STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PLANS PREPARED BY:
vhb
500 Southborough Drive, Suite 105B
South Portland, Maine 04106

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
DATE 2-8-22
COMMISSIONER: Jay McCaughey
CHIEF ENGINEER: [illegible] 2-7-2022

PLAN LEGEND

Town, County, State		Catch Basins	Existing ■ Proposed
Property Lines		Manholes	Existing ● Proposed
R/W Lines-Existing		Proposed Underdrain	
R/W Lines-Proposed		Proposed Ditch	
Culvert-Existing		Existing Ditch	
Culvert Proposed		Utility Poles	Existing ♦ Proposed
Curbing	Existing / Proposed	Fire Hydrants	Existing ◈ Proposed
Type 1		Existing Water Line	
Type 3		Existing San. Sewer	
Type 5		Existing San. Sewer Manhole	⊙
Outline of Bodies of Water		Guardrail-Existing	
Exposed Bedrock		Guardrail-Proposed	
Buildings		Guardrail-Cable, Other	
Trees	Conifer / Deciduous	Centerline-Existing	
Tree Line		Centerline-Proposed	10+00
Clearing Limit Line		Travelway-Existing	
Railroad		Travelway-Proposed	

Boring — HB-XXX-###
Pavement Core — PC-#
Test Pit — TP-XXX-###

Probe — P-#.#X
#.# = Depth
X = W (Weathered Rock)
R (Refusal)
NR (No Refusal)

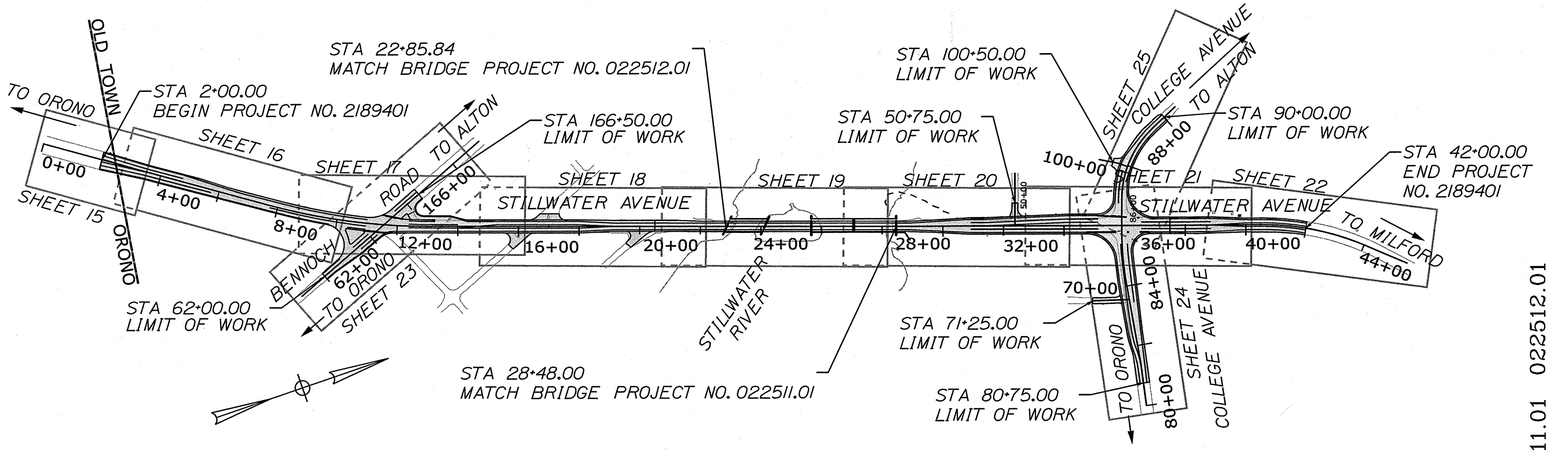
OLD TOWN
PENOBSCOT COUNTY
FED. PROJ. NO. 2189401

STILLWATER AVENUE
WIN NO. 022950.01
PROJECT LENGTH : 0.65 MILES

STILLWATER BRIDGES
OVER
STILLWATER RIVER
WIN NO.
022512.01 & 022511.01
BRIDGE NO. 1472 & 2806

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LAYOUT SCALE
300 0 300 600
Scale in Feet

vhb
SHEETS 1 TO 39 SHEETS 42 TO 153

STATE OF MAINE ANTHONY GRANDE No. 12023 LICENSED PROFESSIONAL ENGINEER

Tony Grande, P.E. — 11/17/2021 DATE

vhb
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STATE OF MAINE ROBERT S. BLUNT 11158 LICENSED PROFESSIONAL ENGINEER

Robert S. Blunt, P.E. — 11/17/2021 DATE

GZA
SHEETS 158-167 SHEET 172
SHEET 187

STATE OF MAINE Andrew R. Blaisdell 10957 LICENSED PROFESSIONAL ENGINEER

Andrew R. Blaisdell, P.E. — 11/17/2021 DATE

TRAFFIC DATA	STILLWATER AVE	COLLEGE AVE
Current (2023) AADT	16360(2023)	8090(2023)
Future (2043) AADT	18000(2043)	8900(2043)
DHV - % of AADT	11%	11%
Design Hour Volume	1980	979
% Heavy Trucks (AADT)	5%	3%
% Heavy Trucks (DHV)	3%	1%
Directional Distribution (DHV)	51%	57%
18 kip Equivalent P 2.0	362	78
18 kip Equivalent P 2.5	346	74
Design Speed (mph)	25	25
Functional Class	Minor Arterial	Minor Arterial
Highway Corridor Priority	2	2

PROJECT LOCATION:	ALONG STILLWATER AVENUE STARTING 0.15 MILES SOUTH OF BENNOCH ROAD THEN RUNNING NORTH 0.11 MILES, PAST THE COLLEGE AVENUE INTERSECTION; INCLUDING WORK ON COLLEGE AVENUE, BENNOCH ROAD, OLD MILL ROAD AND MICHAEL STREET. BRIDGES ARE LOCATED 0.69 MILES NORTHEAST OF I-95 EXIT 193 N BRIDGE NO. 1: LATITUDE 44°54'41.50"N LONGITUDE 68°41'5.70"W BRIDGE NO. 2: LATITUDE 44°54'45"N LONGITUDE 68°41'4.0"W
PROGRAM AREA:	HIGHWAY PROGRAM
SCOPE OF WORK:	INTERSECTION IMPROVEMENTS WITH SAFETY, DRAINAGE, PEDESTRIAN, AND PAVEMENT UPGRADES.

WIN 022950.01 022511.01 022512.01

PROJECT INFORMATION

PROGRAM	HIGHWAY
PROJECT MANAGER	R. MOULTON
DESIGNER	E. FLYNN
CONSULTANT	VHB
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

SIGNATURE
P.E. NUMBER
DATE

OLD TOWN
STILLWATER AVENUE

TITLE SHEET

SHEET NUMBER
1
OF 218

Date:11/17/2021
Username: EFlynn
Division: HIGHWAY
Filename: ...\MSTA\PLANSET\001_Title.dgn

Filename: ...\MSTA\PLANSET\002_Estimate.dgn Division: HIGHWAY Username: jomesdavis Date:12/8/2021

ESTIMATED QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	WIN 22950.01 HIGHWAY	WIN 022512.01 BRIDGE 1	WIN 022511.01 BRIDGE 2	OLD TOWN POLLUTION CONTROL (SEWER)	OLD TOWN WATER DISTRICT	CONSOLIDATED COMMUNICATIONS OF NORTHERN NEW ENGLAND COMPANY	FIRSTLIGHT	TOTAL
201.11	CLEARING	AC	1							1
201.23	REMOVE SINGLE TREE TOP ONLY	EA	25							25
201.24	REMOVE STUMP	EA	26							26
202.08	REMOVING BUILDING NO. 1 (STILLWATER AVE, 35+30 LT)	EA	1							1
202.08	REMOVING BUILDING NO. 2 (OLD MILL RD, 70+42 LT)	EA	1							1
202.11	REMOVING PORTLAND CEMENT CONCRETE PAVEMENT	SY	2700							2700
202.15	REMOVE MH OR CB	EA	12					1		13
202.19	REMOVING EXISTING BRIDGE (Br.1: S=50 T, C=914 CY. Br.2: S=145 T, C=960 CY)	LS		1	1					1
202.202	REMOVING PAVMENT SURFACE	SY	3900							3900
202.203	PAVEMENT BUTT JOINT	SY	1160							1160
203.20	COMMON EXCAVATION	CY	11200	1740	1890					14830
203.2318	DISPOSAL OF SPECIAL WASTE	T			33					33
203.25	GRANULAR BORROW	CY	50	2700	2700					5450
203.35	CRUSHED STONE 3/4 - INCH	CY	20	39	39					98
206.082	STRUCTURAL EARTH EXCAVATION - MAJOR STRUCTURES, PLAN QUANTITY	CY		1150	1550					2700
206.092	STRUCTURAL ROCK EXCAVATION - MAJOR STRUCTURES	CY		10	190					200
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	CY	10900	850	850		40			12640
304.14	AGGREGATE SUBBASE COURSE - TYPE A	CY					15			15
403.2081	12.5 MM POLYMER MODIFIED HMA	T	2200	104	204					2508
403.209	HOT MIX ASPHALT 9.5 MM (INCIDENTALS)	T	590	6	6		10			612
403.211	HOT MIX ASPHALT (SHIM)	T	1100							1100
403.213	HOT MIX ASPHALT, 12.5 MM BASE	T	2700	60	60					2820
409.15	BITUMINOUS TACK COAT, APPLIED	G	2370	48	95					2513
461.131	TEMPORARY PAVEMENT	T		210	210					420
501.502	ROCK SOCKETED H-PILES 117 LBS/FT, IN PLACE	LF		153	171					324
501.54	STEEL H-BEAM PILES 117 LBS/FT, DELIVERED	LF		173	191					364
501.804	DRILLING EQUIPMENT MOBILIZATION	LS		1	1					1
502.219	STRUCTURAL CONCRETE, ABUTMENTS AND RET. WALLS (Br.1 = 114 CY, Br.2 = 110 CY)	LS		1	1					1
502.239	STRUCTURAL CONCRETE PIERS (Br.2 = 190 CY)	LS			1					1
502.24	STRUCTURAL CONCRETE PIERS (PLACED UNDER WATER)	CY			190					190
502.26	STRUCTURAL CONCRETE ROADWAY AND SIDEWALK SLAB ON STEEL BRIDGES (Br.1 = 243 CY, Br.2 = 450 CY)	LS		1	1					1
502.31	STRUCTURAL CONCRETE APPROACH SLAB (Br.1 = 25 CY, Br.2 = 25 CY)	LS		1	1					1
502.49	STRUCTURAL CONCRETE CURBS AND SIDEWALKS (Br.1 = 48 CY, Br.2 = 102 CY)	LS		1	1					1
502.77	FRP BRIDGE DRAIN - TYPE F	EA		2	4					6
502.77	FRP BRIDGE DRAIN - TYPE B	EA		2	4					6
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED	LB		37500	63950					101450
503.13	REINFORCING STEEL, PLACING	LB		37500	63950					101450
503.26	STAINLESS STEEL REINFORCEMENT, FABRICATED AND DELIVERED	LB		62000	120900					182900
503.27	STAINLESS STEEL REINFORCEMENT, PLACING	LB		62000	120900					182900
504.702	STRUCTURAL STEEL FABRICATED AND DELIVERED (Br.1 = 273,000 LB, Br.2 = 626,000 LB)	LS		1	1					1
504.71	STRUCTURAL STEEL ERECTION (Br.1 = 273,000 LB, Br.2 = 626,000 LB)	LS		1	1					1
505.08	SHEAR CONNECTORS (Br.1 = 2,268 EA, Br.2 = 4,626 EA)	LS		1	1					1
506.9104	THERMAL SPRAY COATING (SHOP APPLIED) (Br.1 = 273,000 LB, Br.2 = 626,000 LB)	LS		1	1					1
507.08161	STEEL APPROACH RAILING, 4-BAR	EA		2	2					4
507.0821	STEEL BRIDGE RAILING, 3 BAR (Br.1 = 128 LF, Br.2 =283 LF)	LS		1	1					1
507.0822	STEEL APPROACH RAILING, 3-BAR	EA		2	2					4
507.0831	STEEL BRIDGE RAILING, 4 BAR (Br.1 = 128 LF, Br.2 =283 LF)	LS		1	1					1
508.14	HIGH PERFORMANCE WATERPROOFING MEMBRANE (Br.1 = 490 SY, Br.2 = 1,100 SY)	LS		1	1					1
510.12	SPECIAL DETOUR, 30 FOOT ROADWAY WIDTH VEHICULAR AND PEDESTRIAN TRAFFIC SEPARATED WITH 5 FOOT SIDEWALK	LS		1	1					1
511.07	COFFERDAM: BRIDGE 1, ABUTMENT NO. 1	LS		1						1
511.07	COFFERDAM: BRIDGE 1, ABUTMENT NO. 2	LS		1						1
511.07	COFFERDAM: BRIDGE 2, ABUTMENT NO. 1	LS			1					1
511.07	COFFERDAM: BRIDGE 2, ABUTMENT NO. 2	LS			1					1
511.07	COFFERDAM: BRIDGE 2, PIER NO. 1	LS			1					1
513.22	CRUSHED STONE SLOPE PROTECTION	SY		50.0	50.0					100
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (Br.1 = 410 SY, Br.2 = 750 SY)	LS		1	1					1
519.60	EXPANSION DEVICE - ASPHALTIC PLUG JOINT	LF		90	81					171
523.52	BEARING INSTALLATION	EA			6					6
523.5401	LAMINATED ELASTOMERIC BEARINGS, FIXED	EA			6					6
527.34	WORK ZONE CRASH CUSHIONS	UNIT		2	2					
603.159	12" CULVERT PIPE OPT III	LF	84							84
603.165	15" RCP CLASS III	LF	40							40
603.175	18" RCP CLASS III	LF	60	24	24					108
603.179	18" CULVERT PIPE OPT III	LF	169							169
604.072	CATCH BASIN TYPE A1-C	EA	11	0.5625	0.5625					12
604.092	CATCH BASIN TYPE B1-C	EA	11							11
604.164	REBUILDING CATCH BASIN	EA	4							4
604.18	ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	EA	10							10
604.245	TYPE F4-C	EA	2							2
604.247	TYPE F5-C	EA	1							1
604.249	TYPE F6-C	EA	1							1
604.252	CATCH BASIN TYPE A5-C	EA	3	0.5625	0.5625					4
604.262	CATCH BASIN TYPE B5-C	EA	2							2
605.09	6" UNDERDRAIN TYPE B	LF	2150							2150
605.11	12" UNDERDRAIN TYPE C	LF	1700							1700
605.12	15" UNDERDRAIN TYPE C	LF	140							140
606.1301	31" W-BEAM GUARDRAIL - MIDWAY SPLICE (STEEL POST, 8" OFF-BLOCK, SINGLE F)	LF	213	100	100					413
606.1303	31" W-BEAM GUARDRAIL - MIDWAY SPLICE - 15' RADIUS AND LESS	LF	100							100
606.1721	BRIDGE TRANSITION - TYPE I	EA		4	4					8
606.259	ANCHORAGE ASSEMBLY	EA	4							4
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	EA	4							4
606.356	DELINEATOR POST	EA	4							4
606.47	SINGLE WOOD POST	EA	6							6
606.51	MULTIPLE MAILBOX SUPPORT	EA	4							4
607.291	REMOVE AND RESET STONEWALL	LF	10							10
607.42	ORNAMENTAL PICKET FENCE	LF	72							72
608.26	CURB RAMP DETECTIBLE WARNING FIELD	SF	270							270
609.11	VERTICAL CURB TYPE 1	LF	3,800	415	725					4940
609.12	VERTICAL CURB TYPE 1 - CIRCULAR	LF	360							360
609.221	TERMINAL CURB TYPE 1	LF	660							660
609.222	TERMINAL CURB TYPE 1 - CIRCULAR	LF	130							130
609.31	CURB TYPE 3	LF	1650							1650

ESTIMATED QUANTITIES

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609.34	CURB TYPE 5	LF	190							190
609.35	CURB TYPE 5 - CIRCULAR	LF	140							140
610.08	PLAIN RIPRAP	CY	10	125	125					260
610.16	HEAVY RIPRAP	CY		2350	2350					4700
610.18	STONE DITCH PROTECTION	CY	26							26
613.319	EROSION CONTROL BLANKET	SY	52							52
615.07	LOAM	CY	900				5			905
618.13	SEEDING METHOD NUMBER 1	UN	70				1			71
619.12	MULCH	UN	70				1			71
619.14	EROSION CONTROL MIX	CY		5	5					
620.58	EROSION CONTROL GEOTEXTILE	SY	80	2250	2250					4580
620.60	SEPARATION GEOTEXTILE	SY	2000							2000
620.66	DRAINAGE GEOCOMPOSITE	SY		180	190					370
626.11	PRECAST CONCRETE JUNCTION BOX	EA	9							9
626.22	NON-METALLIC CONDUIT	LF	525							525
626.221	NON-METALLIC CONDUIT, CONCRETE ENCASED	LF	55							55
626.251	NON-METALLIC UNDER PAVEMENT CONDUIT (SCHEDULE 80 OR GREATER RATING)	LF	450							450
626.26	3 INCH DIAMETER UTILITY CONDUIT SYSTEM, TEMPORARY	LS							1	1
626.271	5 INCH DIAMETER UTILITY CONDUIT SYSTEM, TEMPORARY	LS						1		1
626.35	CONTROLLER CABINET FOUNDATION	EA	2							2
626.36	REMOVE OR MODIFY CONCRETE FOUNDATION	EA	3							3
626.421	24 INCH FOUNDATION	LF	77							77
626.451	42 INCH FOUNDATION	LF	42							42
626.46	48-INCH FOUNDATION	LF	23							23
626.48	60-INCH FOUNDATION	LF	26							26
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	LF	20000							20000
627.75	WHITE PAVEMENT & CURB MARKING	SF	4225							4225
627.78	4" TEMPORARY PAVEMENT MARKING LINE, WHITE OR YELLOW	LF	20000							20000
627.94	PREFORMED THERMOPLASTIC PAVEMENT MARKING	SF	35							35
629.05	HAND LABOR, STRAIGHT TIME	HR	80	20	20			3		123
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	HR	80	20	20			3		123
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	HR	160	20	20					200
631.32	CULVERT CLEANER (INC. OPERATOR)	HR	40							40
639.18	FIELD OFFICE TYPE A	EA	0.34	0.33	0.33					1
642.15	PRECAST CONCRETE STEPS	EA	1							1
643.21	NON-INVASIVE DETECTION - STOP BAR: STILLWATER AVE & BENNOCH ROAD	LS	1							1
643.21	NON-INVASIVE DETECTION - STOP BAR: STILLWATER AVE & COLLEGE AVE	LS	1							1
643.71	TRAFFIC SIGNAL MODIFICATION: STILLWATER AVE & BENNOCH RD	LS	1							1
643.71	TRAFFIC SIGNAL MODIFICATION: STILLWATER AVE & COLLEGE AVE	LS	1							1
643.72	TEMPORARY TRAFFIC SIGNAL: STILLWATER AVE & COLLEGE AVE	LS	1							1
643.72	TEMPORARY TRAFFIC SIGNAL: STILLWATER AVE & BENNOCH RD	LS	1							1
643.91	MAST ARM POLE, W/25' ARM	EA	3							3
643.91	MAST ARM POLE, W/33' ARM	EA	1							1
643.91	MAST ARM POLE, W/35' ARM	EA	2							2
643.91	MAST ARM POLE, W/40' ARM	EA	1							1
643.91	MAST ARM POLE, W/50' ARM	EA	1							1
643.92	PEDESTAL POLE	EA	11							11
645.103	DEMOUNT GUIDE SIGN	EA	31							31
645.106	DEMOUNT REGUALTORY, WARNING, CONFIRMATION, RTE ASSEMBLY SIGNS	EA	66							66
645.108	DEMOUNT POLE	EA	2							2
645.113	REINSTALL GUIDE SIGN	EA	13							13
645.116	RESINSTALL REGULATORY, WARNING, CONFIRMATION, RTE ASSEMBLY SIGN	EA	29							29
645.251	ROADSIDE GUIDE SIGN, TYPE 1	SF	104							104
645.271	REGULATORY, WARNING, CONFIRMATION, AND RTE ASSEMBLY SIGN, TYPE 1	SF	248							248
645.512	LED BLANK-OUT SIGN, OVERHEAD MOUNTED	EA	1							1
652.312	TYPE III BARRICADE	EA		3	3					6
652.33	DRUM	EA	100	30	30					160
652.34	CONE	EA	200	25	25					250
652.35	CONSTRUCTION SIGNS	SF	1000	250	250					1500
652.36	MAINTENANCE OF TRAFFIC CONTROL DEVICES	CD	350	293	293	10	45			991
652.38	FLAGGER	HR	14000	200	200	100	720			15220
652.381	TRAFFIC OFFICER	HR		20	20					40
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	EA	4	2	2					8
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LS	0.34	0.33	0.33					1
658.20	ACRYLIC LATEX COLOR FINISH	SY	115							115
659.10	MOBILIZATION	LS	0.34	0.33	0.33					1
660.21	ON-THE-JOB TRAINING	HR			1000					1000
801.03	TEST PITS	EA				2	5			7
801.04	PREINSULATED SEWER PIPE	LF				280				280
801.071	TEMPORARY SEWER BY-PASS	LS				1				1
801.133	6" FORCE MAIN	LF				80				80
801.141	4" PVC SANITARY SEWER (SDR-35)	LF	20							20
801.16	6" PVC SANITARY SEWER (SDR-35)	LF	20							20
812.162	ADJUSTING SEWER MANHOLE TO GRADE	EA				20				20
822.322	6-INCH DUCTILE IRON PIPE	LF					950			950
822.35	10-INCH CLASS 52 DUCTILE IRON PIPE	LF					15			15
822.36	12-INCH DUCTILE IRON PIPE	LF					1065			1065
822.37	16-INCH DUCTILE IRON PIPE	LF					396			396
823.31	12-INCH GATE VALVE	EA					3			3
823.331	6-INCH GATE VALVE	EA					6			6
823.374	16-INCH GATE VALVE	EA					2			2
824.30	FIRE HYDRANT	EA					5			5
824.31	REMOVE FIRE HYDRANT	EA					5			5
824.32	REMOVE AND RESET FIRE HYDRANT	EA					1			1
825.4222	2-INCH CTS HDPE WATER SERVICE	LF					90			90
825.43	1-INCH COPPER WATER SERVICE (TYPE K)	LF					870			870
825.5411	TEMPORARY WATER MAIN	LS					1			1
827.30	ROCK EXCAV REMOV & REFILL	CY				20				20
827.304	TRENCH ROCK EXCAVATION	CY					100			100
827.31	UNSUIT SOIL EXCAV REMOV & REFILL	CY				100				100
827.312	SELECT BACKFILL	CY				70				70
827.321	ABANDON EXISTING WATER MAIN IN-PLACE	LS					1			1
827.331	TRENCH INSULATION	SY				50	650			700
830.10	WATER MAIN BRIDGE CROSSING	LS					1			1
830.13	SEWER MAIN BRIDGE CROSSING	LS				1				1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	12/8/2021
CHECKED-REVIEWED	ECF	AG	12/8/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE
ESTIMATED QUANTITIES

SHEET NUMBER

2

OF 218

EARTHWORK SUMMARY

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)	10,616	
EARTH FROM DRIVES, OLD ROAD, ETC.	258	
TEMPORARY DETOUR	720	
GRUBBING IN FILL	166	
REMOVE PAVEMENT	190	
PAVEMENT SALVAGE IN FILL	129	
BRIDGE 1 ABUTMENTS	1,300	
BRIDGE 2 ABUTMENTS	1,450	
TOTAL COMMON EXCAVATION (for estimate)		14,830

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)	2,160	
FILL FOR DRIVES	26	
TEMPORARY DETOUR	1,364	
GRUBBING IN FILL	166	
LOAM SALVAGE IN FILL	0	
UNDERCUT	0	
MUCK EXCAVATION	0	
PAVEMENT SALVAGE IN FILL	129	
TOTAL FILL		3,845

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

(1) TOTAL COMMON EXCAVATION		14,830
DEDUCTIONS:		
GRUBBING IN CUT	914	
GRUBBING IN FILL	166	
LOAM SALVAGE IN CUT	0	
LOAM SALVAGE IN FILL	0	
UNDERCUT	0	
CONCRETE REMOVAL	2,678	
PAVEMENT SALVAGE (CUT & FILL)	319	
(2) TOTAL DEDUCTIONS		4,078
TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)		10,752
TOTAL AVAILABLE STRUCT. EXCAVATIONS		3,244
TEMPORARY DETOUR		1,364
RIPRAP		235
HEAVY RIPRAP		1,410
TOTAL AVAILABLE NON-ROCK EXCAVATION		17,005

COMPUTATION OF GRANULAR BORROW FOR ESTIMATE

GRANULAR BORROW HIGHWAY	50	
GRANULAR BORROW BRIDGE 1	1,740	
GRANULAR BORROW BRIDGE 2	1,890	
GRANULAR BORROW =	3,680 x 1.00 =	3,680

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3)TOTAL FILL				3,845
TOTAL AVAIL. NON-ROCK EXCAV.	17,005 x 0.90	=	15,305	
TOTAL AVAIL. ROCK EXCAV.	0 x 1.30	=	0	
TOTAL AVAIL. STR. ROCK EXCAV.	0 x 1.30	=	0	
TOTAL WASTE MATERIAL TO BE UTILIZED	0 x 0.00	=	0	
(4)TOTAL AVAILABLE EXCAVATION				15,305
BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION				-11,460

SURPLUS MATERIAL = AVAILABLE EXCAVATION MINUS
TOTAL FILL, PLUS TOTAL WASTE MATERIAL TO BE WASTED 11,460

Filename: ...\003_Earthwork_Summary.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

EARTHWORK SUMMARY

SHEET NUMBER

3

OF 218

Filename: ...\004_ConstructionNotes.dgn Division: HIGHWAY Username: jamesdavis Date:11/29/2021

CONSTRUCT THE FOLLOWING DRIVES AND ENTRANCES

STATION	OFFSET	TYPE	OPENING WIDTH
STILLWATER AVE			
2+60.00	LT	PAVED	26.0
2+80.00	RT	PAVED	26.0
3+75.00	RT	GRAVEL	26.0
4+60.00	RT	PAVED	26.0
5+10.00	RT	PAVED	26.0
5+75.00	RT	PAVED	26.0
6+50.00	RT	PAVED	26.0
7+00.00	RT	GRAVEL	26.0
7+82.00	RT	PAVED	26.0
9+35.00	LT	PAVED	26.0
9+64.00	RT	GRAVEL	26.0
(Intersection)			
15+50.00	LT	PAVED	26.0
18+25.00	RT	GRAVEL	26.0
20+75.00	LT	PAVED	20.0
21+09.00	RT	PAVED (COMMERICAL)	35.8
21+41.00	RT	PAVED	26.0
21+50.00	LT	GRAVEL	33.0
(Bridge)			
29+25.00	RT	PAVED	26.0
29+40.00	LT	FIELD OPENING	13.4
30+75.00	LT	GRAVEL	18.0
30+75.00	RT	PAVED	26.0
31+35.00	RT	PAVED	16.0
31+50.00	LT	GRAVEL	26.0
32+05.00	RT	GRAVEL	20.0
34+00.00	LT	GRAVEL	23.0
34+35.00	RT	PAVED	26.0
34+35.00	LT	PAVED	26.0
(Intersection)			
37+90.00	LT	PAVED (COMMERICAL)	30.4
37+90.00	RT	PAVED (COMMERICAL)	49.7
38+12.00	LT	PAVED (COMMERICAL)	30.4
39+25.00	LT	PAVED (COMMERICAL)	32.0
40+25.00	LT	PAVED (COMMERICAL)	65.5
41+00.00	LT	PAVED (COMMERICAL)	40.0
BENNOCH RD			
62+75.00	RT	PAVED	26.0
63+32.00	RT	GRAVEL	26.0
OLD MILL RD			
70+75.00	LT	PAVED	17.4
COLLEGE AVE			
81+60.00	LT	PAVED	20.0
81+60.00	RT	PAVED	20.0
82+82.00	RT	PAVED	26.0
83+15.00	RT	PAVED	26.0
84+25.00	RT	PAVED (COMMERICAL)	63.0
(Intersection)			
87+75.00	RT	PAVED (COMMERICAL)	25.7
89+00.00	RT	PAVED (COMMERICAL)	51.5

REMOVE THE FOLLOWING DRIVES AND ENTRANCES

STATION	OFFSET	TYPE	OPENING WIDTH
STILLWATER AVE			
11+75.00	RT	PAVED (FRANKLIN ST)	39.5
30+45.00	LT	GRAVEL	16.4
36+95.00	LT	PAVED	29.4
COLLEGE AVE			
87+17.00	RT	PAVED	17.4
87+25.00	LT	PAVED	37.8

ITEM 201.23 - REMOVING SINGLE TREE TOP ONLY

STATION	OFFSET		QUANTITY (EA)
STILLWATER AVE			
4+77.61	30.0	RT	1.0
4+82.76	30.9	RT	1.0
13+19.23	43.7	LT	1.0
13+35.89	38.6	LT	1.0
13+76.89	39.2	LT	1.0
14+02.17	38.7	LT	1.0
14+57.99	29.9	LT	1.0
17+50.58	31.3	LT	1.0
17+53.73	30.3	LT	1.0
17+62.30	30.3	LT	1.0
17+68.41	30.4	LT	1.0
17+79.54	31.0	LT	1.0
17+90.14	30.5	LT	1.0
20+95.82	26.7	LT	1.0
29+94.18	35.0	RT	1.0
31+60.55	30.8	LT	1.0
31+70.58	35.3	RT	1.0
32+63.85	41.0	LT	1.0
32+84.40	25.5	LT	1.0
33+00.16	25.5	LT	1.0
34+49.46	40.3	LT	1.0
34+66.65	40.8	LT	1.0
BENNOCH RD			
62+94.69	27.8	LT	1.0
OLD MILL RD			
70+93.73	19.0	LT	1.0
COLLEGE AVE			
83+40.11	37.9	LT	1.0

ITEM 201.24 - REMOVING STUMP

STATION	OFFSET		QUANTITY (EA)
STILLWATER AVE			
30+92.00	35.9	RT (EXIST. STUMP)	1.0
ALL 201.23 ITEMS (SEE ABOVE)			25.0

ITEM 202.11 - REMOVING PORTLAND CEMENT CONCRETE PAVEMENT

STATION	OFFSET	QUANTITY (SY)
STILLWATER AVE		
21+00.00 TO 22+87.50	RT & LT	371.3
28+46.50 TO 35+00.00	RT & LT	1303.7
COLLEGE AVE		
80+75.00 TO 85+75.00	RT & LT	1003.0

ITEM 202.15 - REMOVE MANHOLE OR CB

STATION	OFFSET			QUANTITY (EA)
STILLWATER AVE				
14+18.82	18.8	LT		1.0
18+16.31	24.8	RT		1.0
22+11.70	11.9	RT		1.0
28+42.80	12.0	RT		1.0
29+37.28	18.7	RT		1.0
32+23.43	20.8	RT		1.0
32+58.43	18.5	LT		1.0
39+81.92	19.9	LT	(SPECIAL CB)	1.0
40+00.66	18.8	LT		1.0
COLLEGE AVE				
83+84.61	15.6	LT		1.0
86+47.46	12.4	RT		1.0
86+48.01	30.1	LT		1.0

ITEM 202.202 - REMOVE PAVEMENT SURFACE

THE PROVIDED DEPTHS ARE INTENDED TO BE APPROXIMATE AND WILL VARY DEPENDING ON THE REQUIRED SLOPE CORRECTION.

MILL & OVERLAY (APPROXIMATE DEPTH = 2.0+/-)
STILLWATER AVE
APPROXIMATE STA. 37+50 TO 42+00 LT & RT

COLLEGE AVE
APPROXIMATE STA. 87+75 TO 90+00 LT & RT

ITEM 202.202 - REMOVE PAVEMENT SURFACE (CONT')

THE DEPARTMENT HAS IDENTIFIED THE FOLLOWING LOCATIONS WHERE SPOT MILLING MAY BE REQUIRED TO ADJUST CROSS SLOPE. THE PROVIDED DEPTHS ARE INTENDED TO BE APPROXIMATE AND WILL VARY DEPENDING ON THE REQUIRED SLOPE CORRECTION.

SPOT MILL (APPROXIMATE DEPTH = 1.0+/-)
STILLWATER AVE
APPROXIMATE STA. 14+00 TO 19+00 CTWLTL & LT (TW)

STILLWATER AVE
APPROXIMATE STA. 19+00 TO 20+50 RT (TW)

ITEM 202.203 - PAVEMENT BUTT JOINT

STATION TO STATION			OFFSET	QUANTITY (SY)
STILLWATER AVE				
2+00.00	TO	2+50.00	(APPROACH)	281.9
SOUTH SPRING STREET				
15+60.00	TO	16+30.00	RT (APPROACH)	151.3
16+10.00	TO	16+15.00	RT (DRIVE)	5.5
SPRING STREET				
16+55.00	TO	17+40.00	LT (APPROACH)	122.3
FREE STREET				
19+75.00	TO	20+15.00	RT (APPROACH)	182.6
DRIVES				
38+40.00	TO	38+55.00	RT (DRIVE)	8.6
40+25.00	TO	40+55.00	RT (DRIVE)	13.3
41+50.00	TO	41+75.00	RT (DRIVE)	8.1
BENNOCH RD				
62+00.00	TO	62+50.00	(APPROACH)	94.2
63+05.00	TO	63+15.00	LT (DRIVE)	6.4
165+50.00	TO	165+75.00	LT (DRIVE)	7.2
166+00.00	TO	166+50.00	(APPROACH)	207.9
COLLEGE AVE				
88+75.00	TO	89+60.00	LT (DRIVE)	28.3
89+70.00	TO	89+91.00	LT (DRIVE)	6.9

403.211 - HOT MIX ASPHALT (SHIM)

VARIABLE DEPTH SHIM AS DIRECTED.

SPOT SHIM STA. 2+50.00 TO 9+25.00.
SEE SUPERELVATION TABLE FOR MORE INFORMATION.

ITEM 604.164 - REBUILDING CATCH BASIN

STATION	OFFSET			QUANTITY (EA)
STILLWATER AVE				
6+85.45	17.0	LT	(WITH 2' OFFSET CONE)	1.0
19+08.84	19.0	LT	(WITH 2' OFFSET CONE)	1.0
38+30.93	24.6	LT	(WITH 2' OFFSET CONE)	1.0
41+45.30	20.5	LT	(WITH 2' OFFSET CONE)	1.0

ITEM 604.18 - ADJUSTING MH OR CB TO GRADE

STATION	OFFSET			QUANTITY (EA)
STILLWATER AVE				
3+54.64	23.0	LT		1.0
3+55.33	23.0	RT		1.0
6+85.52	23.0	RT		1.0
16+53.84	24.6	LT		1.0
38+95.96	22.0	LT	(WITH SOLID COVER)	1.0
39+51.20	24.0	RT		1.0
39+55.01	19.7	LT	(WITH SOLID COVER)	1.0
COLLEGE AVE				
81+76.75	18.7	LT		1.0
82+58.78	23.1	RT		1.0
89+14.49	14.9	RT		1.0

ITEM 606.1301 - 31" W-BEAM GUARDRAIL - MIDWAY SPLICE

STATION TO STATION	OFFSET	QUANTITY (LF)
STILLWATER AVE		
21+70.00 TO 22+60.00	RT (6.25' OVERLAP)	75.0
21+76.00 TO 22+75.00	LT	75.0
24+55.00 TO 25+30.00	LT	87.5
24+30.00 TO 25+30.00	RT	112.5
28+69.00 TO 29+05.00	RT (6.25' OVERLAP)	25.0
28+69.00 TO 29+30.00	LT	37.5

ITEM 606.1301 - 31" W-BEAM GUARDRAIL - MIDWAY SPLICE 15' RADIUS AND LESS

STATION	OFFSET	RADIUS	QUANTITY (LF)
STILLWATER AVE			
21+75.00	RT	15.0 (6.25' OVERLAP)	25.0
21+80.00	LT	15.0	25.0
29+00.00	RT	15.0 (6.25' OVERLAP)	25.0
29+25.00	LT	10.0	25.0

ITEM 606.259 - ANCHORAGE ASSEMBLY

STATION	OFFSET	QUANTITY (EA)
STILLWATER AVE		
21+70.00	RT	1.0
21+76.00	LT	1.0
29+05.00	RT	1.0
29+30.00	LT	1.0

ITEM 606.353 - REFLECTORIZED FLEXIBLE GUARDRAIL MARKER

STATION	OFFSET	QUANTITY (EA)
STILLWATER AVE		
21+70.00	RT	1.0
21+76.00	LT	1.0
29+05.00	RT	1.0
29+30.00	LT	1.0

ITEM 606.356 - DELINEATOR POST

STATION	OFFSET	QUANTITY (EA)
STILLWATER AVE		
2+00.00	RT	1.0
2+00.00	LT	1.0
10+25.00	RT	1.0
11+75.00	LT	1.0

ITEM 606.47 - SINGLE WOOD POST

STATION	OFFSET	QUANTITY (EA)
STILLWATER AVE		
31+32.00	LT	1.0
32+95.00	LT	1.0
34+60.00	LT	1.0
37+66.00	RT	1.0
COLLEGE AVE		
81+45.00	LT	1.0
81+91.00	RT	1.0
82+58.00	RT	1.0

ITEM 606.51 - MULTIPLE MAILBOX SUPPORT

STATION	OFFSET	QUANTITY (EA)
STILLWATER AVE		
30+47.00	LT	1.0
31+47.00	RT	1.0
32+79.00	LT	1.0
33+73.00	LT	1.0

ITEM 607.42 - ORNAMENTAL PICKET FENCE

STATION TO STATION	OFFSET	QUANTITY (LF)
STILLWATER AVE		72.0
33+47.00 TO 34+20.00	RT	

(NOTE: GATE IS INCIDENTAL TO FENCE)

ITEM 607.291 - REMOVE AND RESET STONEWALL

STATION TO STATION	OFFSET	QUANTITY (LF)
STILLWATER AVE		
30+86.00 TO 30+88.00	LT	10.0

ITEM 608.26 - CURB RAMP DETECTIBLE WARNING FIELD

STATION	OFFSET	QUANTITY (SF)
STILLWATER AVE		
11+60.00	LT	15.0
12+20.00	LT	13.0
12+25.00	RT	13.0
12+30.00	LT	14.0
12+30.00	RT	10.0
12+40.00	LT	11.0
12+65.00	LT	10.0
16+60.00	LT	16.0
17+40.00	LT	12.0
19+35.00	LT	10.0
19+35.00	RT	10.0
32+20.00	LT	11.0
32+60.00	LT	15.0
35+20.00	LT	10.0
35+20.00	RT	10.0
35+40.00	RT	15.0
35+55.00	LT	13.0
36+33.00	LT	13.0
36+40.00	RT	14.0
36+50.00	LT	13.0
36+50.00	RT	13.0

ITEM 609.31 - CURB TYPE 3

STATION TO STATION	OFFSET	QUANTITY (LF)
STILLWATER AVE		
2+00.00 TO 10+25.00	RT	598.1
2+00.00 TO 11+75.00	LT	915.2
16+60.00 TO 16+75.00	LT	11.4
17+75.00 TO 17+80.00	LT	8.2
COLLEGE AVE		
89+05.00 TO 89+25.00	RT	37.6
MICHAEL ST		
100+30.00 TO 100+39.00	LT	20.1
BENNOCH RD		
166+00.00 TO 166+50.00	RT	54.0

ITEM 610.08 - PLAIN RIPRAP

STATION TO STATION	OFFSET	QUANTITY (CY)
STILLWATER AVE		
8+10.00 TO 8+15.00	RT	3.8
21+95.00 TO 22+00.00	LT	2.2
21+95.00 TO 22+00.00	RT	3.6

ITEM 610.18 - STONE DITCH PROTECTION

STATION	OFFSET	QUANTITY (CY)
OLD MILL RD		
70+43 TO 71+22	RT	26.0

ITEM 613.319 - EROSION CONTROL BLANKET

STATION	OFFSET	QUANTITY (SY)
STILLWATER AVE		
13+00.00 TO 14+00.00	LT	25.9
32+50.00 TO 33+25.00	LT	25.9

ITEM 620.58 - EROSION CONTROL GEOTEXTILE

STATION	OFFSET	QUANTITY (SY)
ALL PLAIN RIPRAP AREAS		28.9
ALL STONE DITCH PROTECTION AREAS		49.8

ITEM 620.60 - SEPARATION GEOTEXTILE

STATION TO STATION	OFFSET	QUANTITY (SY)
ALL AREAS (FROM MDOT)	LT & RT	2000

ITEM 642.15 - PRECAST CONCRETE STEPS

STATION TO STATION	OFFSET	QUANTITY (EA)
STILLWATER AVE		
20+31.00 TO 20+35.00	LT	1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER					
DESIGN-DETAILED	JBD	11/29/2021			
CHECKED-REVIEWED	ECF	11/29/2021			
DESIGN2-DETAILED2					
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REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

R. MOULTON

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CONSTRUCTION NOTES

SHEET NUMBER

4

OF 218

Filename: ...\PLANSET\005_General_Notes.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

GENERAL NOTES:

1. THE UTILITIES INVOLVED IN THIS CONTRACT ARE AS FOLLOWS:
   BANGOR GAS COMPANY
   CHARTER COMMUNICATIONS
   CONSOLIDATED COMMUNICATIONS
   GWI
   MAINE FIBER COMPANY
   OLD TOWN WATER DISTRICT
   OLD TOWN POLLUTION CONTROL (SEWER)
   VERSANT POWER

2. STUMPS HAVE BEEN ESTIMATED TO BE REMOVED UNDER ITEM 201.24 REMOVE STUMP. HOWEVER, WHERE DIRECTED BY THE RESIDENT, ITEM 631.20 STUMP CHIPPER (INCLUDING OPERATOR) MAY BE USED TO REMOVE STUMPS.

3. ALL INSLOPE AND DITCHES IN CUT AREAS SHALL BE GRADED AS SHOWN ON THE TYPICALS OR FLATTER, OR AS DIRECTED BY THE RESIDENT.

4. DRIVEWAY FILL SIDE SLOPES SHALL BE THE SAME AS THE NON-GUARDRAIL FILL SLOPES UNLESS OTHERWISE NOTED ON THE PLANS.

5. ALL WASTE MATERIAL NOT USED ON THE PROJECT SHALL BE DISPOSED OF OFF THE PROJECT IN ACCEPTABLE WASTE AREAS REVIEWED BY THE RESIDENT. GRADING, SEEDING AND MULCHING OF WASTE AREAS SHALL BE CONSIDERED INCIDENTAL.

6. GRANULAR BORROW USED TO BACKFILL MUCK EXCAVATION OR IN LOW WET AREAS TO 1 FOOT ABOVE WATER LEVEL OR OLD GROUND SHALL MEET REQUIREMENTS FOR GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL AS SPECIFIED IN STANDARD SPECIFICATIONS ITEM 703.19, GRANULAR BORROW.

7. GRUBBING IN FILL AREAS HAVE BEEN SHOWN ON THE CROSS SECTIONS AND THE QUANTITIES NOTED. THESE LIMITS ARE APPROXIMATE AND HAVE BEEN USED FOR ESTIMATING PURPOSES ONLY. ACTUAL GRUBBING LIMITS MAY VARY BASED ON FIELD CONDITIONS AS DIRECTED BY THE RESIDENT.

8. EXISTING INSLOPES IN PROPOSED FILL AREAS SHALL BE BENCHED BY EXCAVATING STEPS OF SUFFICIENT WIDTH TO PERMIT PLACING AND COMPACTING THE FILL MATERIAL ALONG WITH THE MATERIAL REMOVED.

9. RESIDENTIAL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH: 2" HOT MIX ASPHALT AND 12" AGGREGATE SUBBASE COURSE GRAVEL.

10. COMMERCIAL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH: 3" HOT MIX ASPHALT AND 11" AGGREGATE SUBBASE COURSE GRAVEL.

11. GRAVEL ENTRANCES SHALL BE CONSTRUCTED WITH 14" AGGREGATE SUBBASE COURSE GRAVEL OR 11" AGGREGATE SUBBASE COURSE GRAVEL AND 3" UNTREATED AGGREGATE SURFACE COURSE UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

12. GRASSED ENTRANCES SHALL BE CONSTRUCTED WITH 12" AGGREGATE SUBBASE COURSE GRAVEL AND 2" LOAM, SEED & MULCH UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

13. A 3' PAVED APRON SHALL BE PLACED AT ALL UNPAVED ENTRANCES UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

14. ALL PAVED WALKS TO BE CONSTRUCTED WITH 12" AGGREGATE SUBBASE COURSE-GRAVEL AND 2" HOT MIX ASPHALT UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

15. ANY NECESSARY CLEANING OF EXISTING PAVEMENT PRIOR TO PAVING (OR MILLING) SHALL BE INCIDENTAL TO THE RELATED PAVING (OR MILLING) ITEMS. THIS INCLUDES KILLING AND REMOVAL OF ALL VEGETATIVE MATTER.

16. WHEN SUPERELEVATION EXCEEDS THE SLOPE OF THE LOW SIDE SHOULDER, THE SHOULDER PAVEMENT WILL HAVE SAME SLOPE AS TRAVELLED WAY.

17. THE CONTRACTOR SHALL PLAN AND CONDUCT WORK SO THAT UPON COMPLETION OF THE PROJECT THERE IS NO DROP-OFF FROM THE EDGE OF THE SHOULDER PAVEMENT.

18. CONCRETE PIPE TIES SHALL BE INSTALLED AT THE INLET AND OUTLET OF REINFORCED CONCRETE PIPE CULVERTS, CONNECTING THE OUTER THREE END SECTIONS.

19. EXISTING CULVERTS AND CATCH BASINS WILL BE CLEANED AS DIRECTED BY THE RESIDENT UNDER ITEM 631.32 CULVERT CLEANER.

20. PRIOR TO SURFACE PAVING, EXISTING CULVERTS TO REMAIN SHALL BE CLEANED AS DIRECTED BY THE RESIDENT. PAYMENT WILL BE MADE UNDER ITEM 631.32 CULVERT CLEANER (INCLUDING OPERATOR).

21. RECONSTRUCTED SHOULDERS WITHIN THE TEMPORARY DETOUR LIMITS WILL BE CONSTRUCTED WITH A MINIMUM OF 4" OF HMA PRIOR TO OPENING THE DETOUR TO TRAFFIC. PAYMENT WILL BE MADE UNDER THE APPROPRIATE 403 ITEMS.

22. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.

23. THE CULVERT SIZES SHOWN ON THE PLANS AND CROSS SECTIONS ARE FOR SMOOTHLINED PIPES.

24. AI-C AND BI-C CATCH BASINS SHALL BE SHAPE 1 WITH HAUNCHED CONE, AS PER STANDARD DETAIL 604(02), UNLESS OTHERWISE NOTED ON THE PLANS.

25. FLAT TOPS FOR CATCH BASINS ARE NOT ALLOWED UNLESS NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.

26. PLASTIC END CAPS USED ON ALL DEAD-END UNDERDRAIN SHALL BE CONSIDERED INCIDENTAL.

27. ANY NECESSARY CUTTING OF EXISTING PIPES TO FIT IN AREAS OF PROPOSED CATCH BASINS WILL NOT BE PAID FOR SEPARATELY AND WILL BE CONSIDERED INCIDENTAL TO ITEM 604.

28. ANY NECESSARY CUTTING OF EXISTING CATCH BASINS TO ALLOW FOR PROPOSED PIPE CONNECTIONS WILL NOT BE PAID FOR SEPARATELY AND WILL BE CONSIDERED INCIDENTAL TO ITEM 603 OR 605.

29. EXISTING ABANDONED WATER MAINS BROKEN BY THE CONTRACTOR DURING CONSTRUCTION SHALL HAVE THE ENDS PLUGGED WITH BRICK AND MORTAR, COST FOR ALL LABOR AND MATERIAL WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO DIRECT PAYMENT WILL BE MADE.

30. GUARDRAIL END TREATMENTS SHALL BE INSTALLED CONCURRENTLY WITH THE PLACEMENT OF EACH SECTION OF BEAM GUARDRAIL.

31. GUARDRAIL AND GRANITE CURB WHICH IS REMOVED AND NOT REUSED ON THE PROJECT BECOMES PROPERTY OF THE CONTRACTOR. DISPOSAL SHALL BE INCIDENTAL TO THE APPROPRIATE 606 OR 609 ITEM.

32. TWO REFLECTORIZED FLEXIBLE G.R. MARKERS (ITEM 606.353) WILL BE INSTALLED AT EACH GUARDRAIL END.

33. ALL CATCH BASINS TYPE A PLACED ON CIRCULAR CURB TYPE 1 SHALL HAVE THE CURB INLET CUT THE SAME RADIUS AS ADJACENT CIRCULAR CURB. PAYMENT SHALL BE INCIDENTAL TO ITEM 604.

34. A DELINEATOR POST (ITEM 606.3561) WILL BE INSTALLED AT EACH END OF A RUN OF BITUMINOUS CURB.

35. LOAM HAS BEEN ESTIMATED FOR DISTURBED LAWN AREAS. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS NOTED ON THE PLANS OR DESIGNATED BY THE RESIDENT.

36. UNLESS OTHERWISE NOTED SEEDING METHOD NO. 1 SHALL BE UTILIZED ON ALL AREAS.

37. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 4 INCHES IN ALL AREAS UNLESS OTHERWISE NOTED OR DIRECTED.

38. ANY BASE PAVEMENT NOT SURFACED BEFORE WINTER WILL REQUIRE TEMPORARY PAVEMENT MARKINGS OF PAINT, BOTH YELLOW CENTERLINE AND WHITE EDGE LINES AND WILL BE CONSIDERED PART OF ITEM 627.78.

39. ACRYLIC LATEX COLOR FINISH GREEN (STANDARD SPECIFICATIONS ITEM 658.20. ACRYLIC LATEX COLOR FINISH) SHALL BE PLACED ON ALL PAVED ISLANDS.

40. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING OPERATIONAL BUSINESS DIRECTIONAL SIGNS (OBDS) TO ENSURE THAT THEY ARE VISIBLE TO THE TRAVELLING PUBLIC. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

41. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING MAILBOXES TO ENSURE THAT MAIL WILL BE DELIVERABLE. PAYMENT FOR THIS WORK WILL BE MADE UNDER THE APPROPRIATE RENTAL ITEMS.

42. ANY DAMAGE TO THE SLOPES CAUSED BY THE CONTRACTOR'S EQUIPMENT, PERSONNEL, OR OPERATION SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT. ALL WORK, EQUIPMENT, AND MATERIALS REQUIRED TO MAKE REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSE.

43. AREAS REQUIRING FILL ON THE PROJECT WILL COME FROM SUITABLE EXCAVATION, DITCH AND INSLOPE OR EQUIPMENT RENTAL AREAS.

44. ESTIMATED QUANTITIES FOR REQUIRED STRUCTURAL EARTH EXCAVATION, DRAINAGE AND MINOR STRUCTURES ARE INFORMATIONAL ONLY AND REPRESENT THE APPROXIMATE MINIMUM QUANTITY REQUIRED TO INSTALL DRAINAGE STRUCTURES. ADDITIONAL EXCAVATION FOR THE CONTRACTOR'S CONVENIENCE OR TO COMPLY WITH BACKSLOPING REQUIREMENTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCIDENTAL TO THE RELATED DRAINAGE ITEMS.

45. NO SEPARATE PAYMENT FOR SUPERINTENDENT OR FOREMAN WILL BE MADE FOR THE SUPERVISION OF EQUIPMENT AND LAYOUT OF WORK BEING PAID FOR UNDER THE EQUIPMENT RENTAL ITEMS.

46. "UNDETERMINED LOCATIONS" SHALL BE DETERMINED BY THE RESIDENT.

47. FINAL STRIPING FOR THE PROJECT SHALL BE DONE BY THE CONTRACTOR PER THE STRIPING PLAN. PAYMENT SHALL BE MADE UNDER APPROPRIATE CONTRACT ITEMS.

48. THE CONTRACTOR SHALL CONDUCT THEIR WORK WITHOUT DISTURBANCE TO EXISTING LANDSCAPED PLANTING AREAS, UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

49. PROPOSED CELLAR CONNECTIONS SHALL BE CAPPED UNLESS THE RESIDENT HAS DETERMINED THAT THE CONNECTION PERMIT HAS BEEN OBTAINED BY THE PROPERTY OWNER.

50. THE INSPECTION STANDPIPE FOR CELLAR DRIAN, END CAPS, CONCRETE, REBAR, STANDPIPE FITTINGS, AND CONNECTION OF THE STANDPIPE TO THE EXISTING CELLAR DRAIN TO THE NEW OUTLET PIPE WILL BE INCIDENTAL TO 801 ITEMS.

51. INSPECTION STANDPIPE COVERS FOR CELLAR DRAIN CONNECTIONS SHALL BE NICKEL BRONZE, THREADED, FLOOR CLEANOUT COVERS SIZED TO FIT THE INSPECTION STANDPIPES. COVERS SHALL BE MANUFACTURED BY ZURN INDUSTRIES OR AN APPROVED EQUAL. PAYMENT FOR COVERS WILL BE INCIDENTAL TO 801 ITEMS.

52. GEOTECHNICAL INFORMATION FURNISHED OR REFERRED TO IN THE BID DOCUMENTS IS FOR THE USE OF THE BIDDERS. NO ASSURANCE IS GIVEN THAT THE INFORMATION OR INTERPRETATIONS WILL BE REPRESENTATIVE OF THE ACTUAL SUBSURFACE CONDITIONS THROUGHOUT THE CONSTRUCTION SITE. MAINEDOT WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSIONS DRAWN FROM THE GEOTECHNICAL INFORMATION. THE BORING LOGS PROVIDED IN THE BID DOCUMENTS (IF ANY) PRESENT FACTUAL AND INTERPRETIVE SUBSURFACE INFORMATION COLLECTED AT THE DISCRETE LOCATIONS. DATA PROVIDED MAY NOT BE REPRESENTATIVE OF THE SUBSURFACE CONDITIONS BETWEEN BORING LOCATIONS.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		BY	DATE
DESIGN-DETAILED	ECF		JBD	11/17/2021
CHECKED-REVIEWED	ECF		AG	11/17/2021
DESIGN2-DETAILED2				
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REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

GENERAL NOTES

SHEET NUMBER

5

OF 218

STRUCTURE NUMBER	STATION					CULVERT PIPE											CATCH BASIN						PIPE ARCH				MH	UNDERDRAIN						REMARKS
						RCP			CMP		OPTION I		OPTION III																TYPE B	TYPE C					
													SMOOTHLINED		CORRUGATED													TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		
						GRND.	RIM	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A5-C	A1-C	B5-C	B1-C	SP	F	SPAN	RISE	LENGTH	GAGE OR WALL THICKNES		LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH	
CB-1	7+75.00	17.00	LT.			131.17	131.05																1											F6
CB-2	7+75.00	23.00	RT.			131.20	131.16														1.125													
CB-3	14+16.84	22.55	LT.			122.97	122.85												1															
CB-4	19+49.00	15.00	RT.			115.59	115.47												1															
CB-5	21+95.00	16.20	LT.			106.79	106.67												1															Flat Top
CB-6	21+95.00	15.95	RT.			106.80	106.68												1															Flat Top and Offset Cone
CB-7	24+50.00	16.00	RT.			108.87	108.75												1.125															
CB-8	24+50.00	16.00	LT.			108.87	108.75										1.125																	2' Offset Cone
CB-9	28+90.19	16.00	RT.			112.30	112.18												1															
CB-10	28+90.19	16.00	LT.			112.30	112.18										1																	2' Offset Cone
CB-11	29+41.36	17.84	RT.			112.69	112.57												1.125															
CB-12	32+24.29	26.00	RT.			119.39	119.27															1													
CB-13	32+58.48	44.86	LT.			119.80	119.68																1											F5
CB-14	32+77.79	31.62	LT.			120.14	120.02												1.125															
CB-15	35+43.44	48.49	LT.			120.57	120.45												1															
CB-16	37+01.48	26.02	LT.			118.37	118.25												1															
CB-17	39+81.82	21.39	LT.			115.42	115.30																1											Special CB (See Stomwater Planter Detail)
CB-18	40+00.64	20.52	LT.			115.45	115.33														1.125													Offset Cone
CB-19	81+79.58	34.37	LT.			99.44	99.44																1											F4
CB-20	81+82.26	33.59	RT.			100.74	100.74																1											F4
CB-21	81+90.31	20.66	RT.			102.33	102.21												1															Flat Top and Offset Cone
CB-22	83+82.49	30.37	LT.			112.07	111.95															1												
CB-23	88+02.53	15.00	RT.			121.11	120.99										1.125																	Offset Cone
PIPE-1	CB-1	-	LT.	TO	CB-2	-	RT.	15	40																									
PIPE-2	CB-2	-	RT.	TO	8+14.08	54.31	RT.								18	48																			
PIPE-3	14+11.17	37.58	LT.	TO	CB-3	-	LT.								12	14																			
PIPE-4	CB-5	-	LT.	TO	CB-6	-	RT.	18	32																									
PIPE-5	CB-6	-	RT.	TO	21+95.00	33.85	RT.								18	16																			
PIPE-6	21+89.79	42.42	LT.	TO	21+97.01	45.72	LT.								18	8																			
PIPE-7	CB-7	-	RT.	TO	24+50.00	34.76	RT.	18	20																									
PIPE-8	CB-8	-	LT.	TO	CB-7	-	RT.	18	28																									
PIPE-9	CB-10	-	LT.	TO	CB-9	-	RT.	18	28																									
PIPE-10	CB-9	-	RT.	TO	28+79.26	45.39	RT.								18	32																			
PIPE-11	CB-11		RT.	TO	28+81.34	45.83	RT.								18	65																			
PIPE-12	32+25.15	31.9	RT.	TO	CB-12	-	RT.								12	4																			
PIPE-13	CB-13	-	LT.	TO	CB-14	-	LT.								12	21																			
PIPE-14	CB-17	-	LT.	TO	39+79.64	27.43	LT.								12	5																			HDPE Pipes, Incidental to Stormwater Planter (See Stomwater Planter Detail)
PIPE-15	39+83.24	29.73	LT.	TO	CB-18	-	LT.								8	18																			
PIPE-16	CB-19	-	LT.	TO	81+76.75	19.31	LT.								12	13																			
PIPE-17	CB-20	-	RT.	TO	CB-21	-	RT.								12	14																			
PIPE-18	83+73.74	48.37	LT.	TO	CB-22	-	LT.								12	18																			
UD6-1	3+75.00	24.00	LT.	TO	6+85.45	17.00	LT.																						6	309				
UD6-2	7+15.00	18.00	LT.	TO	CB-1	-	LT.																						6	62				
UD6-3	CB-1	-	LT.	TO	11+00.00	18.00	LT.																						6	321				
UD6-4	CB-2	-	RT.	TO	9+50.00	13.00	RT.																						6	175				
UD6-5	166+50.00	19.41	RT.	TO	CB-3	-	LT.																						6	215				
UD6-6	16+50.00	21.50	RT.	TO	CB-4	-	RT.																						6	297				
UD6-7	34+75.00	27.00	RT.	TO	CB-12	-	RT.																						6	249				
UD6-8	34+75.00	27.00	RT.	TO	CB-22	-	LT.																						6	250				
UD6-9	88+50.00	21.38	LT.	TO	CB-15	-	LT.																						6	223				
UD12-1	CB-3	-	LT.	TO	14+50.00	17.50	LT.																								12	32		
UD12-2	CB-4	-	RT.	TO	CB-6	-	RT.																								12	242		
UD12-3	CB-14	-	LT.	TO	CB-10	-	LT.																								12	382		
UD12-4	CB-15	-	LT.	TO	CB-14	-	LT.																								12	265		
UD12-5	CB-12	-	RT.	TO	CB-11	-	RT.																								12	279		
UD12-6	CB-16	-	LT.	TO	37+25.00	24.65	LT.																								12	22		
UD12-7	81+76.75	19.31	LT.	TO	81+50.00	19.51	LT.																								12	25		
UD12-8	CB-21	-	RT.	TO	81+75.00	20.33	RT.																								12	14		
UD12-9	82+00.00	21.35	RT.	TO	CB-21	-	RT.																								12	8		
UD12-10	CB-22	-	LT.	TO	81+76.75	19.31	LT.																								12	205		
UD12-11	CB-23	-	RT.	TO	CB-16	-	LT.																								12	218		
UD15-1	6+85.51	23.00	RT.	TO	CB-2	-	RT.																								15	86		
UD15-2	39+75.00	18.61	LT.	TO	CB-18	-	LT.																								15	23		
UD15-3	CB-18	-	LT.	TO	40+25.00	18.26	LT.																								15	23		
UD15-4	88+12.00	12.66	RT.	TO	CB-23	-	RT.																								15	8		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

R. MOULTON			
PROJ. MANAGER	BY	DATE	
DESIGN-DETAILED	ECF	11/17/2021	SIGNATURE
CHECKED-REVIEWED	ECF	11/17/2021	
DESIGN2-DETAILED2	AG		P.E. NUMBER
DESIGN3-DETAILED3			
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

OLD TOWN
STILLWATER AVENUE

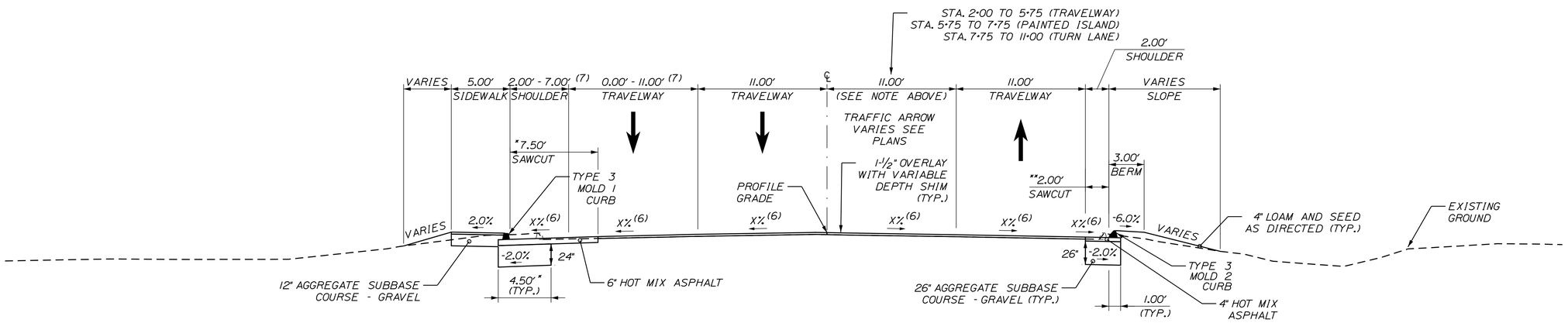
DRAINAGE SCHEDULE

SHEET NUMBER

6

OF 218

Filename: ...\MSTA\PLANSET\006_Drainage.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



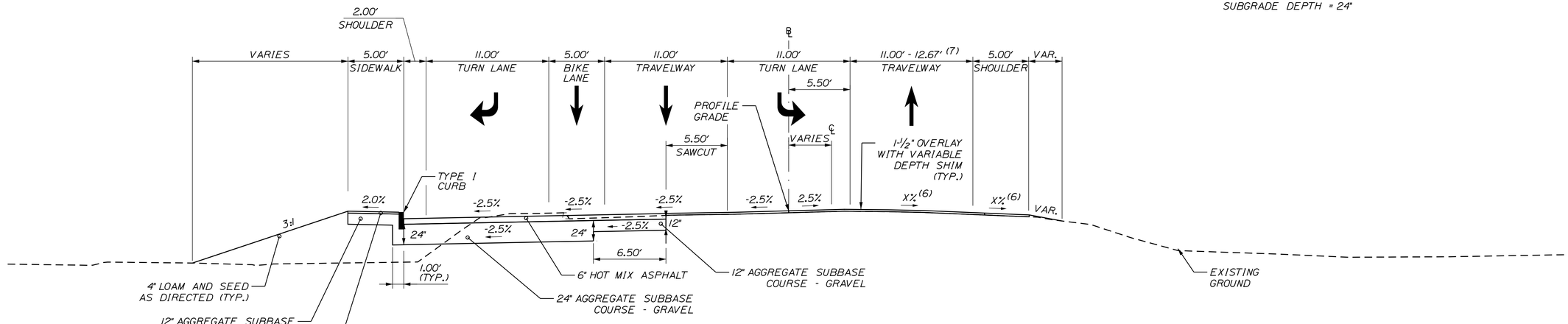
* NOTE: STA. 2+14 TO 4+49
SUBGRADE WIDTH = 3.00'
SAWCUT WIDTH = 2.00'

STILLWATER AVENUE
SHOULDER RECONSTRUCTION LEFT
STA. 4+50 TO 11+50

STILLWATER AVENUE
OVERLAY
STA. 3+50 TO 11+50

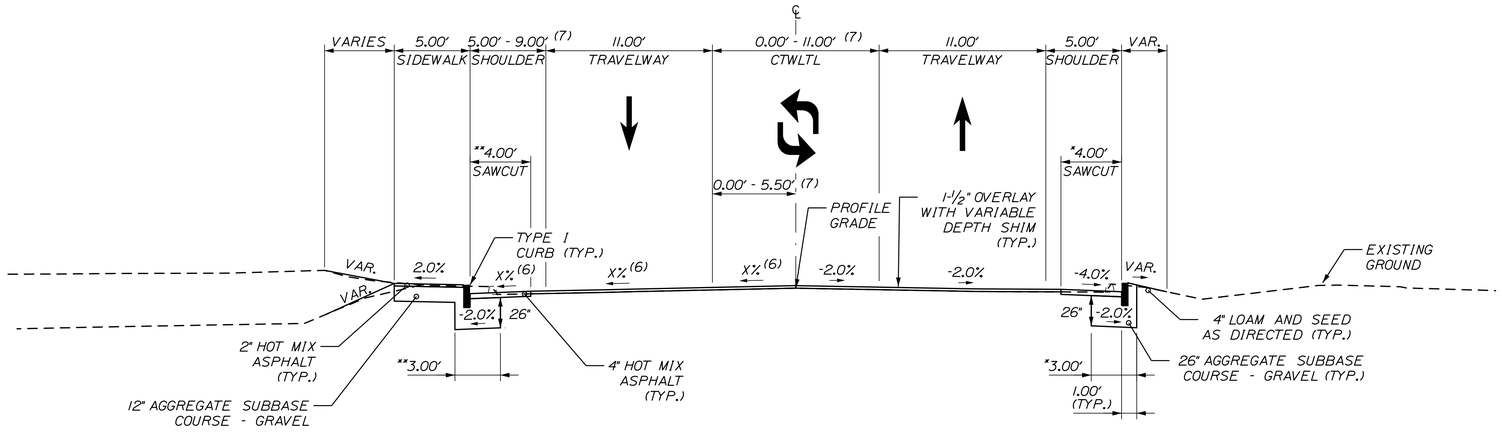
STILLWATER AVENUE
SHOULDER RECONSTRUCTION RIGHT
STA. 2+00 TO 9+75

** NOTE: STA. 6+75 TO 7+80 RT.
SAWCUT WIDTH = 7.50'
SUBGRADE WIDTH = 3.00'
SUBGRADE DEPTH = 24"



STILLWATER AVENUE
SHOULDER RECONSTRUCTION LEFT
STA. 12+90 TO 13+75

STILLWATER AVENUE
OVERLAY
STA. 12+30 TO 14+50



** NOTE: STA. 14+50 TO 18+50 LT.
SUBGRADE WIDTH = 4.00'
SAWCUT WIDTH = 5.00'

STILLWATER AVENUE
SHOULDER RECONSTRUCTION LEFT
STA. 14+50 TO 20+50

STILLWATER AVENUE
OVERLAY
STA. 14+75 TO 20+50

STILLWATER AVENUE
SHOULDER RECONSTRUCTION RIGHT
STA. 16+50 TO 18+70

* NOTE: STA. 16+50 TO 18+00 RT.
SUBGRADE WIDTH = 3.50'
SAWCUT WIDTH = 4.50'

NOTES:

1. THE PAVEMENT, BASE AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
2. WHEN SUPERELEVATION EXCEEDS THE SLOPE OF THE LOW SIDE OF THE SHOULDER, THE LOW SIDE SHOULDER SHALL HAVE THE SAME SLOPE AS THE TRAVELWAY.
3. CROWN FOR BOTH THE NORMAL AND SUPERELEVATED SECTIONS FOR ALL COARSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
4. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVELWAY CROSS SLOPES "ROLLOVER" SHALL NOT EXCEED 8%.
5. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
6. SEE SUPERELEVATION TABLE FOR SLOPES
7. SEE PLANS FOR SHOULDER, SIDEWALK AND LANE TRANSITION STATIONING.

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

TYPICAL SECTIONS

SHEET NUMBER

7

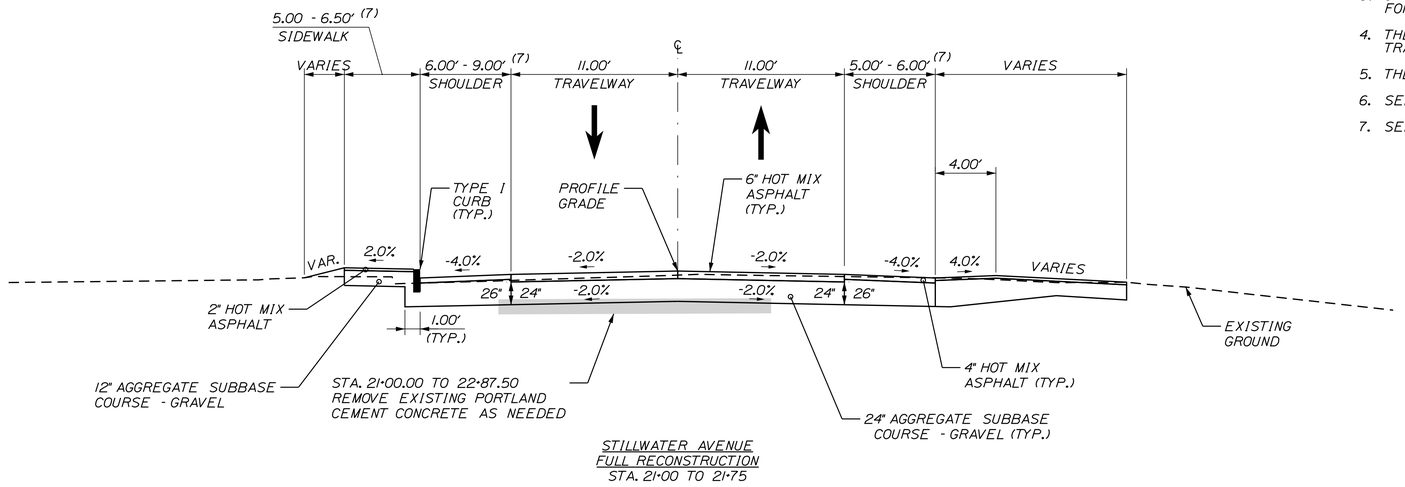
OF 218

Filename: ...\PLANSET\007-012_Typicals.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

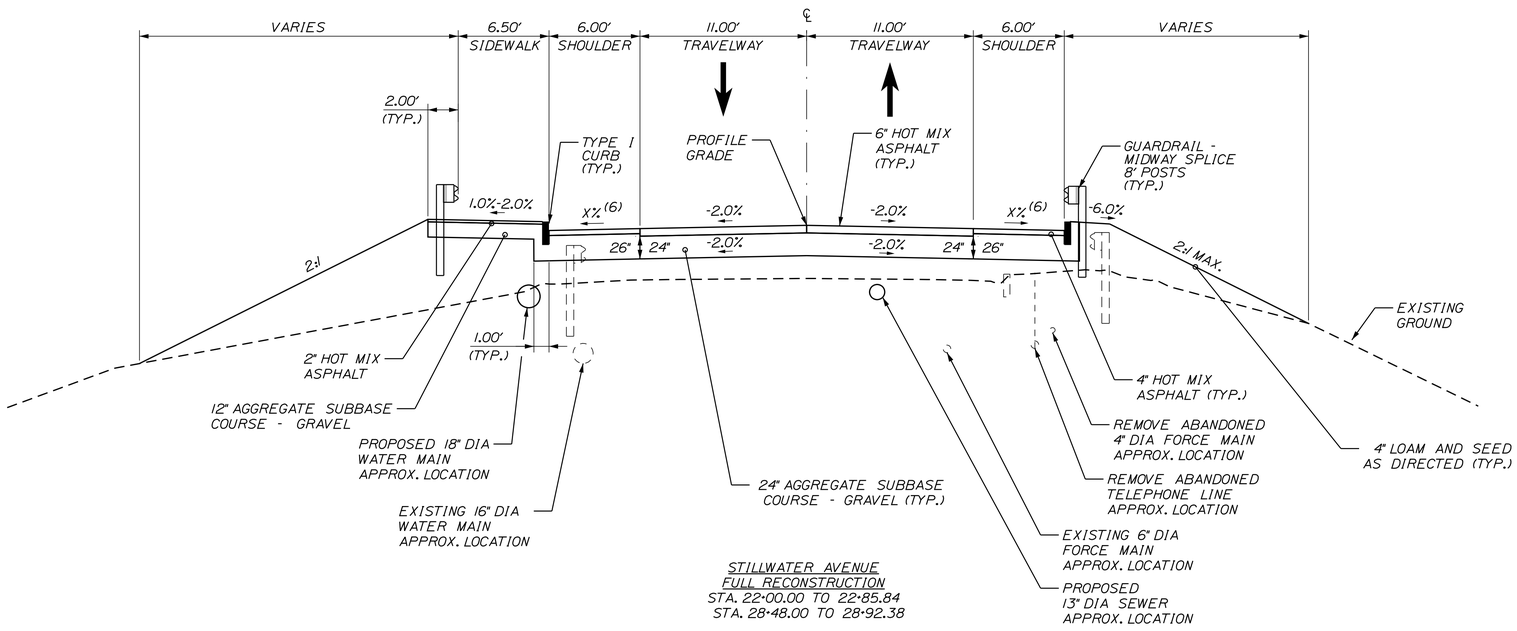
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STILLWATER AVENUE
FULL RECONSTRUCTION
STA. 21+00 TO 21+75



STILLWATER AVENUE
FULL RECONSTRUCTION
STA. 22+00.00 TO 22+85.84
STA. 28+48.00 TO 28+92.38

NOT TO SCALE

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HIGHWAY PLANS

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OLD TOWN
STILLWATER AVENUE

TYPICAL SECTIONS

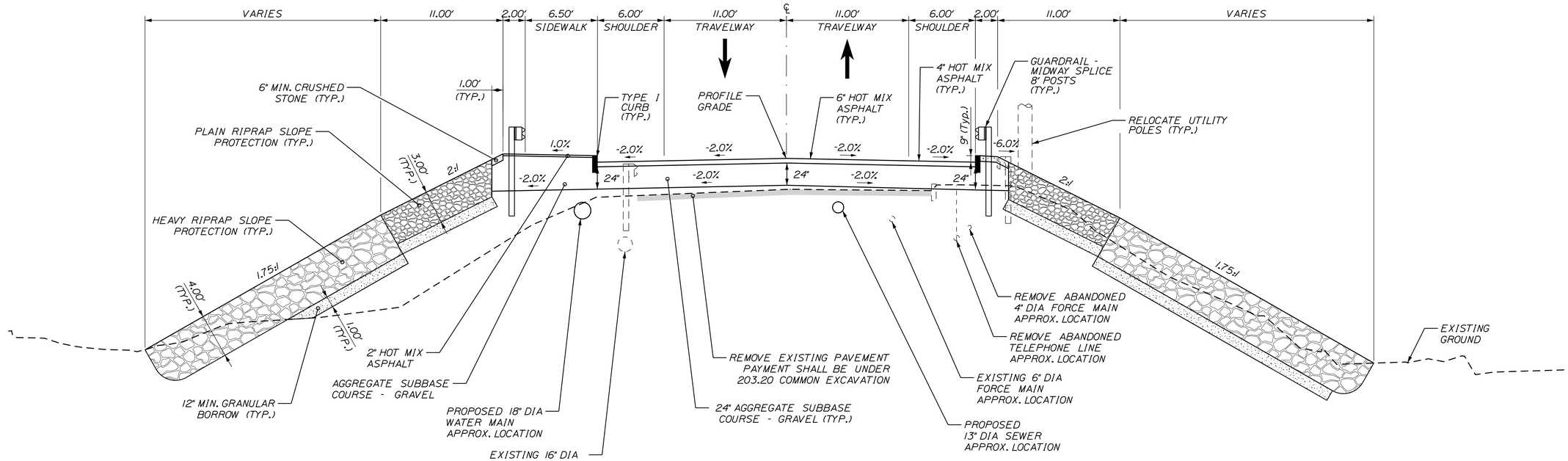
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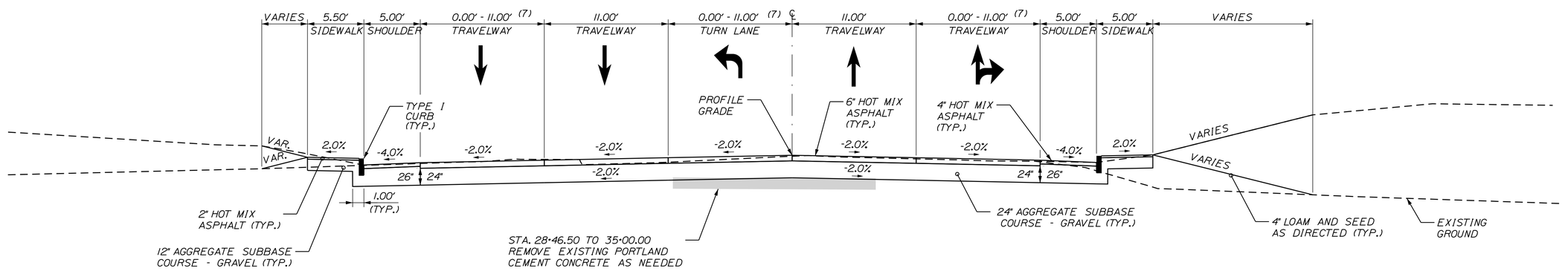
OF 218

NOTES:

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STILLWATER AVENUE
FULL RECONSTRUCTION
STA. 24+14.15 TO 25+65.00
(ISLAND)



STILLWATER AVENUE
FULL RECONSTRUCTION
STA. 29+50 TO 35+00

STILLWATER AVENUE
SIDEWALK RIGHT
STA. 31+50 TO 35+00

NOT TO SCALE

STATE OF MAINE
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2189401

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HIGHWAY PLANS

PROJ. MANAGER			
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R. MOULTON		BY	DATE
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OLD TOWN
STILLWATER AVENUE

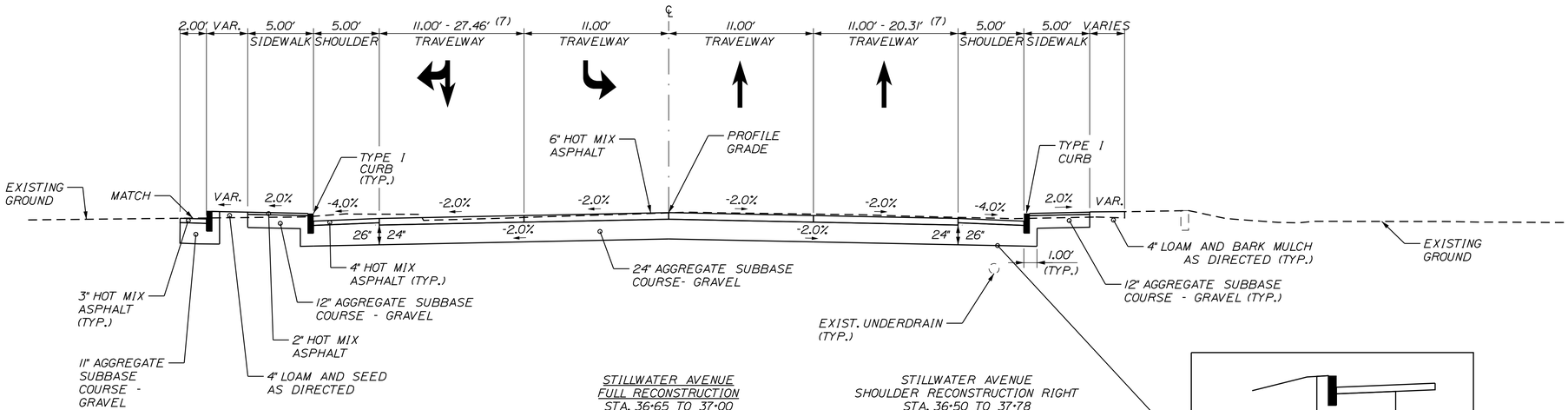
TYPICAL SECTIONS

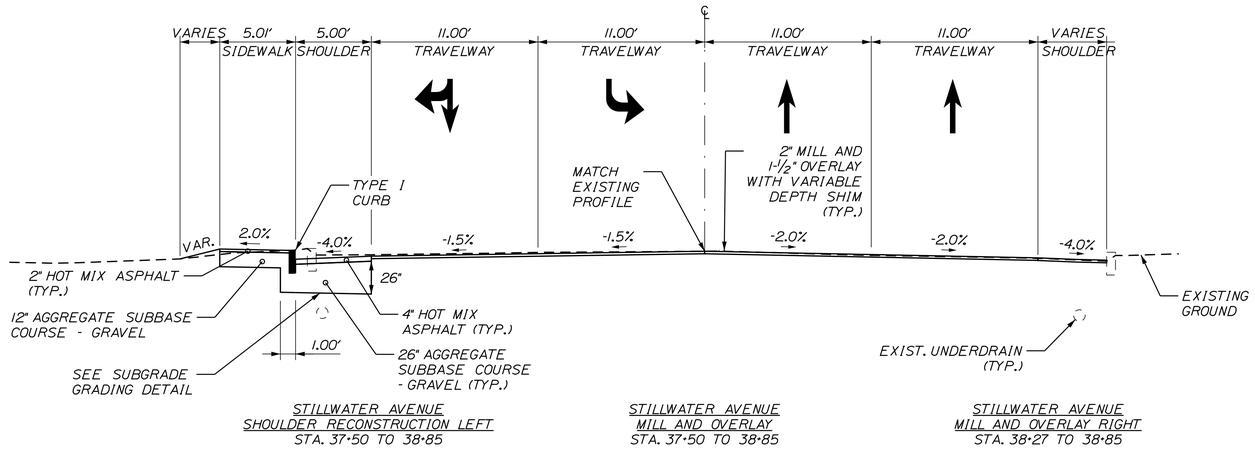
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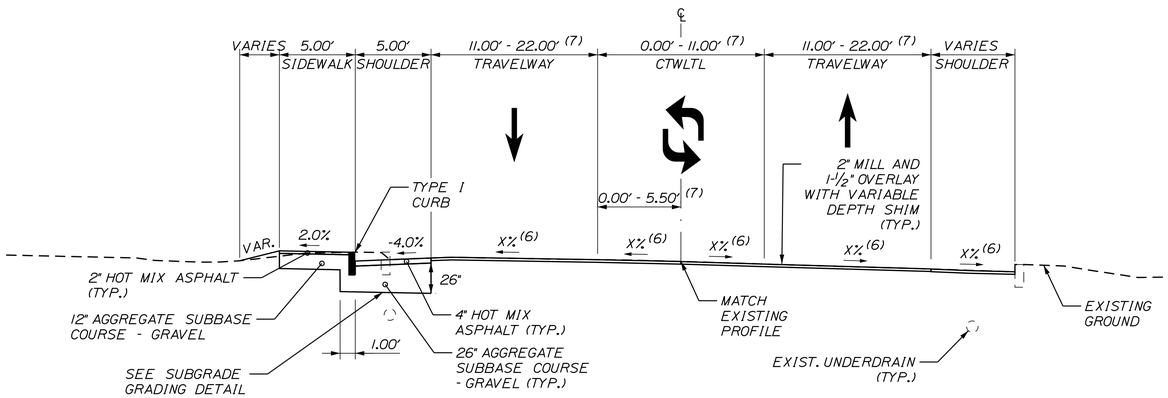
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Filename: ...\PLANSET\007-012_Typicals.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







NOTES:

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NOT TO SCALE

STATE OF MAINE
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2189401

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HIGHWAY PLANS

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PROJ. MANAGER			
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OLD TOWN
STILLWATER AVENUE

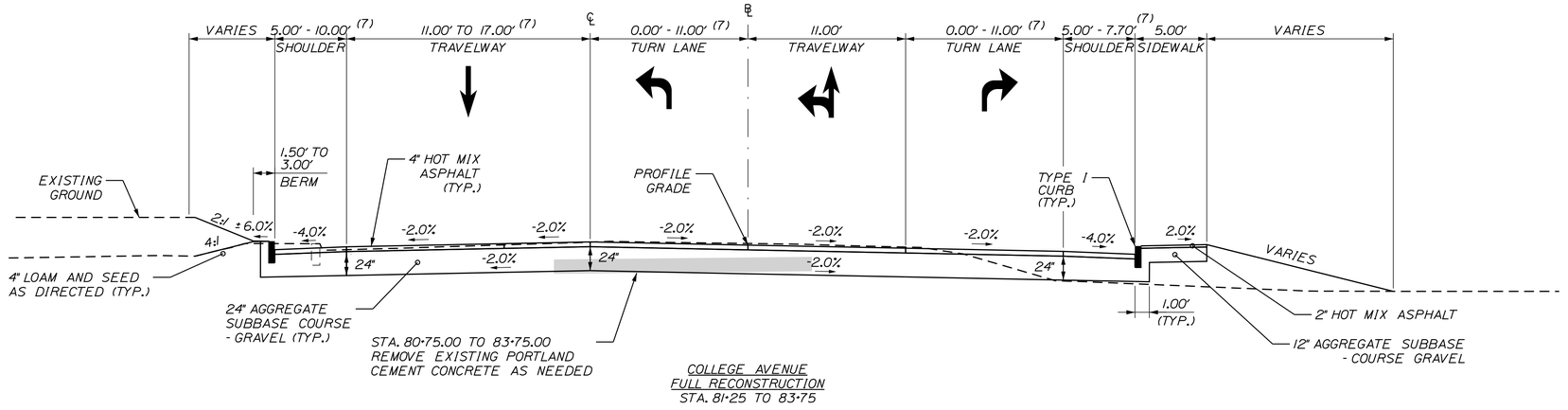
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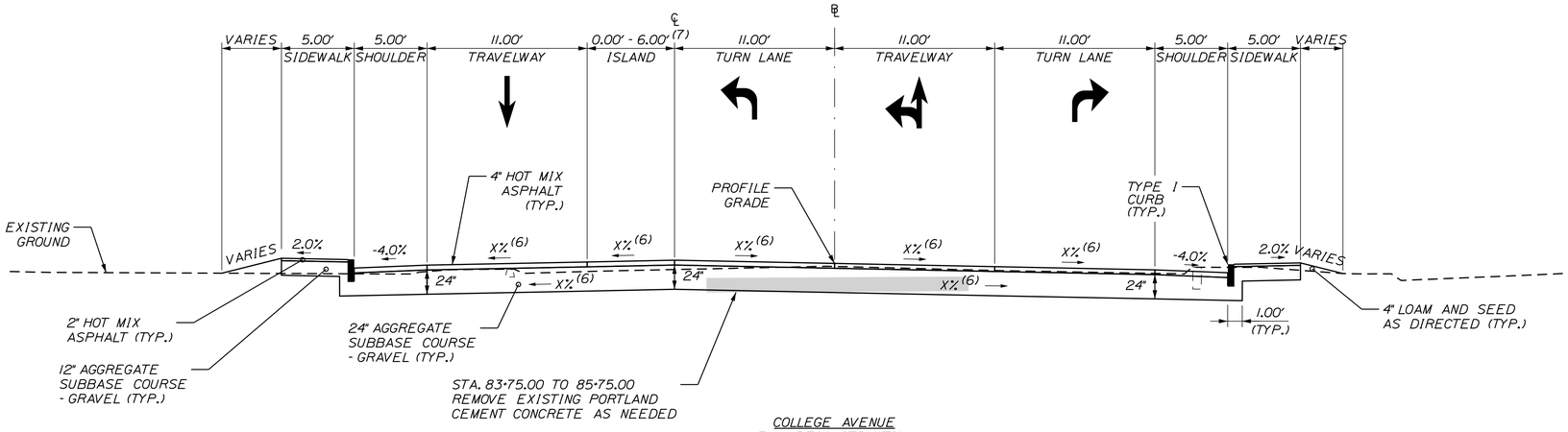
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OF 218

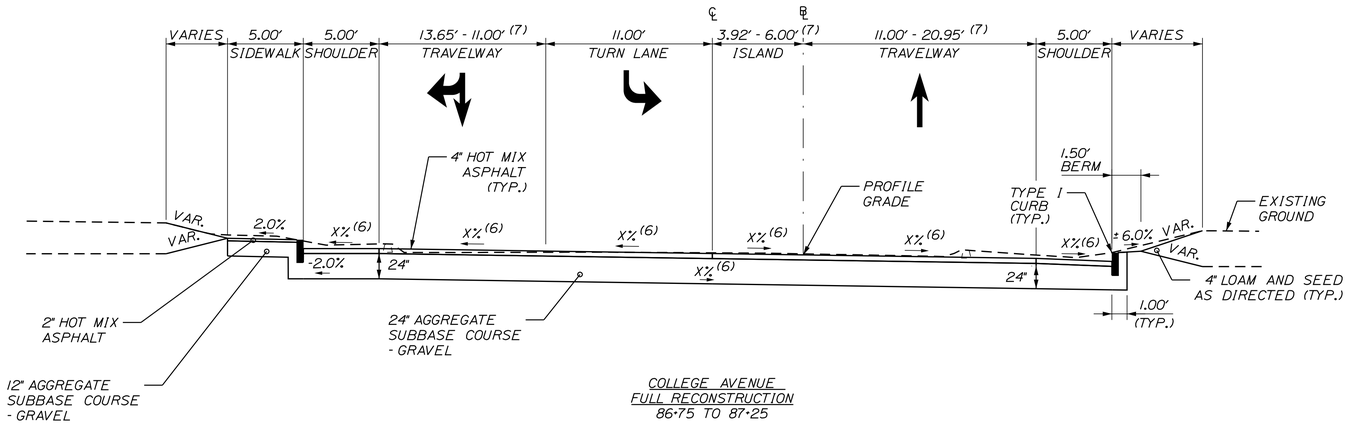
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COLLEGE AVENUE
FULL RECONSTRUCTION
STA. 81+25 TO 83+75



COLLEGE AVENUE
FULL RECONSTRUCTION
STA. 83+75 TO 85+25



COLLEGE AVENUE
FULL RECONSTRUCTION
86+75 TO 87+25

NOTES:

1. THE PAVEMENT, BASE AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
2. WHEN SUPERELEVATION EXCEEDS THE SLOPE OF THE LOW SIDE OF THE SHOULDER, THE LOW SIDE SHOULDER SHALL HAVE THE SAME SLOPE AS THE TRAVELWAY.
3. CROWN FOR BOTH THE NORMAL AND SUPERELEVATED SECTIONS FOR ALL COARSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
4. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVELWAY CROSS SLOPES "ROLLOVER" SHALL NOT EXCEED 8%
5. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
6. SEE SUPERELEVATION TABLE FOR SLOPES
7. SEE PLANS FOR SHOULDER, SIDEWALK AND LANE TRANSITION STATIONING.

