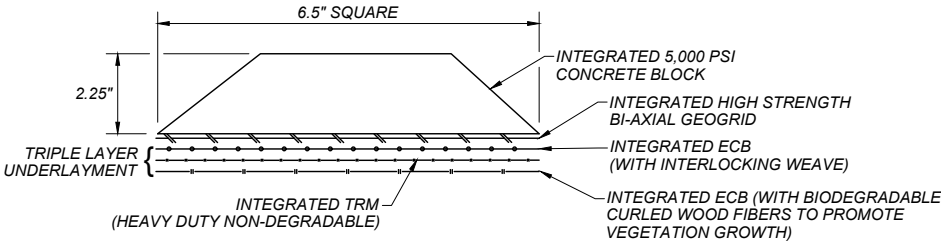
DITCH SECTION A-A



OVERLAP SEAM PERPENDICULAR TO FLOW



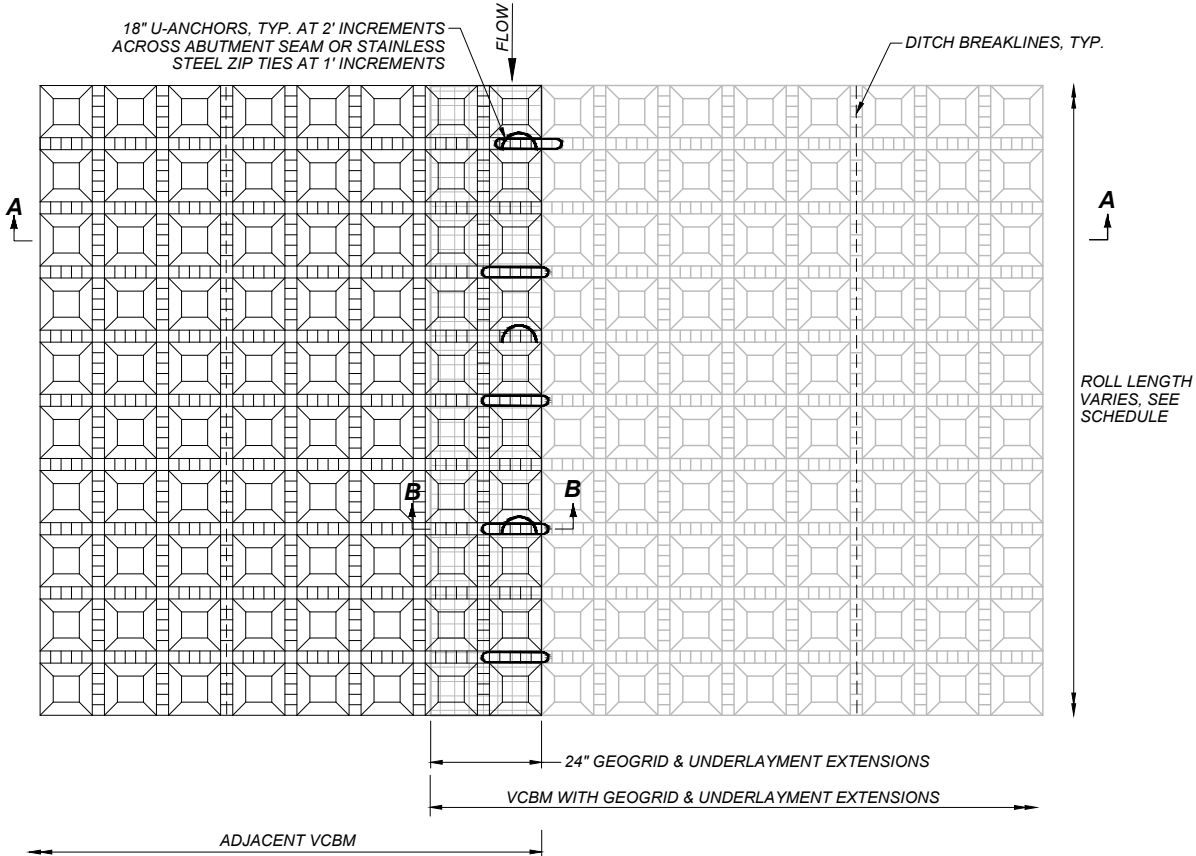
PROFILE SECTION B-B
ABUTMENT SEAM PARALLEL TO FLOW



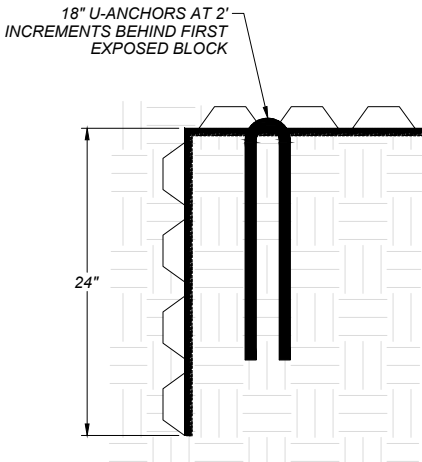
BLOCK SECTION

VCBM LINED DITCH PARALLEL TO FLOW - OPTION

FOR INFORMATION ONLY, STA. 110+09.50 TO 119+39.00



PLAN - ABUTMENT SEAM PARALLEL TO FLOW



LEADING & ENDING EDGE
ANCHOR TRENCH
STA. 110+09.50 AND 119+39.00

- NOTES:
- THIS DETAIL IS FOR INFORMATION ONLY. PROJECT QUANTITIES ARE FOR PERPENDICULAR INSTALLATION FROM 110+09.50 TO 119+39.00. IF CONTRACTOR CHOOSES PARALLEL INSTALLATION, FURNISH AND INSTALL THE ADDITIONAL VCBM QUANTITY REQUIRED AT NO ADDITIONAL COST TO THE DEPARTMENT.
 - PROVIDE FOR A MANUFACTURER'S REPRESENTATIVE TO BE ONSITE FOR THE INSTALLATION.
 - PREPARE SUBGRADE SURFACES SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, PROTRUSIONS, AND DEBRIS.
 - PRIOR TO VCBM INSTALLATION, SEED AND FERTILIZE TOPSOIL WITH SITE SPECIFIC SEED MIX. SEE DITCH TYPICAL SECTIONS FOR LOCATIONS.
 - INSTALL VCBM ROLLS THAT INCLUDE A GEOGRID EXTENSION AND UNDERLAYMENT EXTENSION. THESE SEAMS ARE PARALLEL TO FLOW. INSTALL THE ADJACENT MAT OVER THE EXTENSIONS. ENSURE EXTENSIONS ARE LAYING FLAT ON SUBGRADE PRIOR TO INSTALLING ADJACENT MAT.
 - SECURE THE ABUTMENT PARALLEL WITH FLOW SEAM BY INSTALLING 18" U-ANCHORS IN 2' INCREMENTS OR 20" STAINLESS STEEL ZIP TIES IN 1' INCREMENTS THROUGH THE EXTENSION OVERLAP. INSTALL U-ANCHORS OR ZIP TIES PERPENDICULAR TO FLOW. INSTALL ZIP TIES TO ENCOMPASS A MINIMUM OF THREE CORDS FROM EACH MAT.
 - FOR ADDITIONAL SECTIONS OF MAT, SECURE SEAM PERPENDICULAR TO FLOW BY OVERLAPPING THE DOWNSTREAM SECTION WITH UPSTREAM SECTION OF MAT. PRIOR TO INSTALLING OVERLAP, FLIP UPSTREAM MAT BACK 24". EXCAVATE 2.25" OF SOIL FROM END OF UPSTREAM MAT. LAY DOWNSTREAM SECTION IN THE SHALLOW TRENCH. RETURN AND TAMP SOIL OVER INITIAL EDGE AND SEED. FLIP END OF UPSTREAM MAT OVER THE SOIL COVERED AND SEEDED INITIAL LEADING EDGE OF DOWNSTREAM MAT.
 - SECURE OVERLAPS PERPENDICULAR TO FLOW BY INSTALLING 18" U-ANCHORS IN 2' INCREMENTS OR 20" STAINLESS STEEL ZIP TIES IN 1' INCREMENTS THROUGH THE OVERLAP. INSTALL ZIP TIES TO ENCOMPASS 3 CORDS OF GEOGRID FROM EACH MAT.
 - FOR OUTSIDE LONGITUDINAL EDGES, RECESS A MINIMUM 18" LONG SECTION INTO THE SUBGRADE AT A 45 DEGREE ANGLE.
 - AT THE INITIAL LEADING EDGE OF THE VCBM LINED DITCH, EMBED THE MAT 24" IN A VERTICAL ANCHOR TRENCH. SECURE TRENCH WITH 18" U-ANCHORS INSTALLED BEHIND THE FIRST ROW OF EXPOSED BLOCKS IN 2' INCREMENTS. AT ENDING EDGE OF DITCH, EMBED THE MAT IN A 24" TERMINATION TRENCH. FILL AND COMPACT ALL TRENCHES WITH SUITABLE BACKFILL.
 - U-ANCHORS ARE #3 REBAR BENT IN U-SHAPE WITH 18" LONG LEGS.

SHEET NO.

10

VCBM LINED DITCH
PARALLEL TO FLOW -
OPTION DETAIL

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

NH 1-6(155)375

UPN

10388000

DESIGNED BY
M. JOHNSON
APR. 2026

REVIEWED BY
J. SMITH
APR. 2026

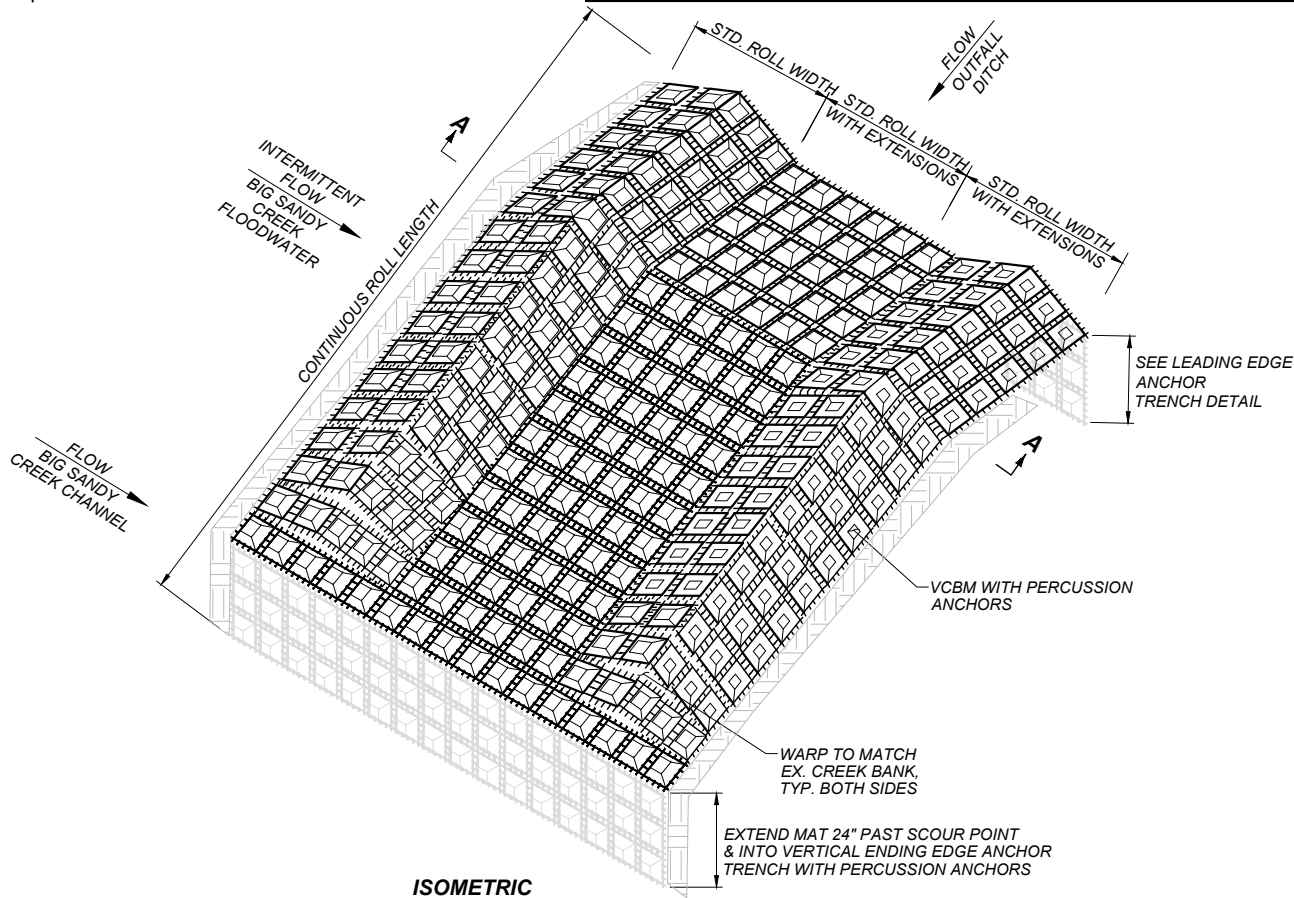
CHECKED BY
S. VENNER
APR. 2026

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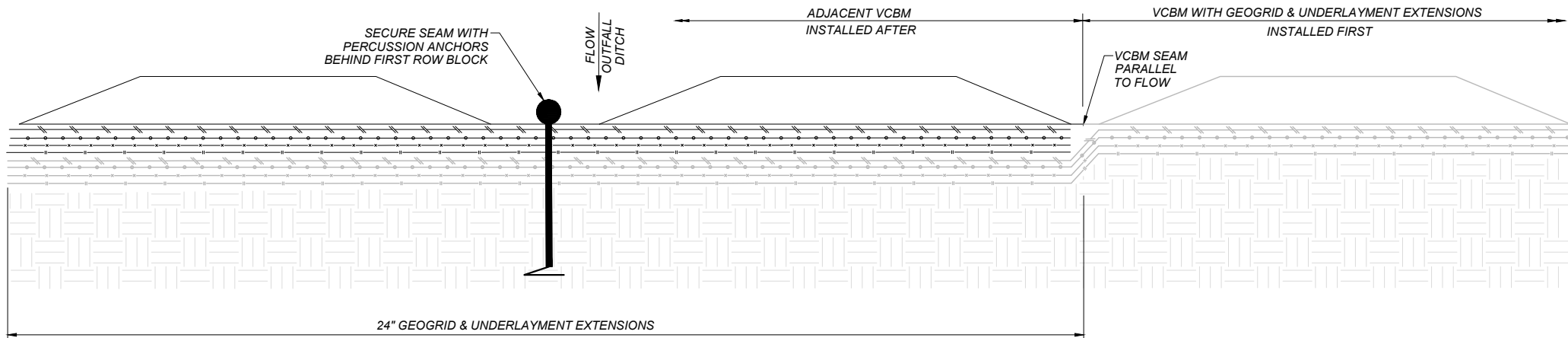
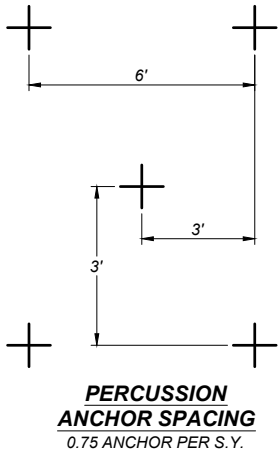
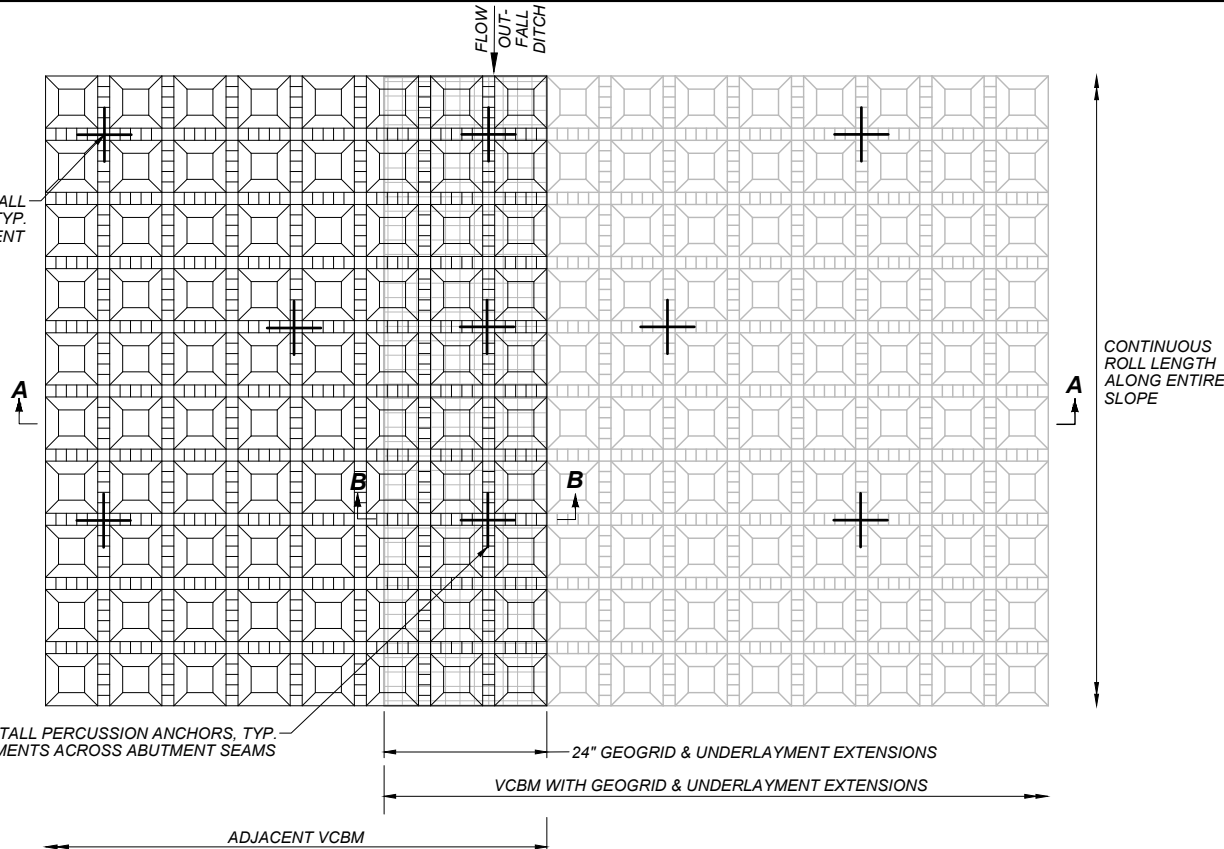
MONTANA
Department of Transportation

ROAD PLANS

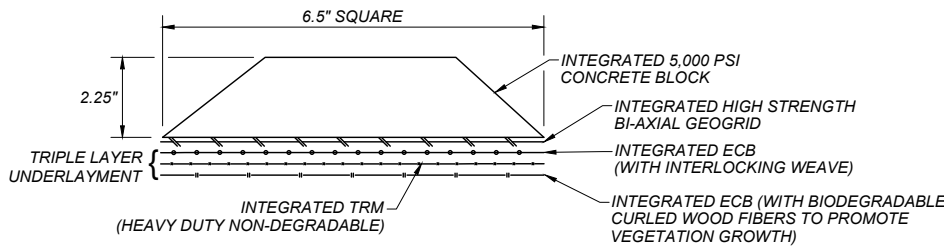
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FURNISH AND INSTALL PERCUSSION ANCHORS, TYP. IN 3' STAGGERED INCREMENT

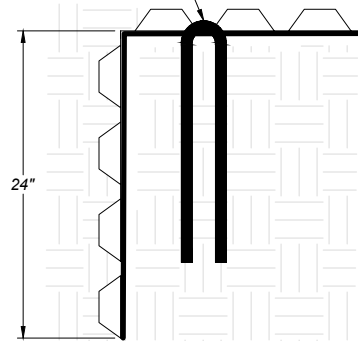


PROFILE SECTION B-B
ABUTMENT SEAM PARALLEL TO FLOW

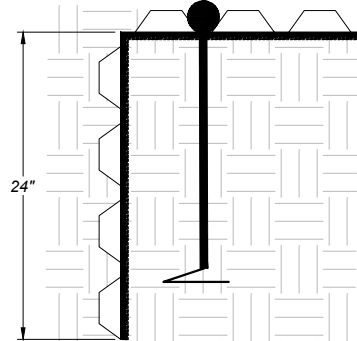


VCBM LINED DITCH ON CREEK BANK PARALLEL TO FLOW
STA. 119+39.00 TO 120+03.00

18" U-ANCHORS AT 2' INCREMENTS BEHIND FIRST EXPOSED BLOCK

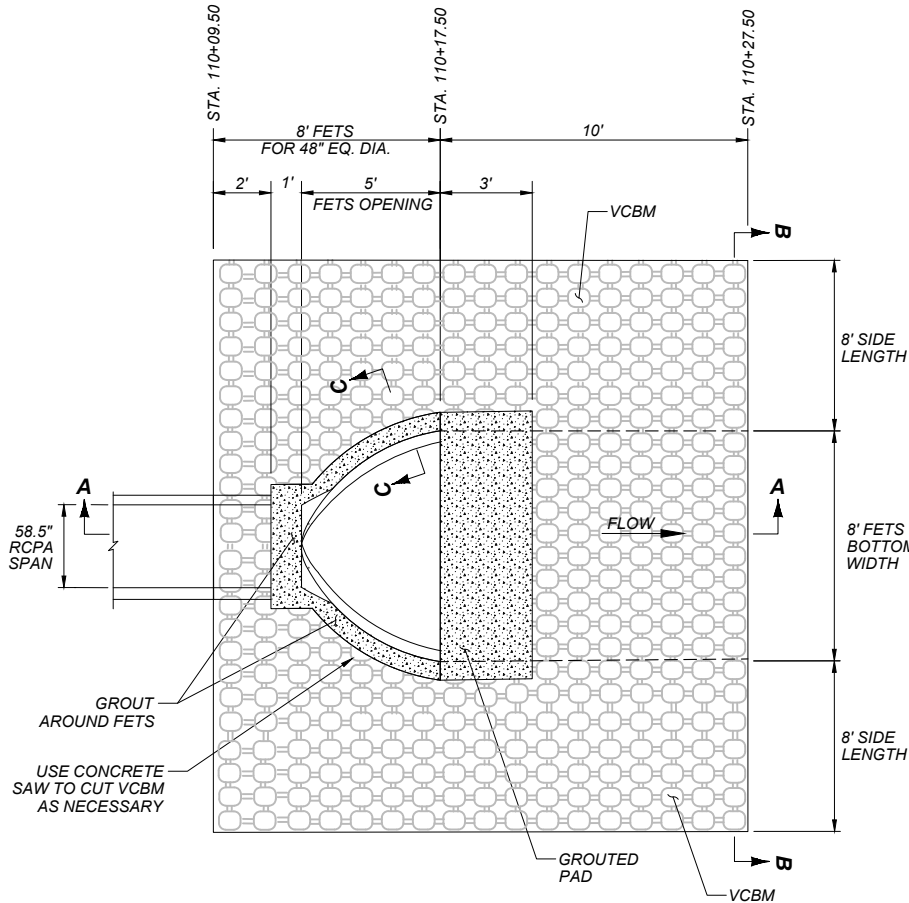


FURNISH AND INSTALL PERCUSSION ANCHORS IN 3' INCREMENTS

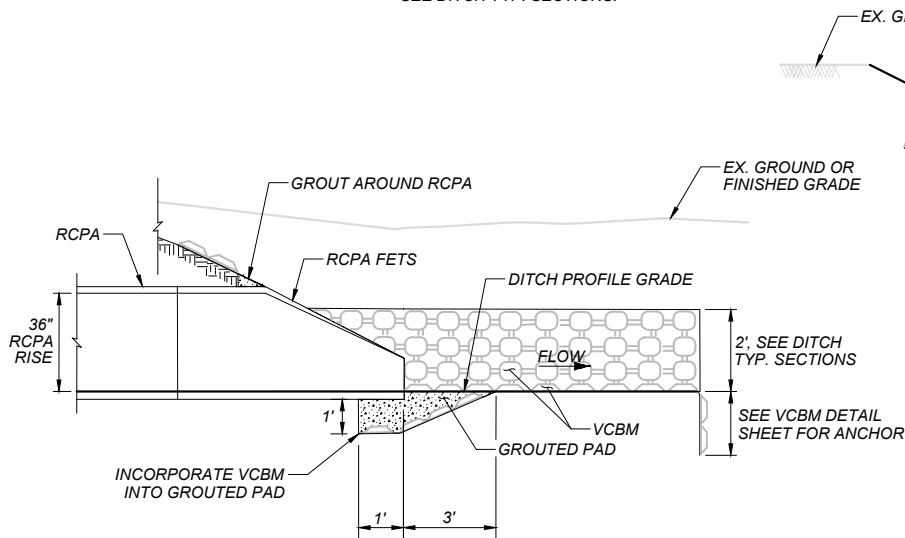


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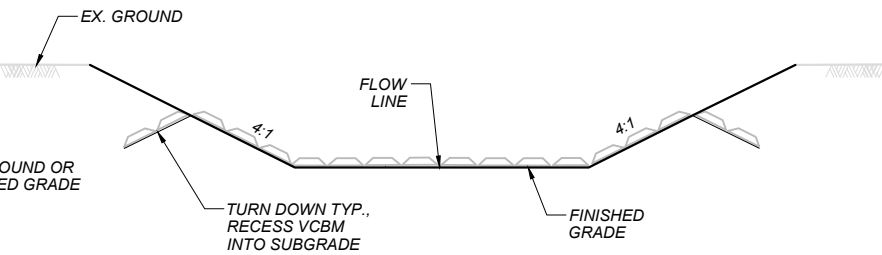
1. PROVIDE FOR A MANUFACTURER'S REPRESENTATIVE TO BE ONSITE FOR THE INSTALLATION.
2. PREPARE SUBGRADE SURFACES SMOOTH AND FREE OF ROCKS, STICKS, ROOTS, PROTRUSIONS, AND DEBRIS.
3. PRIOR TO VCBM INSTALLATION, SEED AND FERTILIZE TOPSOIL WITH SITE SPECIFIC SEED MIX. SEE DITCH TYPICAL SECTIONS FOR LOCATIONS. DO NOT TOPSOIL AND SEED BELOW THE ORDINARY HIGH WATER MARK.
4. INSTALL VCBM ROLLS THAT INCLUDE A GEOGRID EXTENSION AND UNDERLAYMENT EXTENSION. THESE SEAMS ARE PARALLEL TO FLOW. INSTALL THE ADJACENT MAT OVER THE EXTENSIONS. ENSURE EXTENSIONS ARE LAYING FLAT ON SUBGRADE PRIOR TO INSTALLING ADJACENT MAT. SECURE SEAM WITH PERCUSSION ANCHORS ALONG THE SEAM AT THE SPACING SHOWN.
5. INSTALL PERCUSSION ANCHORS THROUGHOUT THE VCBM PER THE ANCHOR SPACING DETAIL. SEE ALSO DETAIL SHEET.
6. FOR OUTSIDE LONGITUDINAL EDGES, RECESS A MINIMUM 24" LONG VCBM SECTION INTO THE SUBGRADE AT A 45 DEGREE ANGLE.
7. AT THE INITIAL LEADING EDGE OF THE VCBM LINED DITCH, EMBED THE MAT 24" IN A VERTICAL ANCHOR TRENCH. SECURE TRENCH WITH 18" U-ANCHORS INSTALLED BEHIND THE FIRST ROW OF EXPOSED BLOCKS IN 2' INCREMENTS. AT ENDING EDGE OF THE DITCH, EMBED THE MAT IN A 24" VERTICAL ANCHOR TRENCH PER DETAIL. FILL AND COMPACT ALL TRENCHES WITH SUITABLE BACKFILL.
8. SEE SCHEDULE FOR ESTIMATED ROLL DIMENSIONS. CONTRACTOR TO VERIFY ROLL SIZES AND MATERIAL QUANTITIES PRIOR TO ORDERING.
11. U-ANCHORS ARE #3 REBAR BENT IN U-SHAPE WITH 18" LONG LEGS.



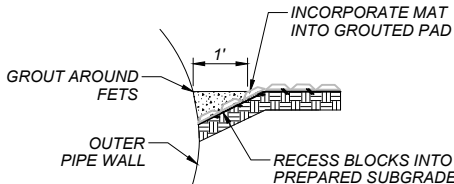
PLAN
VCBM TURN DOWNS & ANCHORS NOT SHOWN FOR CLARITY,
SEE DITCH TYP. SECTIONS.



SECTION A-A
TOPSOIL & LOW PERMEABILITY BACKFILL UNDER VCBM
NOT SHOWN FOR CLARITY, SEE DITCH TYP. SECTIONS.



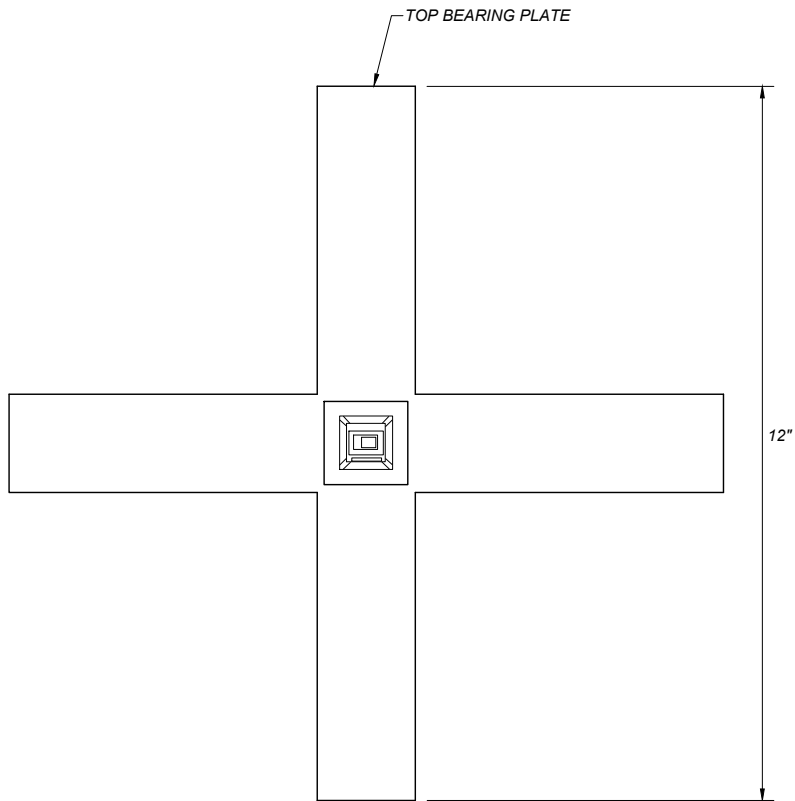
SECTION B-B
TOPSOIL & LOW PERMEABILITY BACKFILL UNDER VCBM
NOT SHOWN FOR CLARITY, SEE DITCH TYP. SECTIONS.



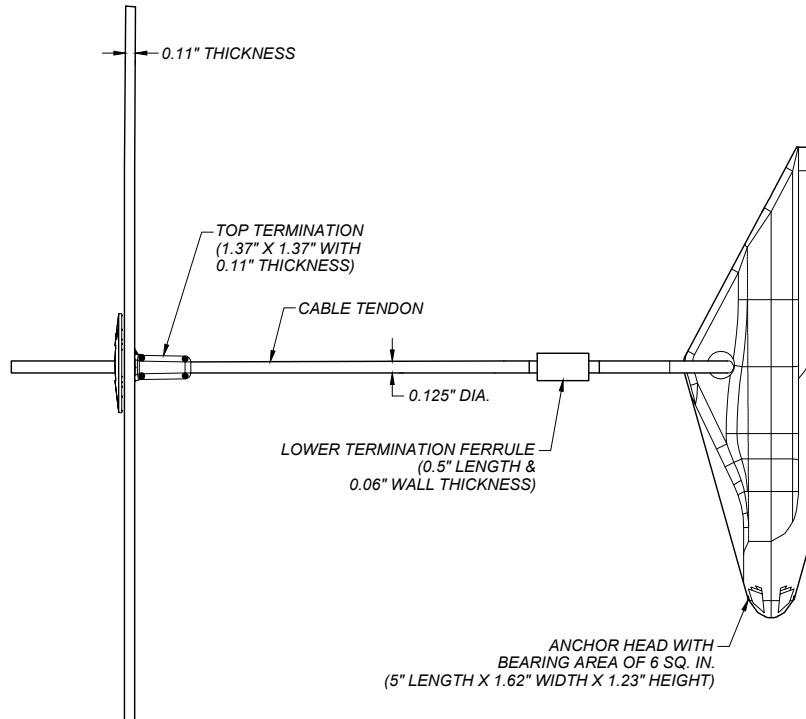
SECTION C-C

- NOTES:
- ALL GROUT IS 4,000 PSI.
 - SEE VCBM DETAIL SHEETS FOR ADDITIONAL REQUIREMENTS AND INSTALLATION DETAILS.
 - SEE DITCH TYPICAL SECTIONS FOR TOPSOIL, LOW PERMEABILITY, AND DITCH WIDTHS.
 - GROUT FOR THE RCPA OUTLET IS INCIDENTAL AND NOT MEASURED FOR PAYMENT, INCLUDE IN THE UNIT BID PRICE PER SQUARE YARD OF VCBM.

VCBM AT RCPA OUTLET
STA. 110+09.50 TO 110+27.50



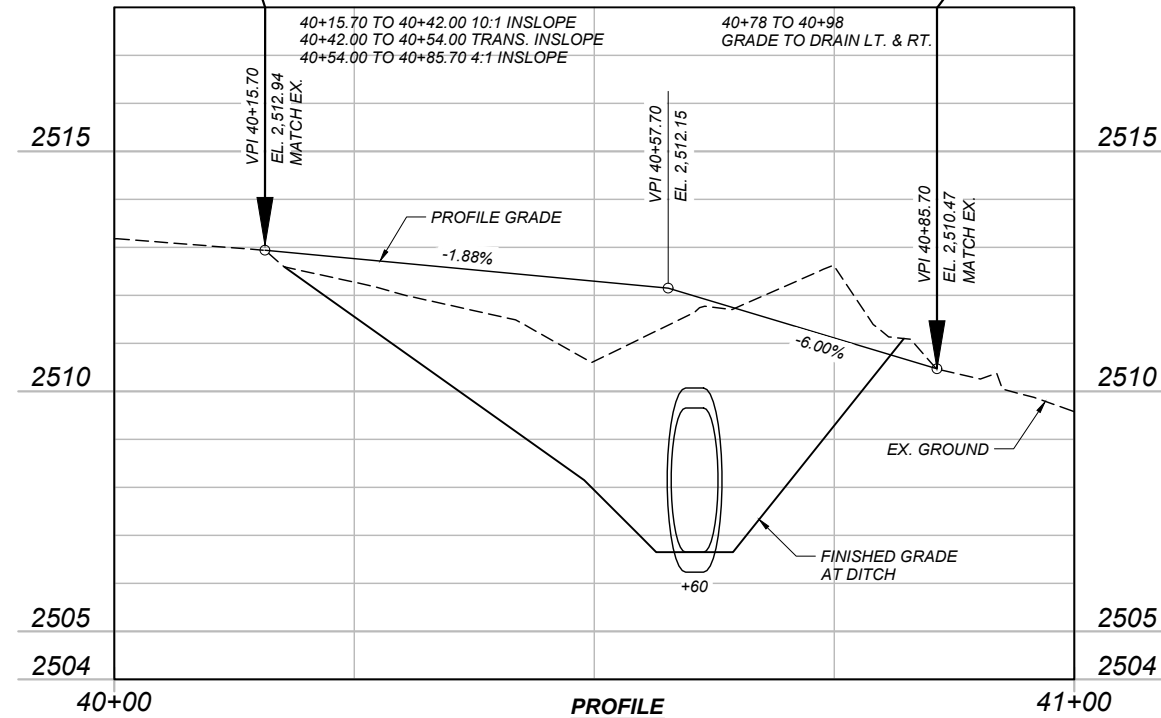
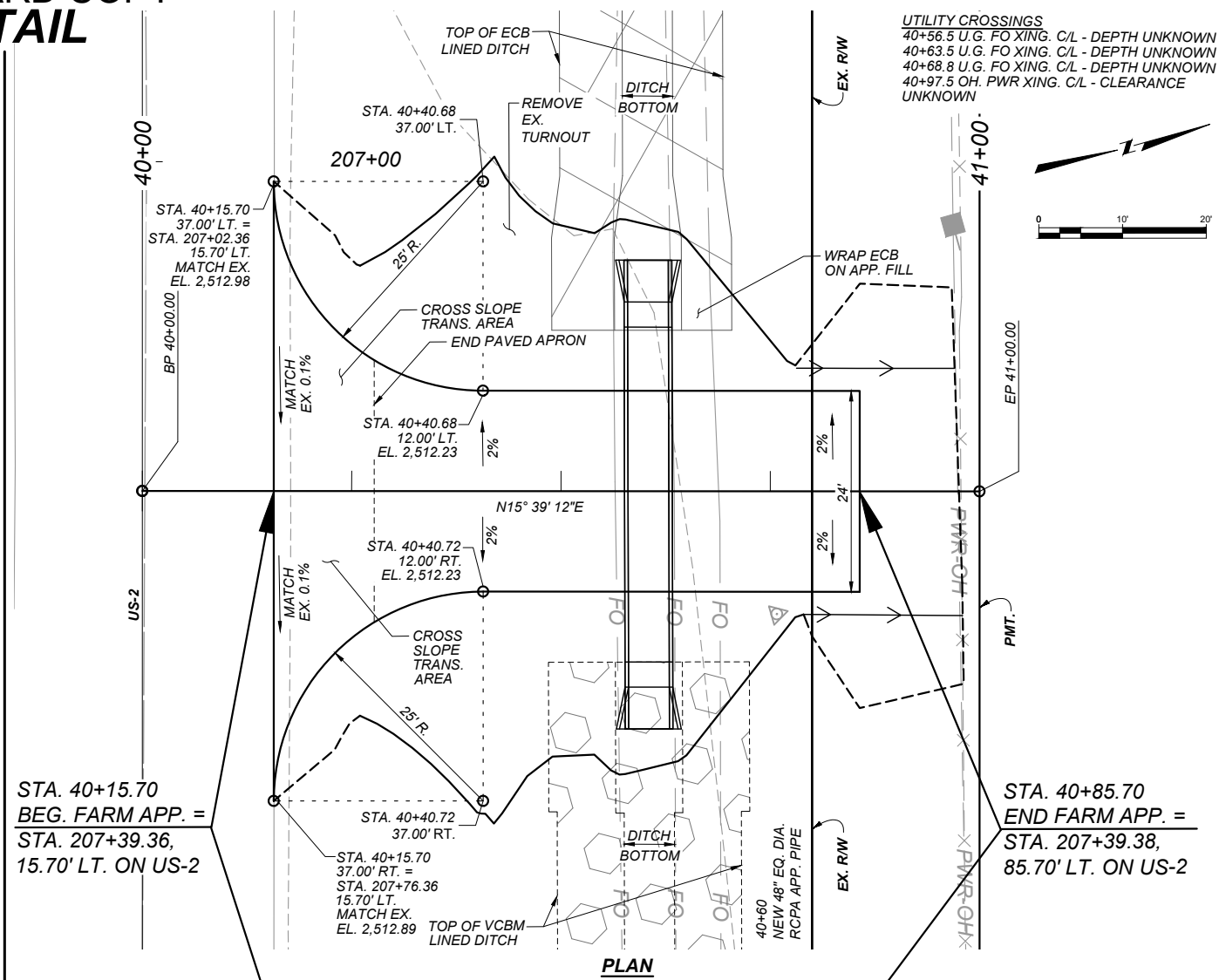
PLAN



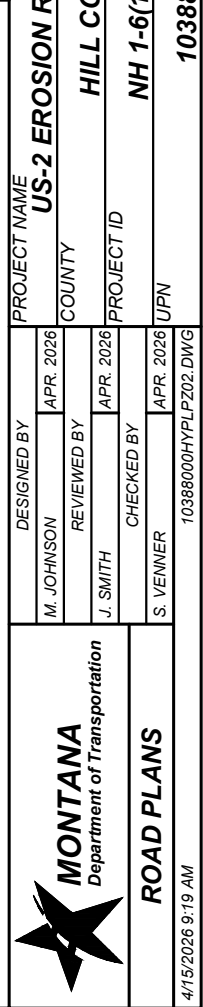
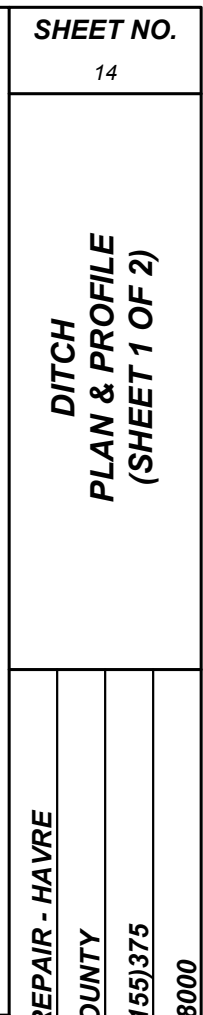
ELEVATION

- NOTES:
- PROVIDE PERCUSSION ANCHORS SPECIFICALLY DESIGNED FOR USE WITH VCBM SYSTEMS RECOMMENDED BY MANUFACTURER AND MADE OF CORROSION RESISTANT MATERIALS THAT ALLOWS FOR RE-TENSIONING WITH AN ULTIMATE ASSEMBLY STRENGTH OF 1,100 LBS AND ULTIMATE CABLE STRENGTH OF 1,800 LBS.
 - SEE VCBM LINED DITCH DETAIL SHEET FOR ANCHOR SPACING.
 - INSTALL ANCHORS PER MANUFACTURER RECOMMENDATIONS.
 - PERCUSSION ANCHORS ARE INCIDENTAL AND NOT MEASURED FOR PAYMENT, INCLUDE IN THE UNIT BID PRICE PER SQUARE YARD OF VCBM.

PERCUSSION ANCHOR
STA. 119+39.00 TO 120+03.00



207+39 FARM FIELD APPROACH





**DITCH
PLAN & PROFILE
(SHEET 2 OF 2)**



HILL COUNTY

NH 1-6(155)375

10388000

DESIGNED BY	M. JOHNSON	APR. 2026
REVIEWED BY	J. SMITH	APR. 2026
CHECKED BY	S. VENNER	APR. 2026
10388000HYPLP202.DWG		



MONTANA
Department of Transportation

ROAD PLANS

4/15/2026 8:19 AM



16

**US-2
PLAN & PROFILE
(SHEET 1 OF 2)**

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

HILL COUNTY

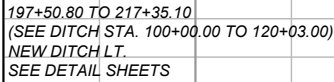
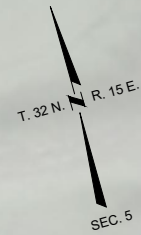
NH 1-6(155)375

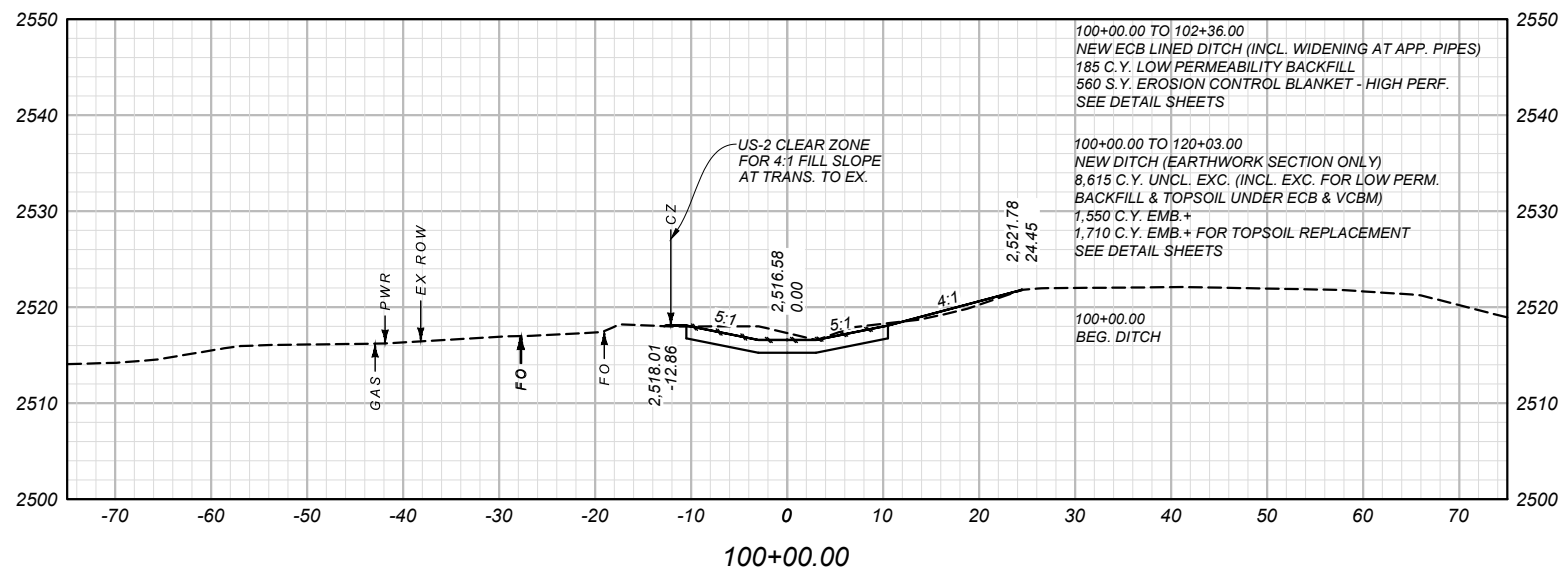
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ROAD PLANS

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1

DITCH CROSS SECTIONS

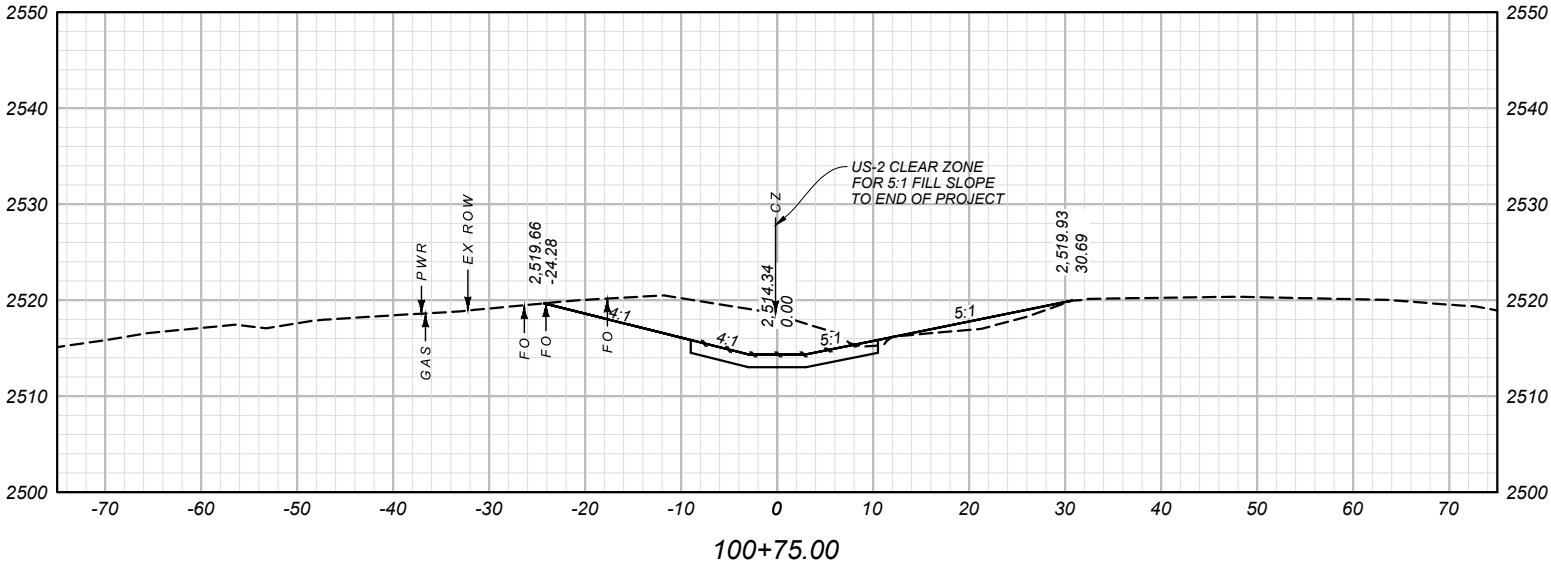
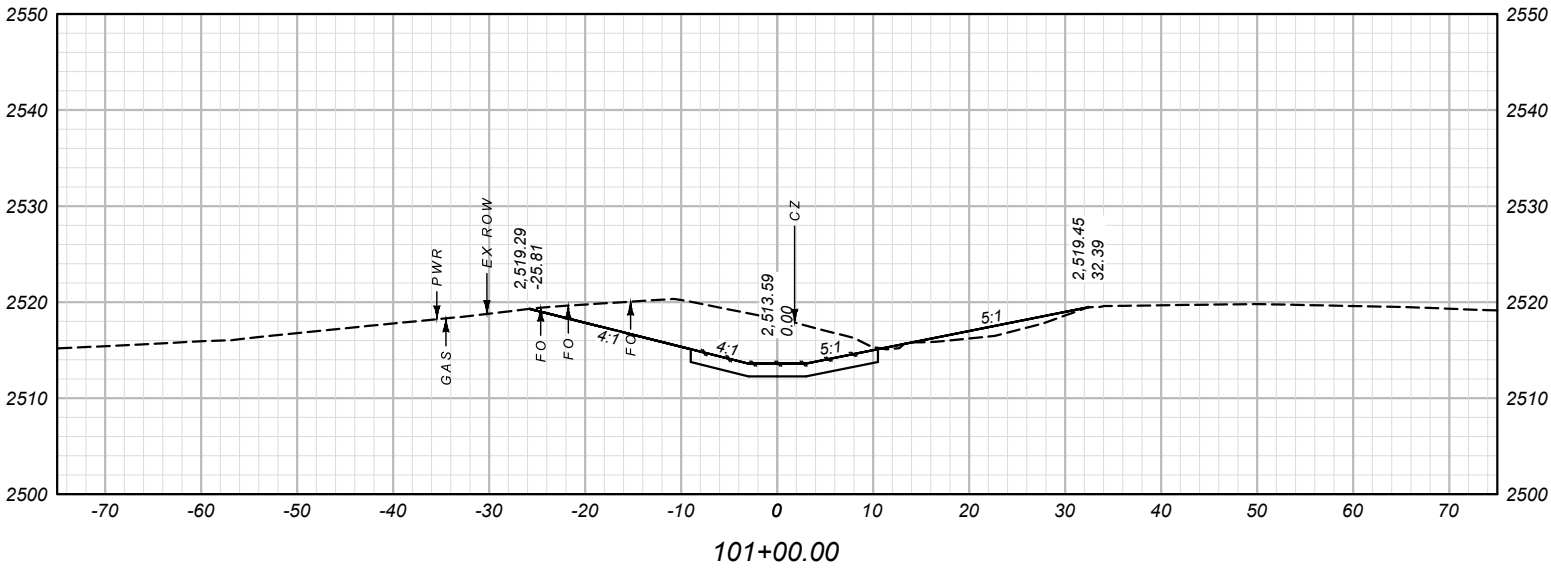
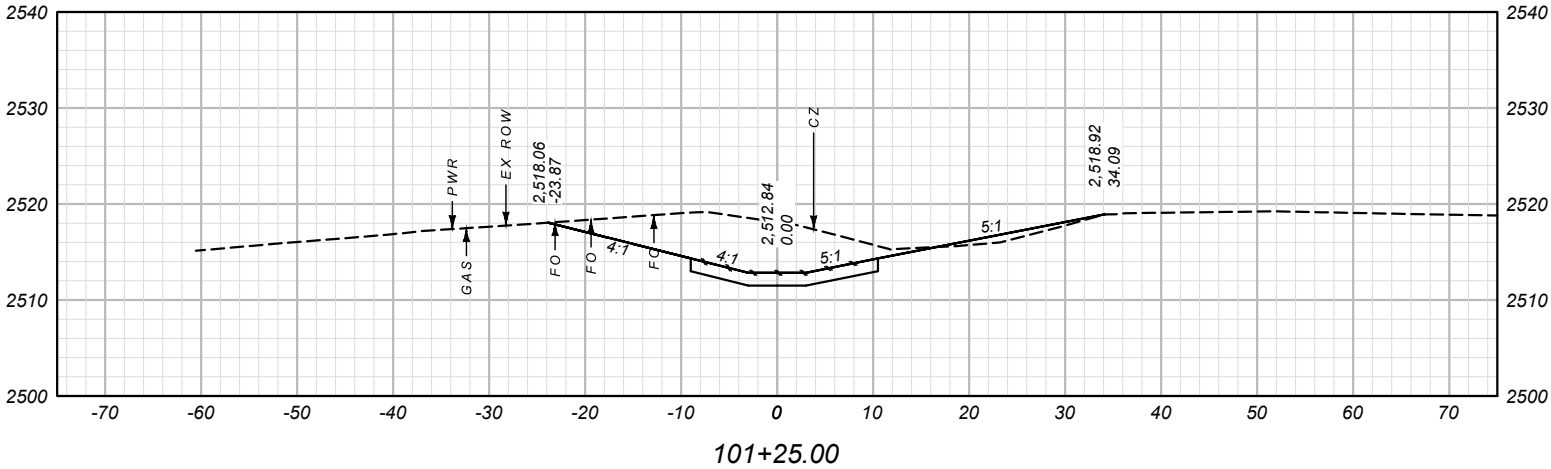
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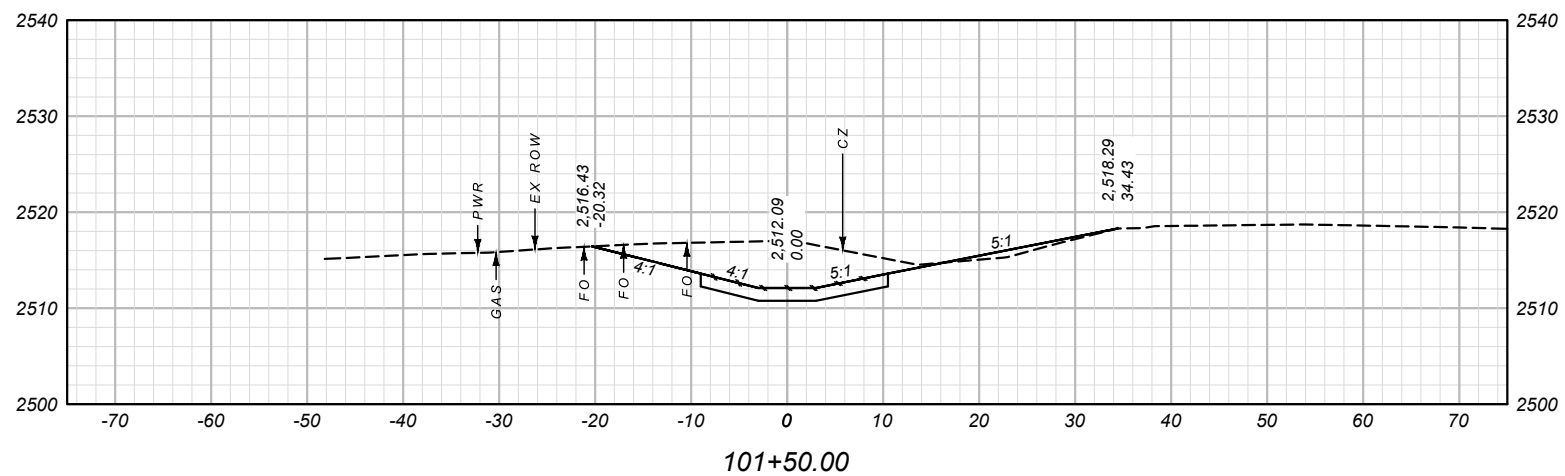
CROSS SECTIONS

/11/2026 11:11 AM

DITCH CROSS SECTIONS



 MONTANA Department of Transportation	DESIGNED BY	PROJECT NAME		
	M. JOHNSON	APR. 2026	US-2 EROSION REPAIR - HAVRE	
	REVIEWED BY		COUNTY	
	J. SMITH	APR. 2026	HILL COUNTY	
CROSS SECTIONS	CHECKED BY	PROJECT ID		
	S. VENNER	APR. 2026	NH 1-6(155)375	
			UPN	
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			10388000	



3

DITCH CROSS SECTIONS

HILL COUNTY

NH 1-6(155)375

10388000

DESIGNED BY

M. JOHNSON	APR 2026
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J. SMITH	APR. 2026
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S VENNEN	APR 2026
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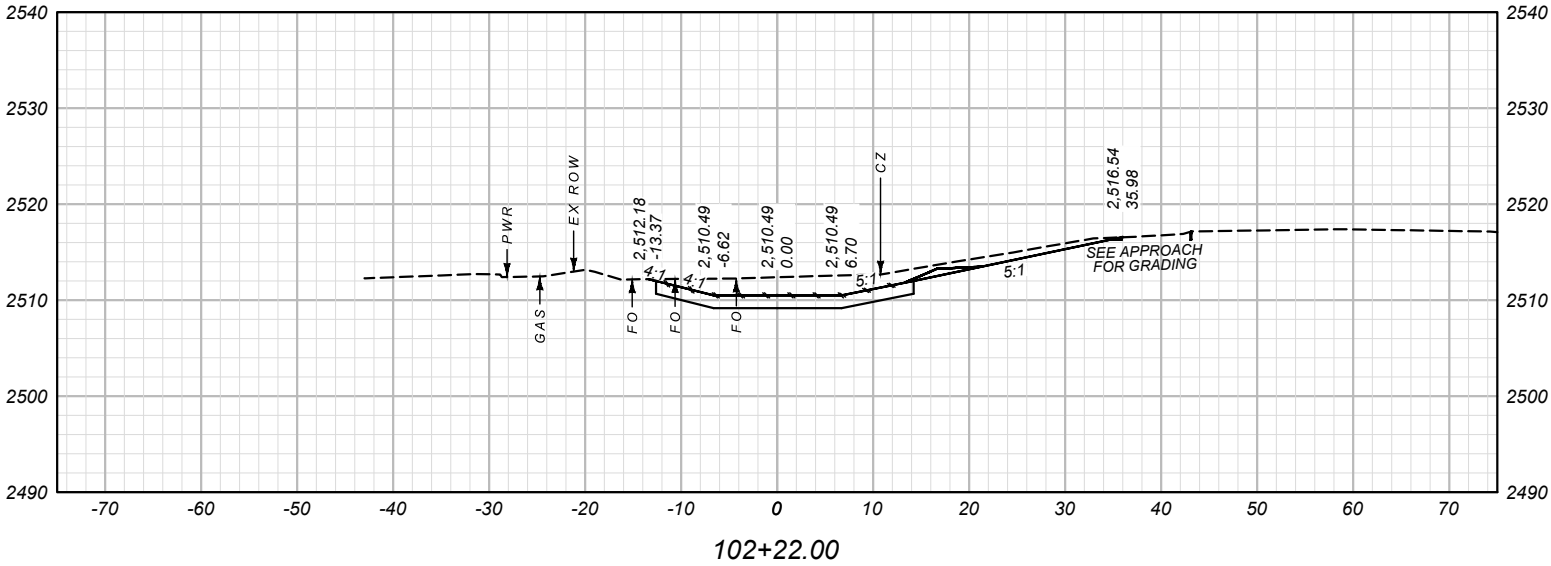
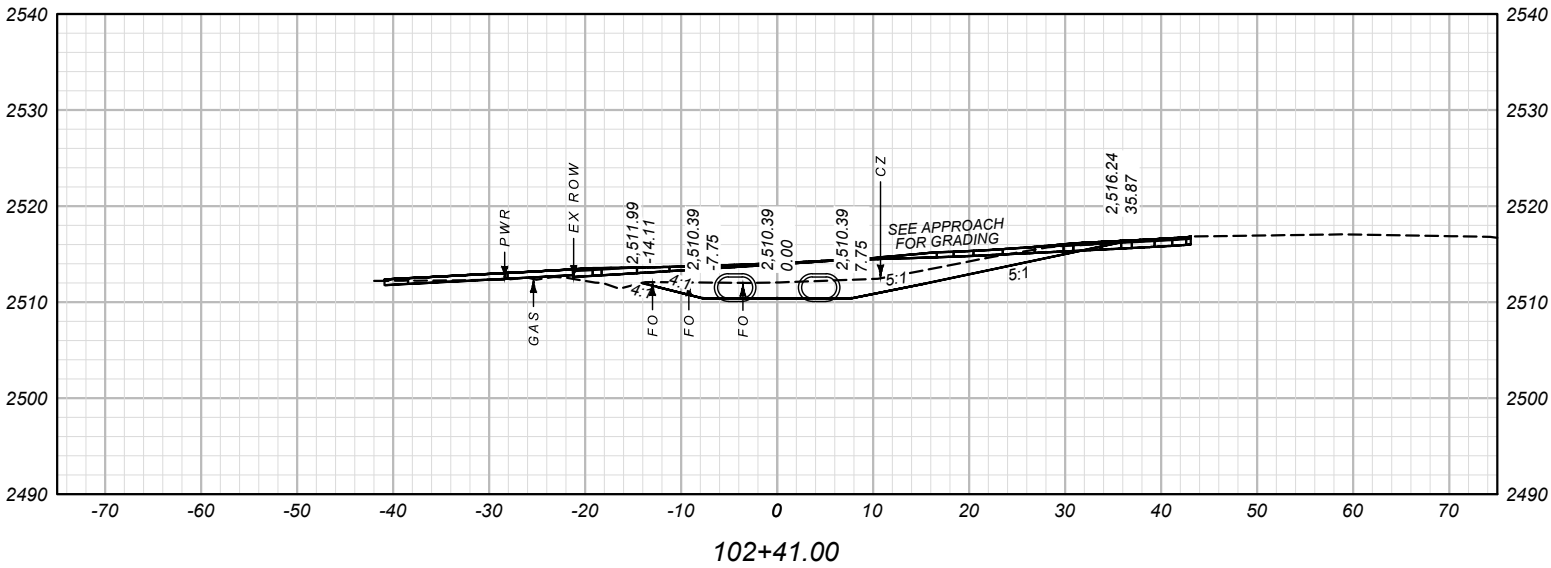
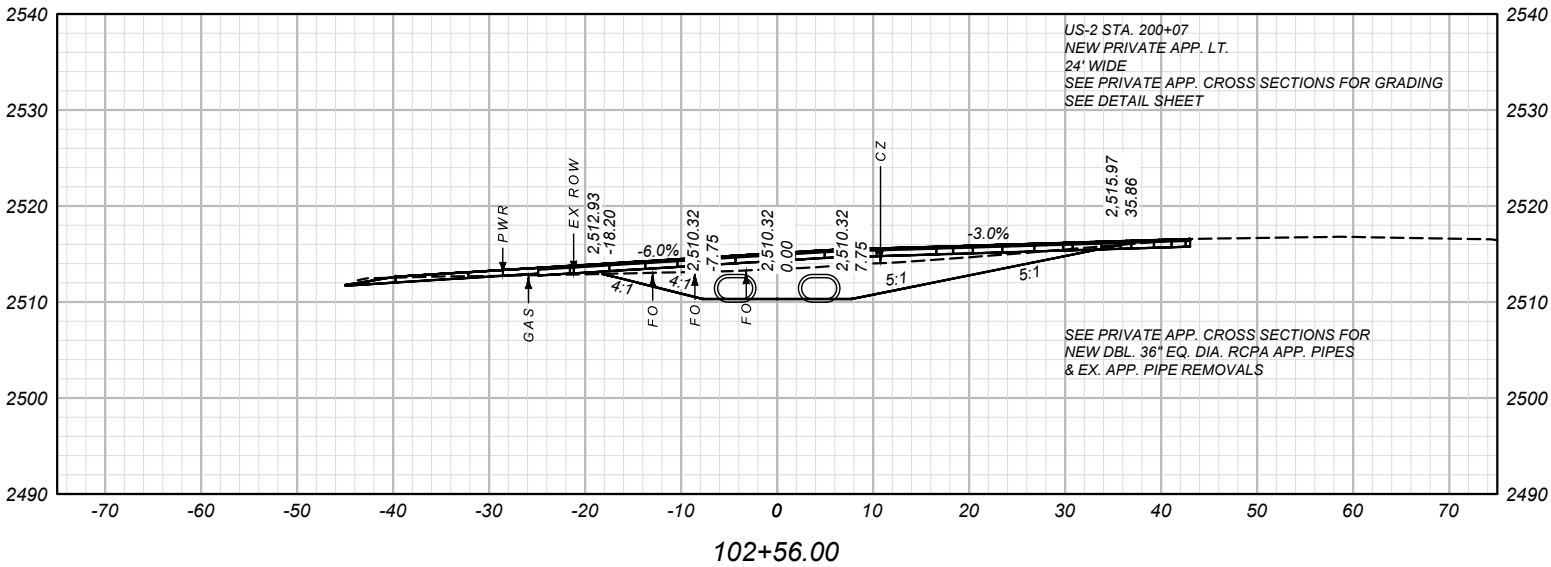