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER			
DESIGN-DETAILED	ECF		
CHECKED-REVIEWED	ECF		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
R. MOULTON			
BY	JBD	AG	
DATE	11/17/2021	11/17/2021	

SIGNATURE

P.E. NUMBER

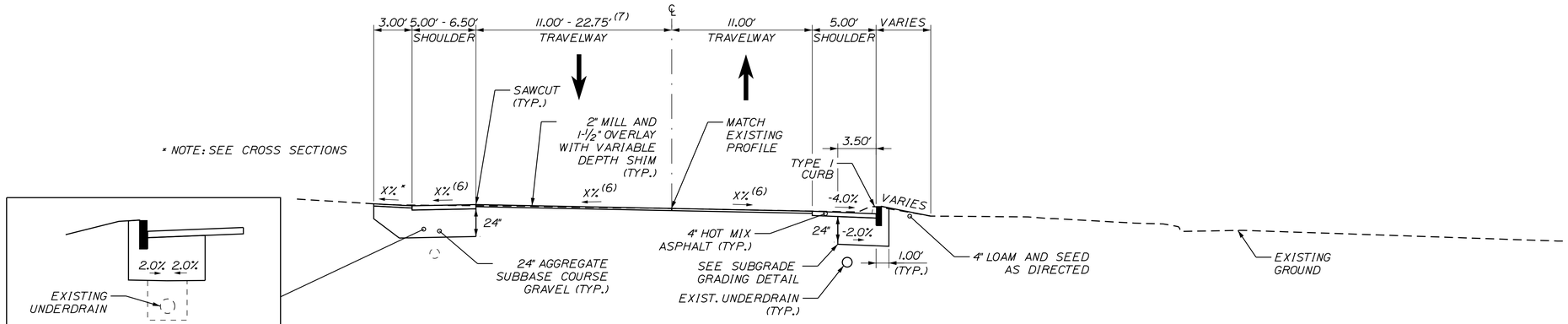
DATE

OLD TOWN
STILLWATER AVENUE

TYPICAL SECTIONS

SHEET NUMBER
11
OF 218

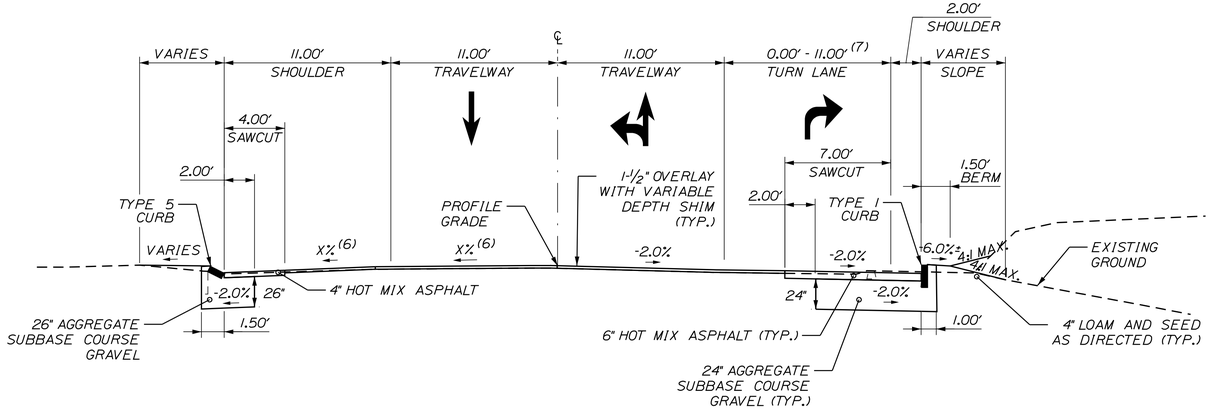
Filename: ...\PLANSET\007-012_Typicals.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



COLLEGE AVENUE
SHOULDER RECONSTRUCTION LEFT
STA. 87+75 TO 88+50

COLLEGE AVENUE
MILL AND OVERLAY
STA. 87+75 TO 90+00

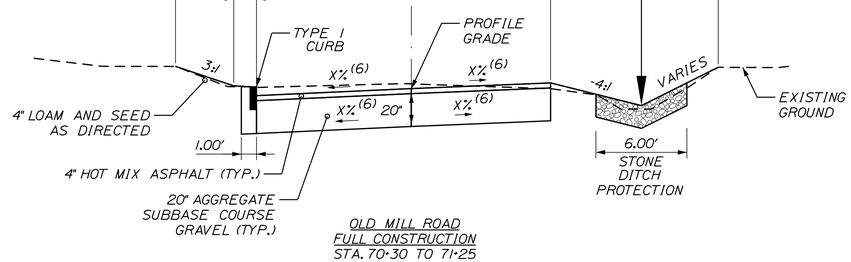
COLLEGE AVENUE
SHOULDER RECONSTRUCTION RIGHT
STA. 87+75 TO 88+81



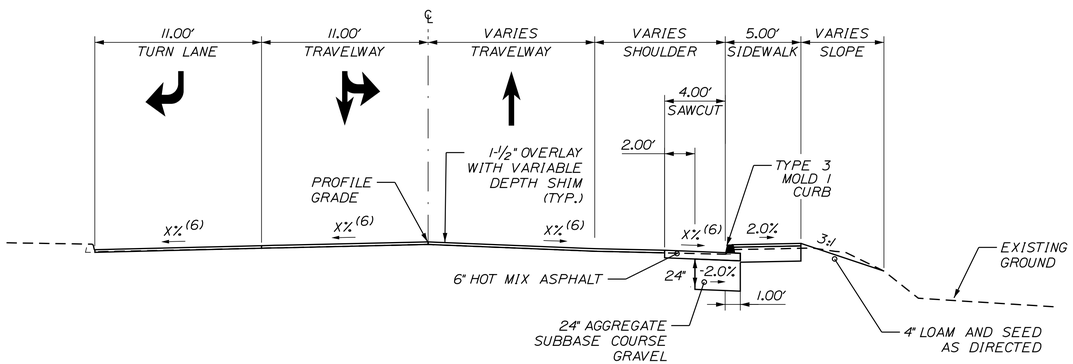
BENNOCH ROAD
SHOULDER RECONSTRUCTION LEFT
STA. 63+35 TO 64+00

BENNOCH ROAD
OVERLAY
STA. 62+00 TO 64+25

BENNOCH ROAD
SHOULDER RECONSTRUCTION RIGHT
STA. 62+00 TO 64+25



OLD MILL ROAD
FULL CONSTRUCTION
STA. 70+30 TO 71+25



BENNOCH ROAD
OVERLAY
STA. 165+50 TO 166+50

BENNOCH ROAD
SHOULDER RECONSTRUCTION RIGHT
STA. 166+10 TO 166+50

NOTES:

1. THE PAVEMENT, BASE AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
2. WHEN SUPERELEVATION EXCEEDS THE SLOPE OF THE LOW SIDE OF THE SHOULDER, THE LOW SIDE SHOULDER SHALL HAVE THE SAME SLOPE AS THE TRAVELWAY.
3. CROWN FOR BOTH THE NORMAL AND SUPERELEVATED SECTIONS FOR ALL COARSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
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6. SEE SUPERELEVATION TABLE FOR SLOPES
7. SEE PLANS FOR SHOULDER, SIDEWALK AND LANE TRANSITION STATIONING.

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

TYPICAL SECTIONS

SHEET NUMBER
12
OF 218

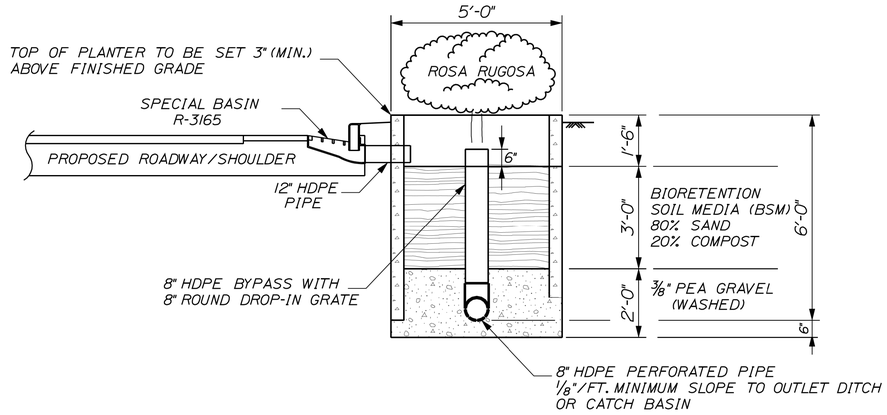
Filename: ...\PLANSET\007-012_Typicals.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

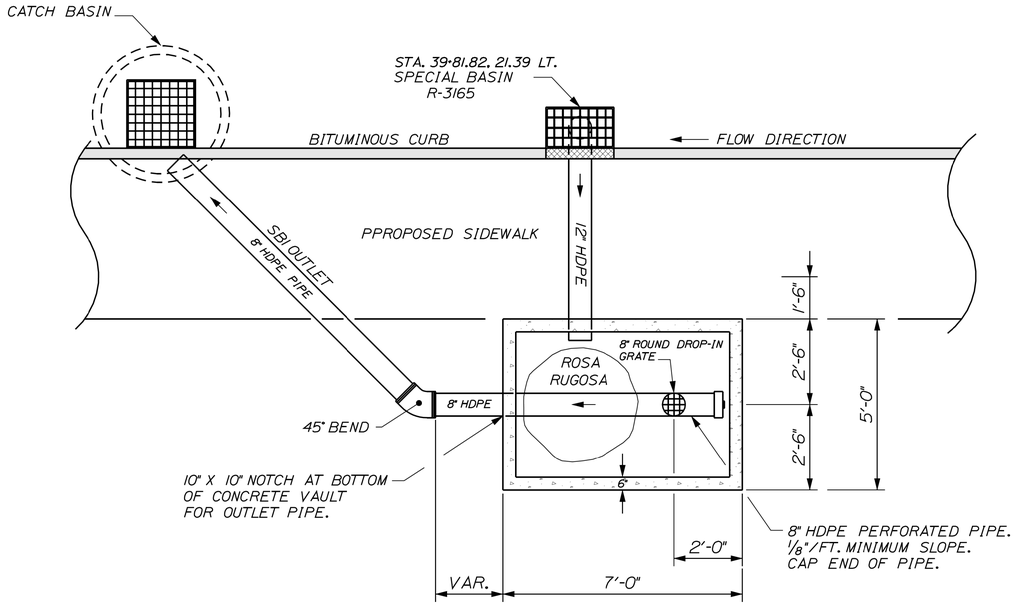
STORMWATER PLANTER DETAILS
4' X 6' I.D. CONCRETE VAULT

DETAILS FROM WIN 14794.00

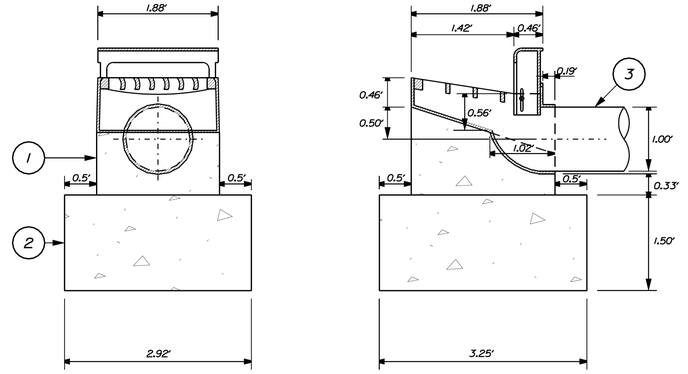
NOTE:

1. ALL CONNECTED PIPES, ELBOWS, TEES, WYES, AND OTHER FITTINGS TO BE INCIDENTAL TO STORMWATER PLANTER ITEM.





STILLWATER AVENUE
STA. 39+76 TO 39+83



SPECIAL BASIN R-3165

NOTES:

1. PRE-CAST BASE. CARE SHALL BE TAKEN TO ELIMINATE ALL AIR VOIDS BETWEEN CONCRETE AND FRAME.

2. CAST-IN-PLACE FOOTINGS. EXTEND APPROXIMATELY 6 INCHES BEYOND THE PRE-CAST BASE ON ALL SIDES. EXACT DIMENSIONS AS CONDITIONS ALLOW.

3. 12" HDPE OUTLET PIPE (INCIDENTAL)

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

P.E. NUMBER

SIGNATURE

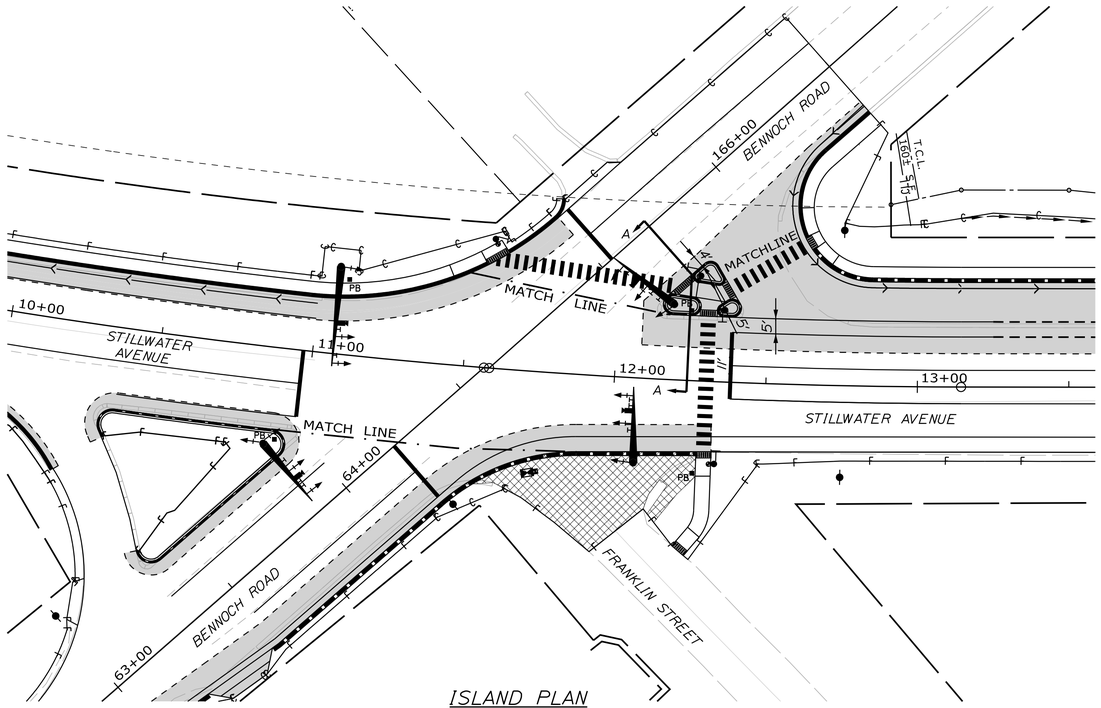
DATE

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

OLD TOWN
STILLWATER AVENUE
STORMWATER PLANTER DETAIL

SHEET NUMBER
13
OF 218

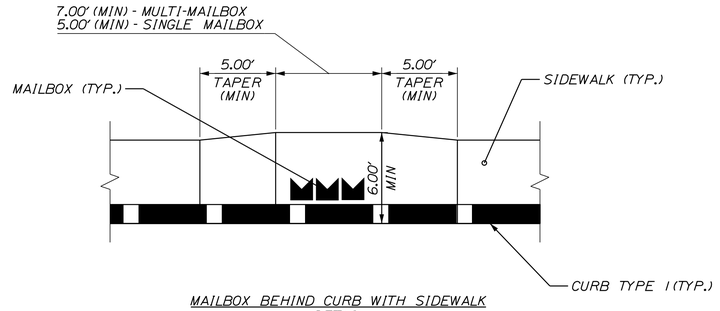
Filename: ...\PLANSET\013_Details_01.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



ISLAND PLAN

25 0 25 50

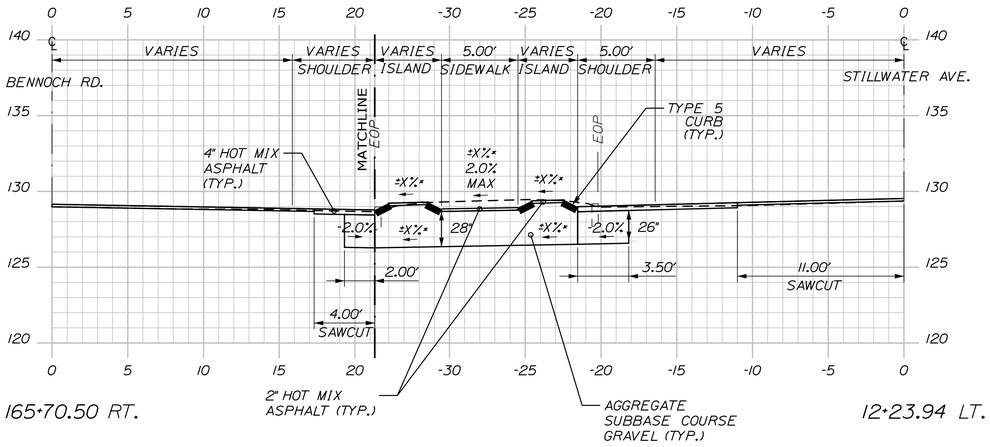
Scale of Feet



MAILBOX BEHIND CURB WITH SIDEWALK DETAIL
N.T.S

SINGLE POST MAILBOX:
STA. 31+32.00 LT
STA. 31+95.00 LT
STA. 34+60.00 LT
STA. 37+66.00 RT
STA. 81+91.00 RT
STA. 82+58.00 RT

MULTIPLE MAILBOX:
STA. 30+47.00 LT
STA. 32+79.00 LT
STA. 33+73.00 LT



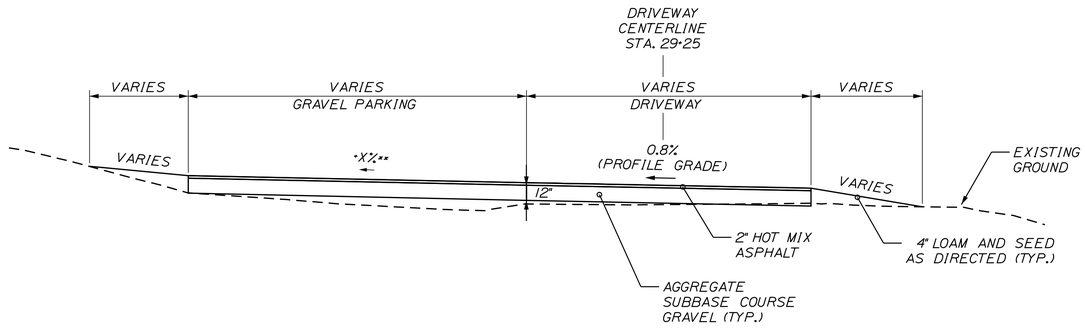
ISLAND SECTION A-A
DETAIL
STA. 12+14 TO 12+40 LT
STA. 165+56 TO 165+79 RT

* SEE GEOMETRIC LAYOUT SHEETS FOR PROPOSED ISLAND ELEVATIONS.

SECTION

5 0 5 10

Scale of Feet



GRAVEL DRIVE PARKING
SECTION DETAIL
STA. 29+10 TO 29+60 RT
N.T.S

** SEE SLOPES ON PLAN SHEETS.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

DETAILS

SHEET NUMBER

14

OF 218

Username: jamesdavis Date:11/17/2021

Division: HIGHWAY

Filename: ...\PLANSET\014_Details_02.dgn

STILLWATER AVENUE									
SUPERELEVATION TABLE									
LT SHLDR %	LT TW %	LT TW %	LT TW %	LT TW %	STATION	SHIM DEPTH	RT TW %	RT TW %	RT SHLDR %
	TURN LANE	TRAVELWAY	TRAVELWAY	TURN LANE	START	(INCHES)	TRAVELWAY	TRAVELWAY	
MATCH	-	MATCH	MATCH	-	2+00	-	MATCH	MATCH	MATCH
-2.0		-2.0	-2.0		2+25	-	-2.4	-2.4	-2.4
-2.0	-	-2.0	-2.0	-	2+50	0.5	-2.0	-2.0	-2.0
-2.0	-	-2.0	-2.0	-	2+75	1.5	-2.0	-2.0	-2.0
					TO				
-2.0	-	-2.0	-2.0	-	6+68	1.5	-2.0	-2.0	-2.0
-2.0	-	-	-2.0	-	7+00	1.5	-2.0	-2.0	-2.0
-2.0	-	-	-2.0	-	7+25	1.5	-2.0	-2.0	-2.0
-2.0	-	-	-2.0	-	7+50	2.5	-2.0	-2.0	-2.0
-2.0	-	-	-2.0	-	8+00	2.5	-0.7	-0.7	-0.7
-2.0	-	-	-2.0	-	8+50	2.5	0.7	0.7	0.7
-2.0	-	-	-2.0	-	8+75	2.5	1.3	1.3	1.3
-2.0	-	-	-2.0	-	9+00	1.5	2.0	2.0	2.0
-2.0	-	-	-2.0	-	9+25	1.5	2.0	2.0	2.0
-2.0	-	-	-2.0	-	9+50	0.5	2.0	2.0	2.0
-2.0	-	-	-2.0	-	10+00	0.5	2.0	1.4	1.4
-2.0	-	-	-2.0	-	10+50	0.5	2.0	0.9	0.9
-2.0	-	-	-2.0	-	11+00	0.5	2.0	0.3	0.3
-2.5	-	-	-2.5	-	11+50	0.5	2.5	-0.3	-0.3
-2.5	-	-	-2.5	-	12+00	0.5	2.5	-0.9	-0.9
-2.5	-2.5	-	-2.5	-	12+50	0.5	2.5	-1.4	-1.4
-2.5	-2.5	-	-2.5	-	13+00	0.5	2.5	-2.0	-2.0
-2.5	-2.5	-	-2.5	-	13+50	0.5	2.5	-2.0	-4.0
-2.5	-2.5	-	-2.5	-	14+00	0.5	2.5	-2.0	-4.0
-2.5	-	-	-2.5	-	14+50	0.5	2.5	-2.0	-4.0
-2.5	-	-	-2.5	-	14+75	0.5	-	-2.0	-4.0
-2.5	-	-	-2.5	-	15+00	0.5	-	-2.0	-4.0
					TO				
-2.5	-	-	-2.5	-	19+00	0.5	-	-2.0	-4.0
-4.0	-	-	-2.0	-	19+50	0.5	-	-2.0	-4.0
-4.0	-	-	-2.0	-	20+00	0.5	-	-2.0	-4.0
-4.0	-	-	-2.0	-	20+25	0.5	-	-2.0	-4.0
-4.0	-	-	-2.0	-	20+50	-	-	-2.0	-4.0
					TO				
-4.0	-	-	-2.0	-	22+25	-	-	-2.0	-4.0
-3.0	-	-	-2.0	-	22+50	-	-	-2.0	-3.0
-2.0	-	-	-2.0	-	22+75	-	-	-2.0	-2.0
-2.0	-	-	-2.0	-	22+88	-	-	-2.0	-2.0
					BRIDGE				
-2.0	-	-	-2.0	-	24+13	-	-	-2.0	-2.0
					TO				
-2.0	-	-	-2.0	-	25+67	-	-	-2.0	-2.0
					BRIDGE				
-2.0	-	-	-2.0	-	28+47	-	-	-2.0	-2.0
-2.0	-	-	-2.0	-	28+50	-	-	-2.0	-2.0
-3.0	-	-	-2.0	-	28+75	-	-	-2.0	-3.0
-4.0	-	-	-2.0	-	29+00	-	-	-2.0	-4.0
					TO				
-4.0	-	-2.0	-2.0	-	31+00	-	-2.0	-2.0	-4.0
					TO				
-4.0	-	-2.0	-2.0	-2.0	33+00	-	-2.0	-2.0	-4.0
					TO				
-4.0	-	-2.0	-2.0	-2.0	35+00	-	-2.0	-2.0	-4.0
-	-	-2.0	-2.0	-	35+25	-	-2.0	-2.0	-
					TO				
-	-	-2.0	-2.0	-	36+75	-	-2.0	-2.0	-
-4.0	-	-2.0	-2.0	-	37+00	-	-2.0	-2.0	-4.0
-4.0	-	-2.0	-2.0	-	37+25	-	-2.0	-2.0	-4.0
-4.0	-	-1.5	-1.5	-	37+50	-	-2.0	-2.0	-4.0
					TO				
-4.0	-	-1.5	-1.5	-	38+85	0.5	-2.0	-2.0	-4.0
-4.0	-	-	-1.5	-	39+00	0.5	-2.0	-	-4.0
-4.0	-	-	-1.5	-	39+25	0.5	-2.0	-	-4.0
-4.0	-	-	-0.7	-	39+50	0.5	-2.0	-	-4.0
-4.0	-	-	0.8	-	40+00	0.5	-2.0	-	-4.0
-4.0	-	-	2.0	-	40+41	0.5	-2.0	-	-4.0
-4.0	-	-	2.3	-	40+50	0.5	-2.3	-	-4.0
-4.0	-	-	3.8	-	41+00	0.5	-3.8	-	-3.8
-4.0	-	-	3.8	-	41+50	0.5	-3.8	-	-3.8
MATCH	-	-	MATCH	-	42+00	-	MATCH	-	MATCH
					END				

NOTE: CONTINUOUS TWO-WAY LEFT-TURN LANE SUPERS ARE EQUAL TO ITS RESPECTIVE LEFT OR RIGHT TRAVELWAY SUPERS.

COLLEGE AVENUE						
SUPERELEVATION TABLE						
LT SHLDR %	LT TW %	LT TW %	STATION	RT TW %	RT TW %	RT SHLDR %
	TRAVELWAY	TURN LANE	START	TRAVELWAY	TURN LANE	
MATCH	MATCH	-	80+75	MATCH	-	MATCH
-3.0	-2.0	-	81+00	-2.0	-	-4.0
-4.0	-2.0	-	81+25	-2.0	-	-4.0
-4.0	-2.0	2.0	81+50	-2.0	-	-4.0
			TO			
-4.0	-2.0	2.0	83+44	-2.0	-2.0	-4.0
			TO			
-4.0	-2.0	2.0	84+50	-2.0	-2.0	-4.0
-4.0	-1.3	2.0	84+75	-2.0	-2.0	-4.0
-4.0	-0.5	2.0	85+00	-2.0	-2.0	-4.0
-4.0	0.3	1.7	85+25	-1.7	-1.7	-4.0
-4.0	1.0	-	85+50	-1.5	-	-4.0
-4.0	1.0	-	85+75	-1.5	-	-4.0
-4.0	1.0	-	85+78	-1.5	-	-4.0
			STILLWATER AVENUE			
-4.0	1.1	-	86+28	-1.5	-	-4.0
-4.0	1.1	-	86+50	-1.5	-	-4.0
-4.0	1.6	1.6	86+75	-1.8	-	-4.0
-2.0	2.0	2.0	87+00	-2.0	-	-4.0
			TO			
-2.0	2.0	2.0	87+75	-2.0	-	-4.0
-1.0	2.0	-	88+00	-2.0	-	-4.0
0.0	2.0	-	88+25	-2.0	-	-4.0
1.0	2.0	-	88+50	-2.0	-	-4.0
2.0	2.0	-	88+75	-2.0	-	-4.0
1.0	2.0	-	89+00	-2.0	-	-4.0
0.0	1.2	-	89+25	-2.0	-	-3.0
-1.0	0.5	-	89+50	-2.0	-	-2.0
-2.0	-0.3	-	89+75	-1.3	-	-1.3
MATCH	MATCH	-	90+00	MATCH	-	MATCH
			END			

BENNOCH ROAD						
SUPERELEVATION TABLE						
LT SHLDR %	LT TW %	LT TW %	STATION	RT TW %	RT TW %	RT SHLDR %
	TURN LANE	TRAVELWAY	START	TRAVELWAY	TURN LANE	
MATCH	-	MATCH	62+00	MATCH	-	MATCH
-2.0	-	-2.0	62+25	-2.0	-	-2.0
-2.0	-	-2.0	62+35	-2.0	-	-2.0
-2.0	-	-2.0	62+50	-2.0	-	-2.0
-2.0	-	-1.6	62+75	-2.0	-	-2.0
-2.0	-	-1.3	63+00	-2.0	-	-2.0
-3.0	-	-0.9	63+25	-2.0	-	-2.0
-2.0	-	-0.5	63+50	-2.0	-2.0	-2.0
-0.9	-	-0.2	63+75	-2.0	-2.0	-2.0
0.2	-	0.2	64+00	-2.0	-2.0	-2.0
-	-	-	64+25	-2.0	-2.0	-2.0
-	-	-	64+50	-	-	-2.0
			STILLWATER AVENUE			
-0.5	-	-0.5	165+25	-	-	-
-2.0	-	-2.0	165+50	-0.7	-	-0.7
-2.0	-2.0	-2.0	165+75	-2.0	-	-2.0
-2.0	-2.0	-2.0	166+00	-2.0	-	-3.9
-2.0	-2.0	-2.0	166+25	-2.0	-	-4.0
MATCH	MATCH	MATCH	166+50	MATCH	-	MATCH
			END			

OLD MILL ROAD		
SUPERELEVATION TABLE		
LT TW %	STATION	RT TW %
TRAVELWAY	START	TRAVELWAY
-5.2	70+30	-
-4.5	70+50	4.1
-3.6	70+75	1.9
-2.7	71+00	-0.4
MATCH	71+25	MATCH
	END	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BY | DATE | SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

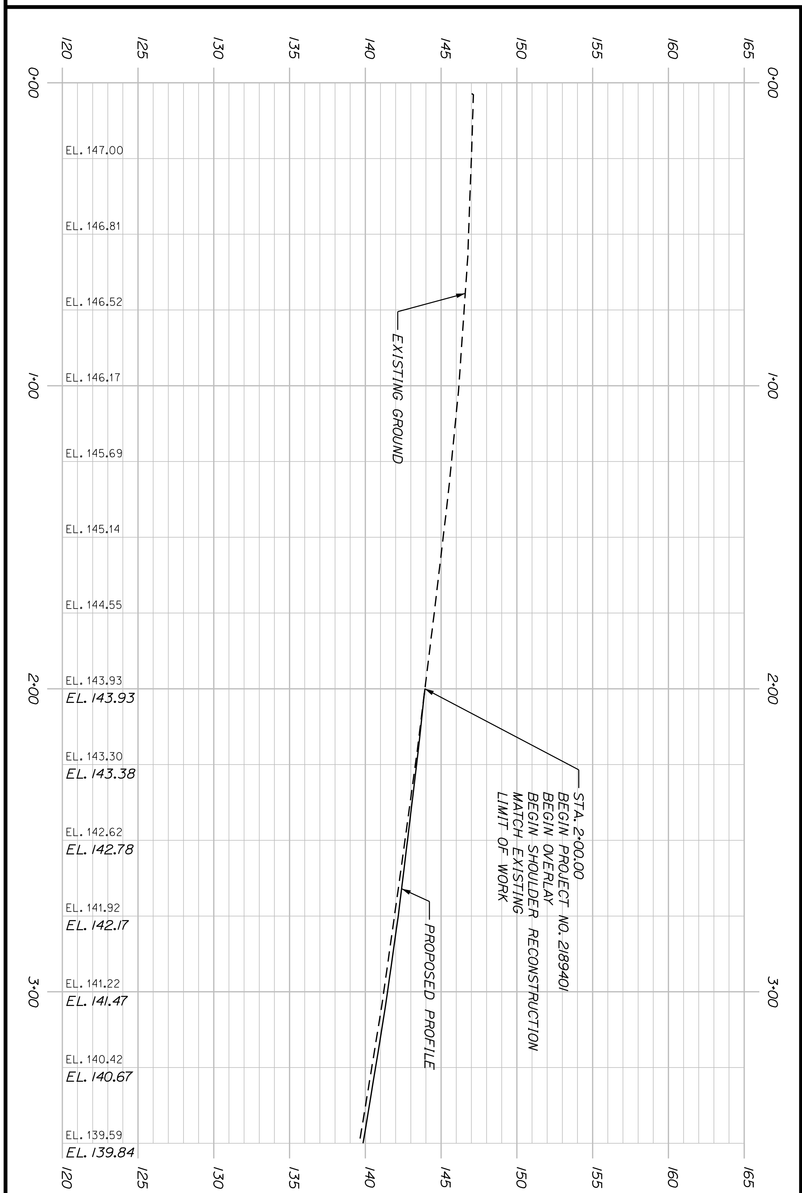
SUPERELEVATION TABLES

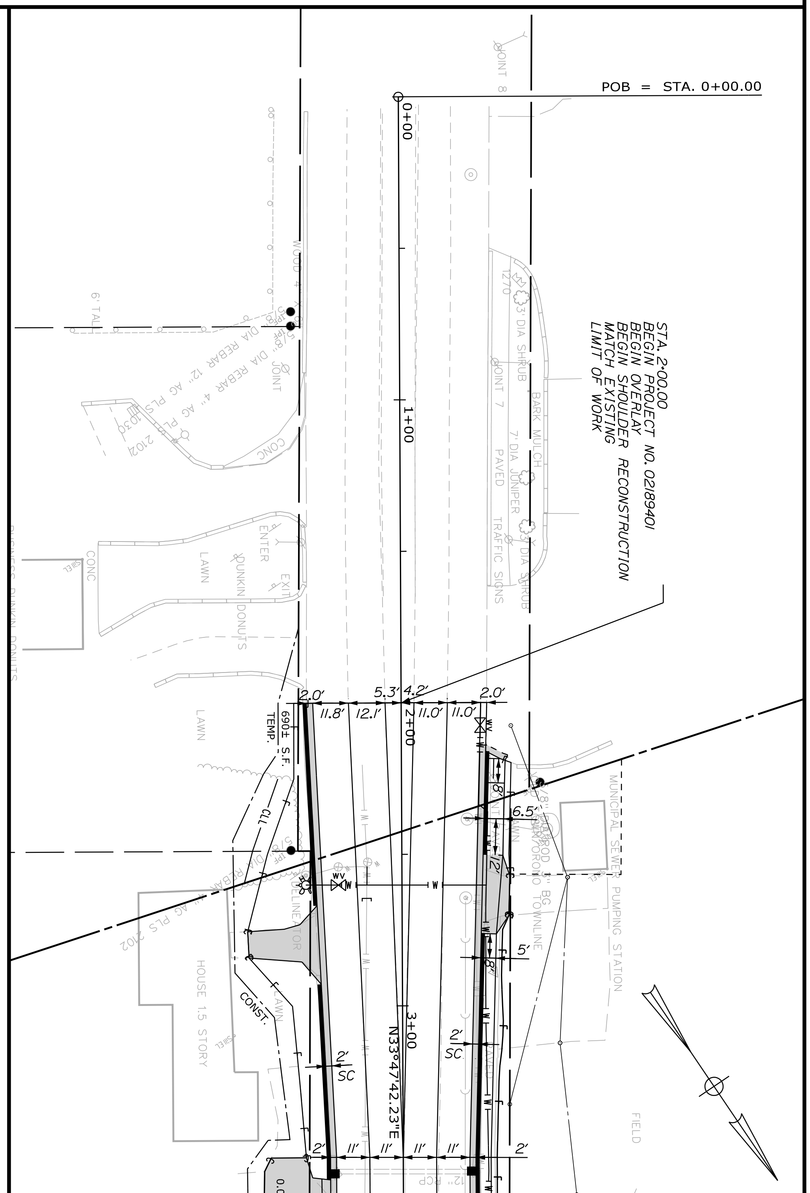
SHEET NUMBER

15

OF 218

Filename: ...\015_Superelevations.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021





PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER 16 OF 218

OLD TOWN
STILLWATER AVENUE

PLAN AND PROFILE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01 HIGHWAY PLANS

Filename: ...\016-027_PlanProfile.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

CURVE DATA #1
PI = 4+00.00
Δ = 0°29'00.1" Lt.

PI = STA. 4+00.00

PC = STA. 8+14.04

STA. 3+50.00 TO 12+10.00
ABANDONED 10" WATERLINE

REBUILD CB WITH
OFFSET CONE

EASEMENT

EDGE OF POTATO FIELD

SLOPE

EXISTING

ADJUST CB
TO GRADE

EXISTING SLOPE EASE.
S.H.C. FILE NO. 10-290

INSTALL CB#1
TYPE F6
REMOVE

STILLWATER AVENUE

3+00
N33°47'42.23"E

4+00

5+00

6+00

7+00

8+00
N33°18'42.10"E

9+00

10+00

6" UD

15" UD

INSTALL RCP 15" x 40'

TO BE REMOVED
BY OTHERS

0.08± AC.
LIMITS

1470± S.F.
CONST.

315± S.F.
LIMITS

200± S.F.
CONST.

REMOVE

TO BE REMOVED
BY OTHERS

ADJUST CB
TO GRADE

INSTALL CB#2
TYPE Bi-C

REMOVE FIRST AND LAST
SECTIONS OF PIPE THEN
CAP AND ABANDON
REMAINING PIPE

375± S.F.
TEMP.

1340± S.F.
CONST.

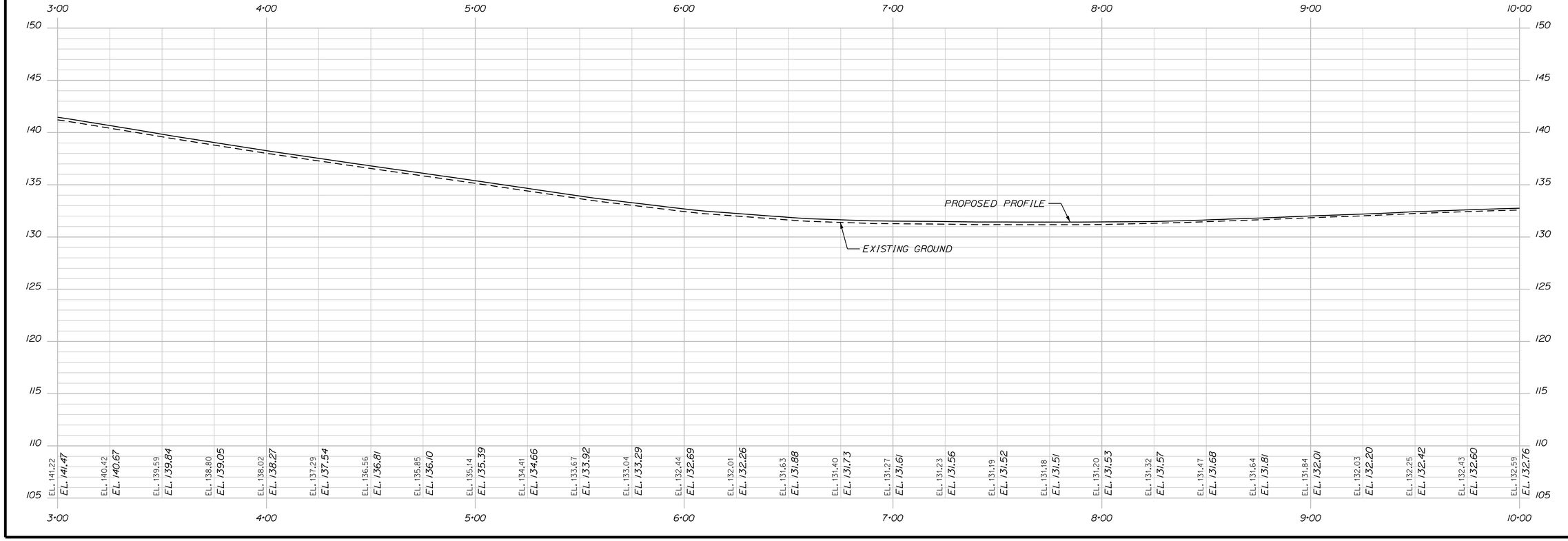
INSTALL
OPT III
18" x 48"

EXISTING DRAIN,
STRUCTURE EASE.
S.H.C. 10-290
OUTLET PIPE

STA. 3+50.00 TO 10+75.00
ABANDONED 6" WATERLINE

CURVE DATA #2
PI = 10+65.55
D = 2°51'53.2"
Δ = 14°20'07.3" Lt.
R = 2000.00'
L = 500.40'
T = 251.51'
E = 15.75'

HOUSE 1.5 STORY
HOUSE 2 STORY
HOUSE 1 STORY
HOUSE 2.5 STORY
OLD TOWN ORONO
ASSORTED PLANTS AND SHRUBS
MIXED GROWTH
LAWN
STONE
WOOD 2 STEPS
FIELD
36" MAPLE
16" MAPLE
14" HARDWOOD
6" HARDWOOD



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

P.E. NUMBER

DATE

SIGNATURE

DATE	BY
11/17/2021	JBD
11/17/2021	AG

R. MOULTON

PROJ. MANAGER	
DESIGN-DETAILED	ECF
CHECKED-REVIEWED	ECF
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

OLD TOWN
STILLWATER AVENUE

PLAN AND PROFILE

SHEET NUMBER

17

OF 218

STA. 3+50.00 TO 12+10.00
10" WATERLINE TO BE ABANDONED

PI = STA. 165+00.00
STA. 11+58.53

BENNOCH ROAD

N22°37'04.63"W

MATCH LINE

STILLWATER AVENUE

TO BE REMOVED BY OTHERS

STA. 3+50.00 TO 10+75.00
ABANDONED 6" WATERLINE

CURVE DATA #2
PI = 10+65.55
D = 2°51'53.2"
Δ = 14°20'07.3" Lt.
R = 2000.00'
L = 500.40'
T = 251.51'
E = 15.75'

REMOVE

REMOVE PAVEMENT LOAM AND SEED

PI = STA. 64+60.33
STA. 11+56.78
FRANKLIN STREET

PT = STA. 13+14.44

WIDENING FOR RIGHT TURN LANE

INSTALL OPT III 12' x 14'

INSTALL CB*3 AFC

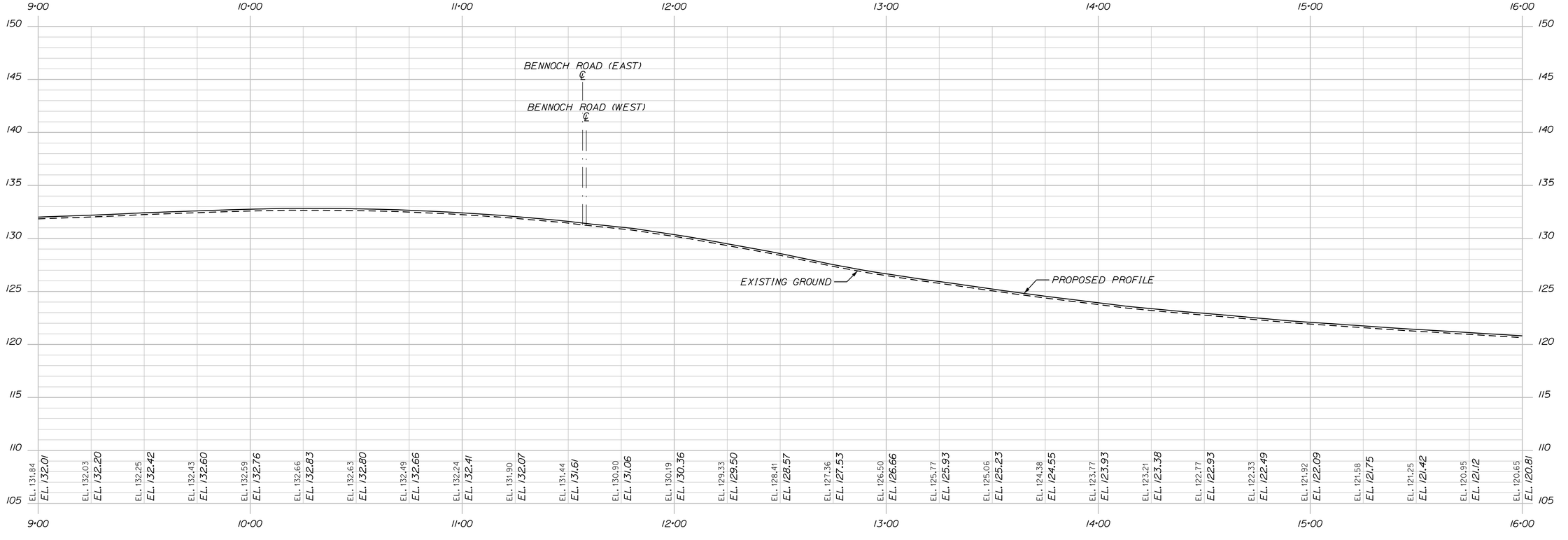
CONSTRUCT PAVED PATH TO MATCH EXISTING STEPS

CONSTRUCT PAVED PATH TO MATCH EXISTING CONC. PAD

140± S.F.

1055± S.F.

SOUTH SPRING STREET



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

R. MOULTON	BY	DATE	P.E. NUMBER
PROJ. MANAGER			
DESIGN-DETAILED	ECF		
CHECKED-REVIEWED	ECF	11/17/2021	SIGNATURE
DESIGN2-DETAILED2	AG	11/17/2021	
DESIGN3-DETAILED3	JBD	11/17/2021	DATE
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

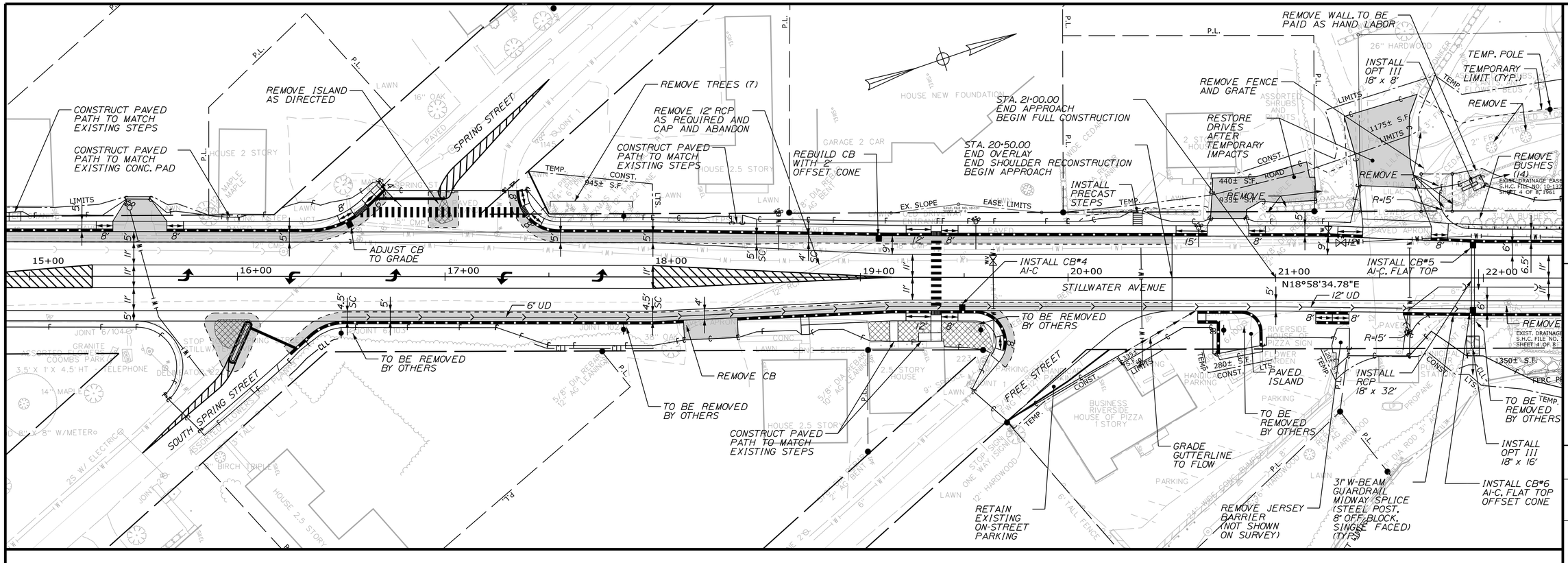
OLD TOWN
STILLWATER AVENUE

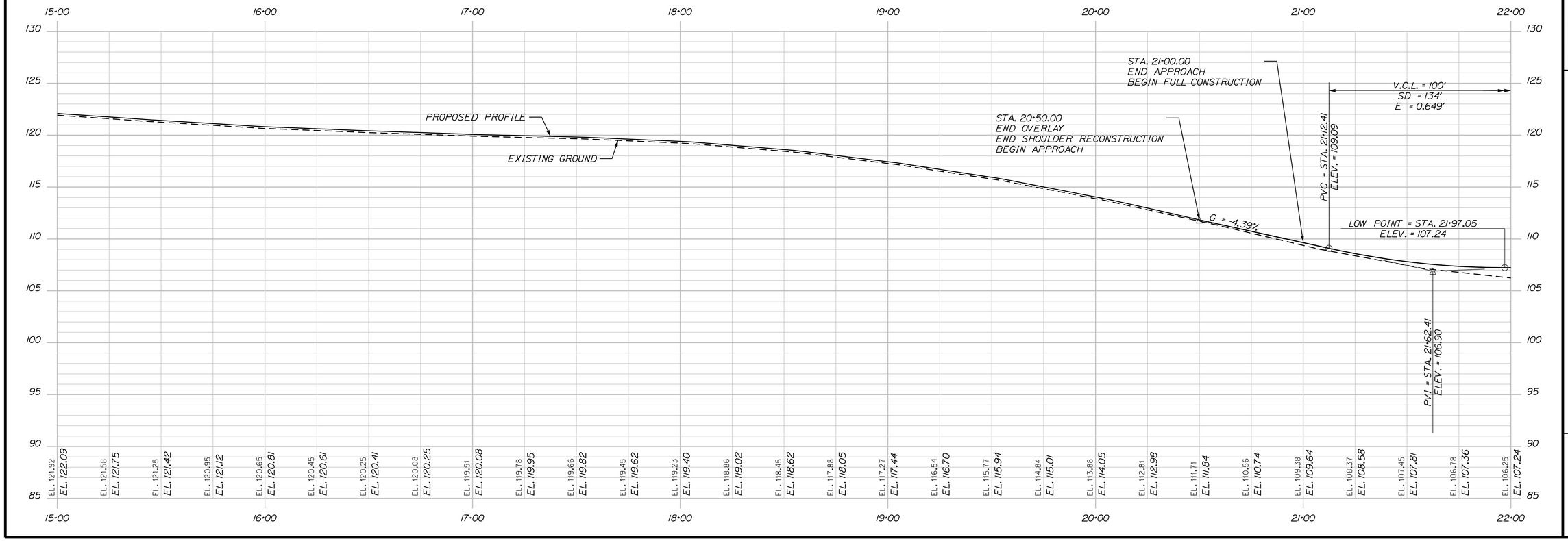
PLAN AND PROFILE

SHEET NUMBER
18
OF 218

Username: jamesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\016-027_PlanProfile.dgn

Username: jamesdavis
Division: HIGHWAY
Filename: ...\016-027_PlanProfile.dgn
Date:11/17/2021





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

P.E. NUMBER

DATE

	BY	DATE
SIGNATURE		
	JBD	11/17/2021
	AG	11/17/2021

R. MOULTON	
PROJ. MANAGER	
DESIGN-DETAILED	ECF
CHECKED-REVIEWED	ECF
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

OLD TOWN
STILLWATER AVENUE

PLAN AND PROFILE

SHEET NUMBER

19

OF 218

Username: jamesdavis
Division: HIGHWAY
Filename: ...\016-027_PlanProfile.dgn
Date:11/17/2021

STILLWATER HYDROELECTRIC PROJECT
FERC NO. 2712

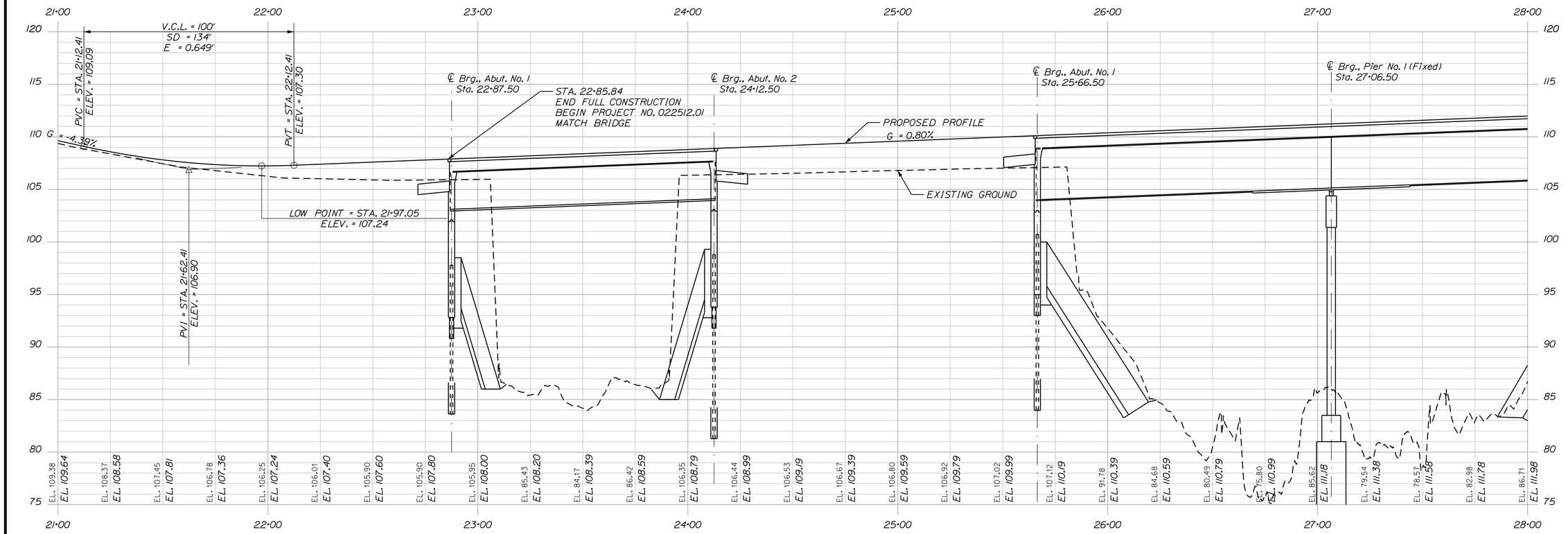
CURVE DATA #3
PI = 28+92.38
Δ = 0°25'22.4" Lt

REMOVE WALL TO BE PAID AS HAND LABOR
INSTALL OPT III 18" x 8'
TEMP. POLE
TEMPORARY LIMIT (TYP.)
REMOVE FENCE AND GRATE
RESTORE DRIVES AFTER TEMPORARY IMPACTS
REMOVE
INSTALL RCP 18" x 32'
EXIST. DRAINAGE EASE. S.H.C. FILE NO. 10-137 SHEET 4 OF 8, 1961
INSTALL CB*5 AI-C, FLAT TOP
REMOVE (14) ± BUSHES
INSTALL OPT III 18" x 16'
INSTALL CB*6 AI-C, FLAT TOP OFFSET CONE
REMOVE JERSEY BARRIER (NOT SHOWN ON SURVEY)
PAVED ISLAND
TO BE REMOVED BY OTHERS
31" W-BEAM GUARDRAIL MIDWAY SPLICE (STEEL POST, 8" OFF-BLOCK, SINGLE FACED) (TYP.)
STA. 22+85.84 END FULL CONSTRUCTION BEGIN PROJECT NO. 022512.01 MATCH BRIDGE
MATCH BRIDGE TRANSITION RAIL (TYP.)
INSTALL CB*8 TYPE A5-C WITH 2' OFFSET CONE
INSTALL RCP 18" x 28'
INSTALL RCP 18" x 20'
INSTALL CB*7 AI-C
TO BE REMOVED BY OTHERS
TO BE REMOVED BY OTHERS

℄ Brg., Abut. No. 1 Sta. 22+87.50
℄ Brg., Abut. No. 2 Sta. 24+12.50
℄ Brg., Abut. No. 1 Sta. 25+66.50
℄ Brg., Pier No. 1 (Fixed) Sta. 27+06.50

0.20± AC. | 0.68± AC. | 0.06± AC. | 0.16± AC. | 0.14± AC. | 0.68± AC.
1175± S.F. | 80± S.F. | 1350± S.F. | 1205± S.F. | 1970± S.F.

21+00 | 22+00 | 23+00 | 24+00 | 25+00 | 26+00 | 27+00 | 28+00
N18°58'34.78"E
12" UD



	R. MOULTON	DATE
PROJ. MANAGER		
DESIGN-DETAILED	ECF	11/17/2021
CHECKED-REVIEWED	ECF	11/17/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BY: JBD, AG

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

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HIGHWAY PLANS

P.E. NUMBER

SIGNATURE

DATE

OLD TOWN
STILLWATER AVENUE
PLAN AND PROFILE

SHEET NUMBER
20
OF 218

Username: jomesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\016-027_PlanProfile.dgn

CURVE DATA #3
PI = 28+92.38
Δ = 0°25'22.4" Lt.

CURVE DATA #4
PI = 30+92.35
Δ = 0°15'47.0" Rt.

PI = STA. 28+92.38

PI = STA. 30+92.35

STILLWATER HYDROELECTRIC PROJECT
FERC NO. 2712

STA. 28+48.00
END PROJECT NO. 0225II.01
BEGIN FULL CONSTRUCTION
MATCH BRIDGE

STA. 32+38.30
STA. 50+00.00

STILLWATER AVENUE

MICHAEL STREET

N18°33'12.38"E

N11°00.58"W

℄ Brg., Pier No. 1 (Fixed)
Sta. 27+06.50

℄ Brg., Abut. No. 2
Sta. 28+46.50

STA. 50+75.00
PROJECT LIMIT

FERC PROJECT LIMITS

EXIST. DRAINAGE EASE.
S.H.C. FILE NO. 10-137
SHEET 4 OF 8, 1961

EXIST. SLOPE EASE.
S.H.C. FILE NO. 10-137
SHEET 4 OF 8, 1961

EXIST. DRAINAGE EASE.
S.H.C. FILE NO. 10-137

MATCH BRIDGE TRANSITION RAIL (TYP.)

3I" W-BEAM GUARDRAIL MIDWAY SPLICE (STEEL POST, 8" OFF-BLOCK, SINGLE FACED) (TYP.)

INSTALL CB*10 A5-C WITH 2' OFFSET CONE

CAP AND ABANDON BUILDING TO BE MOVED BY OTHERS

TEMPORARY LIMIT (TYP.)

REMOVE SECOND DRIVE ENTRANCE

REMOVE & RESET WALL BEHIND SIDEWALK

CONSTRUCT PAVED PATH TO MATCH EXISTING STEPS

TO BE REMOVED BY OTHERS

INSTALL CB*13 TYPE F5

INSTALL OPT III 12" x 21'

REMOVE TREES

INSTALL CB*14 A1-C

REMOVE

CAP AND ABANDON

12" UD

6" UD

INSTALL CB*11 A1-C

REMOVE CB AND OUTLET CULVERT

TO BE REMOVED BY OTHERS

INSTALL OPT III 18" x 32'

INSTALL OPT III 18" x 65'

RECONSTRUCT GRAVEL PARKING AREA SEE GRAVEL PARKING DETAIL

INSTALL RCP 18" x 28'

INSTALL CB*9 A1-C

CONSTRUCT PAVED PATH TO MATCH EXISTING STEPS

INSTALL CB*12 B1-C

INSTALL OPT III 12" x 4'

CLEAN INLET PIPE

REMOVE (II) BUSHES

REMOVE & REPLACE FENCE & GATE

INSTALL GRANITE CURB STEP AS DIRECTED

1970± S.F.
1705± S.F.
1750± S.F.
940 S.F.
910± S.F.
765± S.F.
205± S.F.
705± S.F.
360± S.F.
785± S.F.
330± S.F.
400± S.F.
795± S.F.
315± S.F.
0.68± AC.
0.08± AC.
0.17± AC.
6.4%
G = 0.80%
G = 2.93%
R=10'
R=15'

V.C.L. = 100'
SD = 805'
E = 0.266'

V.C.L. = 480'
SD = 484'
E = -2.651'

PVC = STA. 29+27.94
ELEV. = 113.00

PVT = STA. 30+27.94
ELEV. = 114.86

PVI = STA. 29+77.94
ELEV. = 113.40

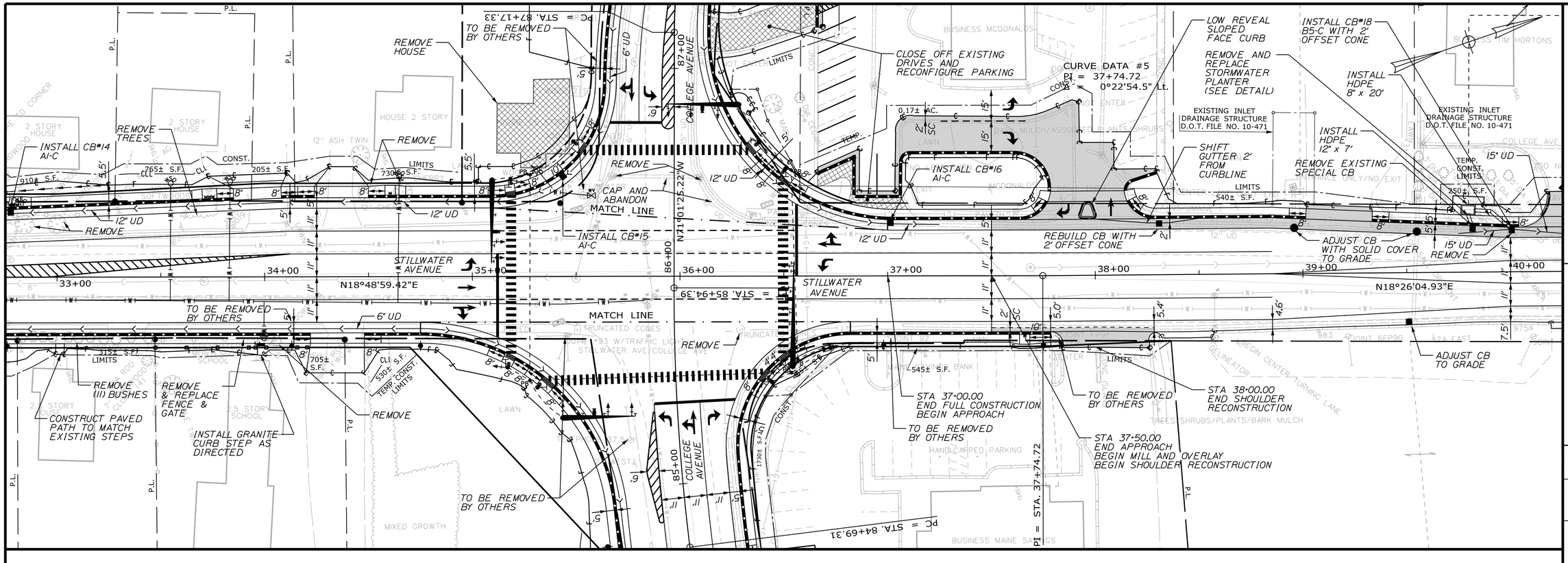
PVC = STA. 31+08.12
ELEV. = 117.21'

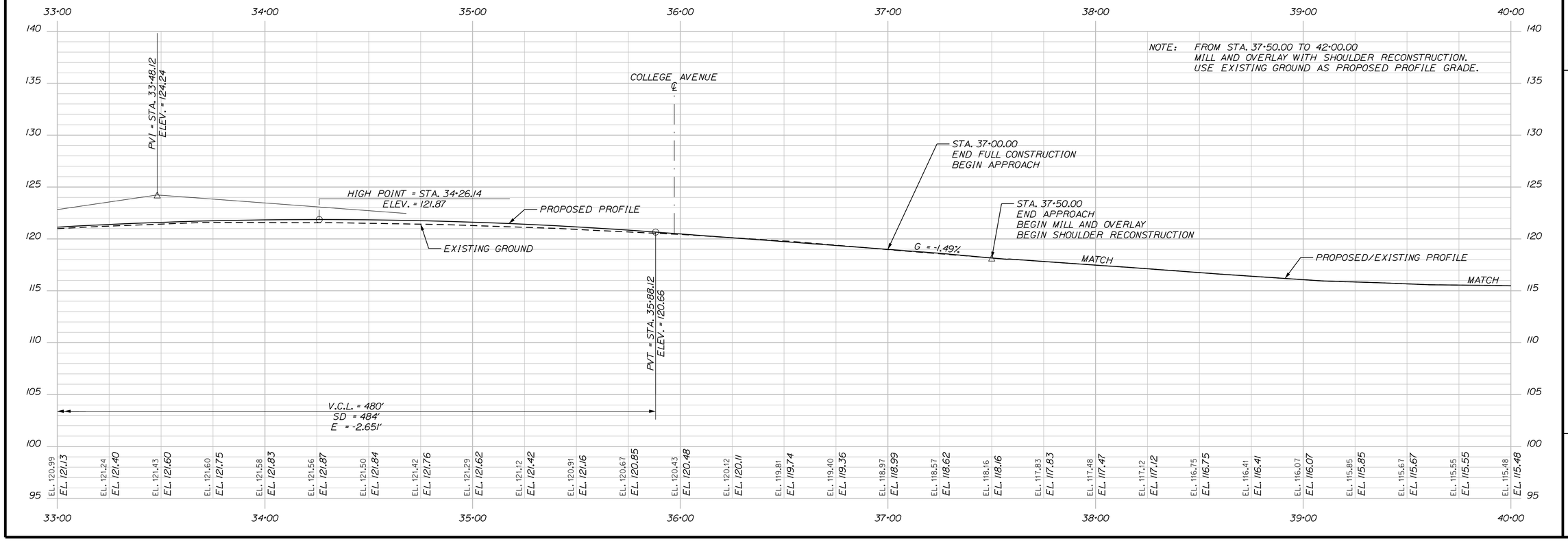
PVI = STA. 33+48.12
ELEV. = 124.24

PROPOSED PROFILE

EXISTING GROUND

| | | |





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON			
DESIGN-DETAILED	ECF	JBD	11/17/2021	
CHECKED-REVIEWED	ECF	AG	11/17/2021	
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

P.E. NUMBER

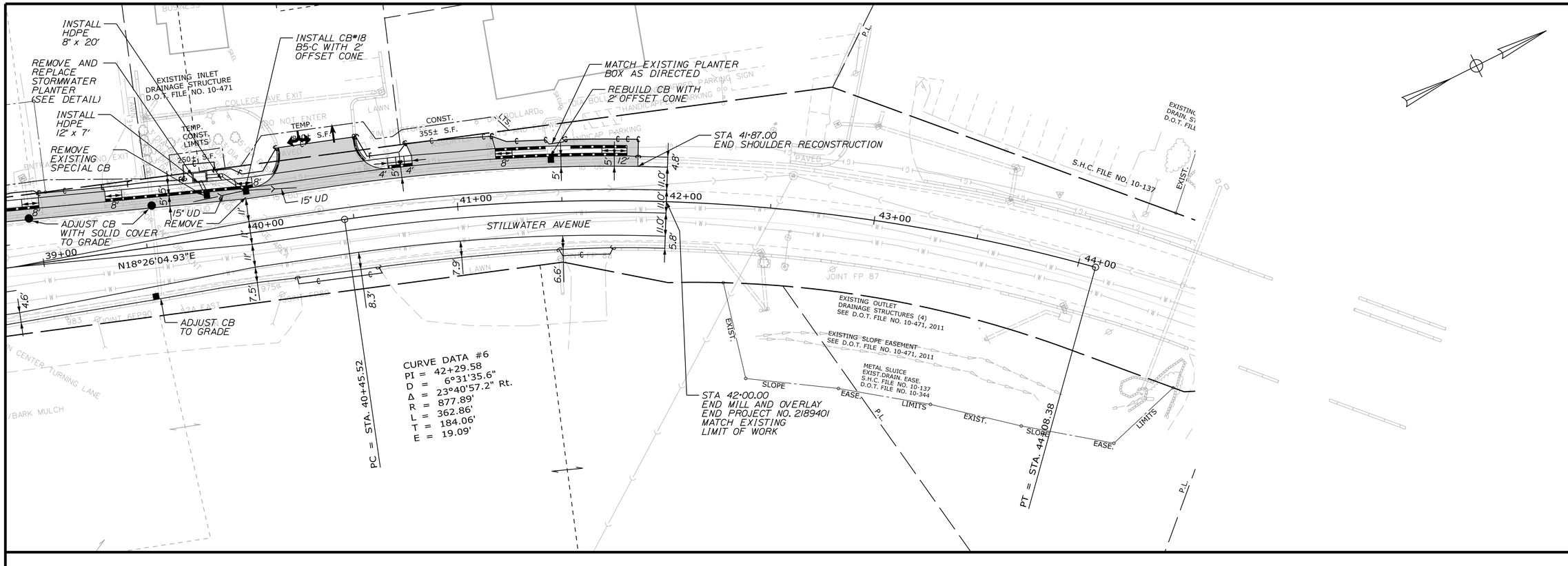
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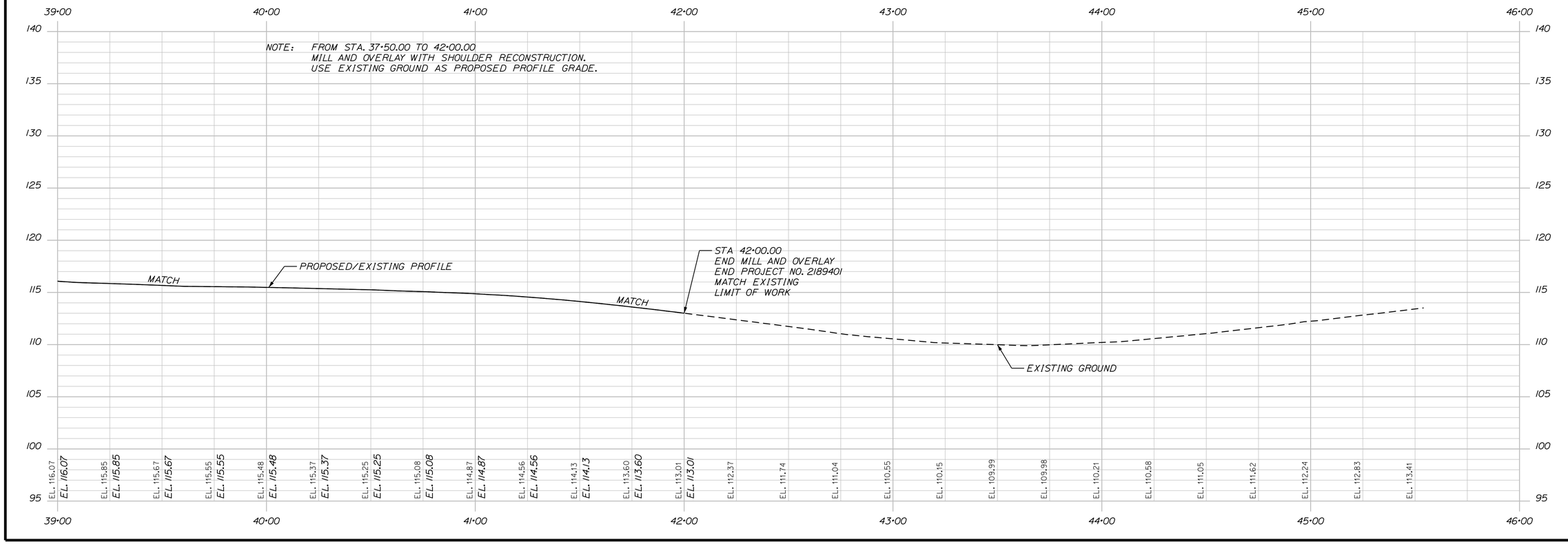
DATE

OLD TOWN
STILLWATER AVENUE
PLAN AND PROFILE

SHEET NUMBER
22
OF 218

Username: jamesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\016-027_PlanProfile.dgn





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	
DESIGN-DETAILED	ECF	
CHECKED-REVIEWED	ECF	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1	JBD	11/17/2021
REVISIONS 2	AG	11/17/2021
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BY

DATE

P.E. NUMBER

SIGNATURE

DATE

OLD TOWN
STILLWATER AVENUE

PLAN AND PROFILE

SHEET NUMBER

23

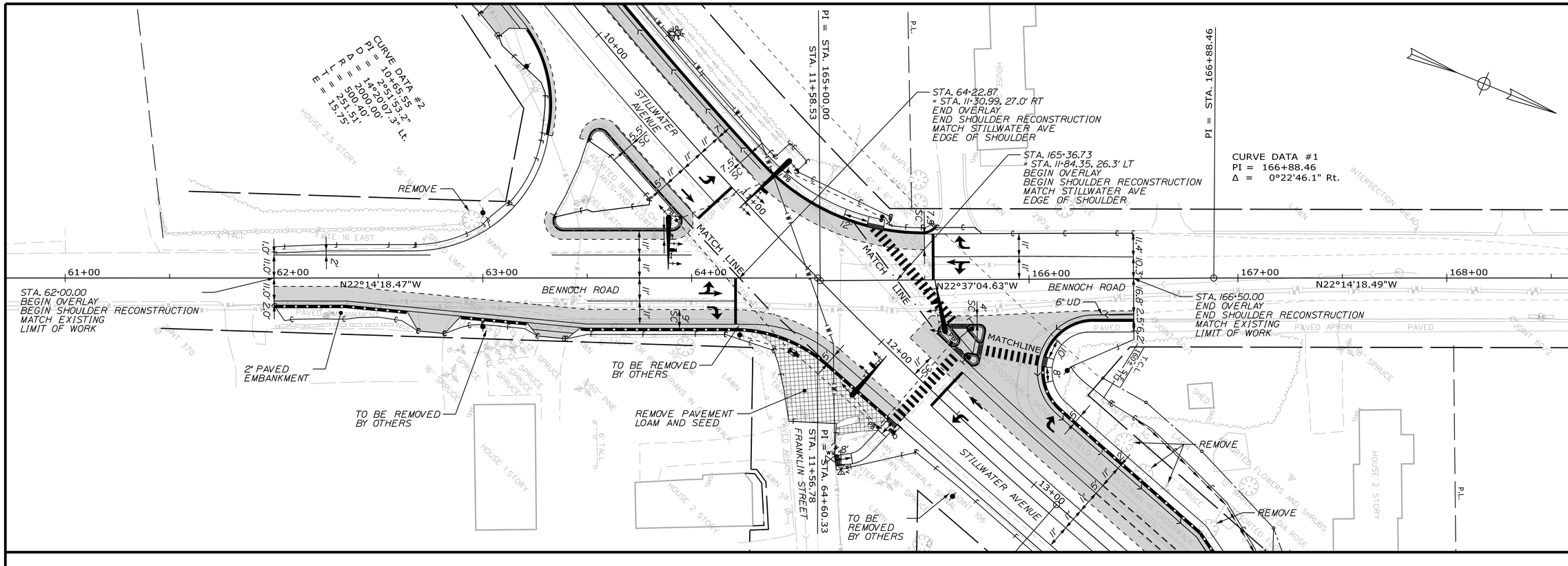
OF 218

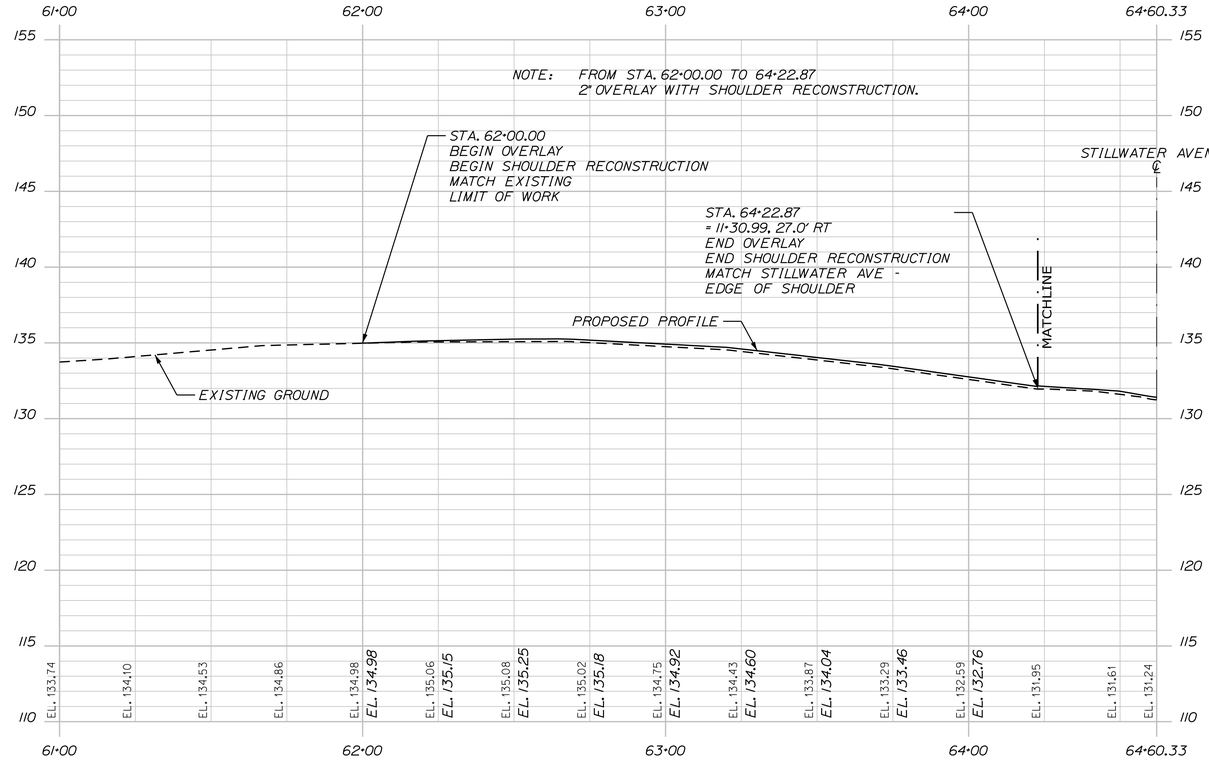
Username: jamesdavis Date:11/17/2021

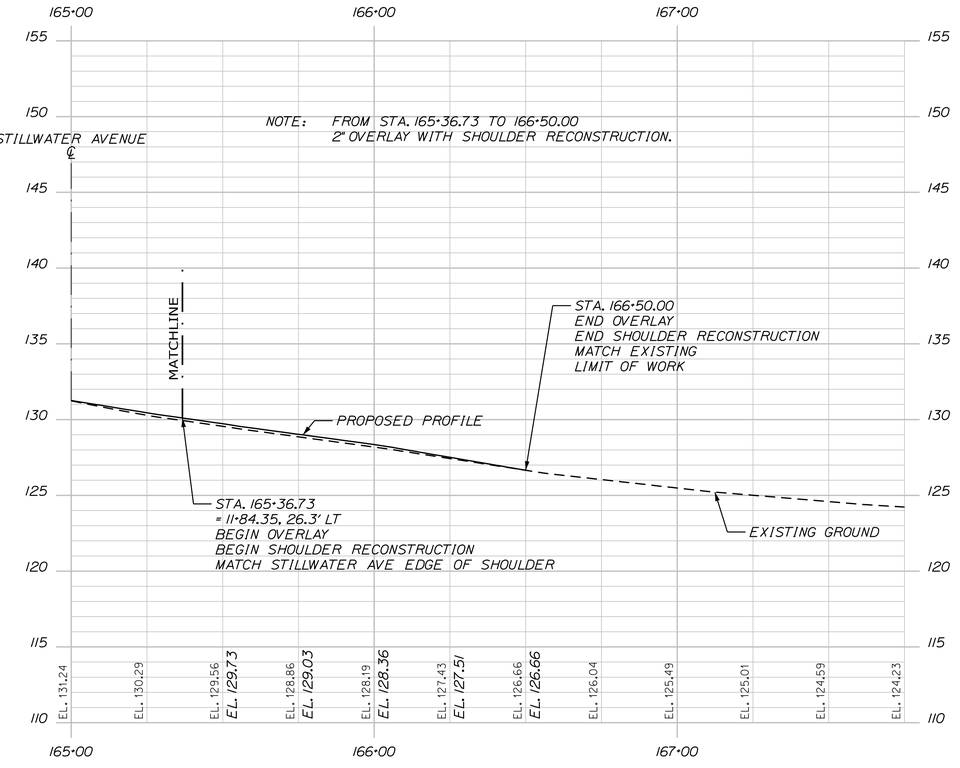
Division: HIGHWAY

Filename: ...\016-027_PlanProfile.dgn

Usernname: jomesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\016-027_PlanProfile.dgn







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01 HIGHWAY PLANS

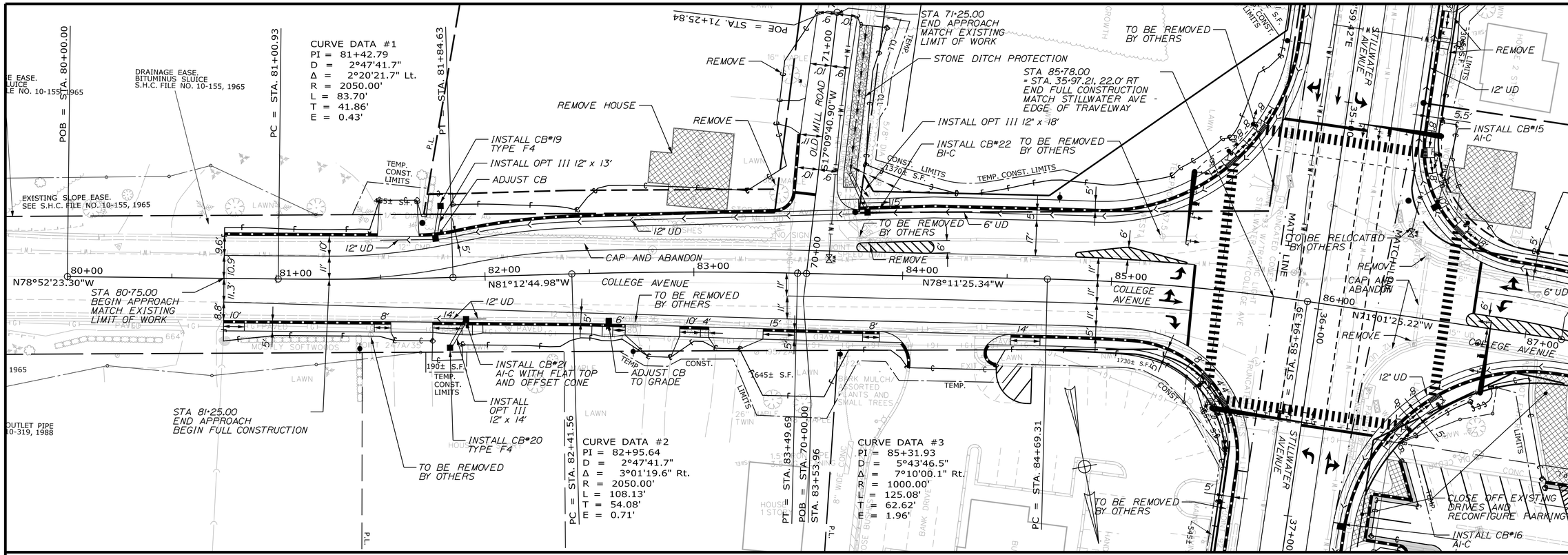
R. MOULTON	BY	DATE	
DESIGN-DETAILED	EGF		
CHECKED-REVIEWED	EGF		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1	JBD	11/17/2021	SIGNATURE
REVISIONS 2	AG	11/17/2021	
REVISIONS 3			P.E. NUMBER
REVISIONS 4			
FIELD CHANGES			DATE

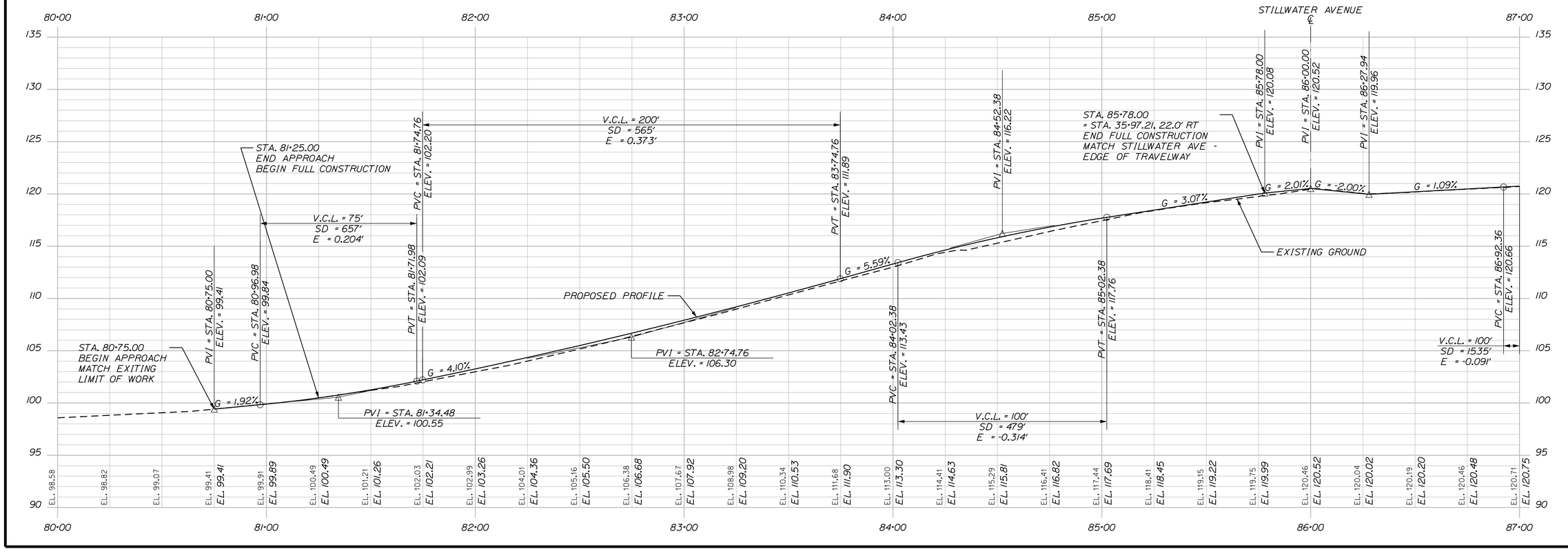
PROJ. MANAGER

OLD TOWN
BENNOCH ROAD
PLAN AND PROFILE

SHEET NUMBER
24
OF 218

Filename: ...\016-027_PlanProfile.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	EGF	J&D	11/17/2021
CHECKED-REVIEWED	EGF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
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P.E. NUMBER

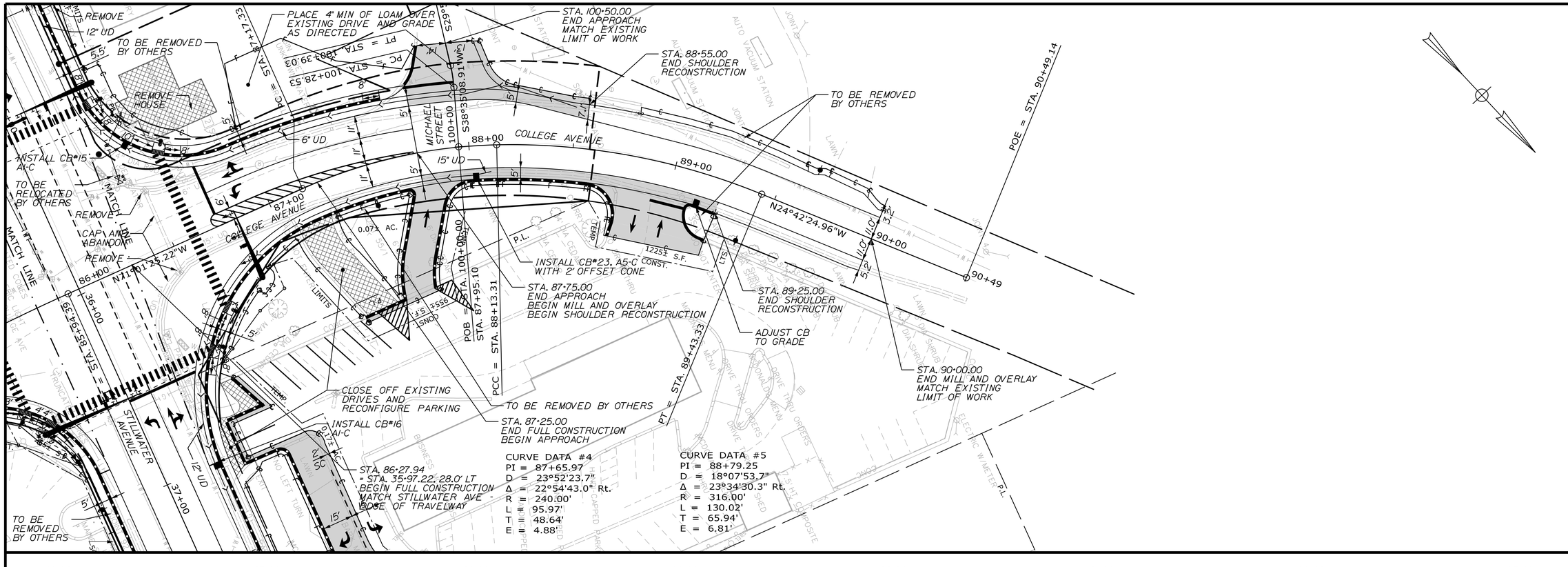
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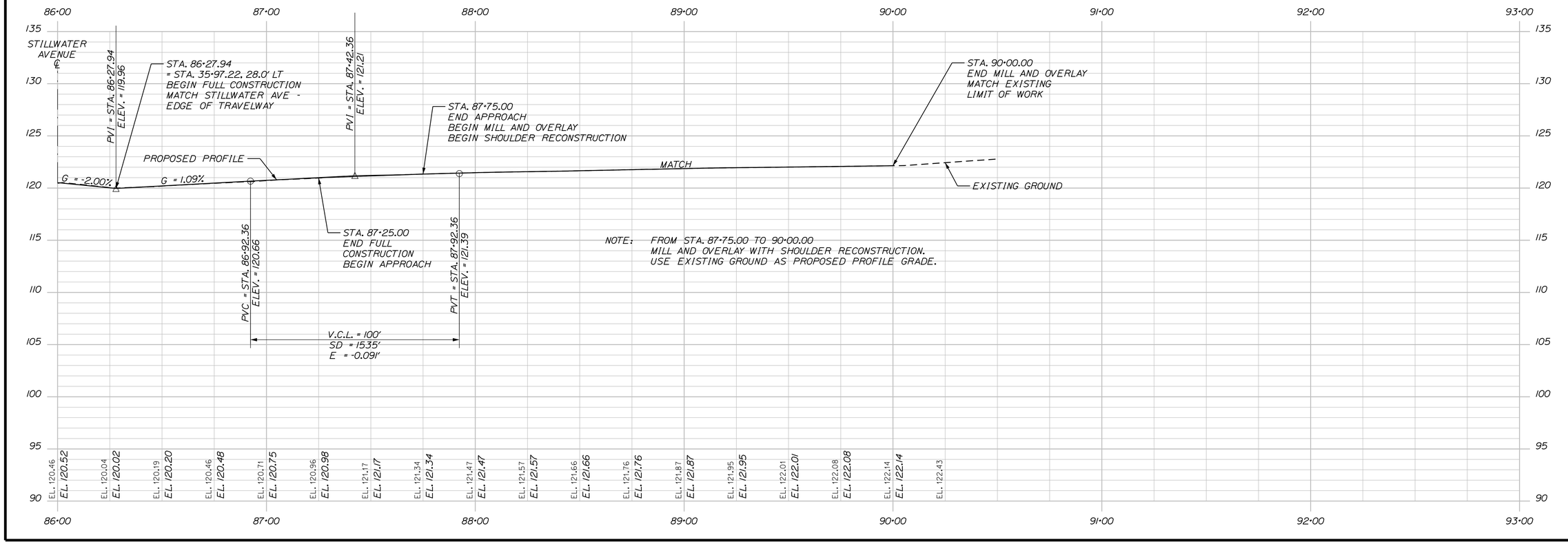
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OLD TOWN
COLLEGE AVENUE
PLAN AND PROFILE