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CROSS SECTIONS

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DITCH CROSS SECTIONS



PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

NH 1-6(155)375

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J. SMITH
APR. 2026

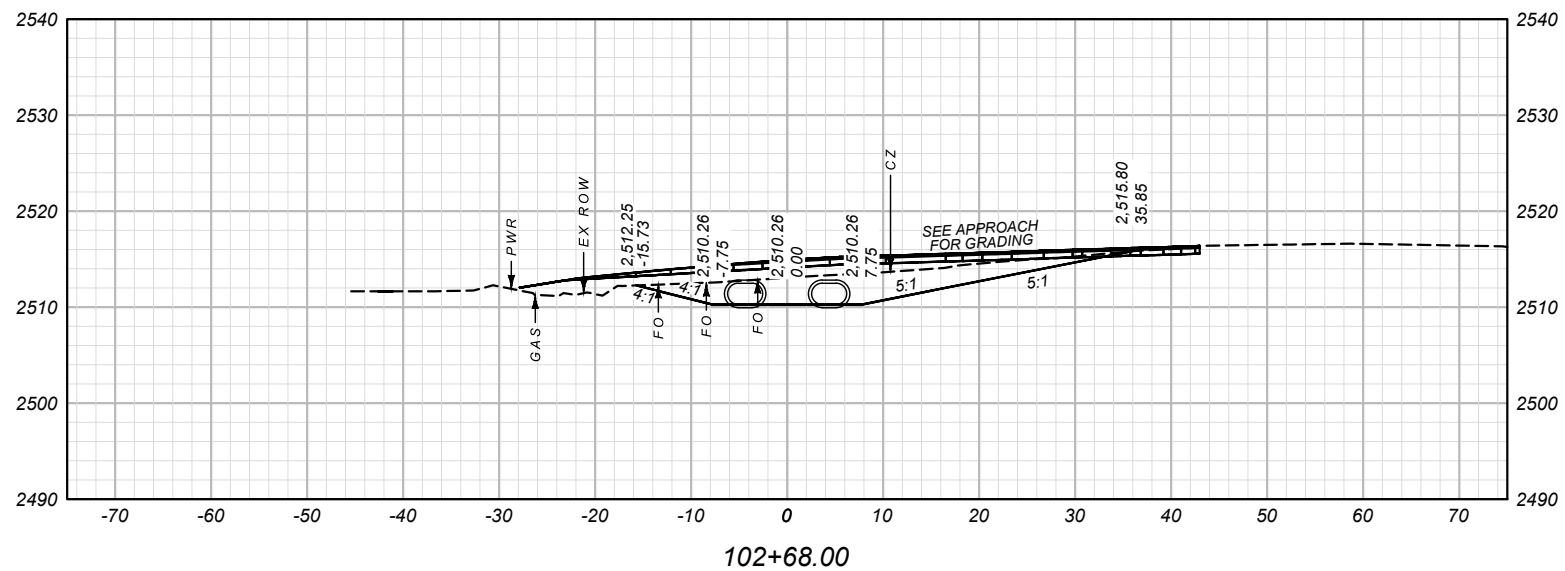
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DITCH CROSS SECTIONS

NH 1-6(155)375

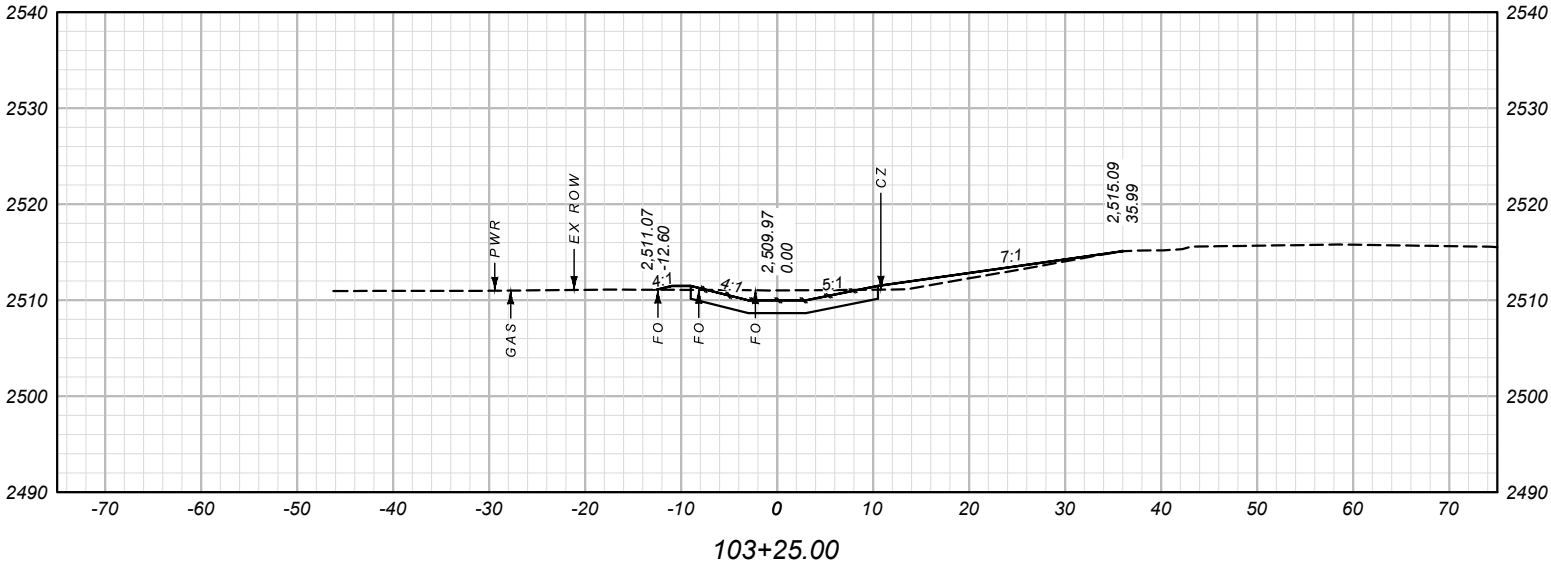
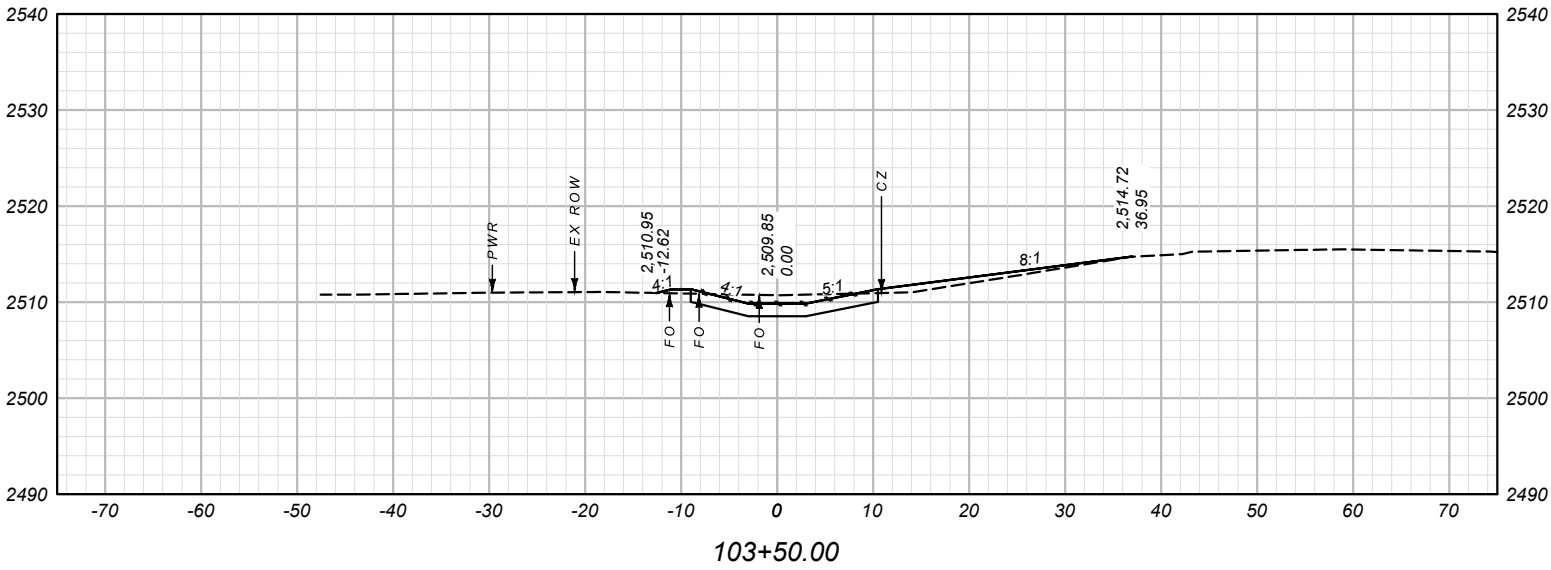
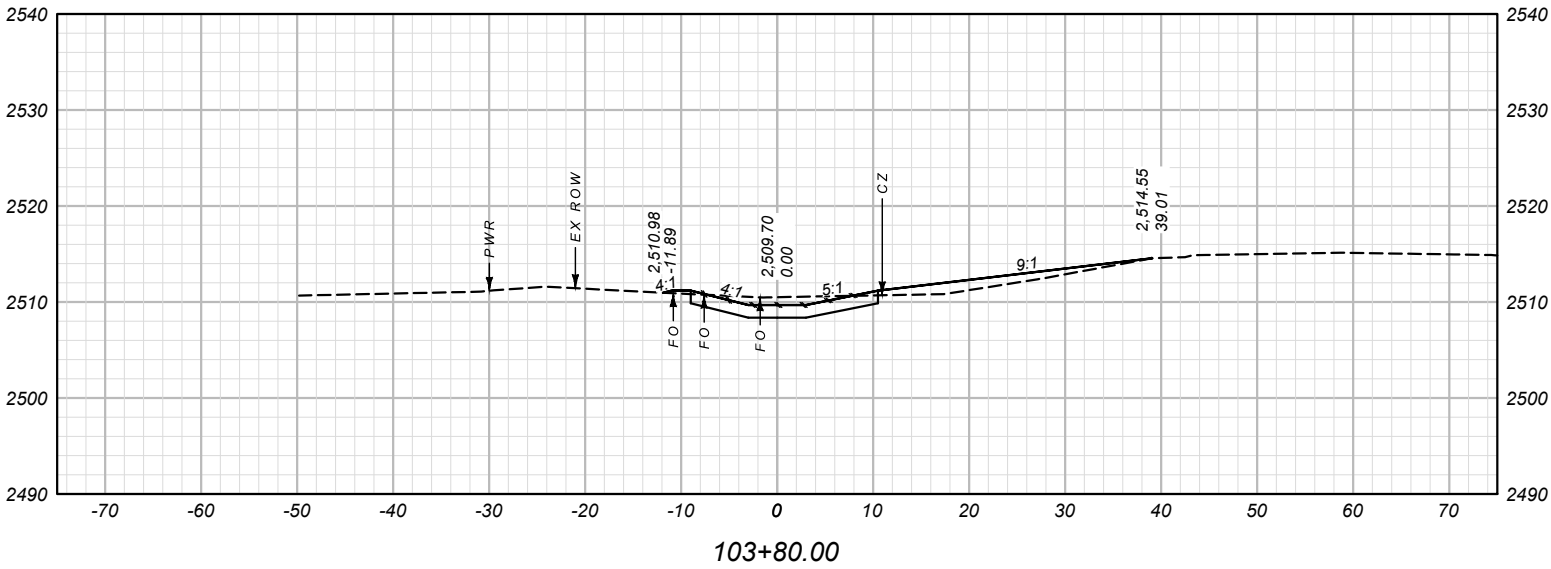
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DITCH CROSS SECTIONS





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PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY
HILL COUNTY

PROJECT ID
NH 1-6(155)375

UPN
10388000

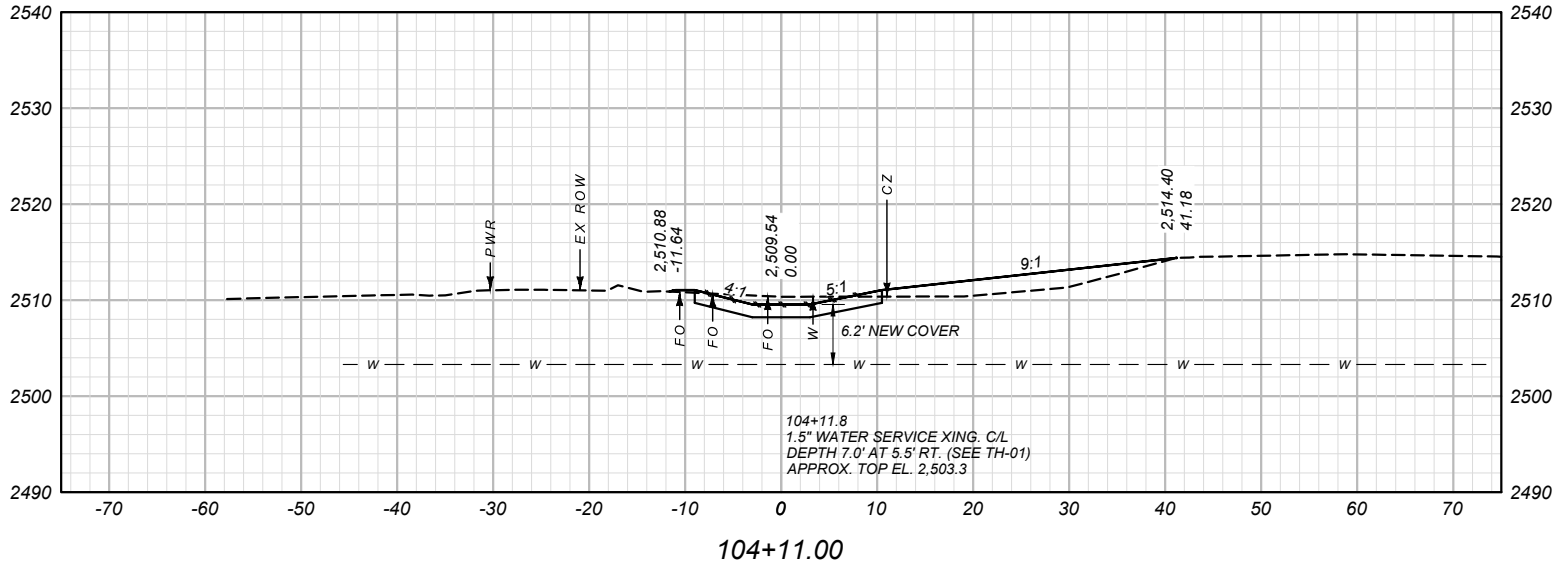
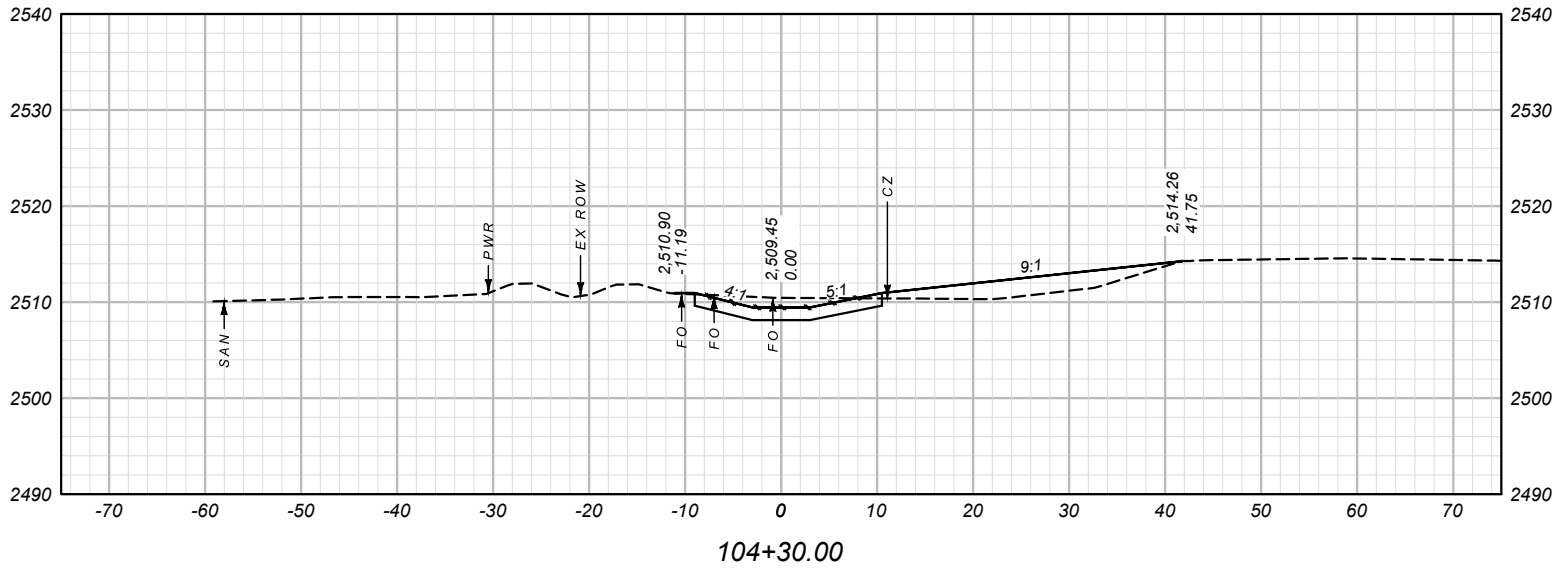
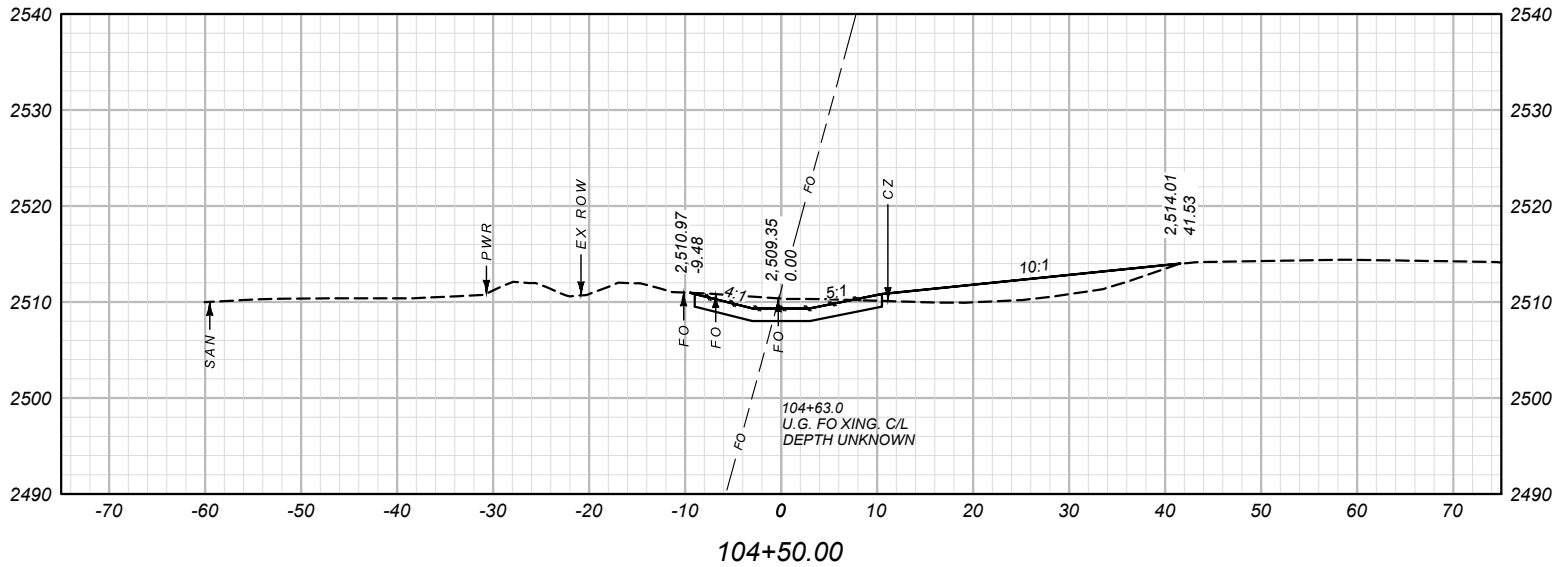
PROJECT NAME


COUNTY

PROJECT ID

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DITCH CROSS SECTIONS





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PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY
HILL COUNTY

PROJECT ID
NH 1-6(155)375

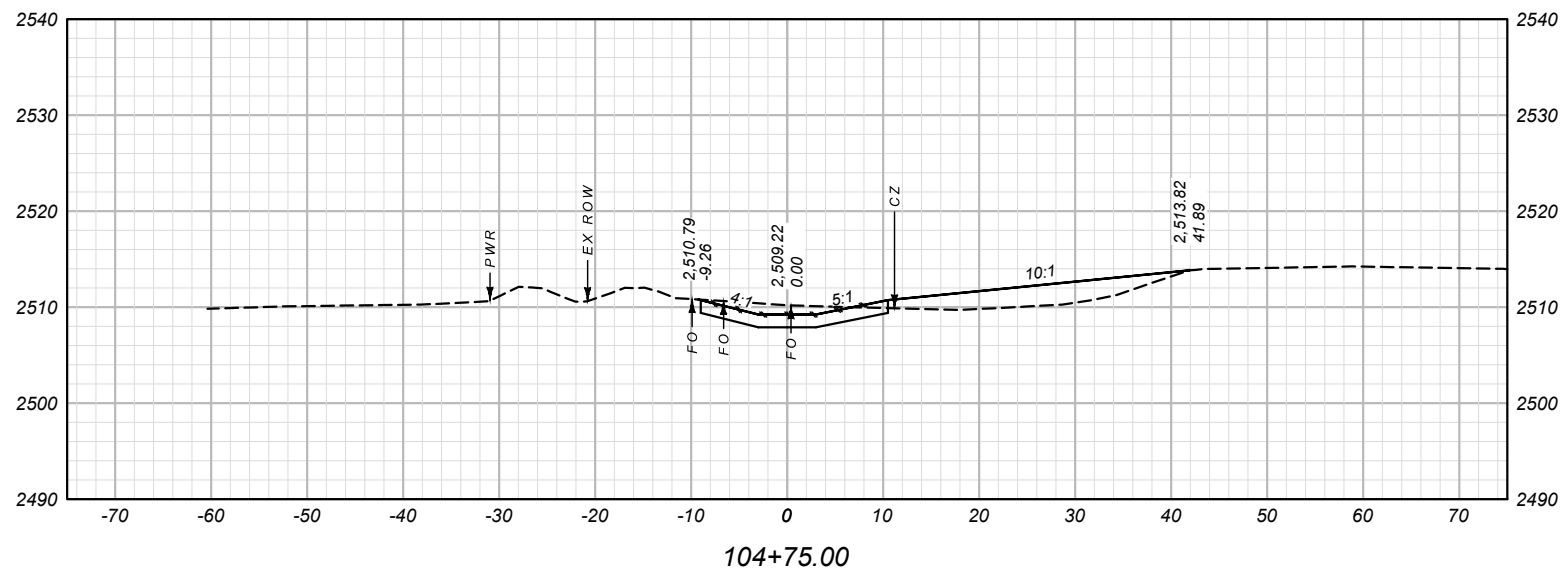
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PROJECT NAME

COUNTY

PROJECT ID

UPN



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DITCH CROSS SECTIONS

HILL COUNTY

NH 1-6(155)375

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9

DITCH CROSS SECTIONS

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

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PROJECT ID

NH 1-6(155)375

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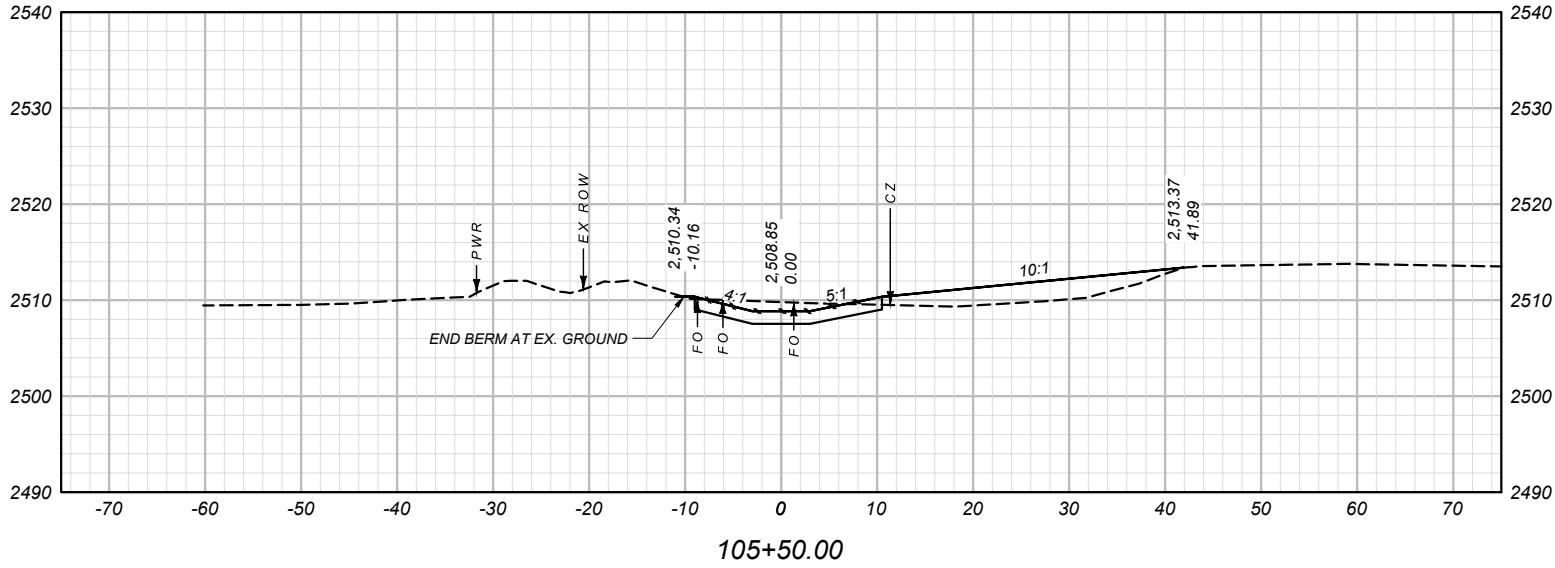
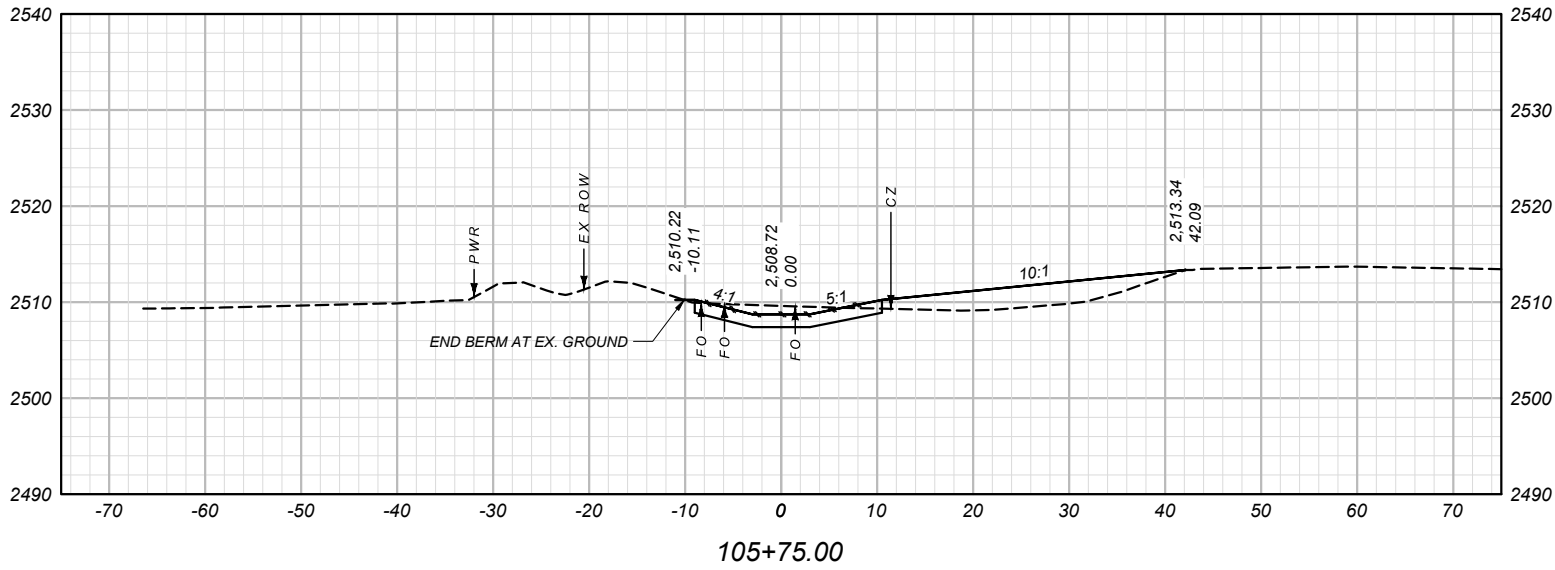
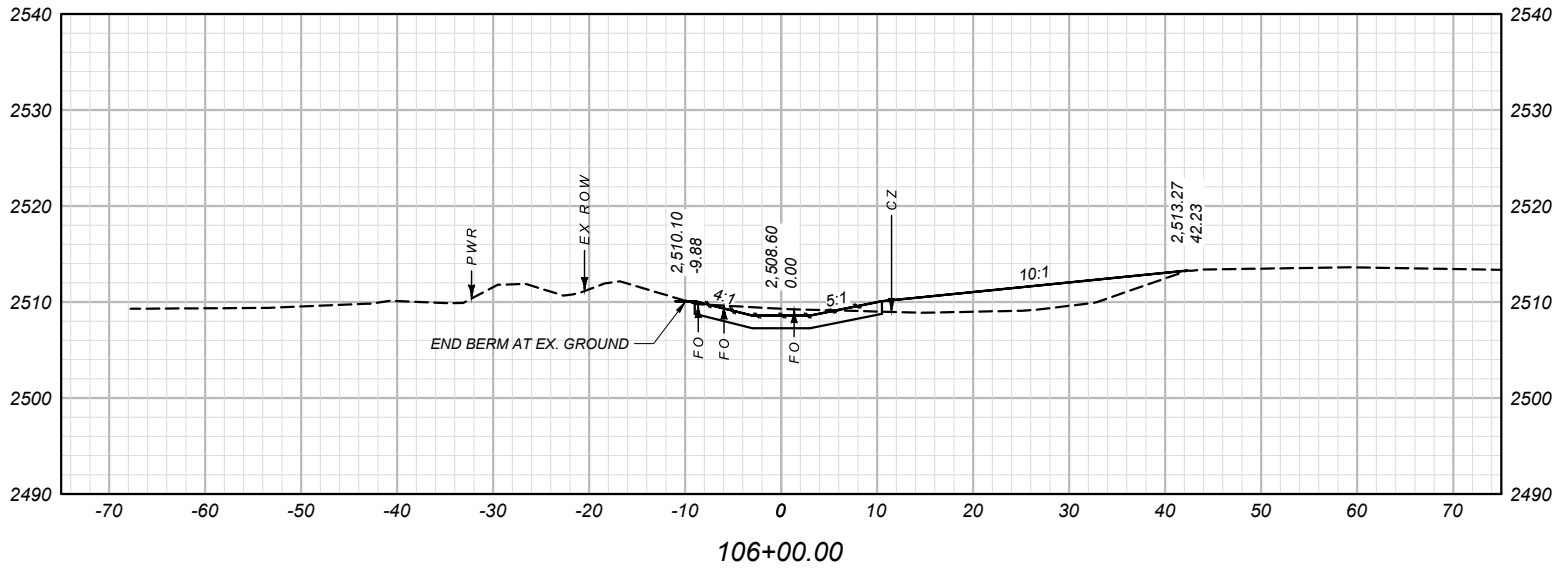
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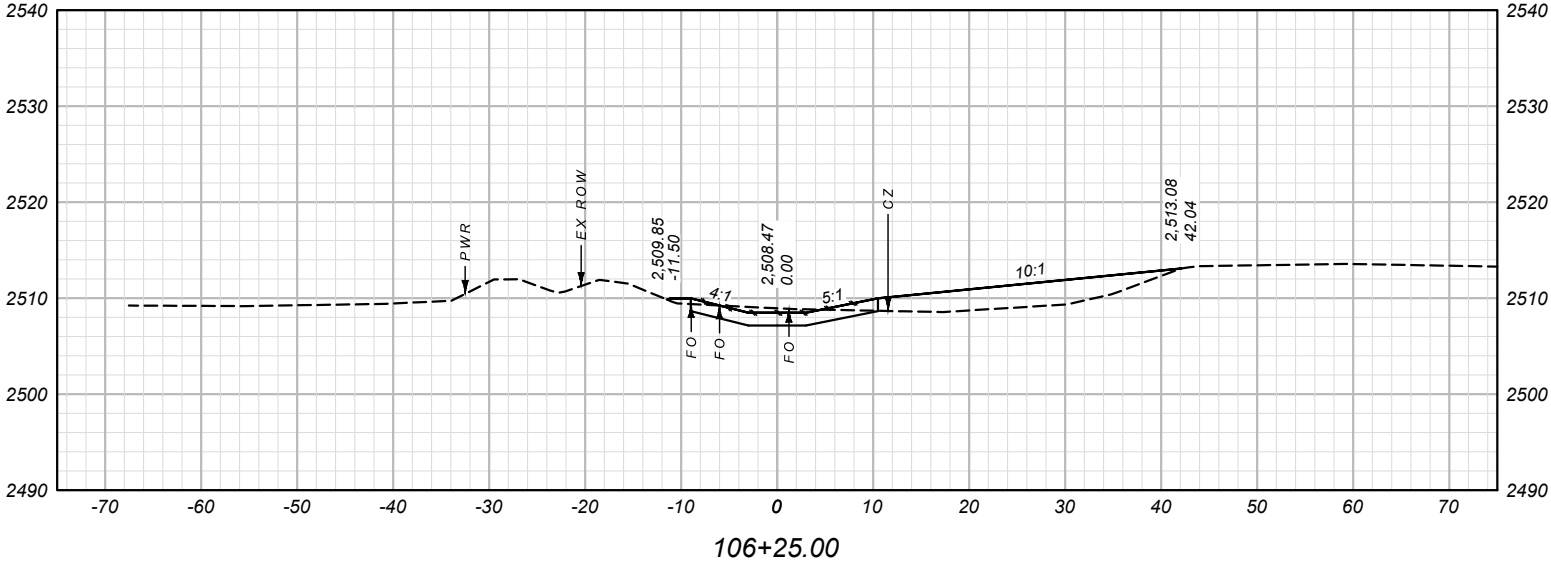
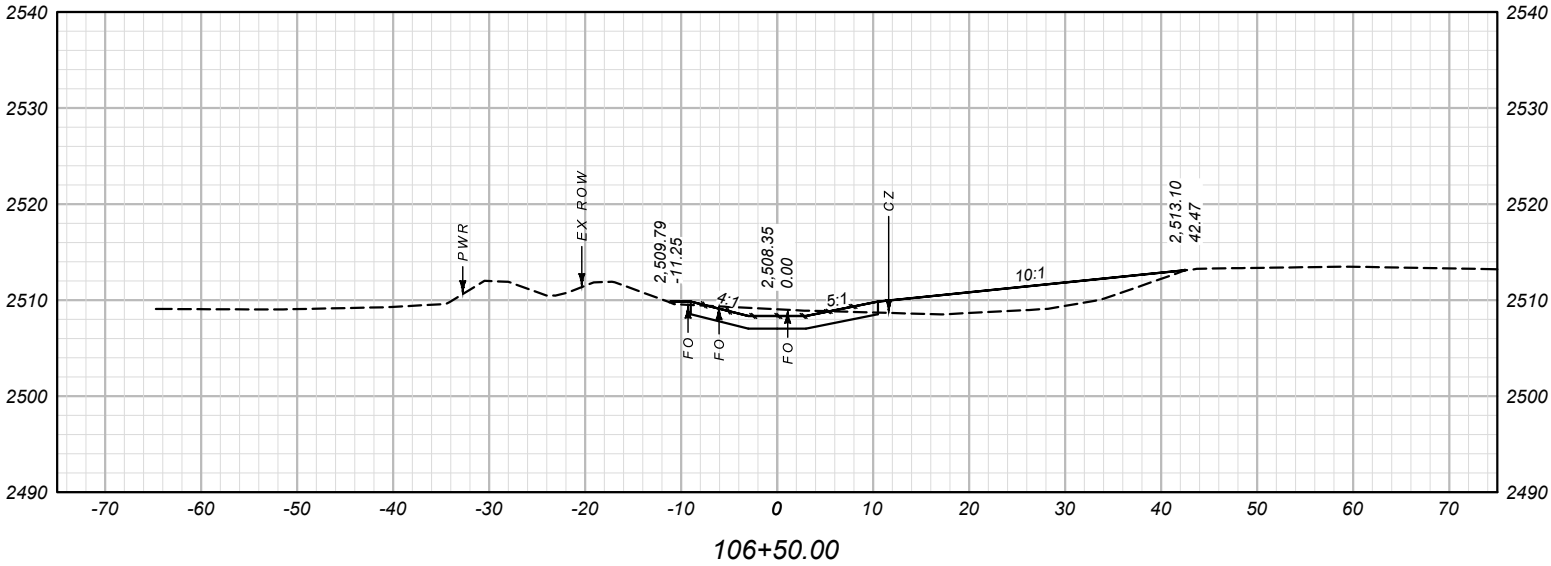
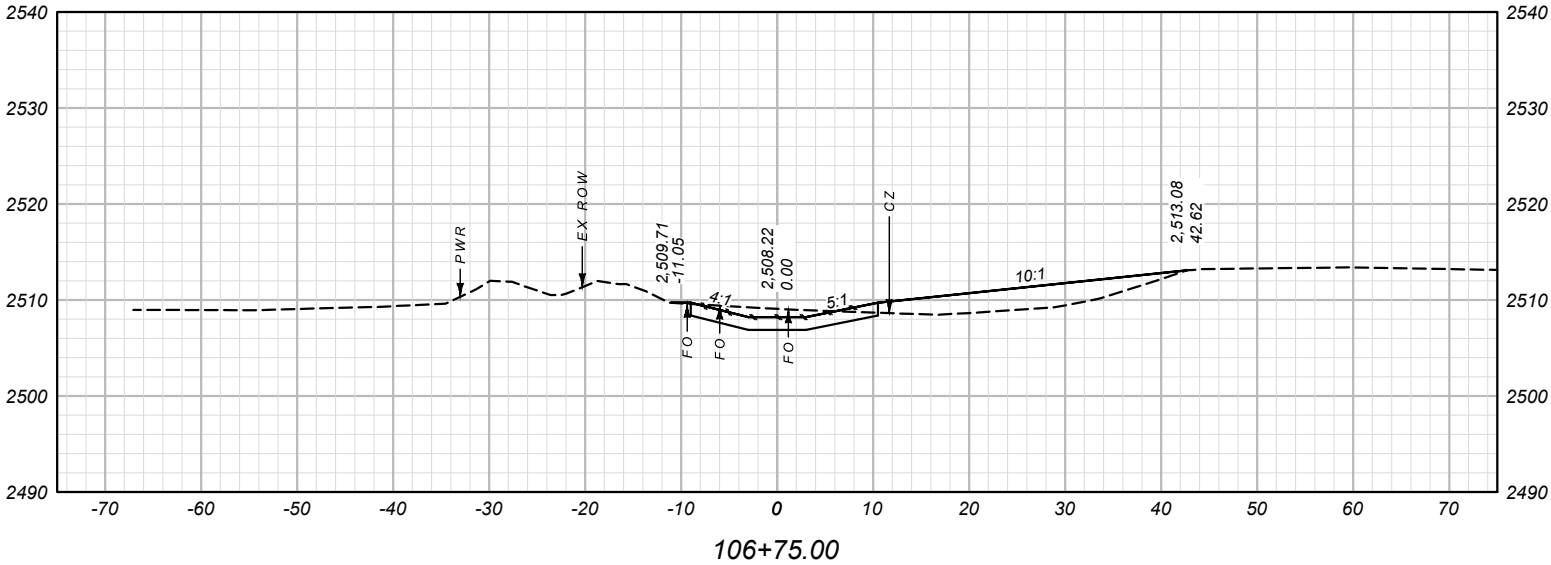


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DITCH CROSS SECTIONS



PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

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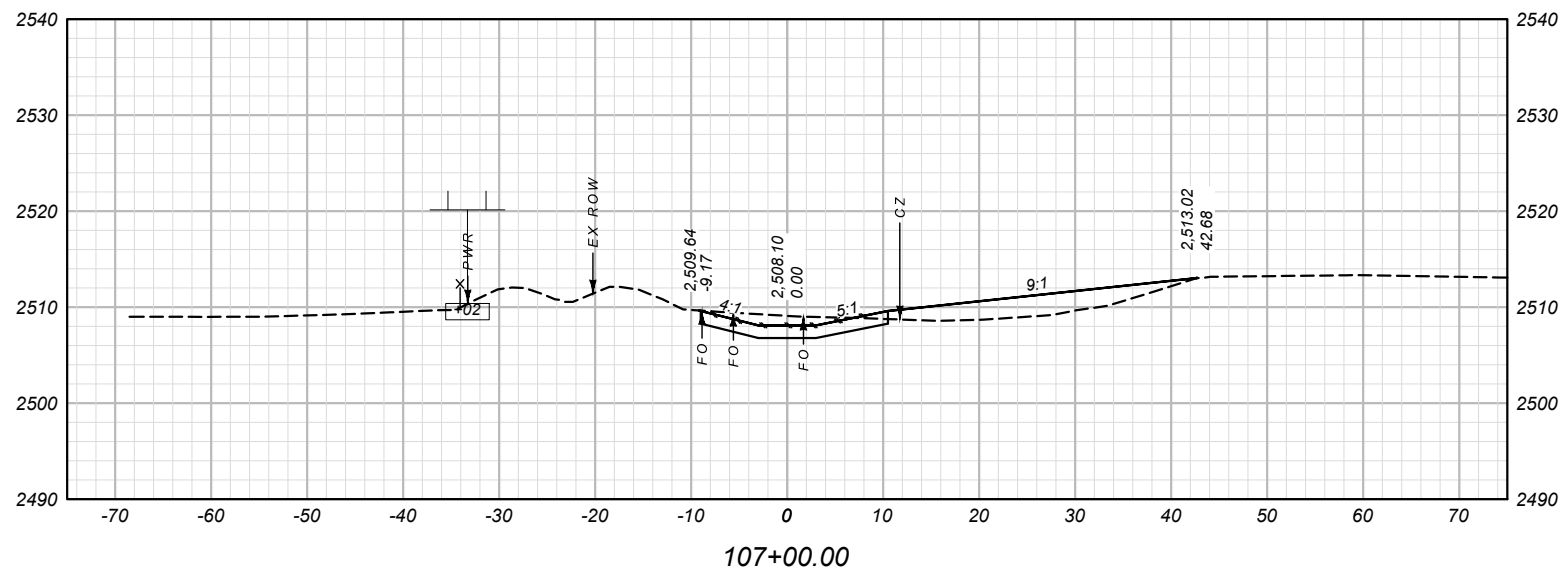
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DITCH CROSS SECTIONS

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

HILL COUNTY

NH 1-6(155)375

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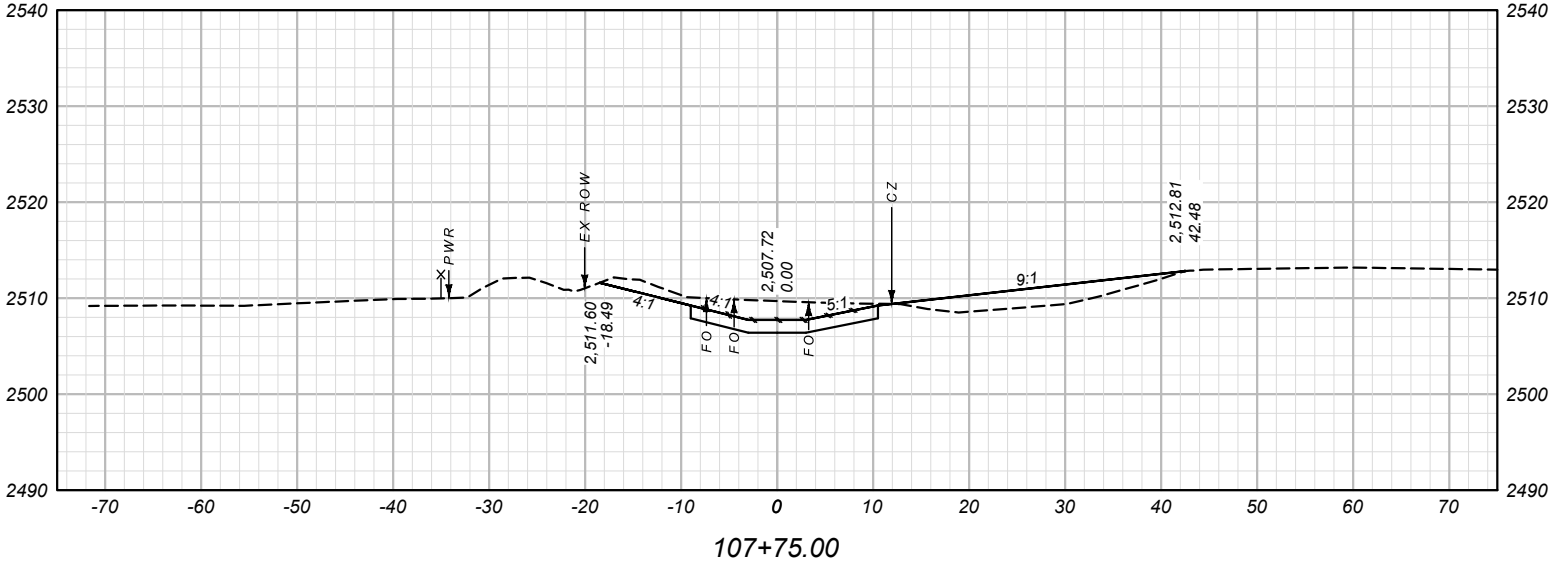
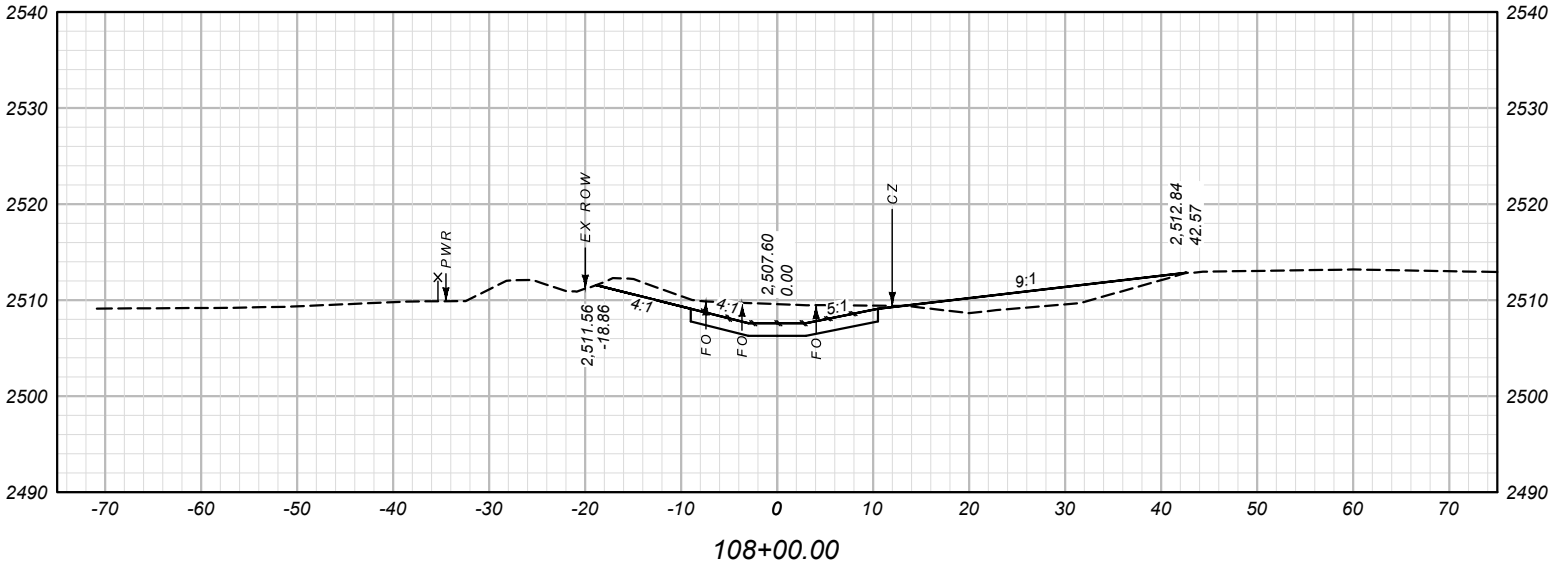
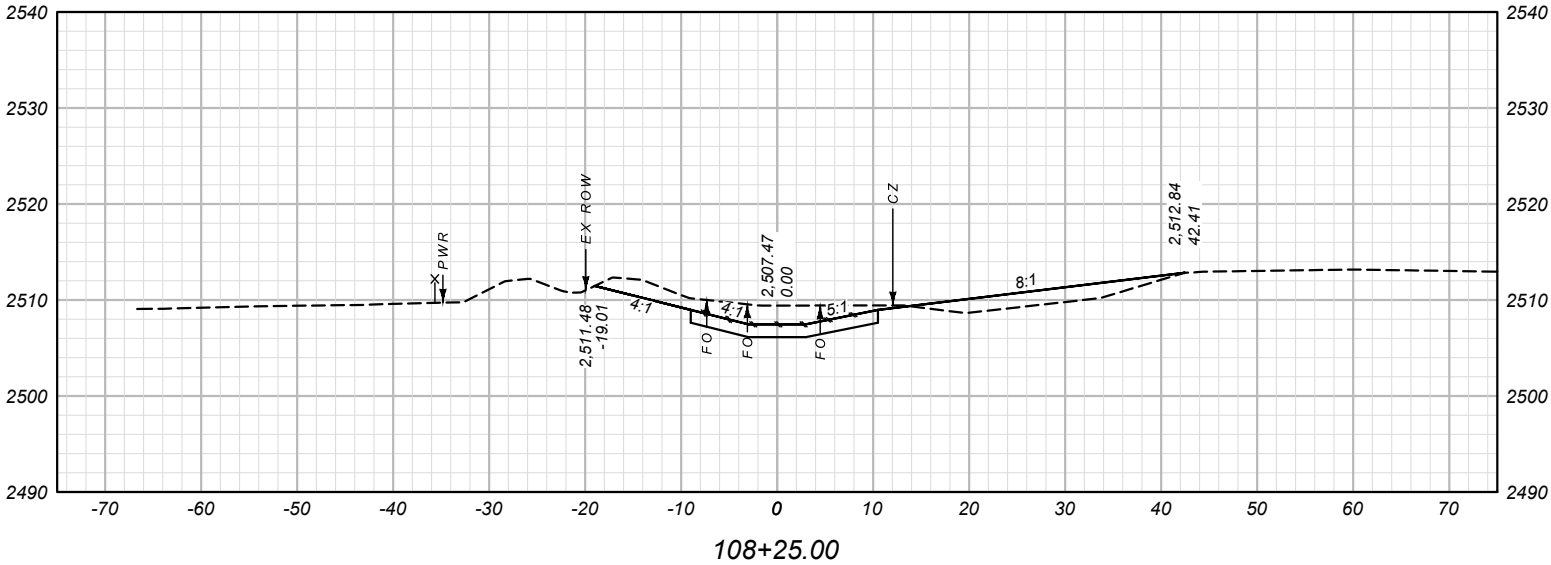
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PROJECT NAME
US-2 EROSION REPAIR - HAVRE

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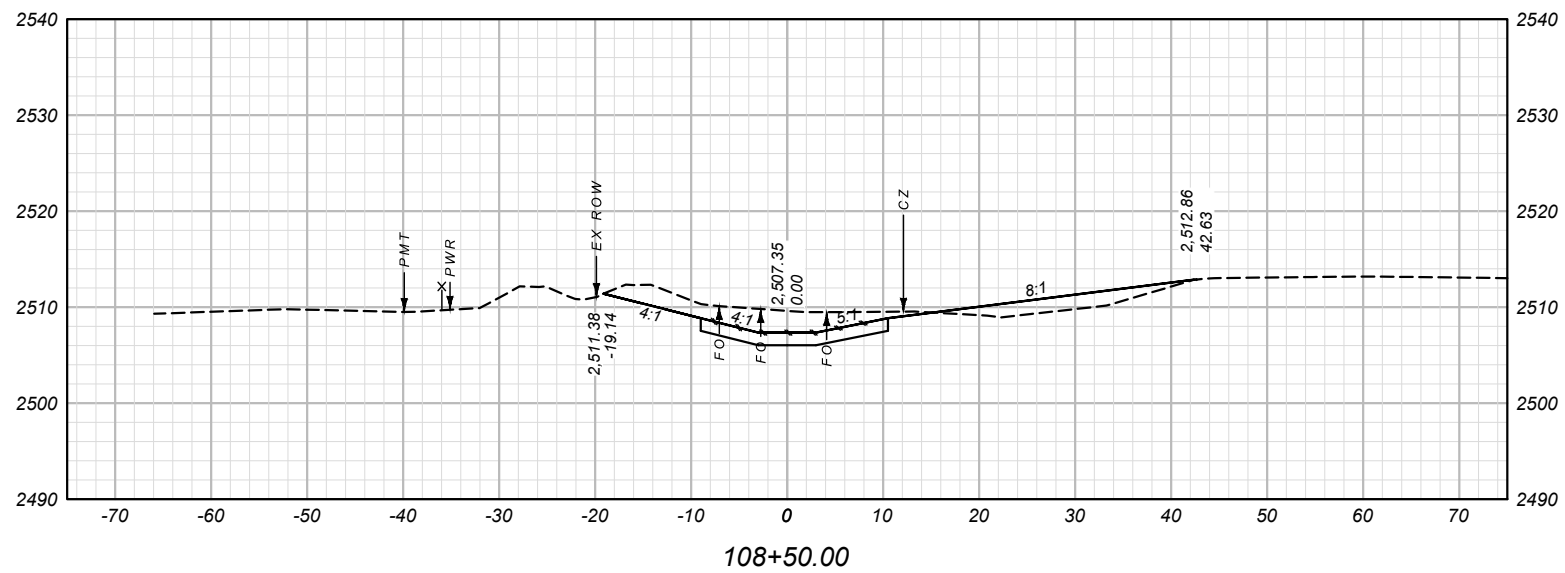
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DITCH CROSS SECTIONS

HILL COUNTY

NH 1-6(155)375

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CROSS SECTIONS

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DITCH CROSS
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PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