SHEET NUMBER
25
OF 218

Usernam: jomesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\016-027_PlanProfile.dgn





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
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DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

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DATE

OLD TOWN COLLEGE AVENUE

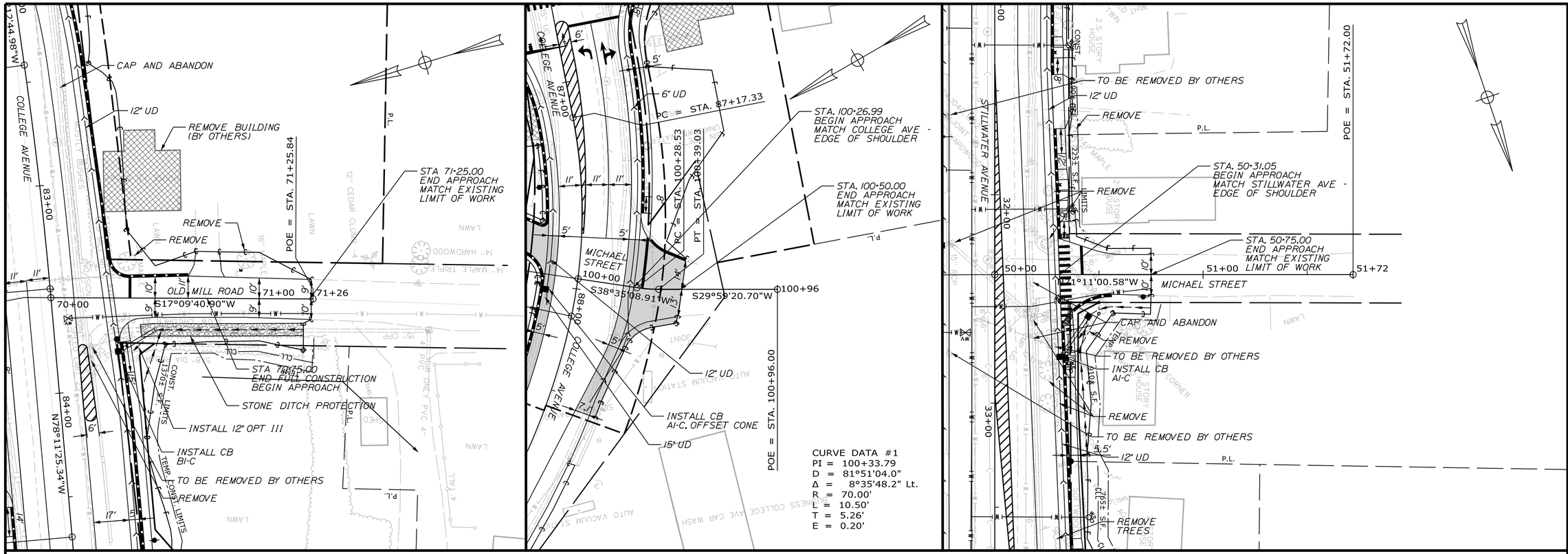
PLAN AND PROFILE

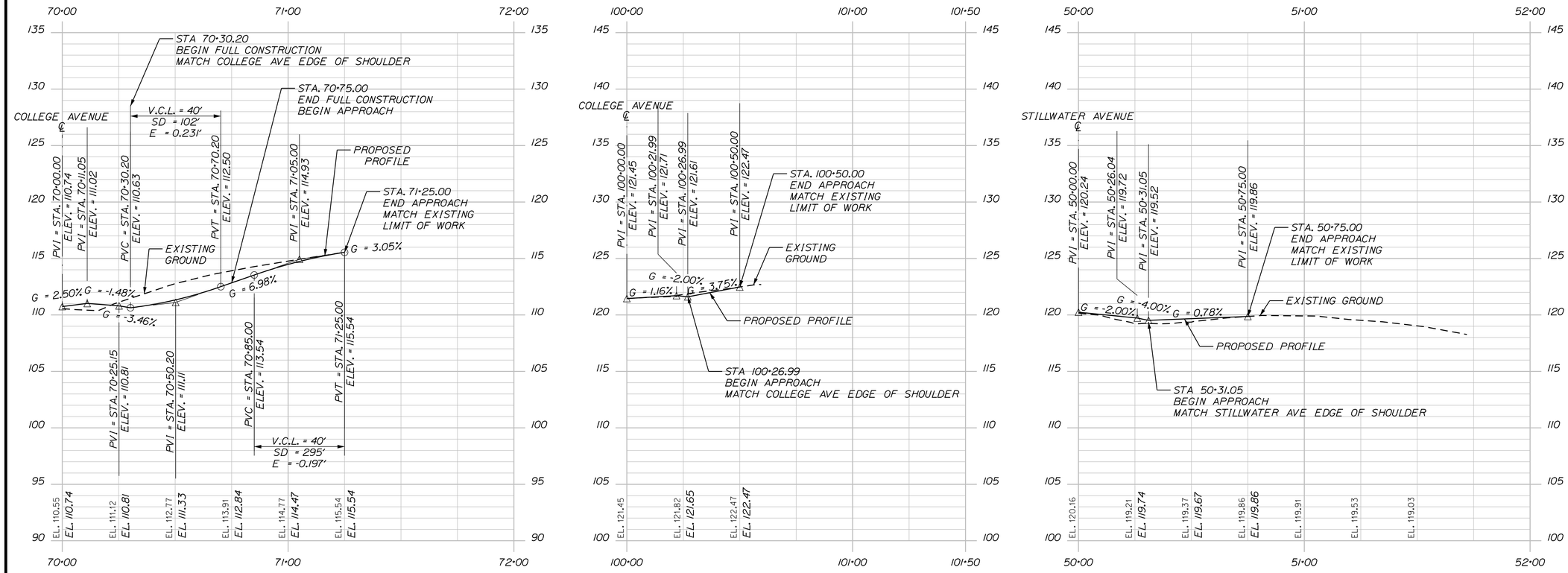
SHEET NUMBER

26

OF 218

Username: jomesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\016-027_PlanProfile.dgn





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

P.E. NUMBER			
DATE			
SIGNATURE			
BY	DATE		
JBD	11/17/2021		
AG	11/17/2021		

PROJ. MANAGER	R. MOULTON
DESIGN-DETAILED	ECF
CHECKED-REVIEWED	ECF
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

OLD TOWN SIDE STREETS

PLAN AND PROFILE

SHEET NUMBER

27

OF 218

ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
7 TO 311	-	34.4'
8 TO 311	-	25.4'
11 TO 12	-	23.7'
15 TO 16	-	69.4'
16 TO 17	68.0'	48.8'
17 TO 18	-	35.5'
39 TO 40	-	89.5'
40 TO 349	-	41.5'
41 TO 350	-	6.2'
42 TO 43	-	107.0'

ITEM 609.12 - VERTICAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
38 TO 39	25.0'	15.2'

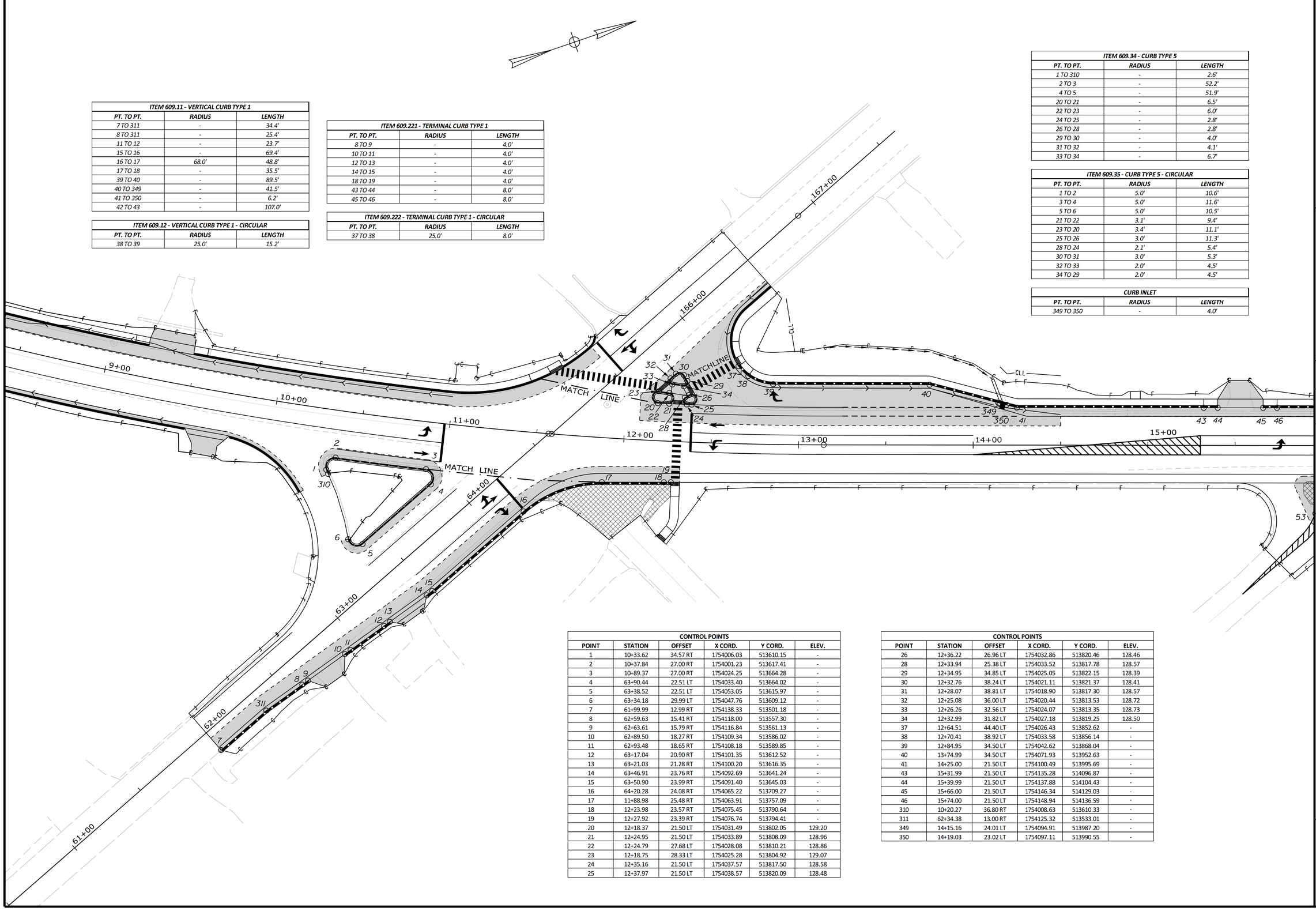
ITEM 609.221 - TERMINAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
8 TO 9	-	4.0'
10 TO 11	-	4.0'
12 TO 13	-	4.0'
14 TO 15	-	4.0'
18 TO 19	-	4.0'
43 TO 44	-	8.0'
45 TO 46	-	8.0'

ITEM 609.222 - TERMINAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
37 TO 38	25.0'	8.0'

ITEM 609.34 - CURB TYPE 5		
PT. TO PT.	RADIUS	LENGTH
1 TO 310	-	2.6'
2 TO 3	-	52.2'
4 TO 5	-	51.9'
20 TO 21	-	6.5'
22 TO 23	-	6.0'
24 TO 25	-	2.8'
26 TO 28	-	2.8'
29 TO 30	-	4.0'
31 TO 32	-	4.1'
33 TO 34	-	6.7'

ITEM 609.35 - CURB TYPE 5 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
1 TO 2	5.0'	10.6'
3 TO 4	5.0'	11.6'
5 TO 6	5.0'	10.5'
21 TO 22	3.1'	9.4'
23 TO 20	3.4'	11.1'
25 TO 26	3.0'	11.3'
28 TO 24	2.1'	5.4'
30 TO 31	3.0'	5.3'
32 TO 33	2.0'	4.5'
34 TO 29	2.0'	4.5'

CURB INLET		
PT. TO PT.	RADIUS	LENGTH
349 TO 350	-	4.0'



CONTROL POINTS					
POINT	STATION	OFFSET	X CORD.	Y CORD.	ELEV.
1	10+33.62	34.57 RT	1754006.03	513610.15	-
2	10+37.84	27.00 RT	1754001.23	513617.41	-
3	10+89.37	27.00 RT	1754024.25	513664.28	-
4	63+90.44	22.51 LT	1754033.40	513664.02	-
5	63+38.52	22.51 LT	1754053.05	513615.97	-
6	63+34.18	29.99 LT	1754047.76	513609.12	-
7	61+99.99	12.99 RT	1754138.33	513501.18	-
8	62+59.63	15.41 RT	1754118.00	513557.30	-
9	62+63.61	15.79 RT	1754116.84	513561.13	-
10	62+89.50	18.27 RT	1754109.34	513586.02	-
11	62+93.48	18.65 RT	1754108.18	513589.85	-
12	63+17.04	20.90 RT	1754101.35	513612.52	-
13	63+21.03	21.28 RT	1754100.20	513616.35	-
14	63+46.91	23.76 RT	1754092.69	513641.24	-
15	63+50.90	23.99 RT	1754091.40	513645.03	-
16	64+20.28	24.08 RT	1754065.22	513709.27	-
17	11+88.98	25.48 RT	1754063.91	513757.09	-
18	12+23.98	23.57 RT	1754075.45	513790.64	-
19	12+27.92	23.39 RT	1754076.74	513794.41	-
20	12+18.37	21.50 LT	1754031.49	513802.05	129.20
21	12+24.95	21.50 LT	1754033.89	513808.09	128.96
22	12+24.79	27.68 LT	1754028.08	513810.21	128.86
23	12+18.75	28.33 LT	1754025.28	513804.92	129.07
24	12+35.16	21.50 LT	1754037.57	513817.50	128.58
25	12+37.97	21.50 LT	1754038.57	513820.09	128.48

CONTROL POINTS					
POINT	STATION	OFFSET	X CORD.	Y CORD.	ELEV.
26	12+36.22	26.96 LT	1754032.86	513820.46	128.46
28	12+33.94	25.38 LT	1754033.52	513817.78	128.57
29	12+34.95	34.85 LT	1754025.05	513822.15	128.39
30	12+32.76	38.24 LT	1754021.11	513821.37	128.41
31	12+28.07	38.81 LT	1754018.90	513817.30	128.57
32	12+25.08	36.00 LT	1754020.44	513813.53	128.72
33	12+26.26	32.56 LT	1754024.07	513813.35	128.73
34	12+32.99	31.82 LT	1754027.18	513819.25	128.50
37	12+64.51	44.40 LT	1754026.43	513852.62	-
38	12+70.41	38.92 LT	1754033.58	513856.14	-
39	12+84.95	34.50 LT	1754042.62	513868.04	-
40	13+74.99	34.50 LT	1754071.93	513952.63	-
41	14+25.00	21.50 LT	1754100.49	513995.69	-
43	15+31.99	21.50 LT	1754135.28	514096.87	-
44	15+39.99	21.50 LT	1754137.88	514104.43	-
45	15+66.00	21.50 LT	1754146.34	514129.03	-
46	15+74.00	21.50 LT	1754148.94	514136.59	-
310	10+20.27	36.80 RT	1754008.63	513610.33	-
311	62+34.38	13.00 RT	1754125.32	513533.01	-
349	14+15.16	24.01 LT	1754094.91	513987.20	-
350	14+19.03	23.02 LT	1754097.11	513990.55	-

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

P.E. NUMBER

DATE

SIGNATURE

	BY	DATE
R. MOULTON		
PROJ. MANAGER		
DESIGN-DETAILED	JBD	11/17/2021
CHECKED-REVIEWED	AG	11/17/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

OLD TOWN
STILLWATER AVENUE

GEOMETRICS PLAN

SHEET NUMBER

28

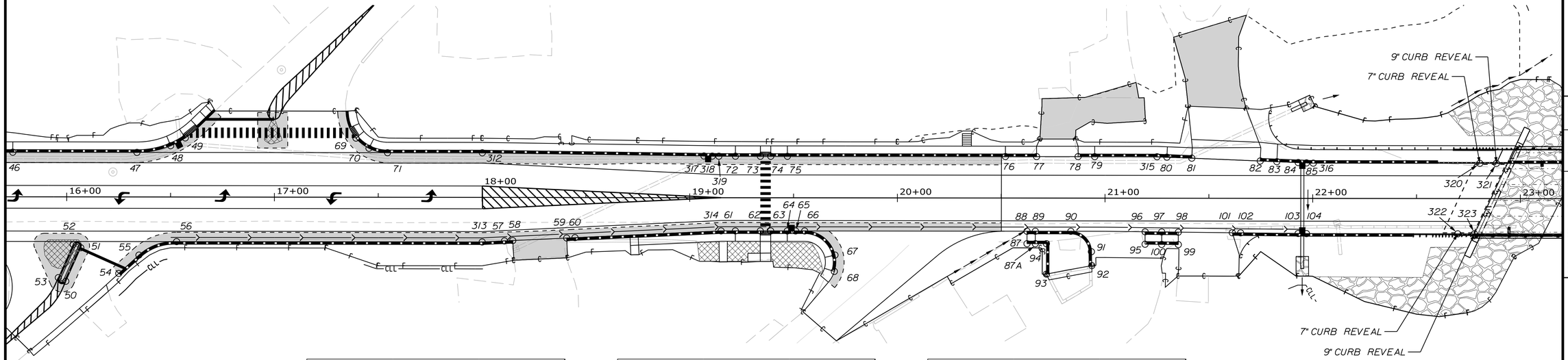
OF 218

Filename: ...\PLANSET\028_Geometrics_01.dgn Division: HIGHWAY Username: jomesdavis Date:11/17/2021

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
46	15+74.00	21.50 LT	1754148.94	514136.59
47	16+33.79	21.50 LT	1754168.38	514193.13
48	16+50.00	24.74 LT	1754170.58	514209.52
49	16+57.05	28.50 LT	1754169.32	514217.41
50	15+99.60	40.69 RT	1754216.07	514140.58
51	16+06.81	24.51 RT	1754203.12	514152.66
52	16+03.14	22.92 RT	1754200.42	514149.70
53	15+96.00	38.94 RT	1754213.25	514137.74
54	16+25.09	36.87 RT	1754220.75	514165.93
55	16+34.80	28.03 RT	1754215.54	514177.99
56	16+52.94	21.50 RT	1754215.27	514197.26
57	18+10.81	20.99 RT	1754266.13	514346.72
58	18+14.81	20.80 RT	1754267.24	514350.56
59	18+40.78	19.55 RT	1754274.51	514375.53
60	18+44.78	19.36 RT	1754275.63	514379.37
61	19+22.00	16.01 RT	1754297.57	514453.48
62	19+34.00	16.00 RT	1754301.46	514464.83
63	19+39.01	16.00 RT	1754303.09	514469.58
64	19+47.00	16.00 RT	1754305.69	514477.13
65	19+51.00	16.00 RT	1754306.99	514480.91
66	19+55.38	16.00 RT	1754308.42	514485.06
67	19+69.99	27.59 RT	1754324.13	514495.10
68	19+69.69	35.49 RT	1754331.50	514492.25
69	17+39.25	28.51 LT	1754196.05	514295.14

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
70	17+45.52	23.61 LT	1754202.72	514299.47
71	17+54.45	21.50 LT	1754207.62	514307.24
72	19+22.00	20.00 LT	1754263.51	514465.20
73	19+34.01	20.00 LT	1754267.43	514476.55
74	19+39.01	20.00 LT	1754269.05	514481.28
75	19+47.01	20.00 LT	1754271.65	514488.85
76	20+52.00	20.00 LT	1754305.79	514588.13
77	20+67.00	20.00 LT	1754310.67	514602.31
78	20+87.00	20.00 LT	1754317.17	514621.23
79	20+95.00	20.00 LT	1754319.77	514628.79
80	21+29.76	19.81 LT	1754331.26	514661.60
81	21+41.76	19.33 LT	1754335.61	514672.79
82	21+74.72	18.01 LT	1754347.58	514703.54
83	21+82.72	17.69 LT	1754350.48	514710.99
84	21+93.00	17.28 LT	1754354.21	514720.58
85	21+97.00	17.12 LT	1754355.66	514724.31
87	20+62.45	22.00 RT	1754348.91	514584.36
87A	20+66.45	22.00 RT	1754350.21	514588.14
88	20+62.44	16.00 RT	1754343.23	514586.30
89	20+66.44	16.00 RT	1754344.53	514590.08
90	20+83.55	16.00 RT	1754350.09	514606.25
91	20+93.46	25.83 RT	1754362.61	514612.43
92	20+93.66	32.51 RT	1754369.00	514610.45

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
93	20+71.81	36.66 RT	1754365.81	514588.43
94	20+71.81	22.00 RT	1754351.95	514593.20
95	21+19.31	22.19 RT	1754367.58	514638.06
96	21+19.31	16.19 RT	1754361.90	514640.01
97	21+27.31	16.27 RT	1754364.58	514647.55
98	21+35.31	16.35 RT	1754367.26	514655.09
99	21+35.31	22.35 RT	1754372.93	514653.14
100	21+27.31	22.27 RT	1754370.26	514645.60
101	21+61.31	16.61 RT	1754375.96	514679.59
102	21+65.31	16.65 RT	1754377.30	514683.36
103	21+93.00	16.93 RT	1754386.56	514709.46
104	21+97.00	16.97 RT	1754387.90	514713.23
312	18+00.09	12.50 LT	1754222.46	514350.40
313	18+00.09	21.50 RT	1754263.12	514336.41
314	19+15.13	16.02 RT	1754295.34	514446.99
315	21+25.00	20.00 LT	1754329.53	514657.16
316	22+00.26	17.00 LT	1754356.84	514727.35
317	19+06.83	20.11 LT	1754258.48	514450.88
318	19+10.83	20.05 LT	1754259.83	514454.65
319	19+14.00	20.00 LT	1754260.92	514457.63
320	22+80.44	17.00 LT	1754382.91	514803.18
321	22+88.44	17.00 LT	1754385.51	514810.74
322	22+69.87	17.00 RT	1754411.63	514782.13
323	22+77.87	17.00 RT	1754414.23	514789.69



ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
46 TO 47	-	59.8'
54 TO 55	-	13.1'
56 TO 313	-	147.1'
313 TO 57	-	10.7'
60 TO 314	-	70.4'
314 TO 61	-	6.9'
65 TO 66	-	4.4'
71 TO 312	-	45.6'
312 TO 317	-	106.8'
318 TO 319	-	3.2'
72 TO 319	-	8.0'
75 TO 76	-	104.9'
79 TO 315	-	30.0'
315 TO 80	-	4.8'
83 TO 84	-	10.3'
85 TO 316	-	95.2'
86 TO 320	-	8.0'
89 TO 90	-	17.0'
91 TO 92	-	6.7'
93 TO 94	-	15.9'
94 TO 87A	-	5.4'
102 TO 103	-	27.7'
104 TO 322	-	72.9'
105 TO 322	-	8.0'
316 TO 320	-	80.2'
320 TO 321	-	20.5'

ITEM 609.12 - VERTICAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
47 TO 48	42.2'	16.6'
55 TO 56	25.0'	18.5'
66 TO 67	15.0'	20.2'
70 TO 71	20'	9.3'
90 TO 91	10.0'	15.5'

ITEM 609.221 - TERMINAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
57 TO 58	-	4.0'
59 TO 60	-	4.0'
61 TO 62	-	12.0'
63 TO 64	-	8.0'
72 TO 73	-	12.0'
74 TO 75	-	8.0'
76 TO 77	-	15.0'
78 TO 79	-	8.0'
80 TO 81	-	12.0'
82 TO 83	-	8.0'
87 TO 87A	-	4.0'
88 TO 89	-	4.0'
96 TO 97	-	8.0'
97 TO 98	-	8.0'
99 TO 100	-	8.0'
100 TO 95	-	8.0'
101 TO 102	-	4.0'
320 TO 321	-	8.0'
322 TO 323	-	8.0'

ITEM 609.222 - TERMINAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
48 TO 49	42.2'	8.0'
67 TO 68	15.0'	8.0'
69 TO 70	20.0'	8.0'

ITEM 609.34 - CURB TYPE 5		
PT. TO PT.	RADIUS	LENGTH
50 TO 51	-	17.8'
52 TO 53	-	17.8'

ITEM 609.35 - CURB TYPE 5 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
51 TO 52	2.0'	6.3'
53 TO 50	2.0'	6.3'

CURB INLET		
PT. TO PT.	RADIUS	LENGTH
64 TO 65	-	4.0'
84 TO 85	-	4.0'
103 TO 104	-	4.0'
317 TO 318	-	4.0'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	DATE	BY
DESIGNED	11/17/2021	JBD
DRAWN	11/17/2021	AG
PROJ. MANAGER		
R. MOULTON		
DESIGN-DETAILED	ECF	
CHECKED-REVIEWED	ECF	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

P.E. NUMBER

DATE

SIGNATURE

OLD TOWN
STILLWATER AVENUE

GEOMETRICS PLAN

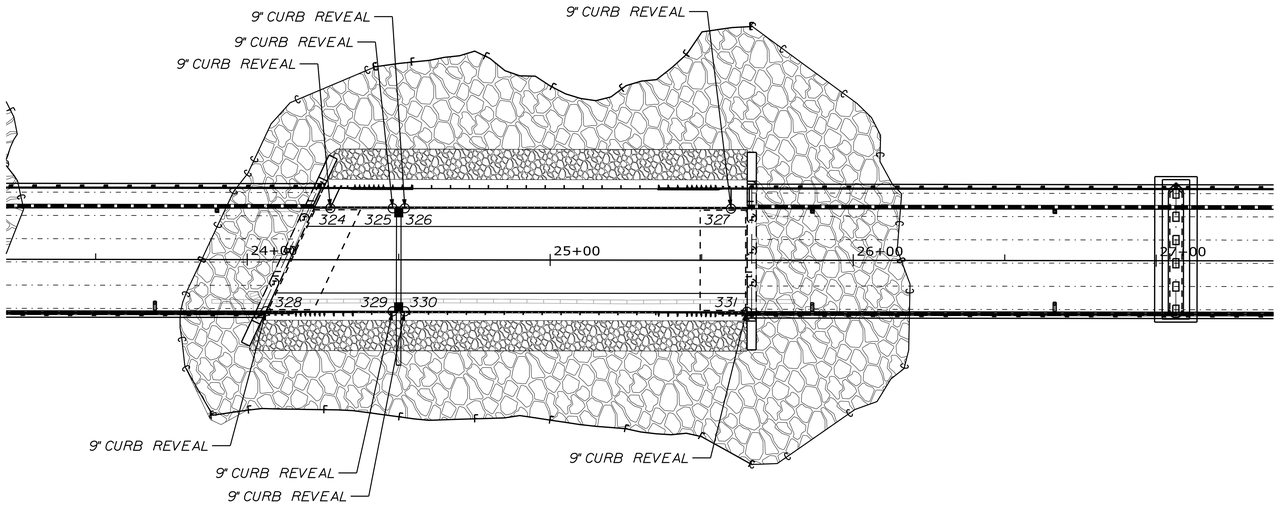
SHEET NUMBER

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Filename: ...\PLANSET\029_GeometRics_02.dgn Division: HIGHWAY Username: jomesdavis Date:11/17/2021

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
324	24+27.42	17.00 LT	1754430.70	514942.17
325	24+48.00	17.00 LT	1754437.40	514961.63
326	24+52.00	17.00 LT	1754438.70	514965.41
327	25+59.67	17.00 LT	1754473.71	515067.23
328	24+06.27	17.00 RT	1754455.98	514911.12
329	24+48.00	17.00 RT	1754469.55	514950.58
330	24+52.00	17.00 RT	1754470.85	514954.36
331	25+64.96	17.00 RT	1754507.58	515061.18



CURB INLET		
PT. TO PT.	RADIUS	LENGTH
325 TO 326	-	4.0'
329 TO 330	-	4.0'

ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
324 TO 325	-	20.6'
326 TO 327	-	107.7'
328 TO 329	-	41.7'
330 TO 331	-	112.8'

Filename: ...\PLANSET\030_Geometrics_03.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

GEOMETRICS PLAN

SHEET NUMBER

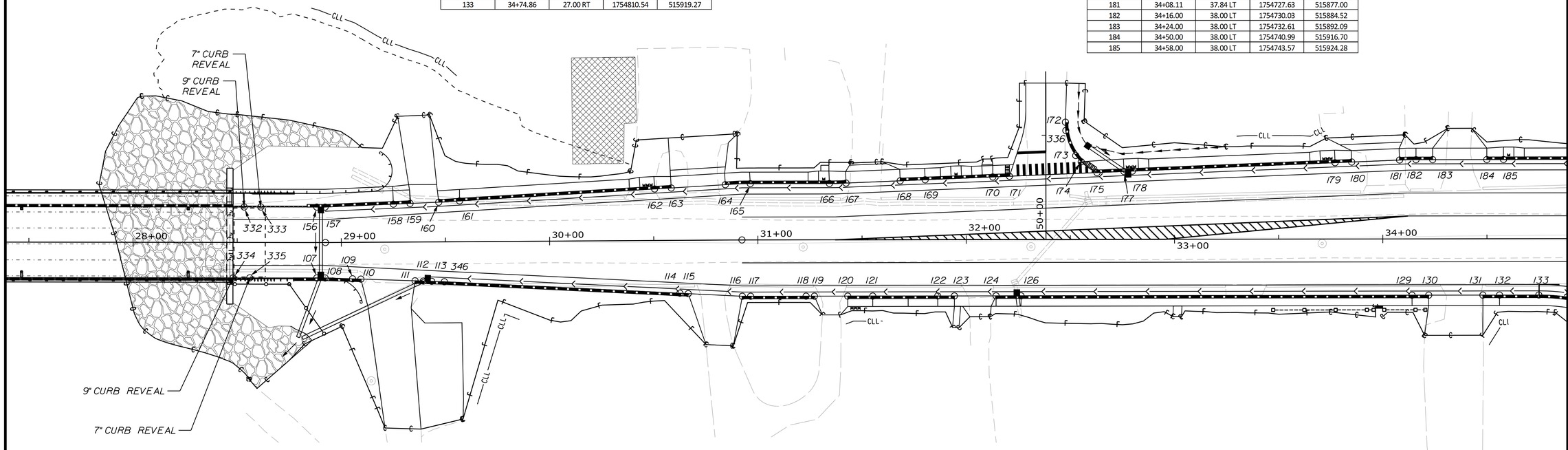
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CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
107	28+88.23	17.00 RT	1754612.70	515366.88
108	28+92.23	17.00 RT	1754614.01	515370.66
109	29+05.28	17.49 RT	1754618.66	515383.00
110	29+09.28	17.64 RT	1754620.08	515386.74
111	29+35.28	18.62 RT	1754629.28	515411.08
112	29+39.28	18.77 RT	1754630.69	515414.82
113	29+43.28	18.92 RT	1754632.10	515418.57
114	30+62.40	25.35 RT	1754676.11	515529.45
115	30+66.39	25.57 RT	1754677.59	515533.16
116	30+92.47	27.00 RT	1754687.20	515557.32
117	30+96.47	27.00 RT	1754688.49	515561.11
118	31+23.09	27.00 RT	1754697.08	515586.30
119	31+27.09	27.00 RT	1754698.37	515590.08
120	31+43.09	27.00 RT	1754703.53	515605.23
121	31+55.09	27.00 RT	1754707.40	515616.59
122	31+86.29	27.00 RT	1754717.46	515646.12
123	31+94.29	27.00 RT	1754720.04	515653.69
124	32+14.29	27.00 RT	1754726.49	515672.62
125	32+22.29	27.00 RT	1754729.07	515680.20
126	32+26.29	27.00 RT	1754730.36	515683.98
129	34+14.00	27.00 RT	1754790.91	515861.66
130	34+22.00	27.00 RT	1754793.49	515869.23
131	34+48.00	27.00 RT	1754801.87	515893.84
132	34+56.00	27.00 RT	1754804.45	515901.42
133	34+74.86	27.00 RT	1754810.54	515919.27

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
332	28+53.33	17.00 LT	1754569.20	515344.94
333	28+61.33	17.00 LT	1754571.81	515352.50
334	28+48.04	17.00 RT	1754599.63	515328.88
335	28+56.04	17.00 RT	1754602.24	515336.44
336	32+47.92	52.25 LT	1754662.32	515730.01
346	29+49.34	19.14 RT	1754634.25	515424.24

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
156	28+88.19	17.00 LT	1754580.54	515377.90
157	28+92.19	17.00 LT	1754581.84	515381.68
158	29+25.12	18.20 LT	1754591.14	515413.16
159	29+33.11	18.49 LT	1754593.40	515420.83
160	29+46.88	19.00 LT	1754597.31	515434.04
161	29+56.88	19.55 LT	1754599.97	515443.70
162	30+50.56	24.70 LT	1754624.90	515534.15
163	30+58.55	25.14 LT	1754627.02	515541.87
164	30+84.51	26.56 LT	1754633.93	515566.93
165	30+96.38	27.00 LT	1754637.35	515578.44
166	31+34.37	27.00 LT	1754649.60	515614.39
167	31+42.37	27.21 LT	1754651.98	515622.03
168	31+68.35	28.25 LT	1754659.38	515646.96
169	31+80.34	28.73 LT	1754662.79	515658.46
170	32+12.81	30.03 LT	1754672.04	515689.62
171	32+20.81	30.35 LT	1754674.31	515697.29
172	32+47.73	56.24 LT	1754658.48	515731.12
173	32+52.65	40.24 LT	1754675.22	515730.63
174	32+55.29	37.23 LT	1754678.92	515732.15
175	32+62.84	32.03 LT	1754686.28	515737.62
177	32+75.79	32.55 LT	1754689.96	515750.04
178	32+79.79	32.71 LT	1754691.10	515753.88
179	33+77.14	36.60 LT	1754718.82	515847.28
180	33+85.13	36.92 LT	1754721.09	515854.95
181	34+08.11	37.84 LT	1754727.63	515877.00
182	34+16.00	38.00 LT	1754730.03	515884.52
183	34+24.00	38.00 LT	1754732.61	515892.09
184	34+50.00	38.00 LT	1754740.99	515916.70
185	34+58.00	38.00 LT	1754743.57	515924.28



ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
108 TO 109	-	13.2'
113 TO 346	-	6.1'
117 TO 118	-	26.6'
121 TO 122	-	31.2'
126 TO 129	-	187.7'
132 TO 133	-	18.8'
157 TO 158	-	32.8'
161 TO 162	-	93.8'
165 TO 166	-	38.0'
169 TO 170	-	32.5'
178 TO 179	-	97.4'
332 TO 333	-	23.9'
333 TO 156	-	26.9'
334 TO 335	-	29.1'
335 TO 107	-	32.2'
336 TO 114	-	113.2'

ITEM 609.12 - VERTICAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
173 TO 336	25.7'	13.0'

ITEM 609.221 - TERMINAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
109 TO 110	-	4.0'
111 TO 112	-	4.0'
114 TO 115	-	4.0'
116 TO 117	-	4.0'
118 TO 119	-	4.0'
120 TO 121	-	12.0'
122 TO 123	-	8.0'
124 TO 126	-	12.0'
129 TO 130	-	8.0'
131 TO 132	-	8.0'
158 TO 159	-	8.0'
160 TO 161	-	10.0'
162 TO 163	-	8.0'
164 TO 165	100.9'	12.0'
166 TO 167	100.1'	8.0'
168 TO 169	-	12.0'
170 TO 171	-	8.0'
175 TO 177	-	13.0'
179 TO 180	-	8.0'
181 TO 182	98.7'	8.0'
182 TO 183	-	8.0'
184 TO 185	-	8.0'
332 TO 333	-	8.0'
334 TO 335	-	8.0'

ITEM 609.222 - TERMINAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
172 TO 336	25.7'	4.0'
173 TO 174	25.7'	4.0'

CURB INLET		
107 TO 108	-	4.0'
112 TO 113	-	4.0'
156 TO 157	-	4.0'
177 TO 178	-	4.0'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

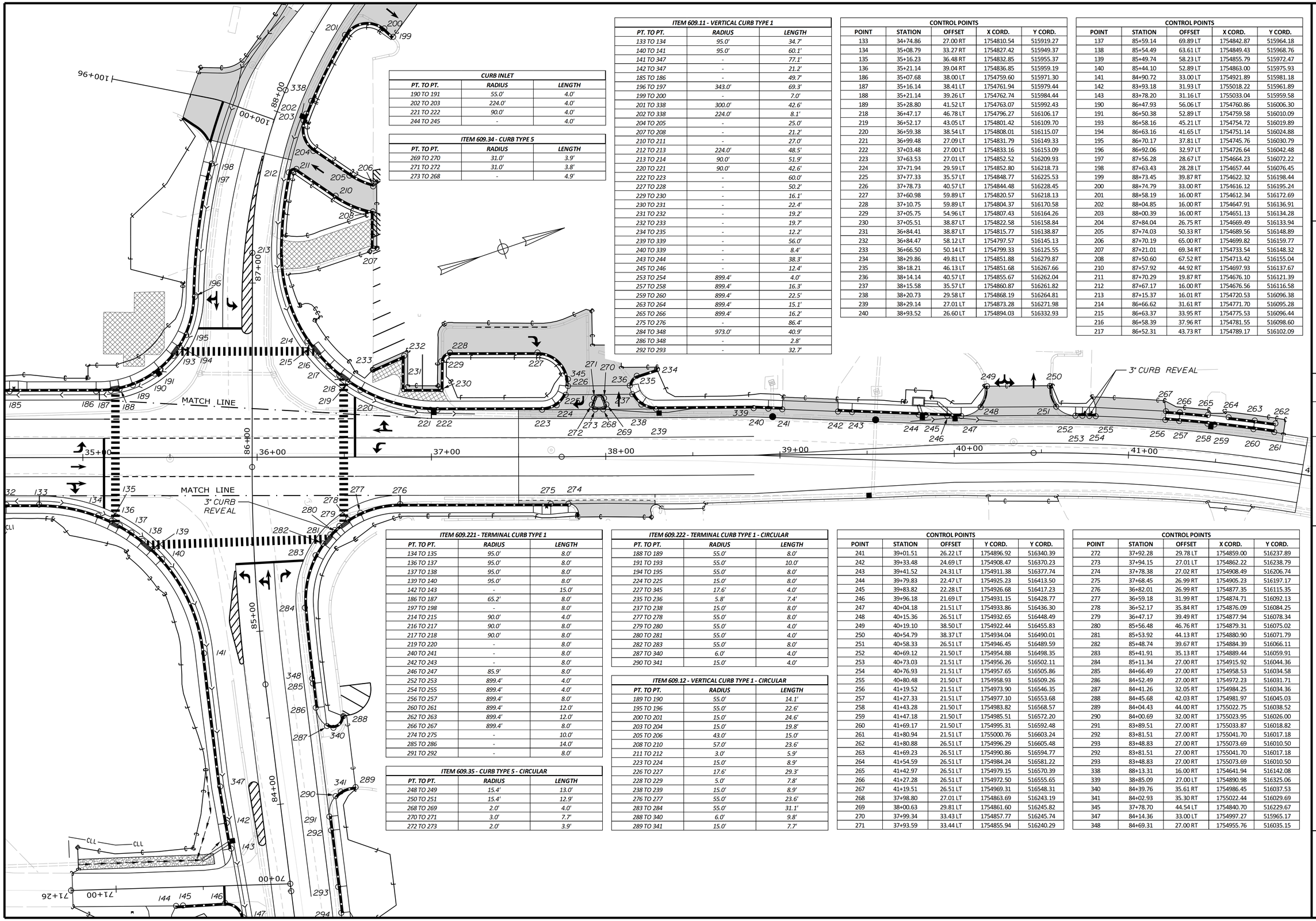
GEOMETRICS PLAN

SHEET NUMBER

31

OF 218

Filename: ...\PLANSET\031_Geometrics_04.dgn Division: HIGHWAY Username: jomesdavis Date:11/17/2021



ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
133 TO 134	95.0'	34.7'
140 TO 141	95.0'	60.1'
141 TO 347	-	77.1'
142 TO 347	-	21.2'
185 TO 186	-	49.7'
196 TO 197	343.0'	69.3'
199 TO 200	-	7.0'
201 TO 338	300.0'	42.6'
202 TO 338	224.0'	8.1'
204 TO 205	-	25.0'
207 TO 208	-	21.2'
210 TO 211	-	27.0'
212 TO 213	224.0'	48.5'
213 TO 214	90.0'	51.9'
220 TO 221	90.0'	42.6'
222 TO 223	-	60.0'
227 TO 228	-	50.2'
229 TO 230	-	16.1'
230 TO 231	-	22.4'
231 TO 232	-	19.2'
232 TO 233	-	19.7'
234 TO 235	-	12.2'
239 TO 339	-	56.0'
240 TO 339	-	8.4'
243 TO 244	-	38.3'
245 TO 246	-	12.4'
253 TO 254	899.4'	4.0'
257 TO 258	899.4'	16.3'
259 TO 260	899.4'	22.5'
263 TO 264	899.4'	15.1'
265 TO 266	899.4'	16.2'
275 TO 276	-	86.4'
284 TO 348	973.0'	40.9'
286 TO 348	-	2.8'
292 TO 293	-	32.7'

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
133	34+74.86	27.00 RT	1754810.54	515919.27
134	35+08.79	33.27 RT	1754827.42	515949.37
135	35+16.23	36.48 RT	1754832.85	515955.37
136	35+21.14	39.04 RT	1754836.85	515959.19
186	35+07.68	38.00 LT	1754759.60	515971.30
187	35+16.14	38.41 LT	1754761.94	515979.44
188	35+21.14	39.26 LT	1754762.74	515984.44
189	35+28.80	41.52 LT	1754763.07	515992.43
218	36+47.17	46.78 LT	1754796.27	516106.17
219	36+52.17	43.05 LT	1754801.42	516109.70
220	36+59.38	38.54 LT	1754808.01	516115.07
221	36+99.48	27.09 LT	1754831.79	516149.33
222	37+03.48	27.00 LT	1754833.16	516153.09
223	37+63.53	27.01 LT	1754852.52	516209.93
224	37+71.94	29.59 LT	1754852.80	516218.73
225	37+77.33	35.57 LT	1754848.77	516225.53
226	37+78.73	40.57 LT	1754844.48	516228.45
227	37+60.98	59.89 LT	1754820.57	516218.13
228	37+10.75	59.89 LT	1754804.37	516170.58
229	37+05.75	54.96 LT	1754807.43	516164.26
230	37+05.51	38.87 LT	1754822.58	516158.84
231	36+84.41	38.87 LT	1754815.77	516138.87
232	36+84.47	58.12 LT	1754797.57	516145.13
233	36+66.50	50.14 LT	1754799.33	516125.55
234	38+29.86	49.81 LT	1754851.88	516279.87
235	38+18.21	46.13 LT	1754851.68	516267.66
236	38+14.14	40.57 LT	1754855.67	516262.04
237	38+15.58	35.57 LT	1754860.87	516261.82
238	38+20.73	29.58 LT	1754868.19	516264.81
239	38+29.14	27.01 LT	1754873.28	516271.98
240	38+93.52	26.60 LT	1754894.03	516332.93

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
137	85+59.14	69.89 LT	1754842.87	515964.18
138	85+54.49	63.61 LT	1754849.43	515968.76
139	85+49.74	58.23 LT	1754855.79	515972.47
140	85+44.10	52.89 LT	1754863.00	515975.93
141	84+90.72	33.00 LT	1754921.89	515981.18
142	83+93.18	31.93 LT	1755018.22	515961.89
143	83+78.20	31.16 LT	1755033.04	515959.58
190	86+47.93	56.06 LT	1754760.86	516006.30
191	86+50.38	52.89 LT	1754759.58	516010.09
193	86+58.16	45.21 LT	1754754.72	516019.89
194	86+63.16	41.65 LT	1754751.14	516024.88
195	86+70.17	37.81 LT	1754745.76	516030.79
196	86+92.06	32.97 LT	1754726.64	516042.48
197	87+56.28	28.67 LT	1754664.23	516072.22
198	87+63.43	28.28 LT	1754657.44	516076.45
199	88+73.45	39.87 RT	1754622.32	516198.44
200	88+74.79	33.00 RT	1754616.12	516195.24
201	88+58.19	16.00 RT	1754612.34	516172.69
202	88+04.85	16.00 RT	1754647.91	516136.91
203	88+00.39	16.00 RT	1754651.13	516134.28
204	87+84.04	26.75 RT	1754669.49	516133.94
205	87+74.03	50.33 RT	1754689.56	516148.89
206	87+70.19	65.00 RT	1754699.82	516159.77
207	87+21.01	69.34 RT	1754733.54	516148.32
208	87+50.60	67.52 RT	1754713.42	516155.04
210	87+57.92	44.92 RT	1754697.93	516137.67
211	87+70.29	19.87 RT	1754676.10	516121.39
212	87+67.17	16.00 RT	1754676.56	516116.58
213	87+15.37	16.01 RT	1754720.53	516096.38
214	86+66.62	31.61 RT	1754771.70	516095.28
215	86+63.37	33.95 RT	1754775.53	516096.44
216	86+58.39	37.96 RT	1754781.55	516098.60
217	86+52.31	43.73 RT	1754789.17	516102.09

CURB INLET		
PT. TO PT.	RADIUS	LENGTH
190 TO 191	55.0'	4.0'
202 TO 203	224.0'	4.0'
221 TO 222	90.0'	4.0'
244 TO 245	-	4.0'

ITEM 609.34 - CURB TYPE 5		
PT. TO PT.	RADIUS	LENGTH
269 TO 270	31.0'	3.9'
271 TO 272	31.0'	3.8'
273 TO 268	-	4.9'

ITEM 609.221 - TERMINAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
134 TO 135	95.0'	8.0'
136 TO 137	95.0'	8.0'
137 TO 138	95.0'	8.0'
139 TO 140	95.0'	8.0'
142 TO 143	-	15.0'
186 TO 187	65.2'	8.0'
197 TO 198	-	8.0'
214 TO 215	90.0'	4.0'
216 TO 217	90.0'	8.0'
217 TO 218	90.0'	8.0'
219 TO 220	-	8.0'
240 TO 241	-	8.0'
242 TO 243	-	8.0'
246 TO 247	85.9'	8.0'
252 TO 253	899.4'	4.0'
254 TO 255	899.4'	4.0'
256 TO 257	899.4'	8.0'
260 TO 261	899.4'	12.0'
262 TO 263	899.4'	12.0'
266 TO 267	899.4'	8.0'
274 TO 275	-	10.0'
285 TO 286	-	14.0'
291 TO 292	-	8.0'

ITEM 609.35 - CURB TYPE 5 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
248 TO 249	15.4'	13.0'
250 TO 251	15.4'	12.9'
268 TO 269	2.0'	4.0'
270 TO 271	3.0'	7.7'
272 TO 273	2.0'	3.9'

ITEM 609.222 - TERMINAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
188 TO 189	55.0'	8.0'
191 TO 193	55.0'	10.0'
194 TO 195	55.0'	8.0'
224 TO 225	15.0'	8.0'
227 TO 345	17.6'	4.0'
235 TO 236	5.8'	7.4'
237 TO 238	15.0'	8.0'
277 TO 278	55.0'	8.0'
279 TO 280	55.0'	4.0'
280 TO 281	55.0'	4.0'
282 TO 283	55.0'	8.0'
287 TO 340	6.0'	4.0'
290 TO 341	15.0'	4.0'

ITEM 609.12 - VERTICAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
189 TO 190	55.0'	14.1'
195 TO 196	55.0'	22.6'
200 TO 201	15.0'	24.6'
203 TO 204	15.0'	19.8'
205 TO 206	43.0'	15.0'
208 TO 210	57.0'	23.6'
211 TO 212	3.0'	5.9'
223 TO 224	15.0'	8.9'
226 TO 227	17.6'	29.3'
228 TO 229	5.0'	7.8'
238 TO 239	15.0'	8.9'
276 TO 277	55.0'	23.6'
283 TO 284	55.0'	31.1'
288 TO 340	6.0'	9.8'
289 TO 341	15.0'	7.7'

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
241	39+01.51	26.22 LT	1754896.92	516340.39
242	39+33.48	24.69 LT	1754908.47	516370.23
243	39+41.52	24.31 LT	1754911.38	516377.74
244	39+79.83	22.47 LT	1754925.23	516413.50
245	39+83.82	22.28 LT	1754926.68	516417.23
246	39+96.18	21.69 LT	1754931.15	516428.77
247	40+04.18	21.51 LT	1754933.86	516436.30
248	40+15.36	26.51 LT	1754932.65	516448.49
249	40+19.10	38.50 LT	1754922.44	516455.83
250	40+54.79	38.37 LT	1754934.04	516490.01
251	40+58.33	26.51 LT	1754946.45	516489.59
252	40+69.12	21.50 LT	1754954.88	516498.35
253	40+73.03	21.51 LT	1754956.26	516502.11
254	40+76.93	21.51 LT	1754957.65	516505.86
255	40+80.48	21.50 LT	1754958.93	516509.26
256	41+19.52	21.51 LT	1754973.90	516546.35
257	41+27.33	21.51 LT	1754977.10	516553.68
258	41+43.28	21.50 LT	1754983.82	516568.57
259	41+47.18	21.50 LT	1754985.51	516572.20
260	41+69.17	21.50 LT	1754995.31	516592.48
261	41+80.94	21.51 LT	1755000.76	516603.24
262	41+80.88	26.51 LT	1754996.29	516605.48
263	41+69.23	26.51 LT	1754990.86	516594.77
264	41+54.59	26.51 LT	1754984.24	516581.22
265	41+42.97	26.51 LT	1754979.15	516570.39
266	41+27.28	26.51 LT	1754972.50	516555.65
267	41+19.51	26.51 LT	1754969.31	516548.31
268	37+98.80	27.01 LT	1754863.69	516243.19
269	38+00.63	29.81 LT	1754861.60	516245.82
270	37+99.34	33.43 LT	1754857.77	516245.74
271	37+93.59	33.44 LT	1754855.94	516240.29

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
272	37+92.28	29.78 LT	1754859.00	516237.89
273	37+94.15	27.01 LT	1754862.22	516238.79
274	37+78.38	27.02 RT	1754908.49	516206.74
275	37+68.45	26.99 RT	1754905.23	516197.17
276	36+82.01	26.99 RT	1754877.35	516115.35
277	36+59.18	31.99 RT	1754874.71	516092.13
278	36+52.17	35.84 RT	1754876.09	516084.25
279	36+47.17	39.49 RT	1754877.94	516078.34
280	85+56.48	46.76 RT	1754879.31	516075.02
281	85+53.92	44.13 RT	1754880.90	516071.79
282	85+48.74	39.67 RT	1754884.39	516066.11
283	85+41.91	35.13 RT	1754889.44	516059.91
284	85+11.34	27.00 RT	1754915.92	516044.36
285	84+66.49	27.00 RT	1754958.53	516034.58
286	84+52.49	27.00 RT	1754972.23	516031.71
287	84+41.26	32.05 RT	1754984.25	516034.36
288	84+45.68	42.03 RT	1754981.97	516045.03
289	84+04.43	44.00 RT	1755022.75	516038.52
290	84+00.69	32.00 RT	1755023.95	516026.00
291	83+89.51	27.00 RT	1755033.87	516018.82
292	83+81.51	27.00 RT	1755041.70	516017.18
293	83+48.83	27.00 RT	1755073.69	516010.50
292	83+81.51	27.00 RT	1755041.70	516017.18
293	83+48.83	27.00 RT	1755073.69	516010.50
338	88+13.31	16.00 RT	1754641.94	516142.08
339	38+85.09	27.00 LT	1754890.98	516325.06
340	84+39.76	35.61 RT	1754986.45	516037.53
341	84+02.93	35.30 RT	1754522.44	516029.69
345	37+78.70	44.54 LT	1754840.70	516229.67
347	84+14.36	33.00 LT	1754997.27	515965.17
348	84+69.31	27.00 RT	1754955.76	516035.15

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	BY	DATE
R. MOULTON		
PROJ. MANAGER		
DESIGN-DETAILED	JBD	11/17/2021
CHECKED-REVIEWED	ECF	
DESIGN2-DETAILED2	AG	11/17/2021
DESIGN3-DETAILED3	ECF	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

GEOMETRICS PLAN

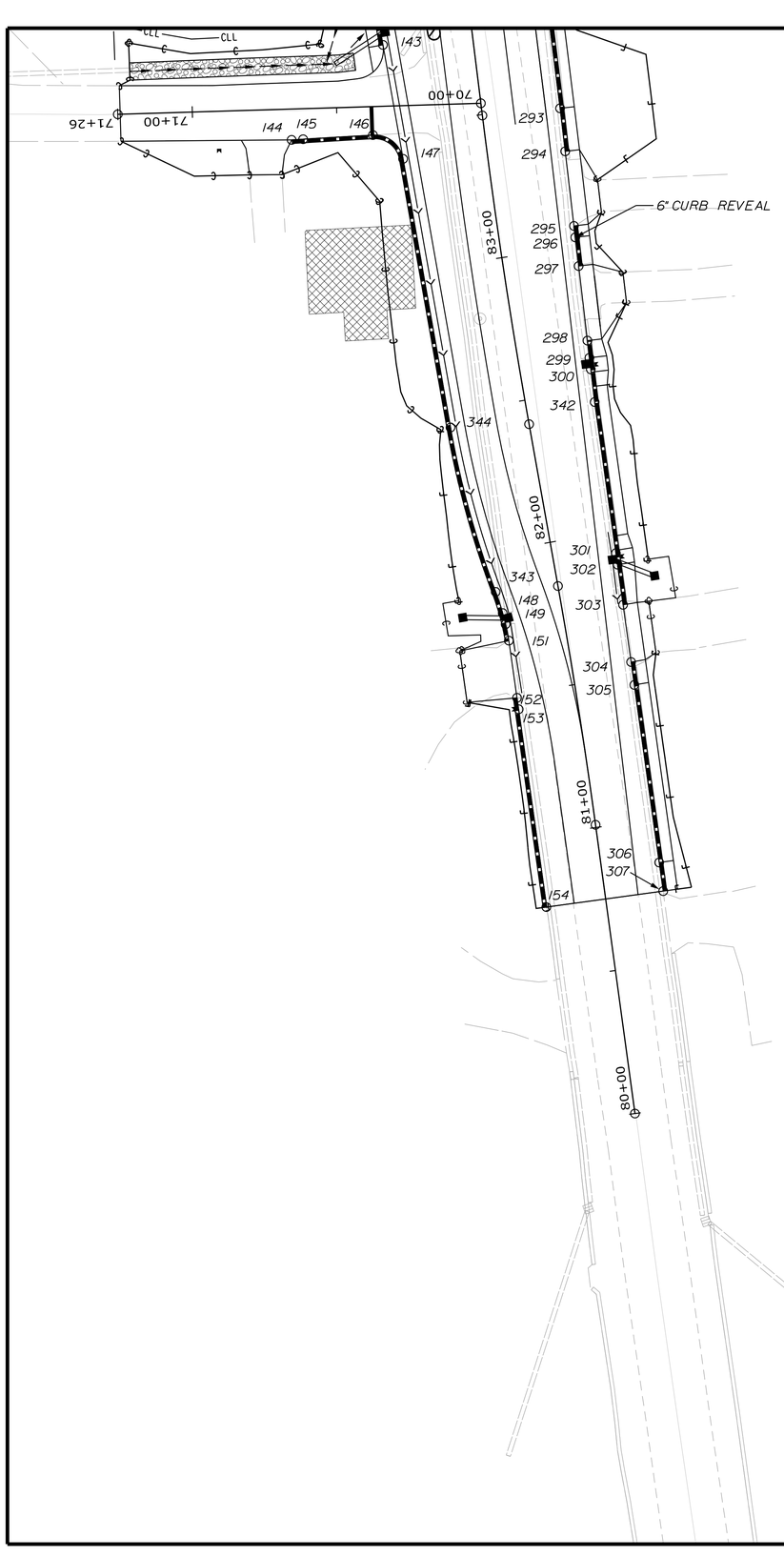
SHEET NUMBER

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OF 218

Username: jomesdavis Date:11/17/2021

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ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
145 TO 146	-	24.2'
147 TO 344	-	95.2'
148 TO 343	89.0'	7.7'
153 TO 154	-	69.2'
300 TO 342	-	11.4'
301 TO 342	-	52.8'
305 TO 306	-	62.1'
343 TO 344	316.0'	59.1'

ITEM 609.221 - TERMINAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
144 TO 145	-	4.0'
149 TO 151	89.0'	5.8'
152 TO 153	-	4.0'
296 TO 297	-	10.0'
293 TO 294	-	15.0'
295 TO 296	-	4.0'
298 TO 299	-	6.0'
302 TO 303	-	14.0'
304 TO 305	-	8.0'
306 TO 307	-	10.0'

CURB INLET		
PT. TO PT.	RADIUS	LENGTH
148 TO 149	89.0'	4.0'
301 TO 302	-	4.0'
299 TO 300	-	4.0'

CONTROL POINTS				
POINT	STATION	OFFSET	X CORD.	Y CORD.
144	70+65.92	10.68 LT	1755053.90	515918.98
145	70+61.92	10.57 LT	1755054.97	515922.83
146	70+37.71	9.87 LT	1755061.44	515946.18
147	83+38.35	29.15 LT	1755072.62	515953.38
148	81+78.71	20.49 LT	1755232.62	515935.06
149	81+74.69	20.17 LT	1755236.61	515934.76
151	81+68.86	20.01 LT	1755242.33	515934.00
152	81+48.66	20.44 LT	1755261.99	515930.26
153	81+44.62	20.51 LT	1755265.92	515929.51
154	80+75.00	20.76 LT	1755333.83	515916.37
293	83+48.83	27.00 RT	1755073.69	516010.50
294	83+33.63	26.87 RT	1755088.35	516007.36
295	83+07.29	26.32 RT	1755113.77	516001.87
296	83+03.24	26.21 RT	1755117.68	516001.02
297	82+93.12	25.89 RT	1755127.45	515998.91
298	82+66.81	24.83 RT	1755152.86	515993.42
299	82+60.74	24.54 RT	1755158.73	515992.14
300	82+56.70	24.33 RT	1755162.64	515991.30
301	81+92.32	21.74 RT	1755225.68	515978.87
302	81+88.32	21.64 RT	1755229.62	515978.16
303	81+74.38	21.10 RT	1755243.42	515975.45
304	81+54.58	20.55 RT	1755263.06	515971.66
305	81+46.66	20.38 RT	1755270.92	515970.14
306	80+85.00	20.08 RT	1755331.90	515958.37
307	80+75.00	20.12 RT	1755341.71	515956.48
342	82+45.17	23.71 RT	1755173.80	515988.89
343	81+86.43	21.59 LT	1755224.89	515935.15
344	82+45.17	27.00 LT	1755165.96	515938.79

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

GEOMETRICS PLAN

SHEET NUMBER

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OF 218

SIGNAL PLAN NOTES:

1. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS OF THE UTILITY COMPANIES WHEN INSTALLING EQUIPMENT ON THEIR POLES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES TO DETERMINE THEIR REQUIREMENTS.

2. THE LOCATIONS OF ALL EQUIPMENT SHOWN ARE APPROXIMATE. FINAL LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE CONSTRUCTION MANAGER.

3. THE COST OF POLE RISERS SHALL BE INCIDENTAL TO ITEM 643.71.

4. THE COST OF OVERHEAD SIGNS ON THE MAST ARMS SHALL BE INCIDENTAL TO ITEM 643.71.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL STRUCTURAL DESIGN OF THE MAST ARMS AND THE CONNECTION OF THE MAST ARMS TO THEIR FOUNDATIONS. ALL DESIGNS SHALL BE PREPARED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE. DESIGN COMPUTATIONS. INCLUDING DESIGN LOADS (OVERTURNING MOMENT. TORSION. SHEAR FORCE AND AXIAL LOAD) AT THE TOP OF THE FOUNDATIONS. AND SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL BY THE DEPARTMENT. NO MATERIALS SHALL BE ORDERED OR FABRICATED UNTIL THE DESIGN HAS BEEN APPROVED.

6. FOUNDATIONS SHALL CONSIST OF CAST-IN-PLACE REINFORCED CONCRETE DRILLED SHAFTS: ONE NEW DRILLED SHAFT PER MAST ARM OR DUAL PURPOSE POLE AS SET FORTH IN SPECIAL PROVISION 643. FOUNDATION SIZES SHALL BE SELECTED BY THE CONTRACTOR BASED UPON ACTUAL COMPUTATED BENDING MOMENTS AND TORSION IN ACCORDANCE WITH SPECIAL PROVISION 643. ACTUAL DESIGN LOADS AT THE TOP OF THE FOUNDATION THAT ARE PROVIDED BY THE CONTRACTOR AS PART OF THEIR STRUCTURAL SUBMITTAL WILL BE USED BY THE DEPARTMENT TO CHECK THE SPECIFIED SIZE OF THE DRILLED SHAFTS. A BORING WAS TAKEN AS PART OF THIS PROJECT FOR THE FOUNDATION DESIGN. THE BORING LOCATIONS AND LOG CAN BE FOUND ON THE BORING LOCATION PLANS WITH FOUNDATION DESIGN REQUIREMENTS.

7. WHERE NOTED ON THE PLANS. ALL NEW VEHICULAR SIGNAL HEADS SHALL BE EQUIPPED WITH NEW LED LENSES 12 INCHES IN DIAMETER AND EQUIPPED WITH NEW 5-INCH LOUVERED BACK PLATES. INCLUDING RETROREFLECTIVITY.

8. TWO COPIES OF AS-BUILT PLANS. WIRING DIAGRAMS. BOX PRINTS. AND EQUIPMENT MANUALS SHALL BE LEFT IN EACH OF THE CONTROLLER CABINETS.

9. TRAFFIC SIGNAL WORK SHALL BE COMPLETED IN A MANNER AND ORDER THAT WILL CAUSE THE MINIMUM DISRUPTION TO TRAFFIC.

10. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.

11. ALL NON-PAVED AREAS DISTURBED DURING SIGNAL CONSTRUCTION SHALL BE LOAMED AND SEEDED. UNLESS OTHERWISE DIRECTED BY THE OWNER. ALL PAVED AREAS DISTURBED DURING SIGNAL CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR. COSTS FOR REPAIR OF DISTURBED AREAS SHALL BE INCIDENTAL TO OTHER CONTRACT ITEMS.

12. CONTRACTOR FURNISHED EQUIPMENT-THE TRAFFIC SIGNAL CONTROLLERS AND VARIOUS OTHER EQUIPMENT ITEMS SHOWN ON THE PLANS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. PER BANGOR AREA COMPREHENSIVE TRANSPORTATION SYSTEMS (BACTS) REGIONAL TRANSPORTATION MANAGEMENT SYSTEMS (RTMS) SPECIFICATIONS. THE TRAFFIC SIGNAL CONTROLLERS SUPPLIED UNDER THIS CONTRACT SHALL BE ETHERNET EQUIPPED ECONOLITE BRAND ATC WITH THE CAPABILITY OF SUPPORTING NTCIP PROTOCOLS. TRAFFIC SIGNAL CONTROLLERS SHALL SUPPORT DIRECT ETHERNET COMMUNICATIONS FROM A PROPOSED ETHERNET SWITCH TO THE CONTROLLERS ETHERNET PORT. THE COMMUNICATIONS SYSTEM SHALL BE CAPABLE OF INTEGRATING WITH A FUTURE ETHERNET COMMUNICATIONS SYSTEM BACK TO A FUTURE ADVANCED TRAFFIC SIGNAL MANAGEMENT SYSTEM (ATMS) SERVER.

BACTS AND THE UNIVERSITY OF MAINE (UMAINE) ARE DEVELOPING THE FUTURE TRAFFIC SIGNAL AND COMMUNICATIONS IMPROVEMENT PROJECT IN ORONO AND OLD TOWN. THE PROPOSED TRAFFIC SIGNALS ON THIS PROJECT WILL INCORPORATED INTO A NETWORKED, FIBER OPTIC COMMUNICATIONS SYSTEM WITH REMOTE OPERATIONS AT A TRAFFIC MANAGEMENT CENTER (TMC). CONTACT BRAD LYON (207.200.2068) FOR ADDITIONAL INFORMATION. THE CONTRACTOR IS DIRECTED TO PROVIDE TRAFFIC SIGNAL EQUIPMENT IN ACCORDANCE WITH THE SPECIAL PROVISIONS TO FACILITATE THE BACTS/UMAINE PROJECT.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING THE PROJECT WITH WORKING AND FULLY CONFIGURED CONTROLLERS FOR EACH INTERSECTION. IN ADDITION, THE CONTRACTOR SHALL FURNISH AND INSTALL AND/OR EXPAND THE EXISTING LIGHT-BASED EMERGENCY VEHICLE PREEMPTION SYSTEM COMPATIBLE WITH THE PREEMPTION EMITTERS OWNED BY THE CITY FIRE DEPARTMENT.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FURNISHING AND INSTALLING ALL OTHER EQUIPMENT TO INCLUDE ETHERNET SWITCH (FOR FUTURE USE), FIELD MONITORING UNIT (FMU), VEHICLE TRAFFIC SIGNALS, PEDESTRIAN SIGNALS, APS PEDESTRIAN BUTTONS AND SIGNS, EMERGENCY VEHICLE PREEMPTION PHASE SELECTORS AND RECEIVERS, EMERGENCY VEHICLE PREEMPTION CONFIRMATION LIGHTS, VIDEO DETECTION CAMERAS, VIDEO-BASED PRESENCE DETECTION SENSORS WITH BICYCLE ALGORITHM, FIELD WIRING, AND ALL OTHER EQUIPMENT NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL TRAFFIC SIGNAL SYSTEMS. THE CONTRACTOR SHALL BE AWARE OF AND CONFORM TO ALL DETAILS FOR THE MATERIAL SPECIFICATIONS IN SPECIAL PROVISION 718.

13. VIDEO DETECTION INSTALLATION-THE ENGINEER RESERVES THE RIGHT TO DIRECT THE CONTRACTOR TO FIELD ADJUST THE VIDEO DETECTOR MOUNTING HEIGHT FOR LOCAL CONDITIONS IDENTIFIED DURING OR AFTER INSTALLATION. NO ADDITIONAL COST WILL BE ALLOWED FOR FIELD ADJUSTING THE PIPE EXTENSIONS OR REWIRING AS NECESSARY. THIS WORK WILL BE INCIDENTAL TO THE 643.83 VIDEO DETECTION SYSTEM ITEMS.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING RED-LINE AS-BUILT DRAWINGS OF THE FINAL WORK TO THE ENGINEER. THOSE DRAWINGS SHALL BE ON A CLEAN SET OF PLANS SHOWING ALL CHANGES OR MODIFICATIONS TO THE BID PLANS.

15. 2-INCH PVC MAY BE USED IN LIEU OF 3-INCH PVC TO TRAFFIC SIGNAL POSTS DEPENDING ON WHETHER PRE-CAST FOUNDATIONS ARE USED AND ITS REQUIREMENTS. ANY 2-INCH CONDUIT SHALL BE PAID BY LINEAL FOOT INSTALLED UNDER THE 626.22 NON-METALLIC CONDUIT ITEM.

16. THE CONTRACTOR IS DIRECTED TO PROJECT SPECIAL PROVISION 718 FOR ADDITIONAL INFORMATION RELATED TO THE FOLLOWING:

- 718.07 TRAFFIC CONTROLLER
- 718.14 FIELD MONITORING UNIT
- 718.15 TWELVE (12) POSITION FIBER OPTIC PATCH PANEL
- 718.16 ETHERNET SWITCH WITH FIBER OPTIC INTERFACES
- 718.17 PEDESTRIAN CROSSING SYSTEM

SPECIAL PROVISION 718 EXPANDS UPON THE INFORMATION FOUND IN THESE SIGNAL NOTES. AS SUCH, THE MORE RESTRICTIVE LANGUAGE BETWEEN THESE NOTES AND SPECIAL PROVISION 718 SHALL GOVERN THE WORK TO BE PERFORMED UNDER THIS PROJECT.

17. TEMPORARY TRAFFIC SIGNALS AT BOTH PROJECT LOCATIONS SHALL BE PAID UNDER ITEM 643.72 TO INCLUDE ANY TEMPORARY WOOD POLES, SPAN WIRE, CONTROL CABINET COMPLETE WITH ALL INCIDENTALS, WITH SIGNAL HEADS AND TEMPORARY PEDESTRIAN ACCOMMODATIONS FOR A COMPLETE TEMPORARY INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING ANY TEMPORARY SIGNAL LAYOUTS TO THE RESIDENT ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

Filename: ...\PLANSET\034_SignalNotes.dgn Username: jamesdavis Division: HIGHWAY Date:11/17/2021

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

R. MOULTON	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	ECF	JBD
CHECKED-REVIEWED	ECF	AG
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

11/17/2021 SIGNATURE

P.E. NUMBER

DATE

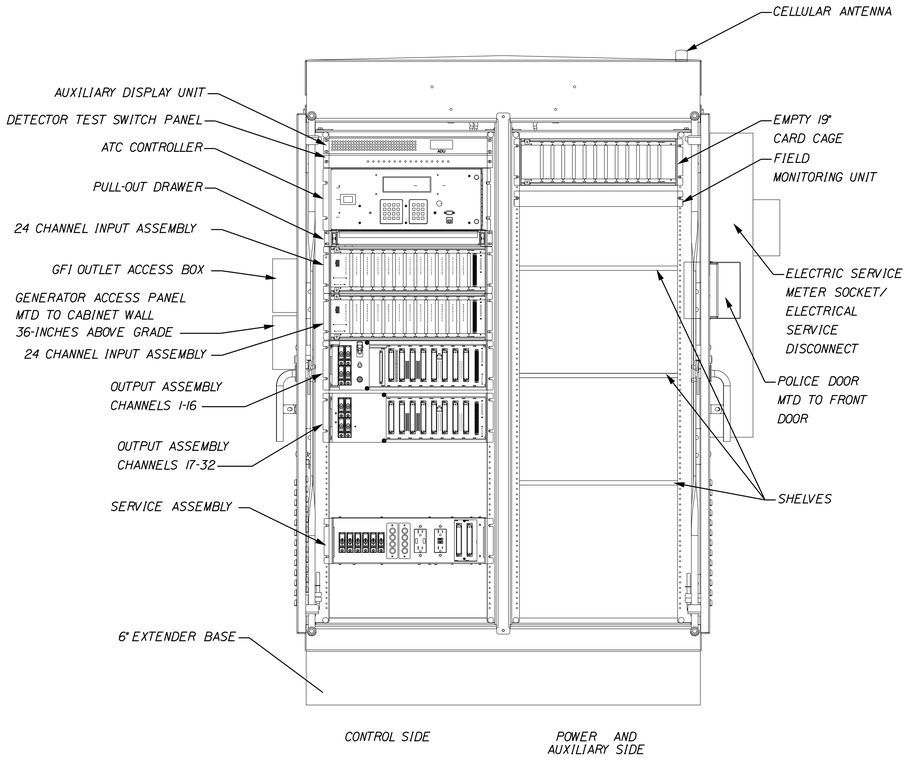
OLD TOWN
STILLWATER AVENUE

TRAFFIC SIGNAL NOTES

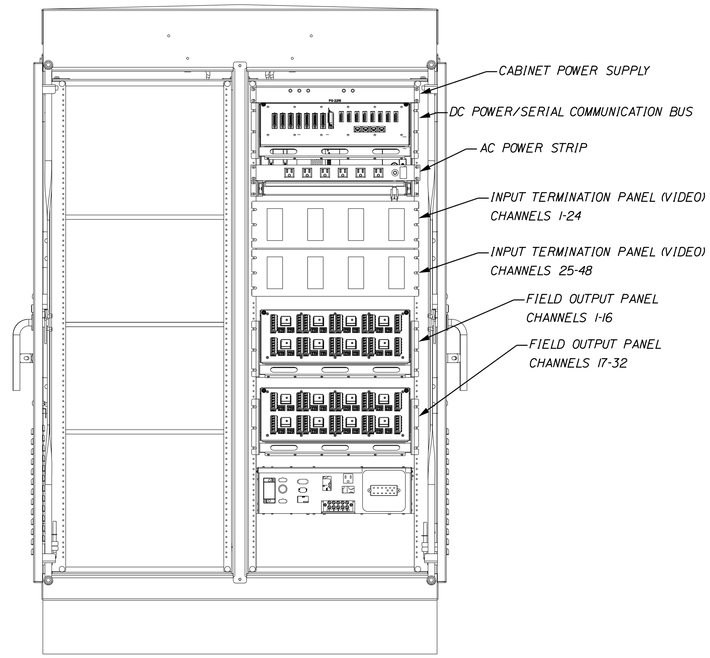
SHEET NUMBER

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OF 218



FRONT VIEW



BACK VIEW

MaineDOT 32/48 ATC CABINET

NOT TO SCALE

NOTES:

1. DRAWING SHOWN IS A SCHEMATIC REPRESENTATION OF THE ATC CABINET DEPICTING THE RELATIVE LOCATION OF VARIOUS IN-CABINET DEVICES AND SUBASSEMBLIES. THE EXACT SIZE OF VARIOUS ELEMENTS MAY VARY PER MANUFACTURER.

2. INPUT TERMINATION PANEL SHOWN IS FOR VIDEO BASED INPUTS.

3. DRAWING DEPICTS TWO INPUT PANELS AND TWO OUTPUT PANELS. THIS QUANTITY MAY BE REDUCED DEPENDING ON APPLICATION; SEE SPECIAL PROVISIONS FOR NUMBER OF PANELS TO BE SUPPLIED.

4. FAN AND THERMOSTAT SHALL BE INSTALLED ON CABINET FRAME ABOVE THE DOOR.

5. LED LIGHT STRIPS SHALL BE INSTALLED ON CABINET FRAME ABOVE THE DOOR AND ON THE UNDERSIDE OF THE LOWER SHELF.

6. THE SIZE OF THE METER SOCKET WILL VARY BASED ON THE LOCAL ELECTRIC UTILITY COMPANY REQUIREMENT.

7. THE METER SHALL BE INSTALLED SUCH THAT THE BOTTOM OF THE METER IS AT LEAST 48 INCHES ABOVE FINAL GRADE.

8. THE LOAD SIDE CABLE SHALL BE ROUTED THROUGH THE INTERIOR OF THE CABINET SUCH THAT IT DOES NOT BLOCK OR ENTER INTO AVAILABLE RACK SPACE. THE CABLE SHALL BE ROUTED BETWEEN THE EDGE OF THE RACK SYSTEM AND THE CABINET SIDE WALL. ALONG THE BOTTOM OF THE CABINET AND BELOW THE BOTTOM OPENING OF THE DOORS.

9. THE BANGOR AREA COMPREHENSIVE TRANSPORTATION SYSTEM (BACTS) AND THE UNIVERSITY OF MAINE ARE DEVELOPING A TRAFFIC SIGNAL IMPROVEMENT PROJECT IN ORONO AND OLD TOWN. THE PROPOSED TRAFFIC SIGNALS ON THIS PROJECT WILL BE INCORPORATED INTO A NETWORKED, FIBER OPTIC COMMUNICATION SYSTEM WITH REMOTE OPERATIONS AT A TRAFFIC MANAGEMENT CENTER (TMC). THE CONTRACTOR IS DIRECTED TO PROVIDE TRAFFIC SIGNAL EQUIPMENT IN ACCORDANCE WITH THE SPECIAL PROVISIONS TO FACILITATE THE BACTS/UNIVERSITY OF MAINE PROJECT.

NOMINAL TERMINAL PANEL SIZE
PER 24 INPUT RACK:
LOOP = 6U HIGH (10.5")
VIDEO = 3U HIGH (5.25")

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	MLG	JAR	11/17/2021
CHECKED-REVIEWED	CMB	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

TRAFFIC SIGNAL DETAIL

SHEET NUMBER

35

OF 218

Filename: ...\MSTA\PLANSET\035-Signal_01.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\MSTA\PLANSETV0.36-SignalL_02.dgn Division: HIGHWAY Username: jomesdavis Date:11/18/2021

LIST OF WORK ITEMS

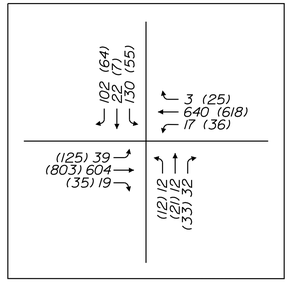
EQUIPMENT AND WORK ITEMS 643.71	QUANTITY
FURNISH AND INSTALL NEW ATCC MAINEDOT 32/48 SPEC GROUND MOUNT CABINET AND ATC CONTROLLER COMPLETE WITH ALL ANCILLARY EQUIPMENT AND WIRING INCLUDING FIELD MONITORING UNIT WITH INTEGRATION INTO CLOUD BASED CENTRAL MANAGEMENT SYSTEM.	1
FURNISH AND INSTALL GENERATOR TRANSFER SWITCH.	1
FURNISH AND INSTALL ONE-WAY 3-SECTION, 12-SECTION TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARMS WITH ASTRO-BRACKETS.	7
FURNISH AND INSTALL ONE-WAY 3-SECTION, 12-SECTION TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARMS WITH BRACKETS.	5
FURNISH AND INSTALL ONE-WAY 4-SECTION, 12-SECTION TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARMS WITH ASTRO-BRACKETS.	1
FURNISH AND INSTALL ONE-WAY, 16 X 18-INCH LED TOP OF POST MOUNTED COUNTDOWN PEDESTRIAN SIGNAL HEAD.	4
FURNISH AND INSTALL ADA COMPLIANT ACCESSIBLE PEDESTRIAN SIGNAL (APS) BUTTON WITH 9" X 15" R10-3e INFORMATIONAL SIGN.	4
FURNISH AND INSTALL ENVIRONMENTALLY HARDENED FIBER OPTIC ETHERNET SWITCH AND 12 POSITION PATCH PANEL	1
FURNISH AND INSTALL MAST ARM MOUNTED SIGNS.	10
FURNISH AND INSTALL NEW SIGNAL CABLE.	-
REMOVE AND SALVAGE EXISTING SIGNAL EQUIPMENT.	-
IMPLEMENT LOCAL AND SYSTEM SIGNAL TIMINGS.	-

THE LISTED QUANTITIES ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY.

STRUCTURE LIST

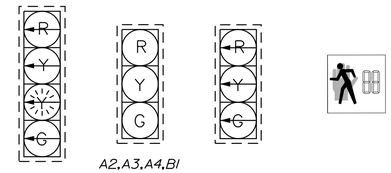
STRUCTURE	DESCRIPTION	FOUNDATION SIZE STATION - OFFSET
A-C	CONTROLLER CABINET	L48"xW36"xH48" STA 11+74 RT 34'
A-MI	25' MAST ARM	42" DIAMETER, 9' DEPTH STA 12+08 RT 28'
A-PI	8' PEDESTAL POLE	24" DIAMETER STA 12+34 RT 27'
B-MI	25' MAST ARM	42" DIAMETER, 12' DEPTH STA 10+87 RT 32'
C-MI	33' MAST ARM	48" DIAMETER, 11.5' DEPTH STA 11+06 LT 32'
C-PI	8' PEDESTAL POLE	24" DIAMETER STA 11+57 LT 43'
D-MI	25' MAST ARM	42" DIAMETER, 9' DEPTH STA 12+19 LT 22'
D-PI	8' PEDESTAL POLE	24" DIAMETER STA 12+27 LT 35'
D-P2	8' PEDESTAL POLE	24" DIAMETER STA 12+36 LT 24'

2017 SYSTEM DESIGN VOLUMES AM (PM)



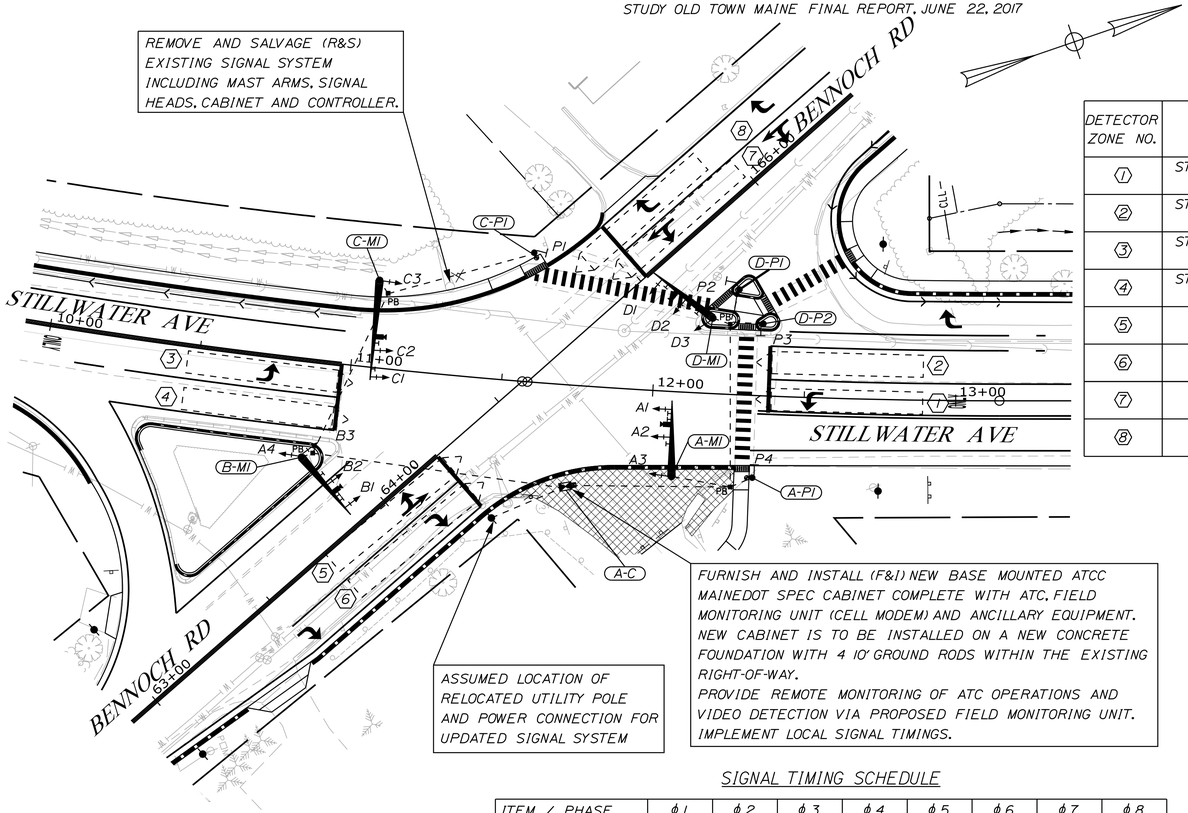
VOLUMES FROM STILLWATER AVENUE CORRIDOR STUDY OLD TOWN MAINE FINAL REPORT, JUNE 22, 2017

PROPOSED INDICATIONS



A1 | A2,A3,A4,B1 B2,B3,C2,C3 D1,D2,D3 | C1 | P1-P4

NOTE:
ALL INDICATIONS SHALL BE 12" LIGHT EMITTING DIODES (LED'S) WITH 5" LOUVERED RETROREFLECTIVE BACKPLATES

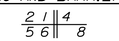


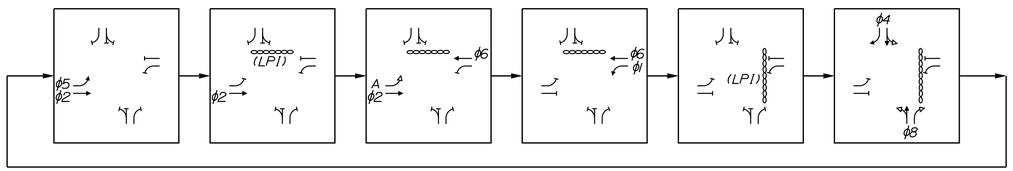
DETECTOR SCHEDULE

DETECTOR ZONE NO.	LOCATION	φ CALLED	φ EXT.	MODE A=ADVANCE B=STOPLINE	DELAY TIME	EXT. TIME
1	STILLWATER AVE SB LEFT	6	6	B	-	-
2	STILLWATER AVE SB THROUGH	6	6	B	-	-
3	STILLWATER AVE NB LEFT	5	5	B	-	-
4	STILLWATER AVE NB THROUGH	2	2	B	-	-
5	BENNOCH RD WB LEFT-THRU	8	8	B	-	-
6	BENNOCH RD WB RIGHT	8	8	B	5	-
7	BENNOCH RD EB LEFT-THRU	4	4	B	5	-
8	BENNOCH RD EB RIGHT	4	4	B	-	-

PREFERENTIAL PHASE SEQUENCE

NEMA RING AND BARRIER DIAGRAM





OVERLAP PHASING:
OVL A = 5 (PROT) + 2 (PERM)

PHASING NOTES:
1. EACH PEDESTRIAN PHASE SHALL HAVE A MINIMUM OF A 4 SECOND LEADING PEDESTRIAN INTERVAL (LPI).
2. PEDESTRIAN PHASE UPON PUSH BUTTON ACTIVATION ONLY.
3. OVERLAP A SHALL BE PROGRAMMED FOR FLASHING YELLOW ARROW.

SIGNAL TIMING SCHEDULE

ITEM / PHASE	ϕ 1	ϕ 2	ϕ 3	ϕ 4	ϕ 5	ϕ 6	ϕ 7	ϕ 8
MOVEMENT	-	A	-	B	A (LT)	C	-	D
MINIMUM INITIAL	-	10	-	7	5	10	-	7
PASSAGE TIME	-	3.0	-	3.0	3.0	3.0	-	3.0
MAXIMUM 1	-	65	-	15	10	45	-	15
MAXIMUM 2	-	70	-	20	15	55	-	20
YELLOW	-	3.5	-	3.5	3.5	3.5	-	3.5
ALL RED	-	3.5	-	2.5	3.0	3.5	-	2.5
PED WALK	-	-	-	-	-	5	-	5
PED CLEAR	-	-	-	-	-	14	-	10
RECALL	-	SOFT	-	OFF	OFF	SOFT	-	OFF
DETECTOR	-	PR	-	PR	PR	PR	-	PR
PREEMPT PRIORITY	-	-	-	-	-	-	-	-
FLASH	-	Y	-	R	R	Y	-	R
DUAL ENTRY	-	OFF	-	OFF	OFF	OFF	-	OFF

NOTES: S = SOFT RECALLY = YELLOW
O = RECALL OFF R = RED
PR = PRESENCE D = DARK

LEGEND

- BASE MOUNTED ATC MAINEDOT SPEC CABINET
- PROPOSED VEHICULAR HEAD
- OVERHEAD SIGN
- MAST ARM POLE
- ALUMINUM PEDESTAL POLE
- PEDESTRIAN SIGNAL HEAD WITH APS PUSH BUTTON AND INFORMATIONAL SIGN
- UNDERGROUND CONDUIT
- VIDEO DETECTION CAMERA
- DETECTION ZONE & ID
- PB PULL BOX

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R. MOULTON	
DESIGN-DETAILED	MLG	11/18/2021
CHECKED-REVIEWED	CMB	11/18/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

TRAFFIC SIGNAL PLAN

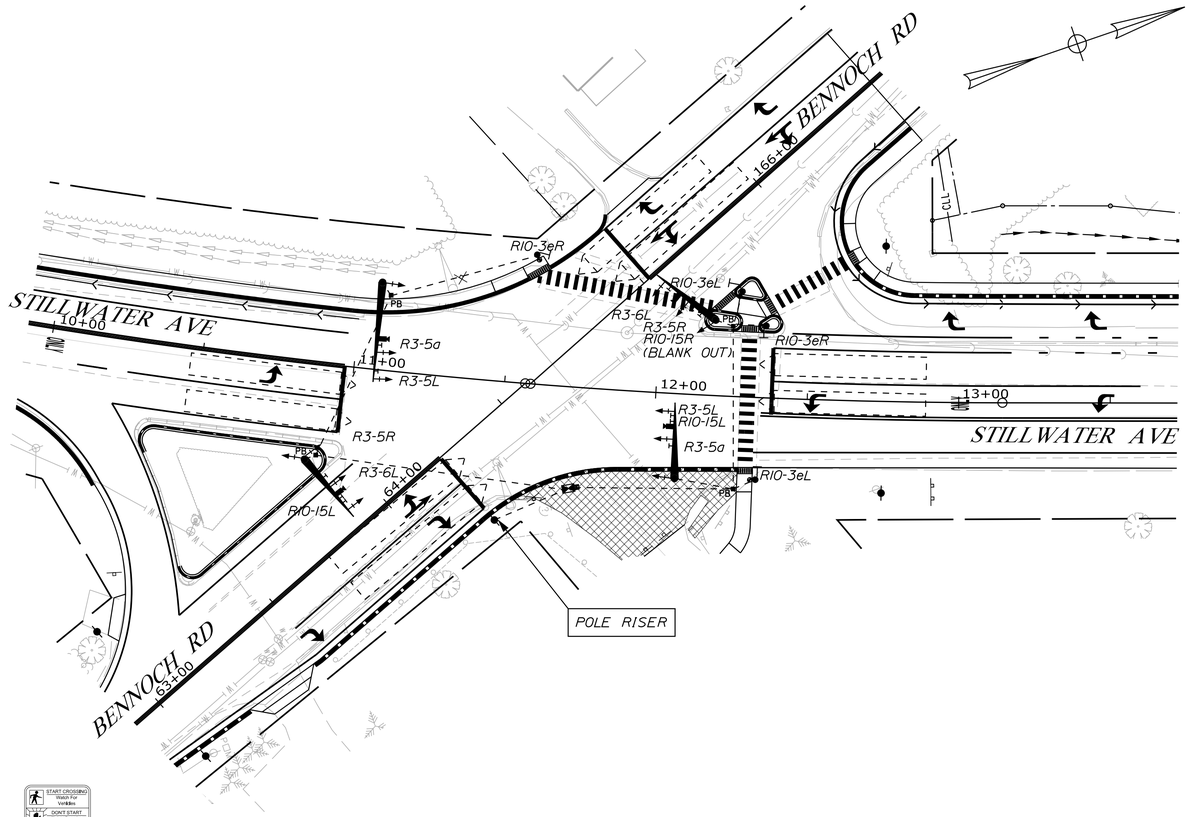
SHEET NUMBER
36
OF 218

Filename: ...\MSTA\PLANSET\037-Signal_03.dgn Division: HIGHWAY Username: jamesdavis Date:11/18/2021

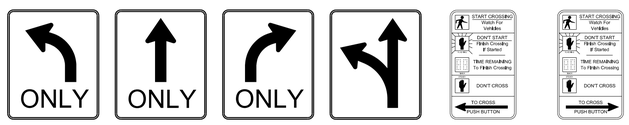
LIST OF WORK ITEMS

EQUIPMENT AND WORK (ITEM XXX.YYZ)	QUANTITY
FURNISH AND INSTALL PRECAST CONCRETE JUNCTION BOX (ITEM 626.11)	4
FURNISH AND INSTALL (3-INCH) NON-METALLIC CONDUIT (ITEM 626.22)	270
FURNISH AND INSTALL NON-METALLIC CONDUIT, CONCRETE ENCASED (ITEM 626.221)	25
FURNISH AND INSTALL NON-METALLIC UNDER PAVEMENT CONDUIT (SCHEDULE 80 OR GREATER RATING) (ITEM 626.251)	120
FURNISH AND INSTALL CONTROL CABINET FOUNDATION (ITEM 626.35)	1
REMOVE OR MODIFY CONCRETE FOUNDATION (ITEM 626.36)	2
FURNISH AND INSTALL 24-INCH DIAMETER FOUNDATION (ITEM 626.421)	28
FURNISH AND INSTALL 42-INCH DIAMETER FOUNDATION (ITEM 626.451)	30
FURNISH AND INSTALL 48-INCH DIAMETER FOUNDATION (ITEM 626.46)	11.5
FURNISH AND INSTALL NON-INVASIVE DETECTION - STOP BAR: STILLWATER AVE & BENNOCH ROAD (ITEM 643.21)	1
FURNISH AND INSTALL 25' MAST ARM POLE (ITEM 643.91)	3
FURNISH AND INSTALL 33' MAST ARM POLE (ITEM 643.91)	1
FURNISH AND INSTALL 8-FOOT PEDESTAL POLE (ITEM 643.92)	4
FURNISH AND INSTALL LED BLANK-OUT SIGN, OVERHEAD MOUNTED (ITEM 645.51)	1

THE LISTED QUANTITIES ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY.