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PROJECT ID

NH 1-6(155)375

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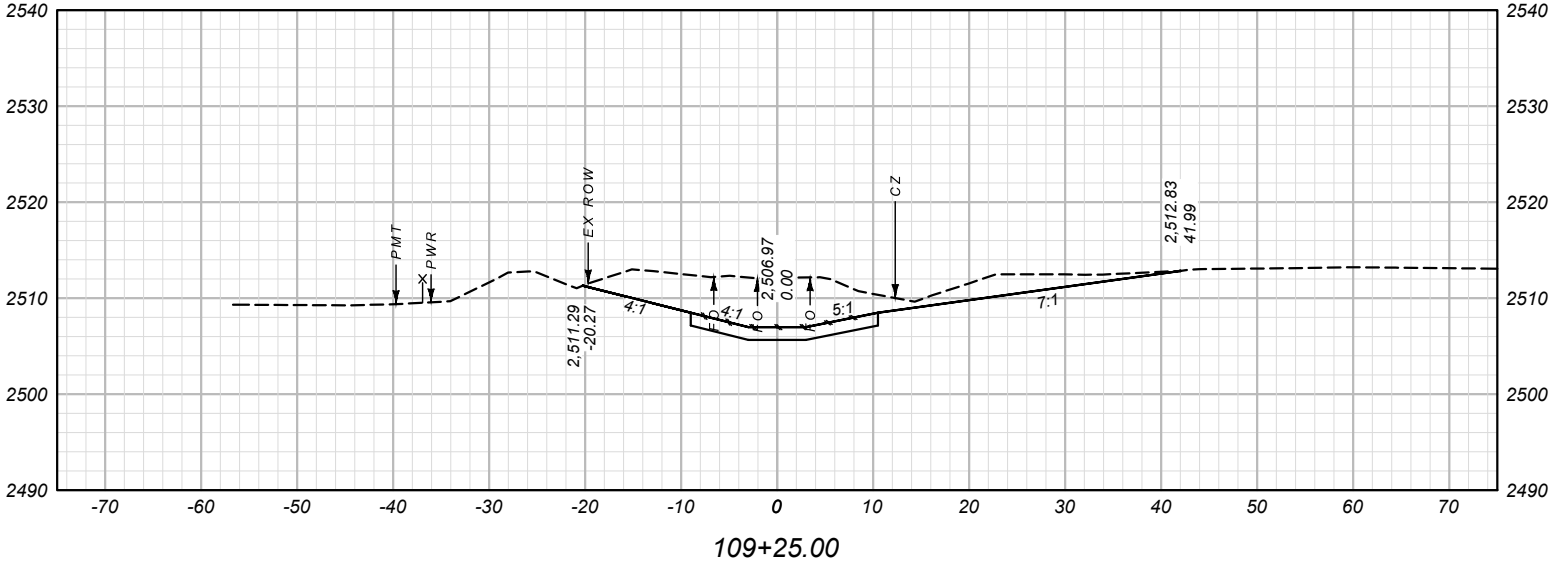
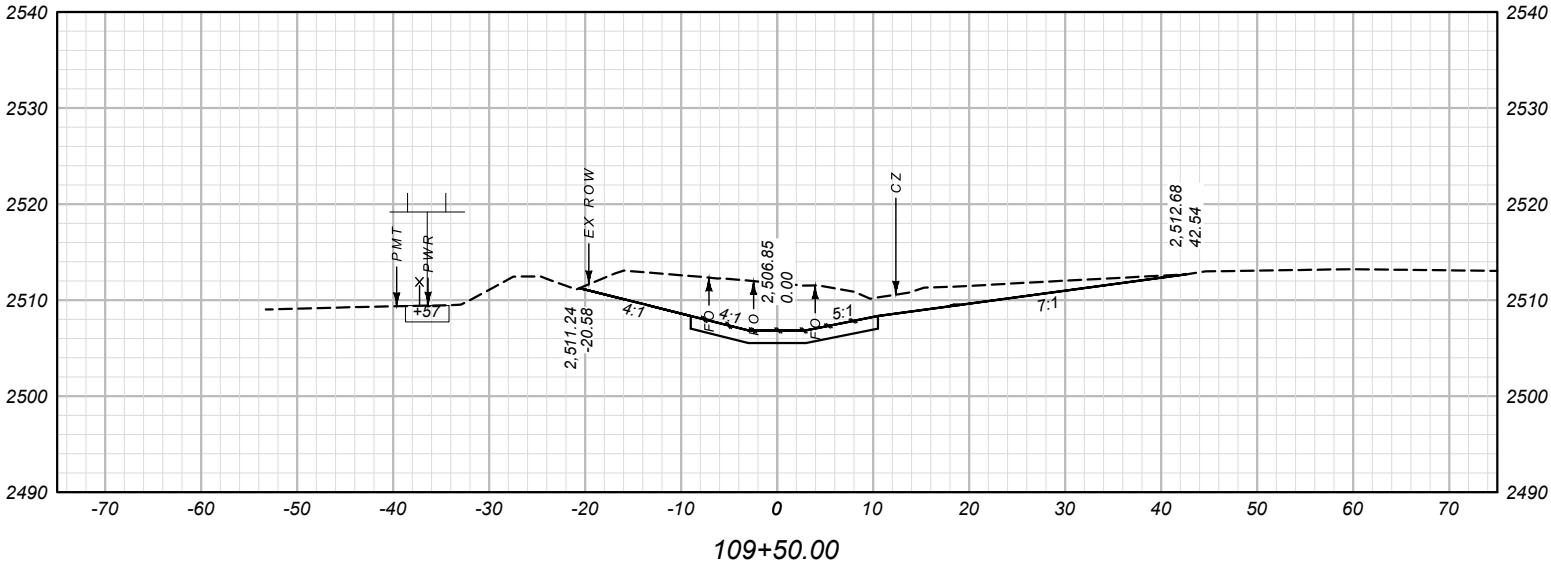
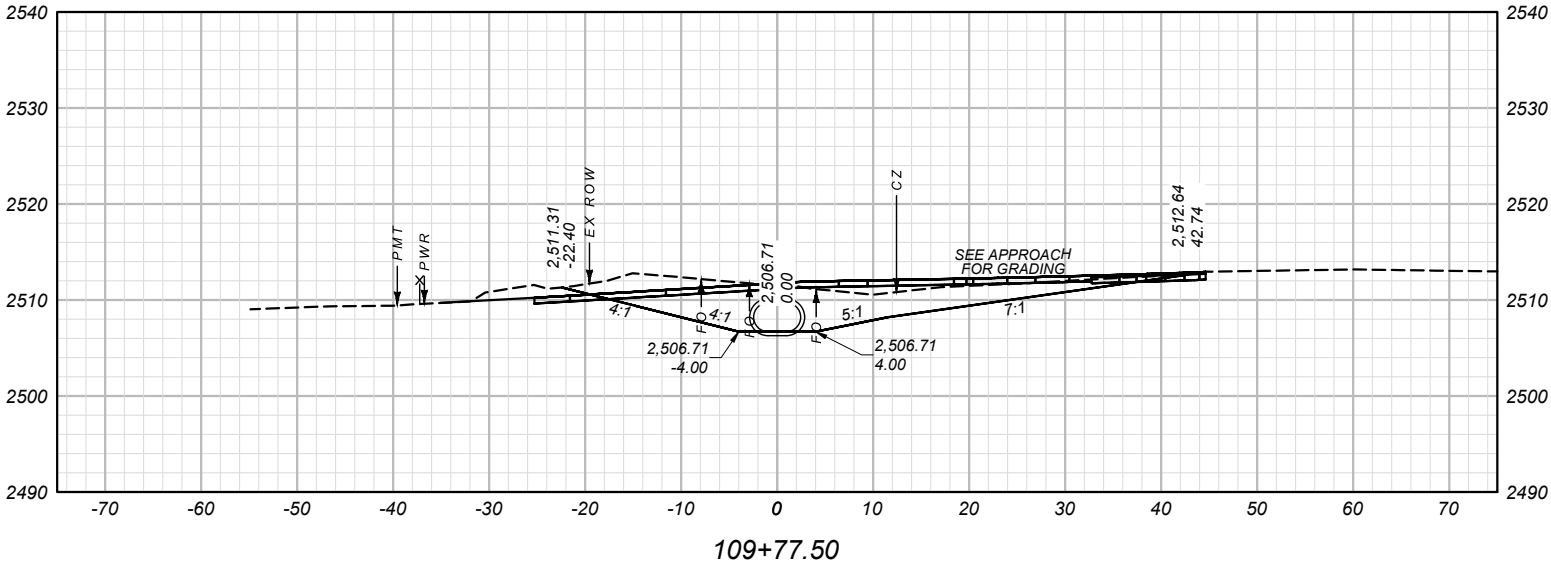
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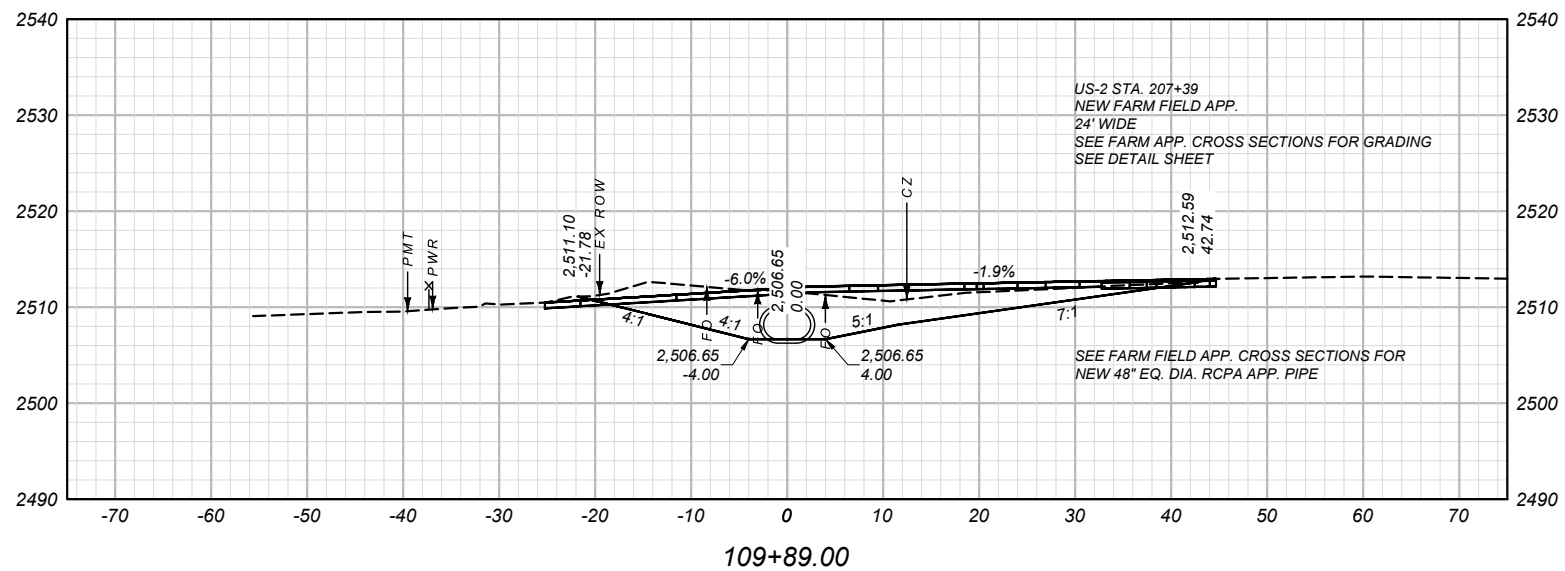
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DITCH CROSS SECTIONS

HILL COUNTY

NH 1-6(155)375

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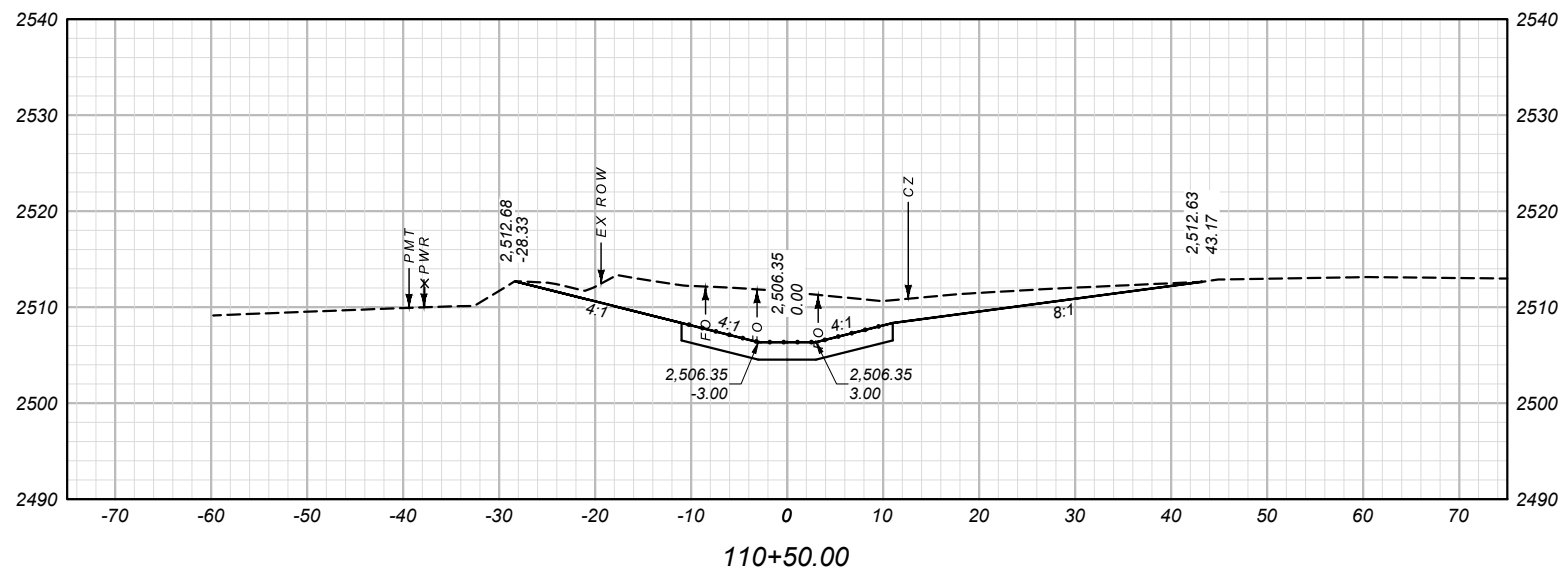
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DITCH CROSS SECTIONS

HILL COUNTY

NH 1-6(155)375

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M. JOHNSON	APR. 2026

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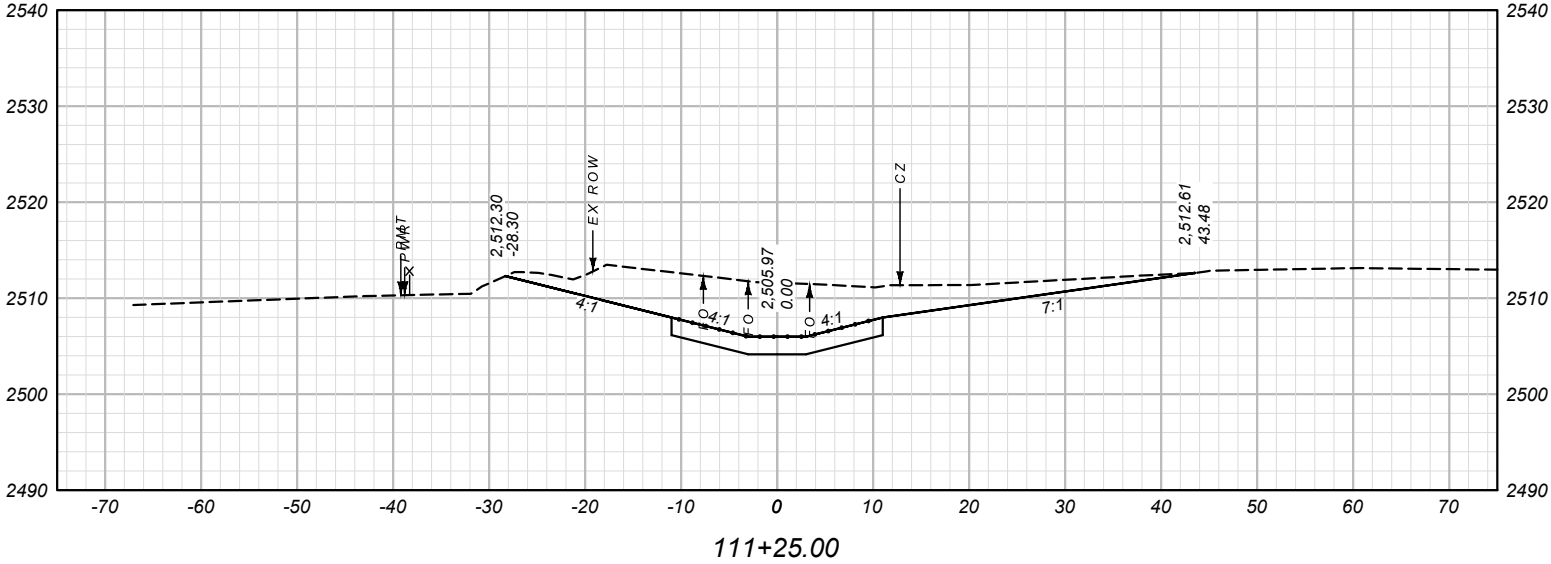
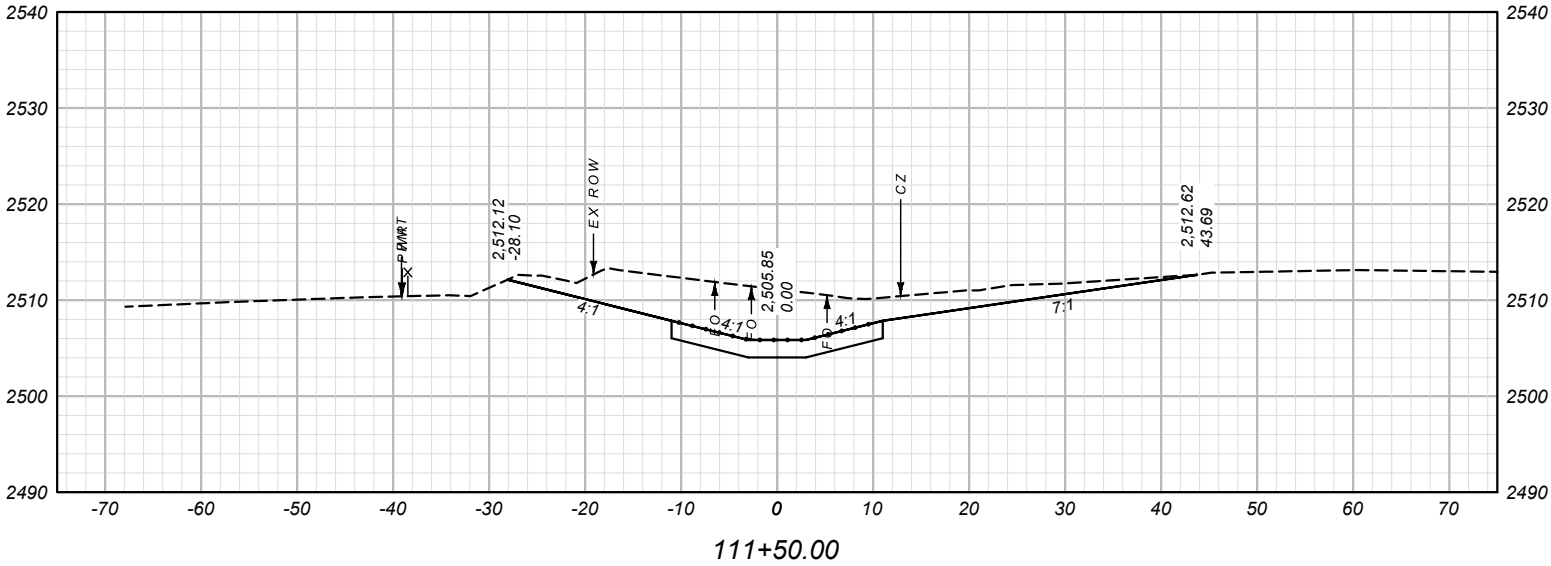
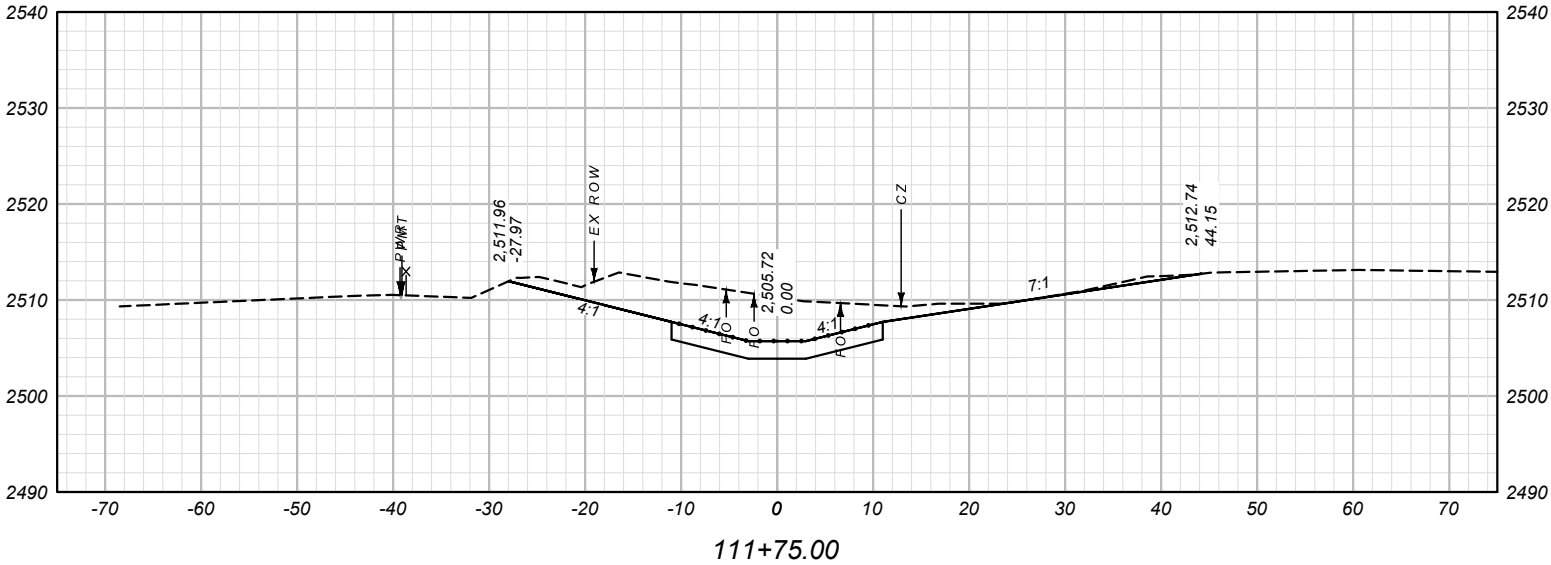
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DITCH CROSS SECTIONS





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PROJECT NAME	US-2 EROSION REPAIR - HAVRE
COUNTY	HILL COUNTY
PROJECT ID	NH 1-6(155)375
UPN	10388000

US-2 EROSION REPAIR - HAVRE

HILL COUNTY

NH 1-6(155)375

10388000

DITCH CROSS SECTIONS

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

NH 1-6(155)375

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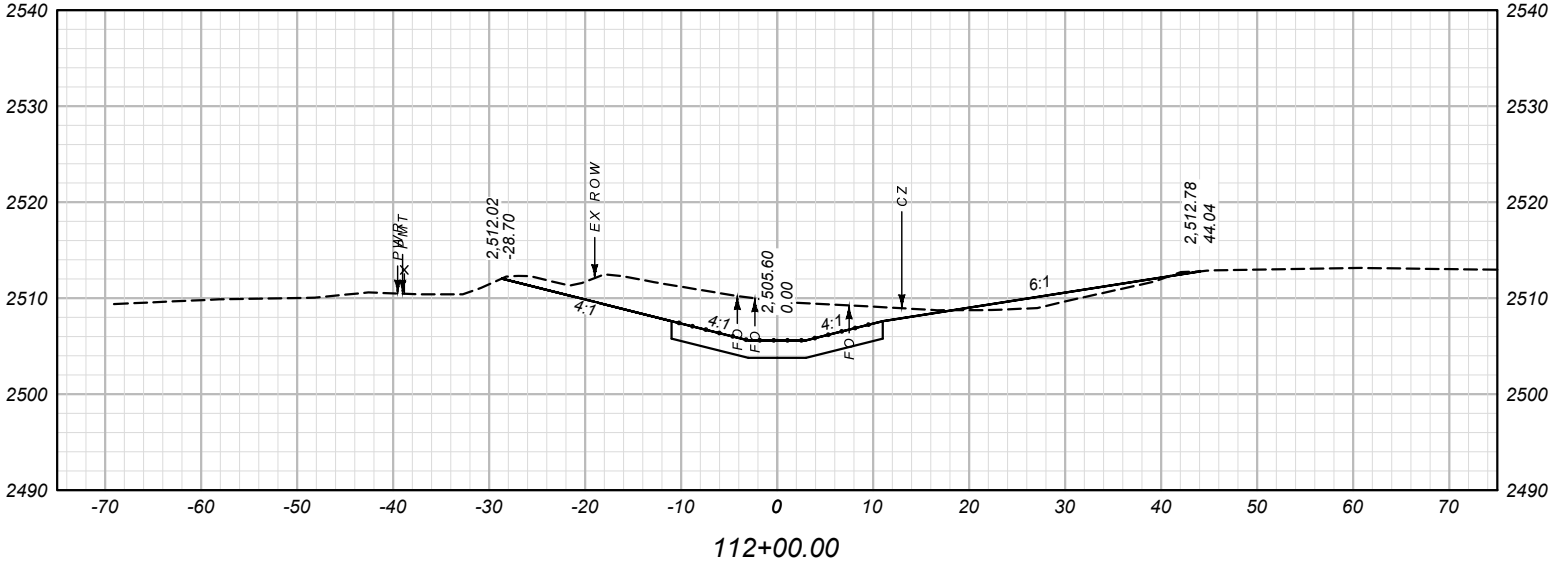
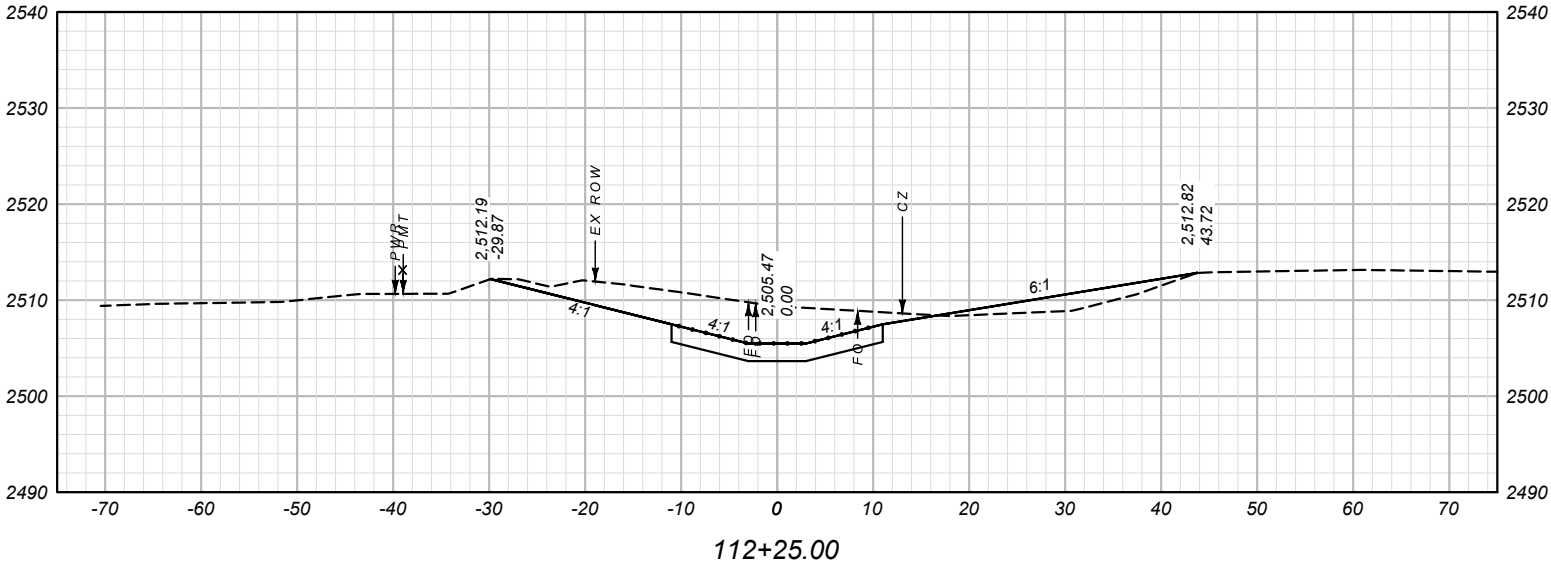
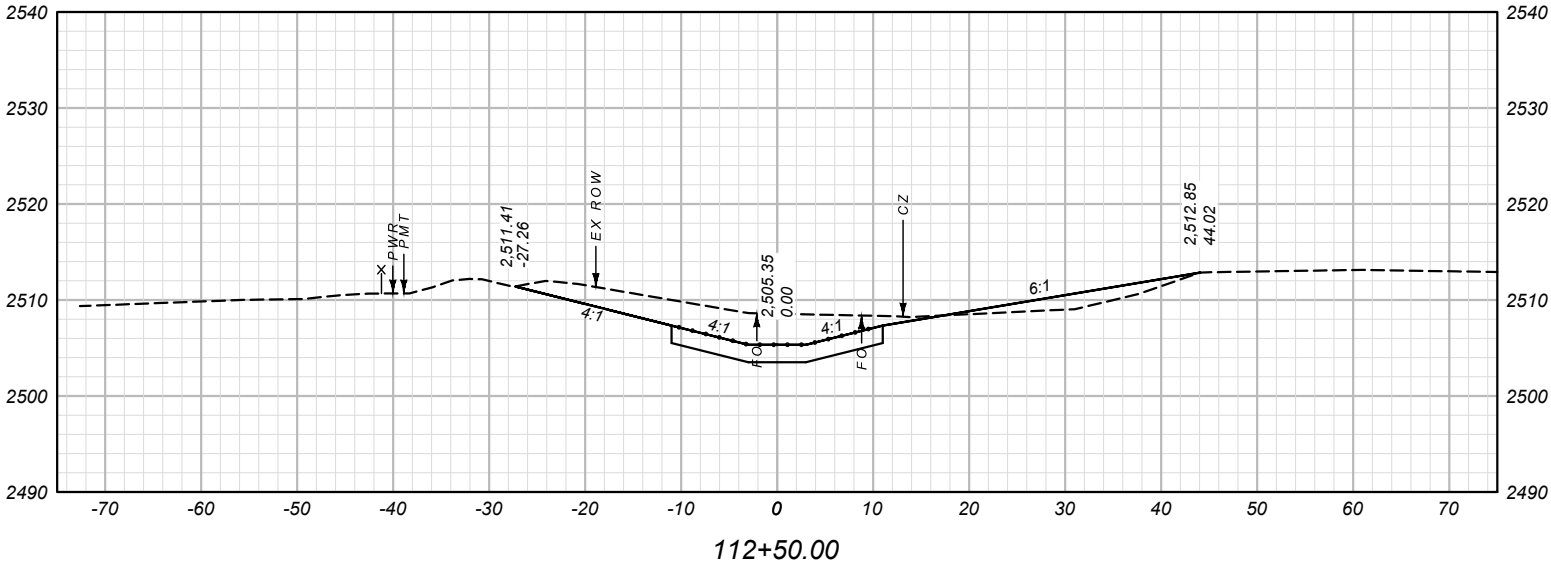
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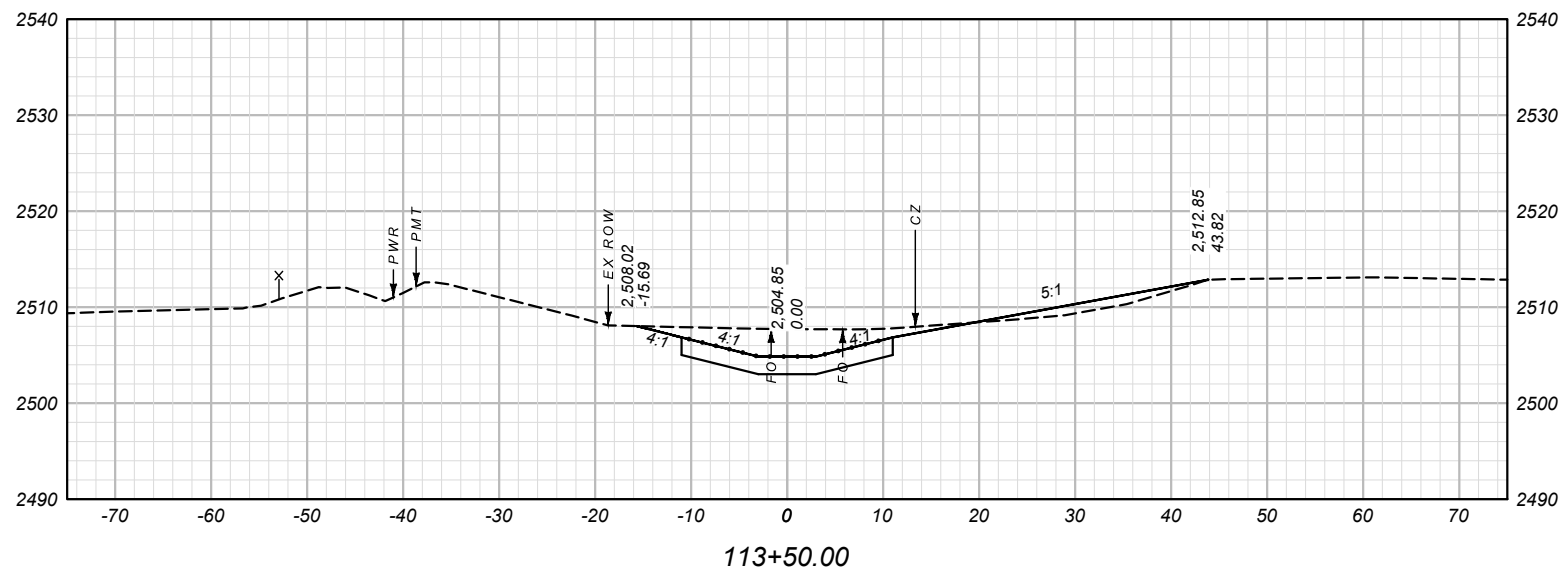


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		CHECKED BY		S. VENNER		APR. 2026									
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DITCH CROSS SECTIONS

HILL COUNTY

NH 1-6(155)375

10388000

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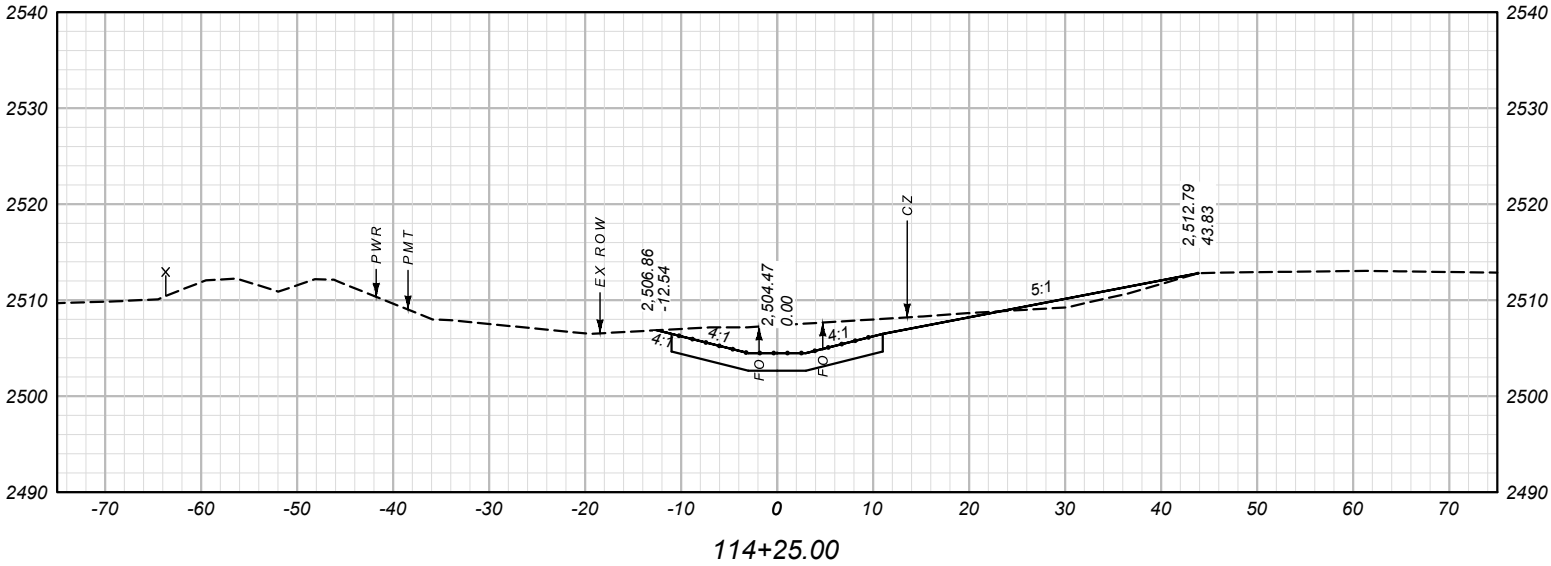
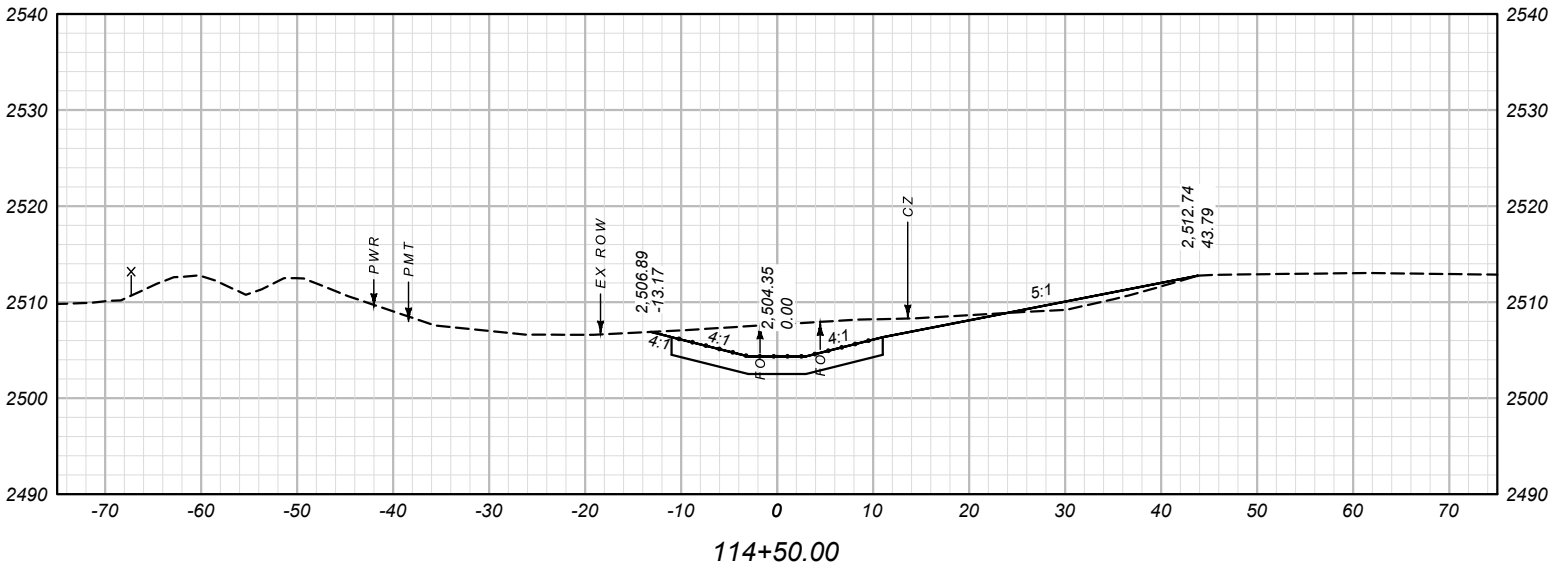
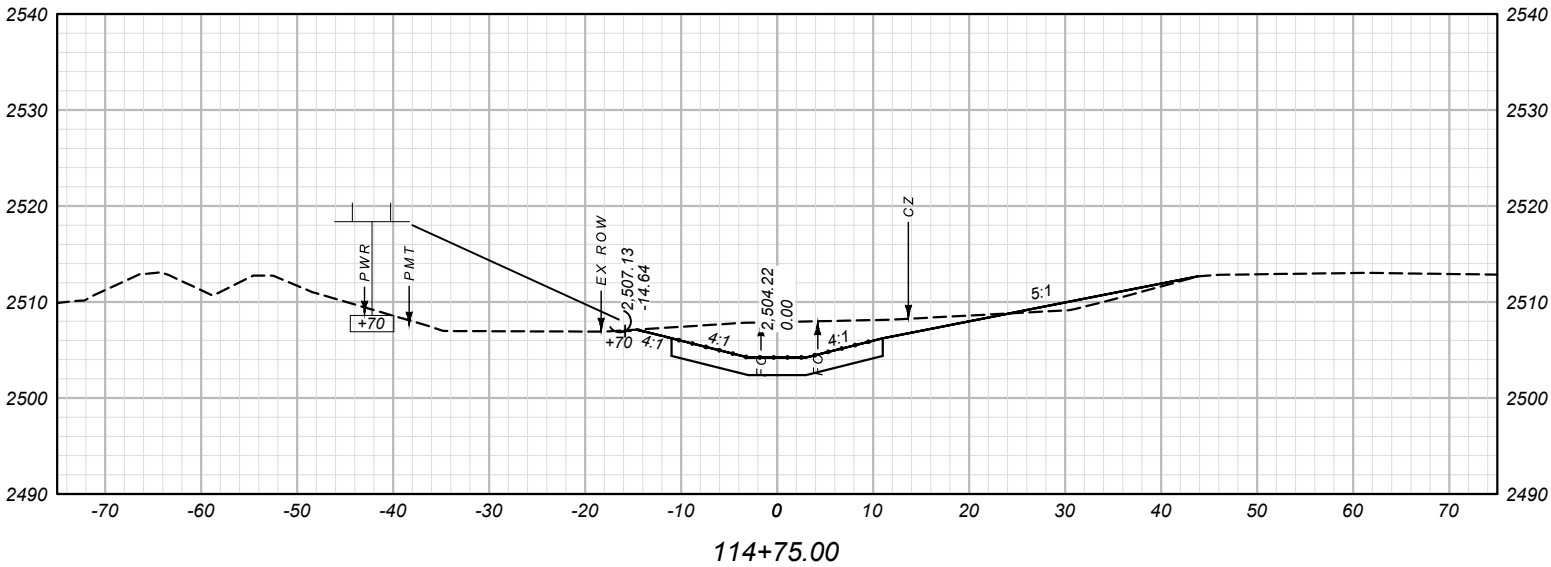
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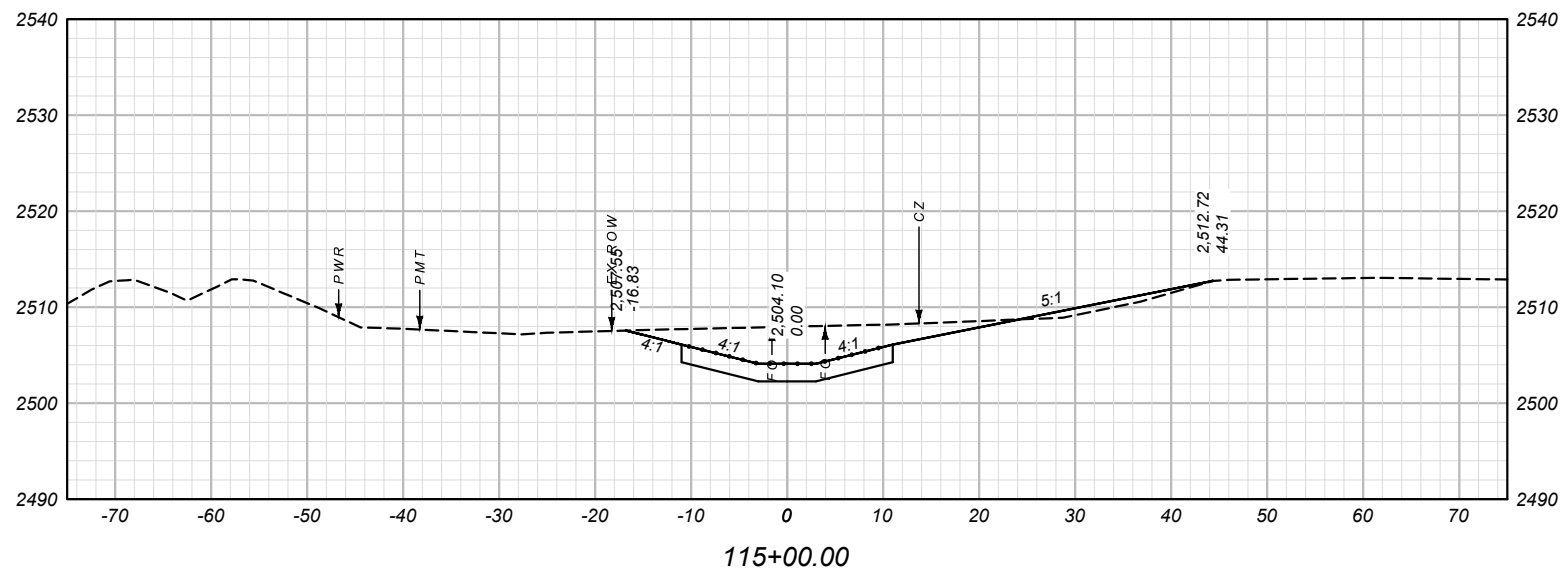
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DITCH CROSS SECTIONS



 MONTANA Department of Transportation	DESIGNED BY	PROJECT NAME			
	M. JOHNSON	APR. 2026	US-2 EROSION REPAIR - HAVRE		
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	J. SMITH	APR. 2026	HILL COUNTY		
CROSS SECTIONS	CHECKED BY	PROJECT ID			
			NH 1-6(155)375		
	S. VENNER	APR. 2026	UPN		
			10388000		
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DITCH CROSS SECTIONS

HILL COUNTY

NH 1-6(155)375

10388000

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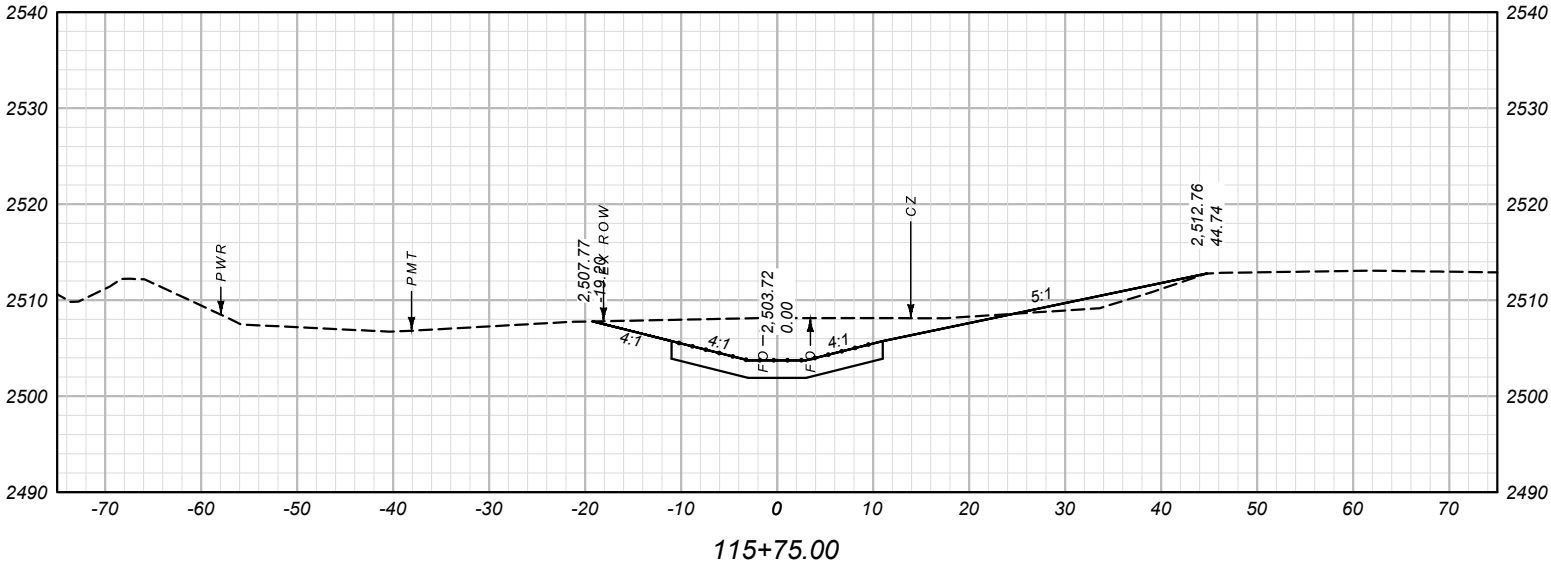
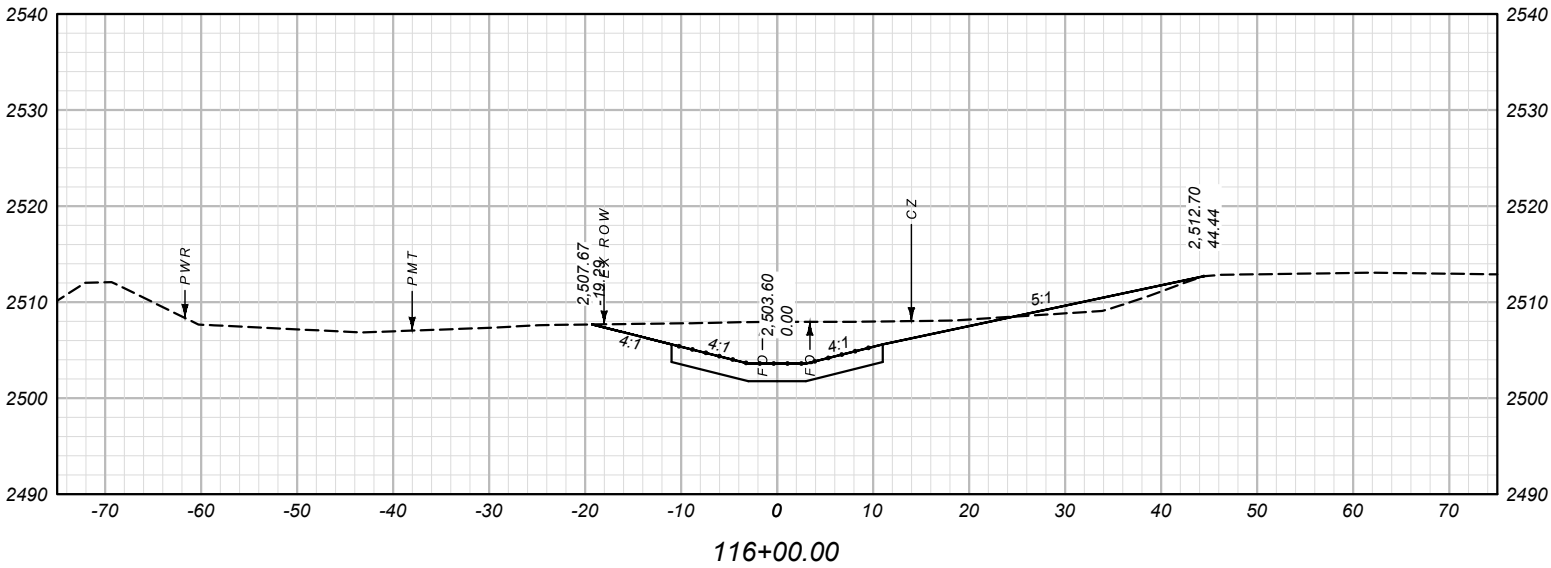
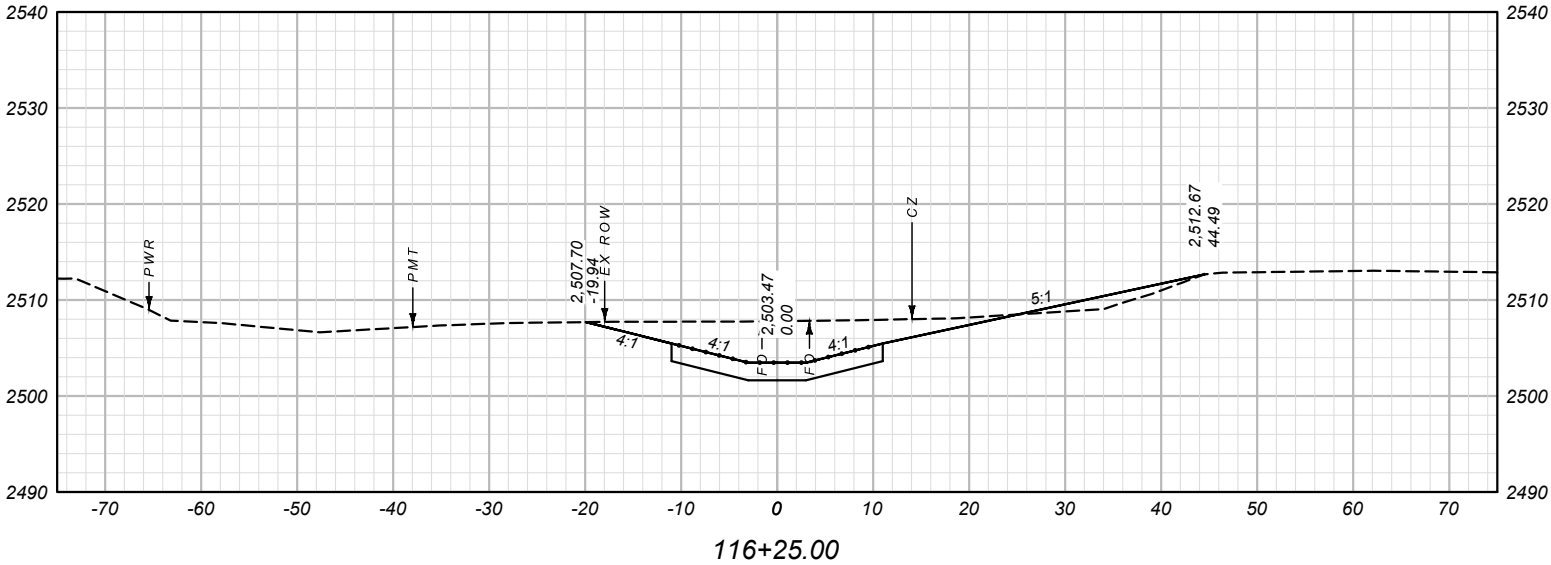
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DITCH CROSS SECTIONS





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CROSS SECTIONS

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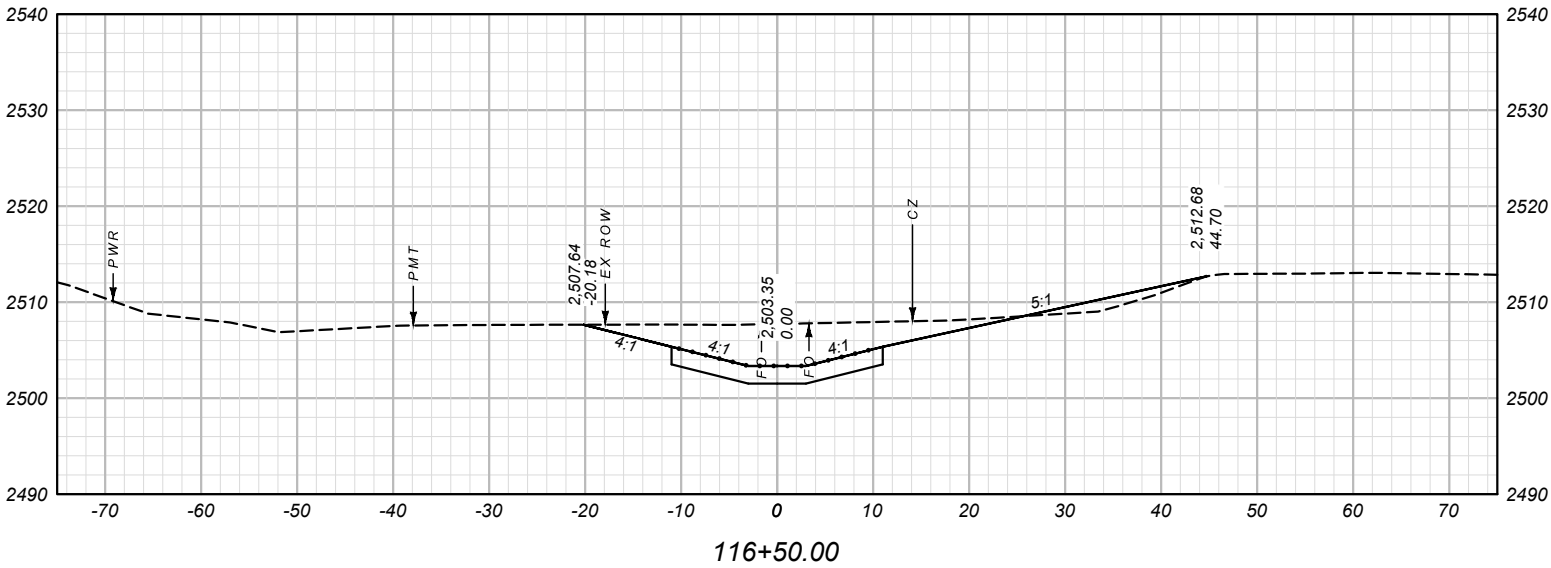
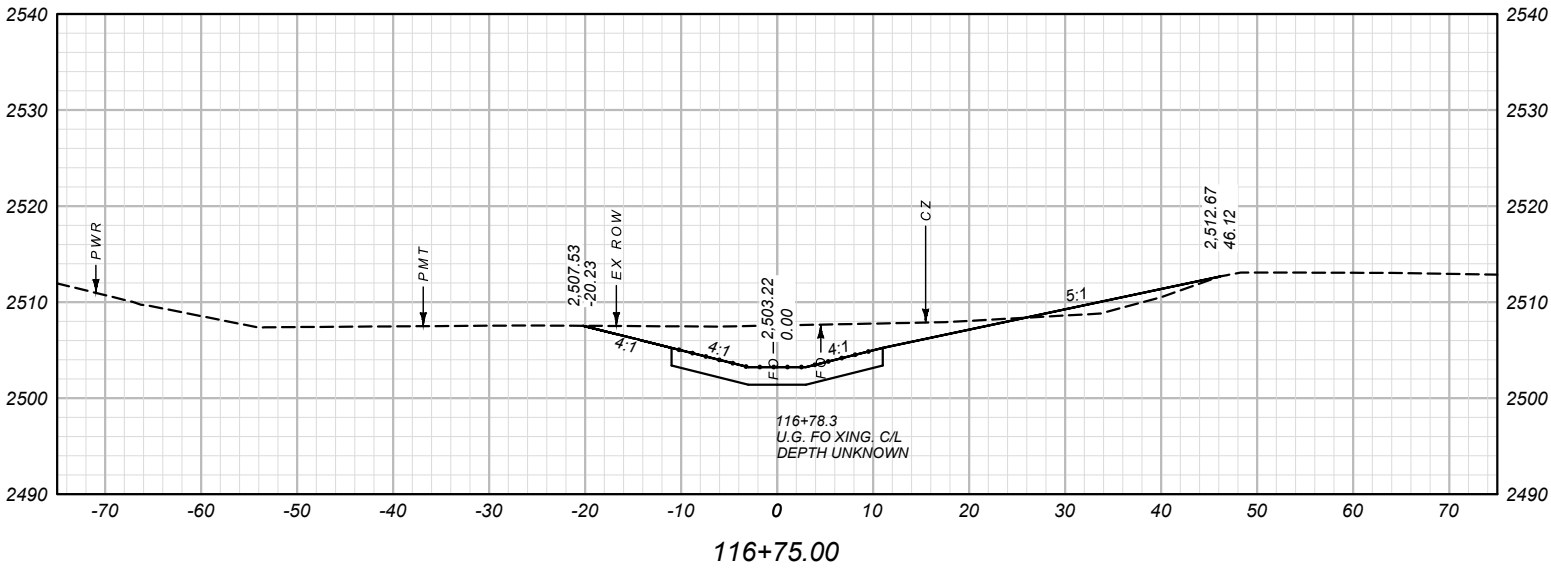
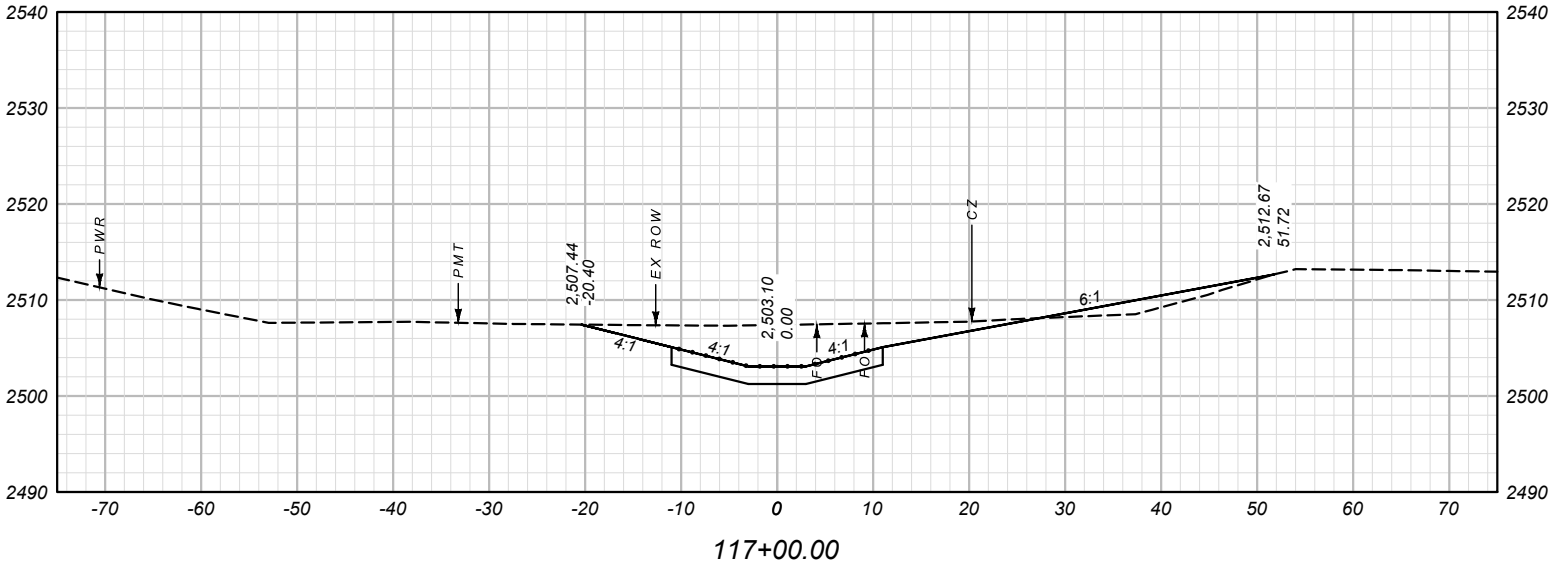
PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY
HILL COUNTY