PROPOSED SIGNS *



R3-5L 30"x36" 2-PROPOSED

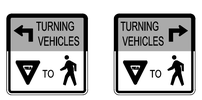
R3-5a 30"x36" 2-PROPOSED

R3-5R 30"x36" 2-PROPOSED

R3-6L 30"x36" 2-PROPOSED

R10-3eL 9"x15" 2-PROPOSED

R10-3eR 9"x15" 2-PROPOSED



R10-15L 30"x30" 2-PROPOSED

R10-15R (BLANK OUT) 30"x30" 1-PROPOSED

* - SEE ALSO SIGN SUMMARY SHEETS AND SIGNING/SUMMARY PLAN (3 OF 10)

NOTE:
HOUSING FOR BLANK OUT MAY BE LARGER THAN 30" SIGN FACE (I.E. 33"X33" HOUSING), ITEM 645.512

LEGEND

- BASE MOUNTED ATC MAINEDOT SPEC CABINET
- PROPOSED VEHICULAR HEAD
- OVERHEAD SIGN
- MAST ARM POLE
- ALUMINUM PEDESTAL POLE
- PEDESTRIAN SIGNAL HEAD WITH APS PUSH BUTTON AND INFORMATIONAL SIGN
- UNDERGROUND CONDUIT
- VIDEO DETECTION CAMERA
- DETECTION ZONE & ID
- PB PULL BOX

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	MLG	JAR	11/18/2021
CHECKED-REVIEWED	CMB	AG	11/18/2021
DESIGN2-DETAILED2			
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REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

TRAFFIC SIGNAL PLAN

SHEET NUMBER
37
OF 218

LIST OF WORK ITEMS

EQUIPMENT AND WORK ITEMS 643.71	QUANTITY
FURNISH AND INSTALL NEW ATCC MAINEDOT 32/48 SPEC GROUND MOUNT CABINET AND ATC CONTROLLER COMPLETE WITH ALL ANCILLARY EQUIPMENT AND WIRING INCLUDING FIELD MONITORING UNIT WITH INTEGRATION INTO CLOUD BASED CENTRAL MANAGEMENT SYSTEM.	1
FURNISH AND INSTALL GENERATOR TRANSFER SWITCH.	1
FURNISH AND INSTALL ONE-WAY 3 SECTION, 12-INCH TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARMS OR TS POSTS WITH ASTRO-BRACKETS.	11
FURNISH AND INSTALL ONE-WAY 4 SECTION, 12-INCH TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARMS WITH ASTRO-BRACKETS.	2
FURNISH AND INSTALL ONE-WAY, 16 X 18-INCH LED TOP OF POST MOUNTED COUNTDOWN PEDESTRIAN SIGNAL HEAD.	8
FURNISH AND INSTALL ADA COMPLIANT ACCESSIBLE PEDESTRIAN SIGNAL (APS) BUTTON WITH 9" X 15" R10-3e INFORMATIONAL SIGN	8
FURNISH AND INSTALL ENVIRONMENTALLY HARDENED FIBER OPTIC ETHERNET SWITCH AND 12 POSITION PATCH PANEL	1
FURNISH AND INSTALL MAST ARM MOUNTED SIGNS	15
FURNISH AND INSTALL NEW SIGNAL CABLE	-
REMOVE AND SALVAGE EXISTING SIGNAL EQUIPMENT	-
IMPLEMENT LOCAL AND SYSTEM SIGNAL TIMINGS	-

THE LISTED QUANTITIES ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY.

DETECTOR SCHEDULE

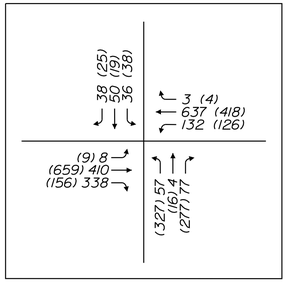
DETECTOR ZONE NO.	LOCATION	φ CALLED	φ EXT.	MODE A=ADVANCE B=STOPLINE	DELAY TIME	EXT. TIME
①	STILLWATER AVE SB LEFT	1	1	B	-	-
②	STILLWATER AVE SB THRU-RIGHT	6	6	B	-	-
③	STILLWATER AVE NB LEFT	2	2	B	-	-
④	STILLWATER AVE NB THROUGH	2	2	B	-	-
⑤	STILLWATER AVE NB THRU-RIGHT	2	2	B	-	-
⑥	COLLEGE AVE WB LEFT	3	3	B	-	-
⑦	COLLEGE AVE WB LEFT-THRU	3	3	B	-	-
⑧	COLLEGE AVE WB RIGHT	3	3	B	5	-
⑨	COLLEGE AVE EB LEFT	4	4	B	-	-
⑩	COLLEGE AVE EB THRU-RIGHT	4	4	B	-	-

SIGNAL TIMING SCHEDULE

ITEM / PHASE	φ1	φ2	φ3	φ4	φ5	φ6	φ7	φ8
MOVEMENT	C (LT)	A	D	B	-	C	-	-
MINIMUM INITIAL	5	10	7	7	-	10	-	-
PASSAGE TIME	3.0	3.0	3.0	3.0	-	3.0	-	-
MAXIMUM 1	11	45	25	15	-	60	-	-
MAXIMUM 2	15	50	30	20	-	70	-	-
YELLOW	3.5	3.5	3.5	3.5	-	3.5	-	-
ALL RED	2.5	3.0	2.5	2.5	-	3.0	-	-
PED WALK	-	5	5	5	-	5	-	-
PED CLEAR	-	25	20	20	-	25	-	-
RECALL	OFF	SOFT	OFF	OFF	-	SOFT	-	-
DETECTOR	PR	PR	PR	PR	-	PR	-	-
PREEMPT PRIORITY	-	-	-	-	-	-	-	-
FLASH	R	Y	R	R	-	Y	-	-
DUAL ENTRY	OFF	OFF	OFF	OFF	-	OFF	-	-

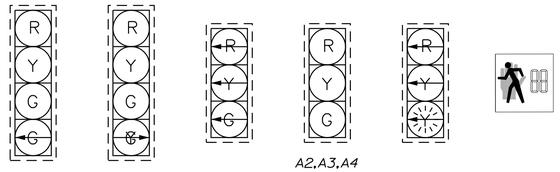
NOTES: S = SOFT RECALLY = YELLOW
O = RECALL OFF R = RED
PR = PRESENCE D = DARK

2017 SYSTEM DESIGN VOLUMES AM (PM)



VOLUMES FROM STILLWATER AVENUE CORRIDOR STUDY OLD TOWN MAINE FINAL REPORT, JUNE 22, 2017

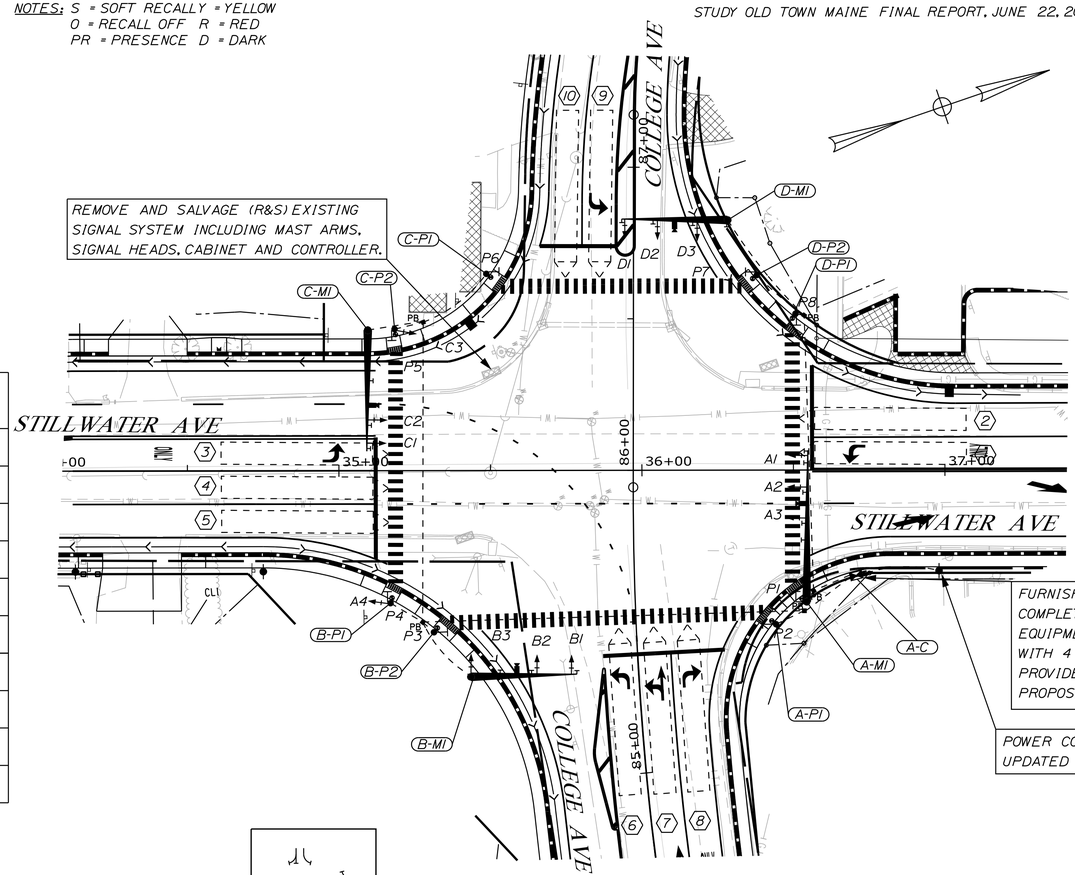
PROPOSED INDICATIONS



NOTE:
ALL INDICATIONS SHALL BE 12" LIGHT EMITTING DIODES (LED'S) WITH 5" LOUVERED RETROREFLECTIVE BACKPLATES

STRUCTURE LIST

STRUCTURE	DESCRIPTION	FOUNDATION SIZE STATION - OFFSET
A-C	CONTROLLER CABINET	L48"xW36"xH48" STA 36+71 RT 35'
A-M1	50' MAST ARM	60" DIAMETER, 15' DEPTH STA 36+54 RT 43'
A-P1	8' PEDESTAL POLE	24" DIAMETER STA 36+44 RT 51'
B-M1	35' MAST ARM	48" DIAMETER, 11.5' DEPTH STA 35+43 RT 68'
B-P1	10' PEDESTAL POLE	24" DIAMETER STA 35+17 RT 44'
B-P2	8' PEDESTAL POLE	24" DIAMETER STA 35+31 RT 53'
C-M1	40' MAST ARM	60" DIAMETER, 11' DEPTH STA 35+10 LT 46'
C-P1	8' PEDESTAL POLE	24" DIAMETER STA 35+49 LT 65'
C-P2	10' PEDESTAL POLE	24" DIAMETER STA 35+19 LT 47'
D-M1	35' MAST ARM	42" DIAMETER, 11.5' DEPTH STA 36+29 LT 83'
D-P1	8' PEDESTAL POLE	24" DIAMETER STA 36+51 LT 52'
D-P2	8' PEDESTAL POLE	24" DIAMETER STA 36+38 LT 64'



FURNISH AND INSTALL (F&I) NEW BASE MOUNTED ATCC MAINEDOT SPEC CABINET COMPLETE WITH ATC, FIELD MONITORING UNIT (CELL MODEM) AND ANCILLARY EQUIPMENT. NEW CABINET IS TO BE INSTALLED ON A NEW CONCRETE FOUNDATION WITH 4 10' GROUND RODS WITHIN THE EXISTING RIGHT-OF-WAY.
PROVIDE REMOTE MONITORING OF ATC OPERATIONS AND VIDEO DETECTION VIA PROPOSED FIELD MONITORING UNIT. IMPLEMENT LOCAL SIGNAL TIMINGS.

POWER CONNECTION FOR UPDATED SIGNAL SYSTEM

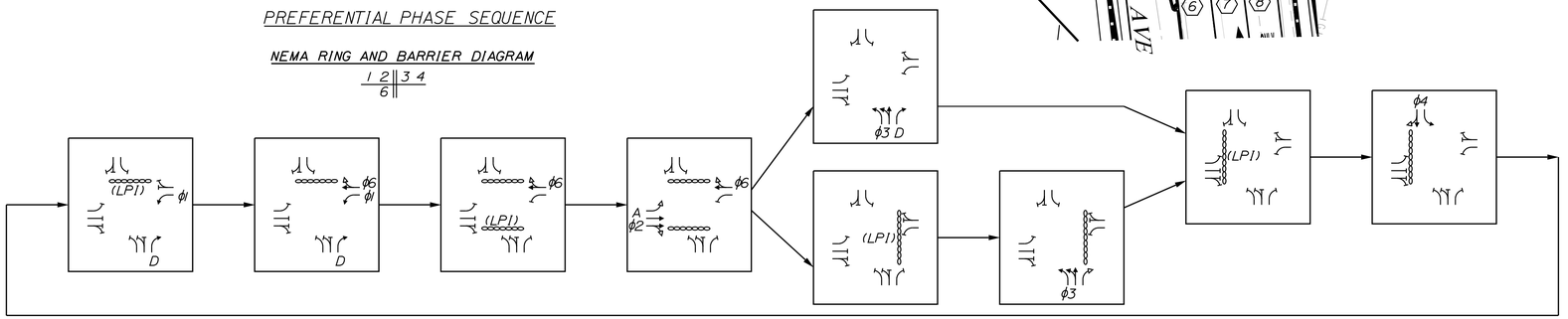
LEGEND

- BASE MOUNTED ATC MAINEDOT SPEC CABINET
- PROPOSED VEHICULAR HEAD
- OVERHEAD SIGN
- MAST ARM POLE
- ALUMINUM PEDESTAL POLE
- PEDESTRIAN SIGNAL HEAD WITH APS PUSH BUTTON AND INFORMATIONAL SIGN
- UNDERGROUND CONDUIT
- VIDEO DETECTION CAMERA
- DETECTION ZONE & ID
- PB PULL BOX

PREFERENTIAL PHASE SEQUENCE

NEMA RING AND BARRIER DIAGRAM

1 2 | 3 4
6 | 5



OVERLAP PHASING:
OVL A = 2
OVL D = 3-1

PHASING NOTES:
1. EACH PEDESTRIAN PHASE SHALL HAVE A MINIMUM OF A 4 SECOND LEADING PEDESTRIAN INTERVAL (LPI).
2. PEDESTRIAN PHASE UPON PUSH BUTTON ACTIVATION ONLY
3. OVERLAP A SHALL BE PROGRAMMED FOR FLASHING YELLOW ARROWS

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R. MOULTON	
DESIGN-DETAILED	MLG	11/18/2021
CHECKED-REVIEWED	CMB	11/18/2021
DESIGN2-DETAILED2	AG	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

P.E. NUMBER

SIGNATURE

DATE

OLD TOWN
STILLWATER AVENUE

TRAFFIC SIGNAL PLAN

SHEET NUMBER
38
OF 218

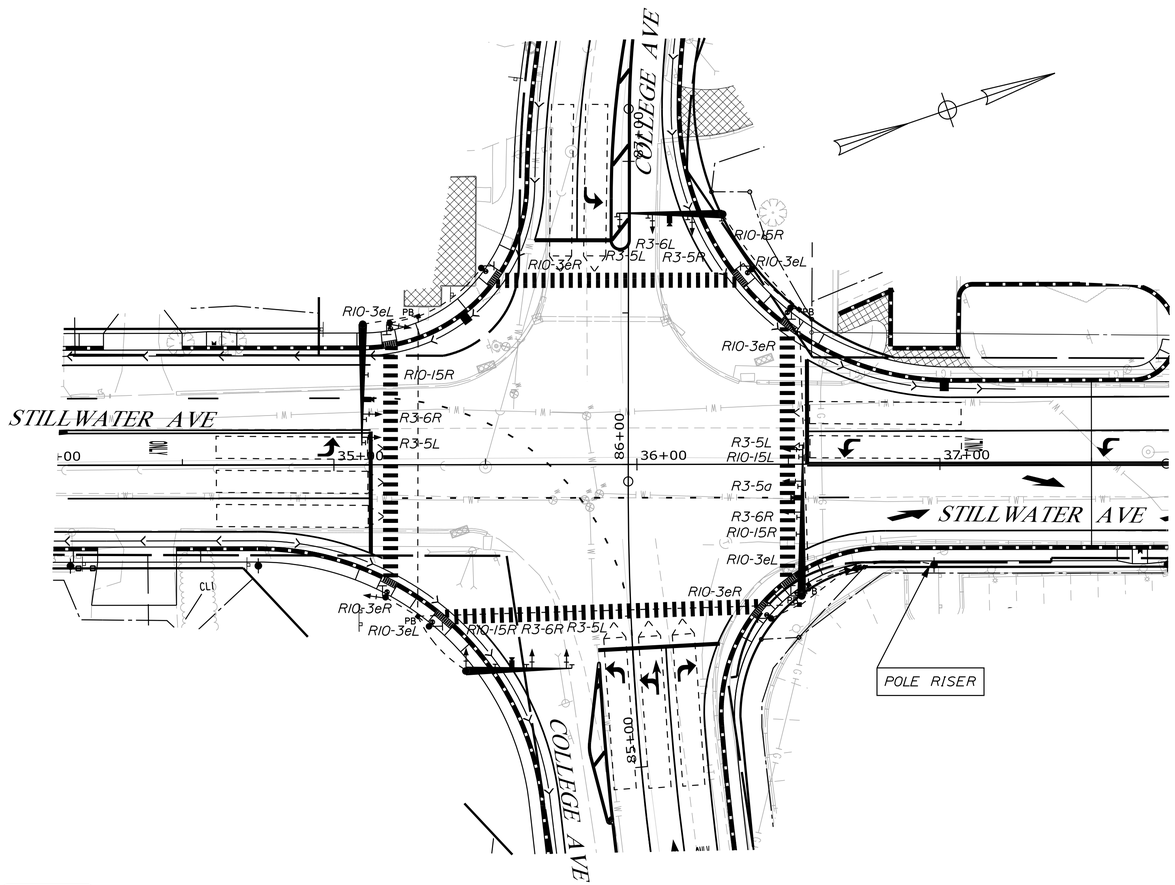
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Filename: ...\MSTA\PLANSET\039-Signal_05.dgn Division: HIGHWAY Username: jamesdavis Date:11/18/2021

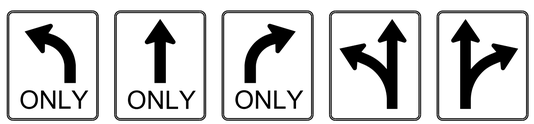
LIST OF WORK ITEMS

EQUIPMENT AND WORK (ITEM XXX.YYZ)	QUANTITY
FURNISH AND INSTALL PRECAST CONCRETE JUNCTION BOX (ITEM 626.11)	5 EA
FURNISH AND INSTALL (3-INCH) NON-METALLIC CONDUIT (ITEM 626.22)	235 LF
FURNISH AND INSTALL NON-METALLIC CONDUIT, CONCRETE ENCASED (ITEM 626.221)	25 LF
FURNISH AND INSTALL NON-METALLIC UNDER PAVEMENT CONDUIT (SCHEDULE 80 OR GREATER RATING) (ITEM 626.251)	320 LF
FURNISH AND INSTALL CONTROLLER CABINET FOUNDATION (ITEM 626.35)	1 EA
REMOVE OR MODIFY CONCRETE FOUNDATION (ITEM 626.36)	1 EA
FURNISH AND INSTALL 24-INCH DIAMETER FOUNDATION (ITEM 626.421)	49 LF
FURNISH AND INSTALL 42-INCH DIAMETER FOUNDATION (ITEM 626.451)	11.5 LF
FURNISH AND INSTALL 48-INCH DIAMETER FOUNDATION (ITEM 626.46)	11.5 LF
FURNISH AND INSTALL 60-INCH DIAMETER FOUNDATION (ITEM 626.48)	26 LF
FURNISH AND INSTALL NON-INVASIVE DETECTION - STOP BAR: STILLWATER AVE & COLLEGE AVE (ITEM 643.21)	1 EA
FURNISH AND INSTALL 35' MAST ARM POLE (ITEM 643.91)	2 EA
FURNISH AND INSTALL 40' MAST ARM POLE (ITEM 643.91)	1 EA
FURNISH AND INSTALL 50' MAST ARM POLE (ITEM 643.91)	1 EA
FURNISH AND INSTALL 10-FOOT PEDESTAL POLE (ITEM 643.91)	2 EA
FURNISH AND INSTALL 8-FOOT PEDESTAL POLE (ITEM 643.91)	5 EA

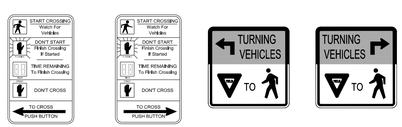
THE LISTED QUANTITIES ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY.



PROPOSED SIGNS *



R3-5L	R3-5a	R3-5R	R3-6L	R3-6R
30"x36"	30"x36"	30"x36"	30"x36"	30"x36"
4-PROPOSED	1-PROPOSED	1-PROPOSED	1-PROPOSED	3-PROPOSED



R10-3eL	R10-3eR	R10-15L	R10-15R
9"x15"	9"x15"	30"x30"	30"x30"
4-PROPOSED	4-PROPOSED	1-PROPOSED	4-PROPOSED

* - SEE ALSO SIGN SUMMARY SHEETS AND SIGNING/SUMMARY PLAN (3 OF 10)

LEGEND

- BASE MOUNTED ATC MAINEDOT SPEC CABINET
- PROPOSED VEHICULAR HEAD
- OVERHEAD SIGN
- MAST ARM POLE
- ALUMINUM PEDESTAL POLE
- PEDESTRIAN SIGNAL HEAD WITH APS PUSH BUTTON AND INFORMATIONAL SIGN
- UNDERGROUND CONDUIT
- VIDEO DETECTION CAMERA
- DETECTION ZONE & ID
- PB PULL BOX

PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
DESIGN-DETAILED	MLG	JAR	11/18/2021
CHECKED-REVIEWED	CMB	AG	11/18/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PROJ. MANAGER

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

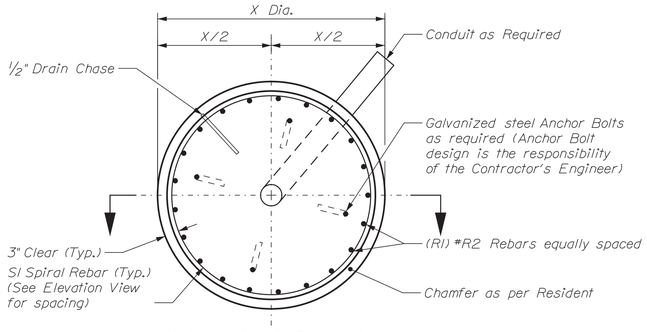
TRAFFIC SIGNAL PLAN

SHEET NUMBER

39

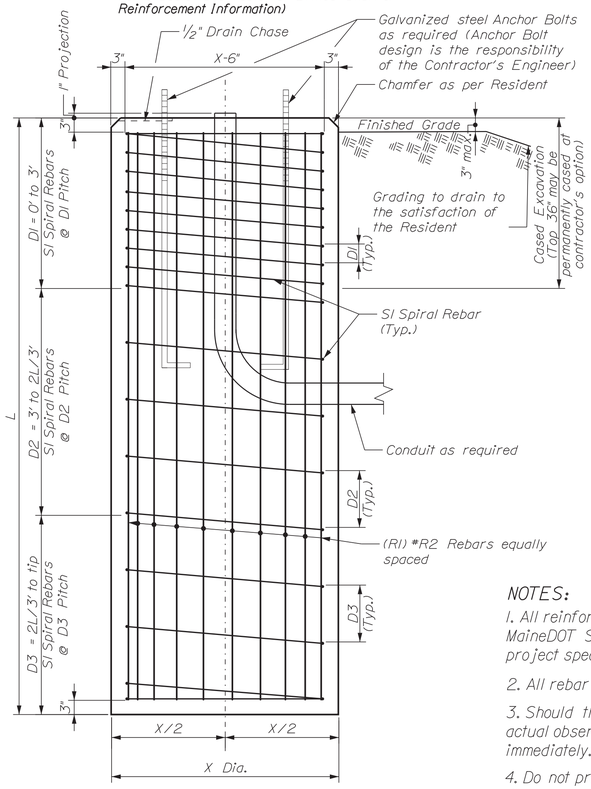
OF 218

Username: Kate.Maguire Date:11/18/2021
Division: GEOTECH
Filename: ...\MSTA\040_MAF&BLP WBL1.dgn



Drilled Shaft Plan View

Not to Scale (See Table for Drilled Shaft & Reinforcement Information)



Drilled Shaft Elevation View

Not to Scale (See Table for Drilled Shaft & Reinforcement Information)

NOTES:

1. All reinforcing steel is to be grade 60 and conform to MaineDOT Standard Specification requirements along with any project specific Supplementals or Special Provisions.

2. All rebar shall have 3" cover unless otherwise noted.

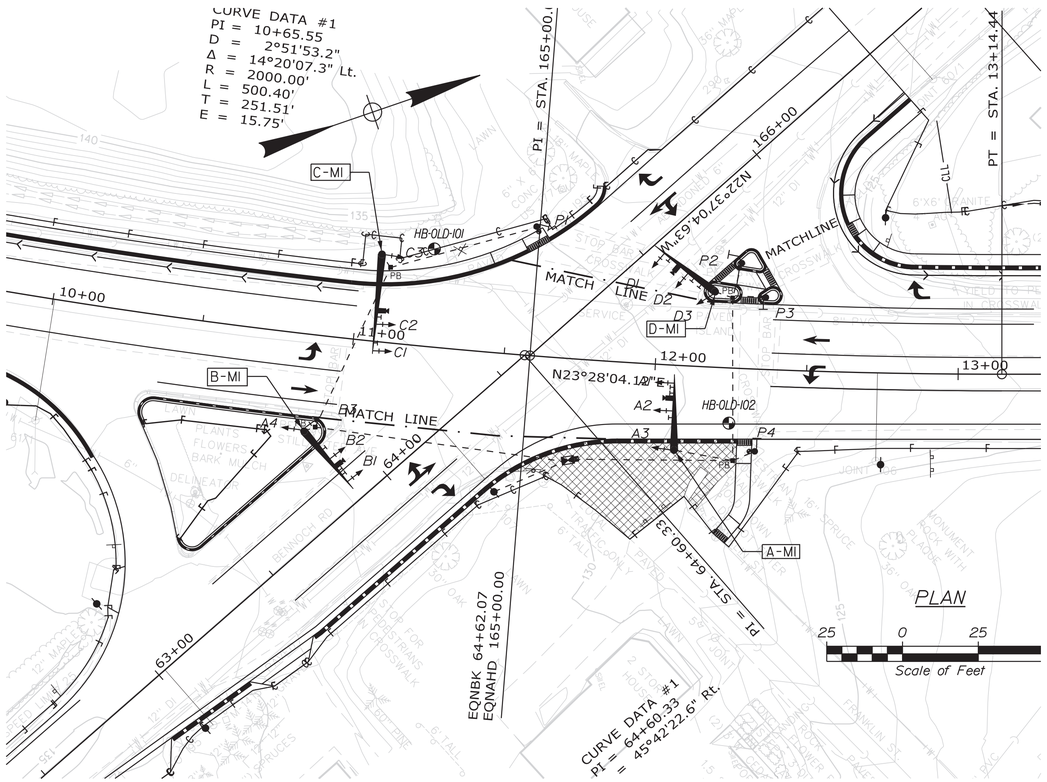
3. Should there be a discrepancy between these Details and actual observed field conditions report it to the Resident immediately.

4. Do not proceed with dependent work until any such discrepancy is resolved to the satisfaction of the Resident.

5. Concrete to be Class LP with f'c = 5,000 PSI.

MAST ARMS A-MI, B-MI, C-MI & D-MI

Mast Arm	Location	Station & Offset	X Diameter (feet)	L Length (feet)	R1 Longitudinal Rebars Quantity	R2 Longitudinal Rebars Size	S1 Spiral Rebars Size	Spiral Bar Spacing D1 (in) 0 to 3 ft	Spiral Bar Spacing D2 (in) 3 ft to 2L/3 ft	Spiral Bar Spacing D3 (in) 2L/3 ft to tip
A-M1	Stillwater Ave	12+08, 28 ft Right	3.5	9.0	18	#9	#5	4	4	12
B-M1	Bennoch Road	10+87, 32 ft Right	3.5	12.0	18	#9	#5	4	4	12
C-M1	Stillwater Ave	11+06, 32 ft Left	4.0	11.5	21	#9	#5	4	4	12
D-M1	Bennoch Road	12+19, 22 ft Left	3.5	9.0	18	#9	#5	4	4	12



Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Intersection Improvements at Stillwater Avenue
Locations Old Town, Maine

Boring No.: HB-OLD-101
WIN: 22950.00

Driller:	MaineDOT	Elevation (ft.)	132.5
Operator:	Daggett/Niles	Datum:	NAVD88
Logged By:	C. Russell	Rig Type:	CME 45C
Date Start/Finish:	8/29/2018; 09:40-10:10	Drilling Method:	Solid Stem Auger
Boring Location:	11+23.9, 33.9 ft Lt.	Casing ID/OD:	N/A
Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Catheod ☐

Auger ID/OD:	5" Dia.		
Samplers:	Standard Split Spoon		
Hammer Wt./Fall:	140#/30"		
Core Barrels:	N/A		
Water Level*:	None Observed		

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Spoon Sample; (SPT) (N)	Uncorrected N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	10	24/4	0.00 - 2.00	2/6/7/7	15	23	55A		Brown, dry, medium dense, fine to coarse SAND, little gravel, little silt. (Fill).	
5	20	24/7	5.00 - 7.00	4/5/4/5	7	11			Brown, dry, loose, fine to coarse SAND, little gravel, little silt. (Fill).	
10	30	24/24	10.00 - 12.00	9/6/7/10	13	20			Brown, damp, medium dense, fine to coarse SAND, little silt.	
15									Bottom of Exploration at 12.0 feet below ground surface. NO REFUSAL	
20										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: HB-OLD-101

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Intersection Improvements at Stillwater Avenue
Locations Old Town, Maine

Boring No.: HB-OLD-102
WIN: 22950.00

Driller:	MaineDOT	Elevation (ft.)	129.3
Operator:	Daggett/Niles	Datum:	NAVD88
Logged By:	C. Russell	Rig Type:	CME 45C
Date Start/Finish:	8/29/2018; 08:50-09:15	Drilling Method:	Solid Stem Auger
Boring Location:	12+24.9, 17.5 ft Rt.	Casing ID/OD:	N/A
Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Catheod ☐

Auger ID/OD:	5" Dia.		
Samplers:	Standard Split Spoon		
Hammer Wt./Fall:	140#/30"		
Core Barrels:	N/A		
Water Level*:	None Observed		

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Spoon Sample; (SPT) (N)	Uncorrected N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0						55A	129.3		4" HMA.	0.3
5	10	24/5	1.00 - 3.00	5/13/11/10	24	37	124.3		Brown, damp, medium dense, GRAVEL, some fine to coarse sand, little silt. (Fill).	5.0
10	20	24/24	5.00 - 7.00	12/10/7/14	17	26	119.3		Brown, damp, stiff, SILT, some fine to medium sand, little clay.	
15	30		10.00 - 12.00	5/2/4/3	6	9	117.3		Brown, damp, medium stiff, fine to medium Sandy SILT, little clay.	12.0
20									Bottom of Exploration at 12.0 feet below ground surface. NO REFUSAL	

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: HB-OLD-102

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2295001

WIN 022950.01

HIGHWAY PLANS

STATE OF MAINE ★ Kathleen Maguire 7120 ★ PROFESSIONAL ENGINEER

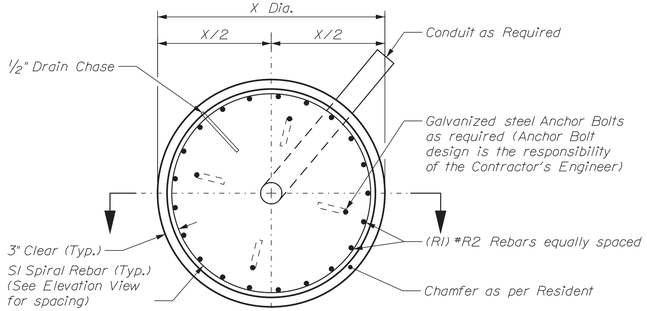
SIGNATURE
7120
P.E. NUMBER
11/18/2021
DATE

PROJ. MANAGER				
DESIGN-DETAILED				
CHECKED-REVIEWED				
DESIGN2-DETAILED2	K.MAGUIRE	T.WHITE	JUL 2021	
DESIGN3-DETAILED3				
REVISIONS 1	ADDED NEW HIGHWAY.DGN		10/20/21	
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

OLD TOWN
STILLWATER AVENUE

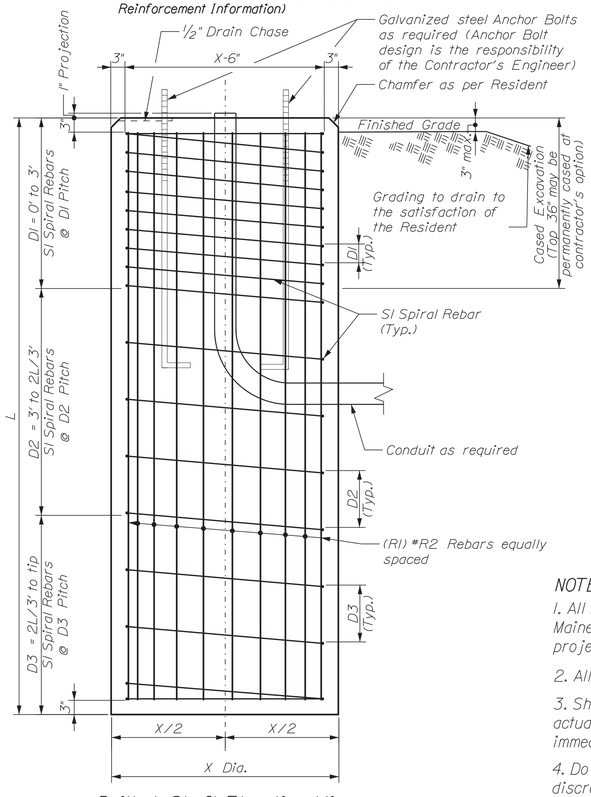
MAST ARM FOUNDATIONS & BORING LOCATION PLAN WITH BORING LOGS

SHEET NUMBER
40
OF 218



Drilled Shaft Plan View

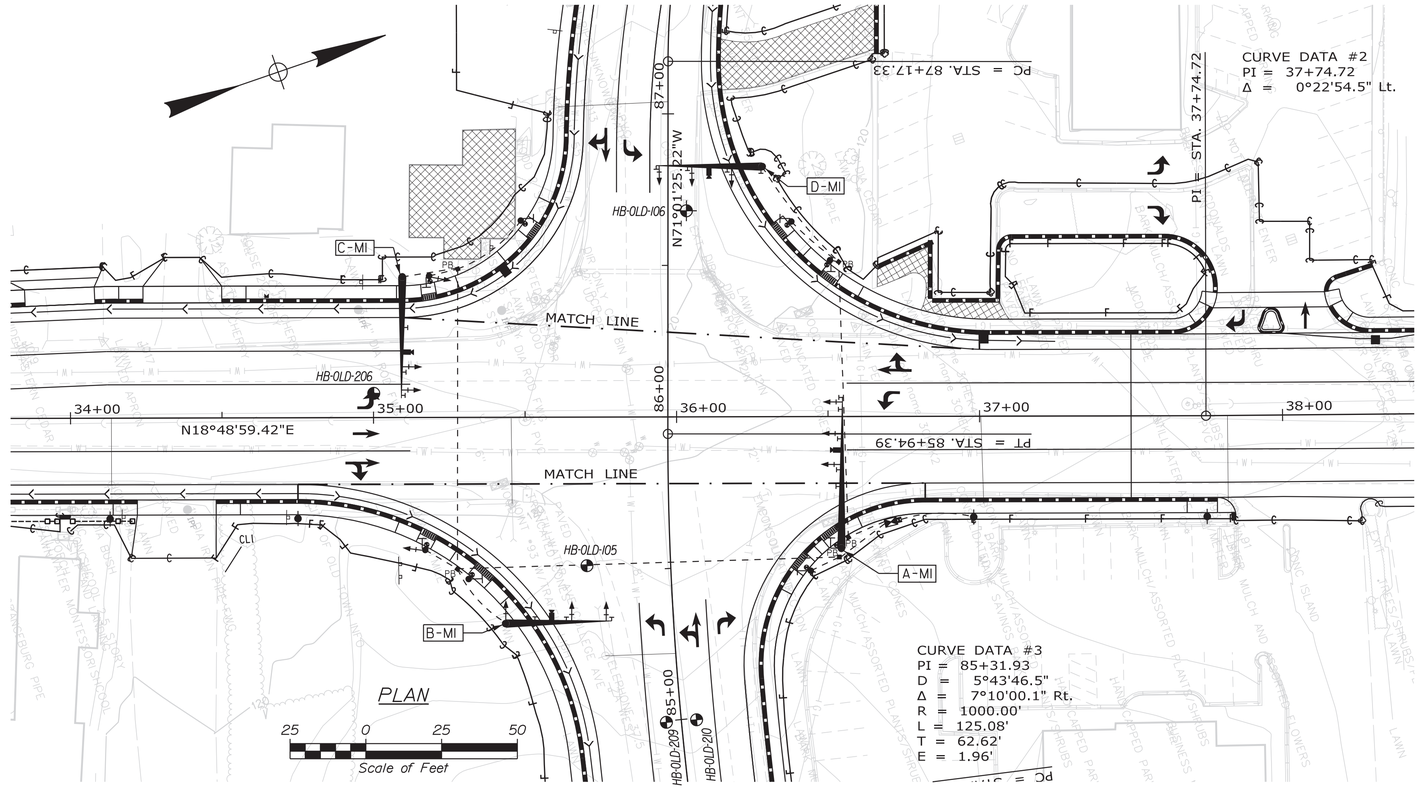
Not to Scale (See Table for Drilled Shaft & Reinforcement Information)



Drilled Shaft Elevation View

Not to Scale (See Table for Drilled Shaft & Reinforcement Information)

MAST ARMS A-MI, B-MI, C-MI & D-MI



Mast Arm	Location	Station & Offset	X Diameter (feet)	L Length (feet)	R1 Longitudinal Rebars Quantity	R2 Longitudinal Rebars Size	S1 Spiral Rebars Size	Spiral Bar Spacing D1 (in) 0 to 3 ft	Spiral Bar Spacing D2 (in) 3 ft to 2L/3 ft	Spiral Bar Spacing D3 (in) 2L/3 ft to tip
A-M1	Stillwater Ave	36+54, 43 ft Right	5.0	15.0	27	#10	#5	4	12	12
B-M1	College Ave	35+43, 68 ft Right	4.0	11.5	21	#9	#5	4	4	12
C-M1	Stillwater Ave	35+10, 46 ft Left	5.0	11.0	27	#10	#5	4	12	12
D-M1	College Ave	36+29, 83 ft Left	3.5	11.5	18	#9	#5	4	4	12

NOTES:

1. *All reinforcing steel is to be grade 60 and conform to MaineDOT Standard Specification requirements along with any project specific Supplementals or Special Provisions.*
2. *All rebar shall have 3" cover unless otherwise noted.*
3. *Should there be a discrepancy between these Details and actual observed field conditions report it to the Resident immediately.*
4. *Do not proceed with dependent work until any such discrepancy is resolved to the satisfaction of the Resident.*
5. *Concrete to be Class LP with f'c = 5,000 PSI.*
6. *Borings HB-OLD-206, HB-OLD-209 and HB-OLD-210 were not used in Mast Arm Foundation Design, but were used in Pavement Design.*

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Intersection Improvements at Stillwater Avenue — Location: Old Town, Maine — Boring No.: HB-OLD-105 — WIN: 22950.00

Driller:	MaineDOT	Elevation (ft.):	119.1	Auger ID/OD:	5" Dia.
Operator:	Daggett/Niles/Sullivan	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	C. Russell	Rig Type:	CME 45C	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	8/28/20181 12:10-12:45	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	85+52.6, 21.2 ft Lt.	Casing ID/OD:	N/A	Water Level*:	None Observed
Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; PP = Pocket Penetrometer; MDRC = Weight of Rods or Casing; MW = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; MDH = Weight of 140lb. Hammer; WOH = Weight of Drg Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); $S_{u(UC)}$ = Lab Vane Undrained Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Uncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; N_{60} = Hammer Efficiency Factor*BDS*MW-uncorrected; WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Pen. Strength (psf) or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0											
	10	24/6	0.00 - 2.00	5/3/3/3	6	9	SSA			Brown, dry, loose, fine to coarse SAND, some gravel, little silt, little wood, (Fill).	
5											
	20	24/20	5.00 - 7.00	12/21/22/26	43	67				Brown, damp, dense, fine to coarse SAND, some gravel, little silt, little wood, (Fill).	
10								109.1			
	30	24/24	10.00 - 12.00	14/10/12/14	22	34				Brown, moist, medium dense, fine to coarse SAND, some silt, little gravel.	
								107.1			
15										Bottom of Exploration at 12.0 feet below ground surface. NO REFUSAL	
20											

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: HB-OLD-105

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Intersection Improvements at Stillwater Avenue — Location: Old Town, Maine — Boring No.: HB-OLD-106 — WIN: 22950.00

Driller:	MaineDOT	Elevation (ft.):	120.3	Auger ID/OD:	5" Solid Stem
Operator:	Daggett/Niles/Sullivan	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	C. Russell	Rig Type:	CME 45C	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	8/28/20181 09:35-11:15	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	86+49.1, 12.1 ft Rt.	Casing ID/OD:	NW-3"	Water Level*:	None Observed
Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; PP = Pocket Penetrometer; MDRC = Weight of Rods or Casing; MW = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; MDH = Weight of 140lb. Hammer; WOH = Weight of Drg Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); $S_{u(UC)}$ = Lab Vane Undrained Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Uncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; N_{60} = Hammer Efficiency Factor*BDS*MW-uncorrected; WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Pen. Strength (psf) or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	119.9		5.5" HMA.	
	10	24/5	1.00 - 3.00	7/11/11/5	22	34				0.5 Brown, dry, medium dense, fine to coarse Sandy GRAVEL, trace silt, (Fill).	
5								115.3		5.0	
	20	24/24	5.00 - 7.00	7/7/8/12	15	23				Brown, damp, stiff, SILT, little fine to medium sand, little clay.	
10											
	30	12/10	10.00 - 11.00	11/50	---					Brown, damp, stiff, SILT, some fine to coarse sand, little clay. 100% RECUSAL at 11.5 ft bgs.	
	R1	60/60	11.50 - 16.50	RQD = 100%			NQ-2	108.8		11.5 Top of Bedrock at Elev. 108.8 ft. R1: Bedrock: Calcareous sandstones interbedded sandstone and impure limestone (Vassalboro Formation). Rock Quality = Excellent R1: Core Times (Minsec): 11.5-12.5 ft (4:19) 12.5-13.5 ft (3:24) 13.5-14.5 ft (3:36) 14.5-15.5 ft (2:36) 15.5-16.5 ft (2:51) 100% Recovery	
15								103.8		16.5 Bottom of Exploration at 16.5 feet below ground surface.	
20											

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: HB-OLD-106

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2295001

WIN 022950.01

HIGHWAY PLANS

STATE OF MAINE ★ Kathleen Maguire 7120 ★ PROFESSIONAL ENGINEER

SIGNATURE
7120 P.E. NUMBER
11/18/2021 DATE

PROJ. MANAGER				
DESIGN-DETAILED				
CHECKED-REVIEWED				
DESIGN2-DETAILED2	K.MAGUIRE	T. WHITE	JUL 2021	ADDED NEW HIGHWAY.DGN
DESIGN3-DETAILED3			10/20/21	
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

OLD TOWN
STILLWATER AVENUE

MAST ARM FOUNDATIONS & BORING LOCATION PLAN WITH BORING LOGS

SHEET NUMBER
41
OF 218

Username: Kate.Maguire Date:11/18/2021
Division: GEOTECH
Filename: ...\MSTA\041_MAF&BLP WBL2.dgn

Identification Number	Size of Sign		Text	Text Dimensions (Inches)			Number of Signs Required	Color		Border Radius	Area in Square Feet	Post
	Width	Height		Letter Height	Vertical Spacing	Arrow RTE.MKR.		Background	Legend Border			
MI-1(95)	24"	24"	INTERSTATE 95	SHSB	SHSB	SHSB	1	RED/BLUE	WHITE	SHSB	4.00 (4.00)	MOUNT ON 4"x4" WOOD POST
MI-4(2A)	24"	24"	2A				1	WHITE	BLACK		4.00 (4.00)	MOUNT ON 4"x4" WOOD POST
MI-5(16)	24"	24"	16				5	WHITE	BLACK		4.00 (20.00)	MOUNT ON 4"x4" WOOD POST
M2-1	21"	15"	JCT				2	WHITE	BLACK		2.19 (4.38)	MOUNT ABOVE MI-5(16)
M3-2	24"	12"	EAST				2	WHITE	BLACK		2.00 (4.00)	MOUNT ABOVE MI-5(16) & MI-4(2A)
M3-4	24"	12"	WEST				2	WHITE	BLACK		2.00 (4.00)	MOUNT ABOVE MI-4(2A)
M4-5	24"	12"	TO				1	BLUE	WHITE		2.00 (2.00)	MOUNT ABOVE MI-1(95)
M6-3	21"	15"					1	BLUE	WHITE		2.19 (2.19)	MOUNT BELOW MI-1(95)
M6-4	21"	15"					2	WHITE	BLACK		2.19 (4.38)	MOUNT BELOW MI-5(16)
RI-1	30"	30"	STOP				5	RED	WHITE		6.25 (31.25)	MOUNT ON 4"x4" WOOD POST
RI-2	36" x 36" x 36"		YIELD				1	WHITE	RED		9.00 (9.00)	MOUNT ON 4"x6" WOOD POST
	48" x 48" x 48"						2				16.00 (32.00)	MOUNT ON 6"x6" WOOD POST
R2-1(25)	24"	30"	SPEED LIMIT 25				2	WHITE	BLACK		5.00 (10.00)	U-CHANNEL POST
R3-5a	30"	36"	ONLY				3	WHITE	BLACK		7.50 (22.50)	MOUNT TO MAST ARM
R3-5L	30"	36"	ONLY				6	WHITE	BLACK		7.50 (45.00)	MOUNT TO MAST ARM
R3-5R	30"	36"	ONLY				3	WHITE	BLACK		7.50 (22.50)	MOUNT TO MAST ARM
							1				7.50 (7.50)	MOUNT ON 4"x4" WOOD POST
R3-6L	30"	36"					3	WHITE	BLACK		7.50 (22.50)	MOUNT TO MAST ARM
R3-6R	30"	36"					3	WHITE	BLACK		7.50 (22.50)	MOUNT TO MAST ARM

SHSB - Text Dimensions Shall Conform to "Standard Highway Signs Book" - 2012 Edition.

Identification Number	Size of Sign		Text	Text Dimensions (Inches)			Number of Signs Required	Color		Border Radius	Area in Square Feet	Post
	Width	Height		Letter Height	Vertical Spacing	Arrow RTE.MKR.		Background	Legend Border			
R3-8a	42"	30"	ONLY ONLY	SHSB	SHSB	SHSB	1	WHITE	BLACK	SHSB	8.75 (8.75)	MOUNT ON 4"x4" WOOD POST
R3-8b	42"	30"	ONLY ONLY ONLY				1	WHITE	BLACK		8.75 (8.75)	MOUNT ON 4"x4" WOOD POST
R3-8c	36"	30"	ONLY				2	WHITE	BLACK		7.50 (15.00)	MOUNT ON 4"x4" WOOD POST
R4-7c	18"	30"					2	WHITE	BLACK		3.75 (7.50)	U-CHANNEL POST
R10-3eL	9"	15"					6	WHITE/ ORANGE	BLACK		0.94 (5.64)	MOUNT TO TS POSTS
R10-3eR	9"	15"					6	WHITE/ ORANGE	BLACK		0.94 (5.64)	MOUNT TO TS POSTS
R10-15L	30"	30"	TURNING VEHICLES TO				3	WHITE/ RED/ YELLOW	BLACK		6.25 (18.75)	MOUNT TO MAST ARM
R10-15R	30"	30"	TURNING VEHICLES TO				4	WHITE/ RED/ YELLOW	BLACK		6.25 (25.00)	MOUNT TO MAST ARM
OM4-1	18"	18"					2	RED	RED		2.25 (4.50)	U-CHANNEL POST

SHSB - Text Dimensions Shall Conform to "Standard Highway Signs Book" - 2012 Edition.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER R. MOULTON		
DESIGN-DETAILED	ECF	11/18/2021
CHECKED-REVIEWED	ECF	11/18/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

SIGN SUMMARY SHEET
(1 OF 2)

SHEET NUMBER
42
OF 218

Filename: ...\PLANSET\042_SignSummary_01.dgn Division: HIGHWAY Username: jamesdavis Date:11/18/2021

Identification Number	Size of Sign		Text	Text Dimensions (Inches)			Number of Signs Required	Color		Border Radius	Area in Square Feet	Post
	Width	Height		Letter Height	Vertical Spacing	Arrow RTE.MKR.		Background	Legend Border			
W4-M	36"	36"					2	BLACK	YELLOW		9.00 (18.00)	MOUNT ON 6" X 6" WOOD POST
W4-2L	36"	36"					1	YELLOW	BLACK		9.00 (9.00)	MOUNT ON 4"x4" WOOD POST
W11-2	30"	30"					4	YELLOW	BLACK		6.25 (25.00)	MOUNT ON 4"x4" WOOD POST
W14-1	30"	30"	DEAD END				1	YELLOW	BLACK		6.25 (6.25)	MOUNT ON 4"x4" WOOD POST
W14-1aL	36"	8"	← DEAD END				1	YELLOW	BLACK		2.00 (2.00)	MOUNT ABOVE R1-1
W14-1aR	36"	8"	DEAD END →				1	YELLOW	BLACK		2.00 (2.00)	MOUNT ABOVE R1-1
W16-7pL	24"	12"					2	YELLOW	BLACK		2.00 (4.00)	MOUNT BELOW W11-2
W16-7pR	24"	12"					2	YELLOW	BLACK		2.00 (4.00)	MOUNT BELOW W11-2
W16-9P(MODa)	36"	18"	ALTERNATE MERGING	5C 5C	2.5 3.0 2.5		2	BLACK	YELLOW		6.00 (12.00)	MOUNT BELOW W4-M
W16-9P(MODb)	24"	18"	TAKE TURNS	5C 5C	2.5 3.0 2.5		2	BLACK	YELLOW		4.00 (8.00)	MOUNT BELOW W16-9P(MODa)

SHSB - Text Dimensions Shall Conform to "Standard Highway Signs Book" - 2012 Edition.

Identification Number	Size of Sign		Text	Text Dimensions (Inches)			Number of Signs Required	Color		Border Radius	Area in Square Feet	Post
	Width	Height		Letter Height	Vertical Spacing	Arrow RTE.MKR.		Background	Legend Border			
D1-1a	90"	18"	← University of Maine				1	GREEN	WHITE	1.5"	11.25 (11.25)	MOUNT ON 2 - 4" X 4" WOOD POST
D1-1b	90"	18"	University of Maine →				1	GREEN	WHITE	1.5"	11.25 (11.25)	MOUNT ON 2 - 4" X 4" WOOD POST
D1-2	66"	30"	← Lagrange Orono →			6"x9"	1	GREEN	WHITE	1.875"	13.75 (13.75)	MOUNT ON 2 - 4" X 6" WOOD POST
D1-3	66"	42"	↑ Bangor ← Orono Lagrange →			6"x9"	1	GREEN	WHITE	2.25"	19.25 (19.25)	MOUNT ON 2 - 6" X 6" WOOD POST
D3-1a	54"	12"	Stillwater Ave				3	GREEN	WHITE	1.50"	4.50 (13.50)	MOUNT ON 2 U-CHANNEL POST, SHARED WITH D3-1b AND D3-1g
D3-1b	66"	12"	South Spring St				2	GREEN	WHITE	1.50"	5.50 (11.00)	MOUNT ON 2 U-CHANNEL POSTS
D3-1c	48"	12"	Michael St				1	GREEN	WHITE	1.50"	4.00 (4.00)	MOUNT ABOVE R1-1 WITH SECOND POST
D3-1d	42"	12"	Spring St				1	GREEN	WHITE	1.50"	3.50 (3.50)	MOUNT ABOVE R1-1
D3-1e	48"	12"	Old Mill Rd				1	GREEN	WHITE	1.50"	4.00 (4.00)	MOUNT ABOVE D3-1a
D3-1f	48"	12"	College Ave				1	GREEN	WHITE	1.50"	4.00 (4.00)	MOUNT ABOVE R1-1
D3-1g	48"	12"	Bennoch Rd				2	GREEN	WHITE	1.50"	4.00 (8.00)	MOUNT ON 2 U-CHANNEL POST, SHARED WITH D3-1a

SHSB - Text Dimensions Shall Conform to "Standard Highway Signs Book" - 2012 Edition.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/18/2021
CHECKED-REVIEWED	ECF	AG	11/18/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

SIGN SUMMARY SHEET
(2 OF 2)

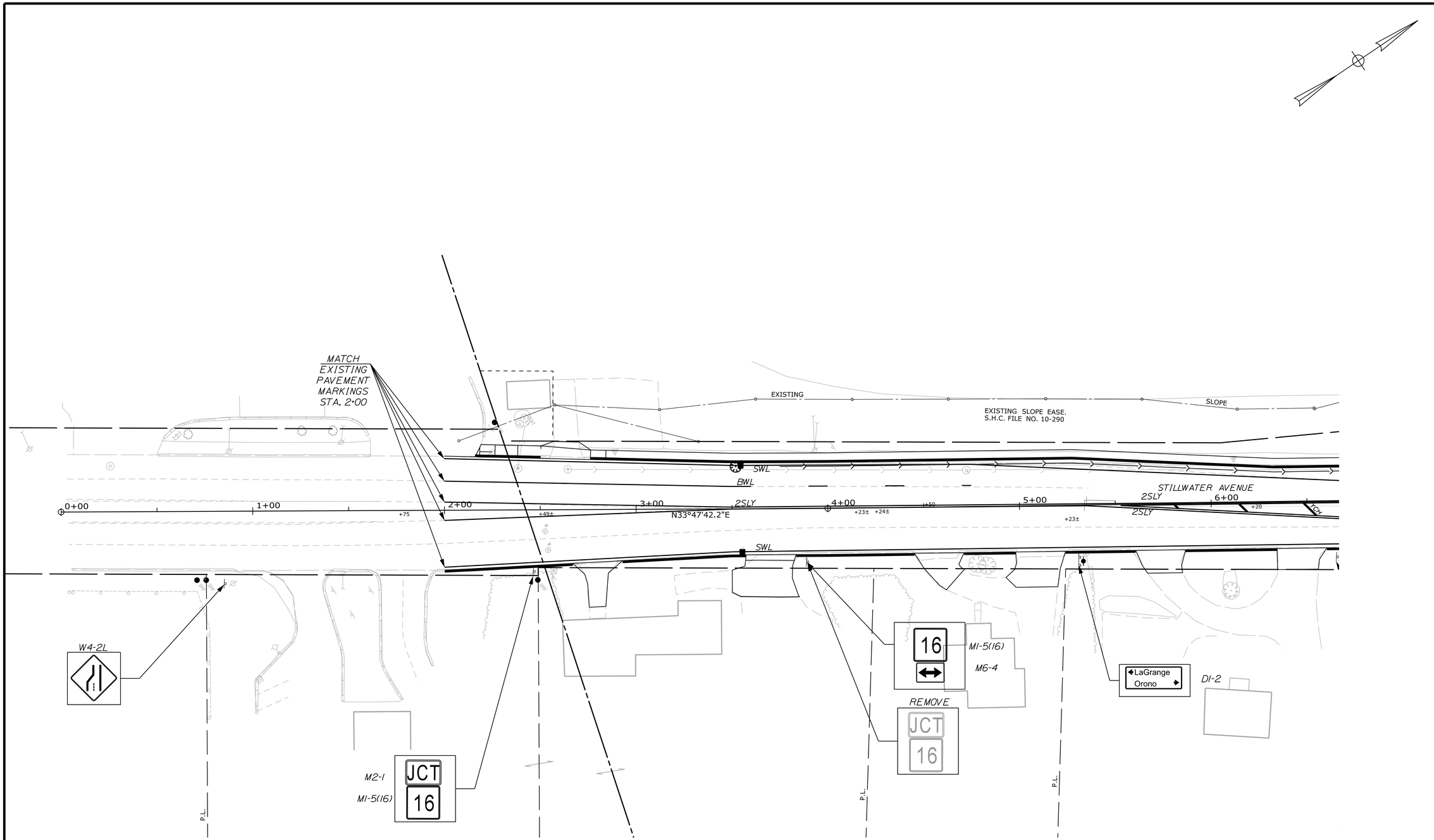
SHEET NUMBER

43

OF 218

Filename: ...\PLANSET\043_SignSummary_02.dgn Division: HIGHWAY Username: jamesdavis Date:11/18/2021

Filename: ...\PLANSET\044-053_SignStripe.dgn Division: HIGHWAY Username: jamesdavis Date:11/18/2021

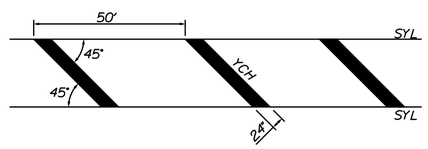


PLAN

25 0 25 50

Scale of Feet

YELLOW CROSS HATCHING DETAIL



SIGNING AND PAVEMENT MARKING LEGEND

SWL - SINGLE WHITE SOLID LINE
BWL - SINGLE WHITE BROKEN LINE (10' LINE 30' SPACE)
BYL - SINGLE YELLOW BROKEN LINE (10' LINE 30' SPACE)
SYL - SINGLE YELLOW SOLID LINE
2SLY - DOUBLE YELLOW SOLID LINE
SL - SINGLE SOLID LINE - STOPLINE (24")
DWL - DOTTED WHITE LANE LINE WITH TAPE (3' LINE 9' SPACE)
DWRL - DOTTED WHITE RECESSED THERMOPLASTIC LINE (2' LINE 6' SPACE)
↰ N - WHITE PAVEMENT MARKING SYMBOLS
DYL - DOTTED YELLOW LINE
YCH - YELLOW CROSS HATCHING (SEE DETAIL)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/18/2021
CHECKED-REVIEWED	ECF	AG	11/18/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

OLD TOWN
STILLWATER AVENUE

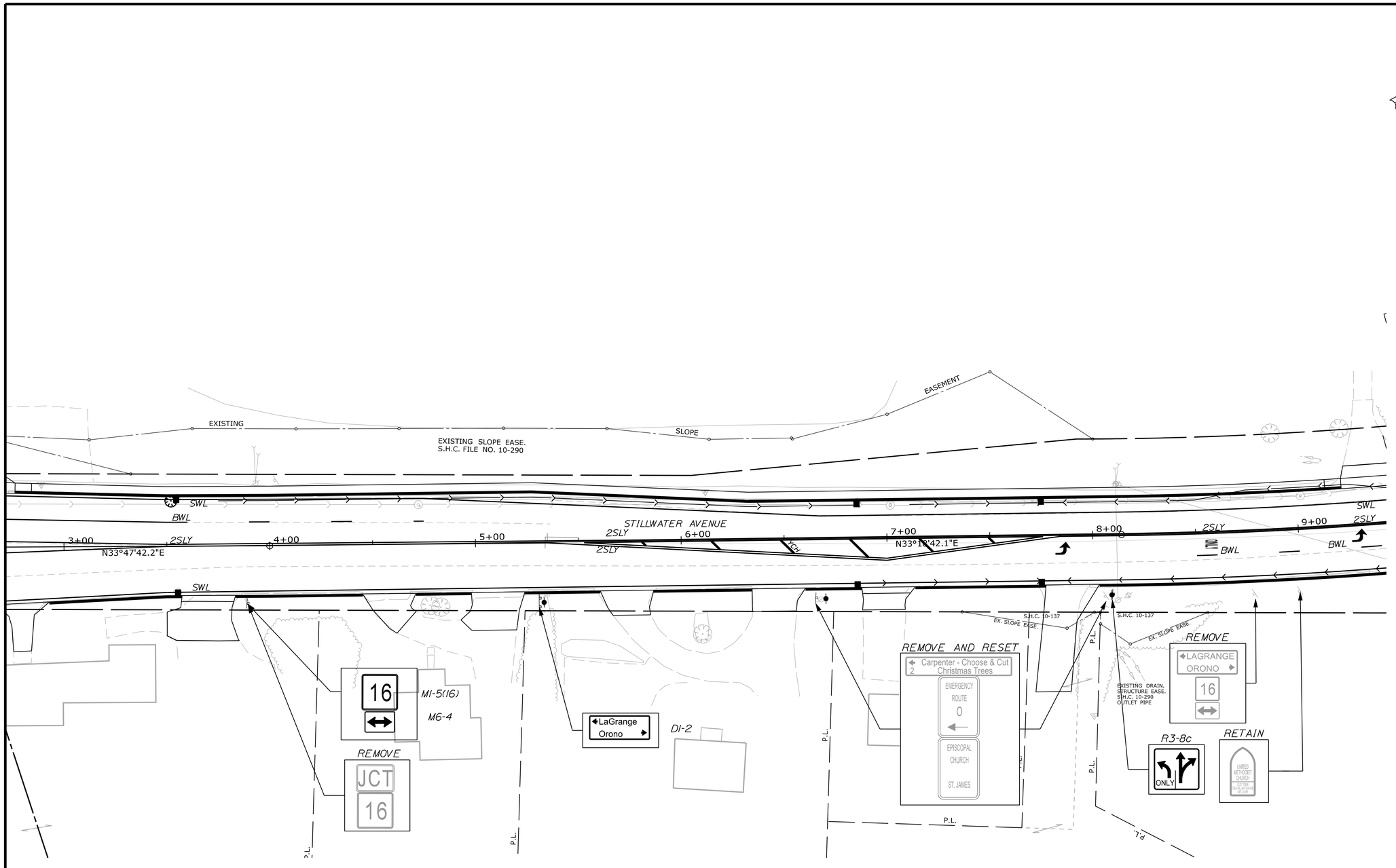
SIGNING AND STRIPING
PLANS (1 OF 10)

SHEET NUMBER

44

OF 218

Filename: ...\PLANSET\044-053_SignStripe.dgn Division: HIGHWAY Username: jamesdavis Date:11/18/2021



PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R. MOULTON	
DESIGN-DETAILED	ECF	11/18/2021
CHECKED-REVIEWED	ECF	11/18/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

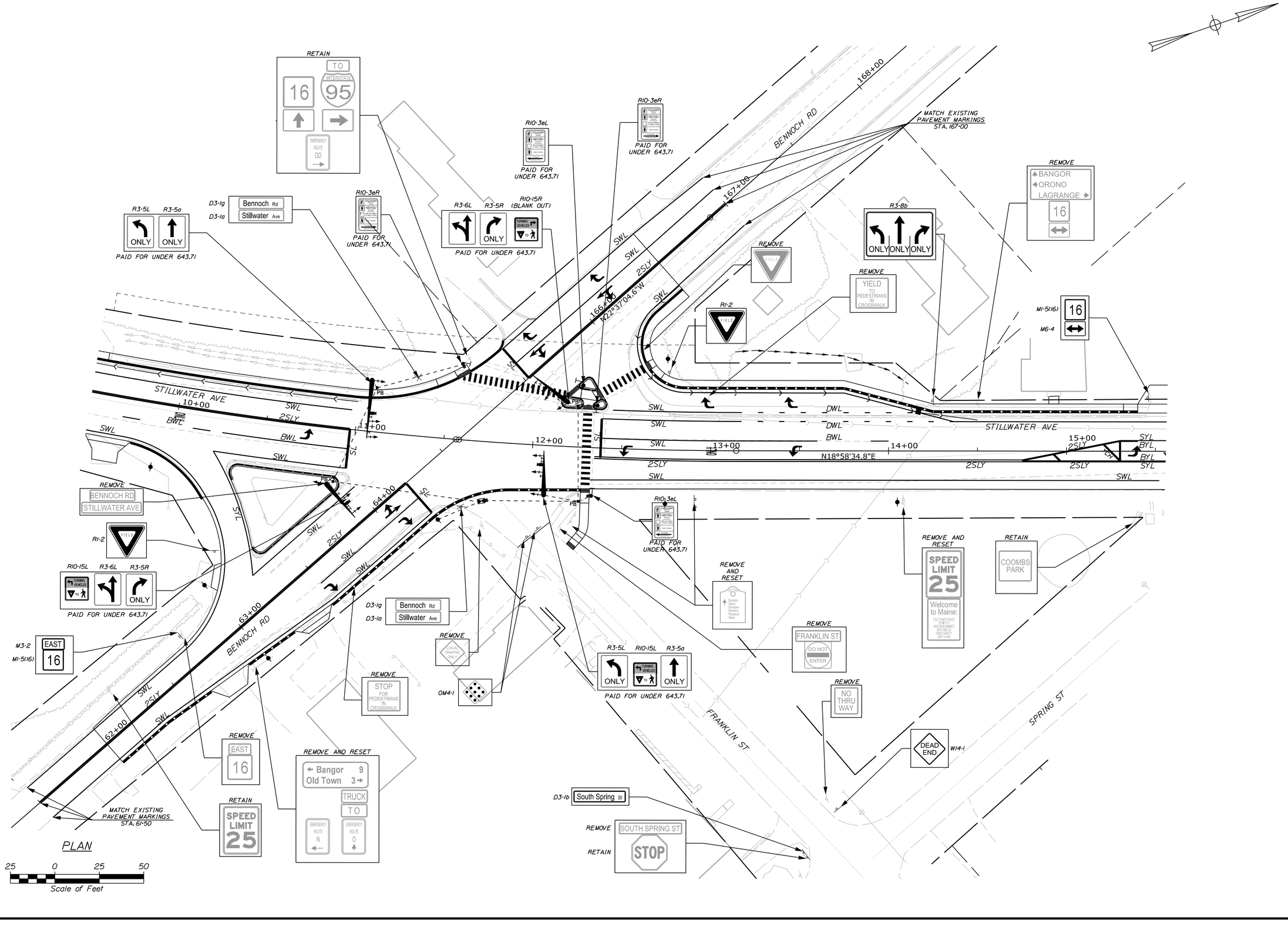
DATE

OLD TOWN
STILLWATER AVENUE
SIGNING AND STRIPING PLANS (2 OF 10)

SHEET NUMBER

45

OF 218



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/18/2021
CHECKED-REVIEWED	ECF	AG	11/18/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

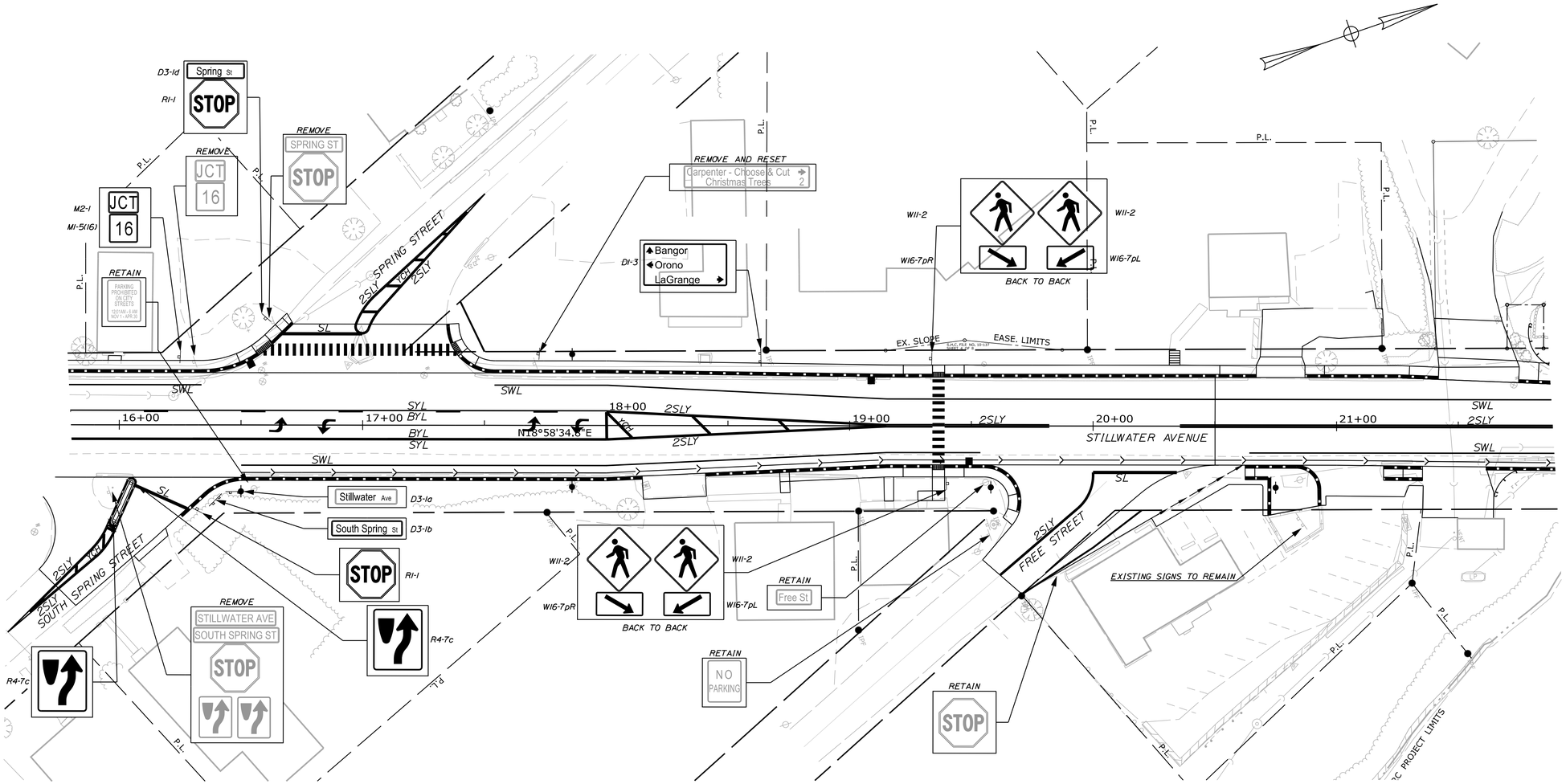
SIGNING AND STRIPING
PLANS (3 OF 10)

SHEET NUMBER

46

OF 218

Filename: ...\PLANSET\044-053_SignStripe.dgn Division: HIGHWAY Username: jamesdavis Date:11/18/2021



PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

OLD TOWN
STILLWATER AVENUE
SIGNING AND STRIPING PLANS (4 OF 10)

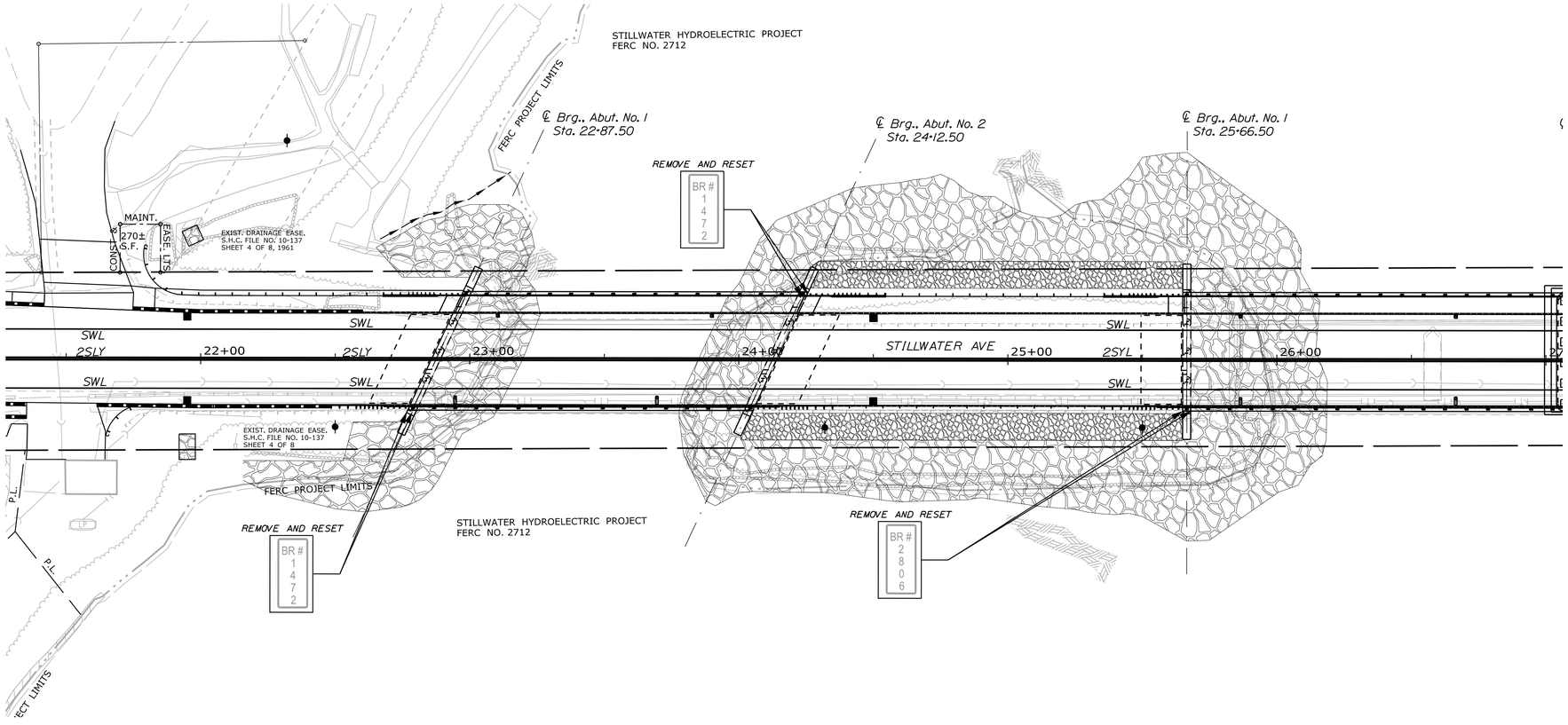
SHEET NUMBER

47

OF 218

Filename: ...\PLANSET\044-053_SignStripe.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\PLANSET\044-053_SignStripe.dgn Division: HIGHWAY Username: jomesdavis Date:11/17/2021



PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

SIGNING AND STRIPING
PLANS (5 OF 10)

SHEET NUMBER

48

OF 218

Filename: ...\PLANSET\044-053_SignStripe.dgn Division: HIGHWAY Username: jomesdavis Date:11/17/2021

LOT 1

REMOVE AND RESET
BR # 6 0 6
STILLWATER HYDROELECTRIC PROJECT
FERC NO. 2712

REMOVE AND RESET
ENTERING MARSH ISLAND
WILDLIFE MANAGEMENT AREA
CLOSED TO ALL HUNTING

FERC PROJECT LIMITS

R2-1(25)
SPEED LIMIT 25

REMOVE AND RESET
OFSR18 STORMWATER OUTFALL
OFSR19 STORMWATER OUTFALL

REMOVE
TO INTERSTATE 95

REMOVE
MICHAEL ST
STOP

REMOVE
SPEED LIMIT 25

REMOVE
NO PARKING HERE TO CORNER

Michael St
STOP
D3-1c
R1-1

M4-5
M4-1(95)
M6-3
TO INTERSTATE 95

EXIST. DRAINAGE EASE.
S.H.C. FILE NO. 10-137
SHEET 4 OF 8, 1961

SWL
2SYL
28+00
29+00
30+00
2SLY
31+00
32+00
50+00
51+00
SL
2SLY
YCH
2SLY
33+00
34+00
BWL

EXIST. DRAINAGE EASE.
S.H.C. FILE NO. 10-137
SHEET 4 OF 8, 1961

EXIST. DRAINAGE EASE.

EXIST. SLOPE EASE.
S.H.C. FILE NO.10-137
SHEET 4 OF 8, 1961

FERC PROJECT LIMITS

STILLWATER HYDROELECTRIC PROJECT
FERC NO. 2712

RETAIN
Llewellyn G Estes Memorial Bridge

RETAIN
WARNING
UNDERGROUND CABLE

RETAIN
3½ Milford Motel
1 DQ Open Year Round
⅒ Appearance Plus Car Wash

EXIST. DRAINAGE EASE.
S.H.C. FILE NO. 10-137

RESET FROM STA 34+75

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

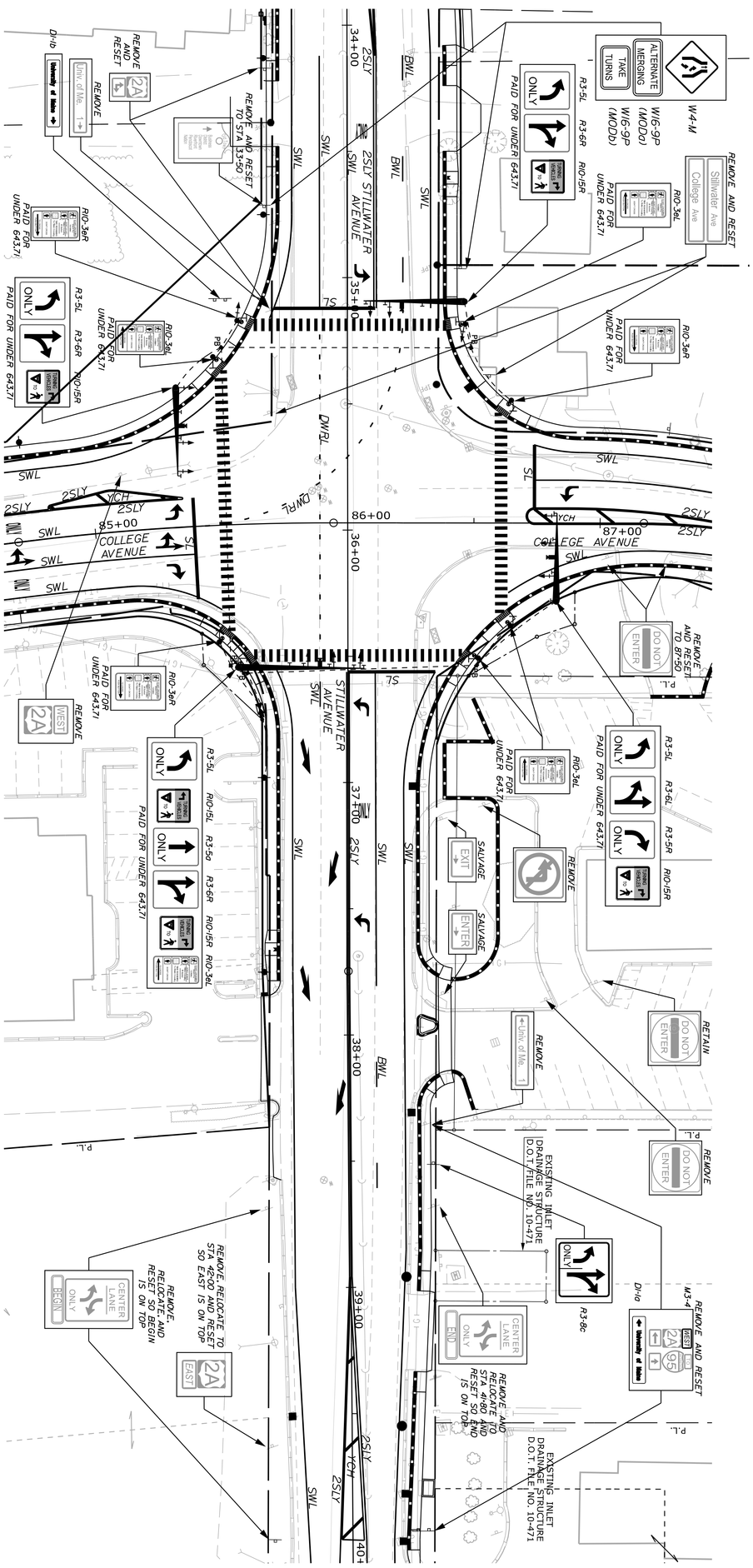
OLD TOWN
STILLWATER AVENUE

SIGNING AND STRIPING
PLANS (6 OF 10)

SHEET NUMBER
49
OF 218

PLAN

25 0 25 50
Scale of Feet



OLD TOWN STILLWATER AVENUE SIGNING AND STRIPING PLANS (7 OF 10)			STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2189401 WIN 022950.01 HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

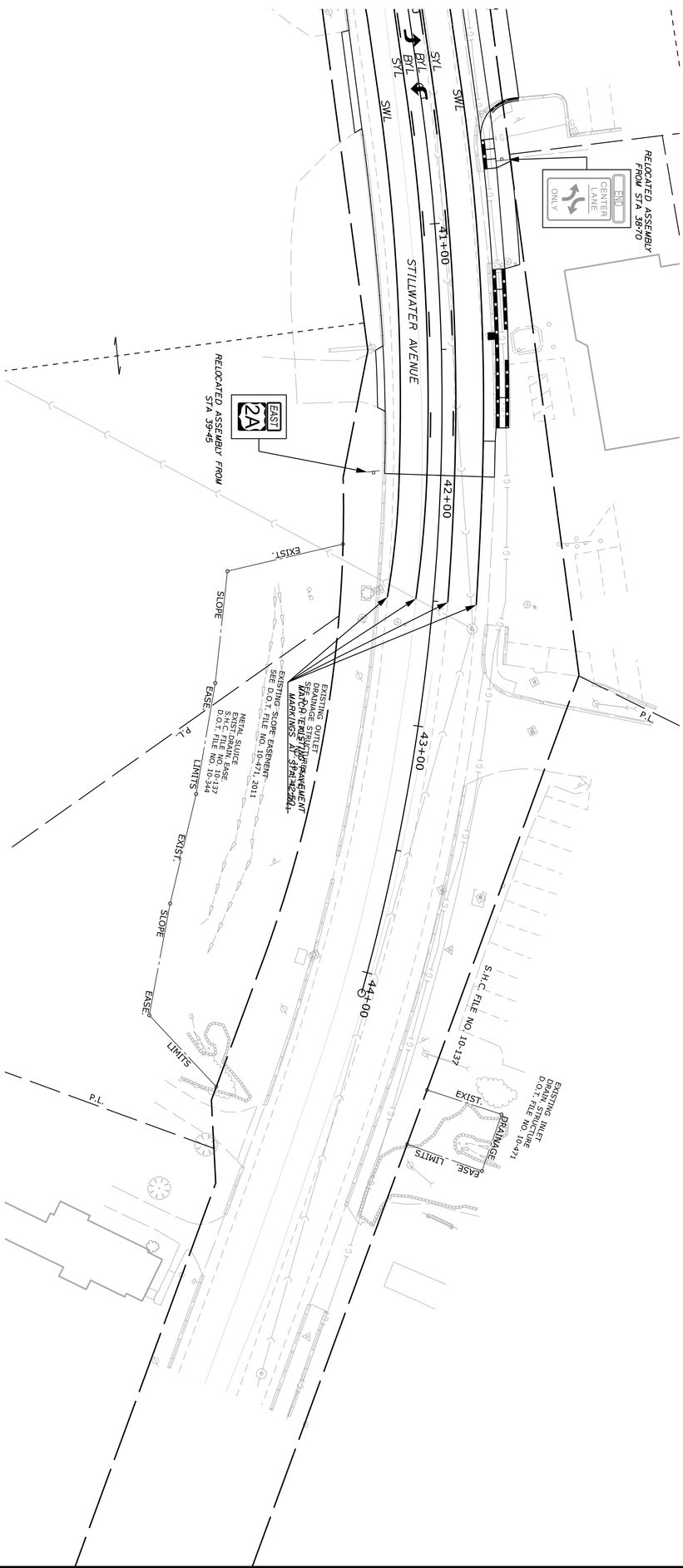
P.E. NUMBER

DATE

SHEET NUMBER 50 OF 218

25 0 25 50
Scale of Feet

PLAN



PROJ. MANAGER	R. MOULTON	BY	DATE	
DESIGN-DETAILED	ECF	JBD	11/17/2021	
CHECKED-REVIEWED	ECF	AG	11/17/2021	SIGNATURE
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				P.E. NUMBER
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				DATE
REVISIONS 4				
FIELD CHANGES				

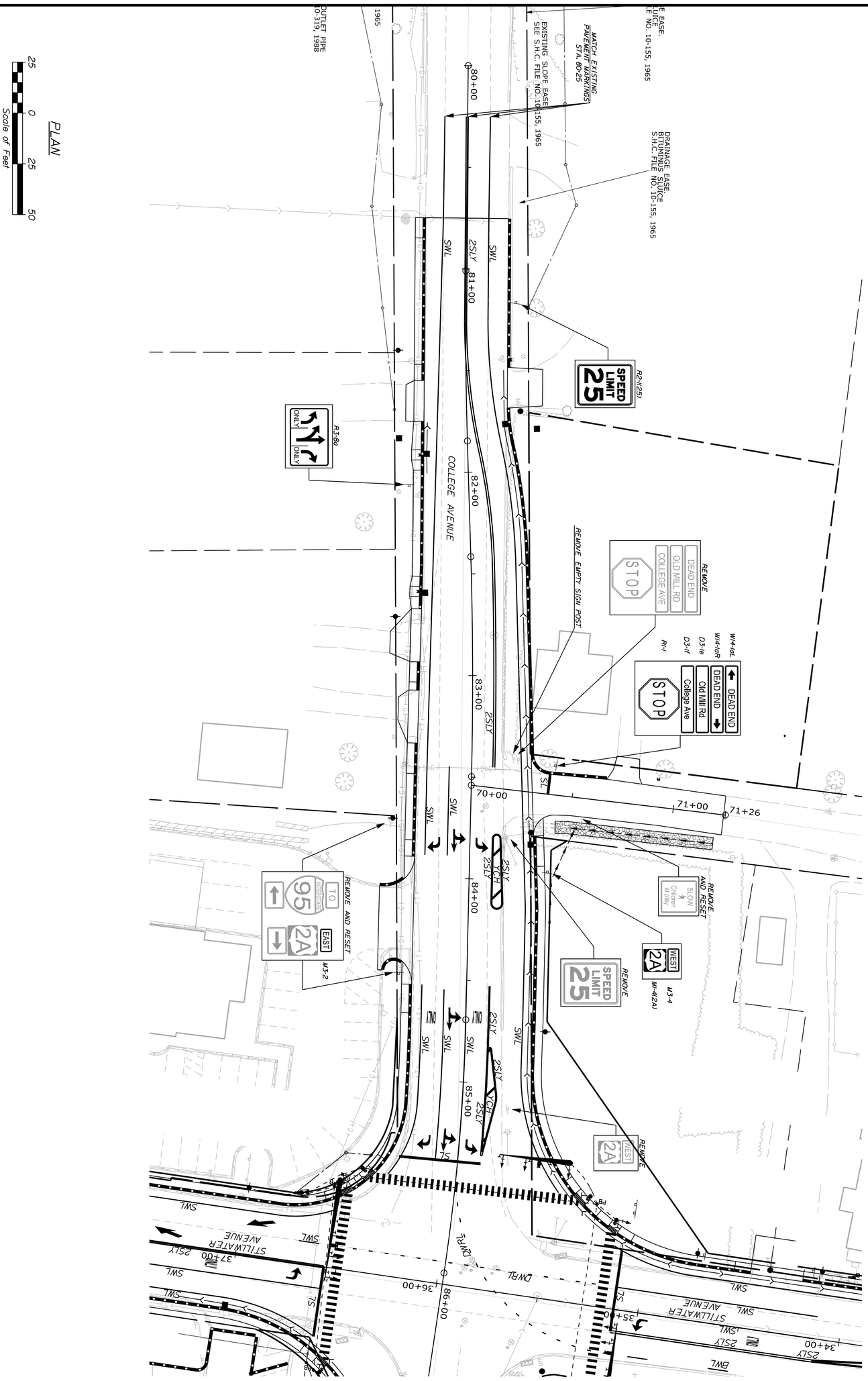
OLD TOWN
STILLWATER AVENUE
SIGNING AND STRIPING PLANS (8 OF 10)

SHEET NUMBER 51 OF 218

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01 HIGHWAY PLANS



SHEET NUMBER 52 OF 218	OLD TOWN STILLWATER AVENUE SIGNING AND STRIPING PLANS (9 OF 10)	PROJ. MANAGER: R. MOULTON	BY	DATE
		DESIGN-DETAILED: ECF	JBD	11/17/2021
		CHECKED-REVIEWED: ECF	AG	11/17/2021
		DESIGN2-DETAILED2		
		DESIGN3-DETAILED3		
		REVISIONS 1		
		REVISIONS 2		
		REVISIONS 3		
		REVISIONS 4		
		FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

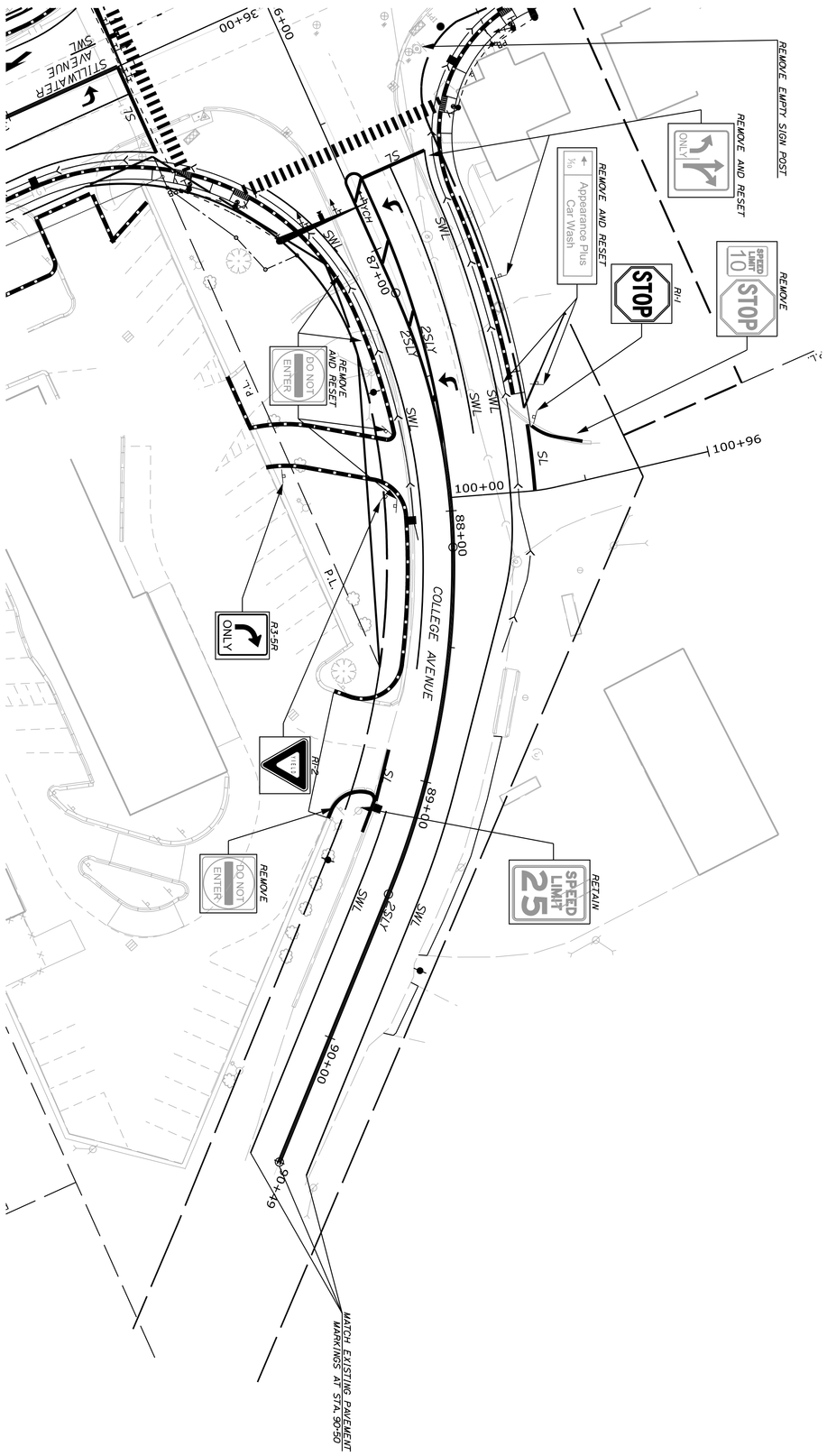
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01 HIGHWAY PLANS