PROJECT ID
NH 1-6(155)375

UPN
10388000

DITCH CROSS SECTIONS



PROJECT NAME
US-2 EROSION REPAIR - HAVRE

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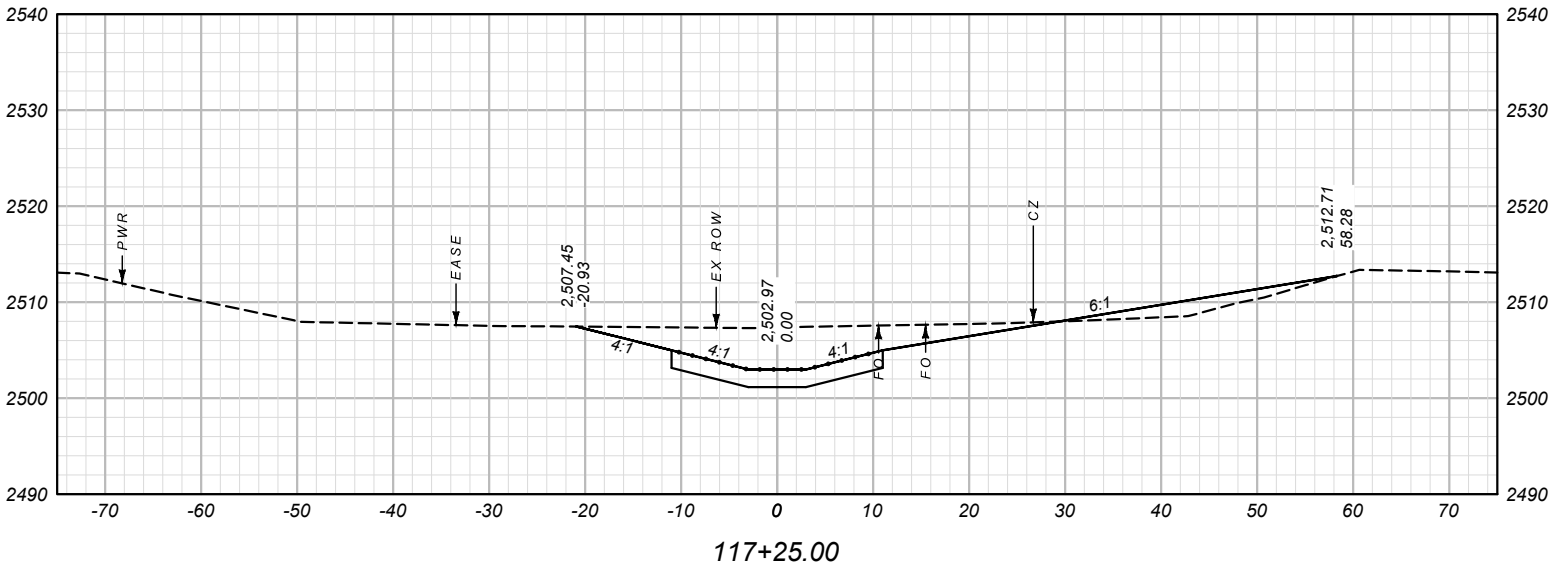
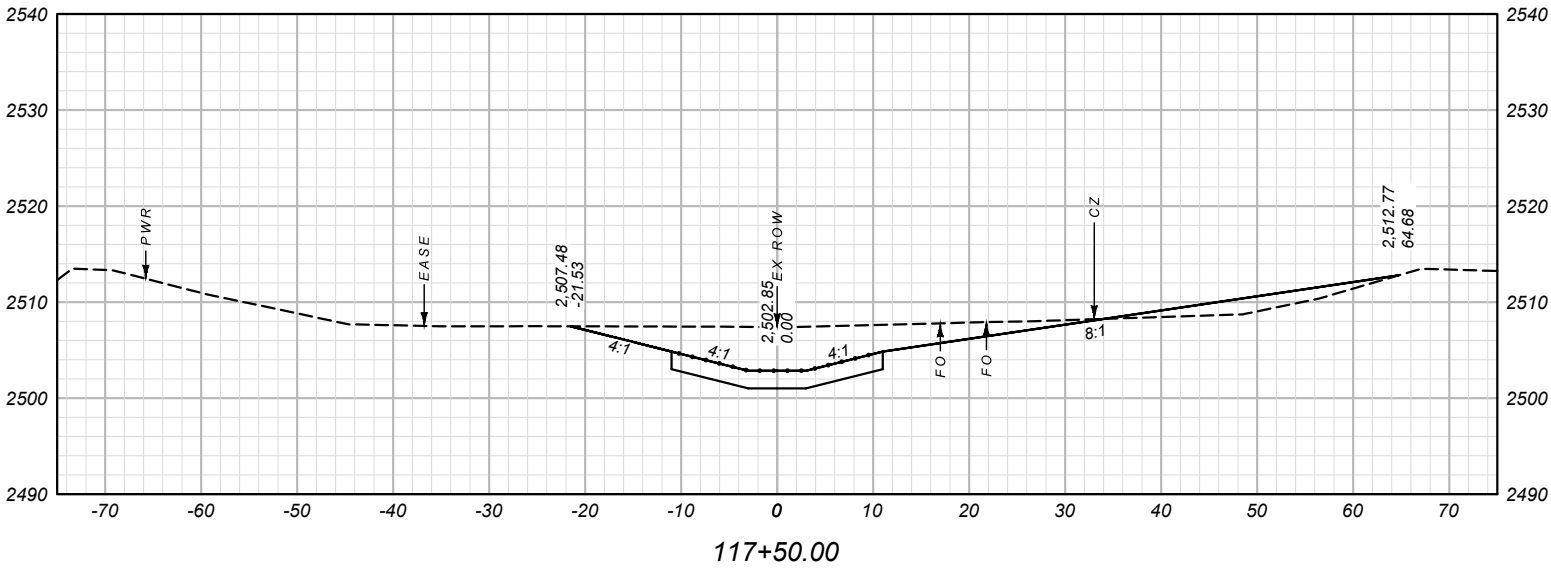
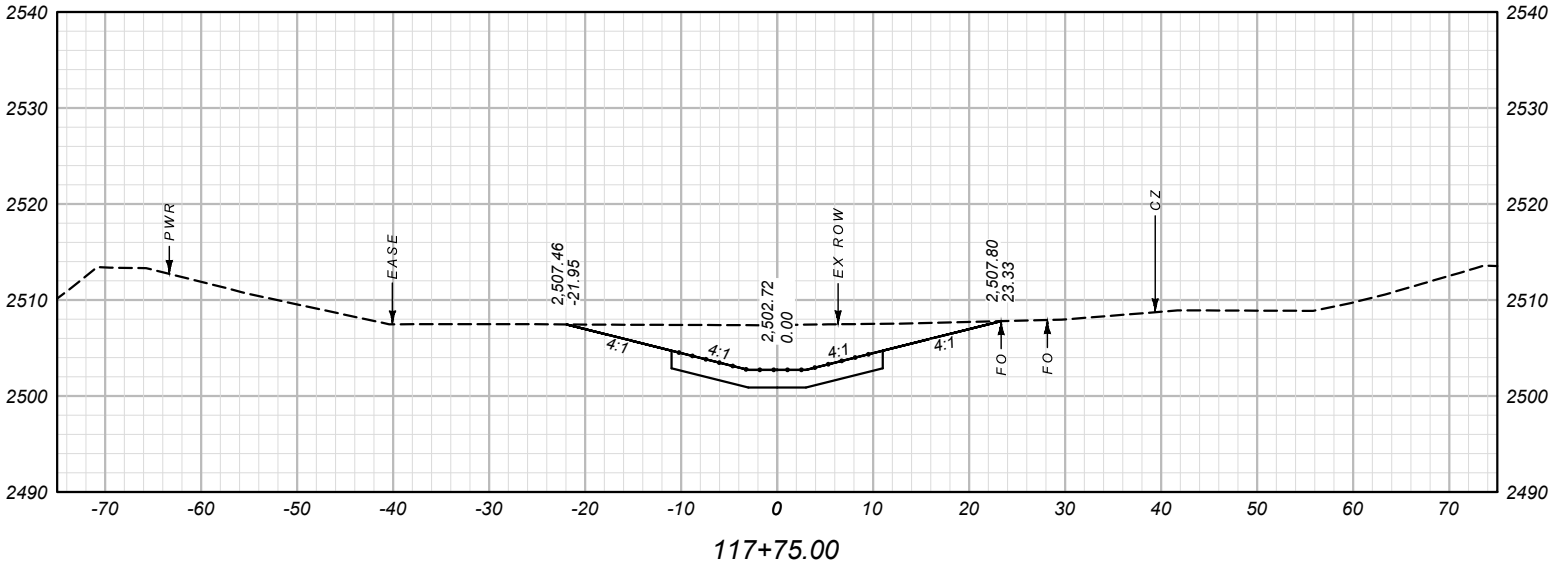
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DITCH CROSS SECTIONS





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CROSS SECTIONS

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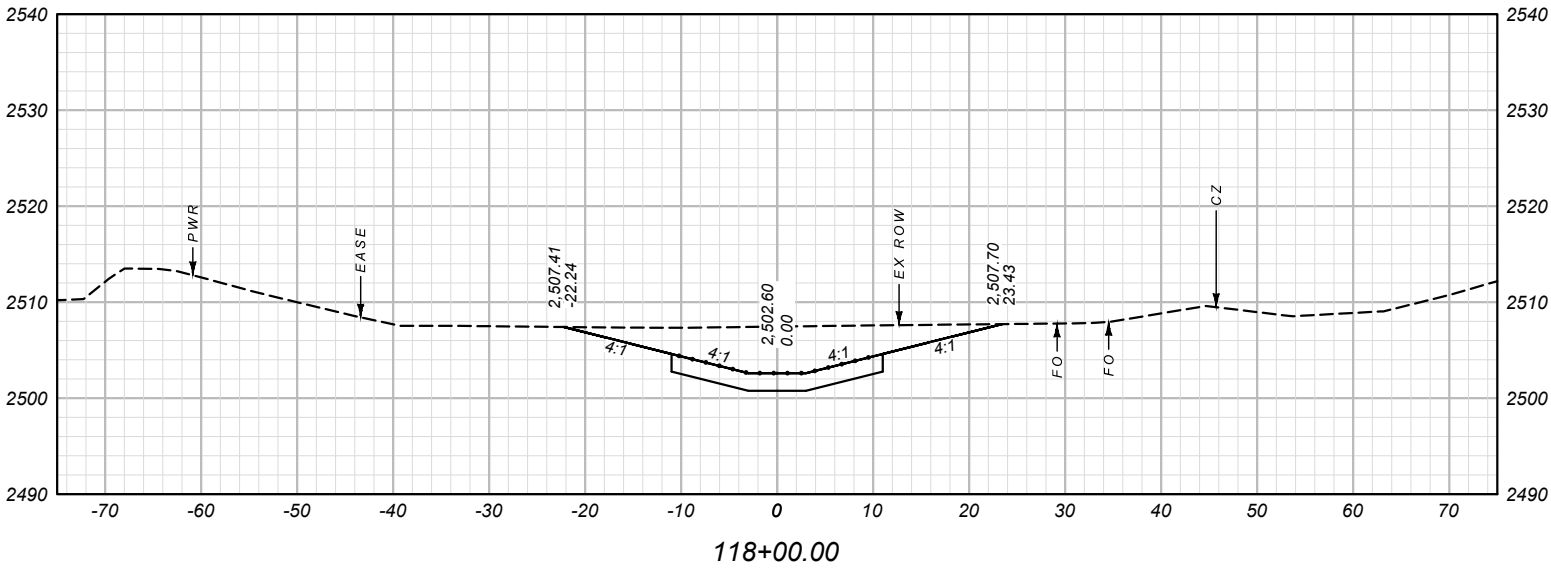
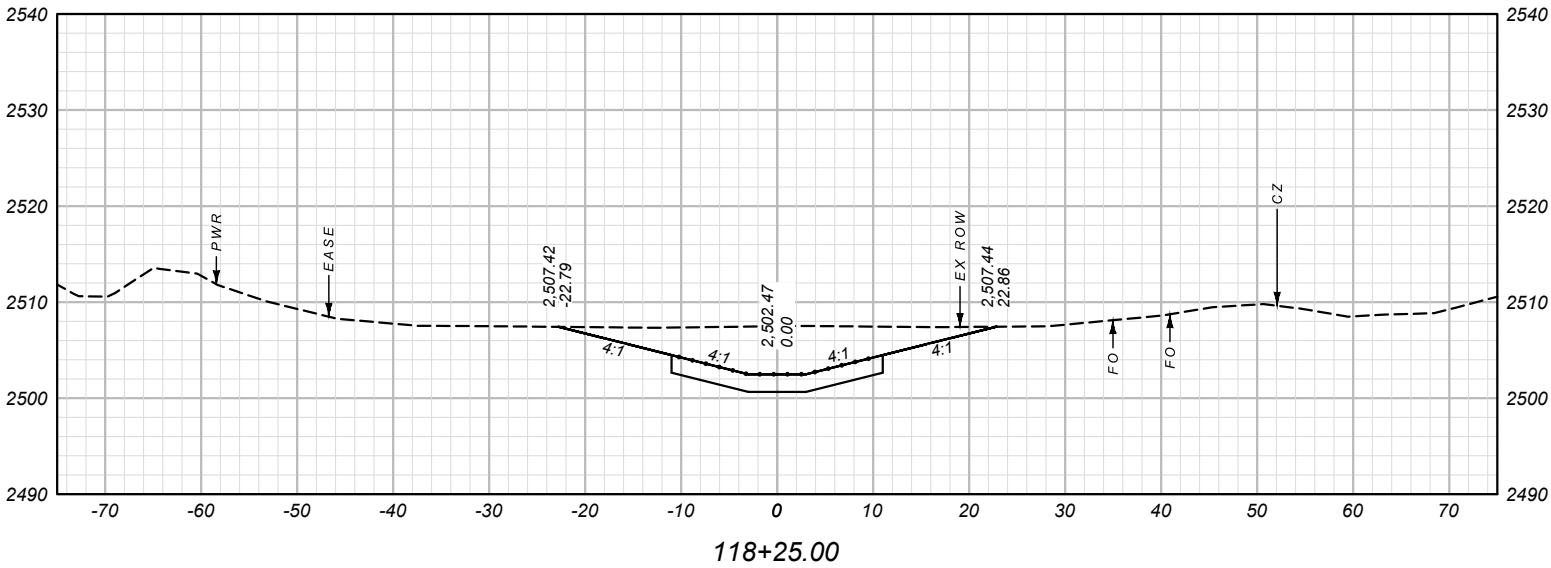
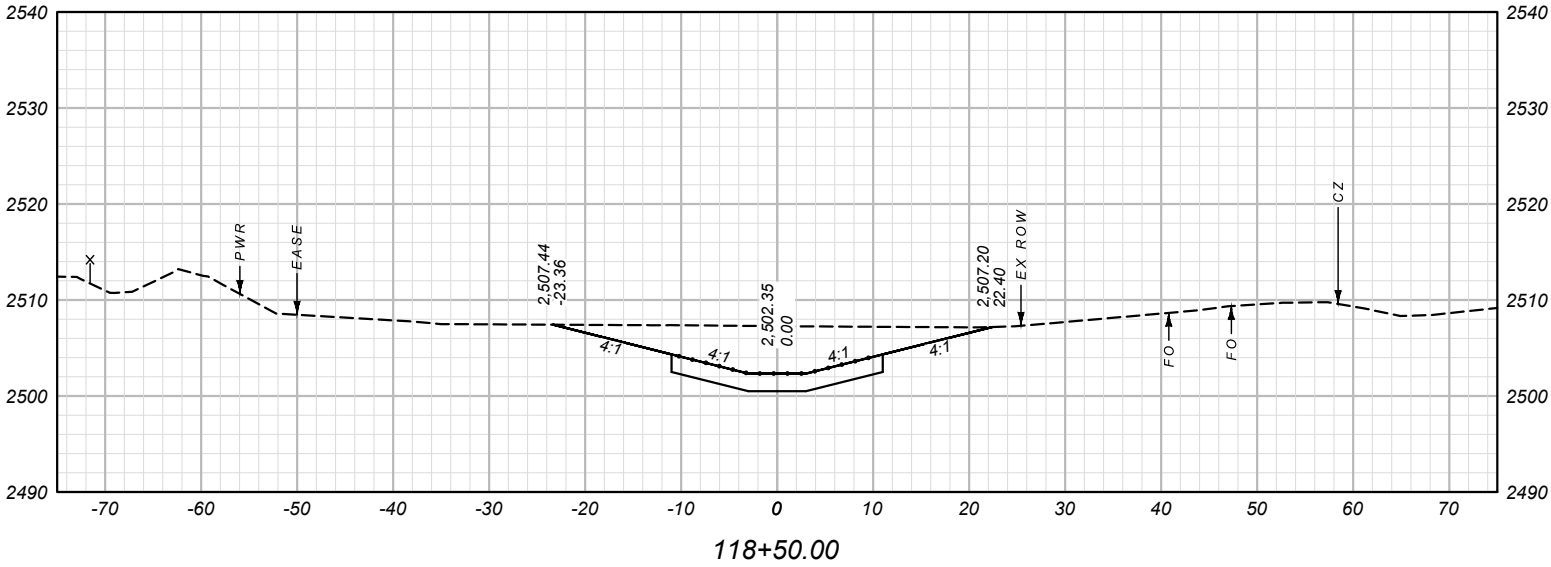
PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY
HILL COUNTY

PROJECT ID
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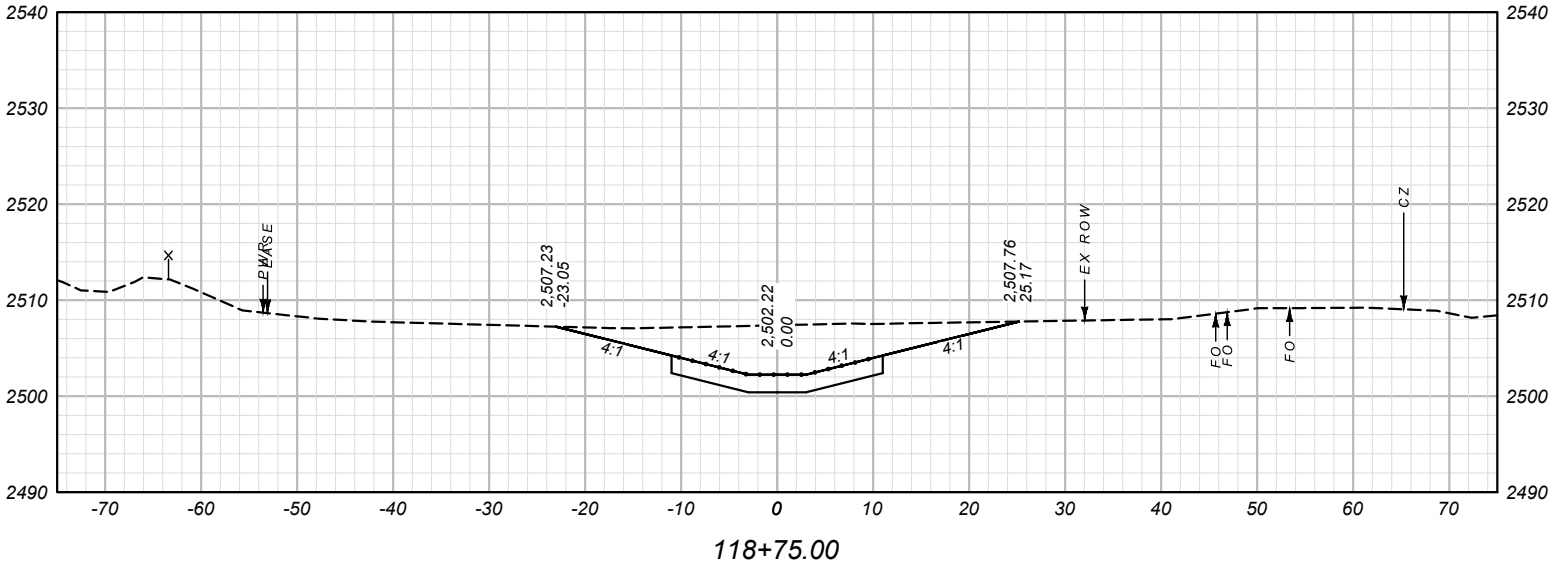
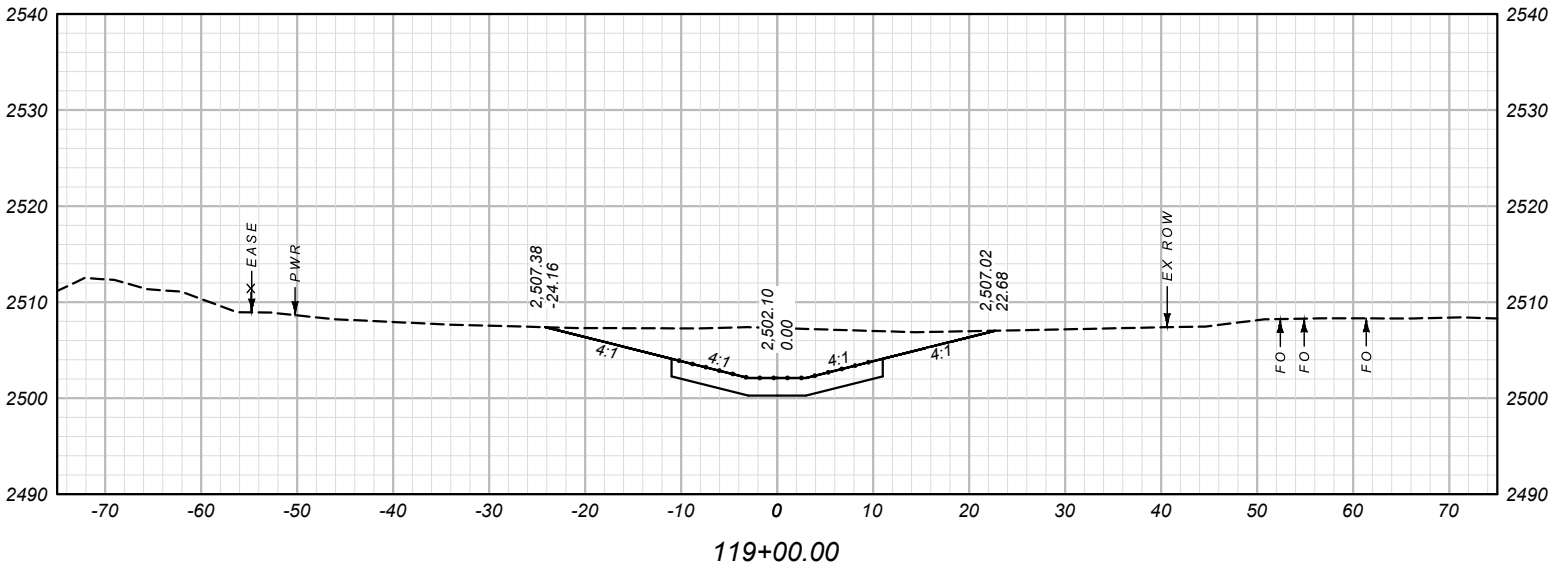
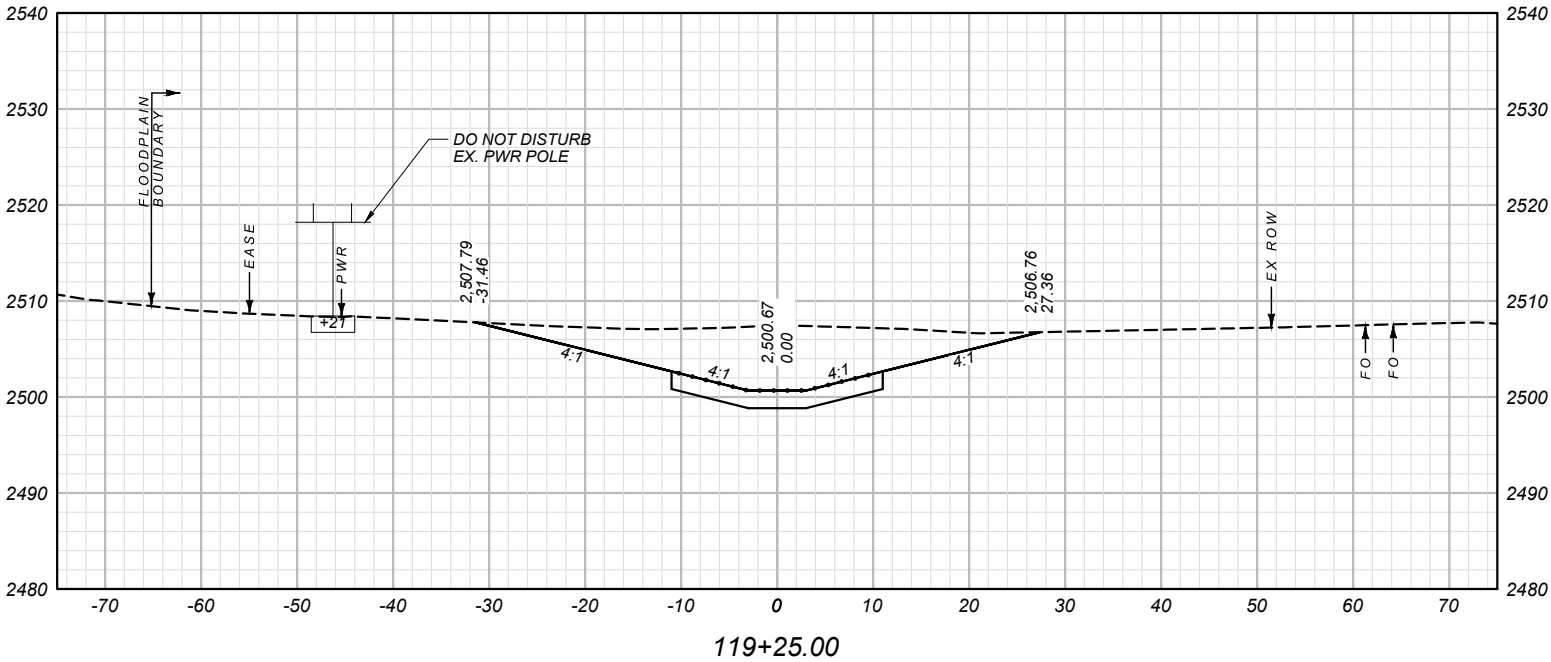
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S. VENNER

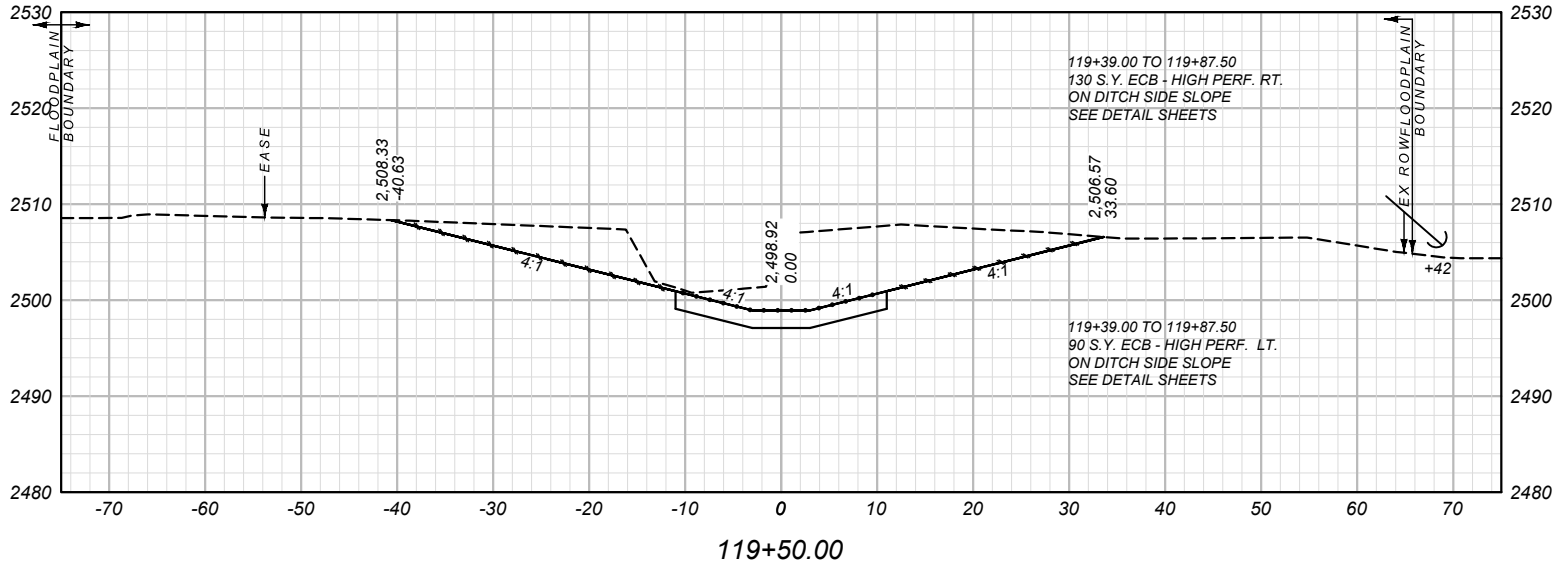
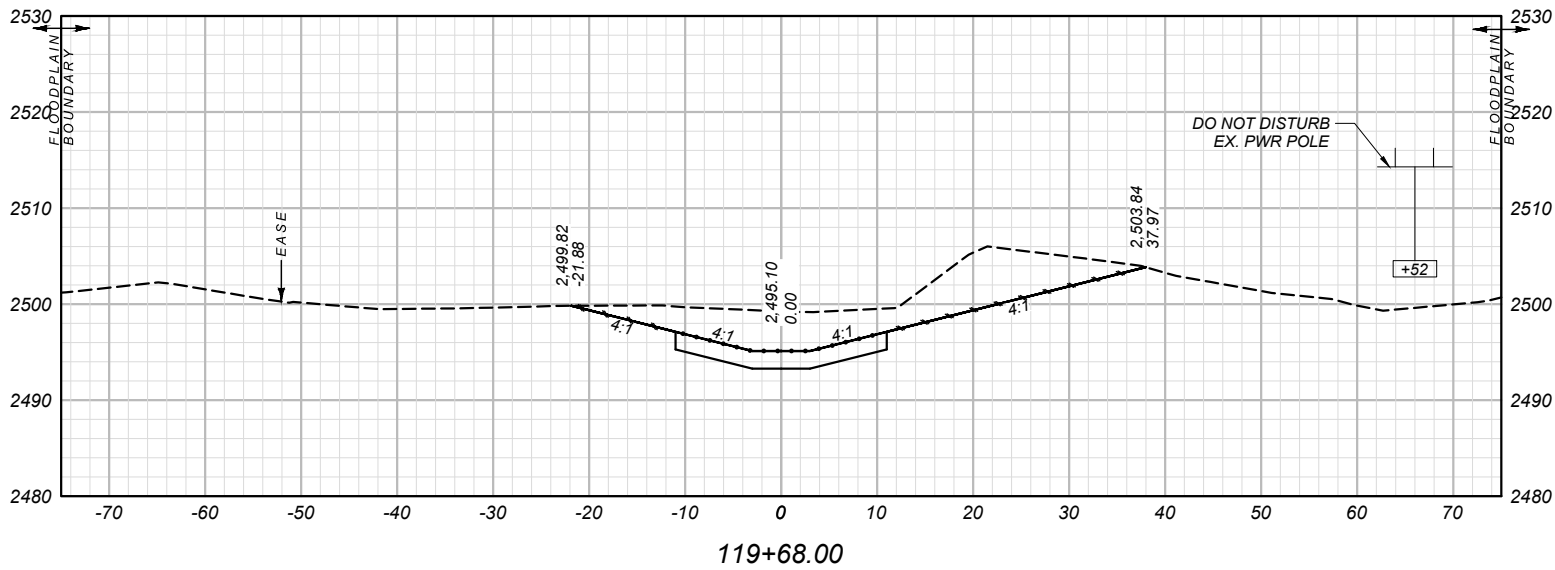
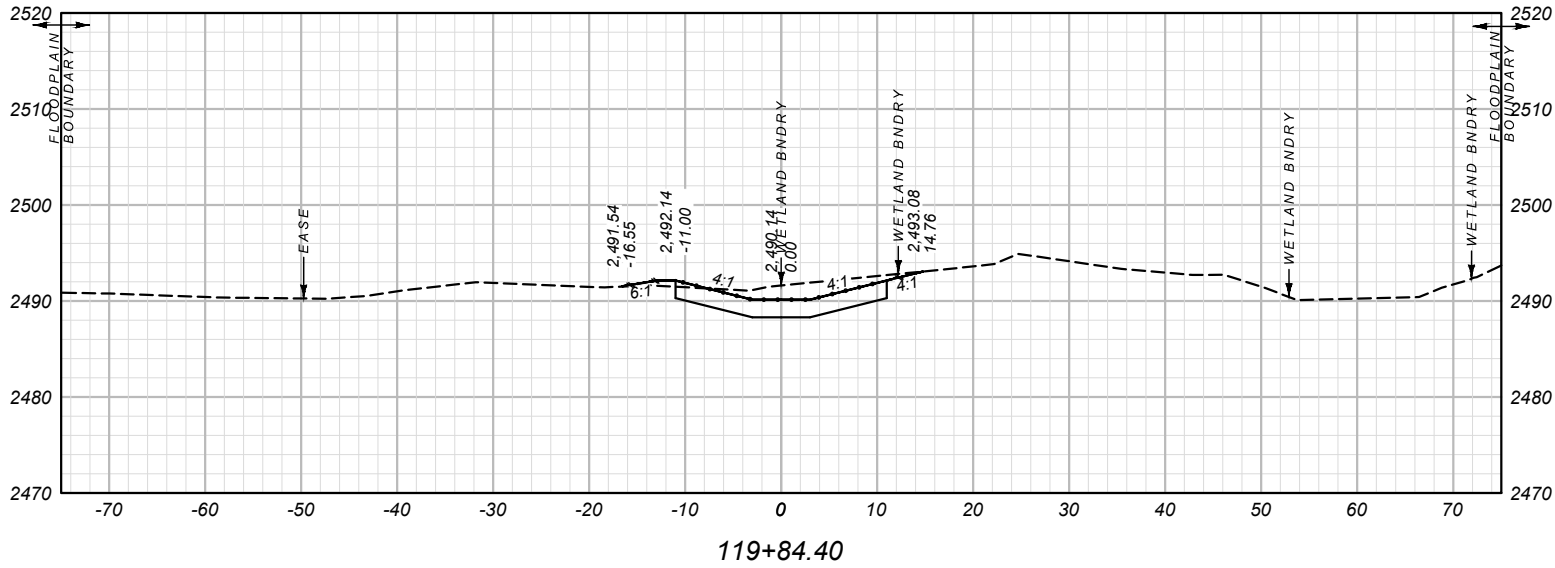
APR. 2026