PLAN

25 0 25 50
Scale of Feet



SHEET NUMBER 53 OF 218	OLD TOWN COLLEGE AVENUE SIGNING AND STRIPING PLANS (10 OF 10)	PROJ. MANAGER R. MOULTON	BY	DATE
		DESIGN-DETAILED ECF	JBD	11/17/2021
		CHECKED-REVIEWED ECF	AG	11/17/2021
		DESIGN2-DETAILED2		
		DESIGN3-DETAILED3		
		REVISIONS 1		
		REVISIONS 2		
		REVISIONS 3		
		REVISIONS 4		
		FIELD CHANGES		

SIGNATURE

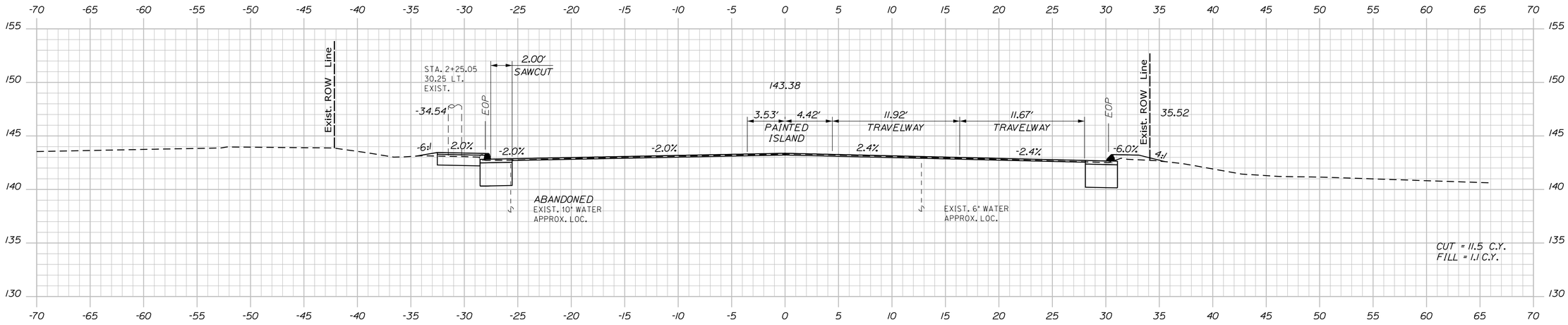
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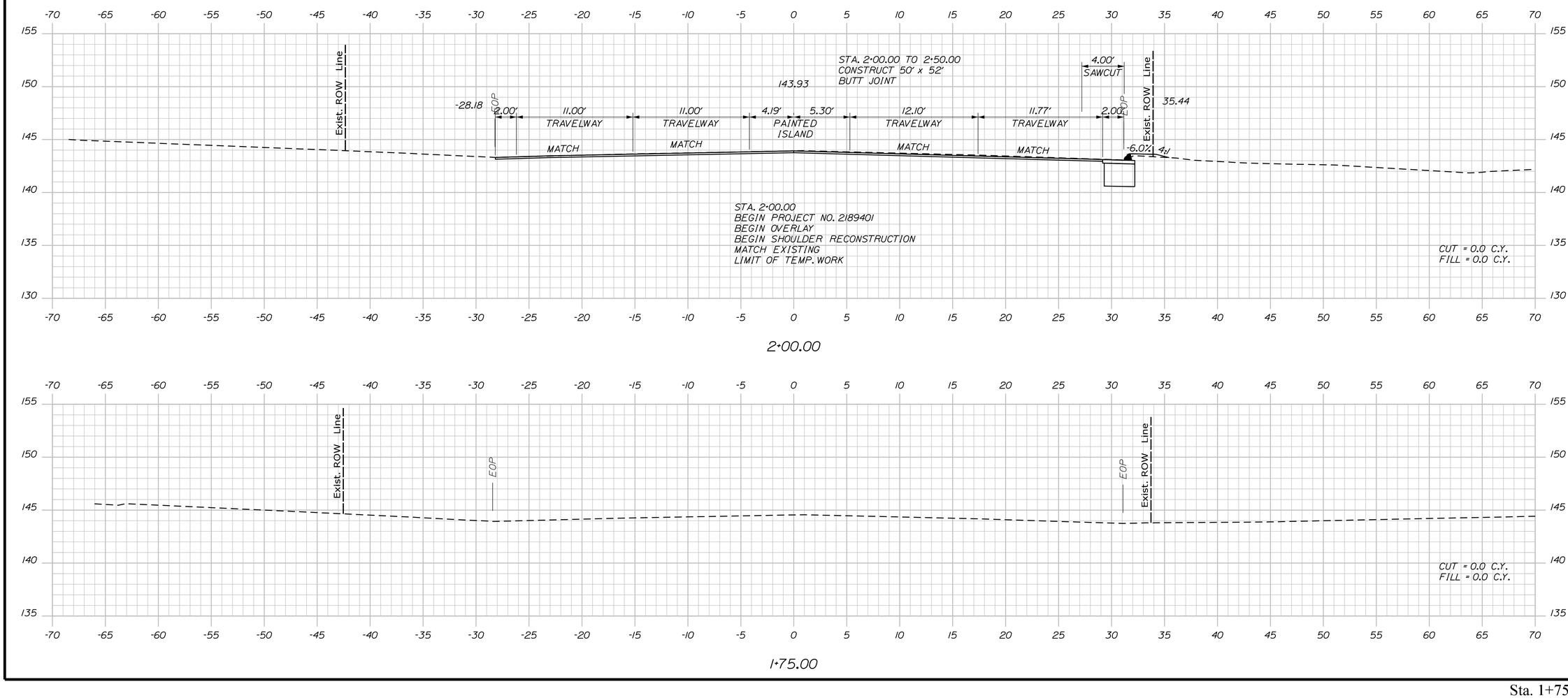
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01 HIGHWAY PLANS





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

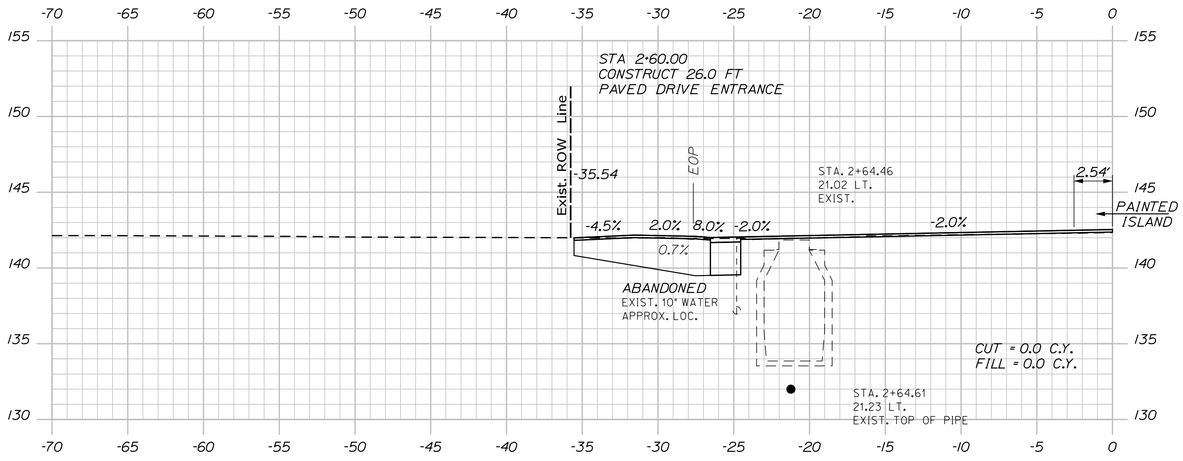
SHEET NUMBER

54

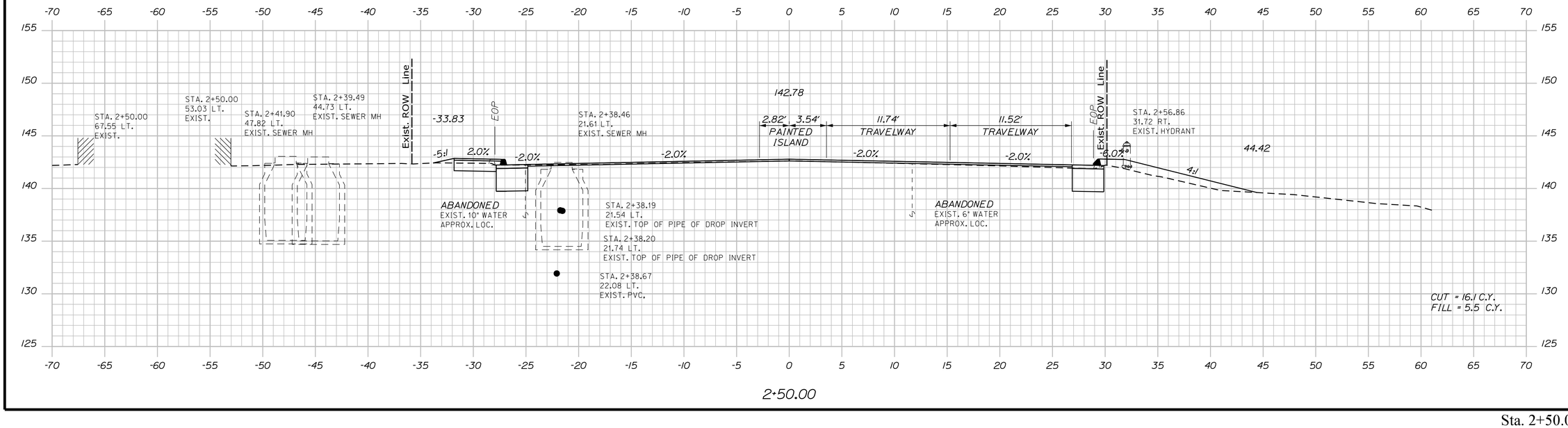
OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Sta. 1+75.00 to Sta. 2+25.00



2+60.00



2+50.00

Sta. 2+50.00 to Sta. 2+60.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

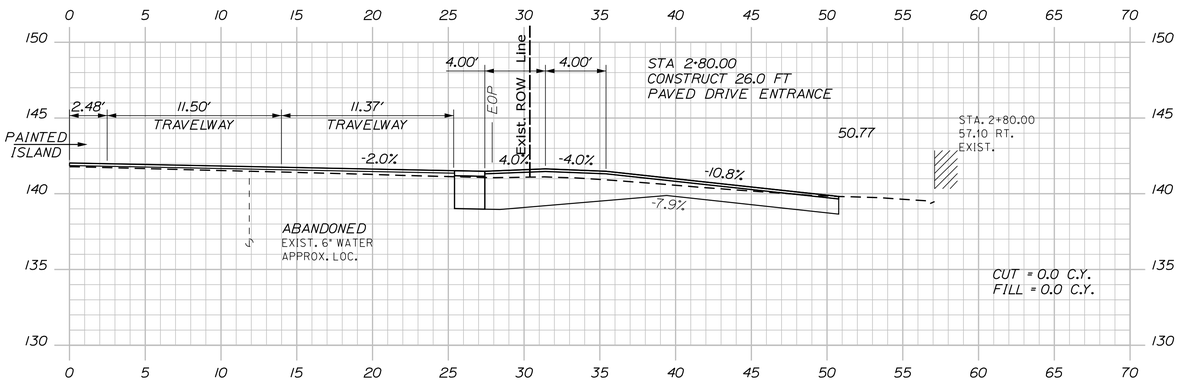
CROSS SECTIONS

SHEET NUMBER

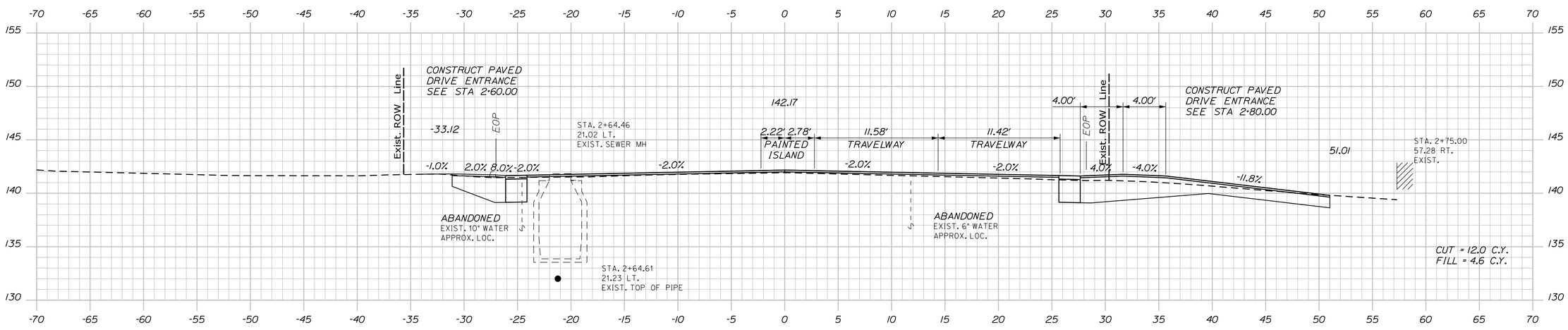
55

OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



2+80.00



2+75.00

Sta. 2+75.00 to Sta. 2+80.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

56

OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

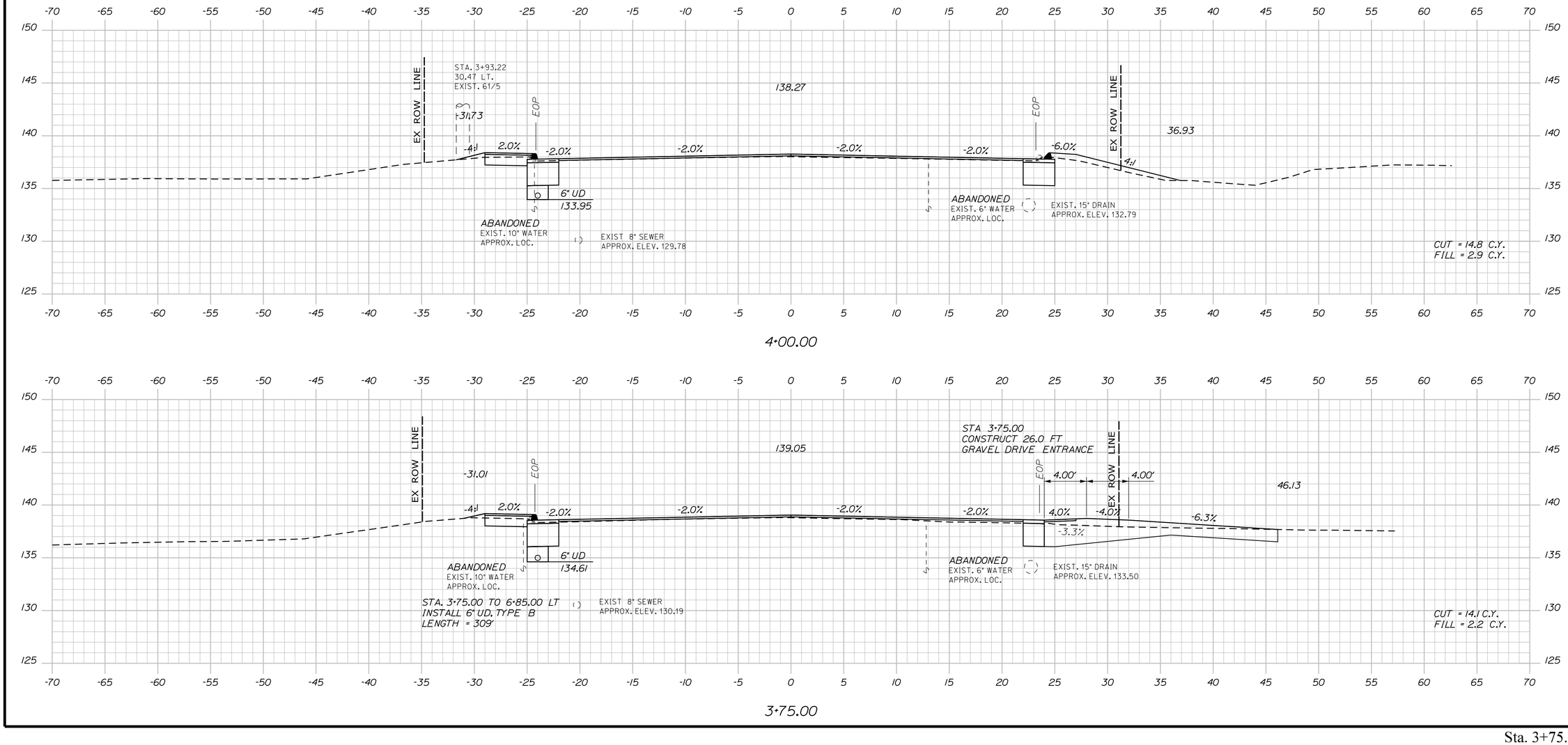
SHEET NUMBER

57

OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Sta. 3+00.00 to Sta. 3+50.00



Sta. 3+75.00 to Sta. 4+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

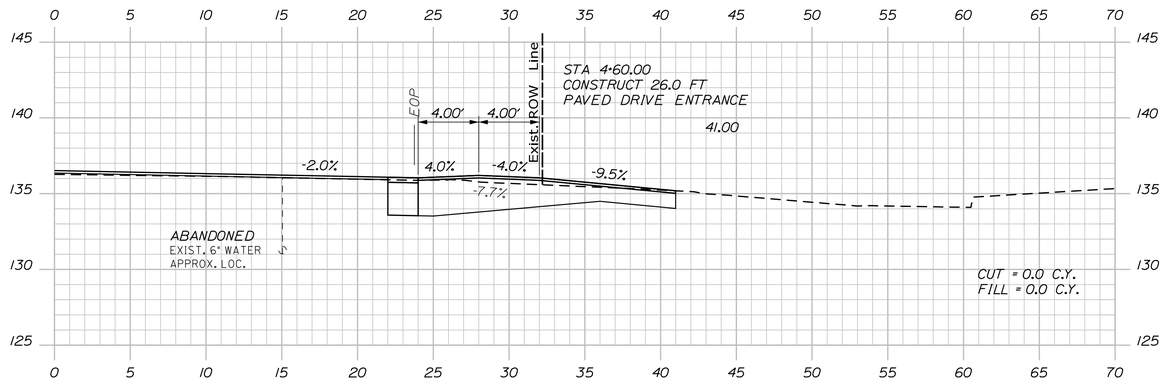
58

OF 218

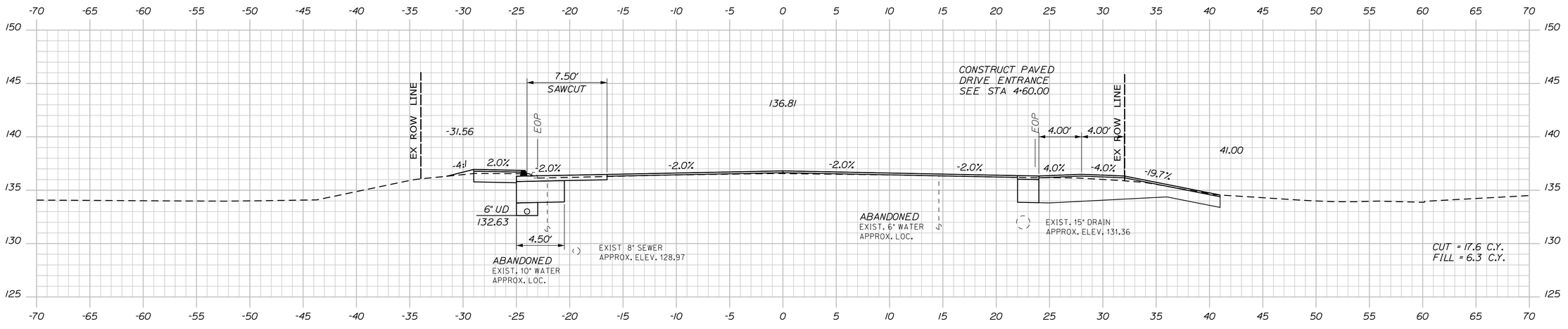
Username: jamesdavis Date:11/17/2021

Division: HIGHWAY

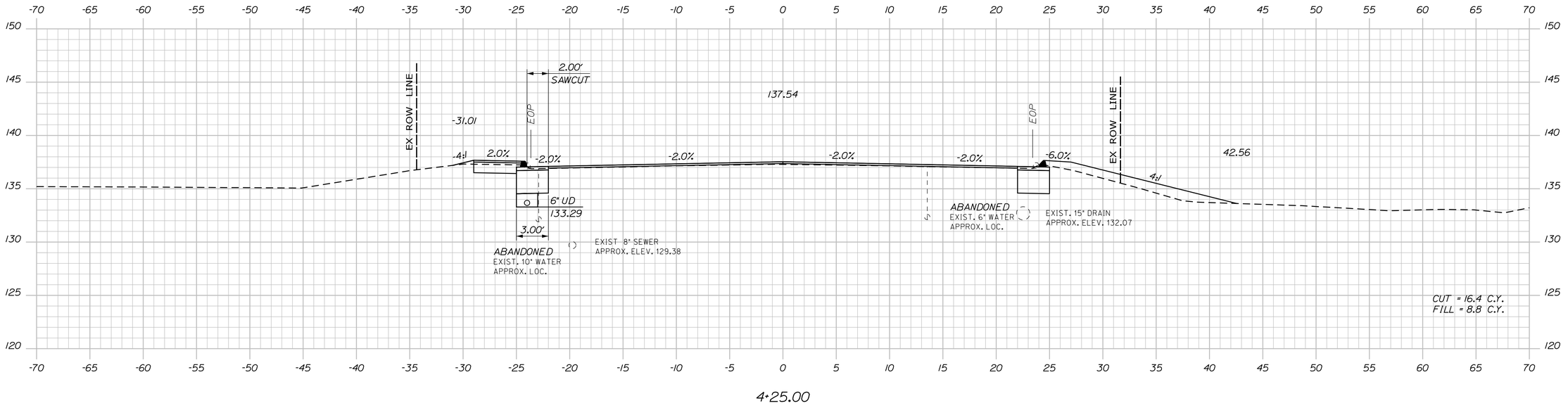
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4+60.00



4+50.00



4+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED		JBD	11/17/2021
CHECKED-REVIEWED		ECF	11/17/2021
DESIGN2-DETAILED2		AG	SIGNATURE
DESIGN3-DETAILED3			
REVISIONS 1			P.E. NUMBER
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			DATE
FIELD CHANGES			

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

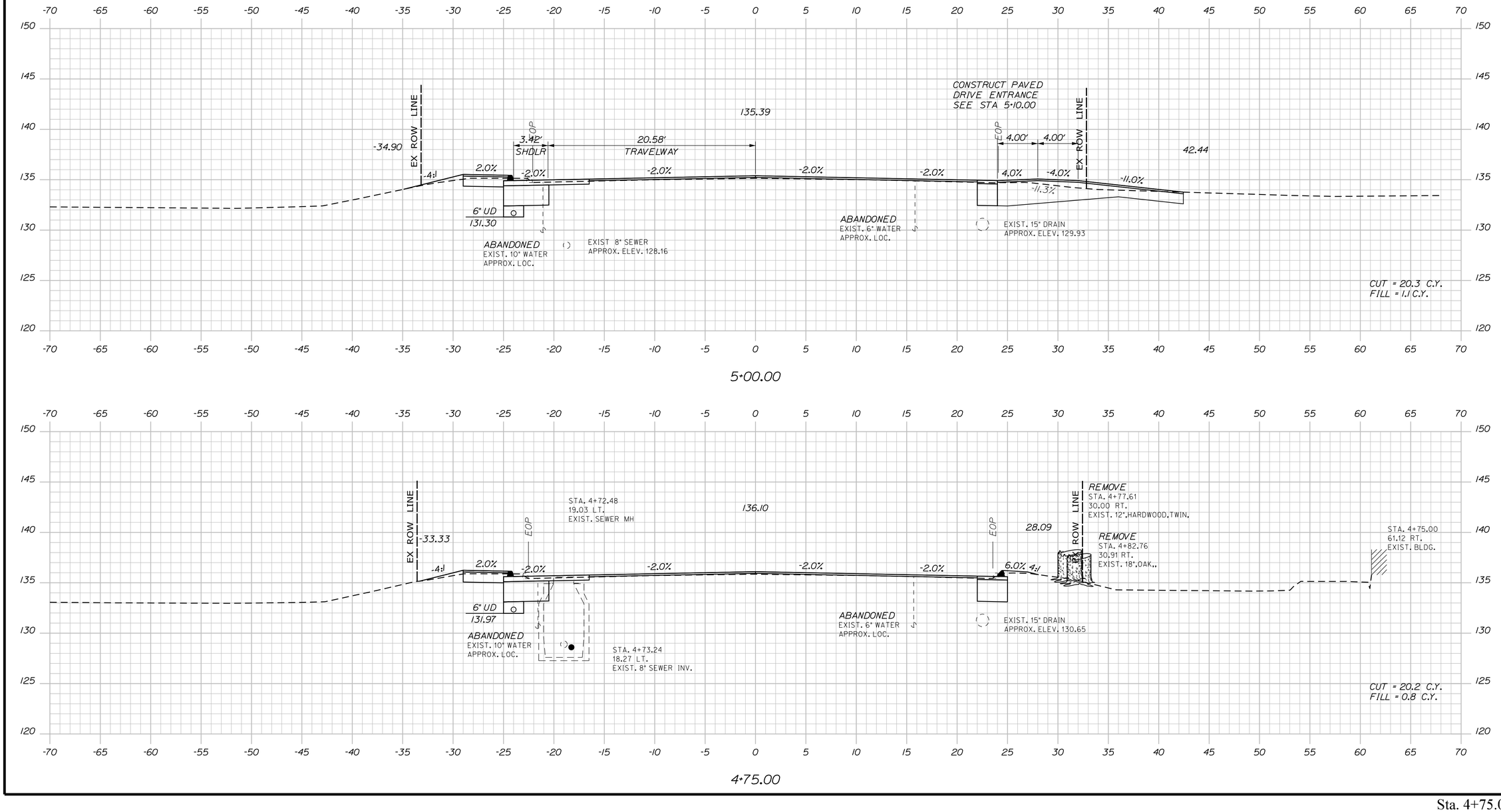
59

OF 218

Sta. 4+25.00 to Sta. 4+50.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jomesdavis Date:11/17/2021

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2	ECF		
DESIGN3-DETAILED3	ECF		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

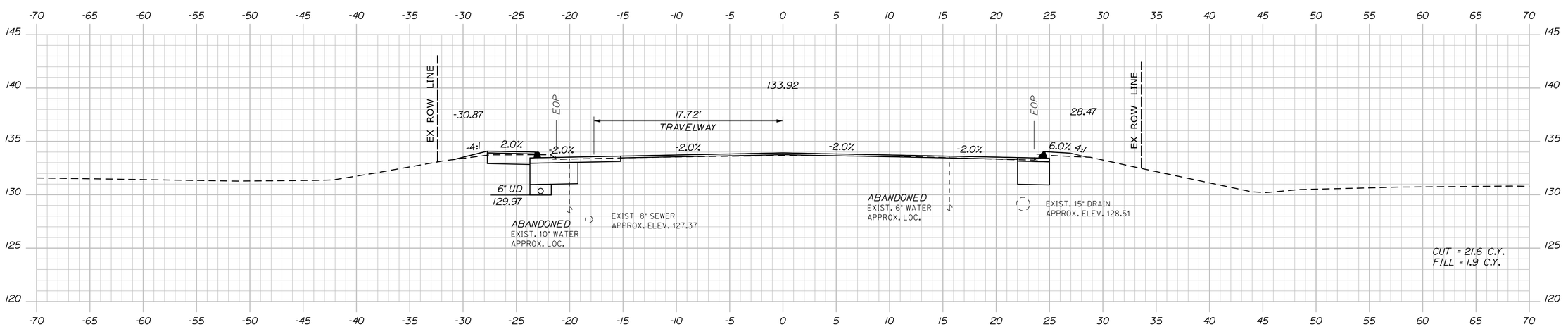
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SHEET NUMBER

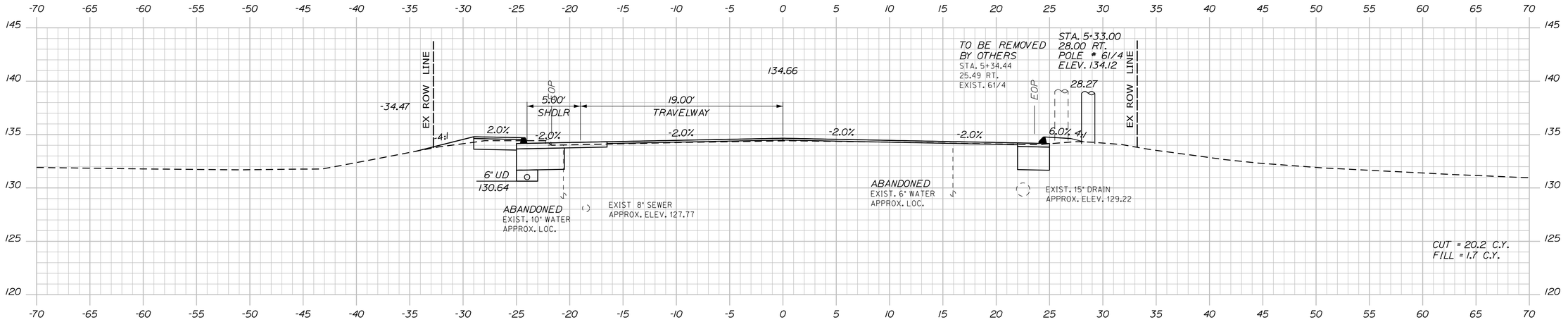
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OF 218

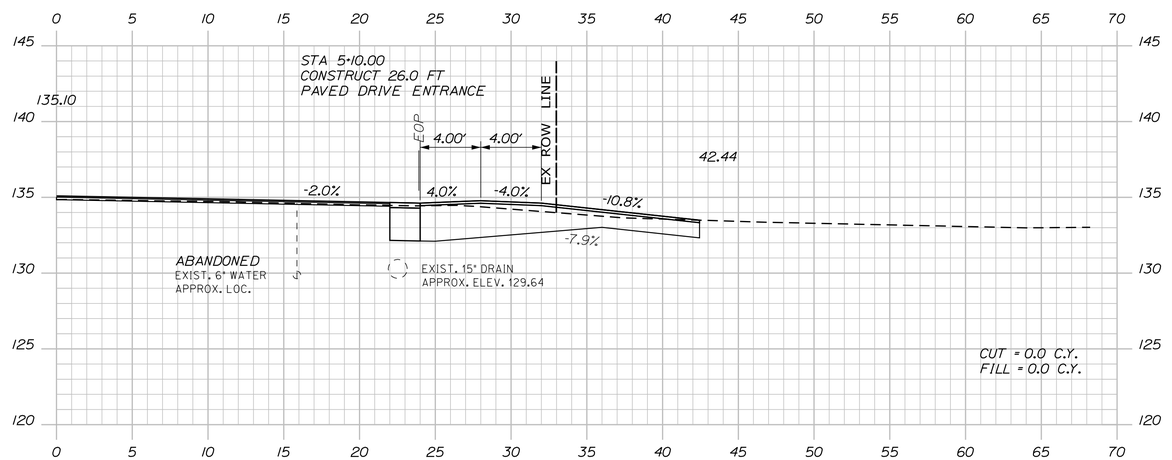
Sta. 4+75.00 to Sta. 5+00.00



5+50.00



5+25.00



5+10.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

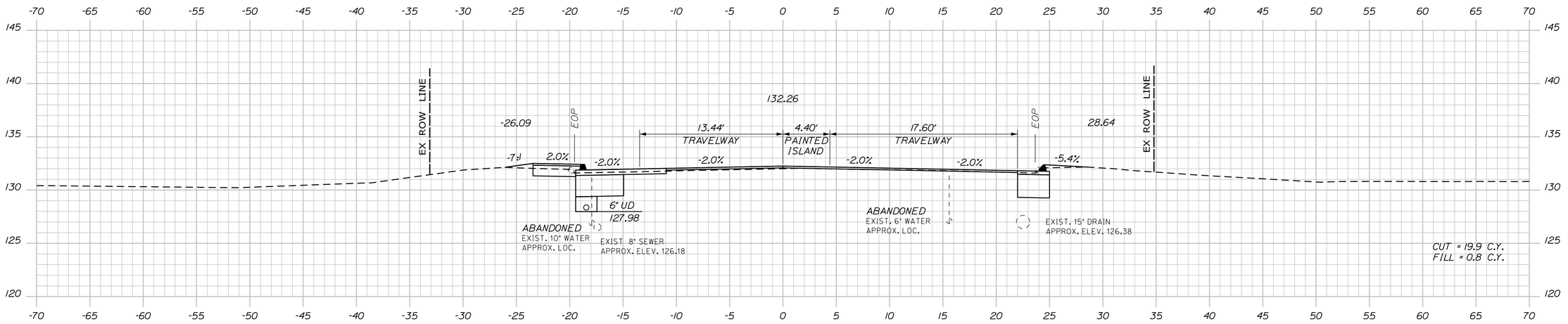
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61

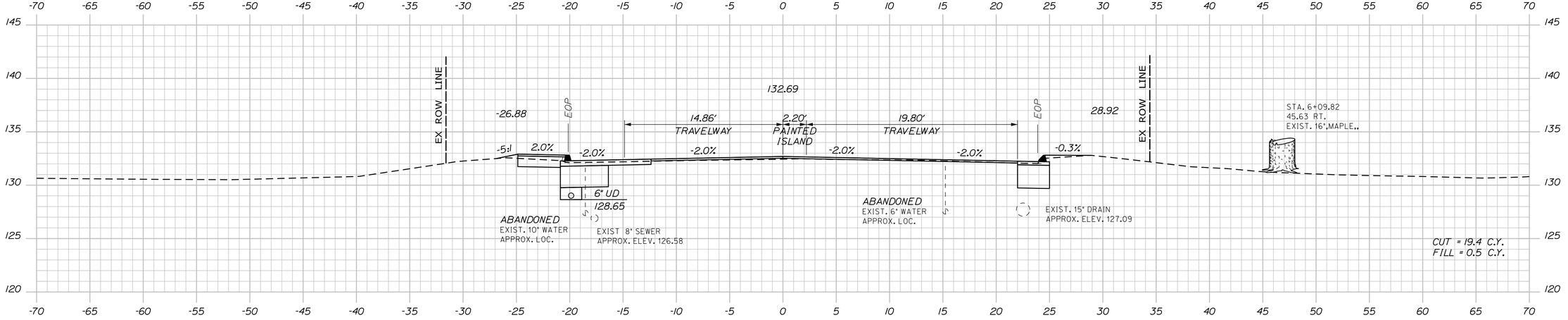
OF 218

Sta. 5+10.00 to Sta. 5+50.00

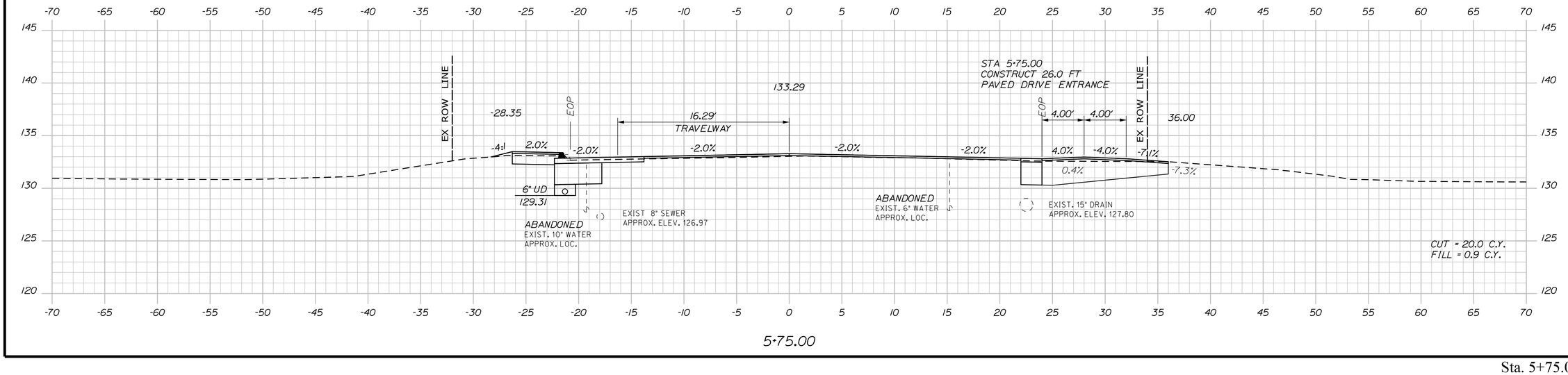
Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



6+25.00



6+00.00



5+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

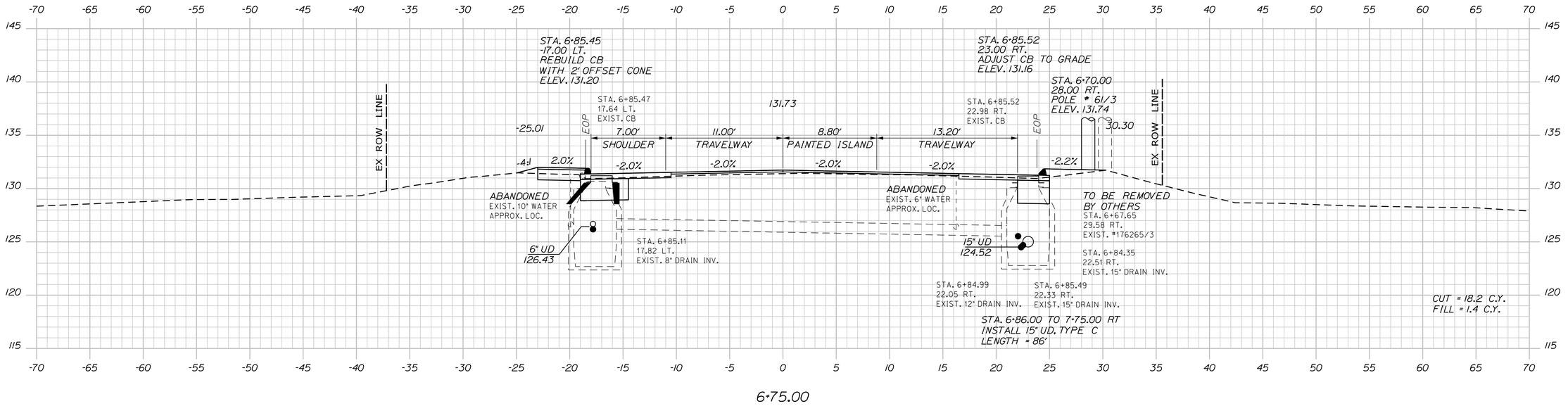
62

OF 218

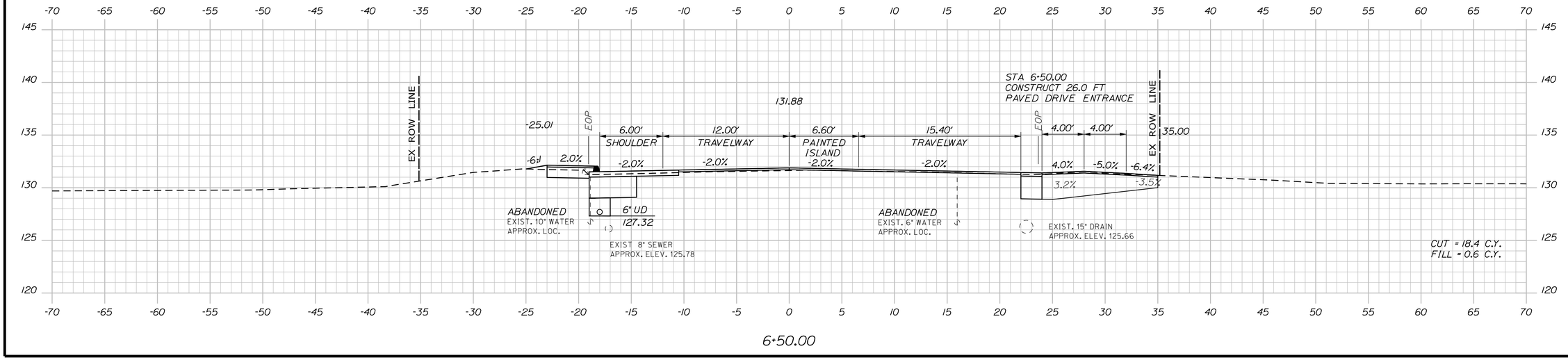
Sta. 5+75.00 to Sta. 6+25.00

Username: jamesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\054-153_Cross-Sections.dgn

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



6+75.00



6+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

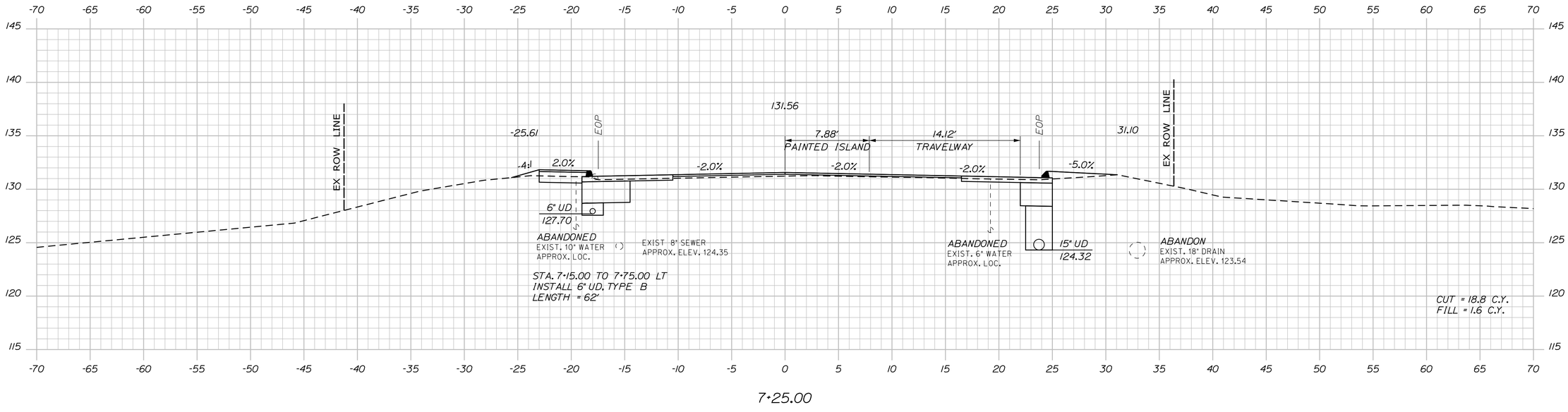
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SHEET NUMBER

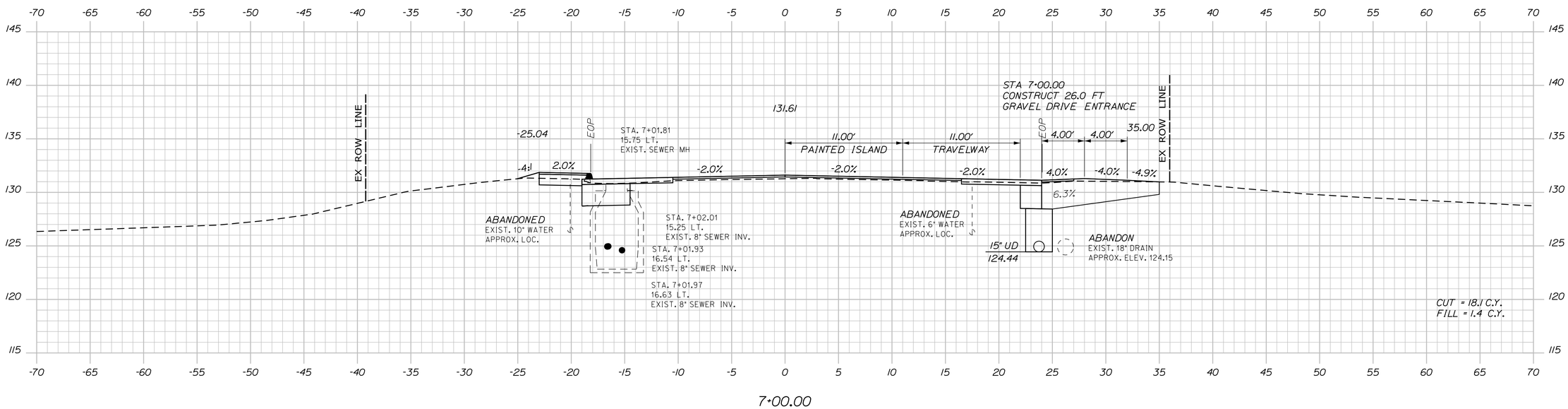
63

OF 218

Sta. 6+50.00 to Sta. 6+75.00



7+25.00



7+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

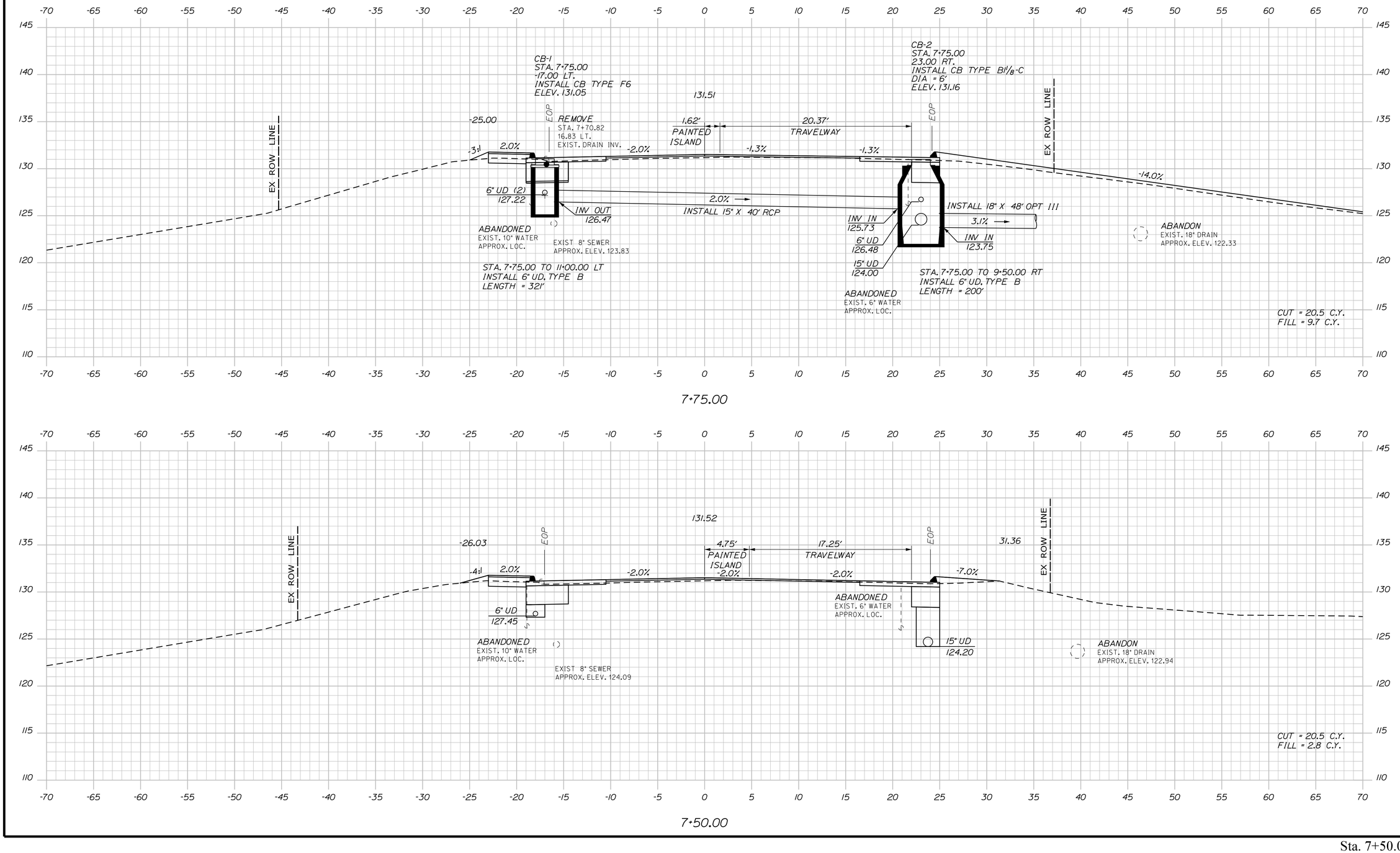
SHEET NUMBER

64

OF 218

Sta. 7+00.00 to Sta. 7+25.00

Division: HIGHWAY
Username: jomesdavis
Date:11/17/2021
Filename: ...\054-153_Cross-Sections.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BY | DATE

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

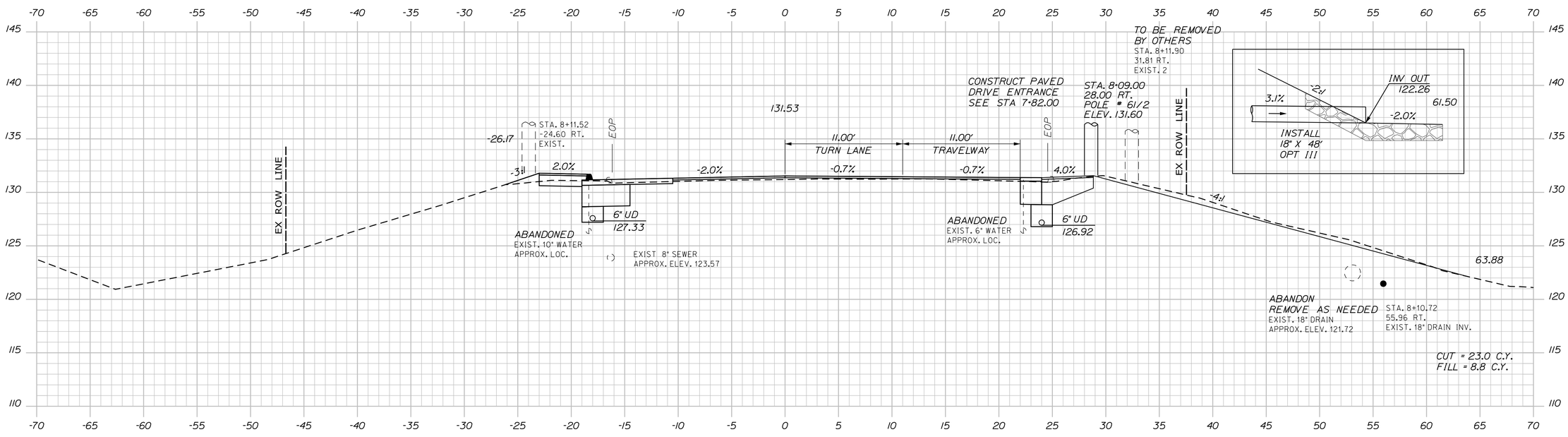
65

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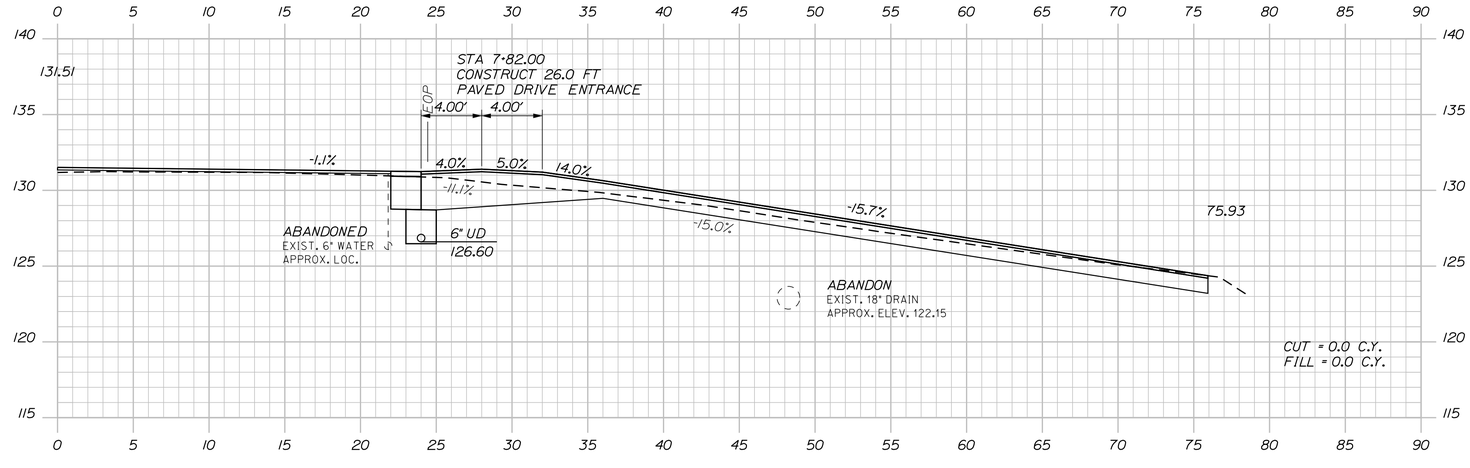
Sta. 7+50.00 to Sta. 7+75.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jomesdavis Date:11/17/2021

Usernome: jomesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\054-153_Cross-Sections.dgn



8+00.00



7+82.00

Sta. 7+82.00 to Sta. 8+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

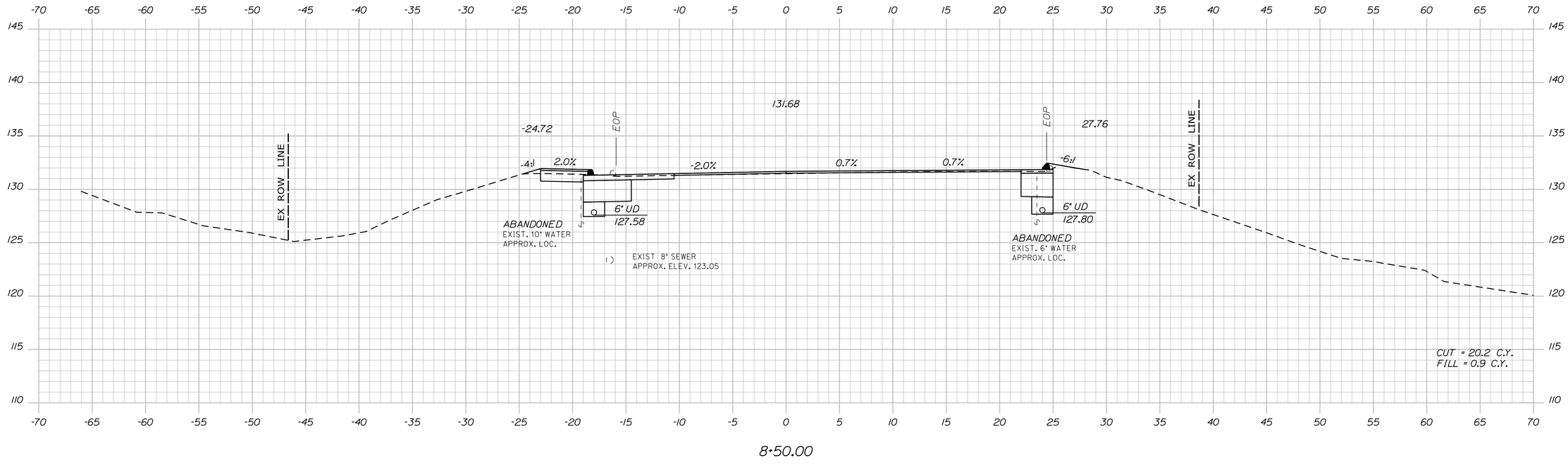
CROSS SECTIONS

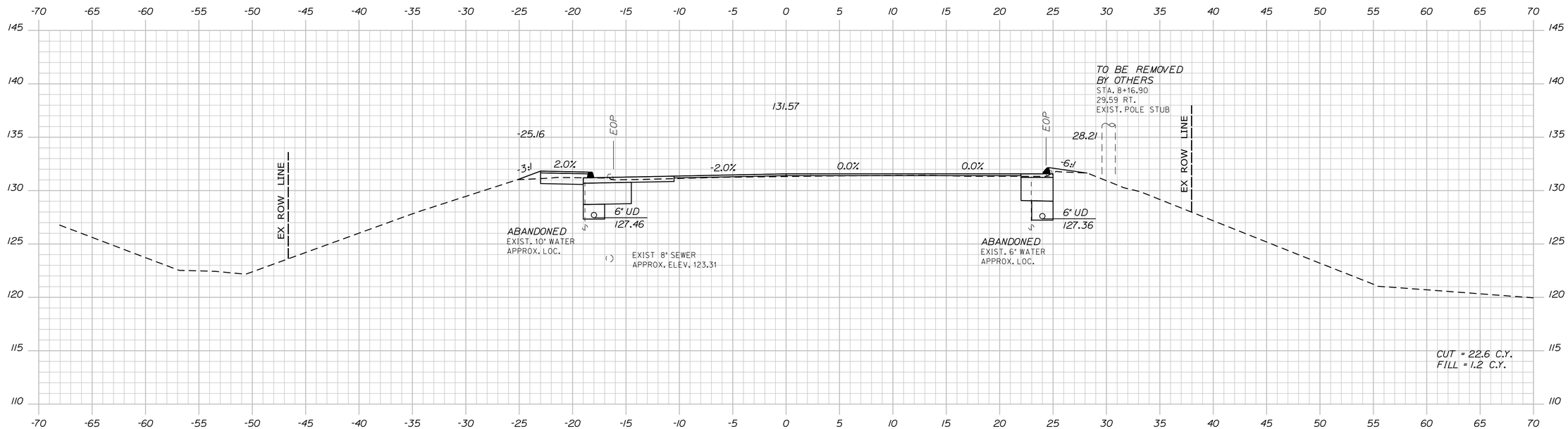
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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

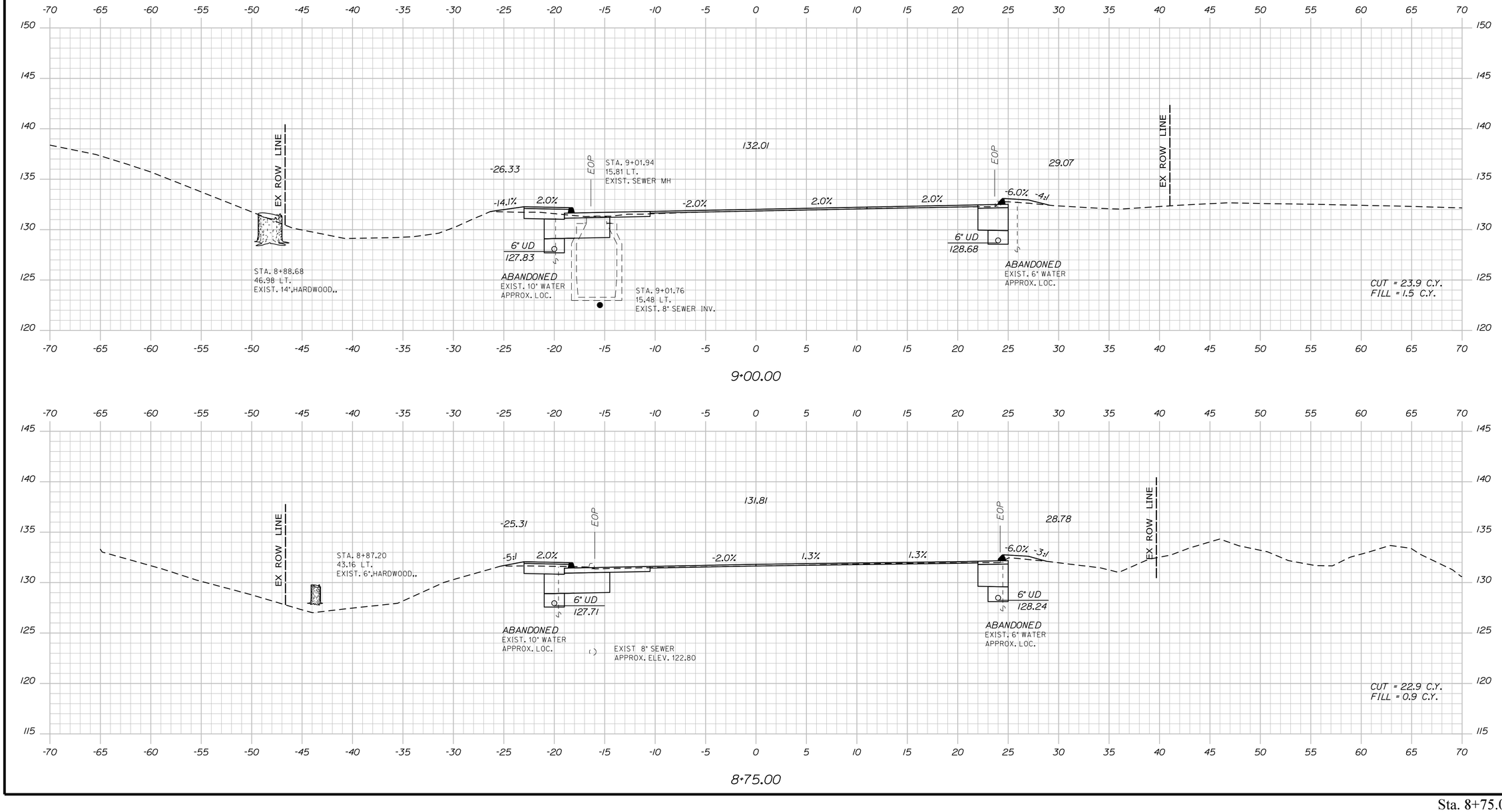
SHEET NUMBER

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Sta. 8+25.00 to Sta. 8+50.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	
DESIGN-DETAILED	ECF	
CHECKED-REVIEWED	ECF	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1	JBD	11/17/2021
REVISIONS 2	AG	11/17/2021
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

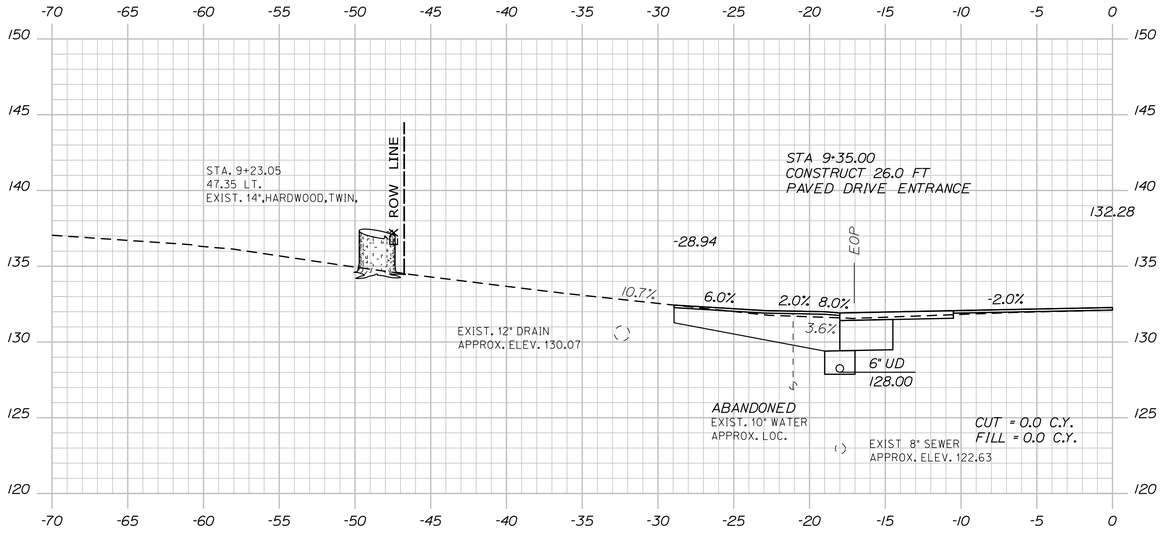
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SHEET NUMBER

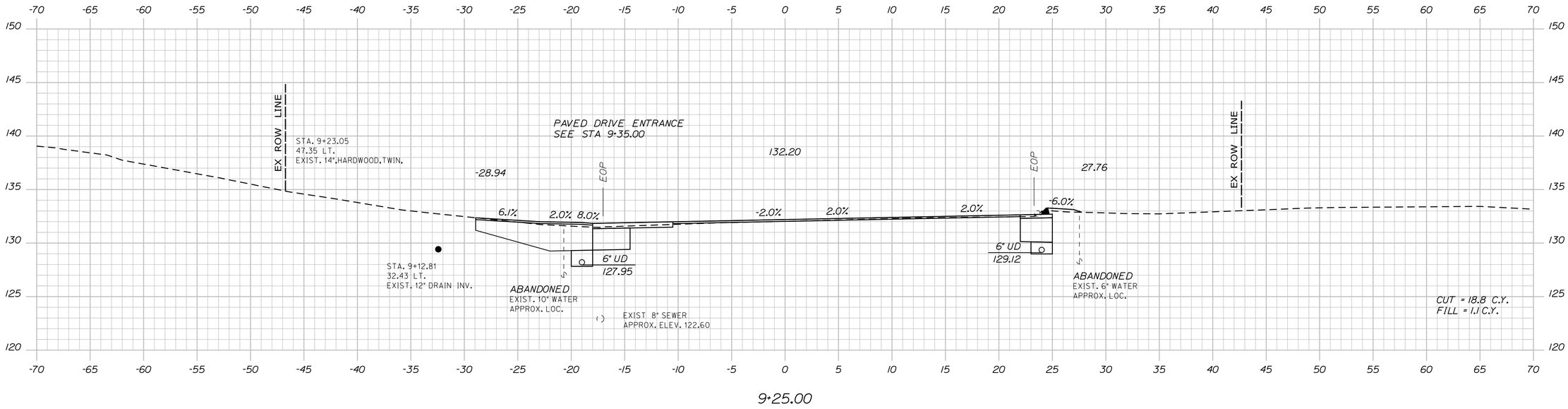
68

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Sta. 8+75.00 to Sta. 9+00.00



9+35.00



9+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

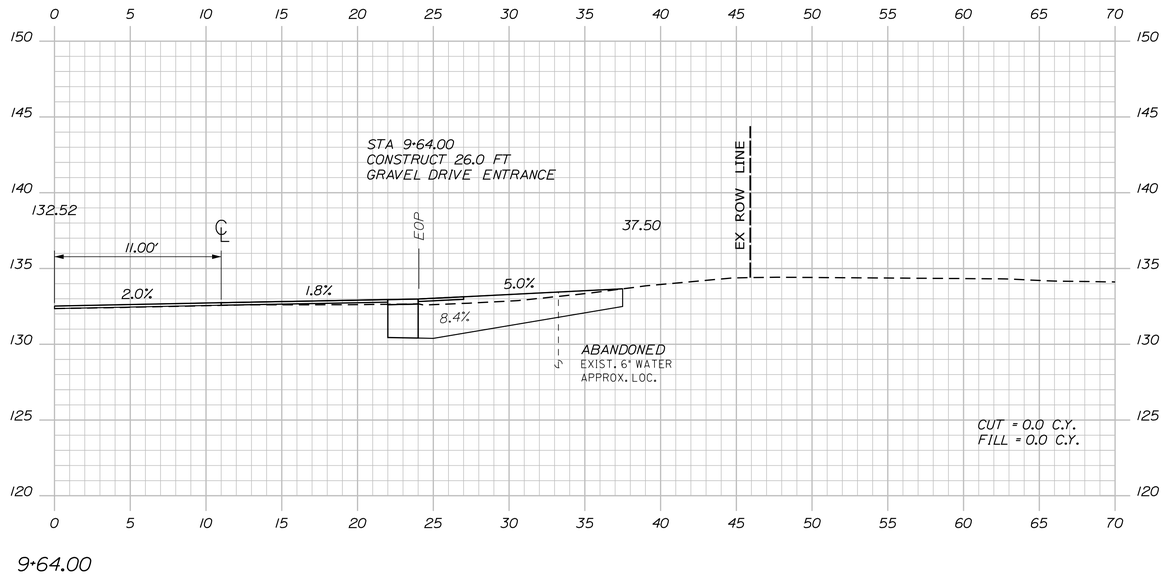
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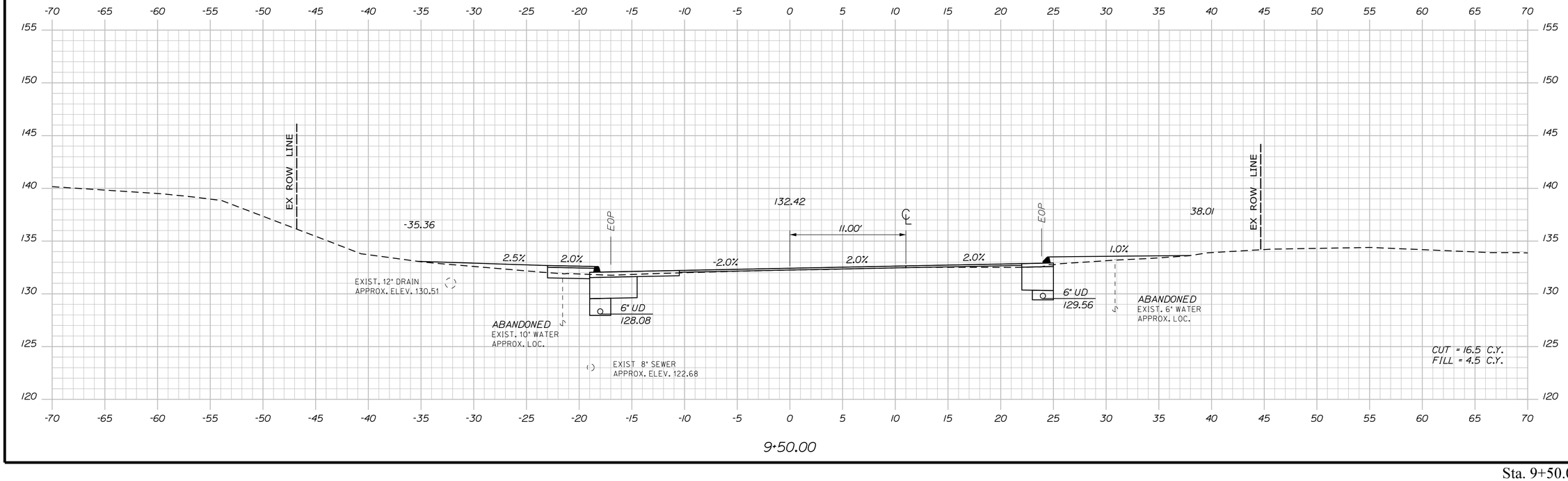
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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Sta. 9+25.00 to Sta. 9+35.00





Sta. 9+50.00 to Sta. 9+64.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

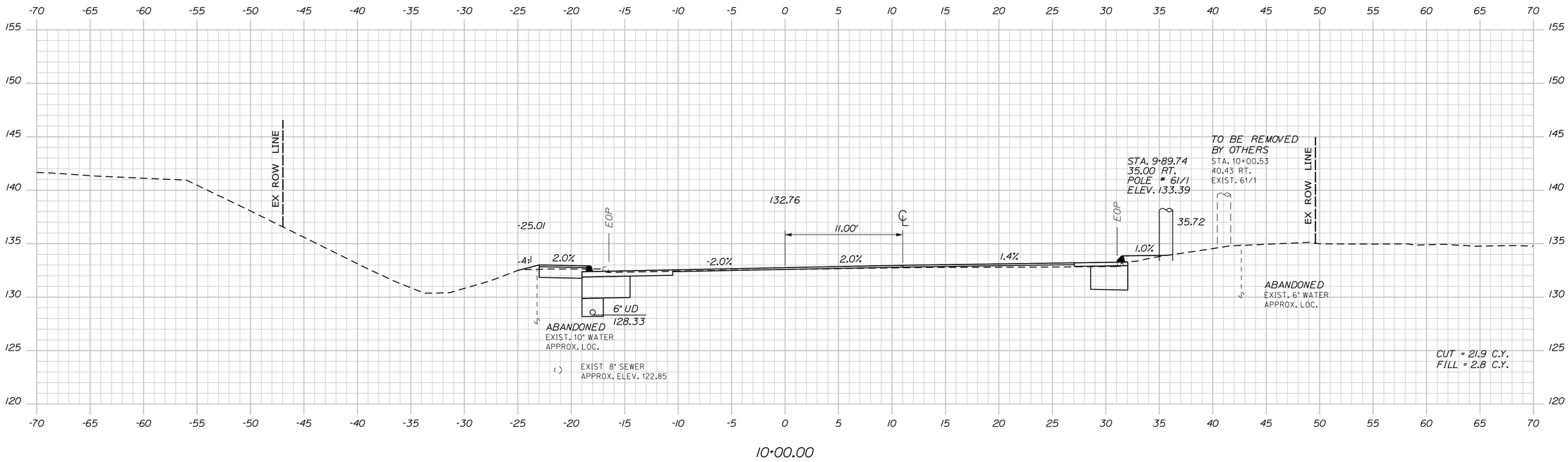
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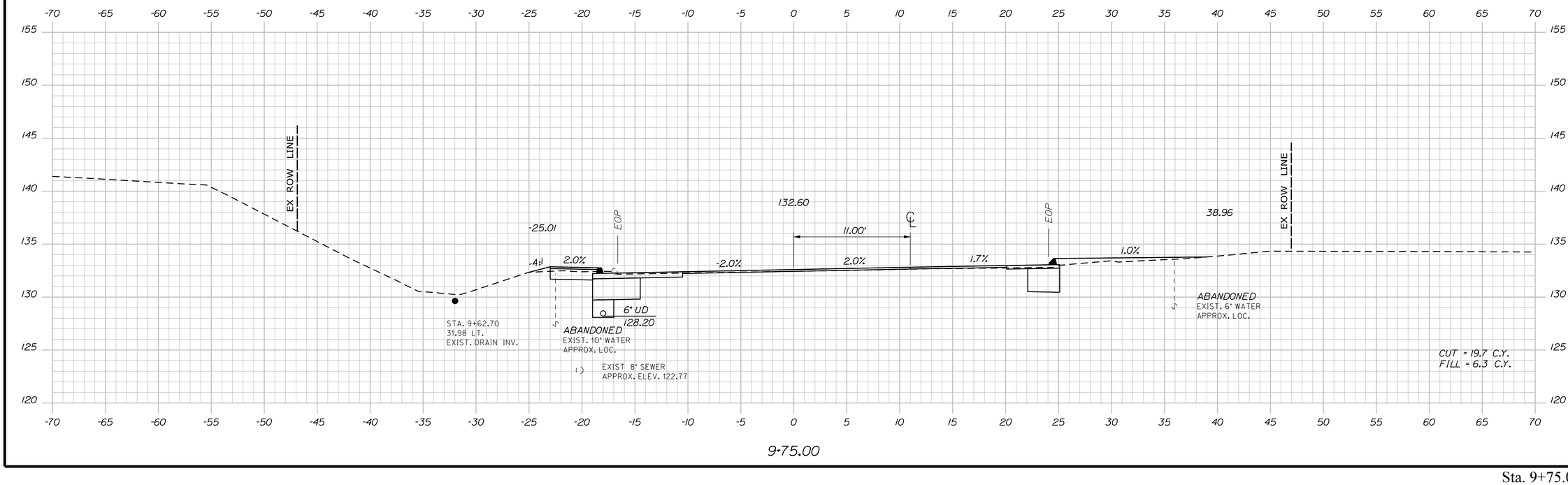
70

OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BY | DATE

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

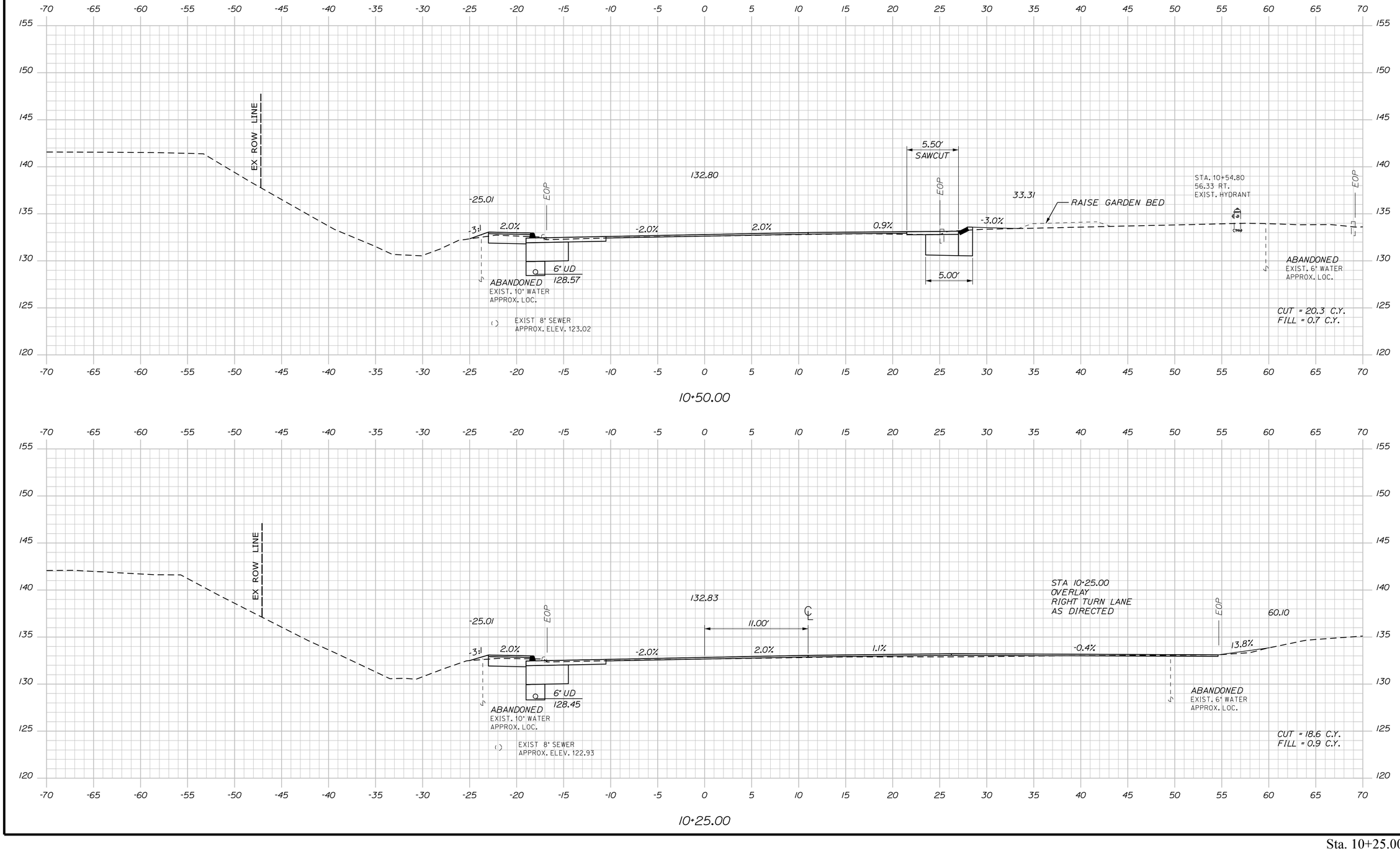
CROSS SECTIONS

SHEET NUMBER

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OF 218

Sta. 9+75.00 to Sta. 10+00.00



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

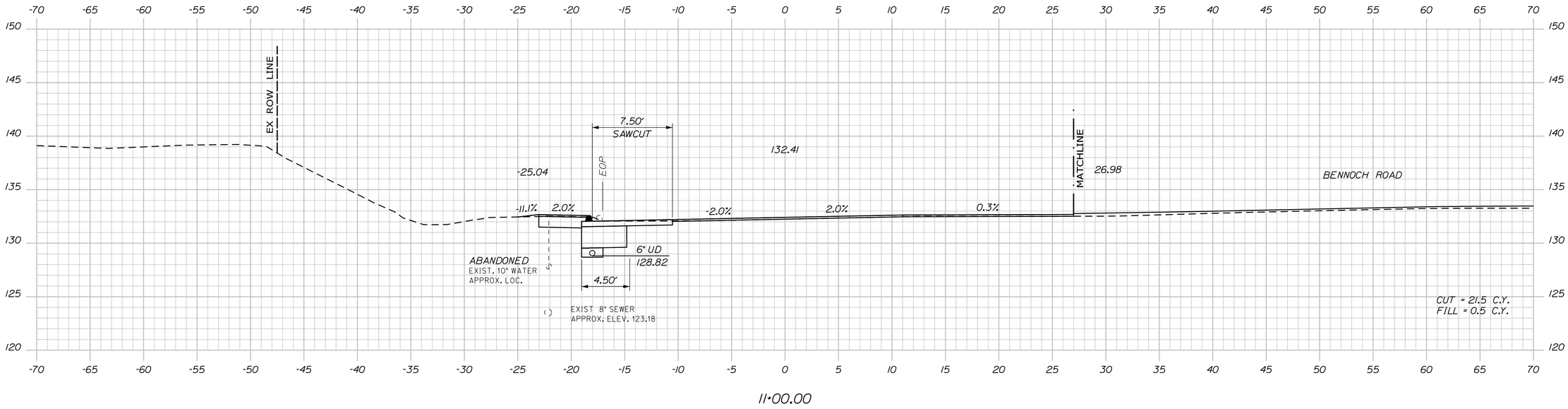
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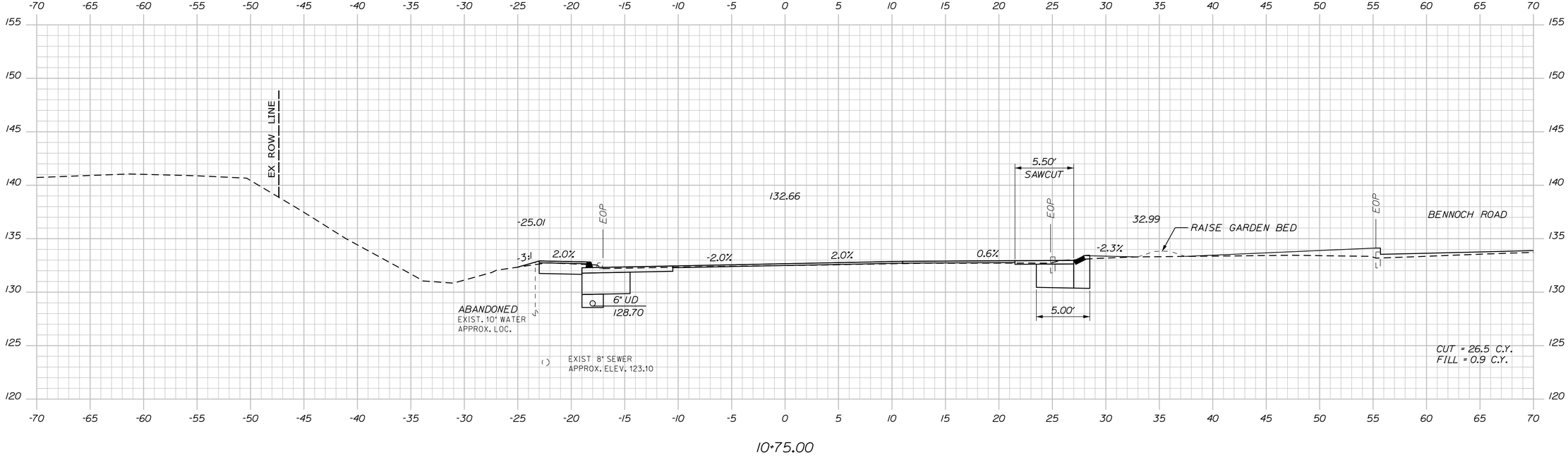
72

OF 218

Sta. 10+25.00 to Sta. 10+50.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

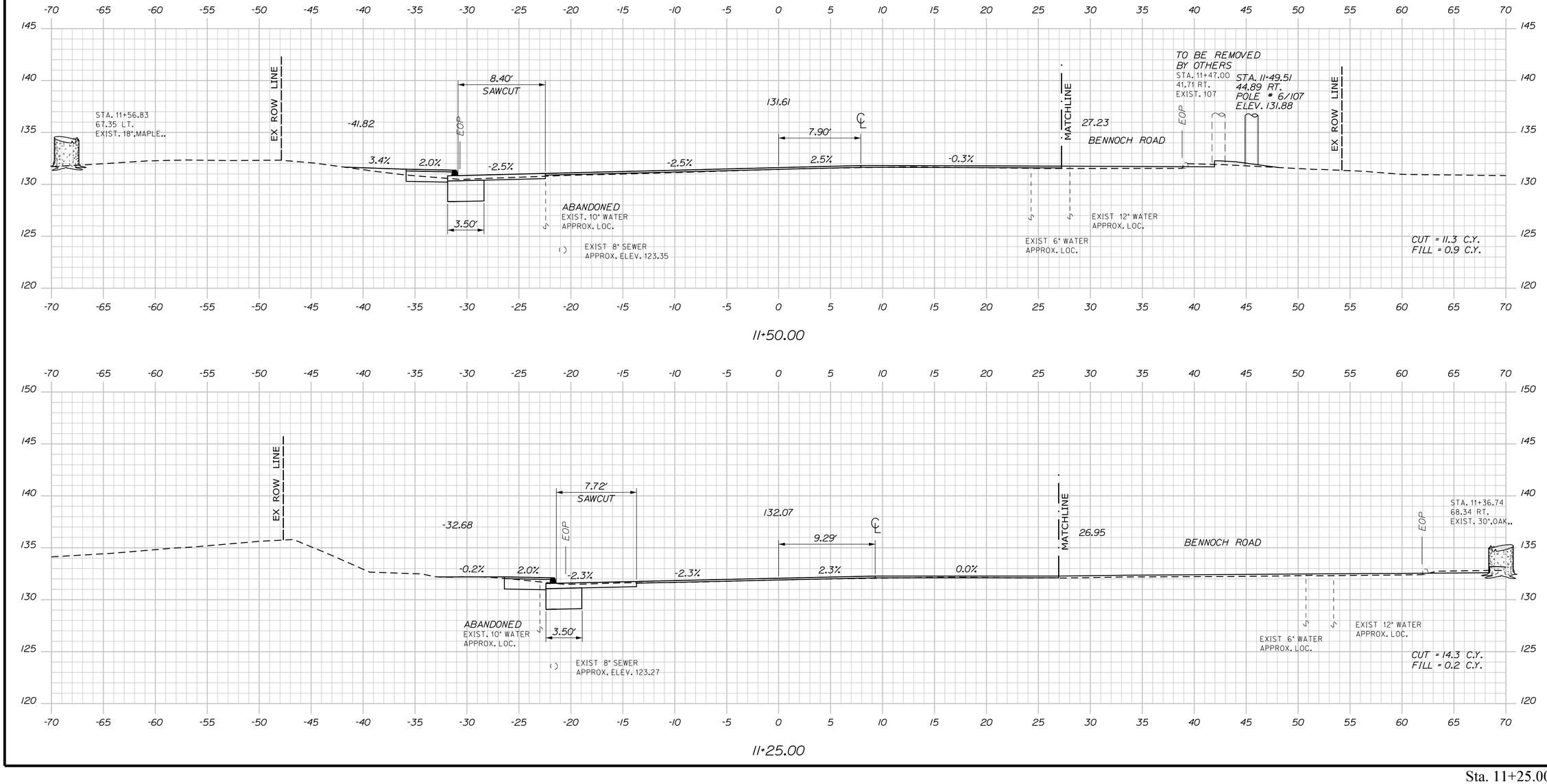
SHEET NUMBER

73

OF 218

Sta. 10+75.00 to Sta. 11+00.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



Sta. 11+25.00 to Sta. 11+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	BY	DATE
R. MOULTON	JBD	11/17/2021
PROJ. MANAGER	AG	11/17/2021
DESIGN-DETAILED	ECF	
CHECKED-REVIEWED	ECF	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	BY	DATE
R. MOULTON		
PROJ. MANAGER	JBD	11/17/2021
DESIGN-DETAILED	AG	11/17/2021
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

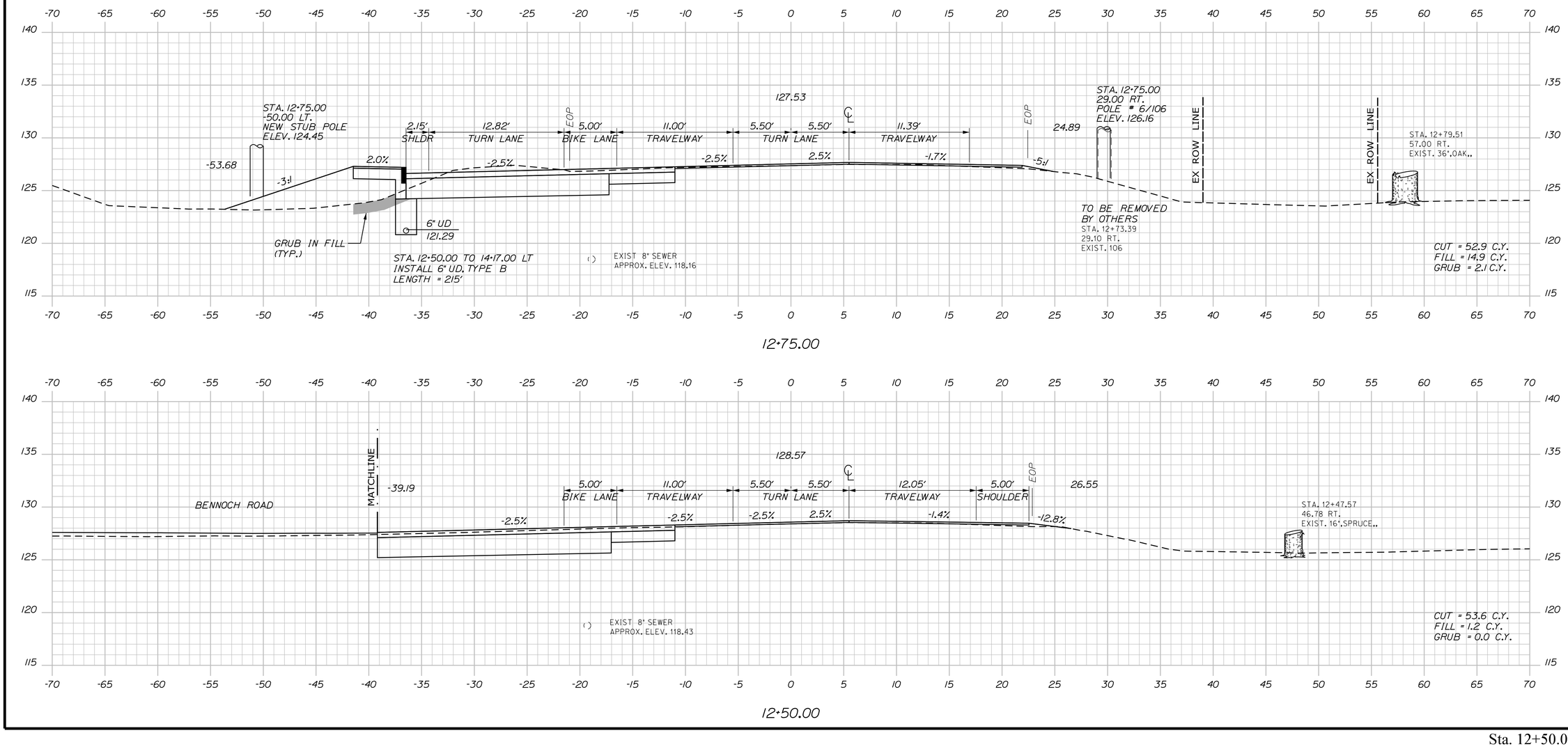
SHEET NUMBER

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Sta. 11+75.00 to Sta. 12+25.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jomesdavis Date:11/17/2021



Sta. 12+50.00 to Sta. 12+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	BY	DATE
R. MOULTON	JBD	11/17/2021
	AG	11/17/2021

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	
DESIGN-DETAILED	ECF
CHECKED-REVIEWED	ECF
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

OLD TOWN
STILLWATER AVENUE

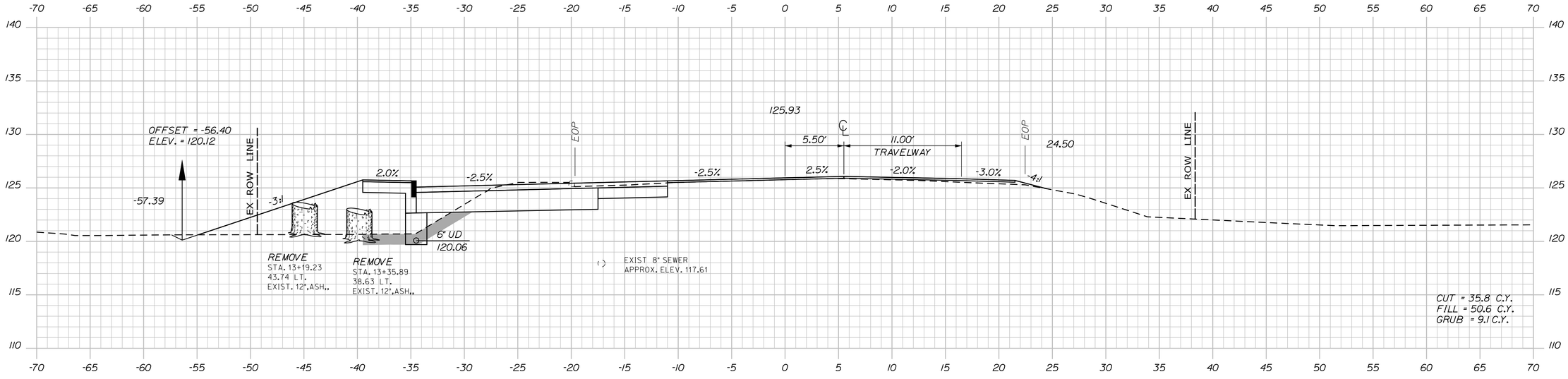
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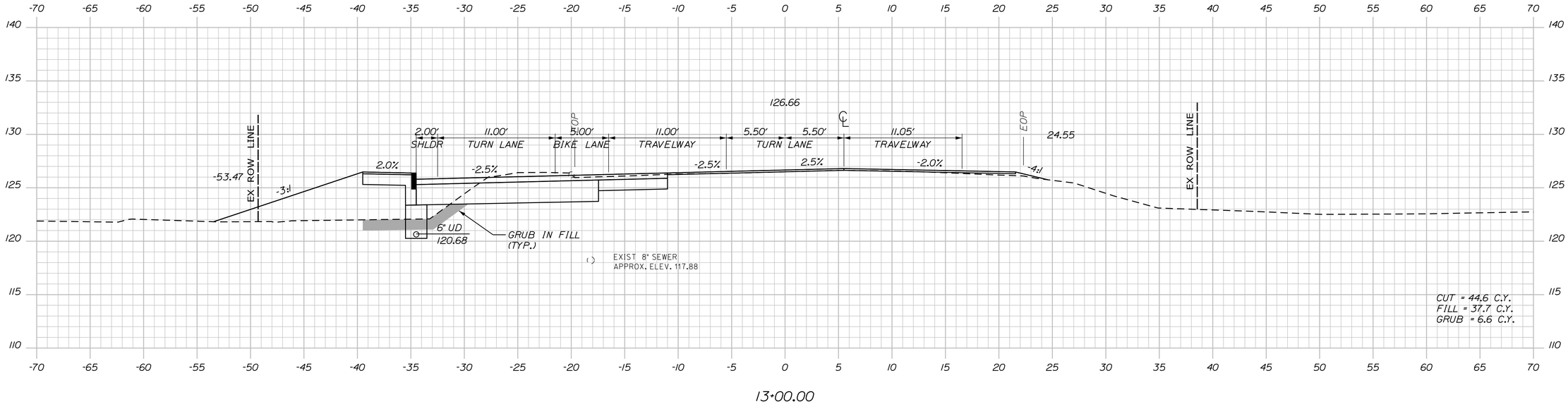
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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

		BY	DATE
R. MOULTON	ECF	JBD	11/17/2021
	ECF	AG	11/17/2021

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	
DESIGN-DETAILED	
CHECKED-REVIEWED	
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
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FIELD CHANGES	

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

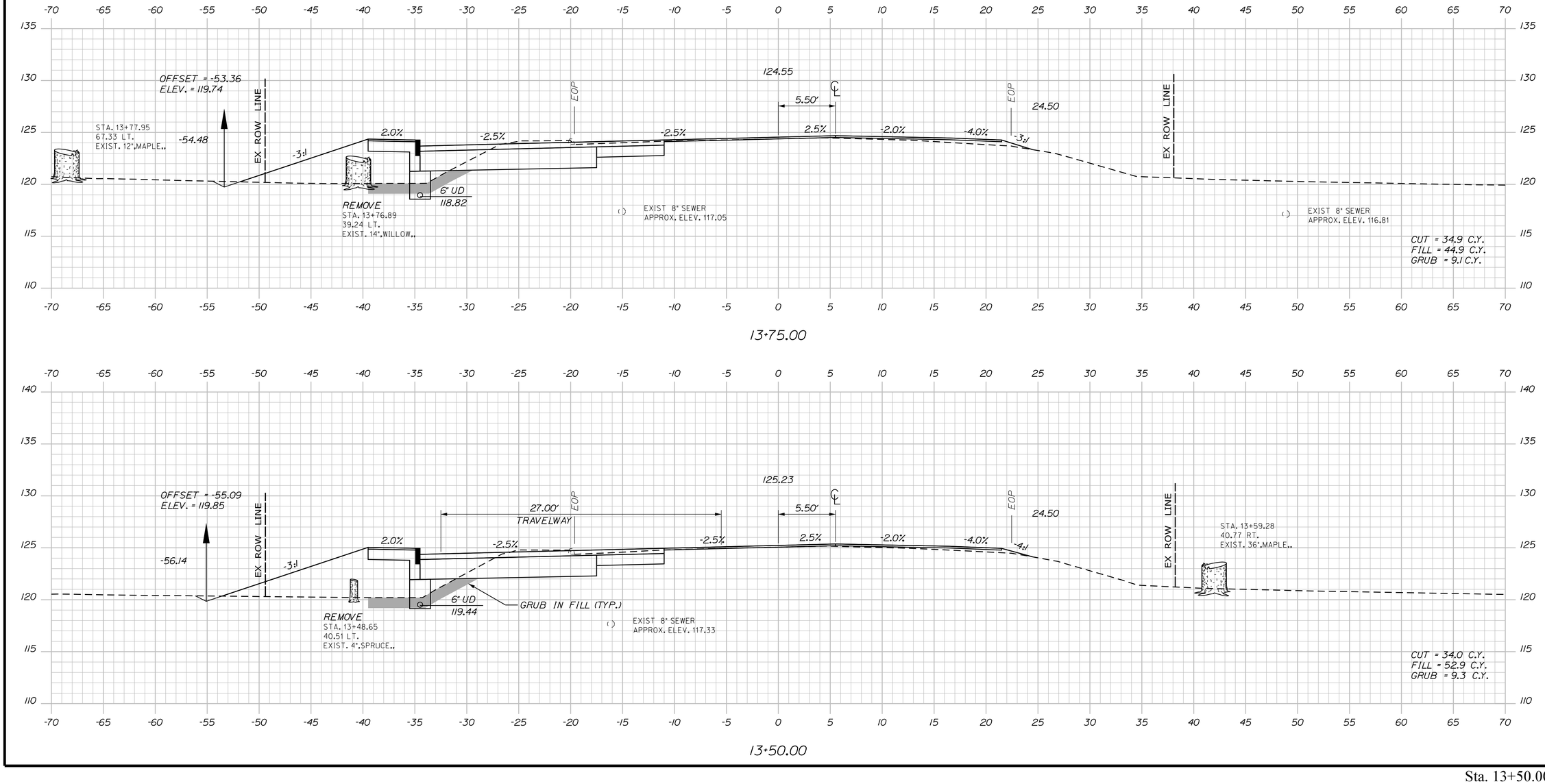
SHEET NUMBER

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OF 218

Sta. 13+00.00 to Sta. 13+25.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

		BY	DATE
R. MOULTON			
PROJ. MANAGER	ECF	JBD	11/17/2021
DESIGN-DETAILED	ECF	AG	11/17/2021
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

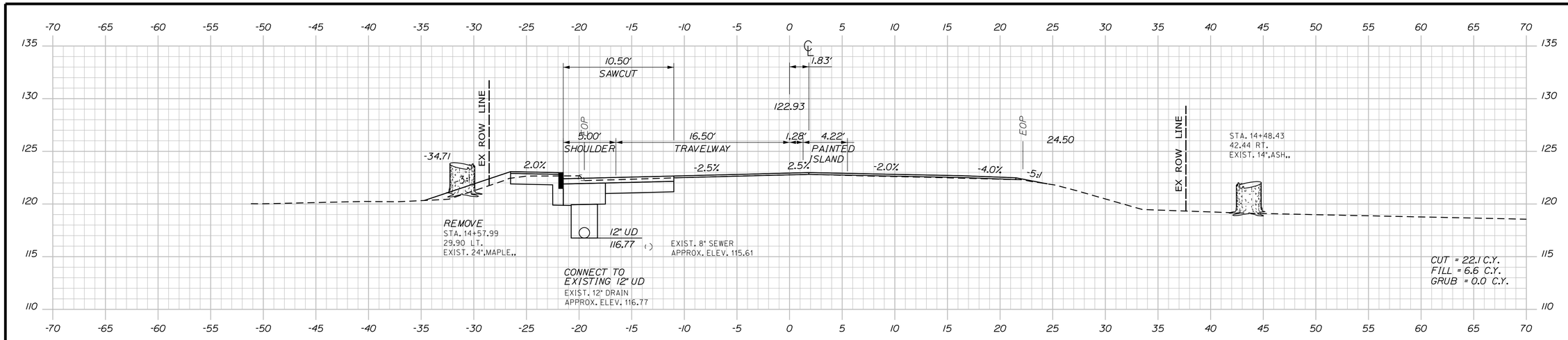
SHEET NUMBER

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Sta. 13+50.00 to Sta. 13+75.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Sta. 14+00.00 to Sta. 14+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
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FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

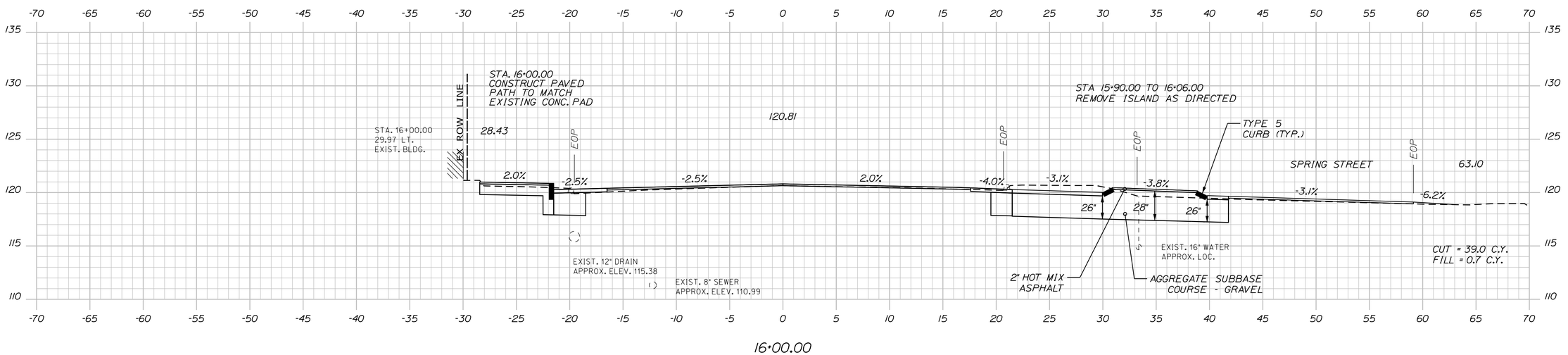
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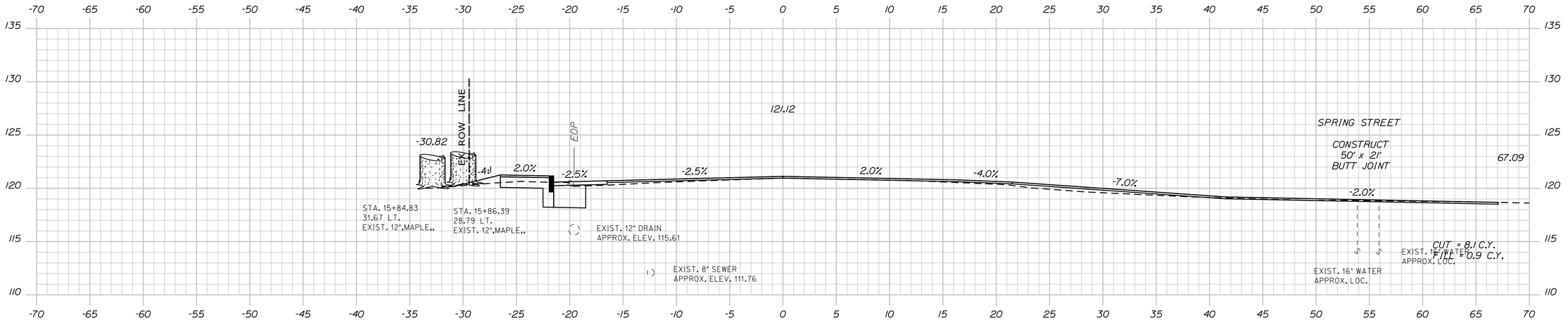
OF 218

Sta. 14+75.00 to Sta. 15+25.00

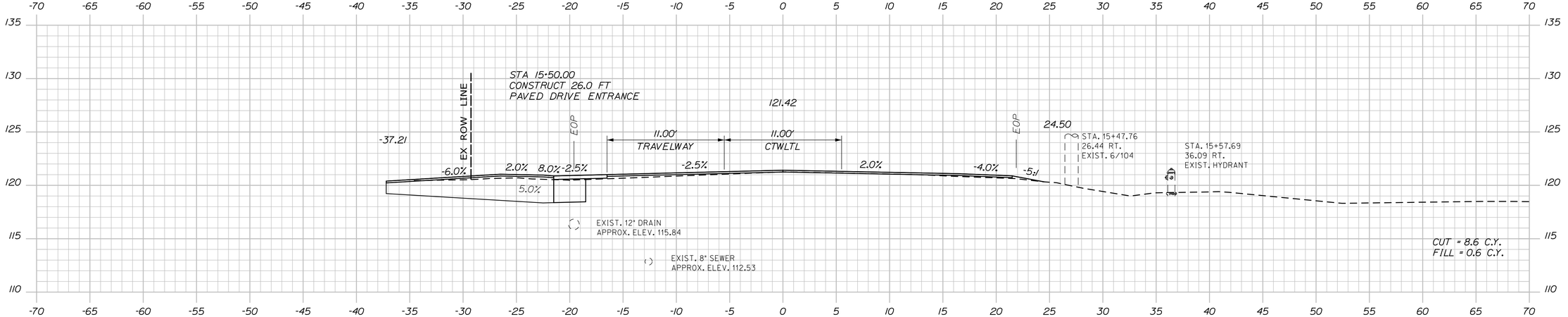
Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



16•00.00



15•75.00



15•50.00

Sta. 15+50.00 to Sta. 16+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

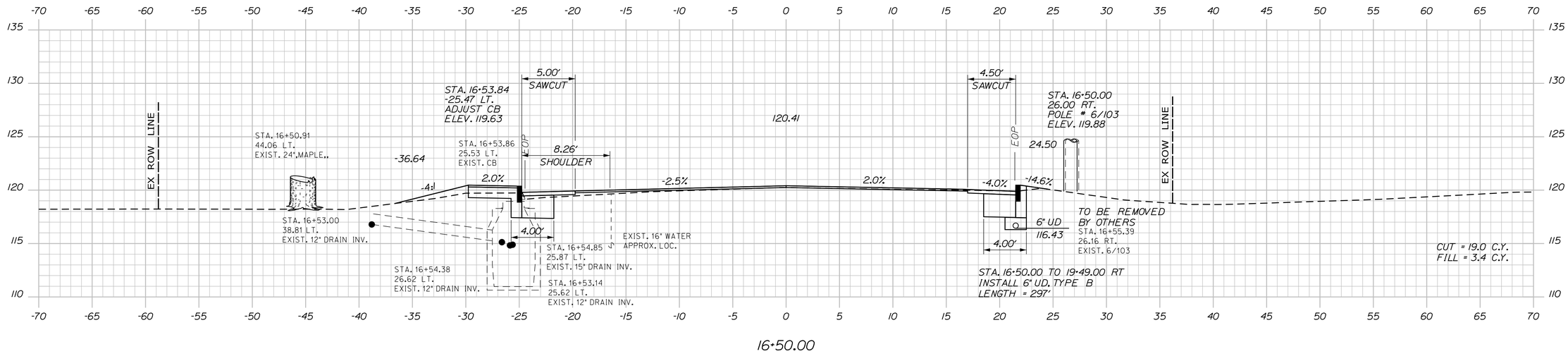
SHEET NUMBER

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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Username: jamesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\054-153_Cross-Sections.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

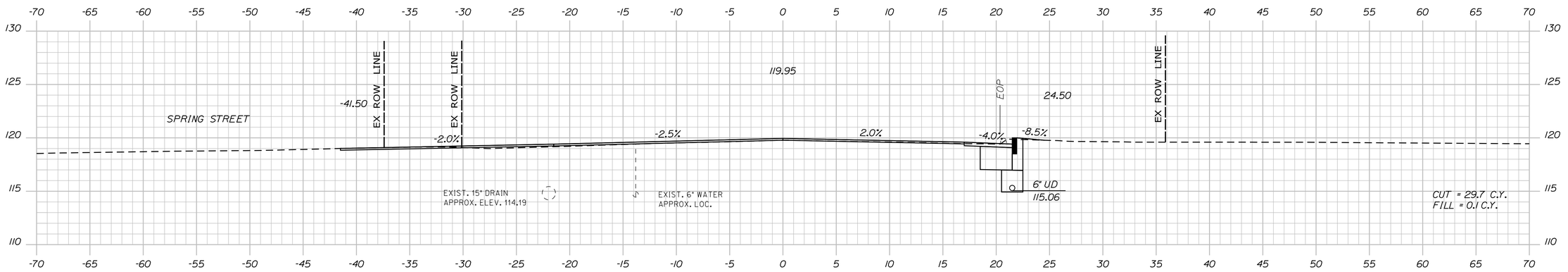
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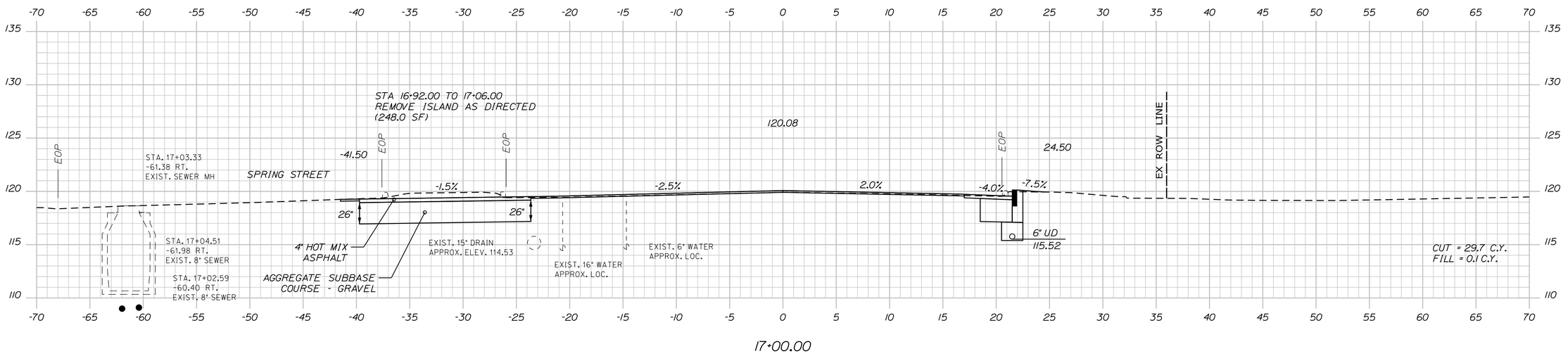
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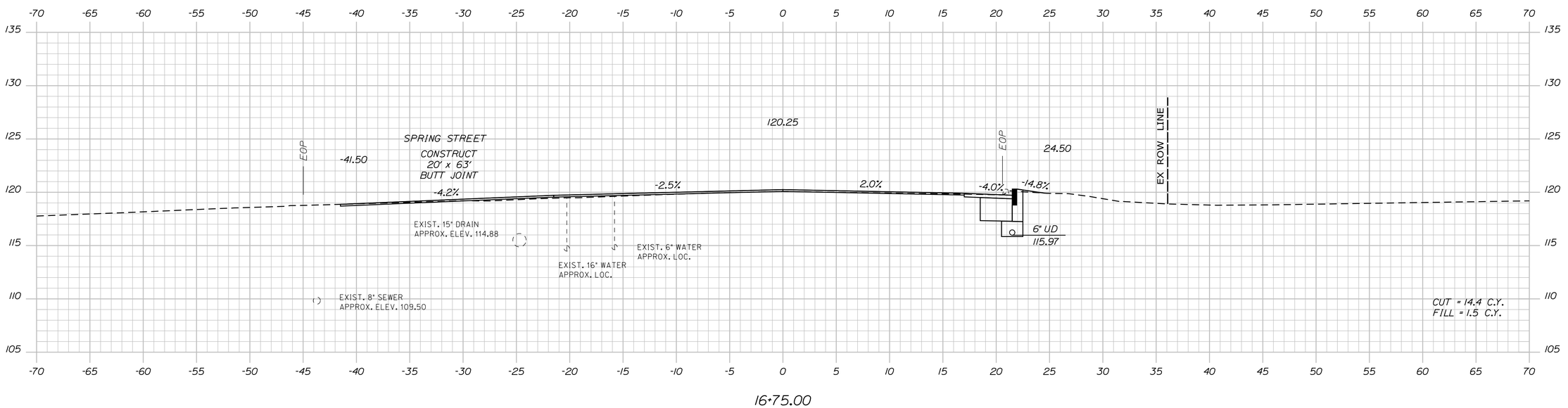
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OF 218

Sta. 16+25.00 to Sta. 16+50.00







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON										
DESIGN-DETAILED	ECF	JBD	11/17/2021	SIGNATURE							
CHECKED-REVIEWED	ECF	AG	11/17/2021								
DESIGN2-DETAILED2				P.E. NUMBER							
DESIGN3-DETAILED3											
REVISIONS 1				DATE							
REVISIONS 2											
REVISIONS 3											
REVISIONS 4											
FIELD CHANGES											

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

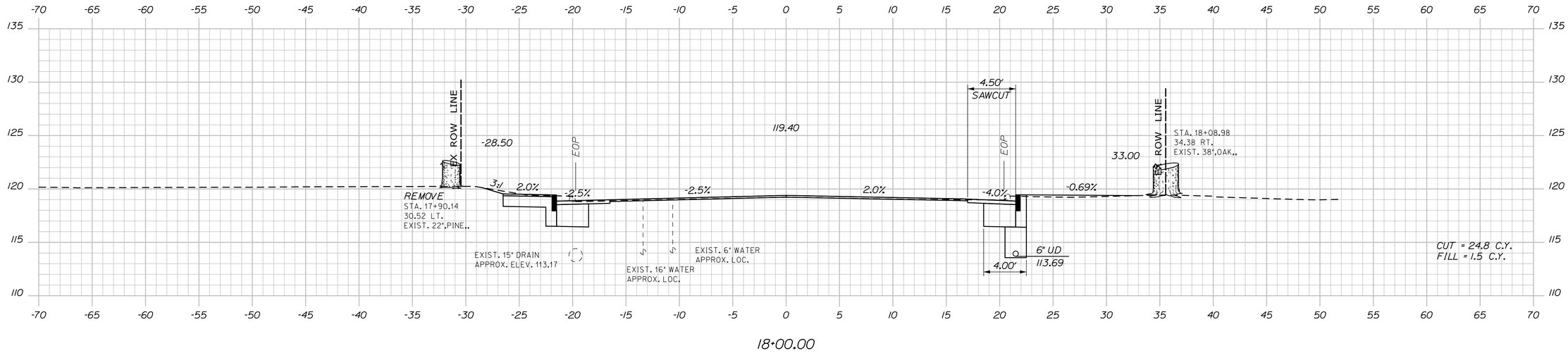
SHEET NUMBER

83

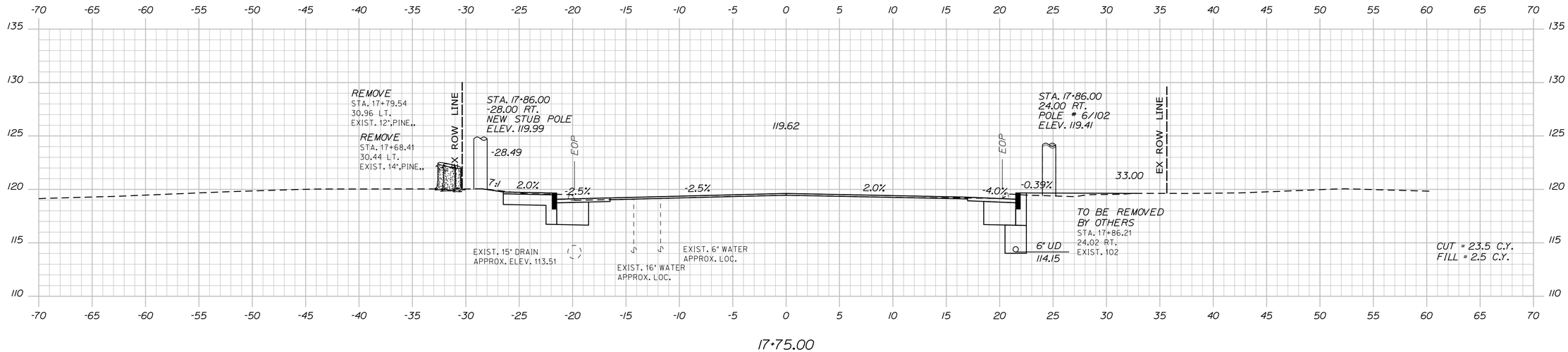
OF 218

Sta. 16+75.00 to Sta. 17+25.00

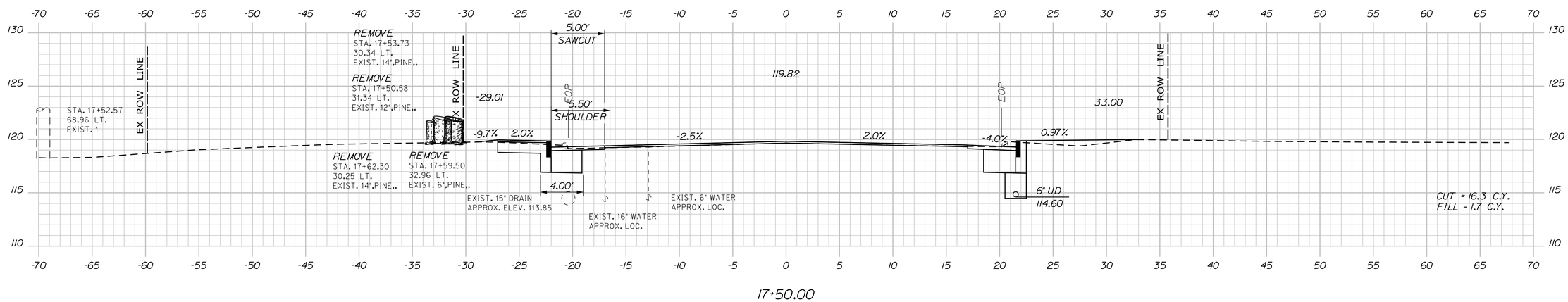
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18+00.00



17+75.00



17+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

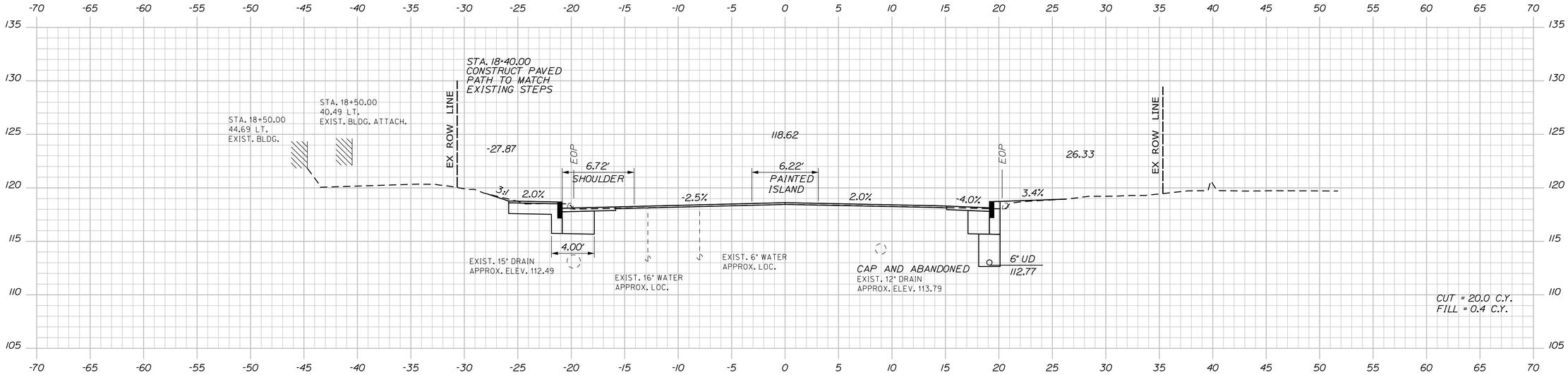
84

OF 218

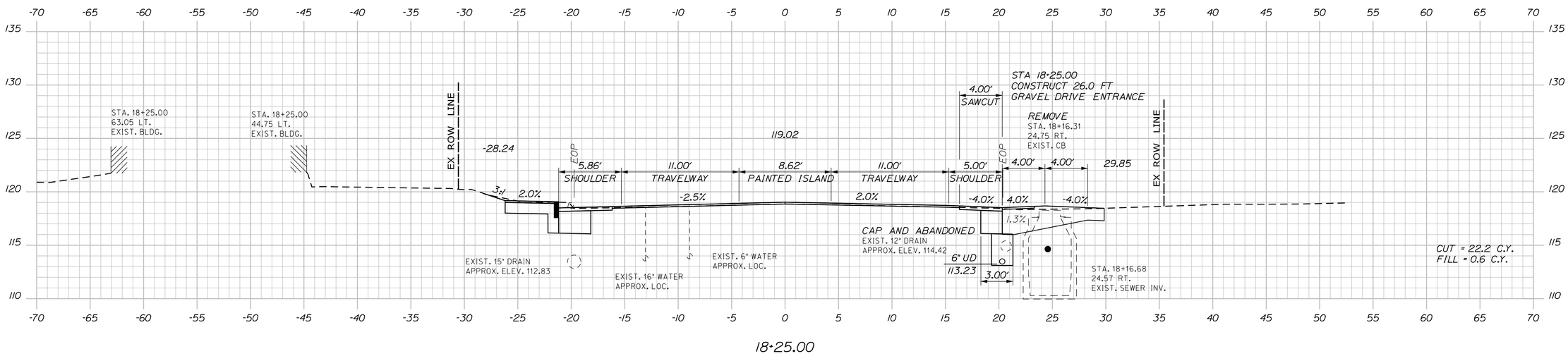
Sta. 17+50.00 to Sta. 18+00.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



18+50.00



18+25.00

Sta. 18+25.00 to Sta. 18+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
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REVISIONS 2			
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FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

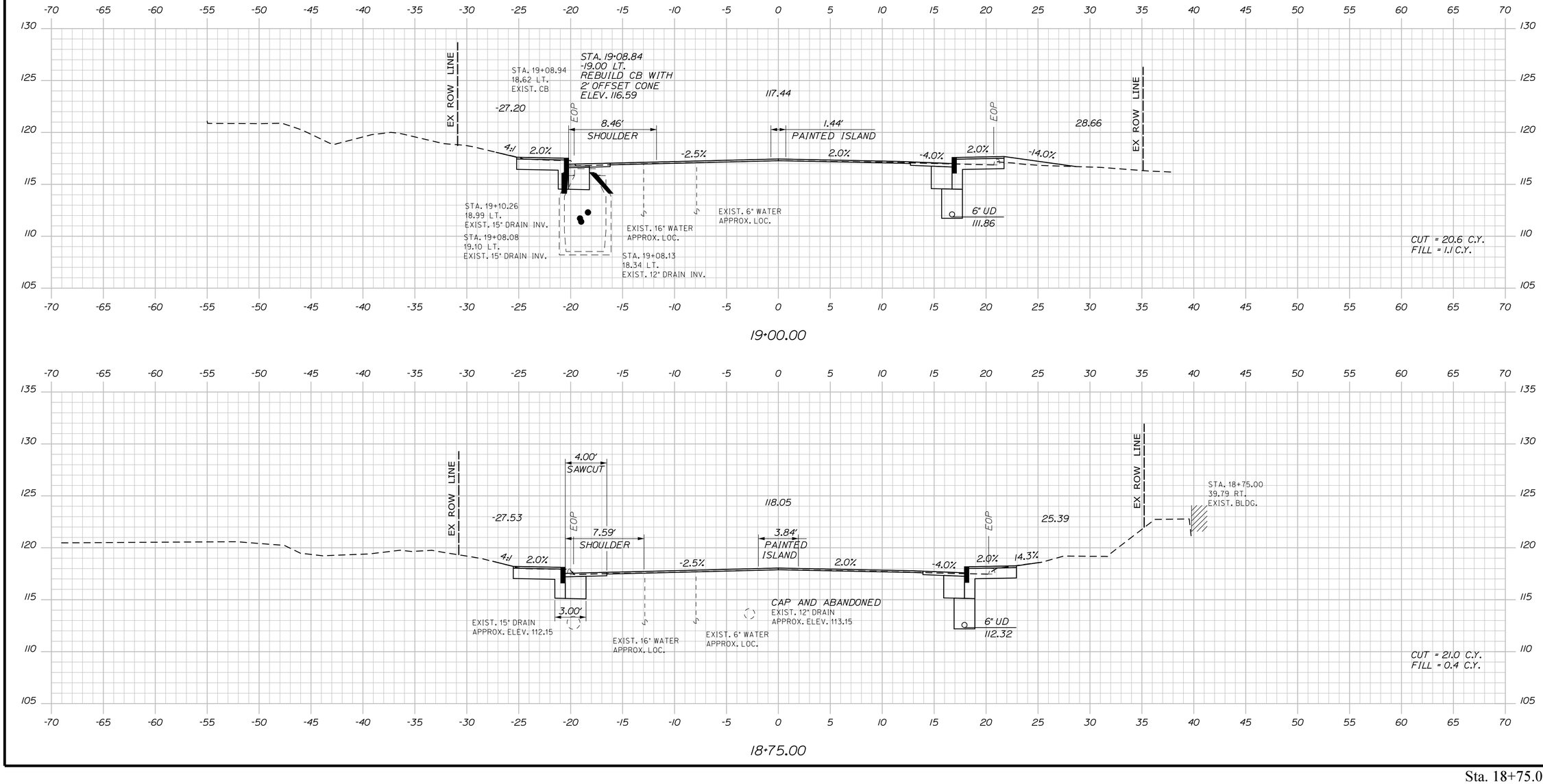
OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

85

OF 218



Sta. 18+75.00 to Sta. 19+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

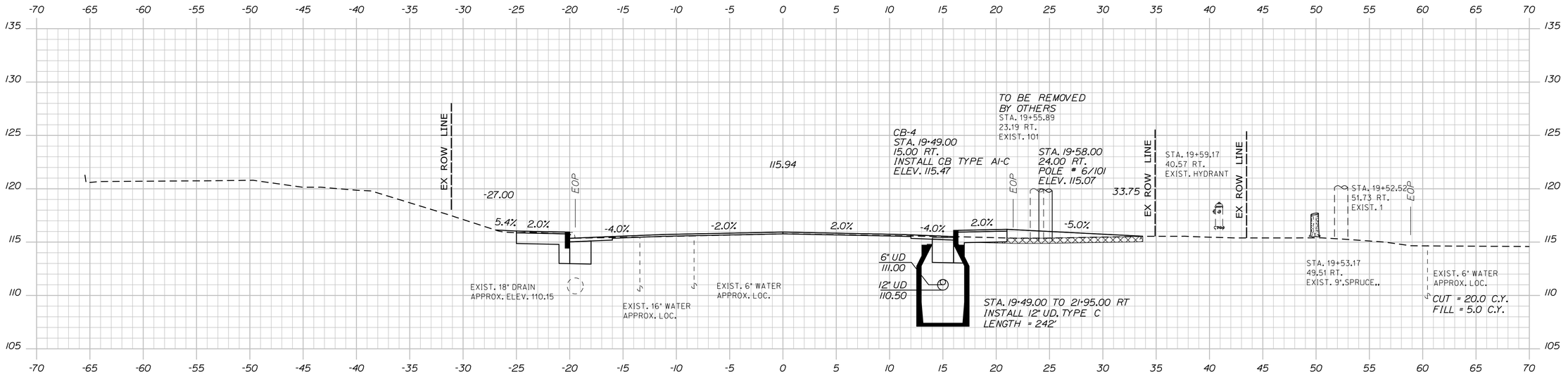
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86

OF 218

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

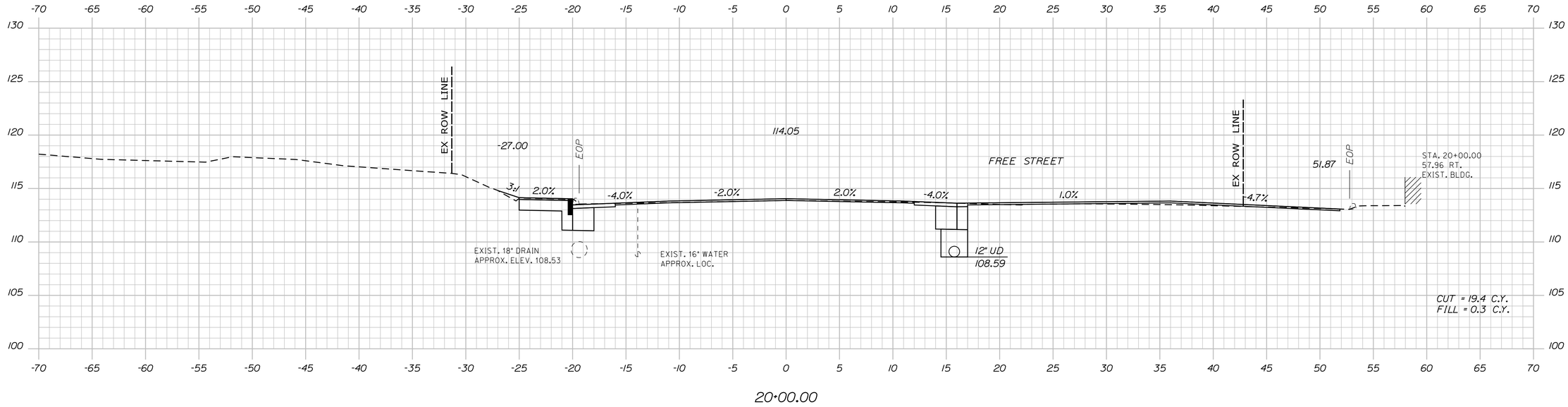
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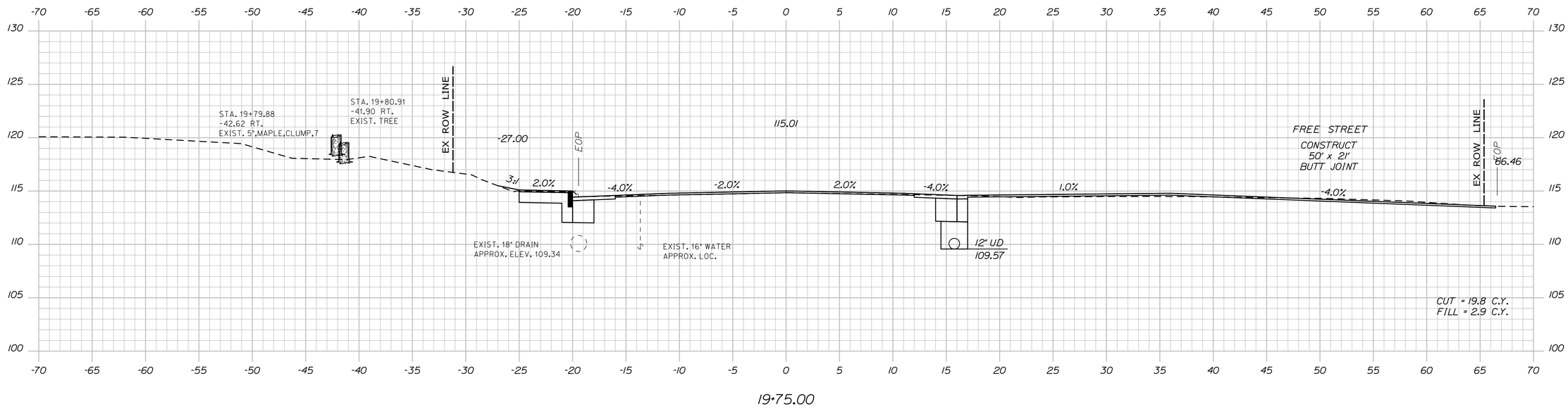
SHEET NUMBER

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OF 218

Sta. 19+25.00 to Sta. 19+50.00





Sta. 19+75.00 to Sta. 20+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	BY	DATE
R. MOULTON		
PROJ. MANAGER		
DESIGN-DETAILED	JBD	11/17/2021
CHECKED-REVIEWED	AG	11/17/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

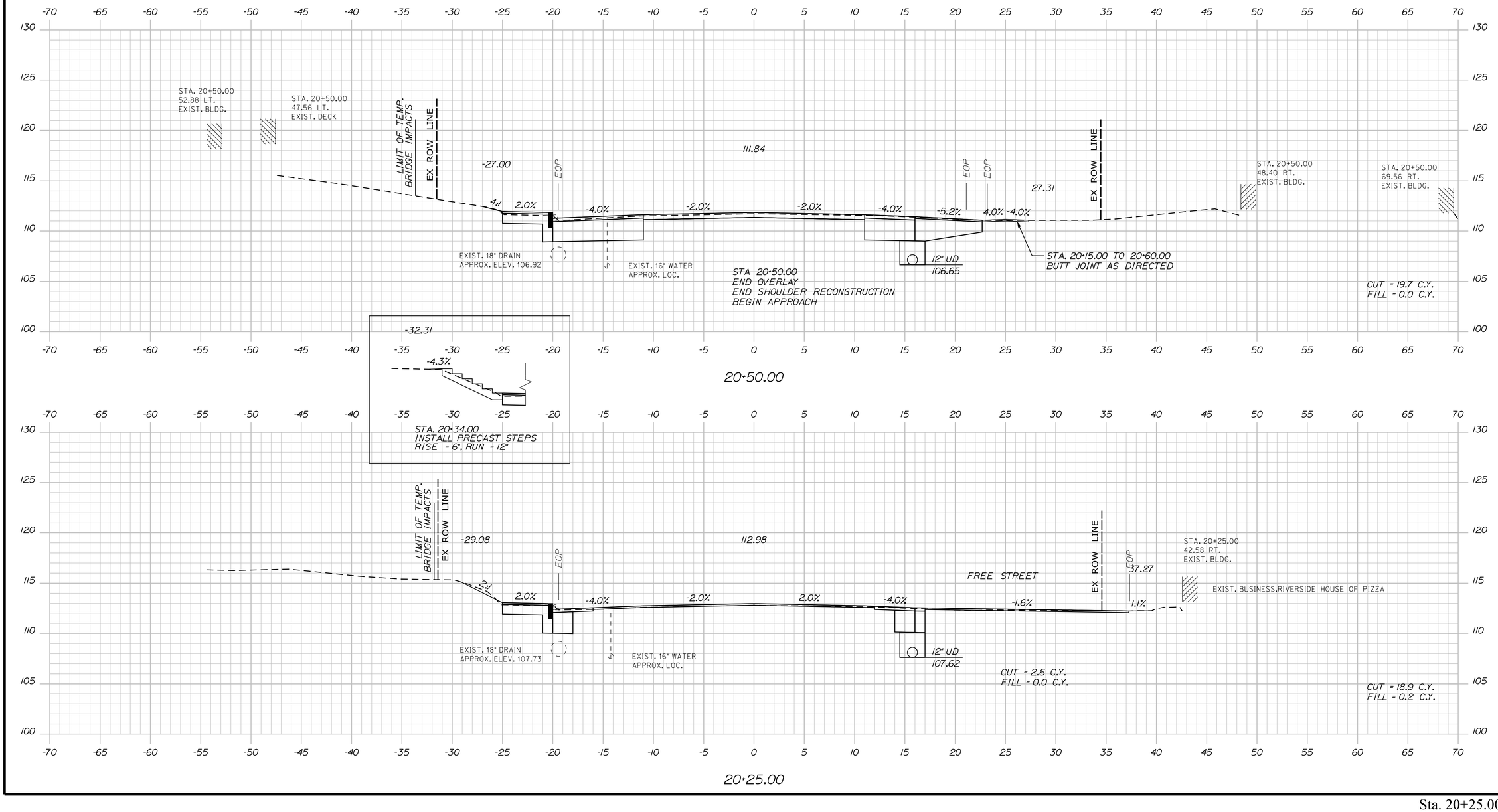
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OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

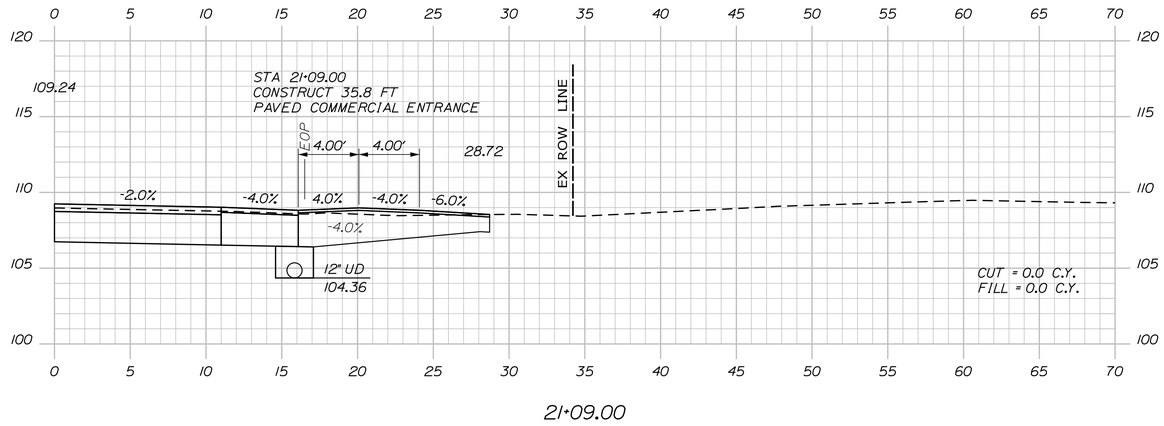
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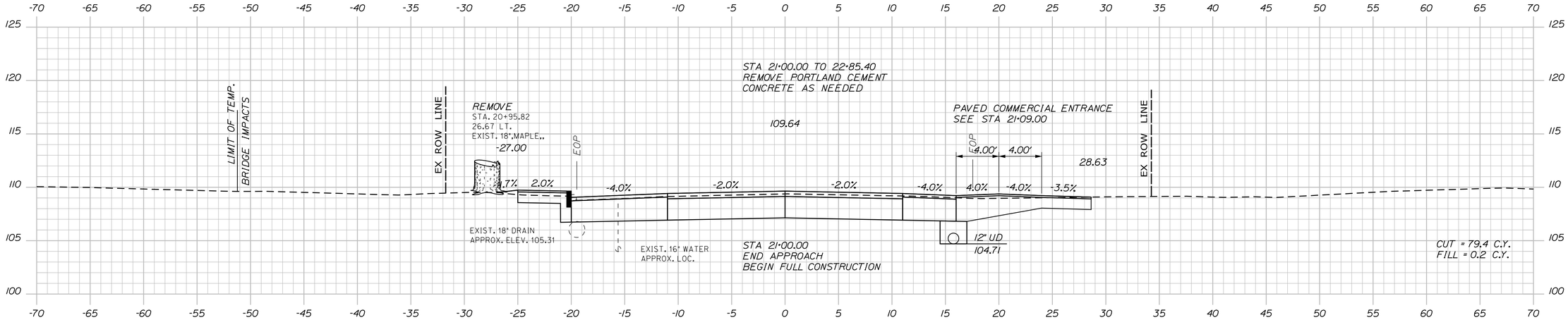
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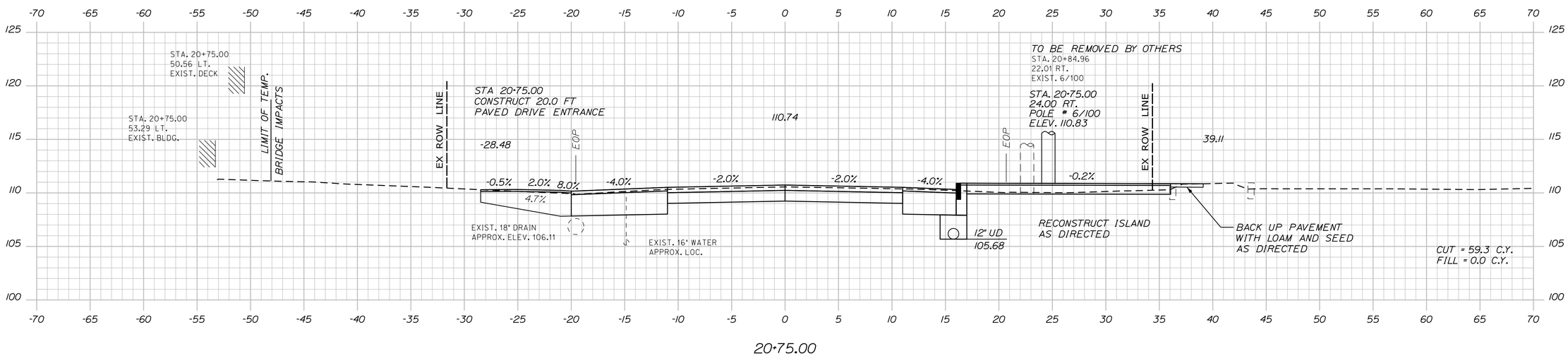
89

OF 218

Sta. 20+25.00 to Sta. 20+50.00







Sta. 20+75.00 to Sta. 21+09.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BY | DATE | SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

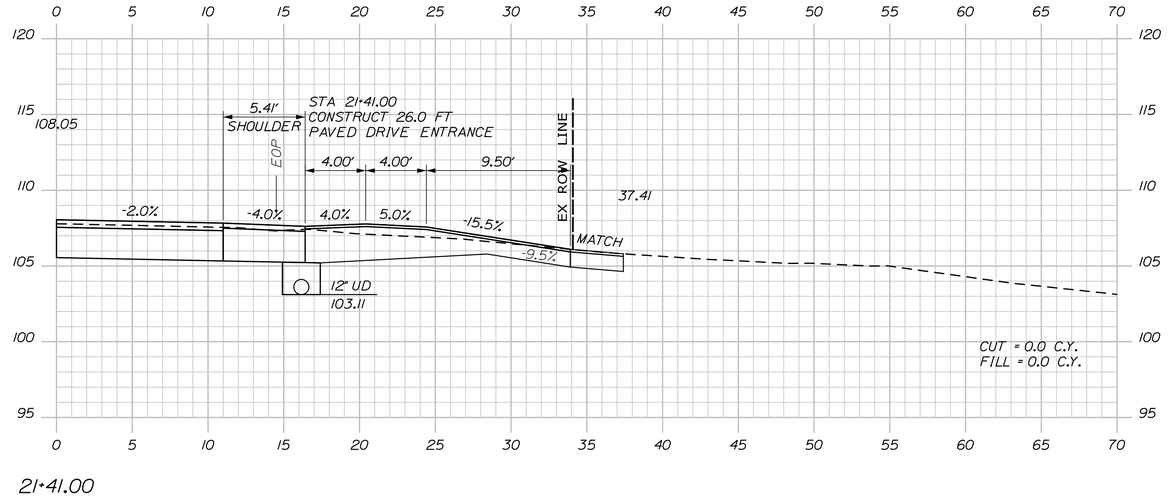
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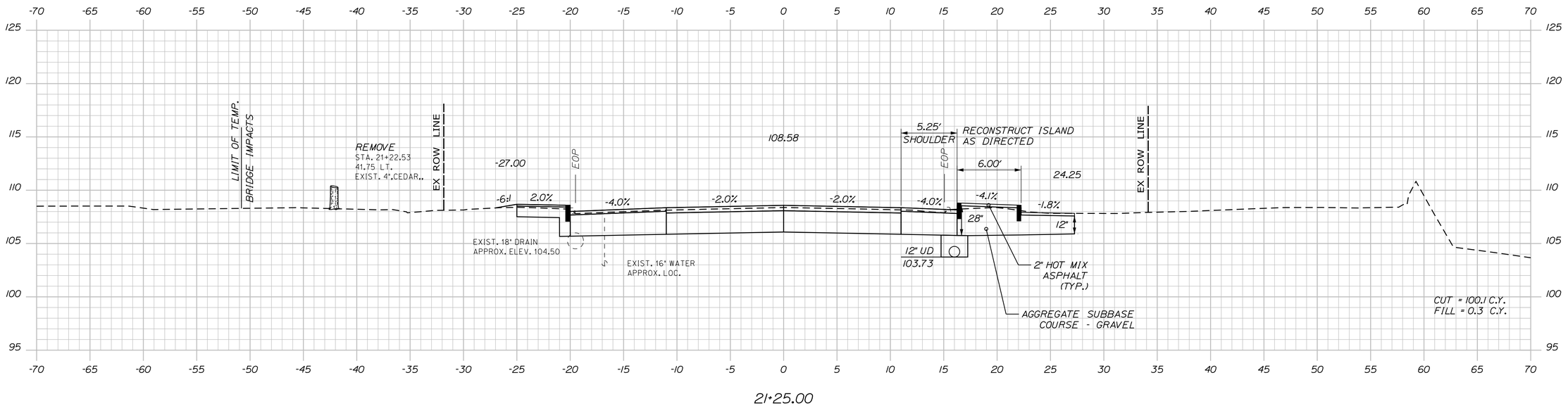
OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



21+41.00



21+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
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REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

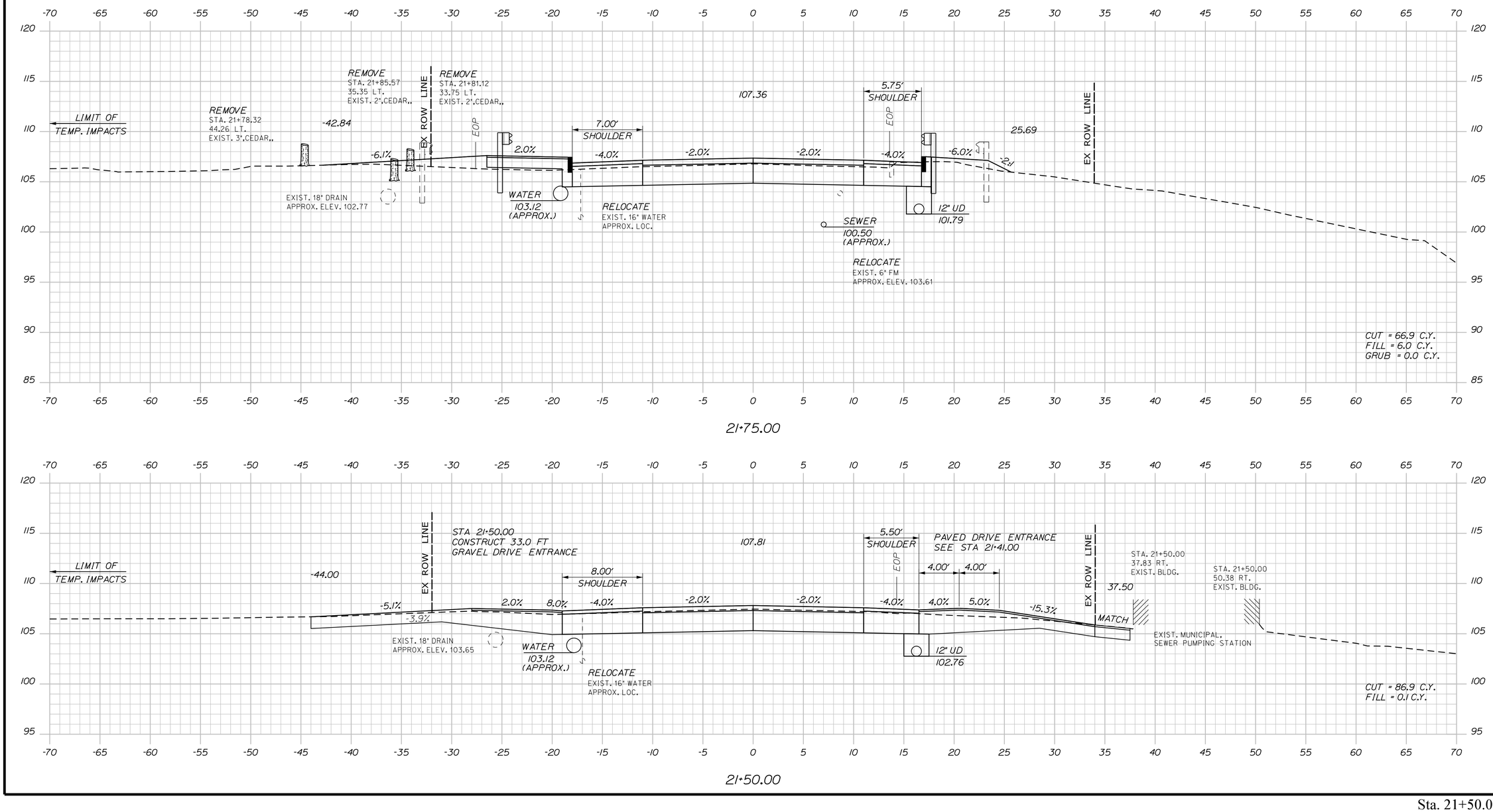
CROSS SECTIONS

SHEET NUMBER

91

OF 218

Sta. 21+25.00 to Sta. 21+41.00



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

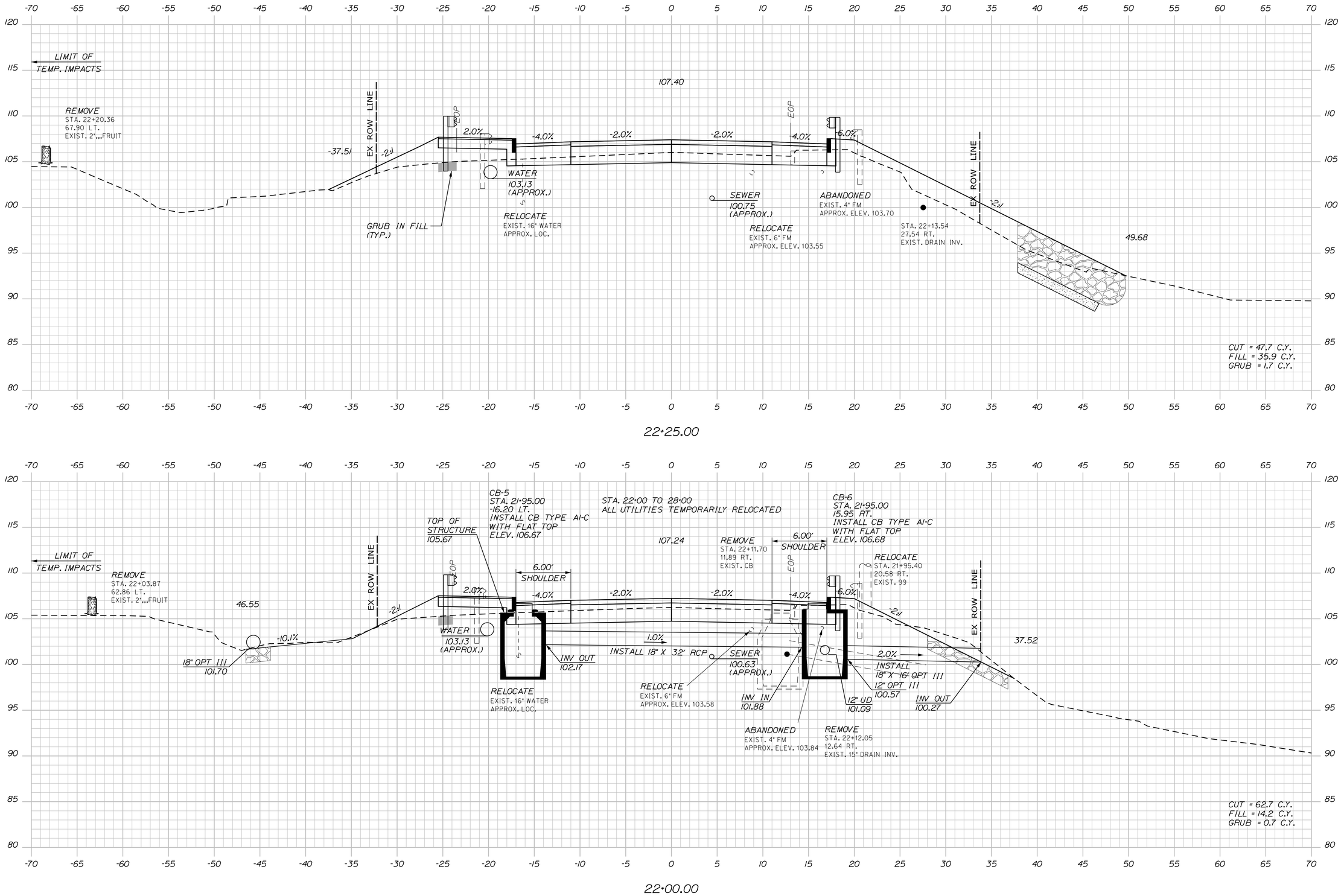
92

OF 218

Sta. 21+50.00 to Sta. 21+75.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Usernname: jamesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\054-153_Cross-Sections.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

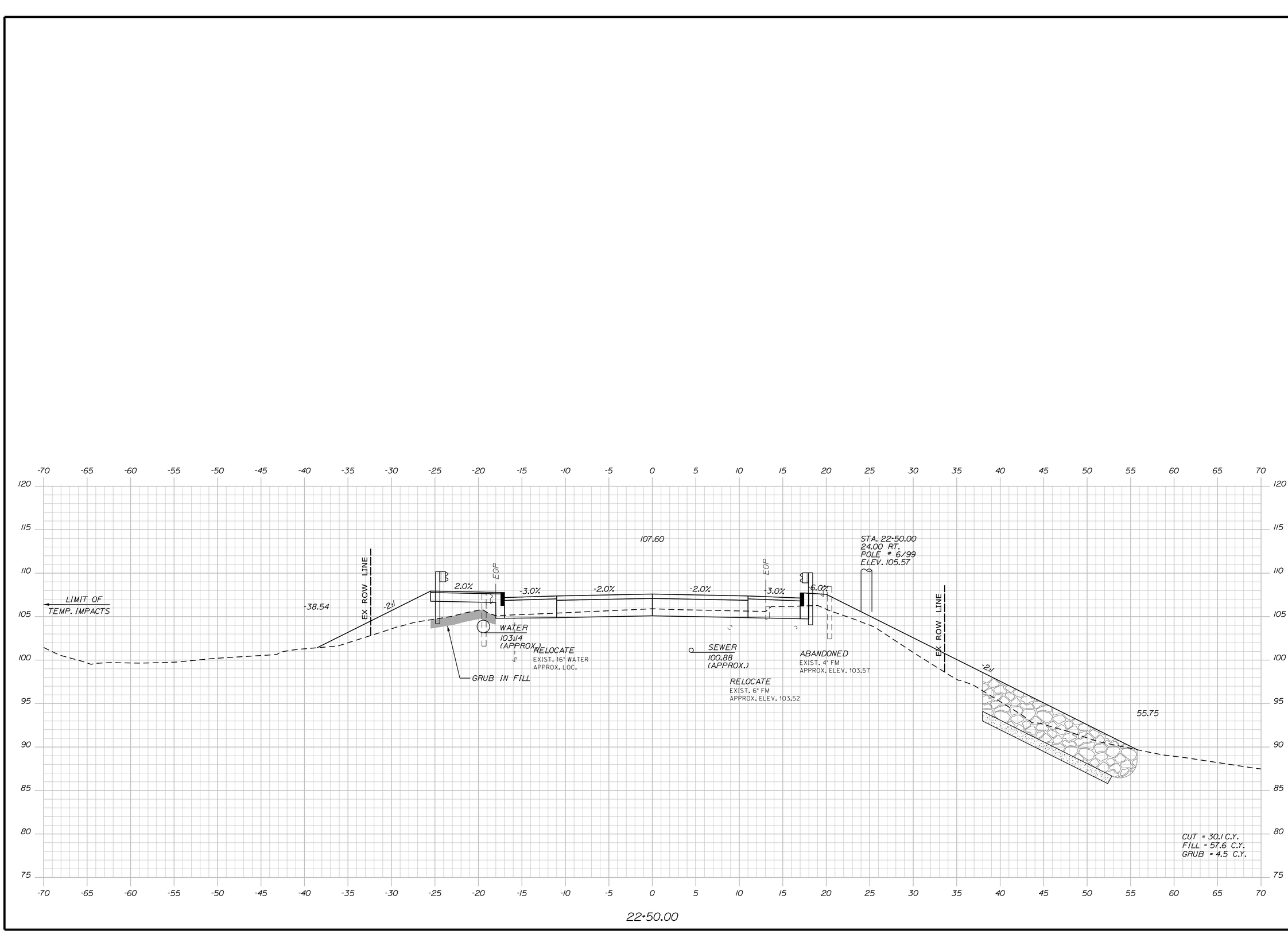
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93

OF 218

Sta. 22+00.00 to Sta. 22+25.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01
HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

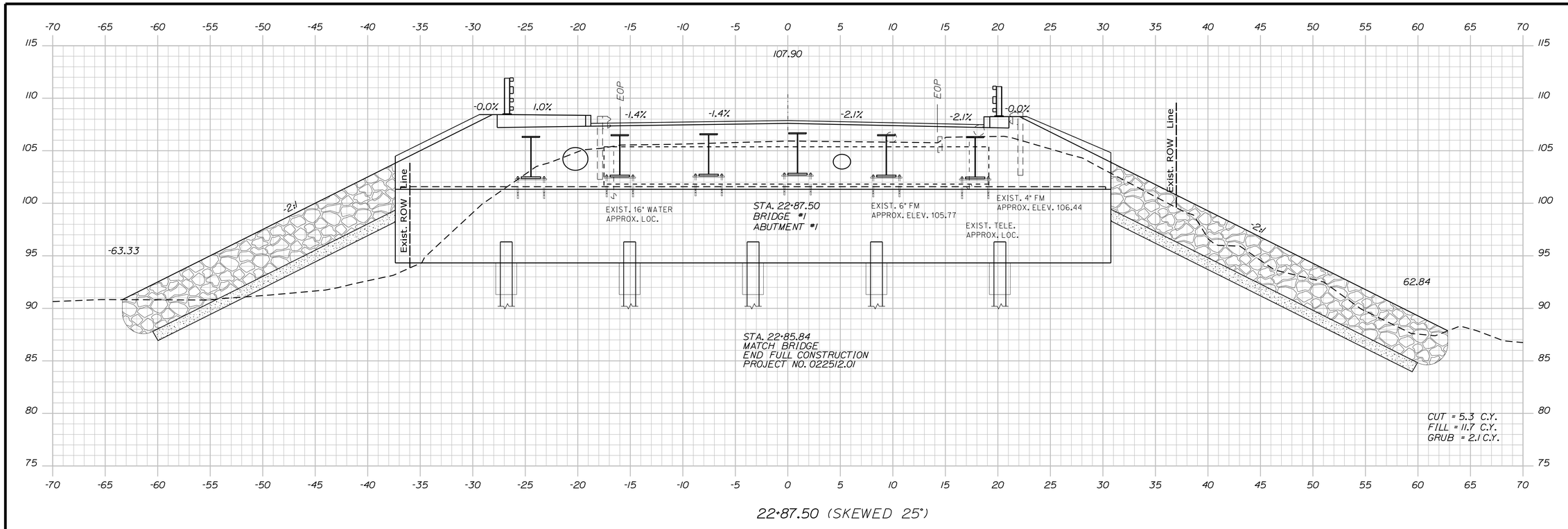
SHEET NUMBER

94

OF 218

Sta. 22+50.00

Filename: ...\054-153_Cross-Sections.dgn Username: jamesdavis Division: HIGHWAY Date:11/17/2021



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER			
DESIGN-DETAILED	ECF	11/17/2021	JBD
CHECKED-REVIEWED	ECF	11/17/2021	AG
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

R. MOULTON

P.E. NUMBER

SIGNATURE

DATE

OLD TOWN
STILLWATER AVENUE

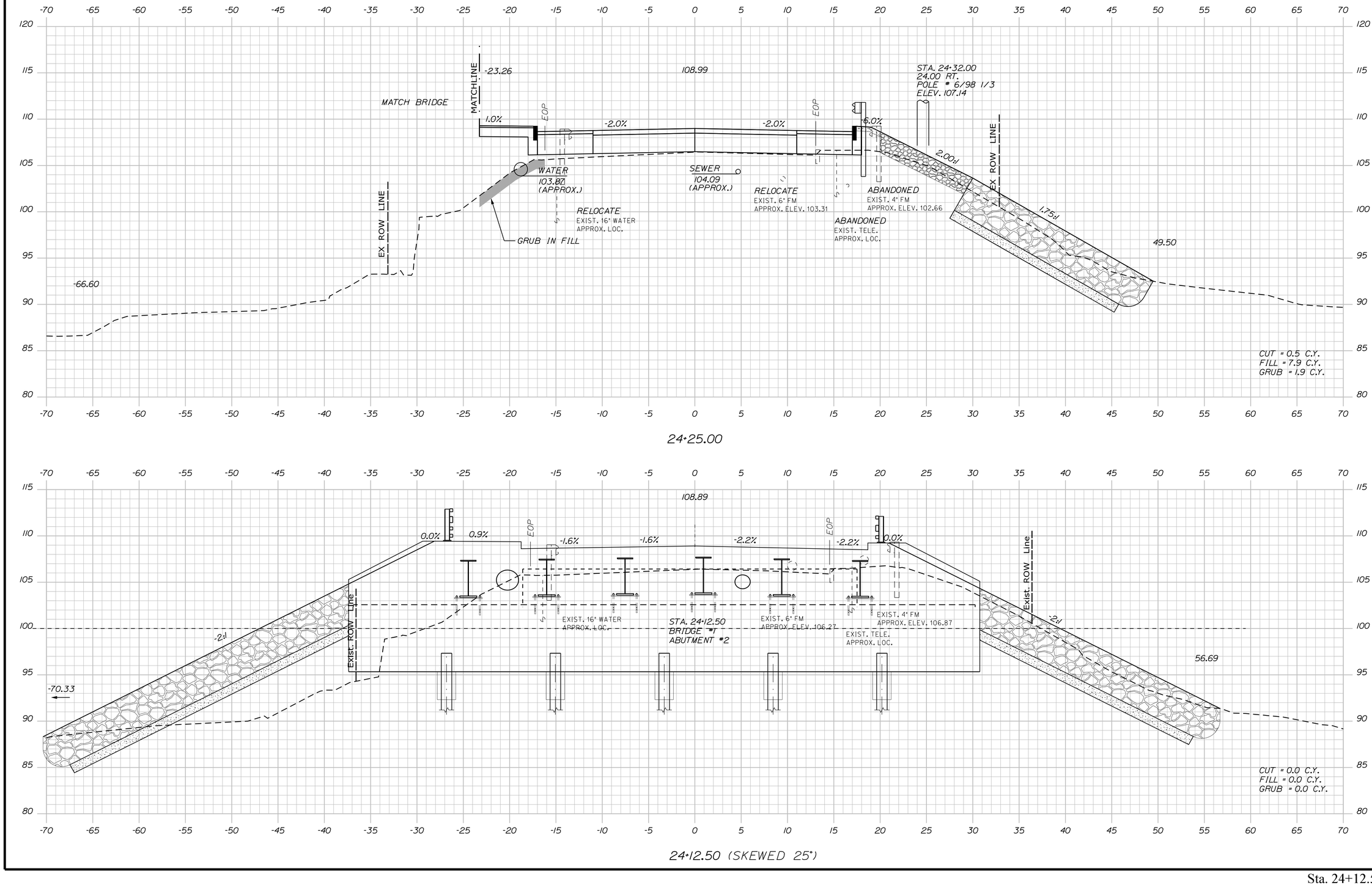
CROSS SECTIONS

SHEET NUMBER

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OF 218

Sta. 22+75.00 to Sta. 22+87.50



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

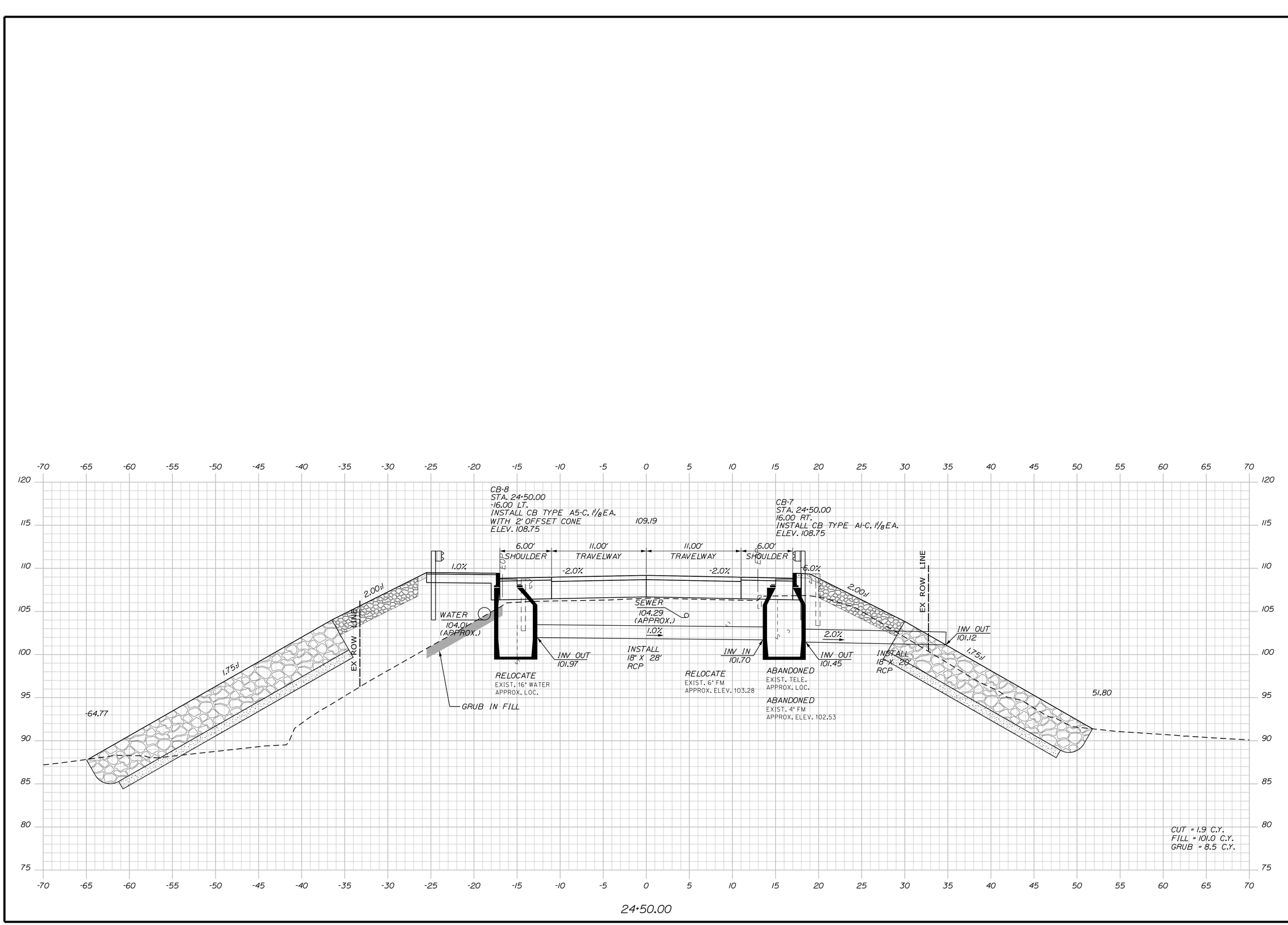
96

OF 218

Sta. 24+12.50 to Sta. 24+25.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SIGNATURE

P.E. NUMBER

DATE

2189401

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022950.01
HIGHWAY PLANS

OLD TOWN
STILLWATER AVENUE

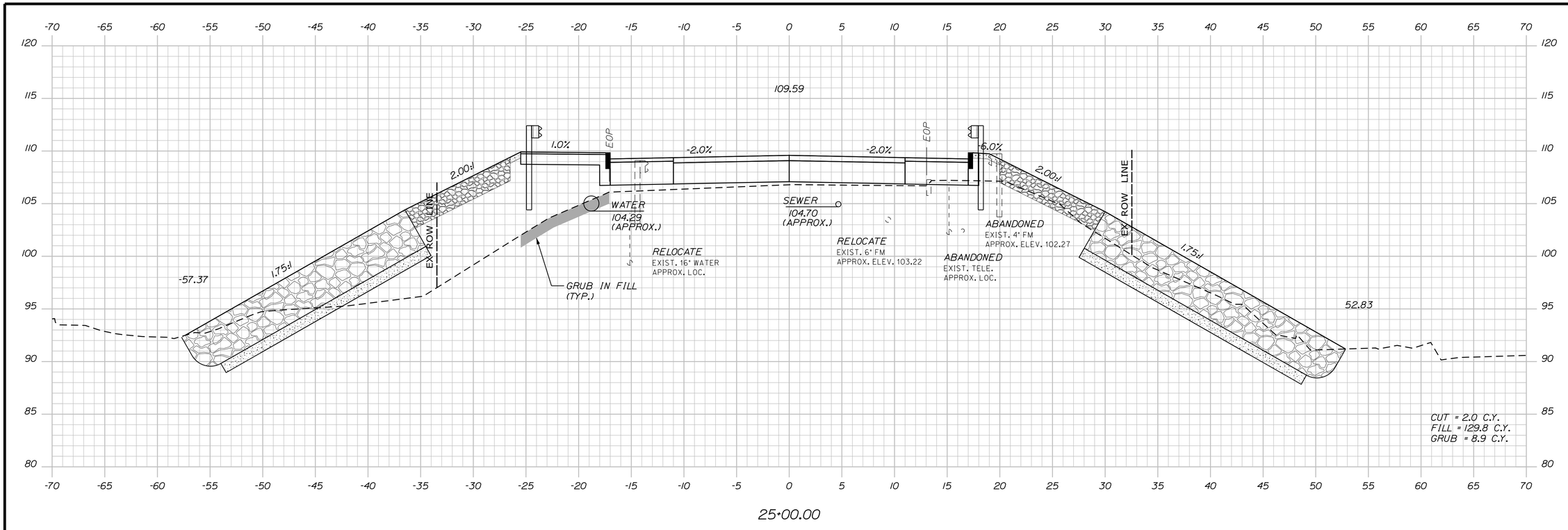
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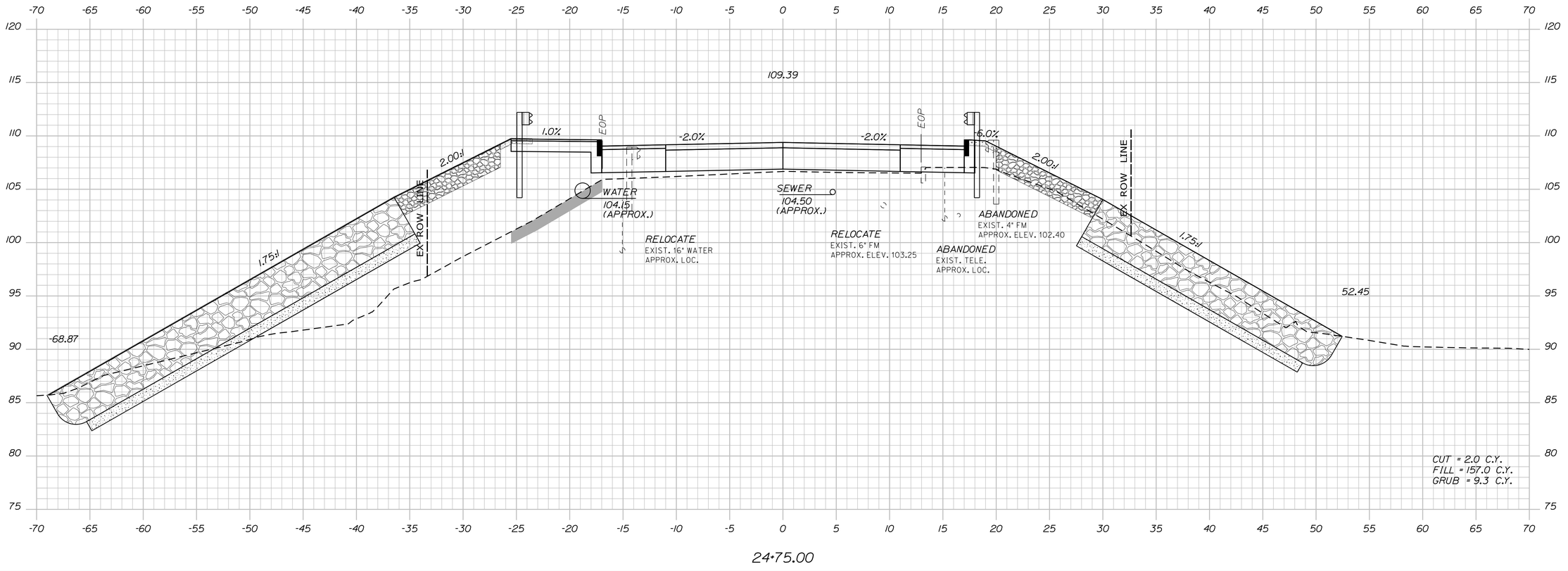
SHEET NUMBER

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OF 218

Sta. 24+50.00 to Sta. 24+50.00





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	BY	DATE
R. MOULTON	JBD	11/17/2021
PROJ. MANAGER	ECF	11/17/2021
DESIGN-DETAILED		
CHECKED-REVIEWED	ECF	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

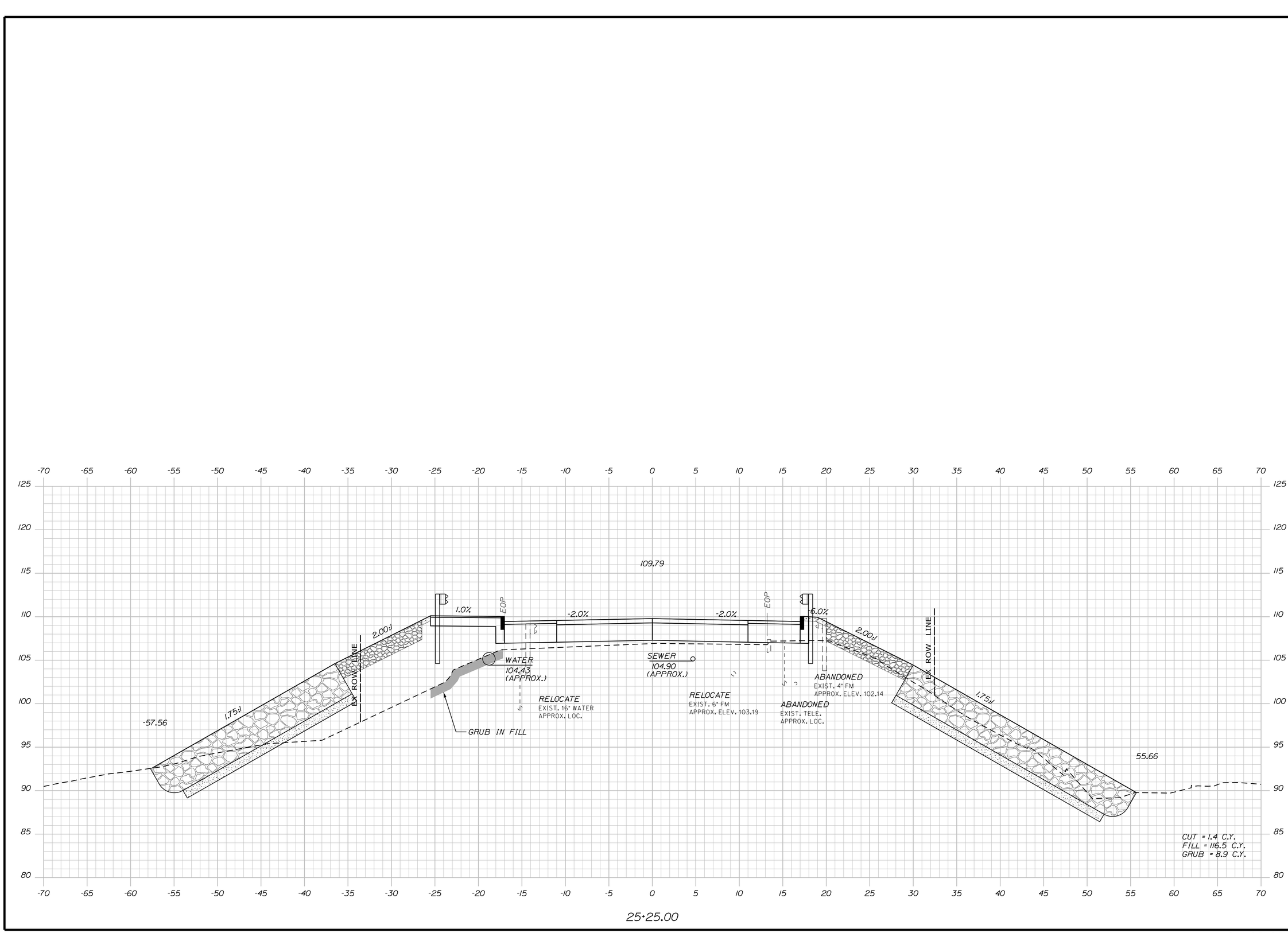
98

OF 218

Sta. 24+75.00 to Sta. 25+00.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



Sta. 25+25.00 to Sta. 25+25.00

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01
HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

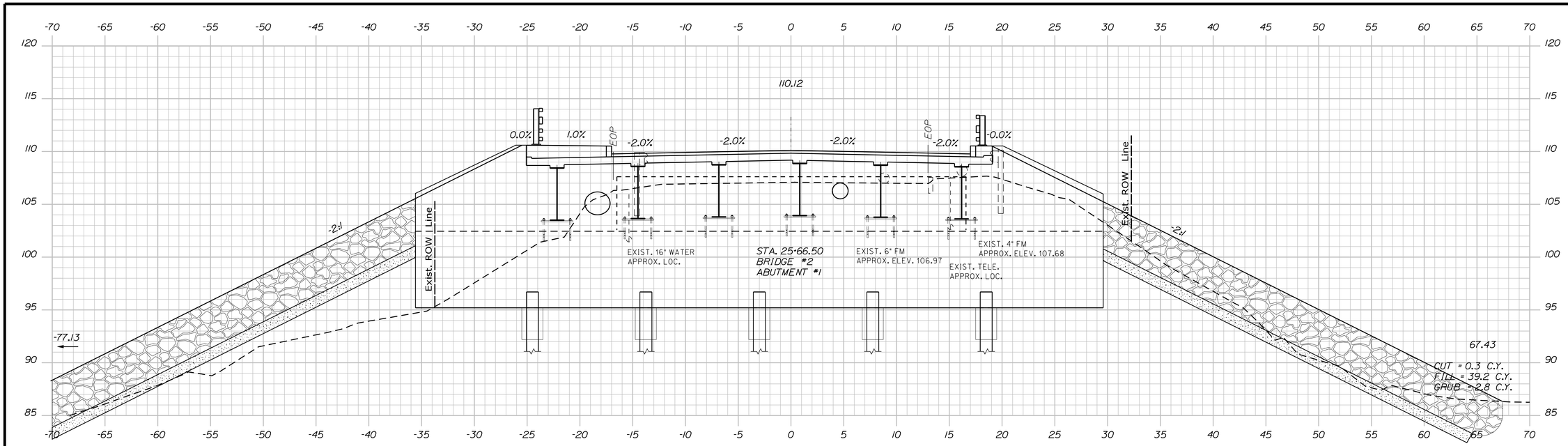
CROSS SECTIONS

SHEET NUMBER

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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