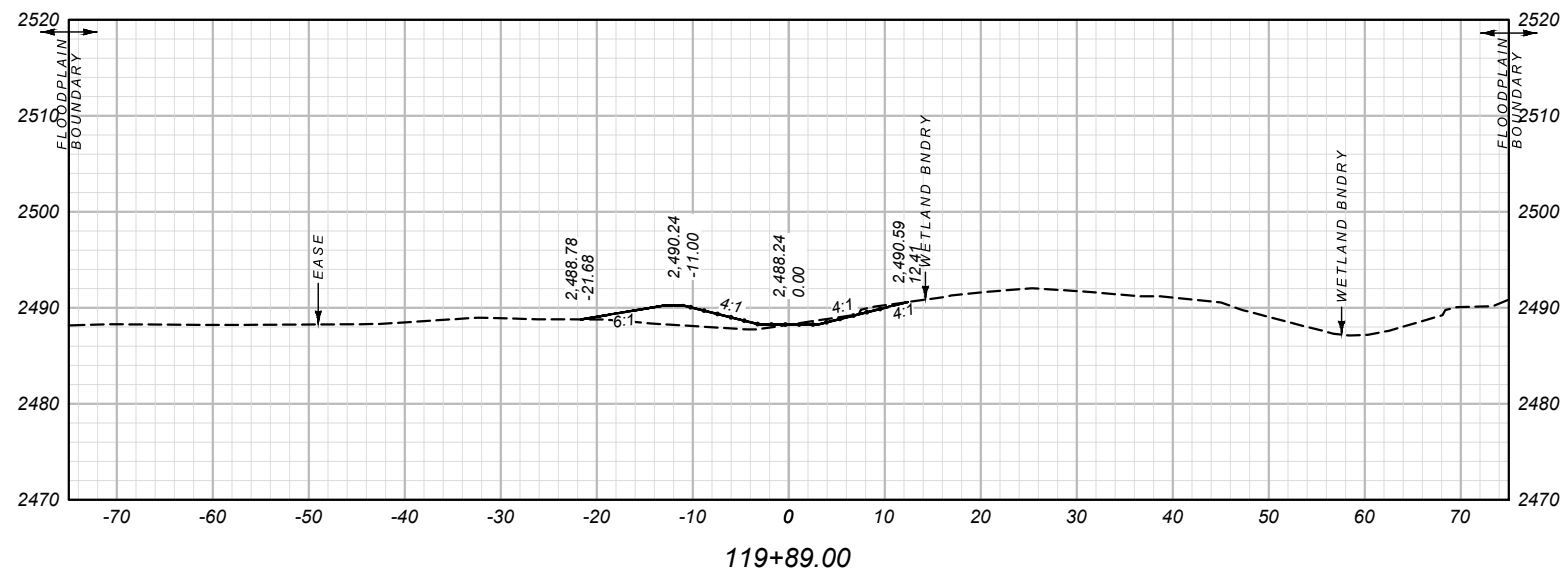
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CROSS SECTIONS

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9

DITCH CROSS SECTIONS

HILL COUNTY

NH 1-6(155)375

10388000

DESIGNED BY

M. JOHNSON
APR. 2026

J. SMITH	APR. 2026
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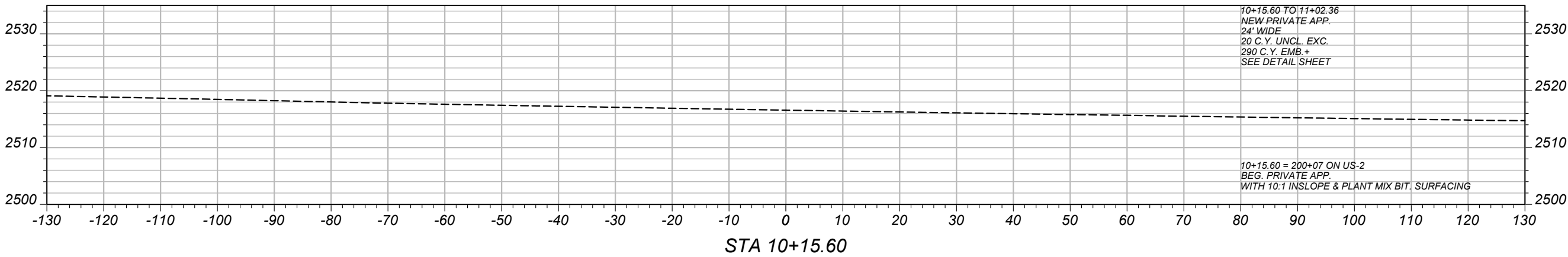
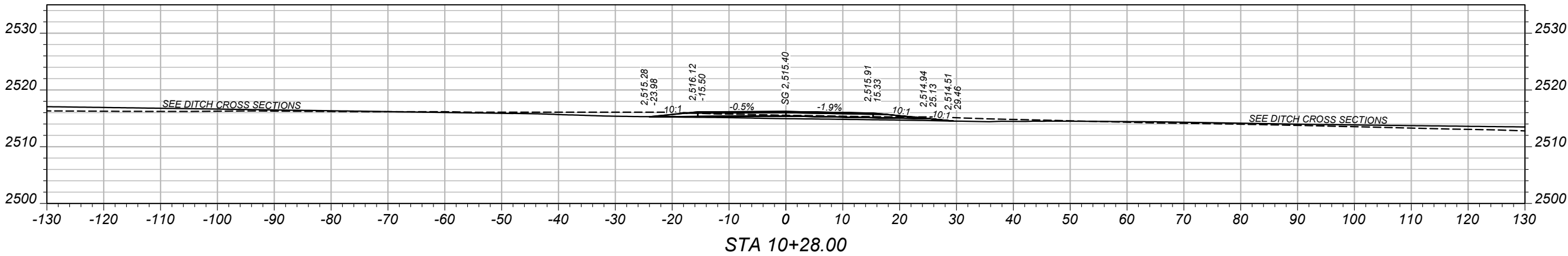
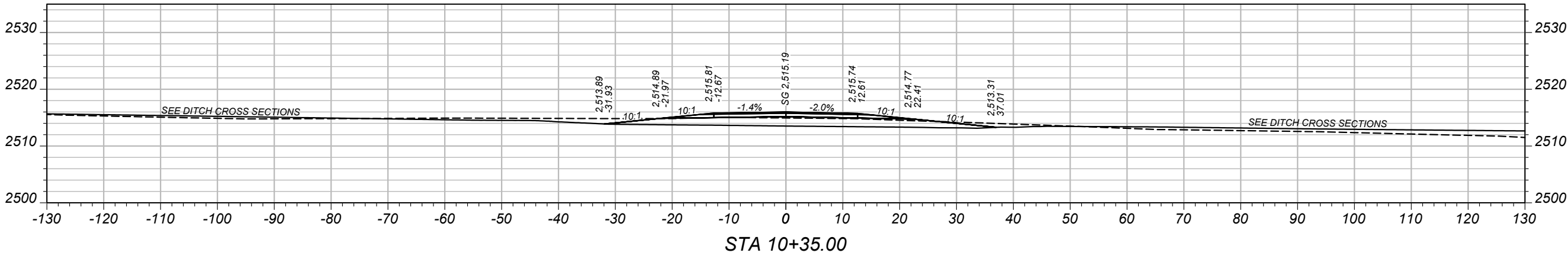
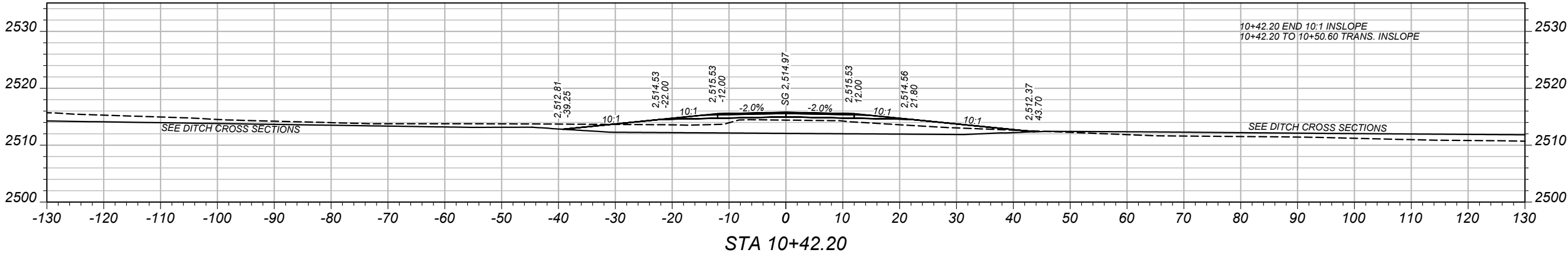
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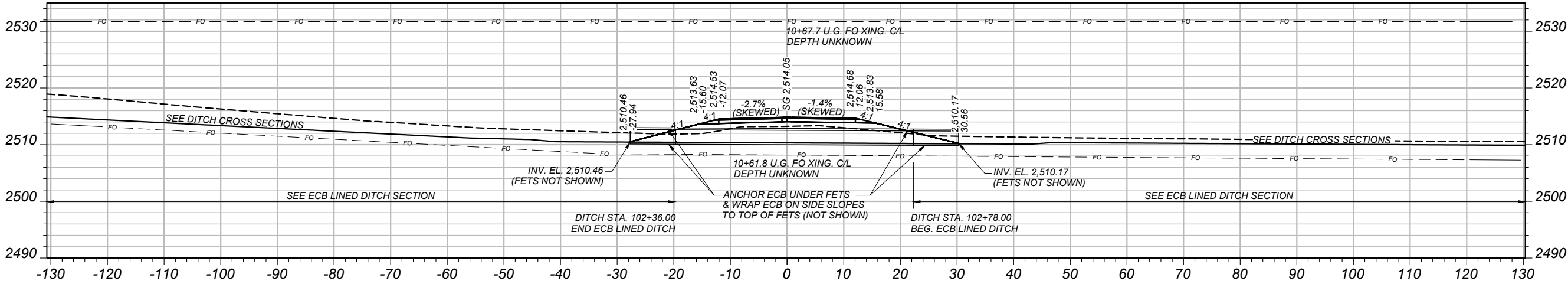
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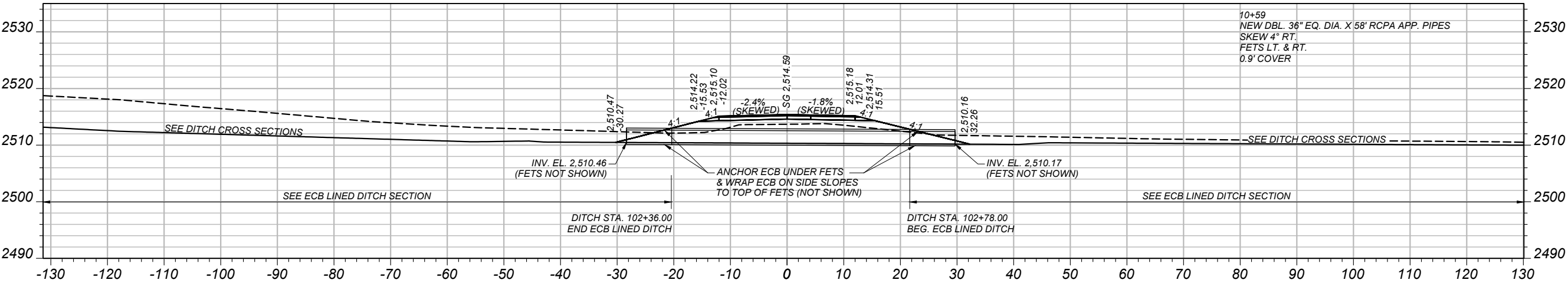
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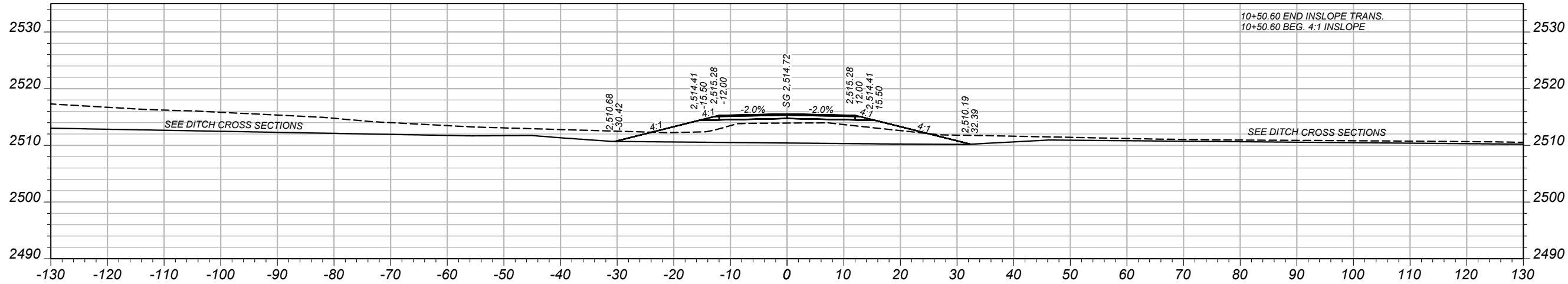





STA 10+63.00 SKEWED ALONG PIPE

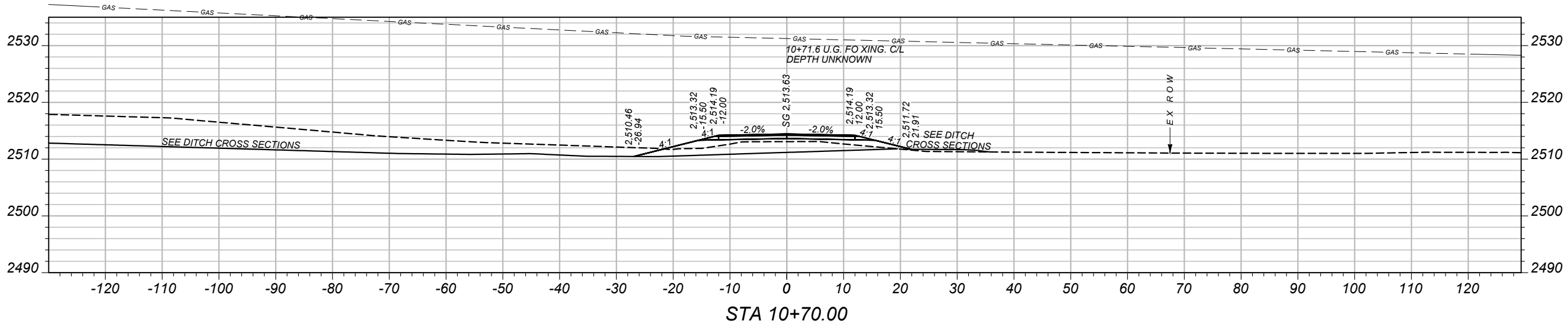
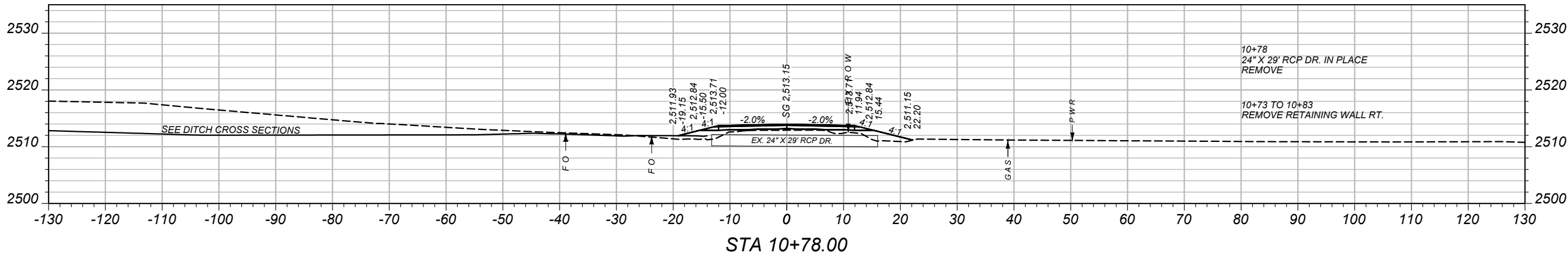
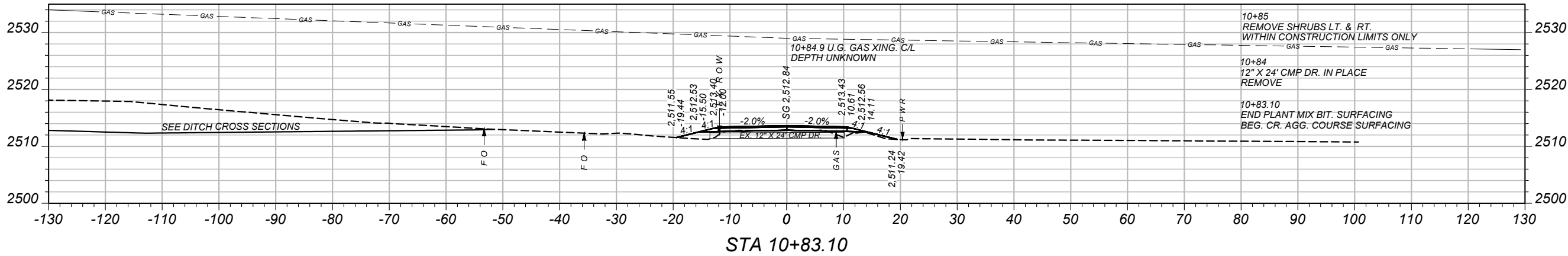
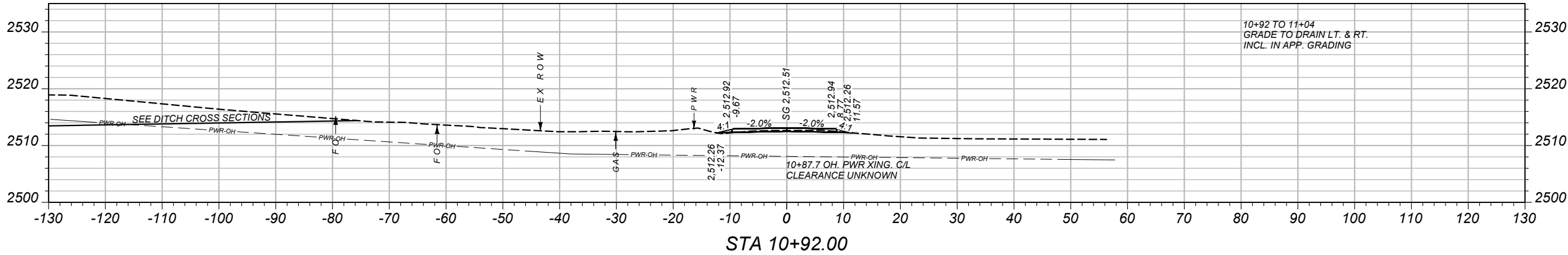


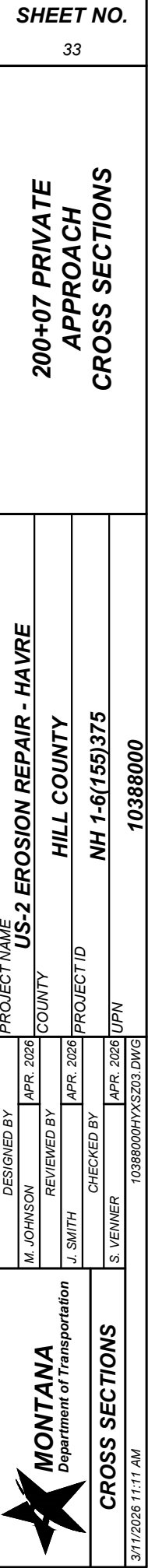
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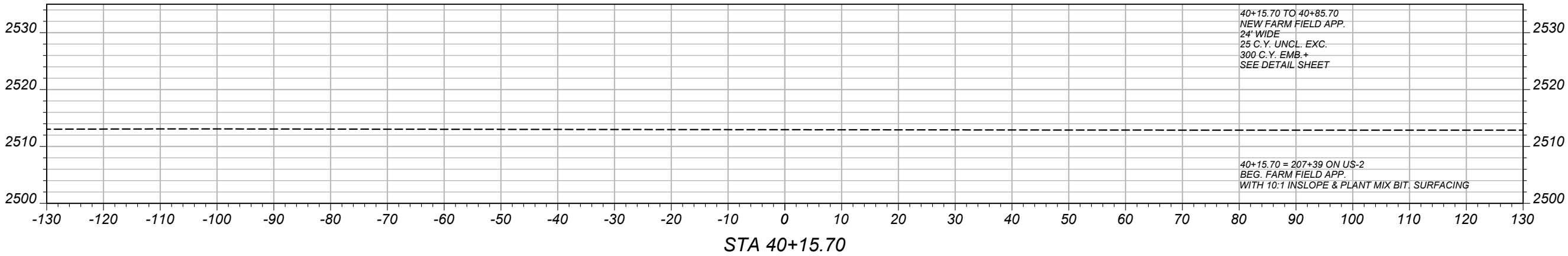
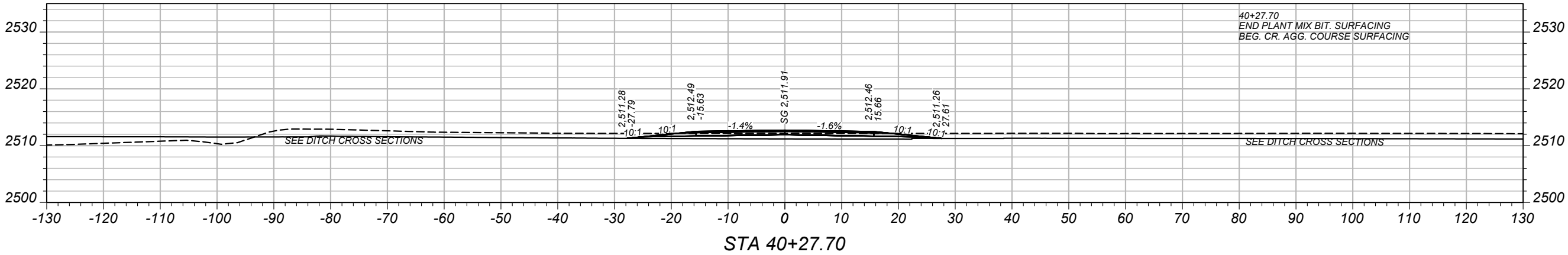
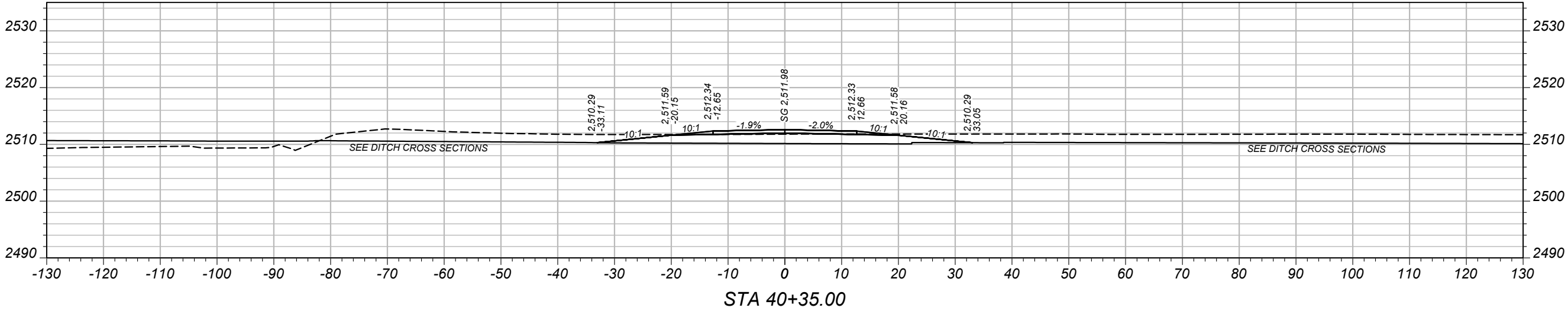
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 MONTANA Department of Transportation	DESIGNED BY M. JOHNSON	APR. 2026	PROJECT NAME US-2 EROSION REPAIR - HAVRE
	REVIEWED BY J. SMITH	APR. 2026	COUNTY HILL COUNTY
	CHECKED BY S. VENNEN	APR. 2026	PROJECT ID NH 1-6(155)375
CROSS SECTIONS		10388000HYXSZ03.DWG	UPN 10388000



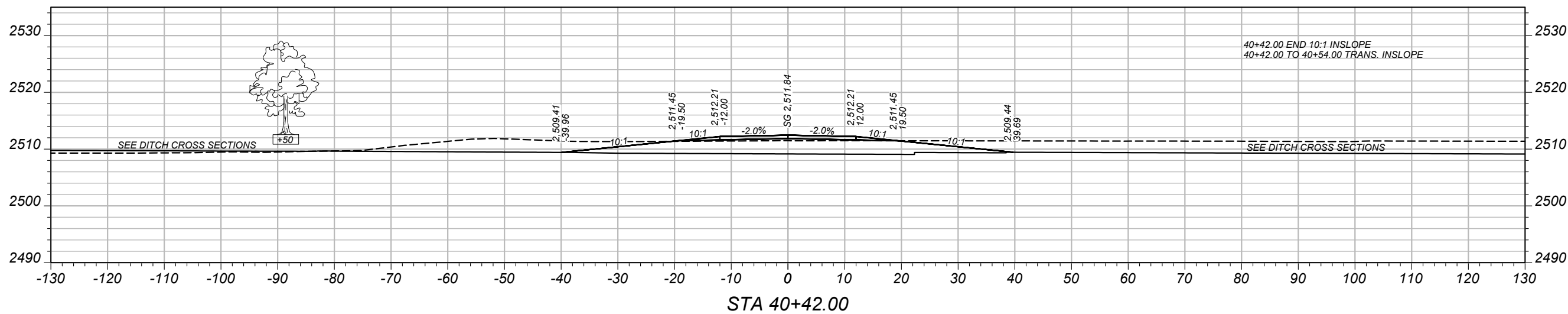
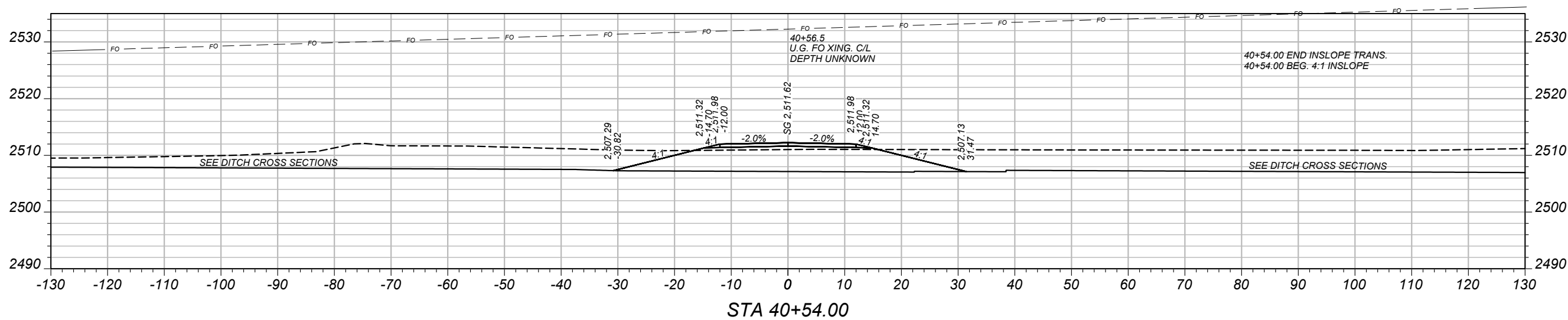
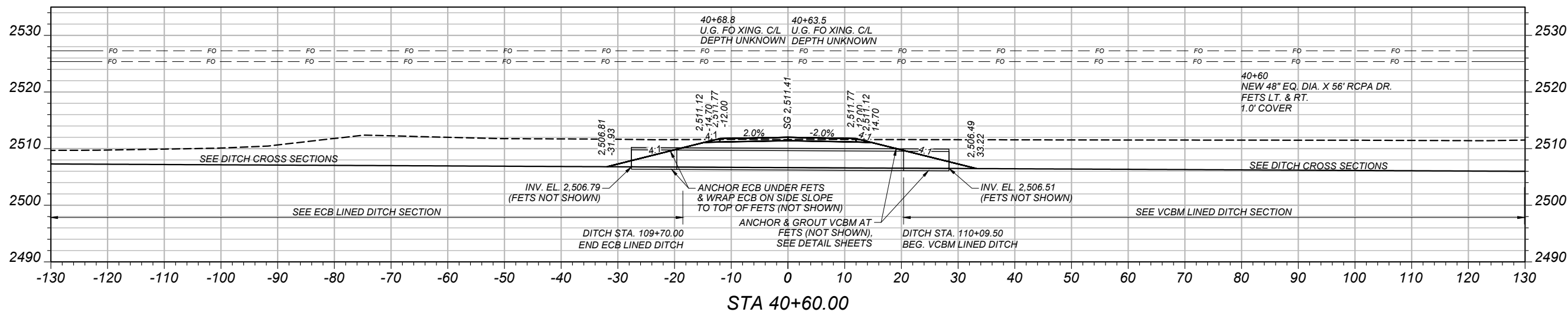


207+39 FARM FIELD
APPROACH
CROSS SECTIONS



 MONTANA Department of Transportation	DESIGNED BY	APR. 2026
	REVIEWED BY	APR. 2026
	CHECKED BY	APR. 2026
CROSS SECTIONS	M. JOHNSON	10388000HYXSZ03.DWG
	J. SMITH	
	S. VENNEN	

PROJECT NAME		
US-2 EROSION REPAIR - HAVRE		
COUNTY		
HILL COUNTY		
PROJECT ID		
NH 1-6(155)375		
UPN		
10388000		



SHEET NO.

35

**207+39 FARM FIELD
APPROACH
CROSS SECTIONS**

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

HILL COUNTY

NH 1-6(155)375

10388000

DESIGNED BY		APR 2026
M. JOHNSON		

REVIEWED BY	
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J. SMITH	APR. 2028
CHECKED BY	

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MONTANA
Department of Transportation

CROSS SECTIONS

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207+39 FARM FIELD
APPROACH
CROSS SECTIONS

PROJECT NAME
US-2 EROSION REPAIR - HAVRE

COUNTY

HILL COUNTY

PROJECT ID

NH 1-6(155)375

UPN

10388000

DESIGNED BY
M. JOHNSON

APR. 2026

REVIEWED BY

APR. 2026

CHECKED BY

APR. 2026

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