OLD TOWN
STILLWATER AVENUE

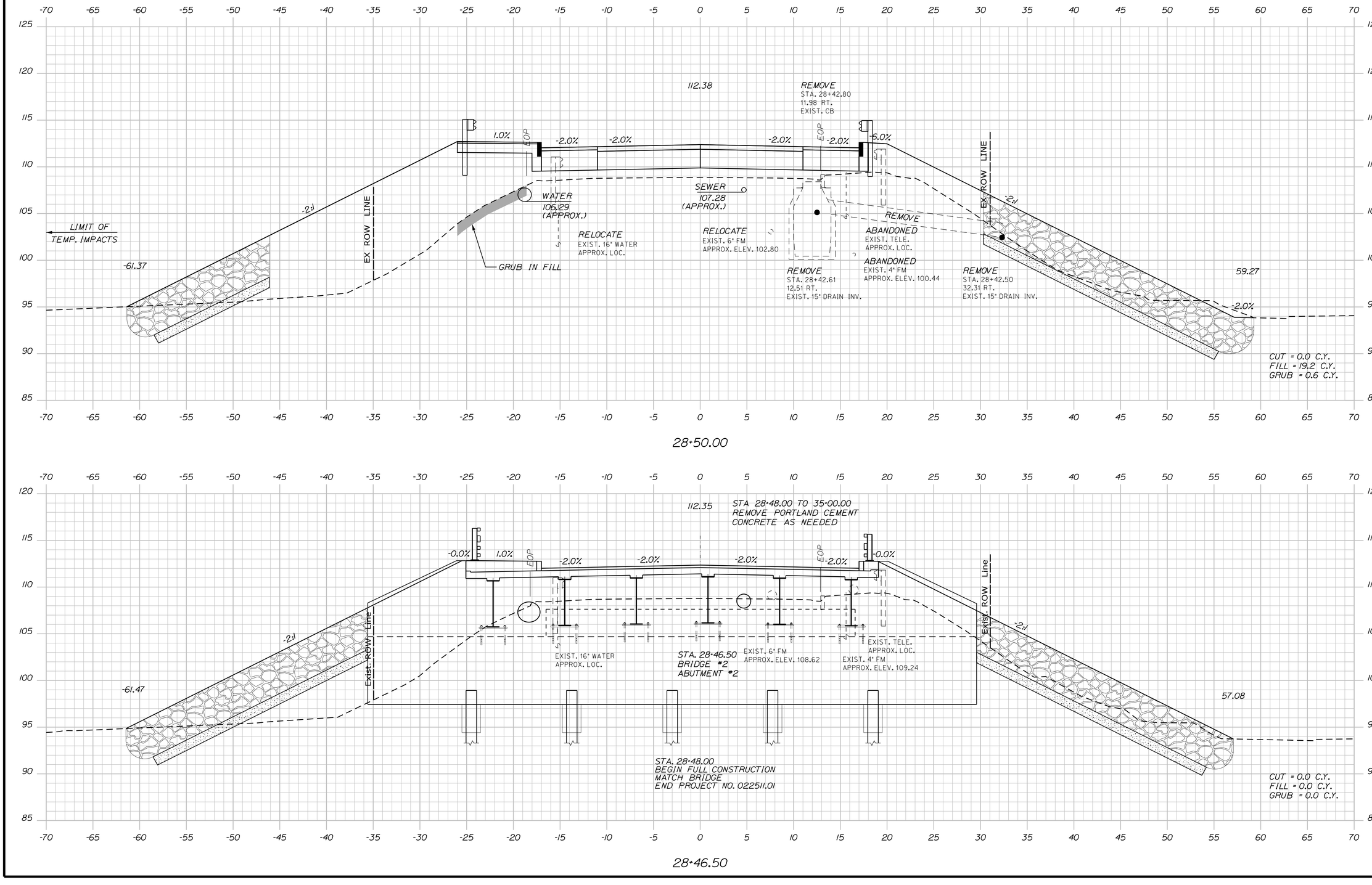
CROSS SECTIONS

SHEET NUMBER

100

OF 218

Sta. 25+50.00 to Sta. 25+66.50



Sta. 28+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

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022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

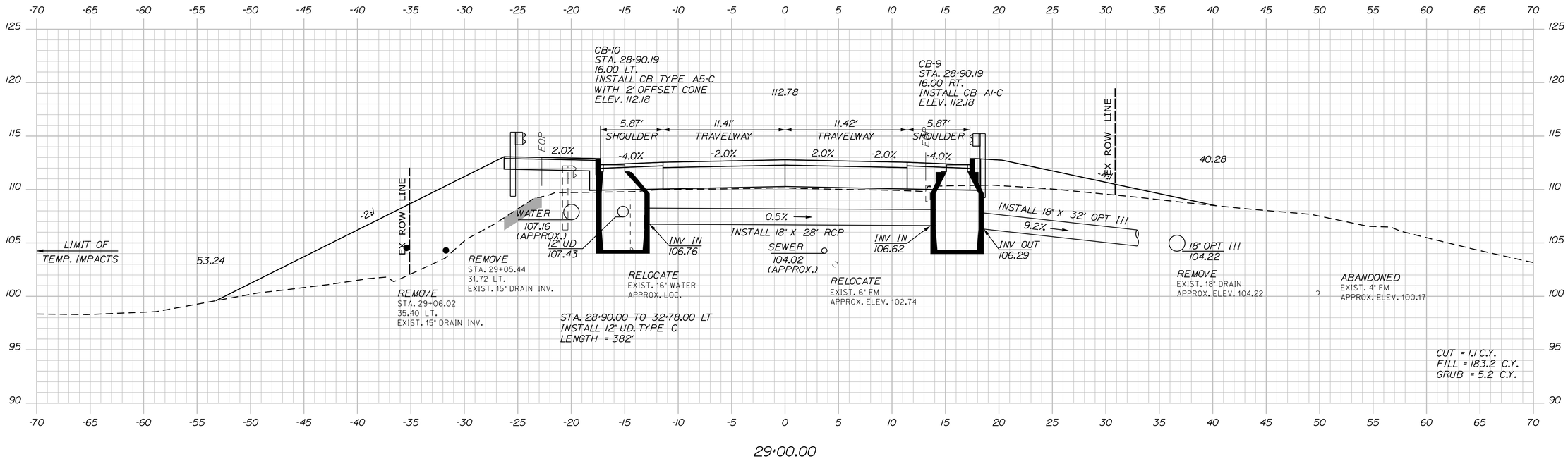
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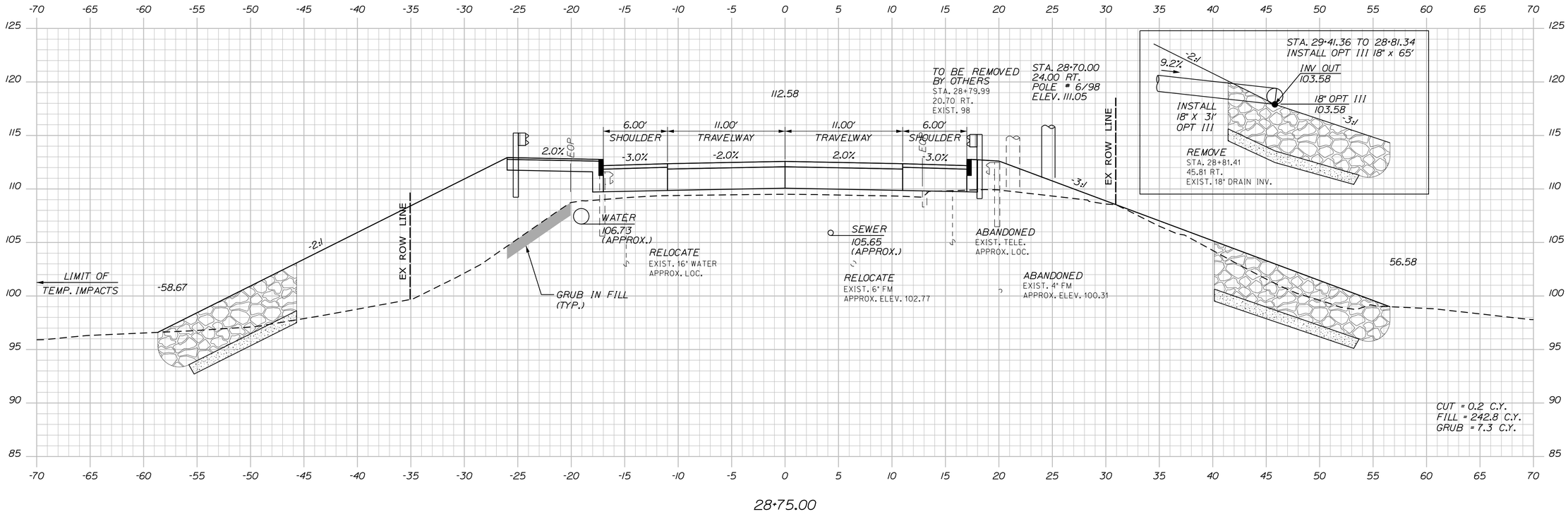
101

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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Usernname: jamesdavis Date:11/17/2021
Division: HIGHWAY
Filename: ...\054-153_Cross-Sections.dgn





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HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

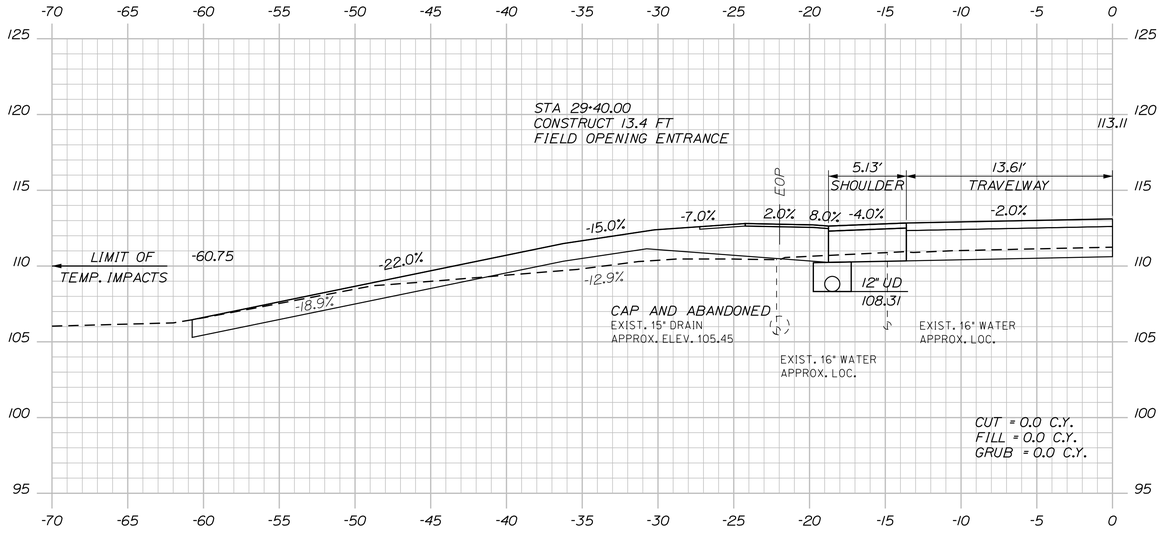
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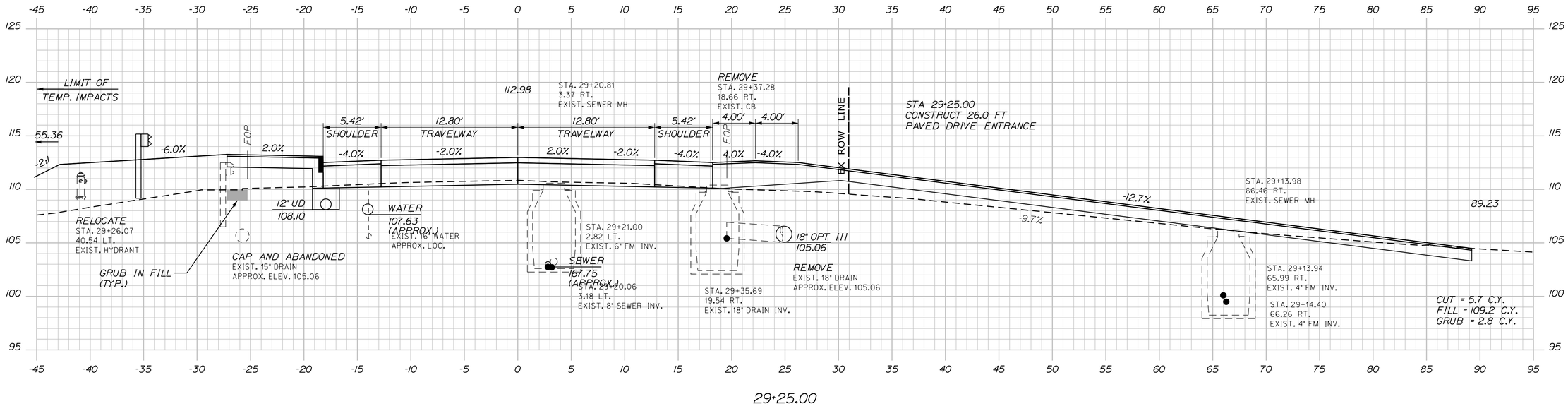
SHEET NUMBER

102

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Sta. 28+75.00 to Sta. 29+00.00





Sta. 29+25.00 to Sta. 29+40.00

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HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON
DESIGN-DETAILED	ECF
CHECKED-REVIEWED	ECF
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

	BY	DATE
REVISIONS 1	JBD	11/17/2021
REVISIONS 2	AG	11/17/2021
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

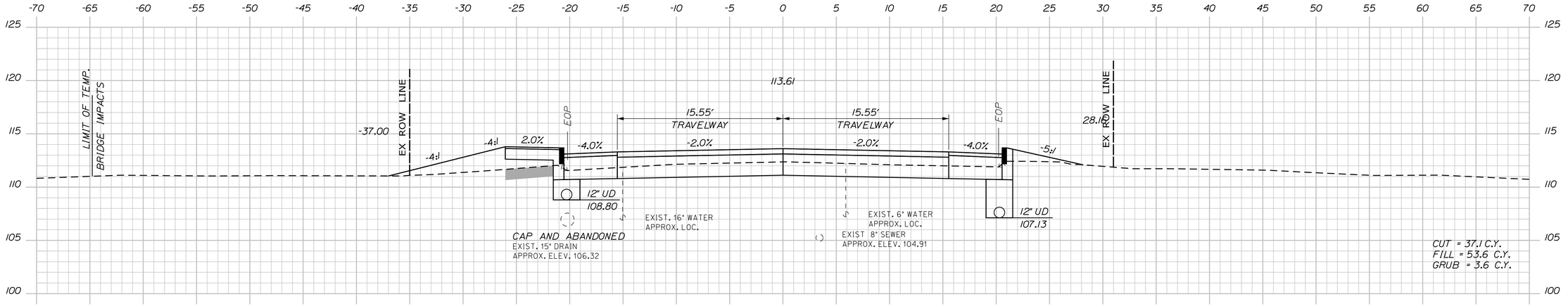
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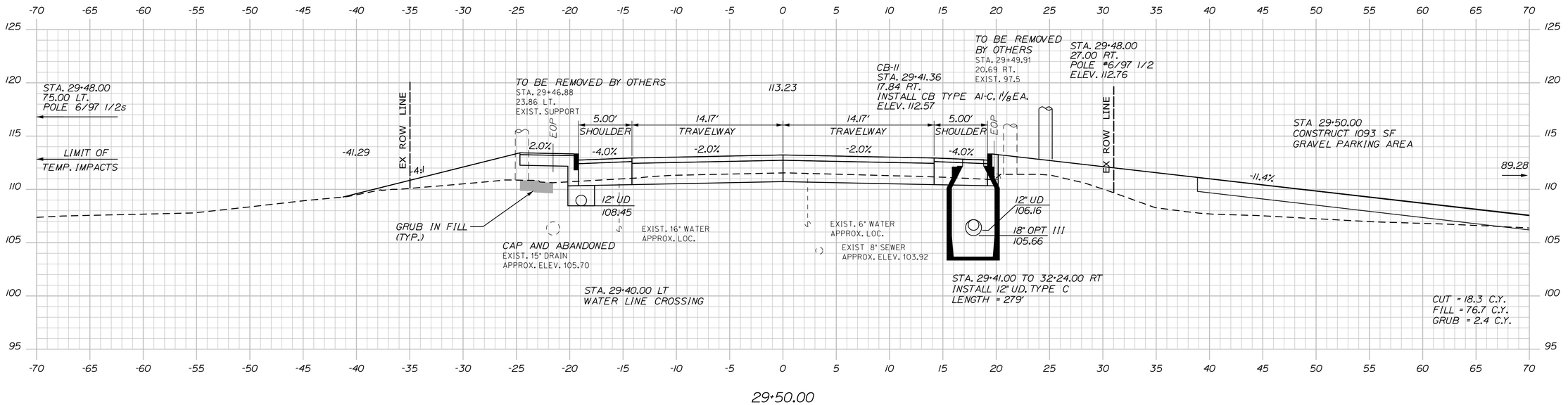
OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



29+75.00



29+50.00

STATE OF MAINE
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HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
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FIELD CHANGES			

BY | DATE | SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

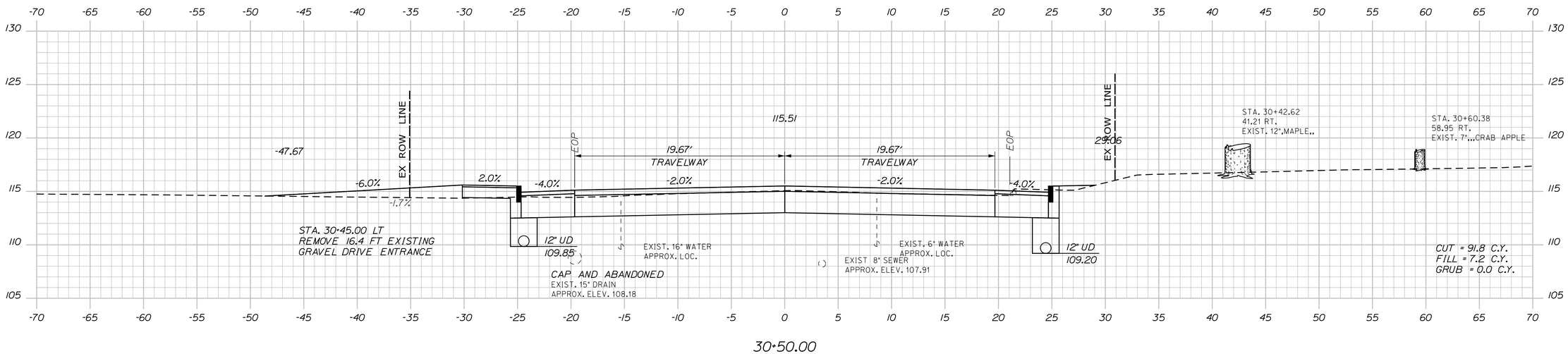
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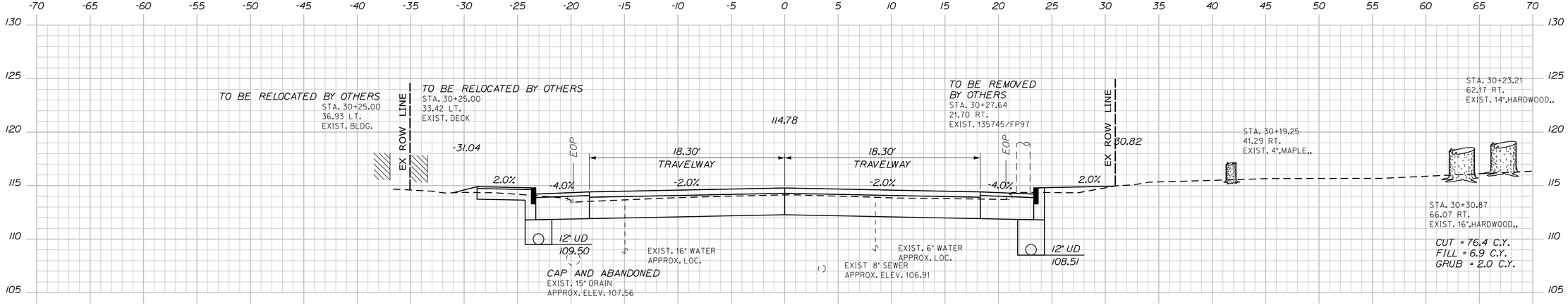
104

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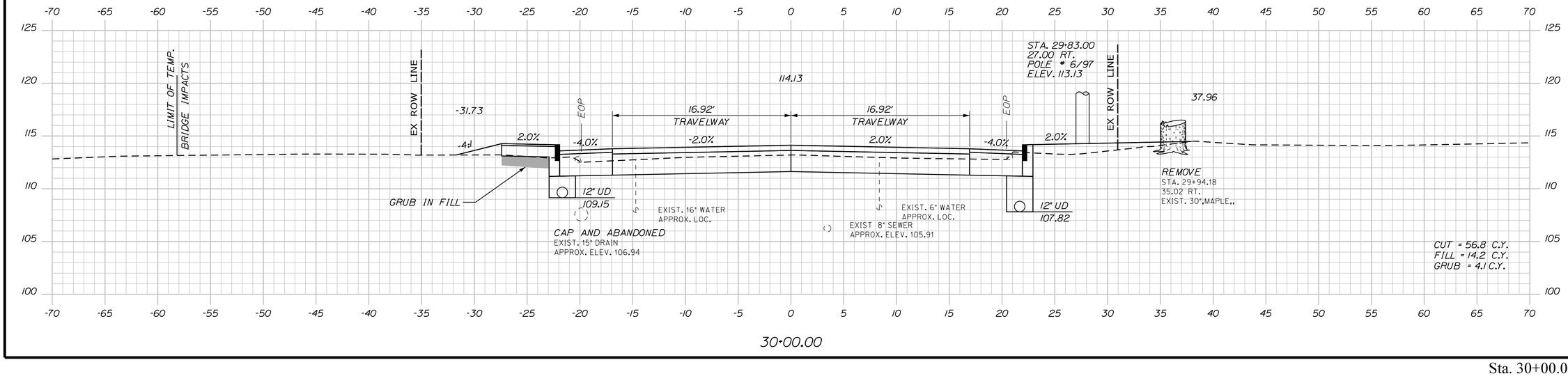
Sta. 29+50.00 to Sta. 29+75.00



30+50.00



30+25.00



30+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

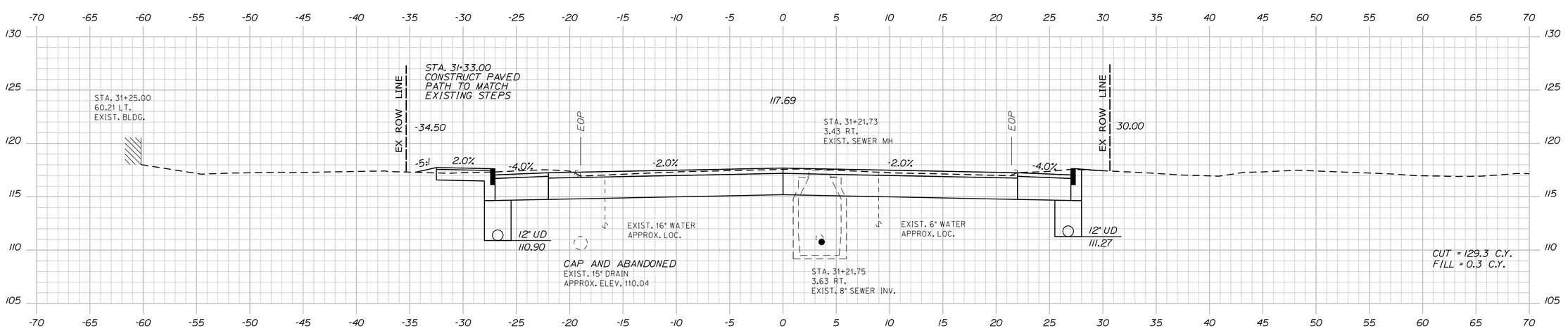
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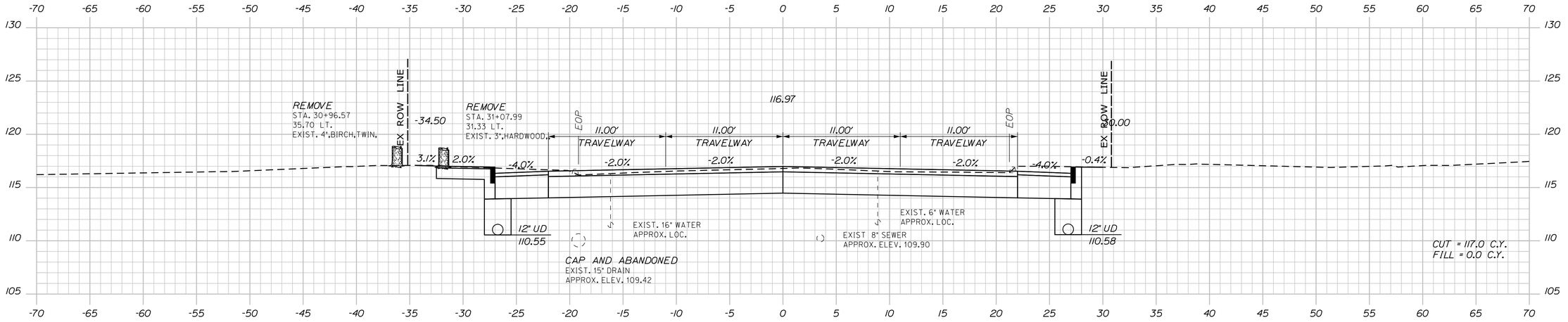
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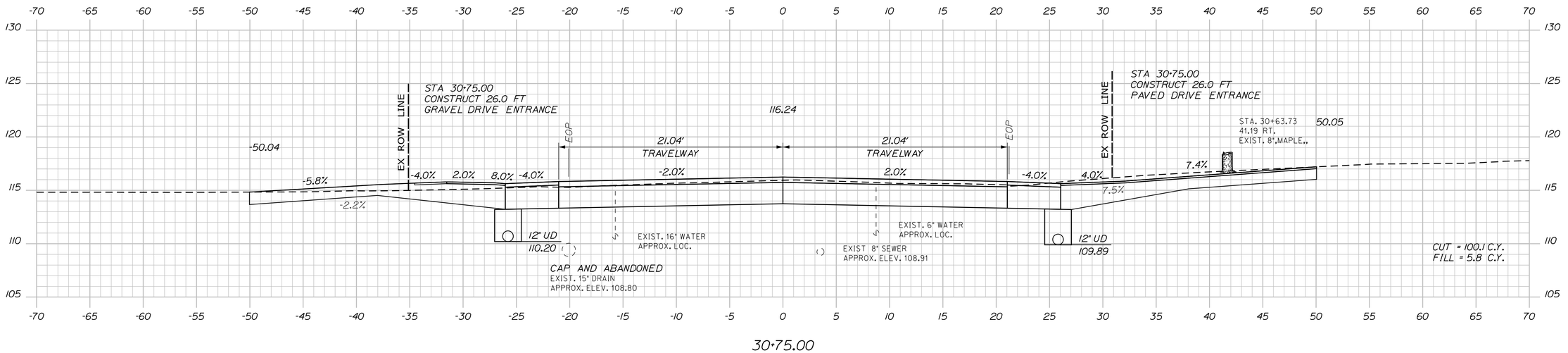
OF 218

Sta. 30+00.00 to Sta. 30+50.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







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HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

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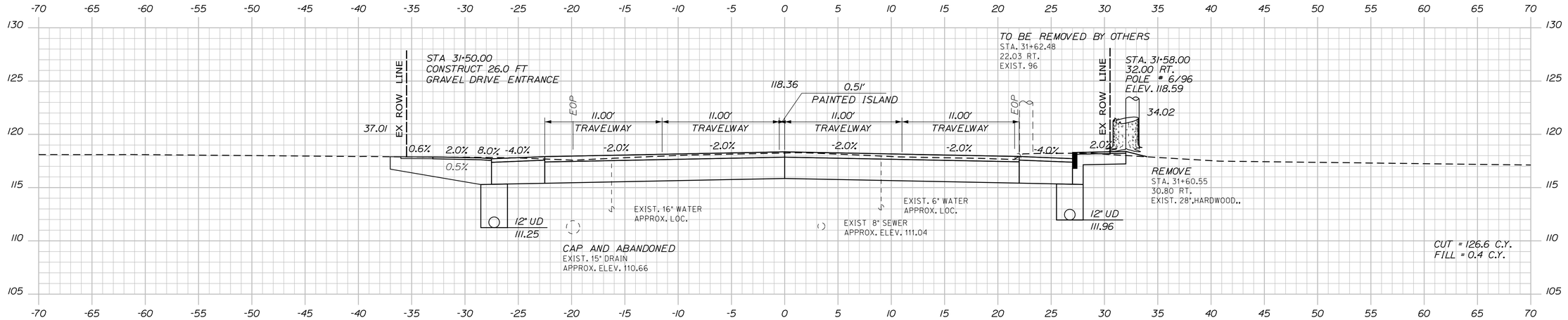
OF 218

Sta. 30+75.00 to Sta. 31+25.00

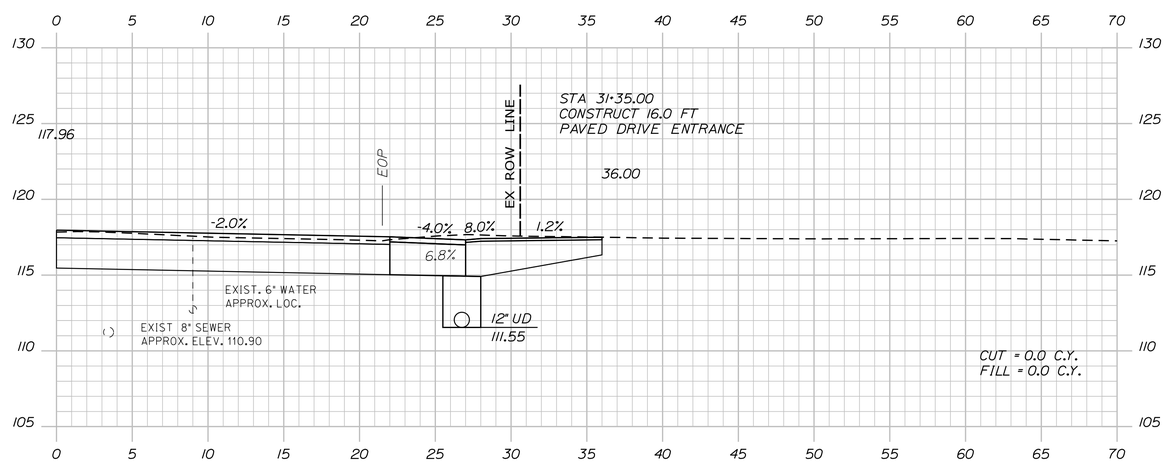
Username: jamesdavis Date:11/17/2021

Division: HIGHWAY

Filename: ...\054-153_Cross-Sections.dgn



31+50.00



31+35.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
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REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

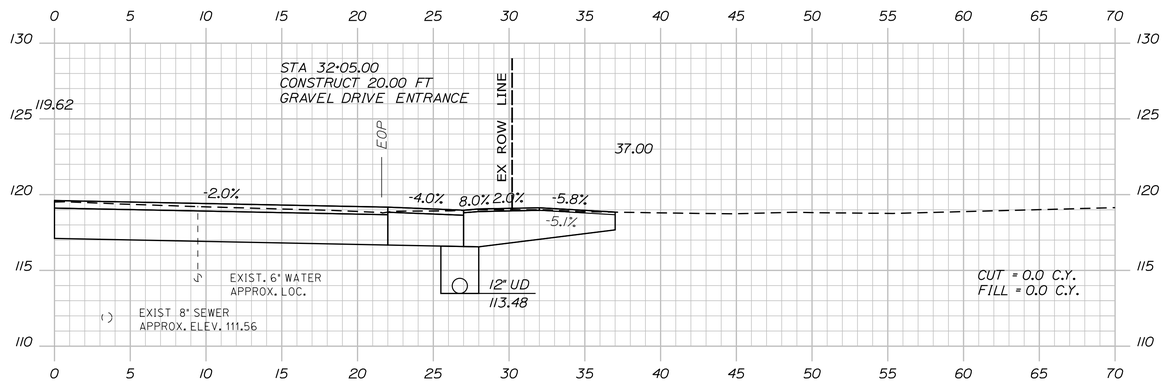
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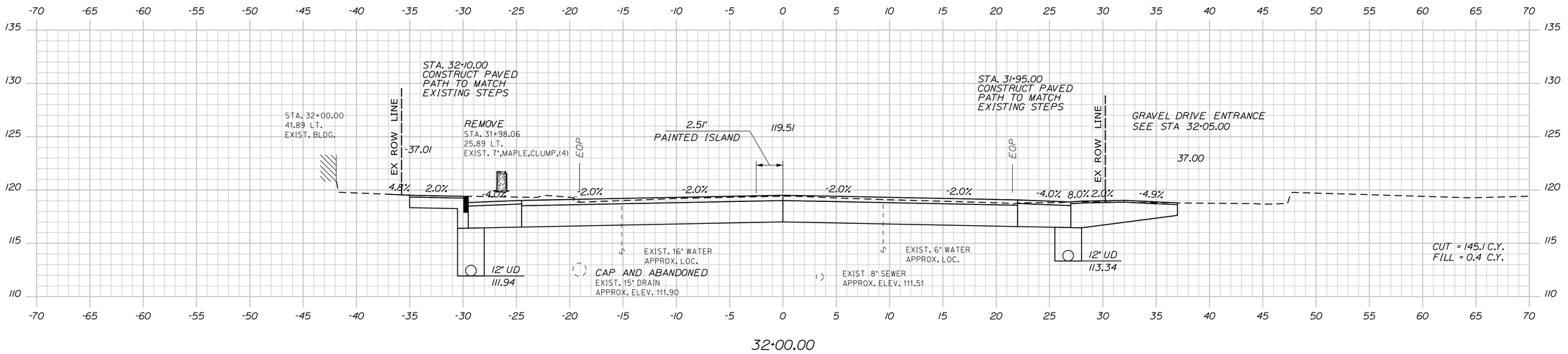
OF 218

Sta. 31+35.00 to Sta. 31+50.00

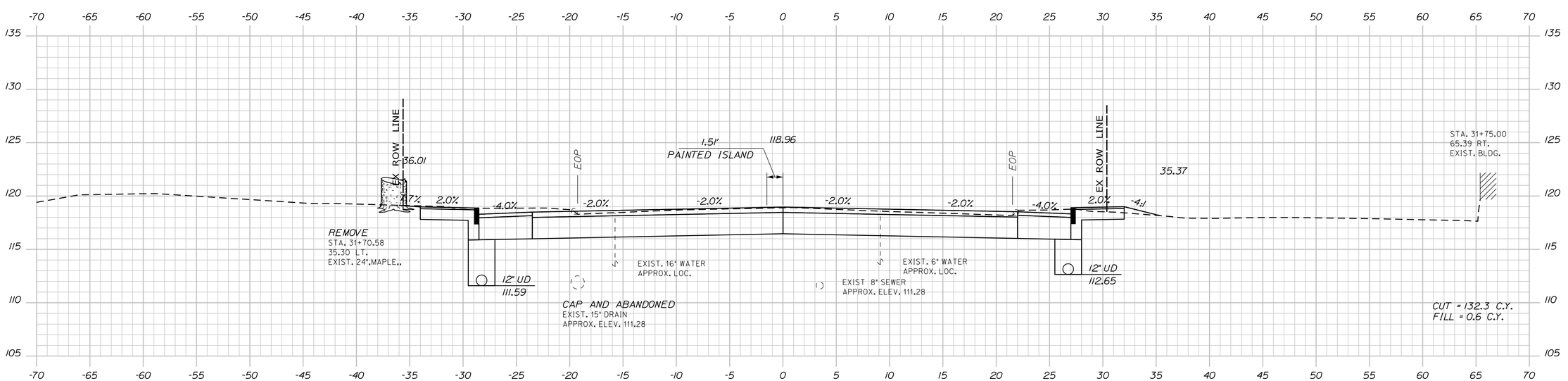
Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



32+05.00



32+00.00



31+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON			
DESIGN-DETAILED	ECF	JBD	11/17/2021	SIGNATURE
CHECKED-REVIEWED	ECF	AG	11/17/2021	
DESIGN2-DETAILED2				P.E. NUMBER
DESIGN3-DETAILED3				
REVISIONS 1				DATE
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

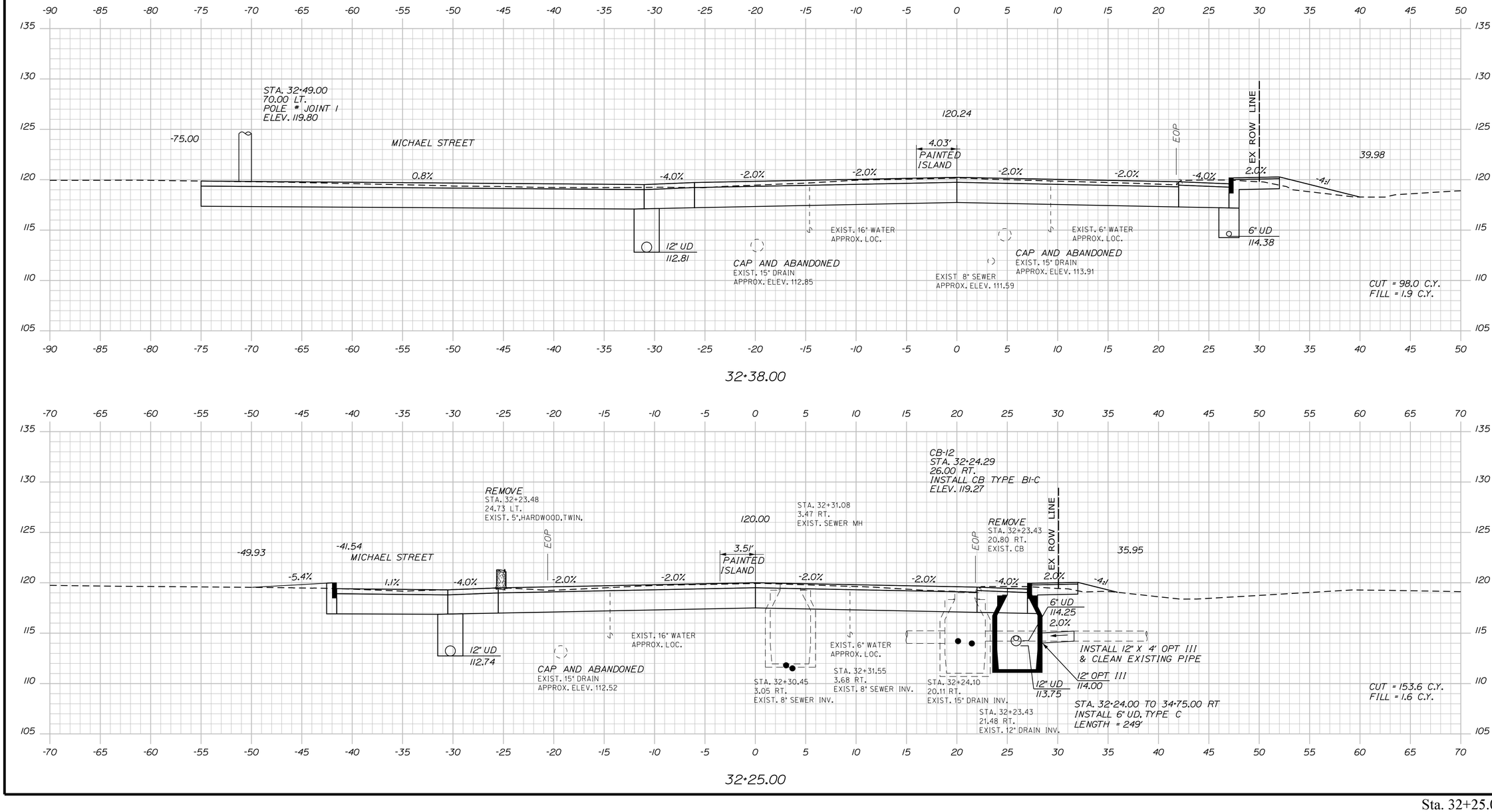
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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Sta. 31+75.00 to Sta. 32+05.00

Division: HIGHWAY
Username: jamesdavis
Date:11/17/2021
Filename: ...\054-153_Cross-Sections.dgn



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HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

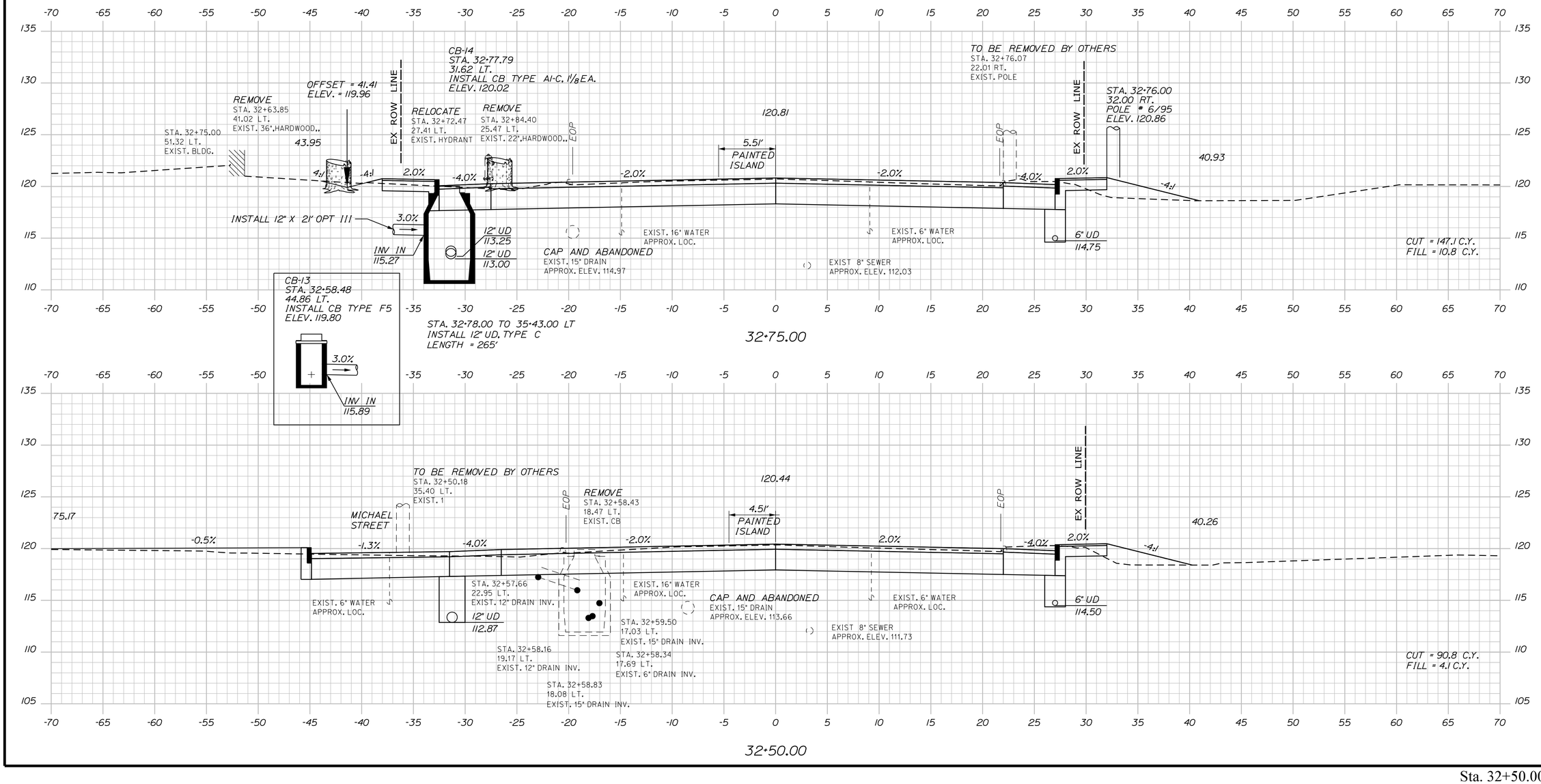
SHEET NUMBER

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Sta. 32+25.00 to Sta. 32+38.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



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HIGHWAY PLANS

	R. MOULTON	DATE	SIGNATURE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	11/17/2021	
CHECKED-REVIEWED	ECF	11/17/2021	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

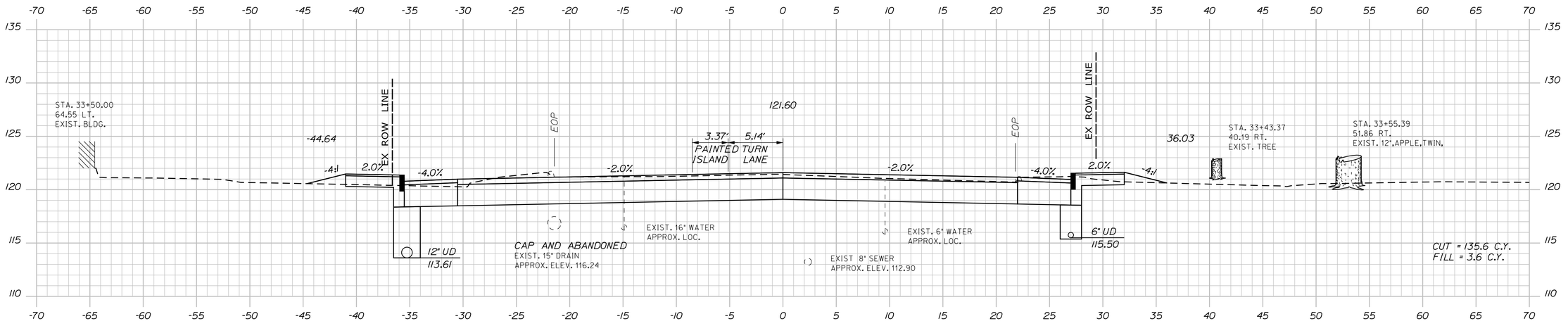
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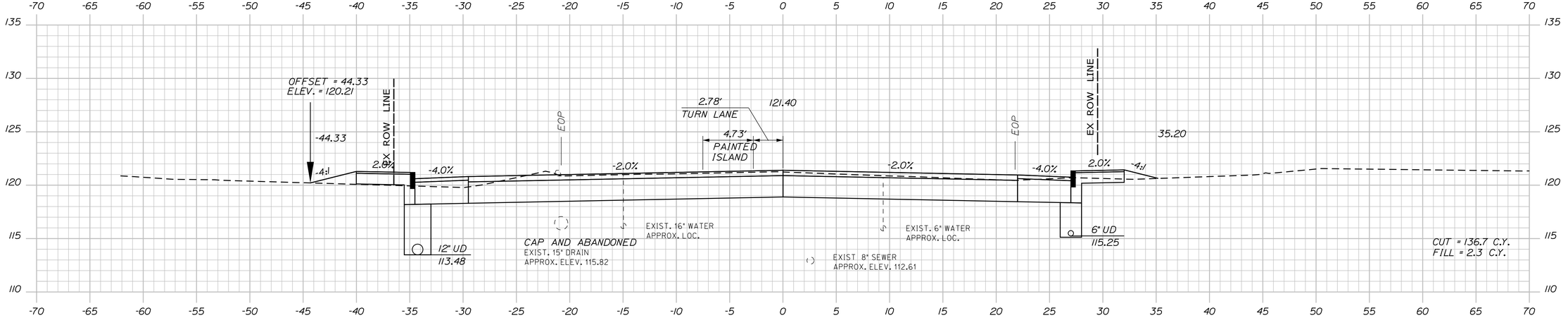
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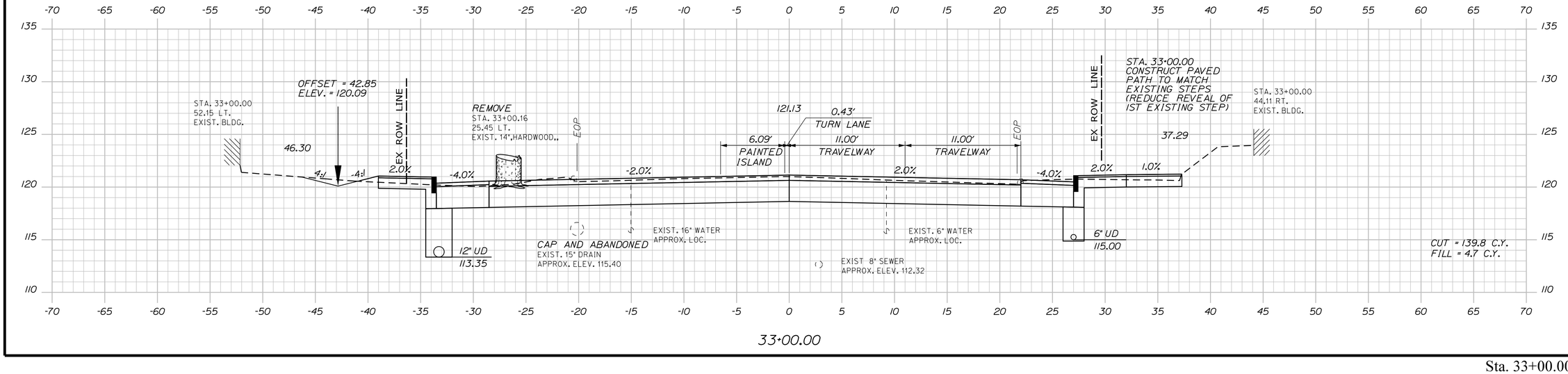
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Sta. 32+50.00 to Sta. 32+75.00







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HIGHWAY PLANS

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DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

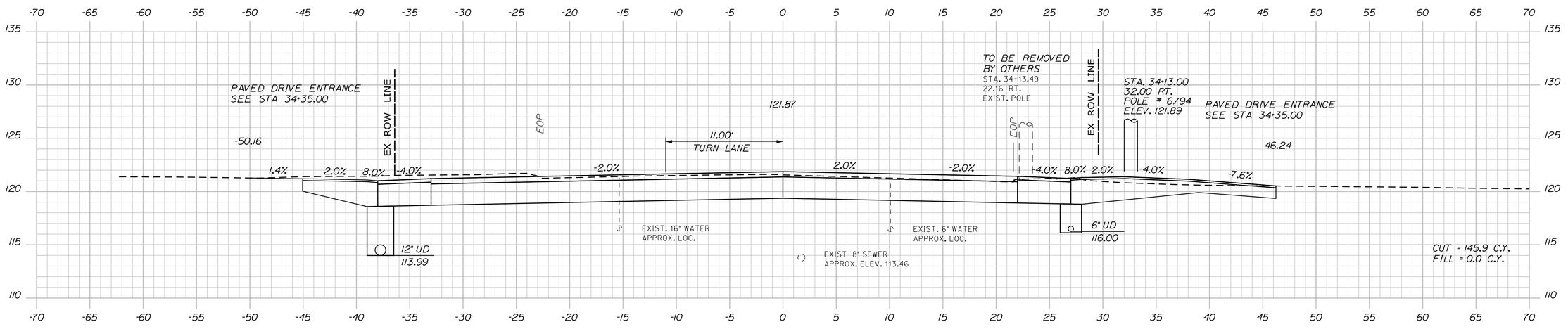
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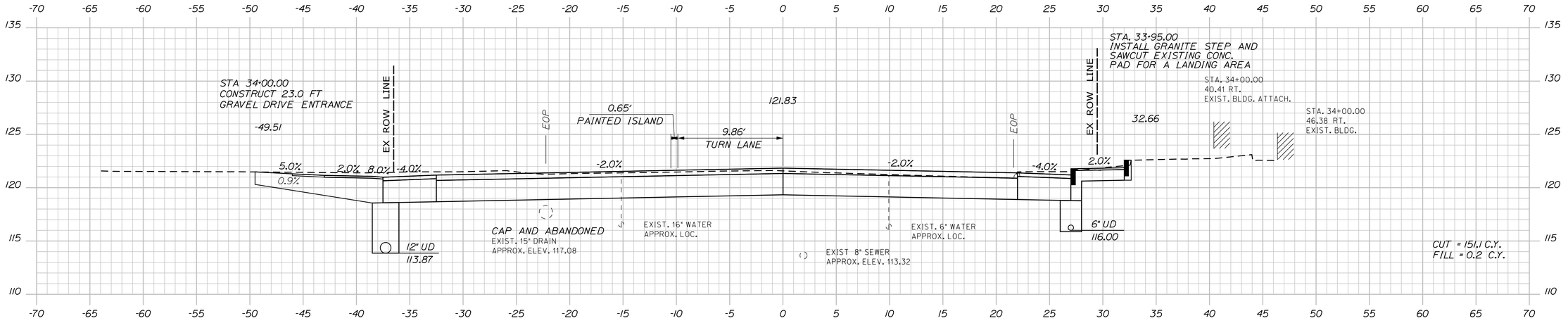
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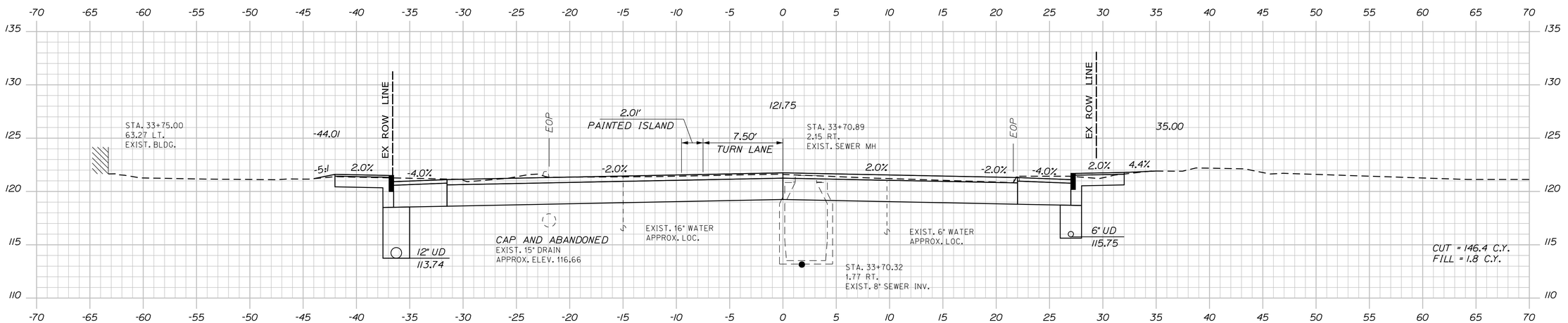
OF 218

Sta. 33+00.00 to Sta. 33+50.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







STATE OF MAINE
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HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R. MOULTON	
DESIGN-DETAILED	ECF	11/17/2021
CHECKED-REVIEWED	ECF	11/17/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
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REVISIONS 3		
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FIELD CHANGES		

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OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

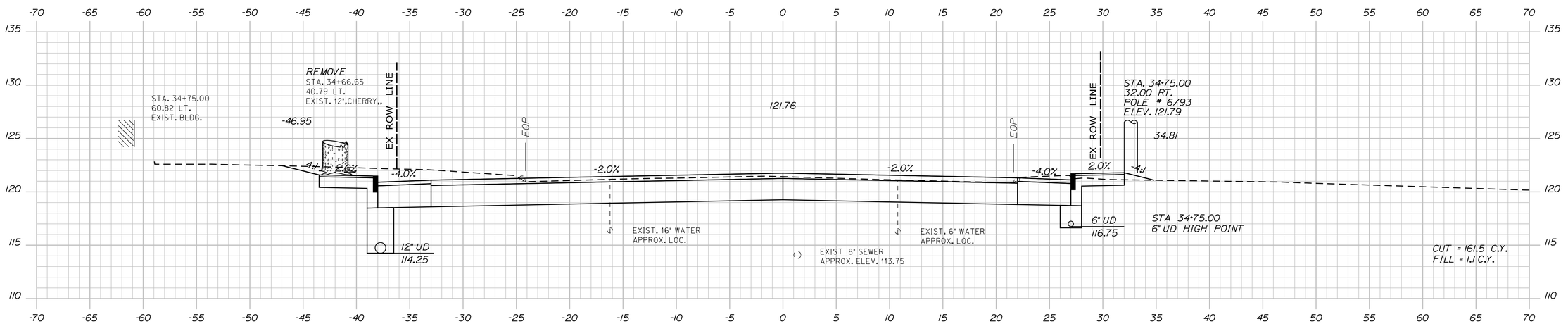
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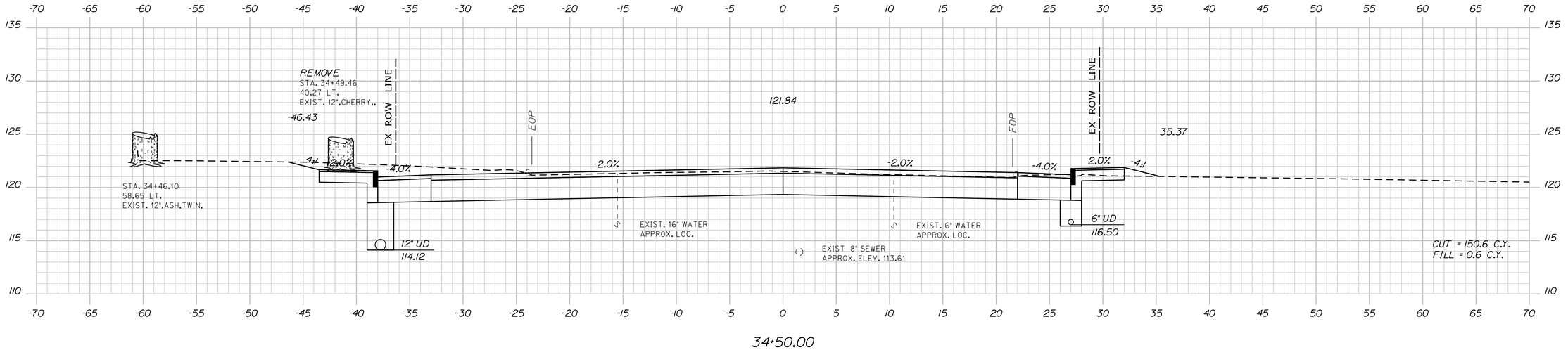
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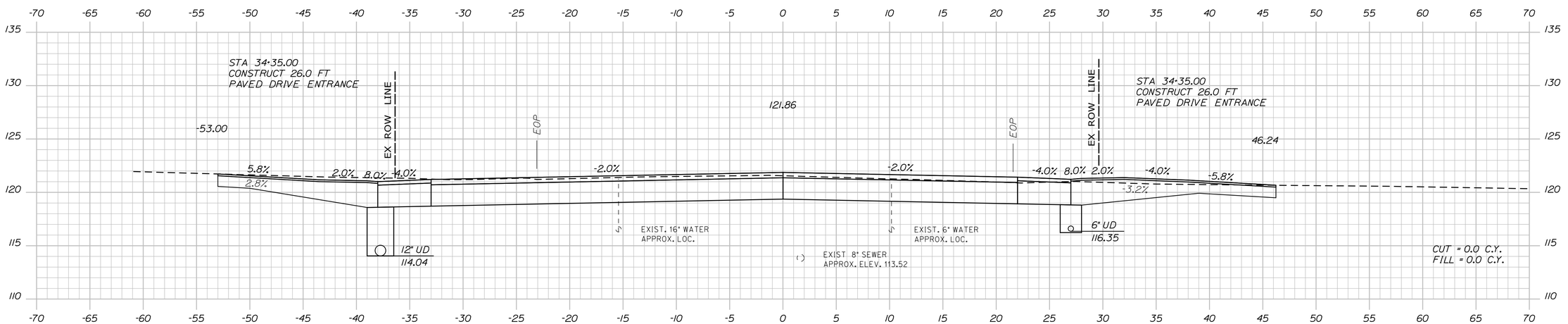
OF 218

Sta. 33+75.00 to Sta. 34+25.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







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HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

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OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

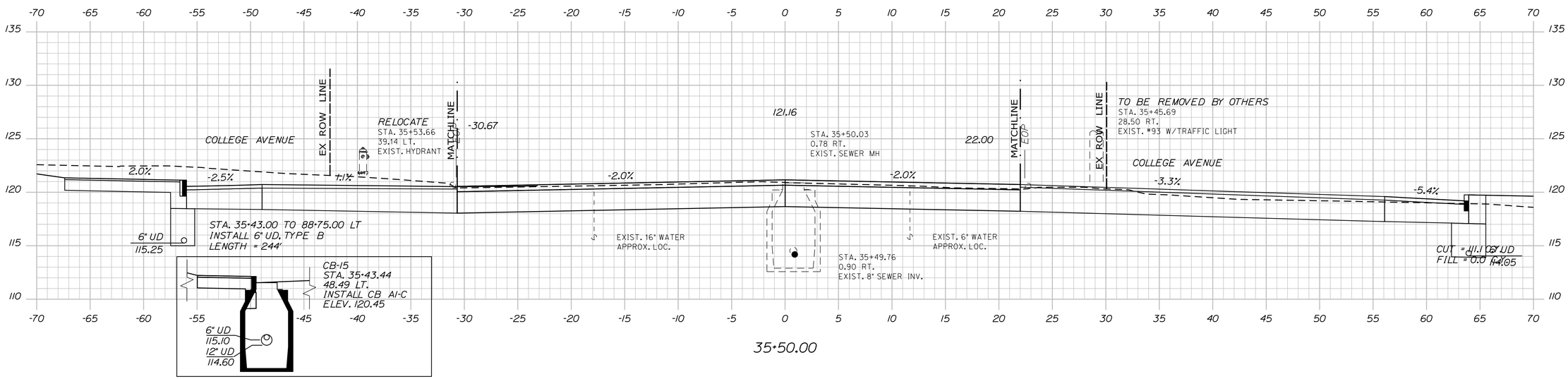
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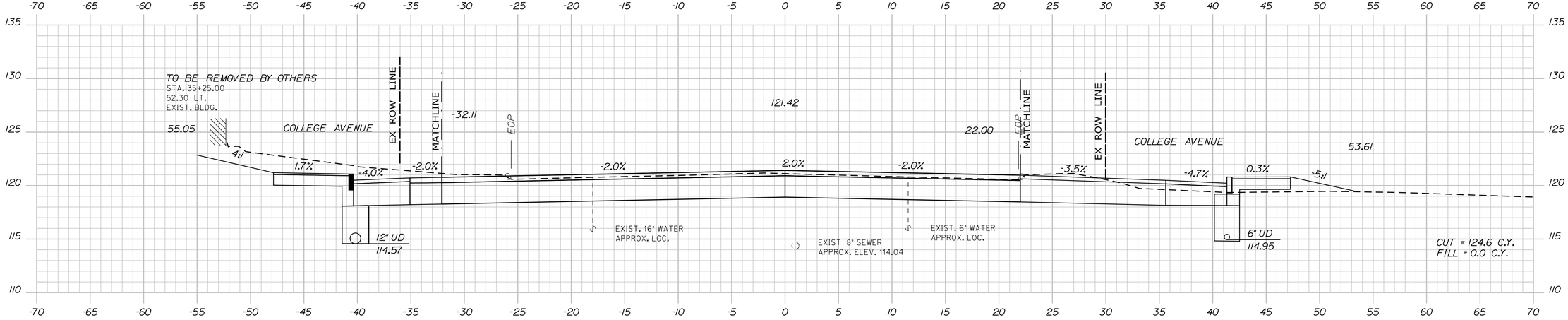
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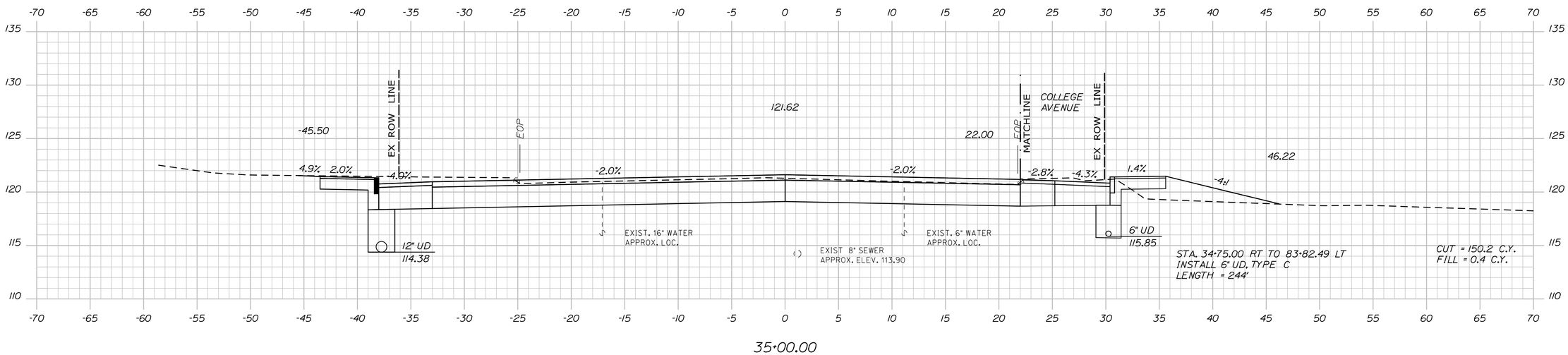
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Sta. 34+35.00 to Sta. 34+75.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







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HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON			
DESIGN-DETAILED	ECF	JBD	11/17/2021	
CHECKED-REVIEWED	ECF	AG	11/17/2021	
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

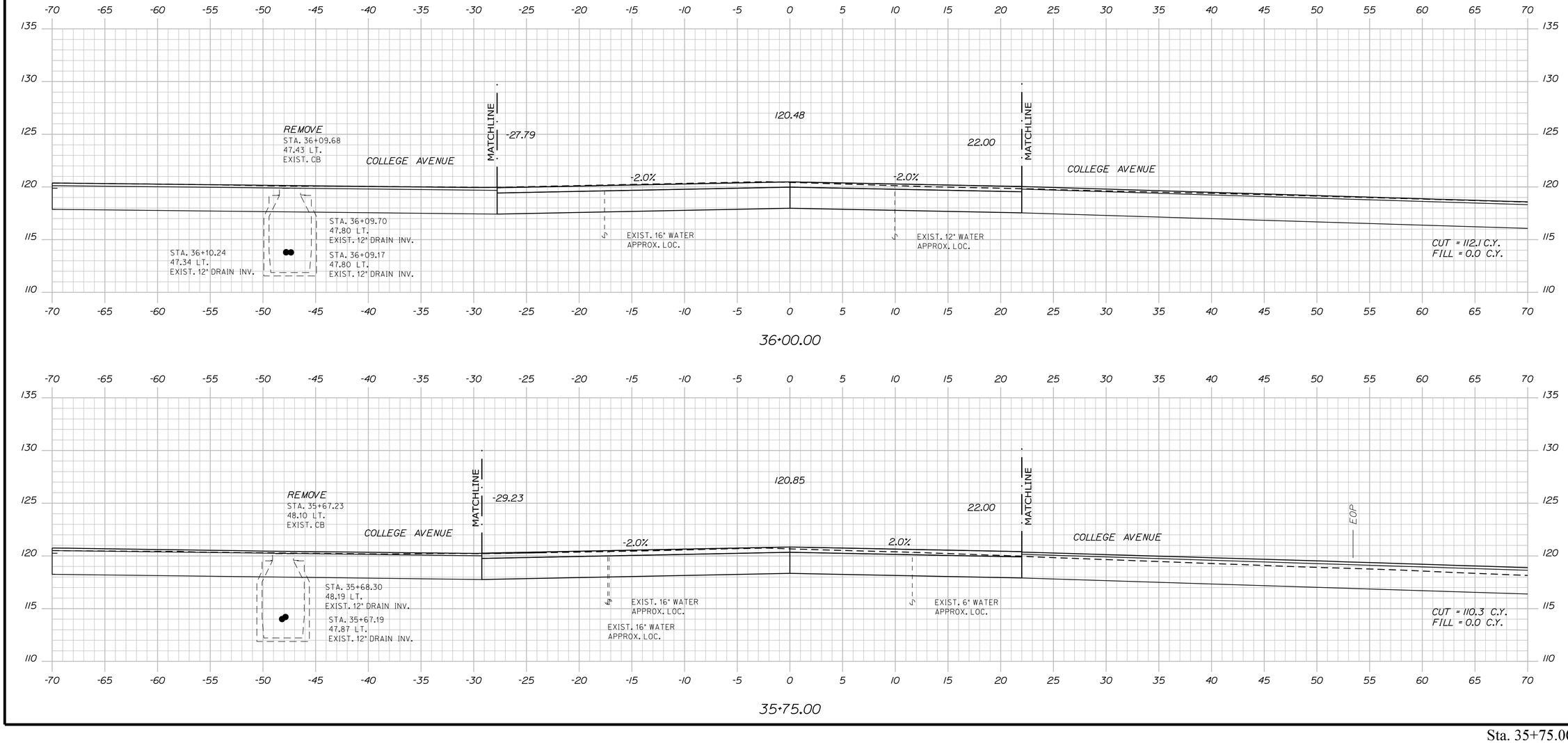
SHEET NUMBER

114

OF 218

Sta. 35+00.00 to Sta. 35+50.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

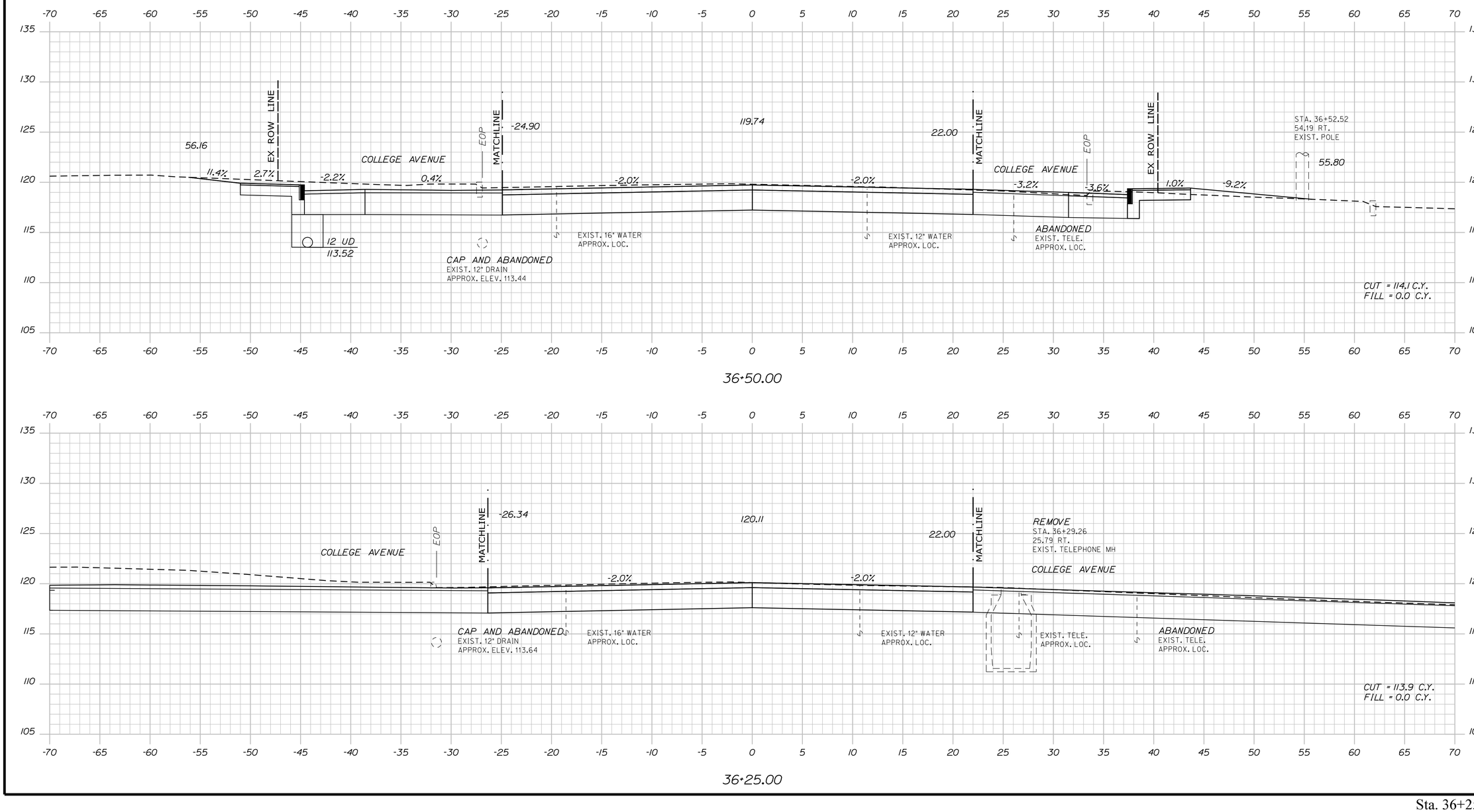
SHEET NUMBER

115

OF 218

Sta. 35+75.00 to Sta. 36+00.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



Sta. 36+25.00 to Sta. 36+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF		
CHECKED-REVIEWED	ECF		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

	BY	DATE
	JBD	11/17/2021
	AG	11/17/2021

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

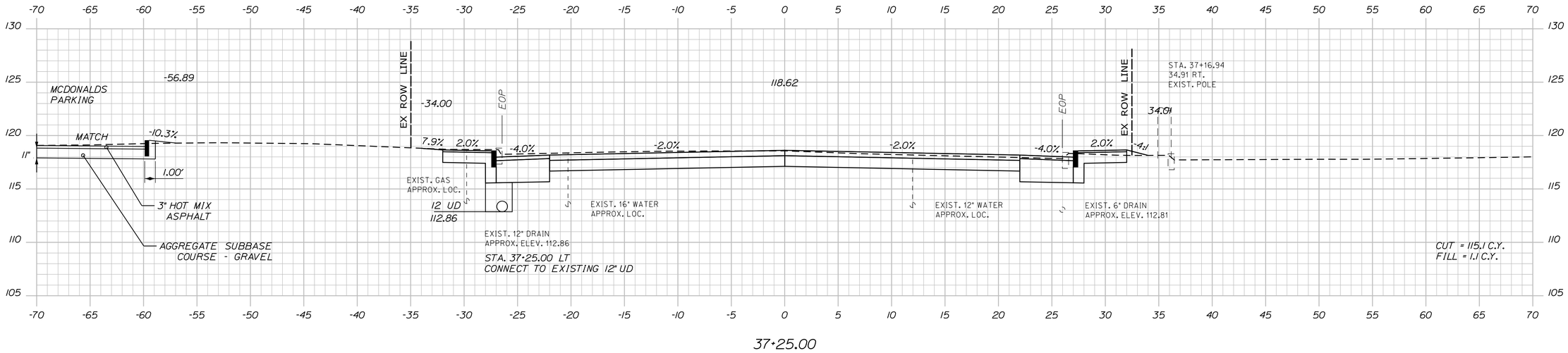
CROSS SECTIONS

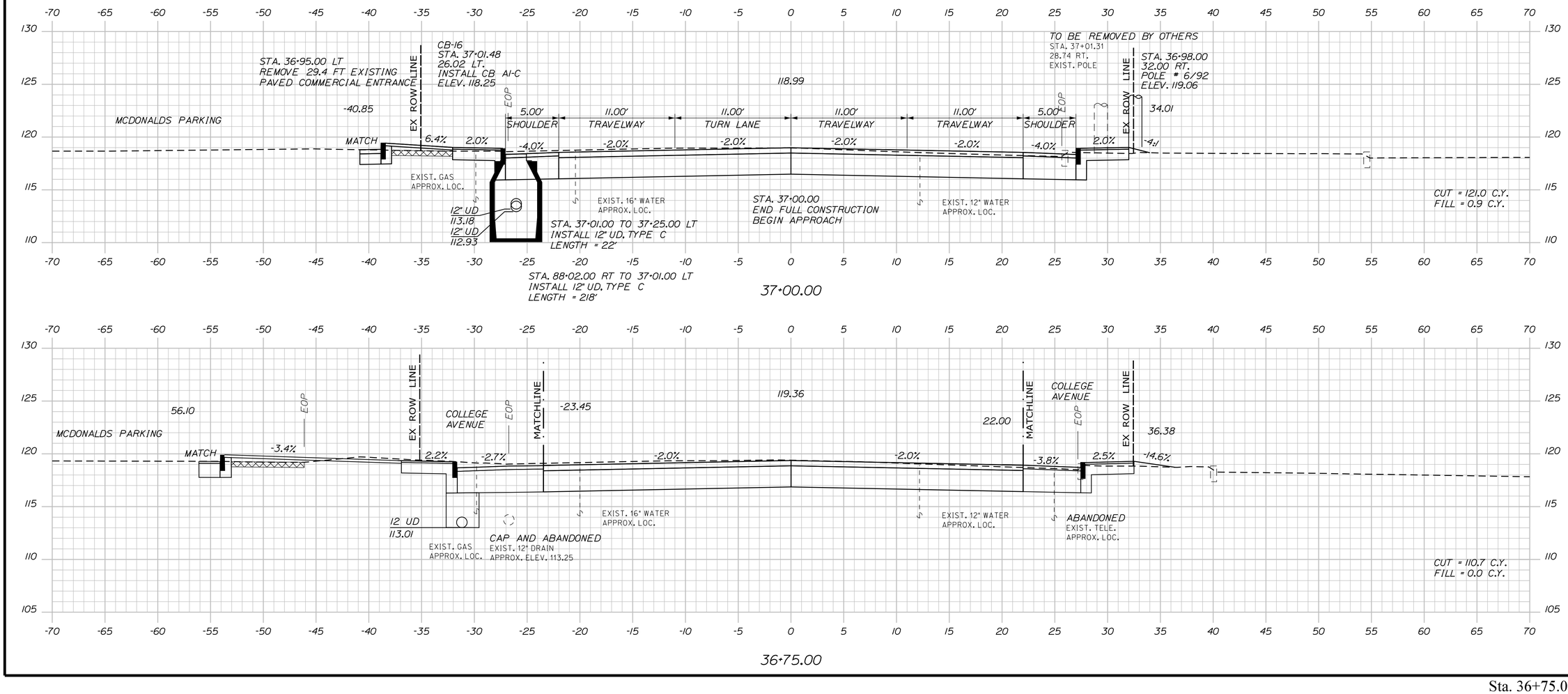
SHEET NUMBER

116

OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021





Sta. 36+75.00 to Sta. 37+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON
DESIGN-DETAILED	ECF
CHECKED-REVIEWED	ECF
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

BY	DATE
JBD	11/17/2021
AG	11/17/2021

SIGNATURE

P.E. NUMBER

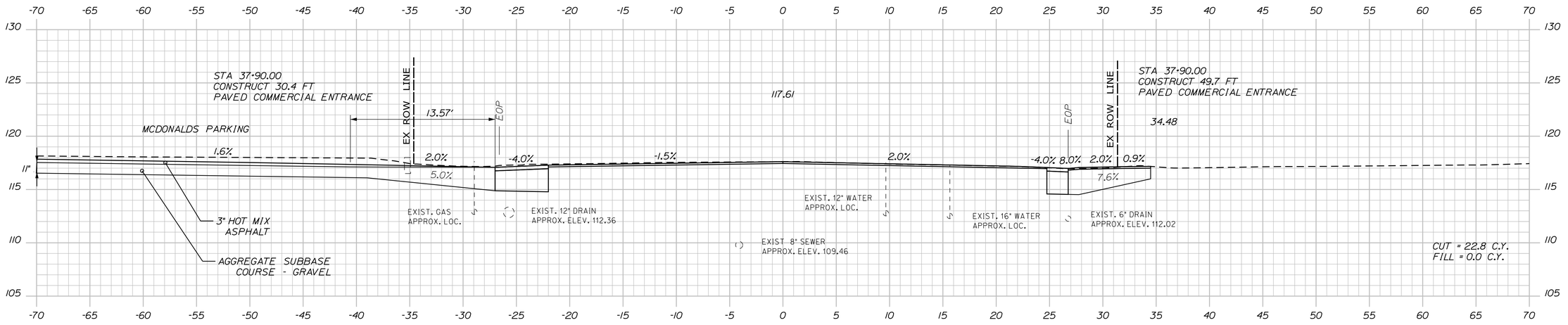
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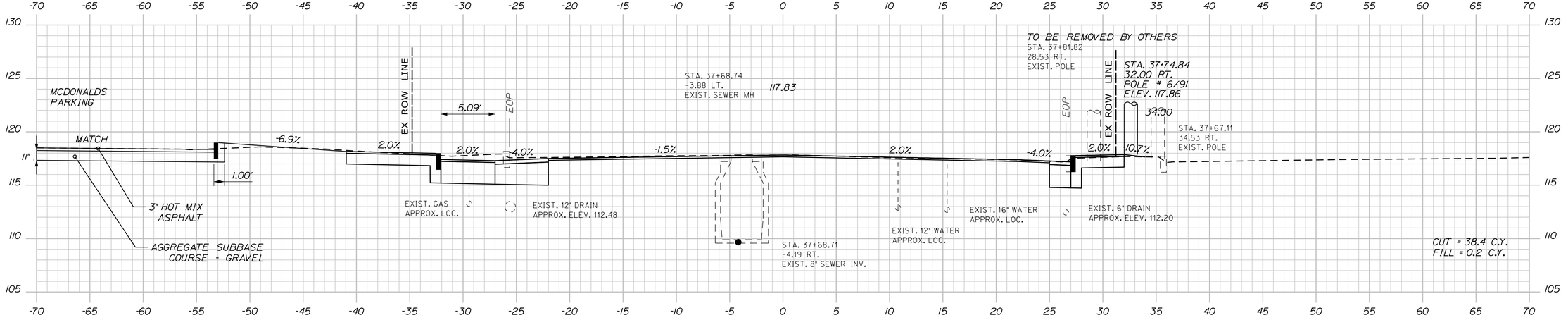
OLD TOWN
STILLWATER AVENUE

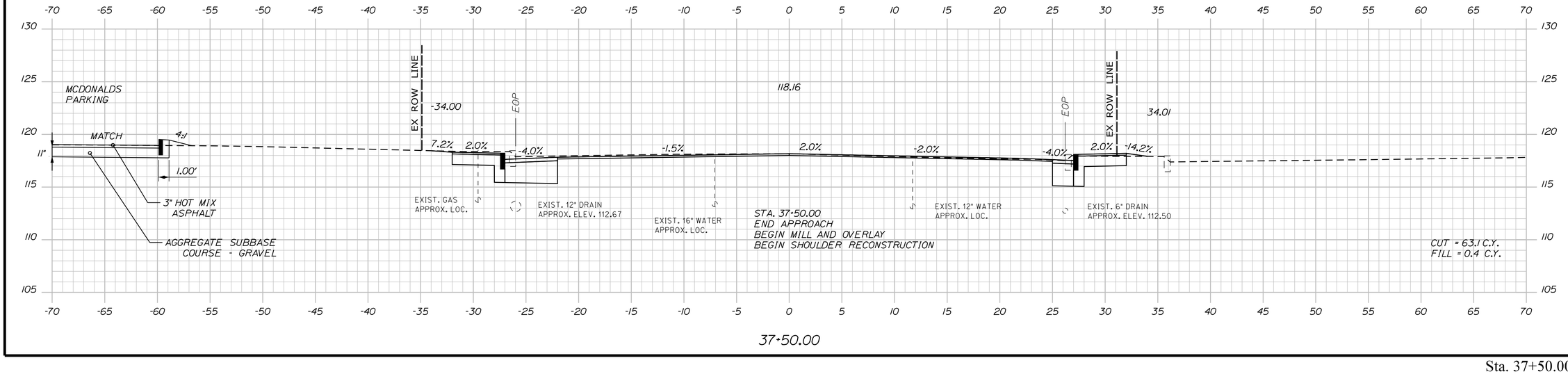
CROSS SECTIONS

SHEET NUMBER
117
OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

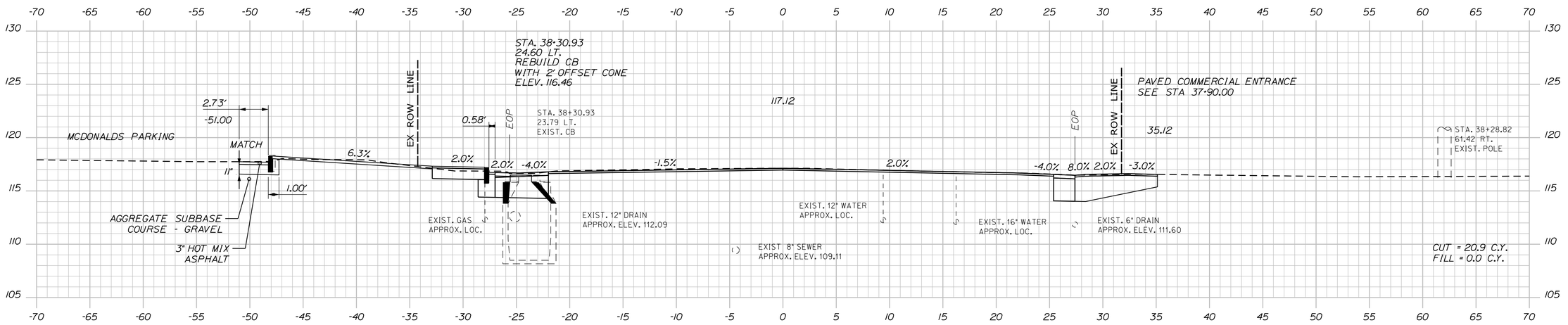
SHEET NUMBER

118

OF 218

Sta. 37+50.00 to Sta. 37+90.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

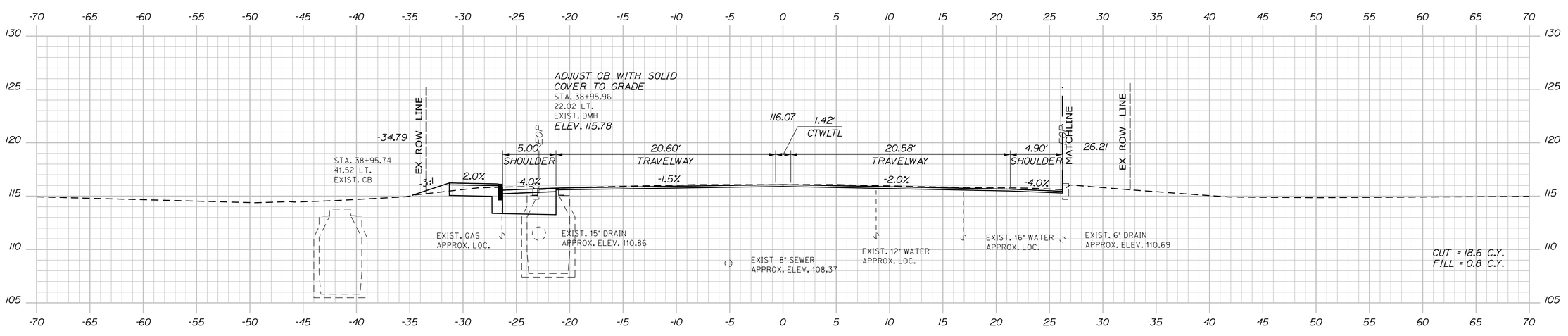
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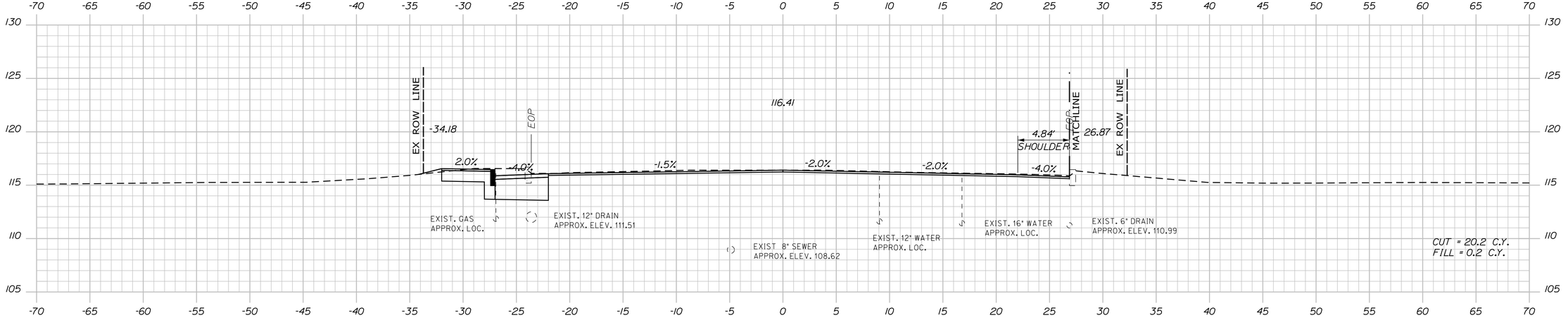
119

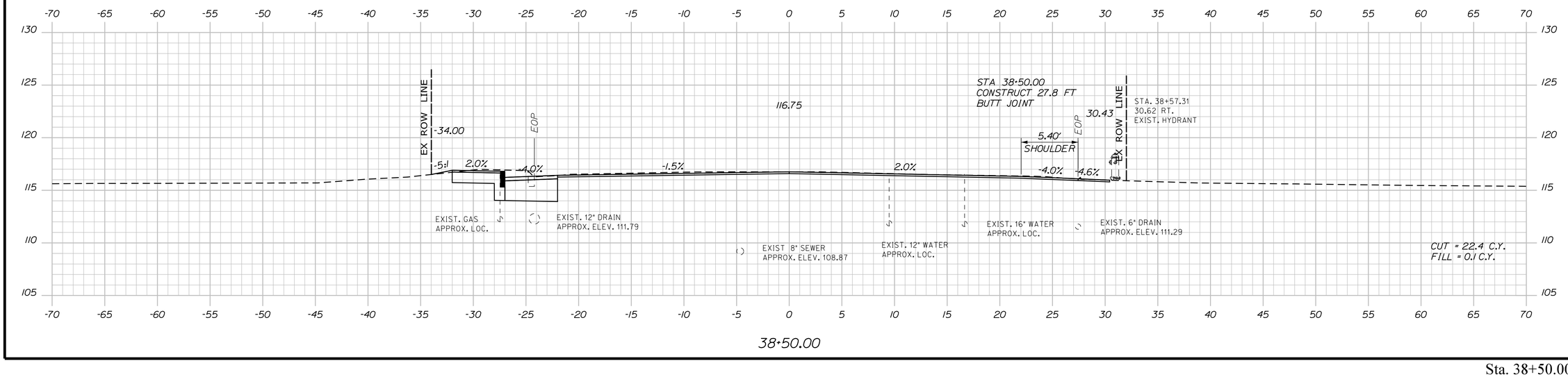
OF 218

Sta. 38+00.00 to Sta. 38+25.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

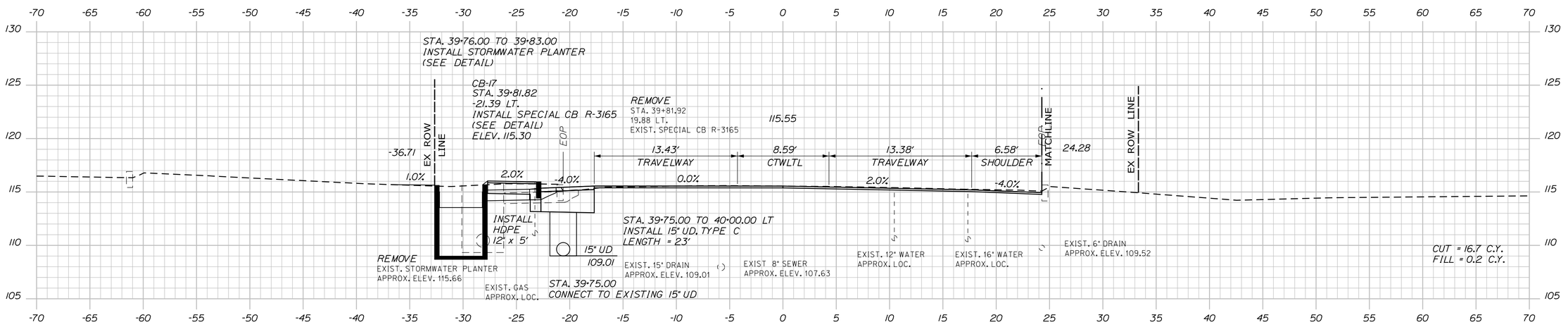
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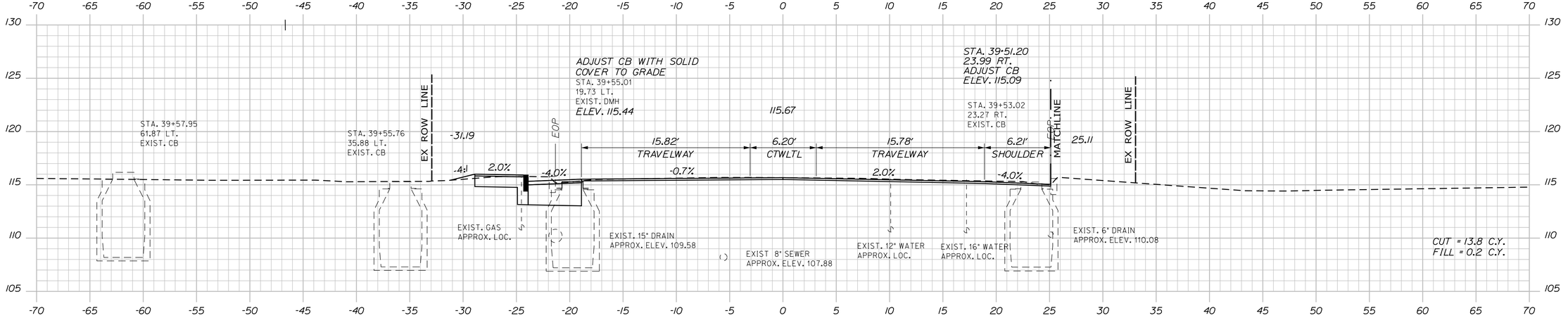
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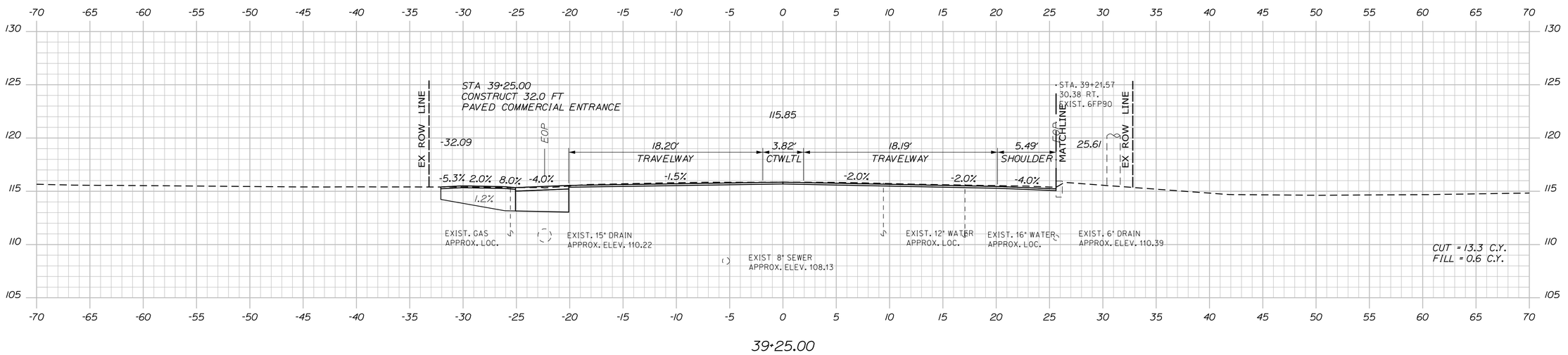
OF 218

Sta. 38+50.00 to Sta. 39+00.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

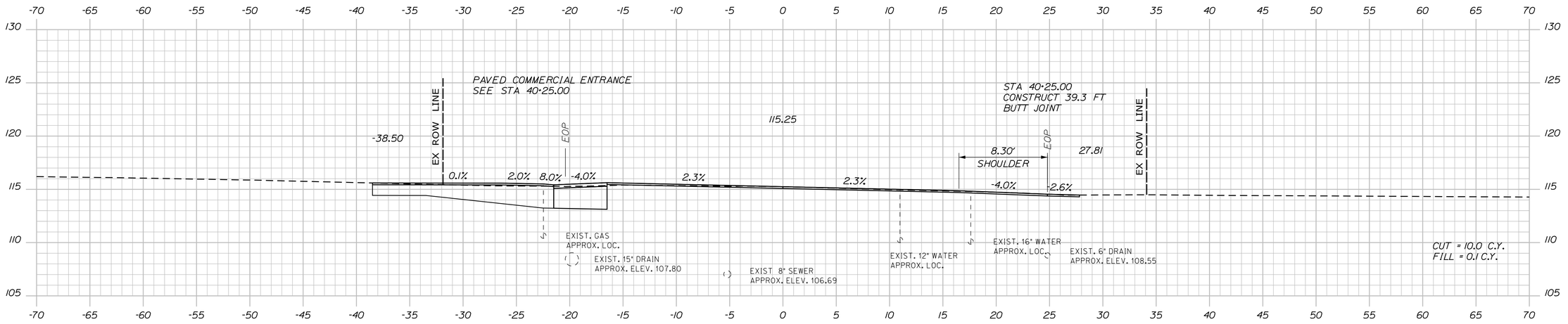
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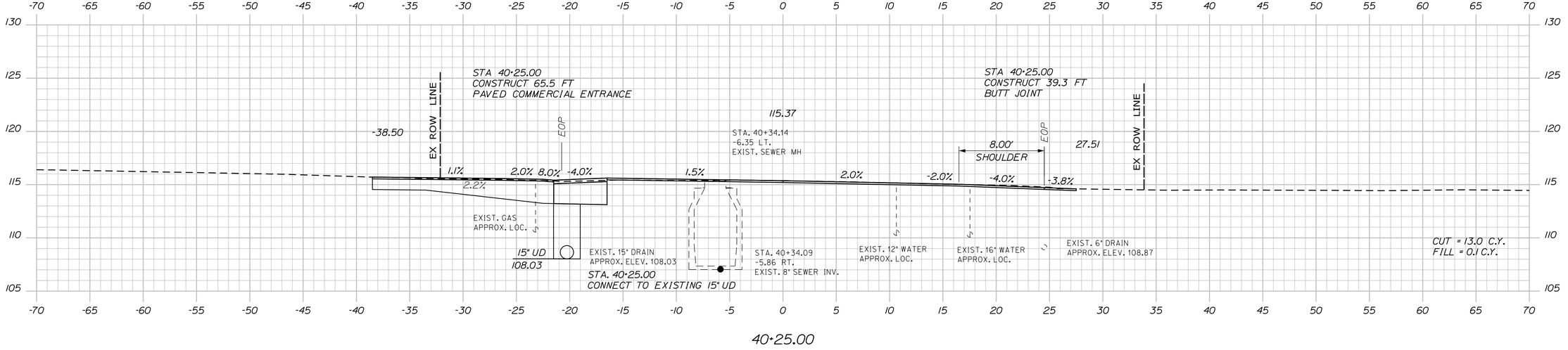
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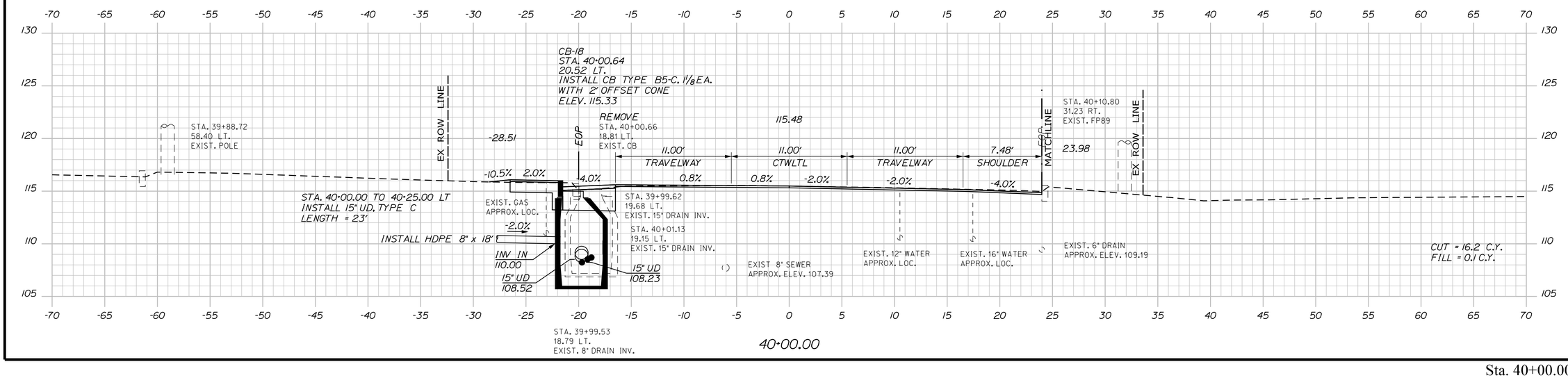
OF 218

Sta. 39+25.00 to Sta. 39+75.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jomesdavis Date:11/17/2021







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

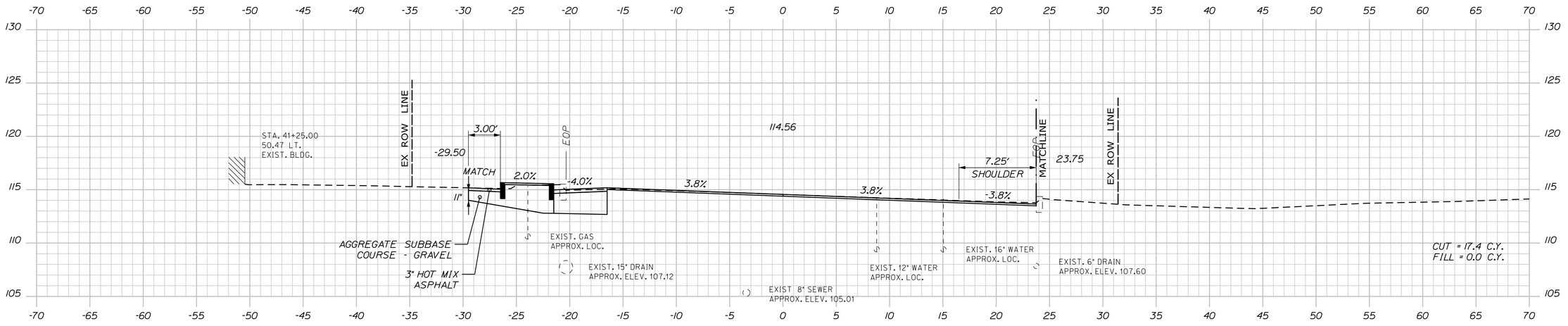
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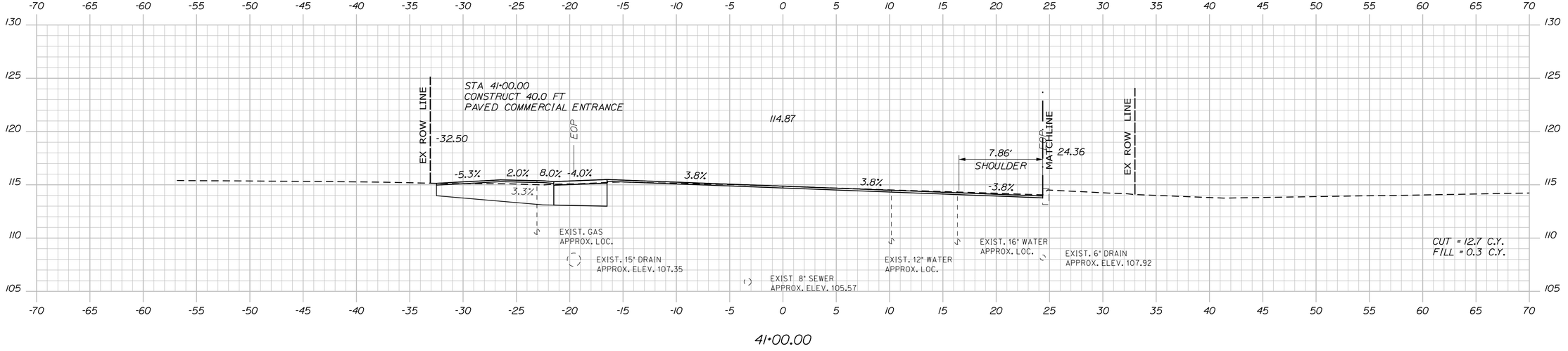
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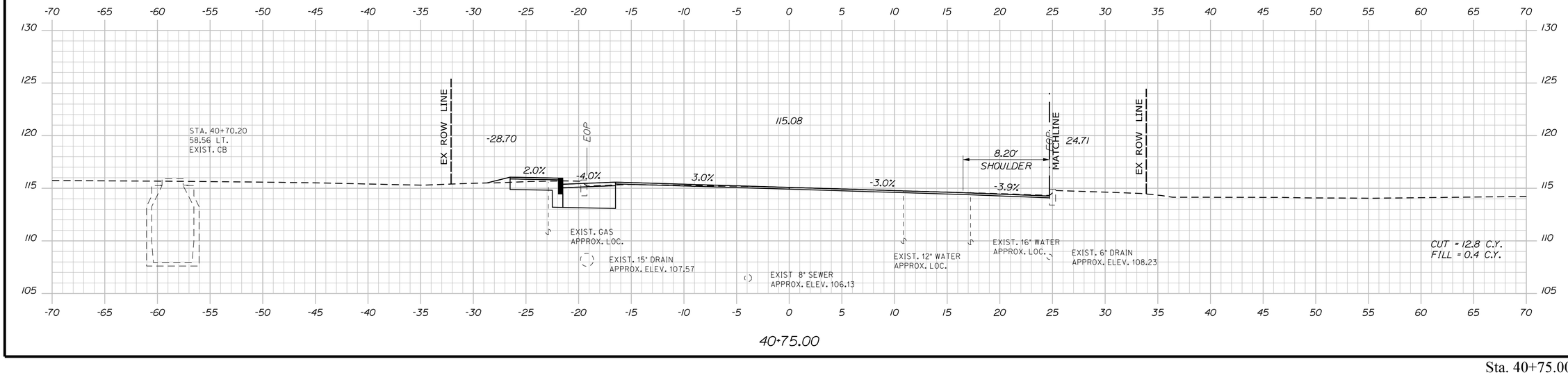
OF 218

Sta. 40+00.00 to Sta. 40+50.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jomesdavis Date:11/17/2021







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	JBD	11/17/2021	
CHECKED-REVIEWED	EGF	11/17/2021	SIGNATURE
DESIGN2-DETAILED2	EGF		
DESIGN3-DETAILED3			P.E. NUMBER
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			DATE
REVISIONS 4			
FIELD CHANGES			

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

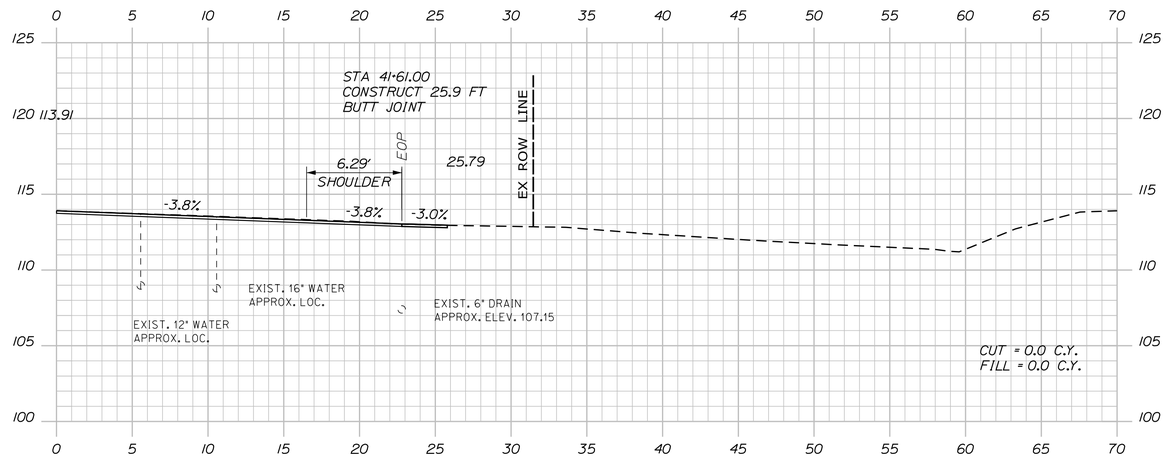
SHEET NUMBER

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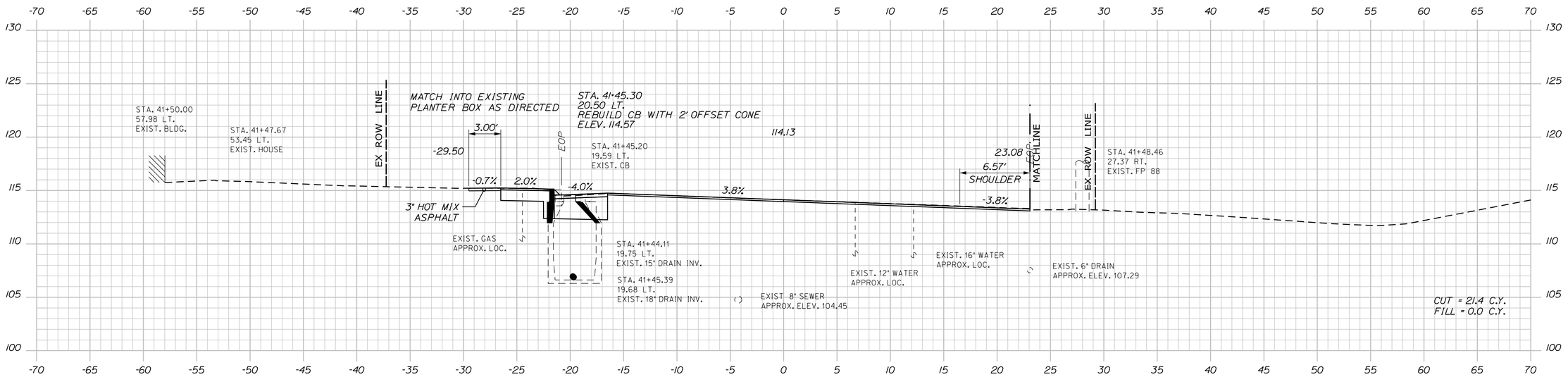
OF 218

Sta. 40+75.00 to Sta. 41+25.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



41+61.00



41+50.00

Sta. 41+50.00 to Sta. 41+61.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	EGF	BY	DATE
CHECKED-REVIEWED	EGF	JBD	11/17/2021
DESIGN2-DETAILED2		AG	11/17/2021
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

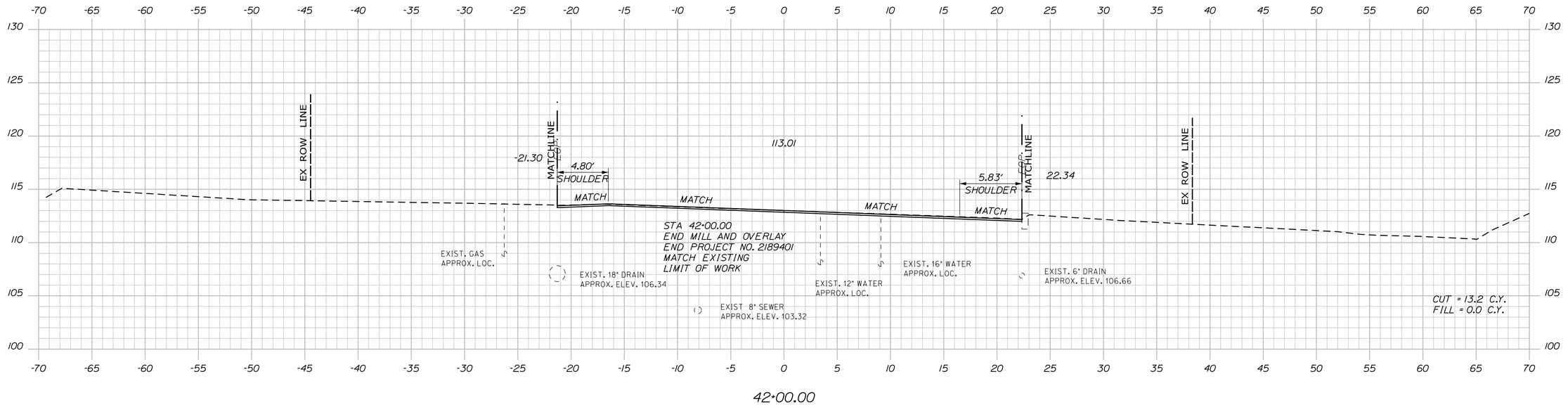
CROSS SECTIONS

SHEET NUMBER

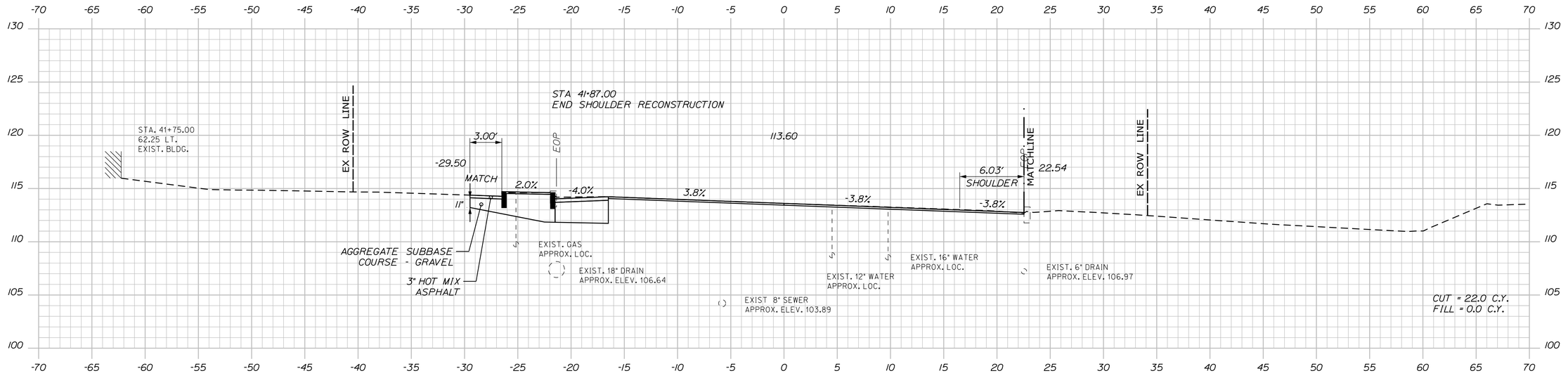
124

OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



42+00.00



41+75.00

Sta. 41+75.00 to Sta. 42+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON
DESIGN-DETAILED	ECF
CHECKED-REVIEWED	ECF
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

BY	DATE	SIGNATURE
JBD	11/17/2021	
AG	11/17/2021	

REVISIONS	BY	DATE
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

P.E. NUMBER

DATE

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

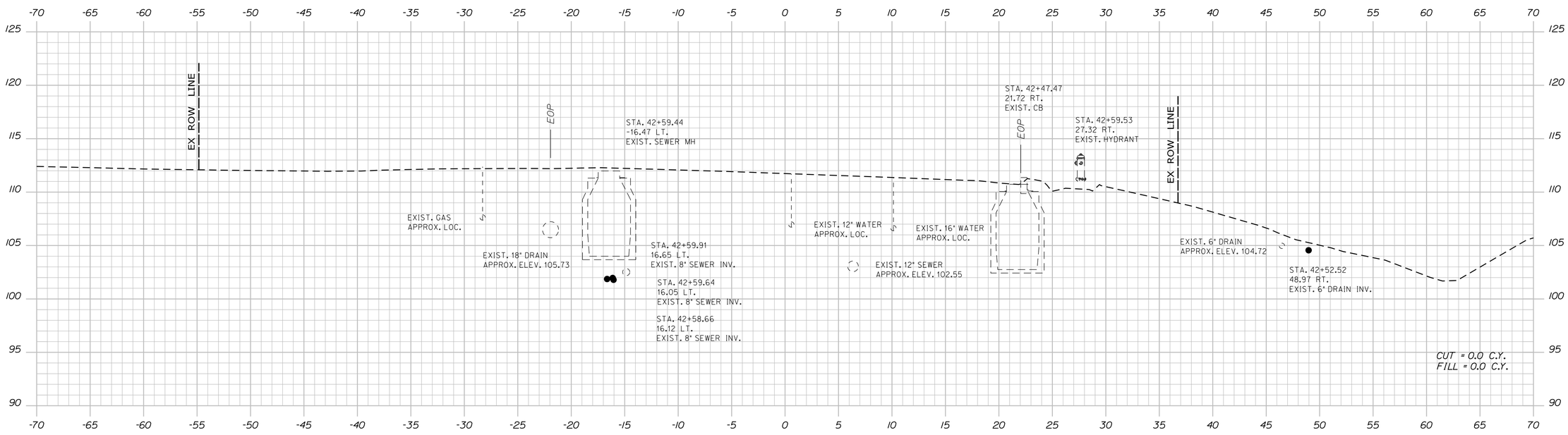
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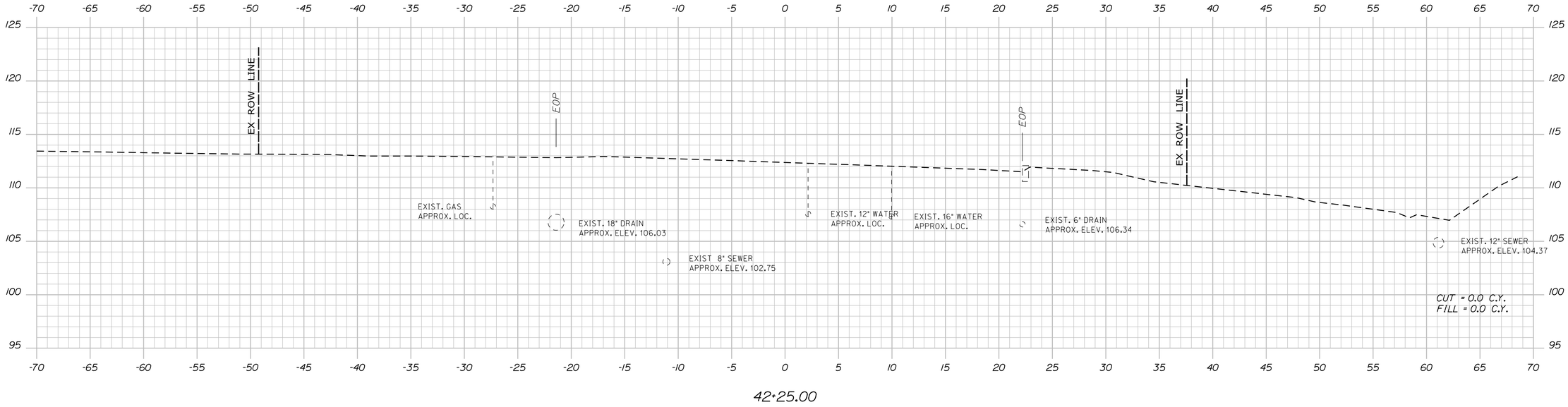
125

OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

R. MOULTON	BY	DATE	
DESIGN-DETAILED	JBD	11/17/2021	SIGNATURE
CHECKED-REVIEWED	EGF	11/17/2021	
DESIGN2-DETAILED2	EGF		P.E. NUMBER
DESIGN3-DETAILED3			
PROJ. MANAGER			DATE
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

OLD TOWN
STILLWATER AVENUE

CROSS SECTIONS

SHEET NUMBER

126

OF 218

Sta. 42+25.00 to Sta. 42+50.00

Sta. 61+75.00 to Sta. 62+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON	BY
DESIGN-DETAILED	ECF	JBD
CHECKED-REVIEWED	ECF	AG
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

DATE	SIGNATURE
11/17/2021	
11/17/2021	

P.E. NUMBER

DATE

OLD TOWN
BENNOCH ROAD

CROSS SECTIONS

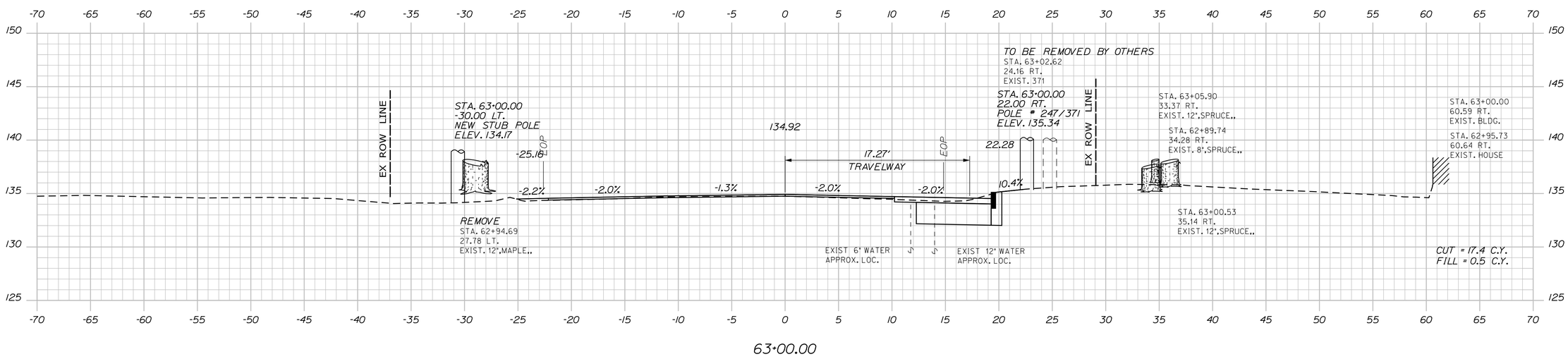
SHEET NUMBER

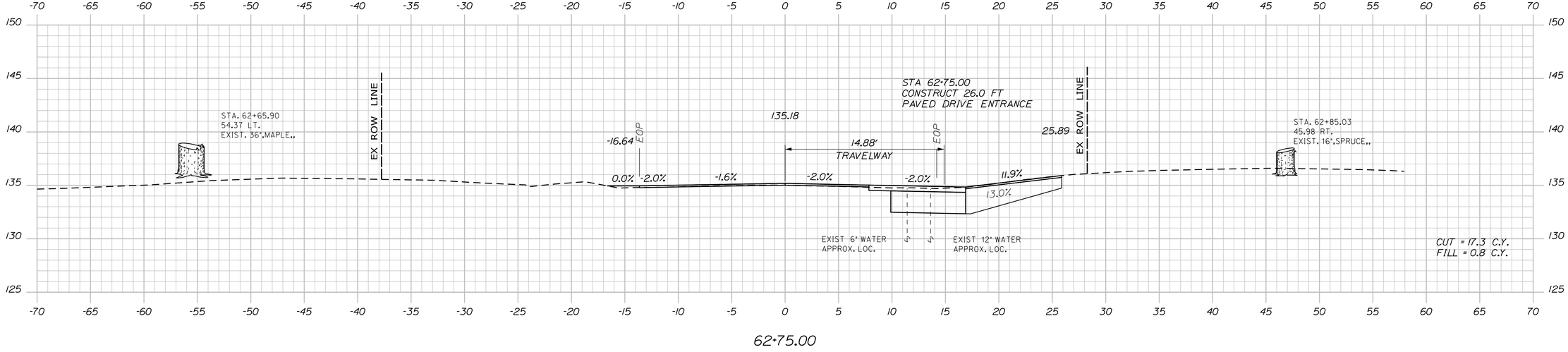
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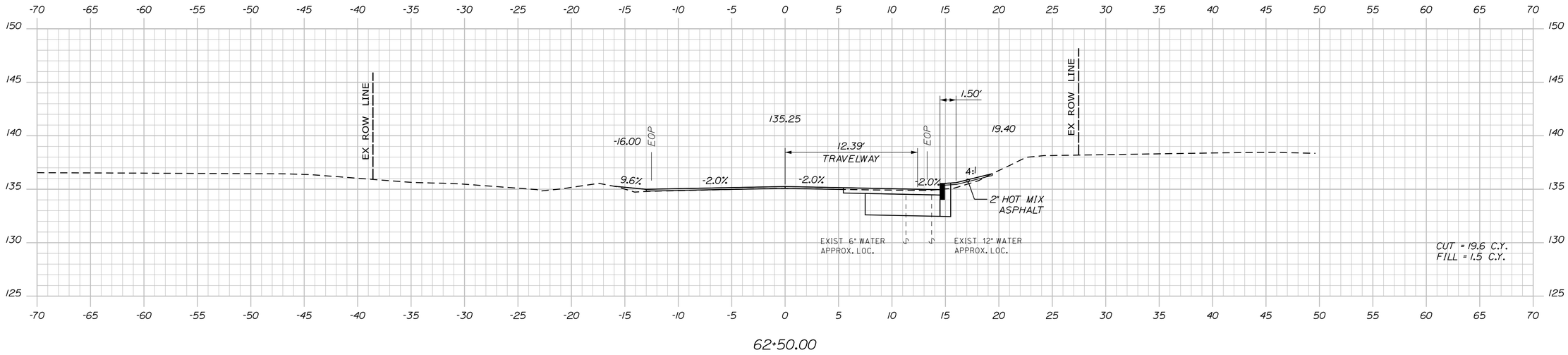
OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
BENNOCH ROAD

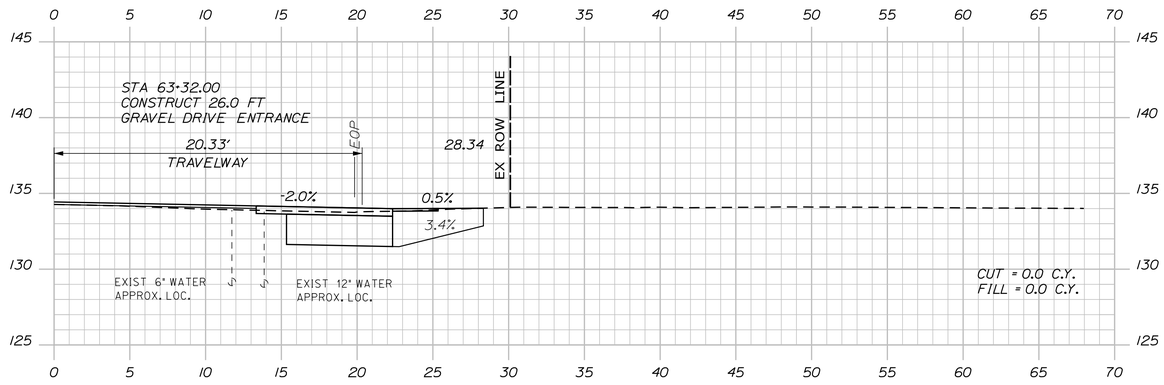
CROSS SECTIONS

SHEET NUMBER

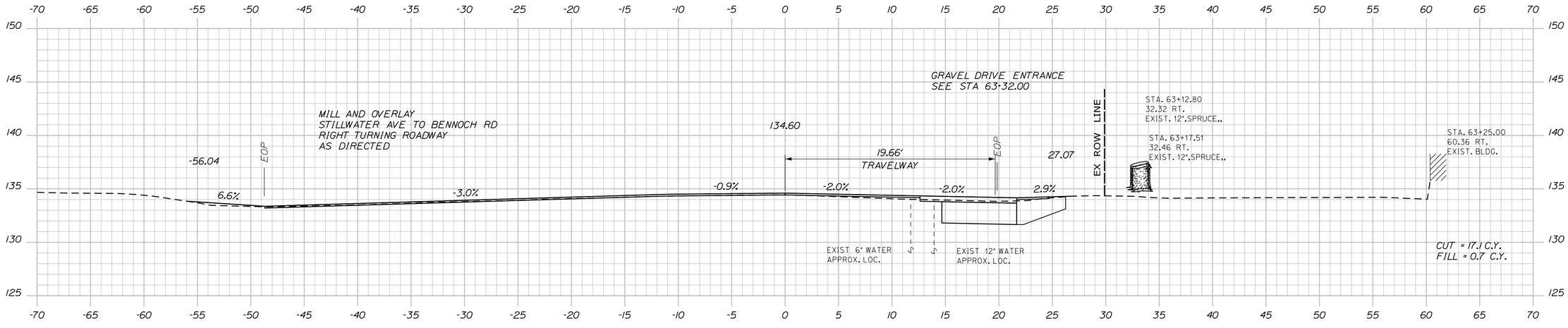
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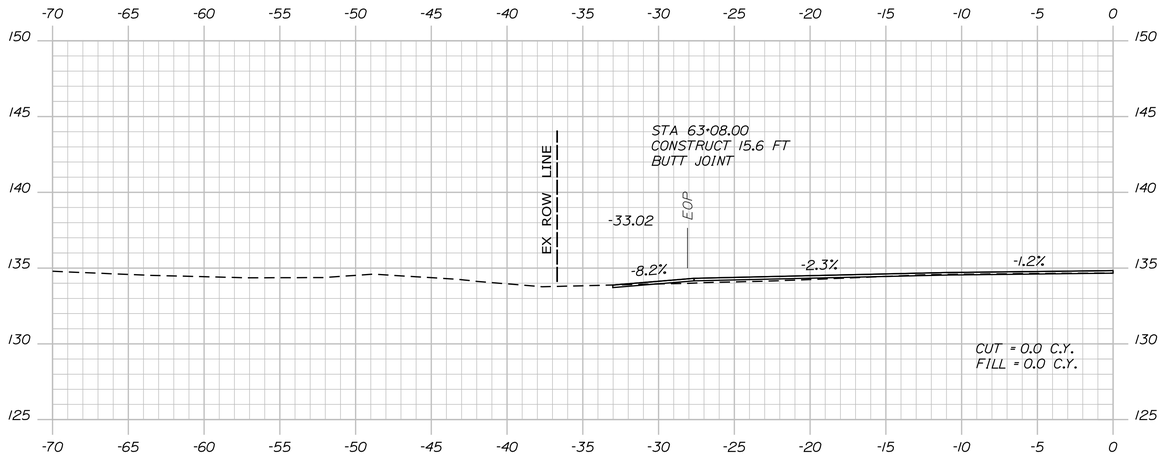
Sta. 62+50.00 to Sta. 63+00.00



63+32.00



63+25.00



63+08.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	DATE
PROJ. MANAGER		
DESIGN-DETAILED	EGF	JBD 11/17/2021
CHECKED-REVIEWED	EGF	AG 11/17/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
BENNOCH ROAD

CROSS SECTIONS

SHEET NUMBER

129

OF 218

Sta. 63+08.00 to Sta. 63+32.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON			
DESIGN-DETAILED	ECF	JBD	11/17/2021	
CHECKED-REVIEWED	ECF	AG	11/17/2021	SIGNATURE
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				P.E. NUMBER
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				DATE
REVISIONS 4				
FIELD CHANGES				

OLD TOWN
BENNOCH ROAD

CROSS SECTIONS

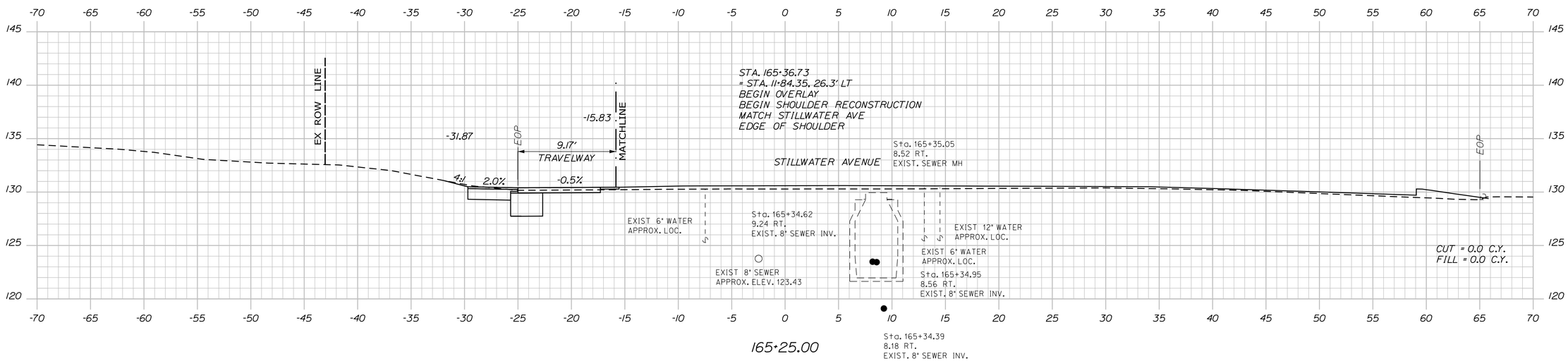
SHEET NUMBER

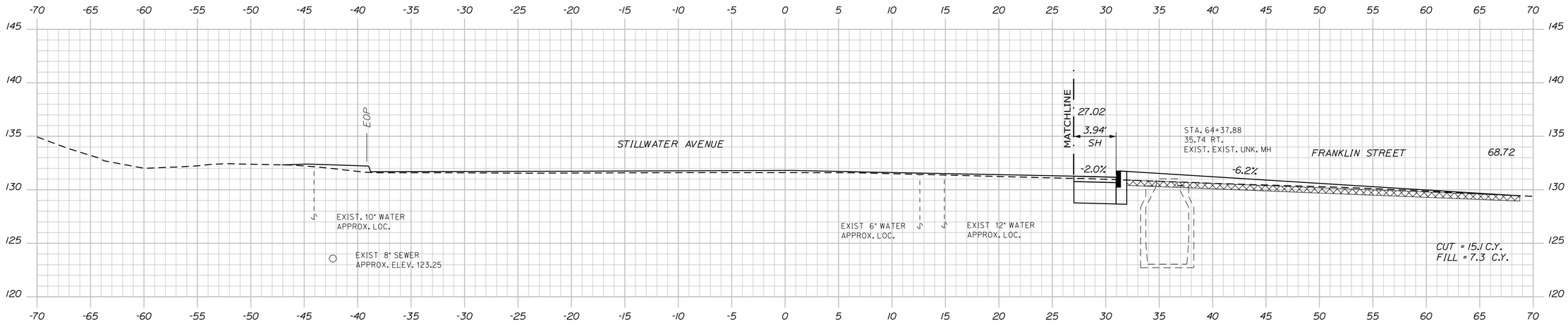
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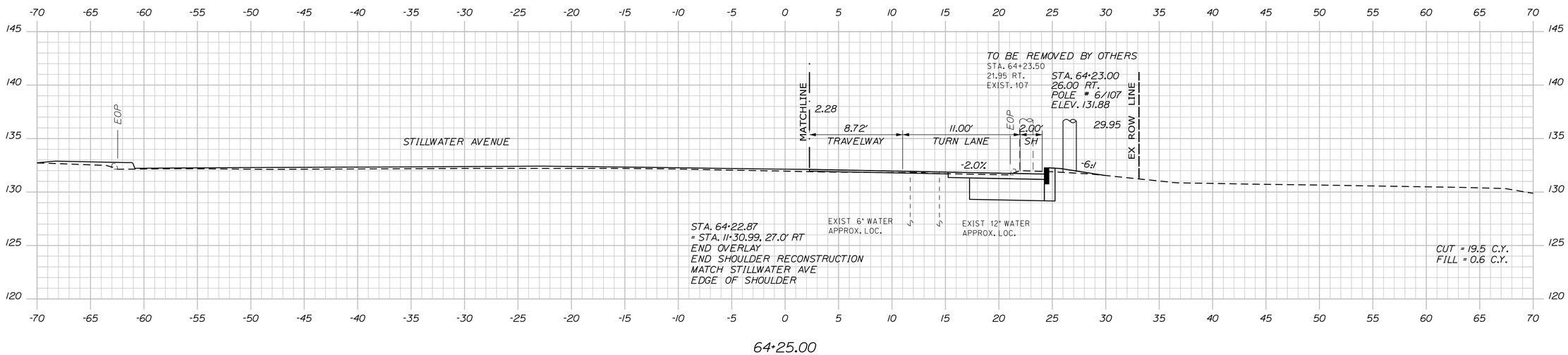
OF 218

Sta. 63+50.00 to Sta. 64+00.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
BENNOCH ROAD

CROSS SECTIONS

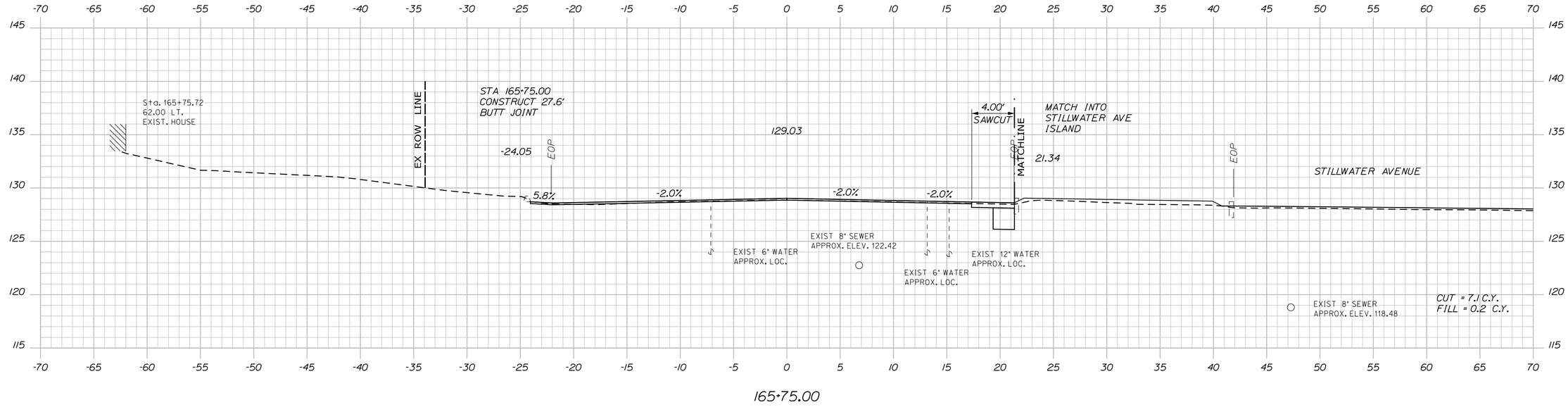
SHEET NUMBER

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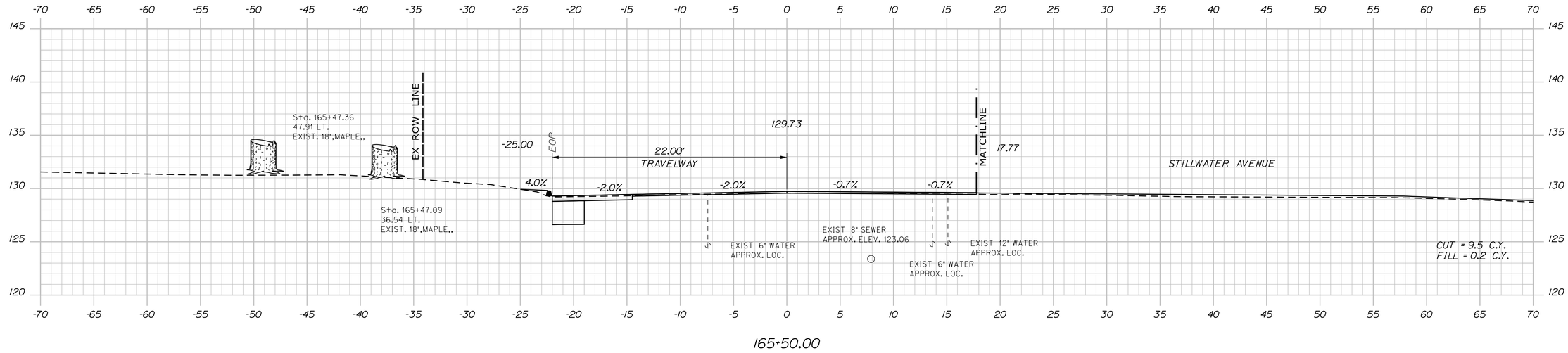
OF 218

Sta. 64+25.00 to Sta. 165+25.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



165+75.00



165+50.00

Sta. 165+50.00 to Sta. 165+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
BENNOCH ROAD

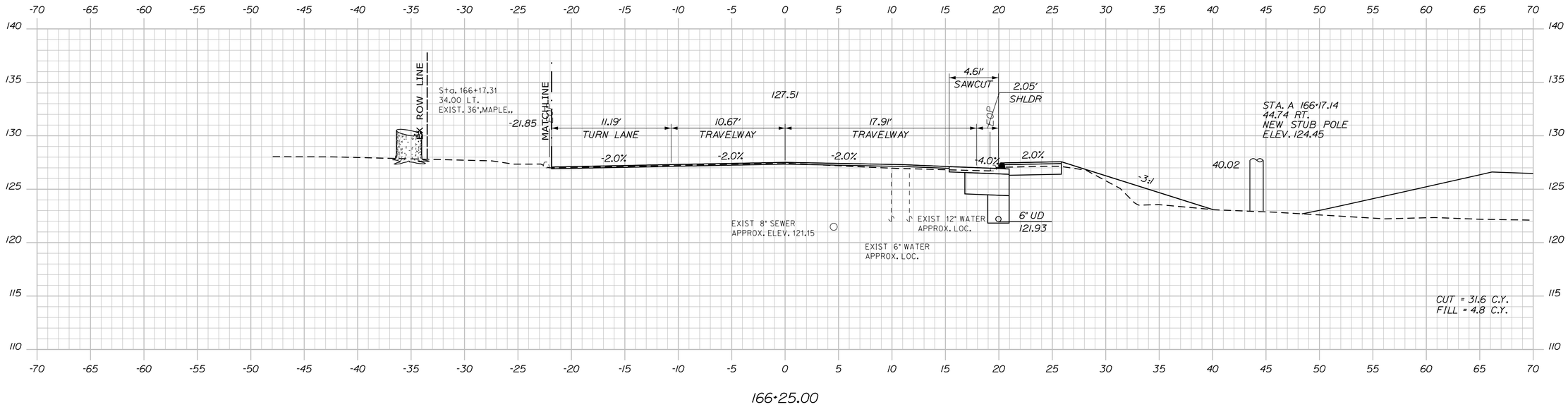
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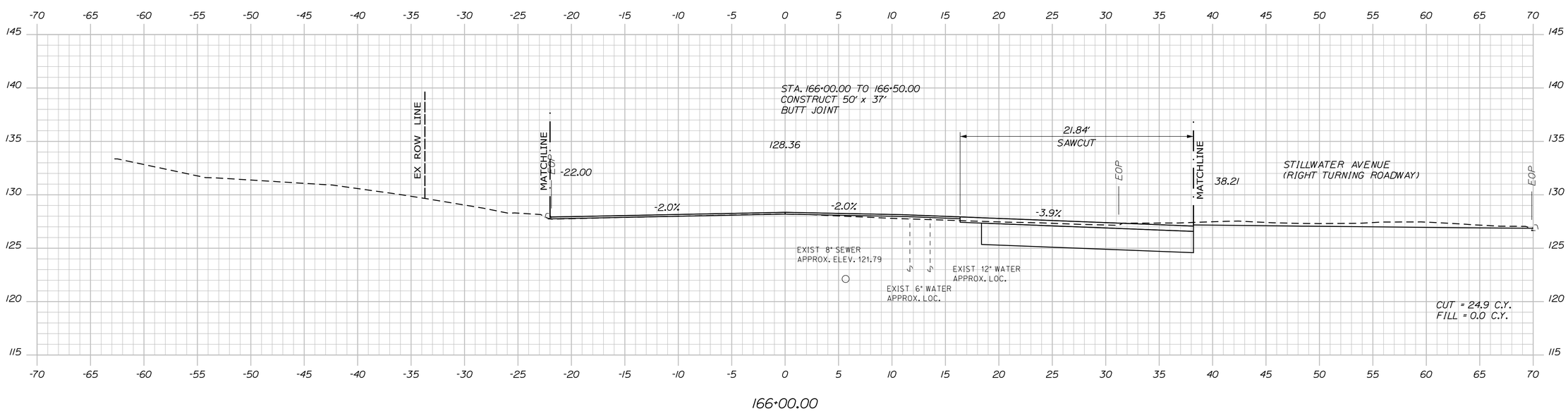
SHEET NUMBER

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OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PROJ. MANAGER

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
BENNOCH ROAD

CROSS SECTIONS

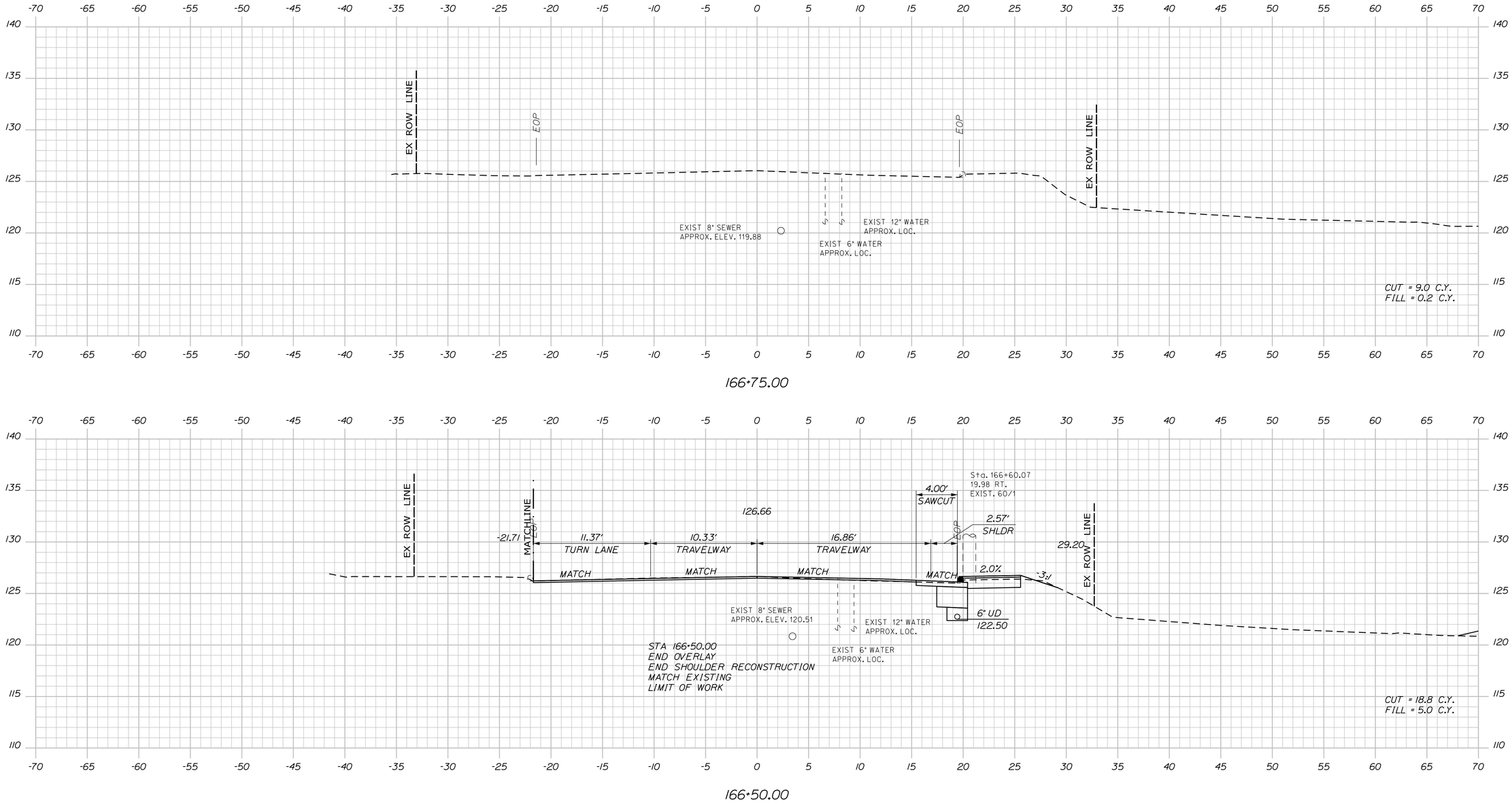
SHEET NUMBER

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OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Sta. 166+00.00 to Sta. 166+25.00



Sta. 166+50.00 to Sta. 166+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
BENNOCH ROAD

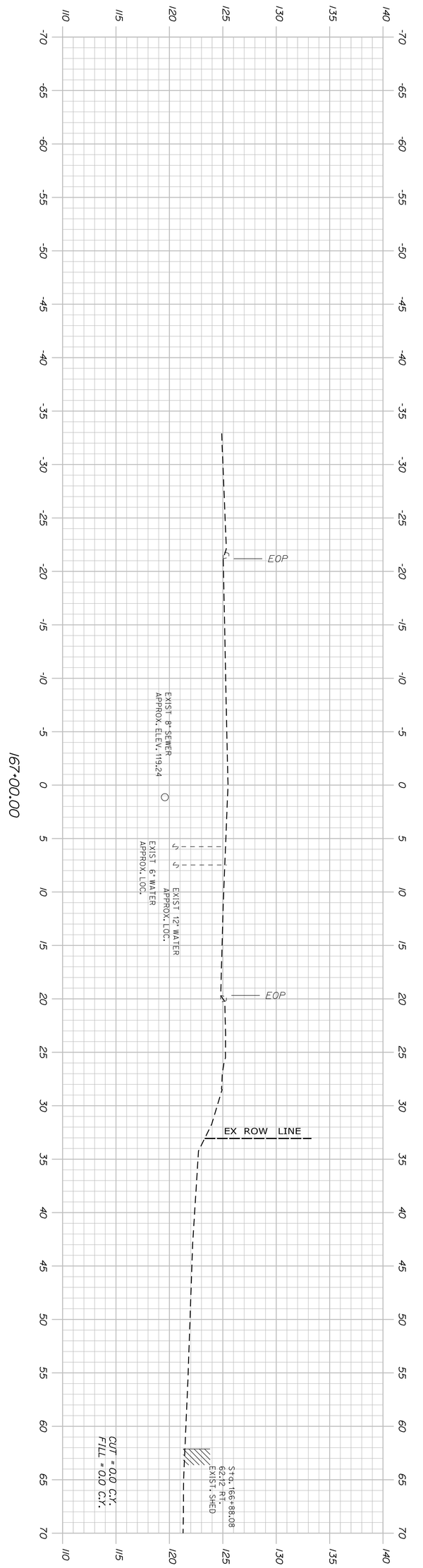
CROSS SECTIONS

SHEET NUMBER

134

OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



Sta. 167+00.00 to Sta. 167+00.00

SHEET NUMBER 135 OF 218

OLD TOWN
BENNOCH ROAD

CROSS SECTIONS

PROJ. MANAGER	R. MOULTON	BY	DATE
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

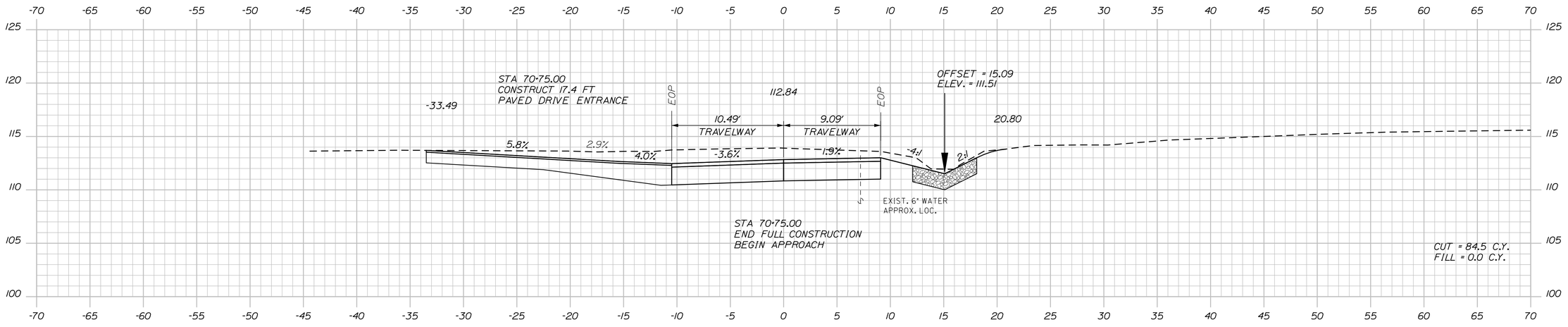
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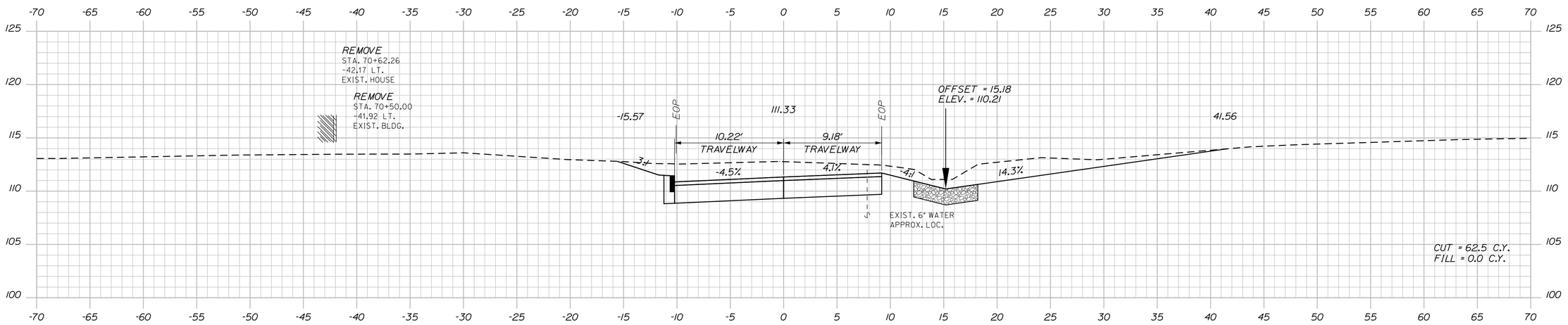
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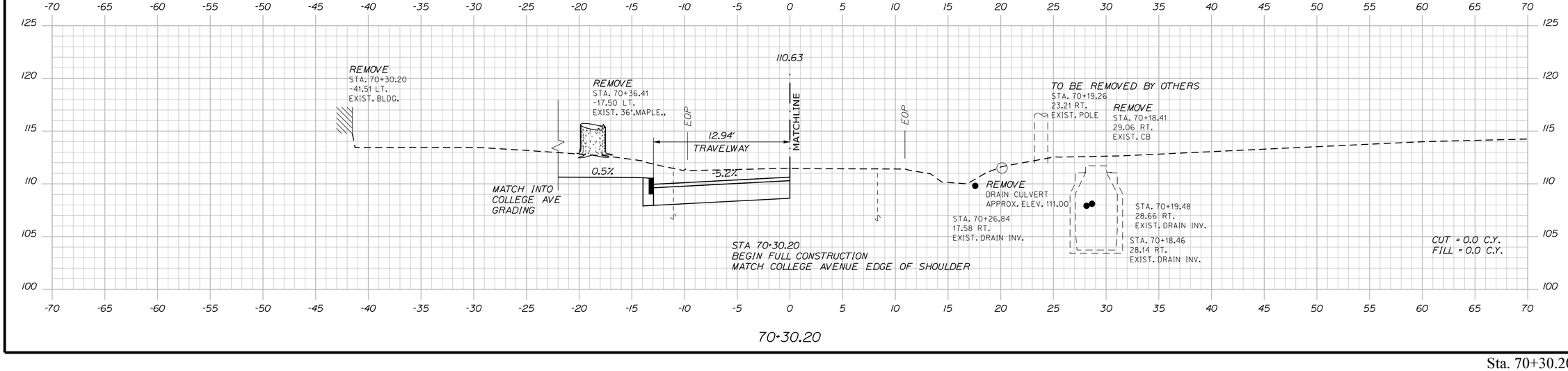
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN 022950.01 HIGHWAY PLANS







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
OLD MILL ROAD

CROSS SECTIONS

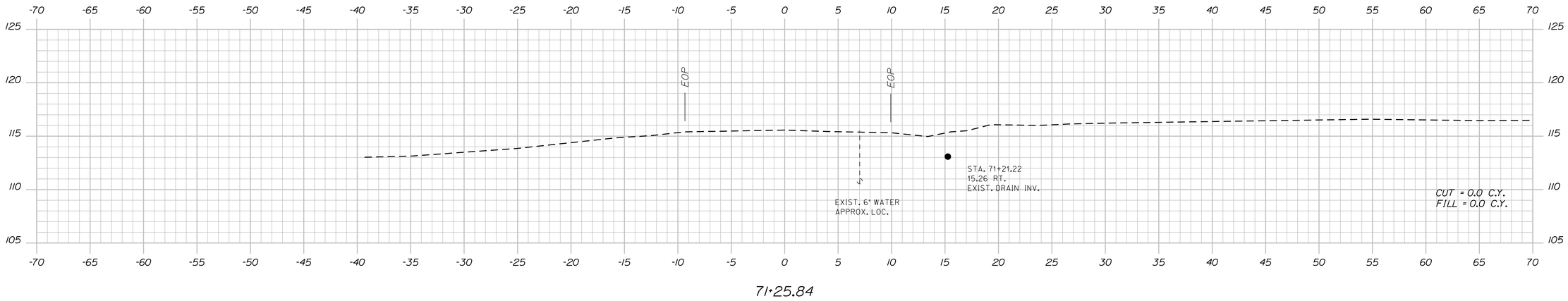
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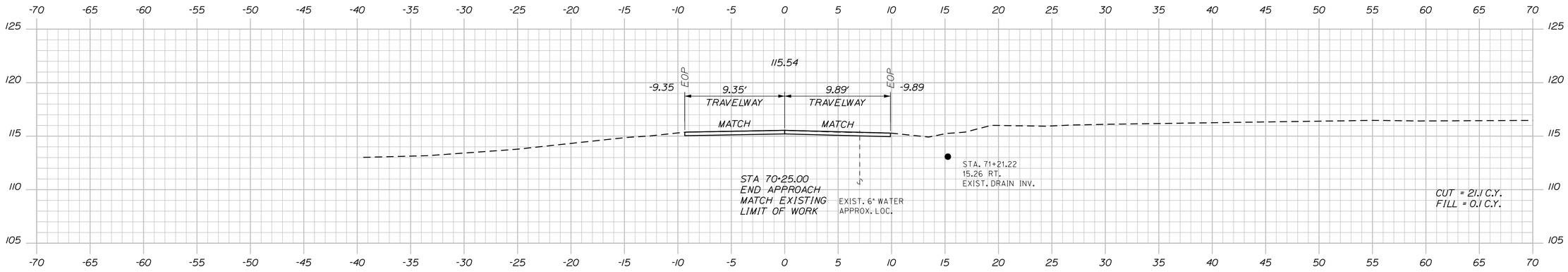
OF 218

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

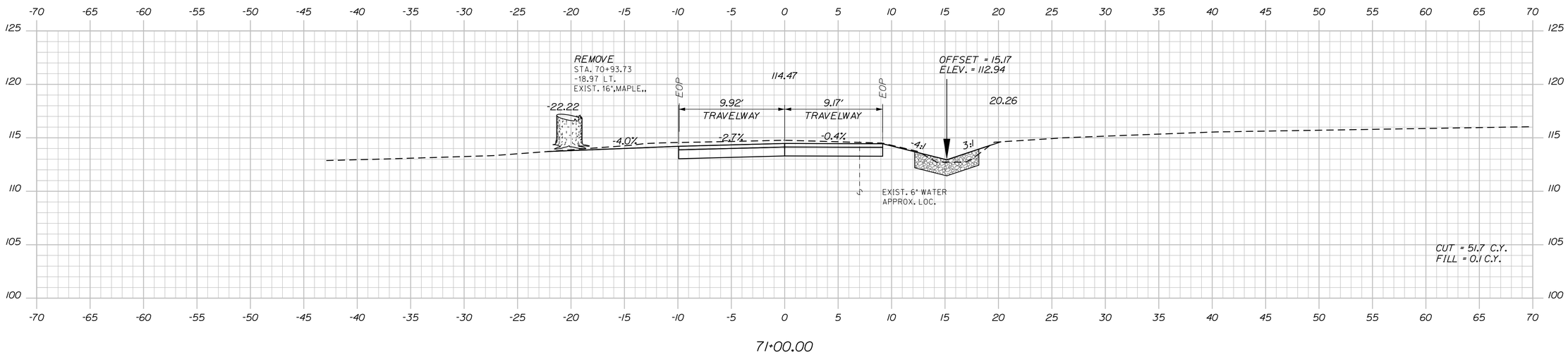
Sta. 70+30.20 to Sta. 70+75.00



71+25.84



71+25.00



71+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BY | DATE

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
OLD MILL ROAD

CROSS SECTIONS

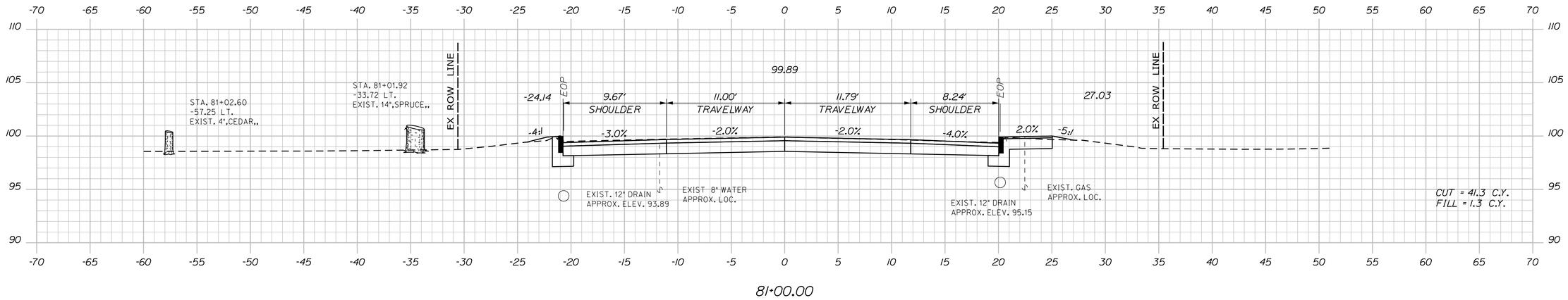
SHEET NUMBER

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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021

Sta. 71+00.00 to Sta. 71+25.84



Sta. 80+50.00 to Sta. 81+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON
DESIGN-DETAILED	ECF
CHECKED-REVIEWED	ECF
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

	BY	DATE
REVISIONS 1	JBD	11/17/2021
REVISIONS 2	AG	11/17/2021
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
COLLEGE AVENUE

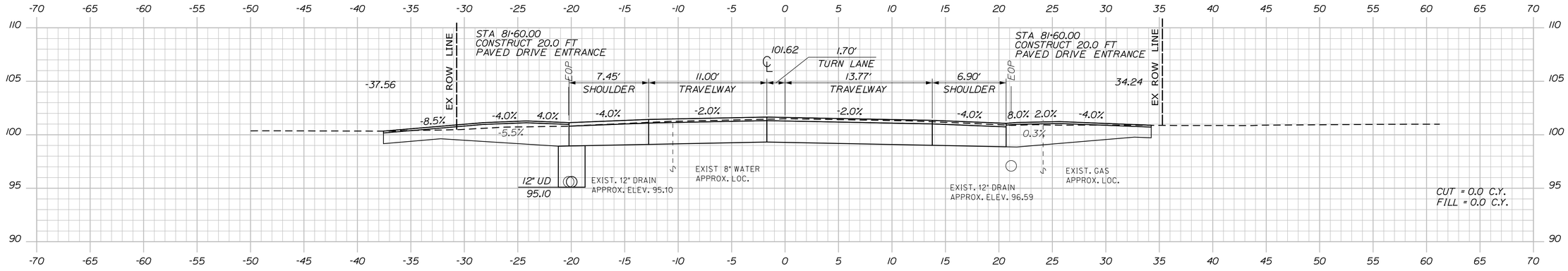
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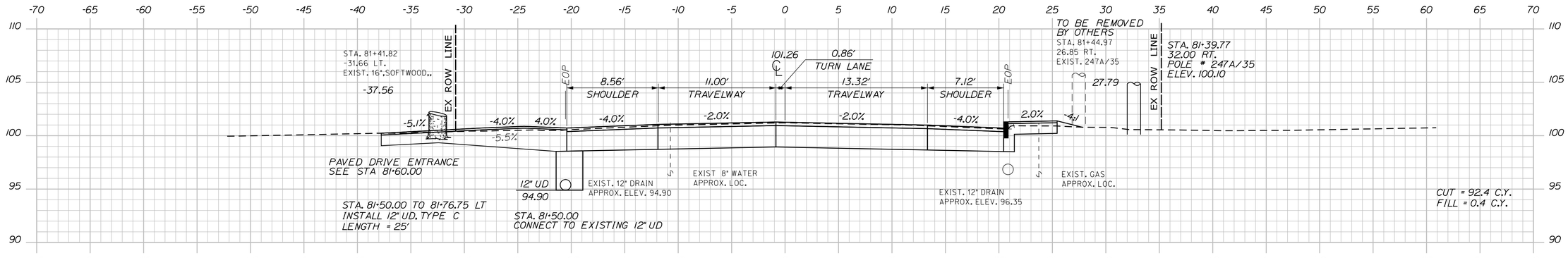
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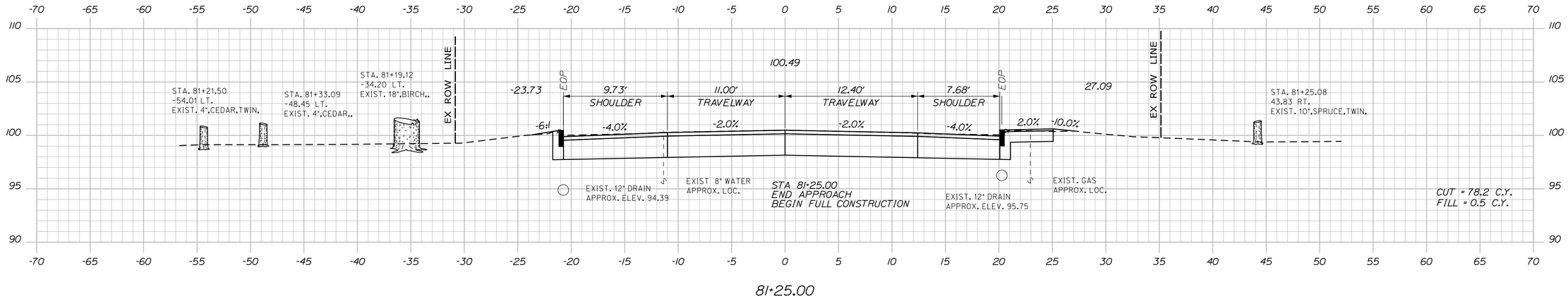
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Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

P.E. NUMBER

DATE

PROJ. MANAGER	BY	DATE
R. MOULTON		
DESIGN-DETAILED	JBD	11/17/2021
CHECKED-REVIEWED	AG	11/17/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

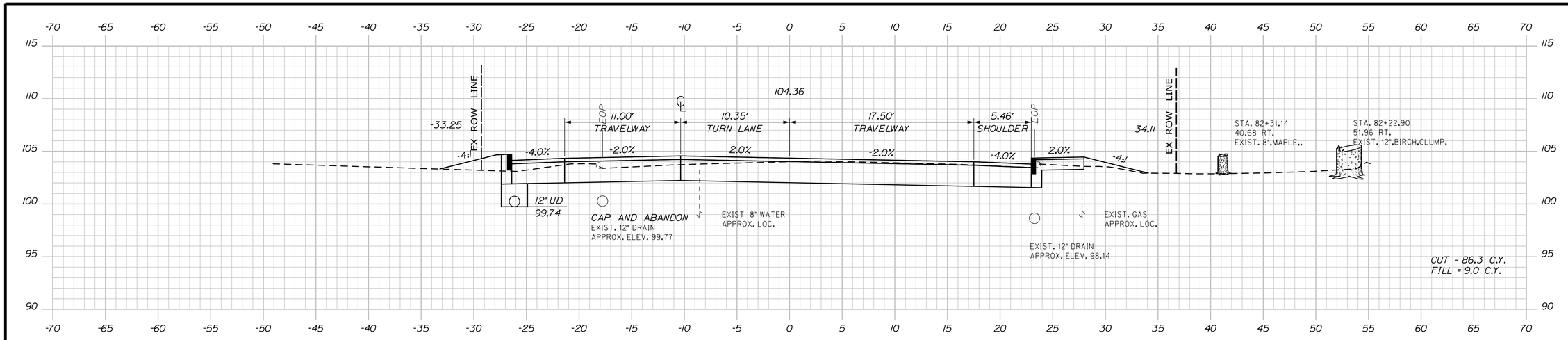
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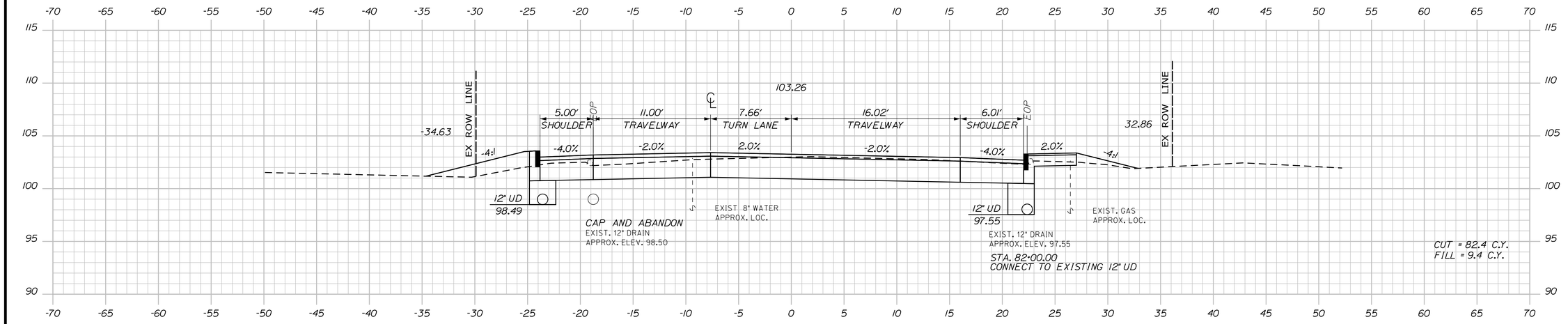
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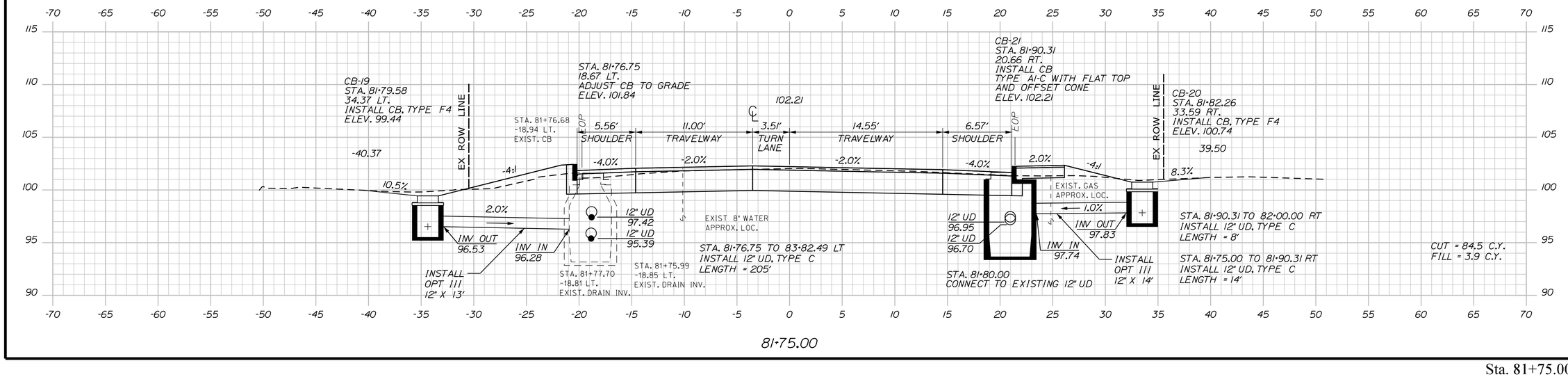
OF 218

Sta. 81+25.00 to Sta. 81+60.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BY | DATE

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

SHEET NUMBER

140

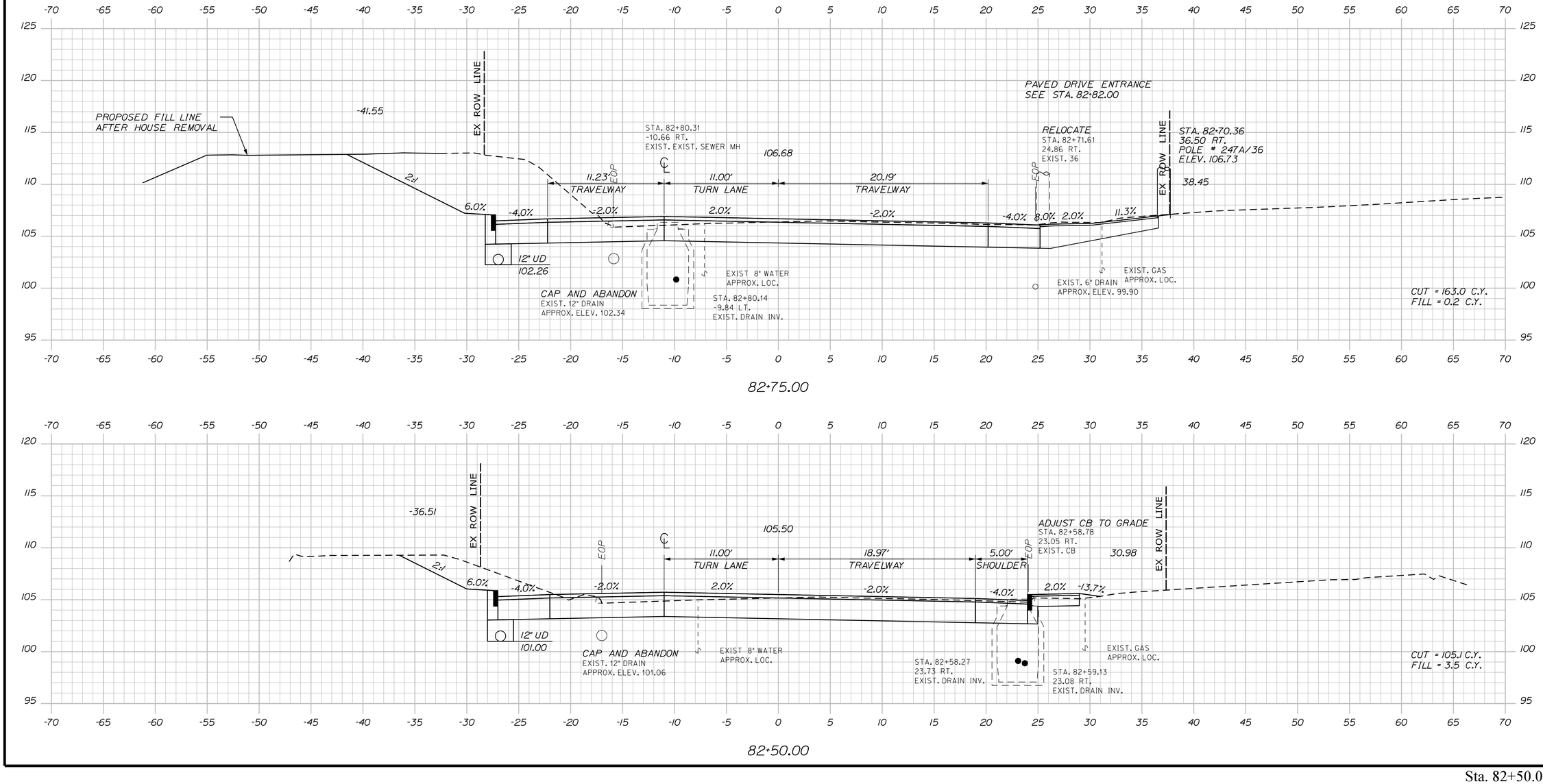
OF 218

Sta. 81+75.00 to Sta. 82+25.00

Username: jamesdavis Date:11/17/2021

Division: HIGHWAY

Filename: ...\054-153_Cross-Sections.dgn



Sta. 82+50.00 to Sta. 82+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BY | DATE

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
COLLEGE AVENUE

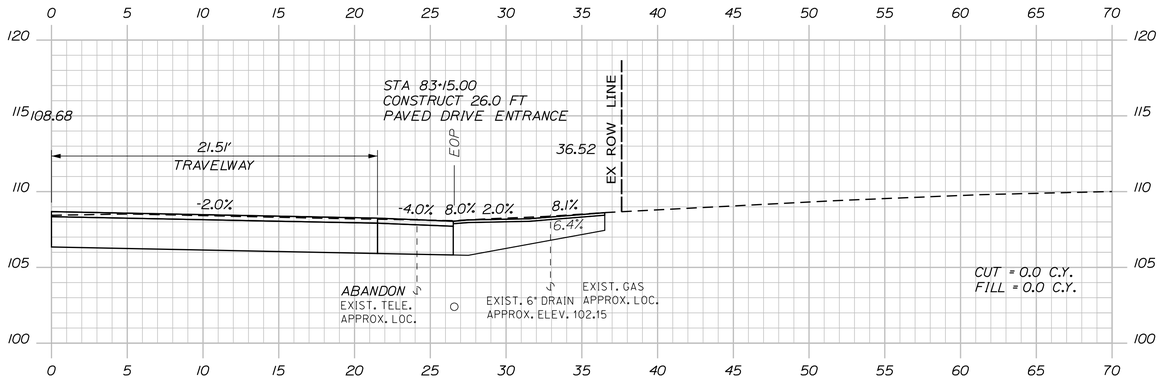
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SHEET NUMBER

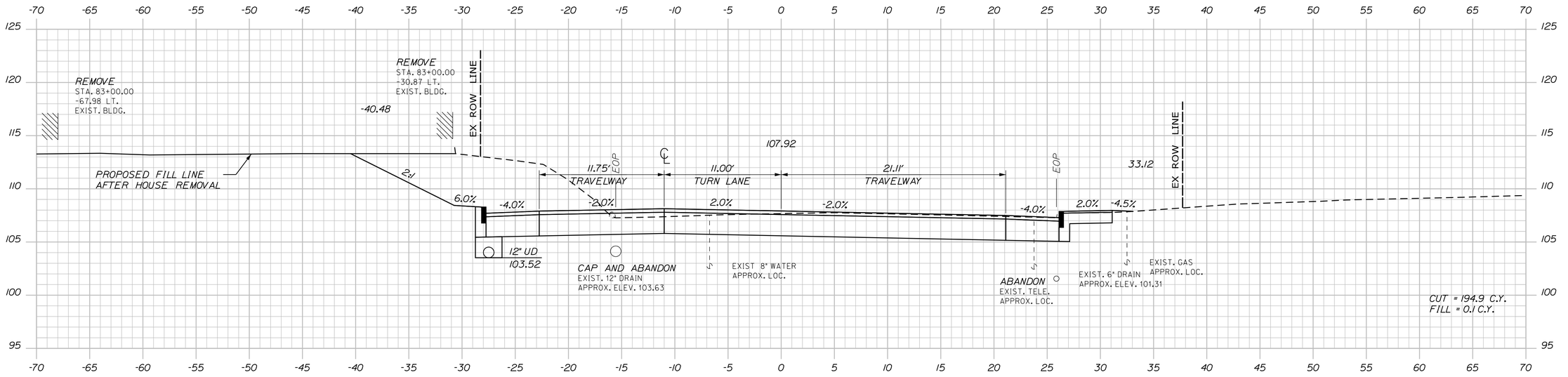
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OF 218

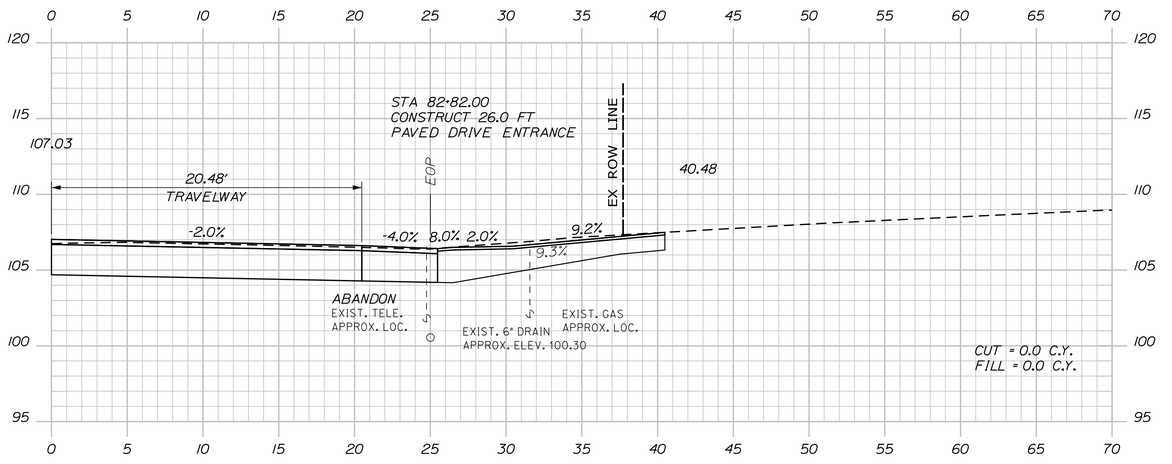
Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



83+15.00



83+00.00



82+82.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

SHEET NUMBER

142

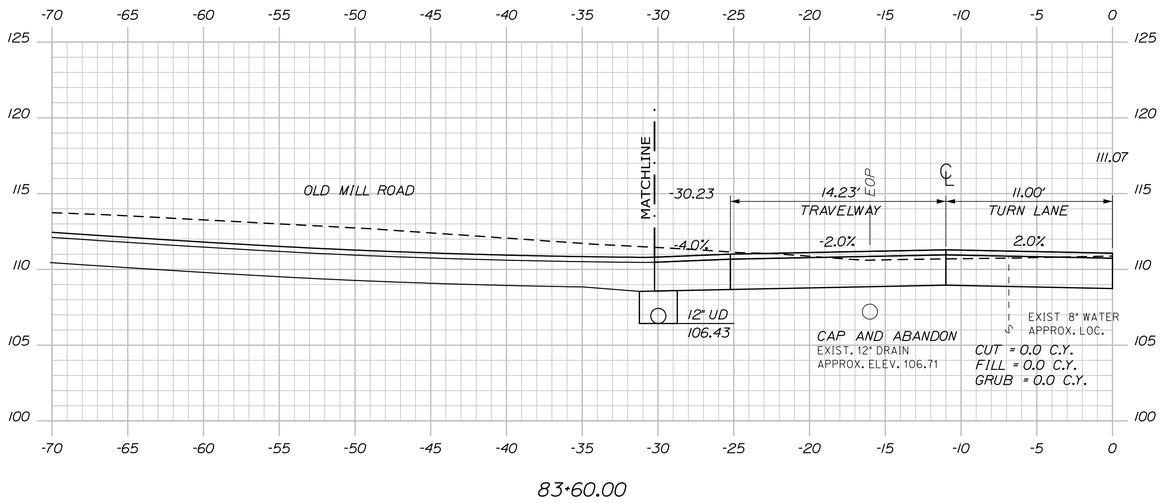
OF 218

Usermame: jomesdavis Date:11/17/2021

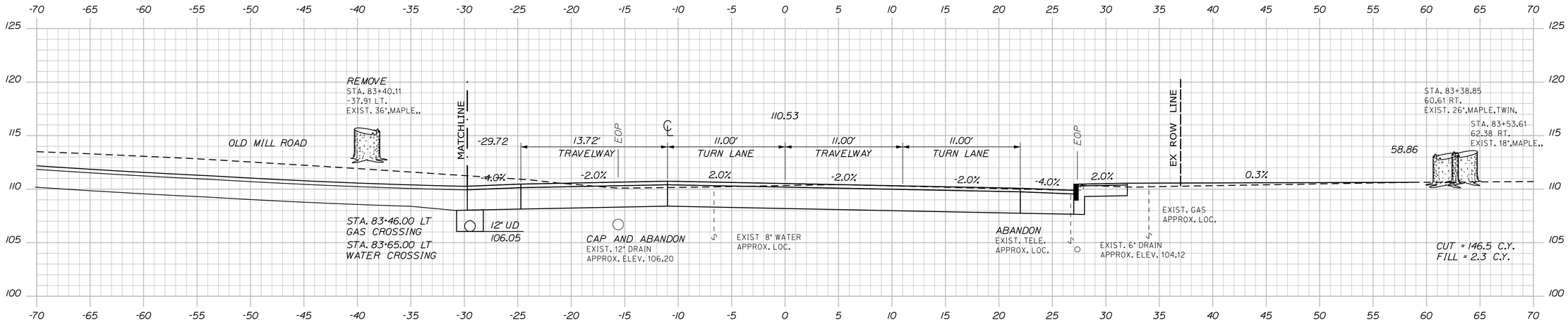
Division: HIGHWAY

Filename: ...\054-153_Cross-Sections.dgn

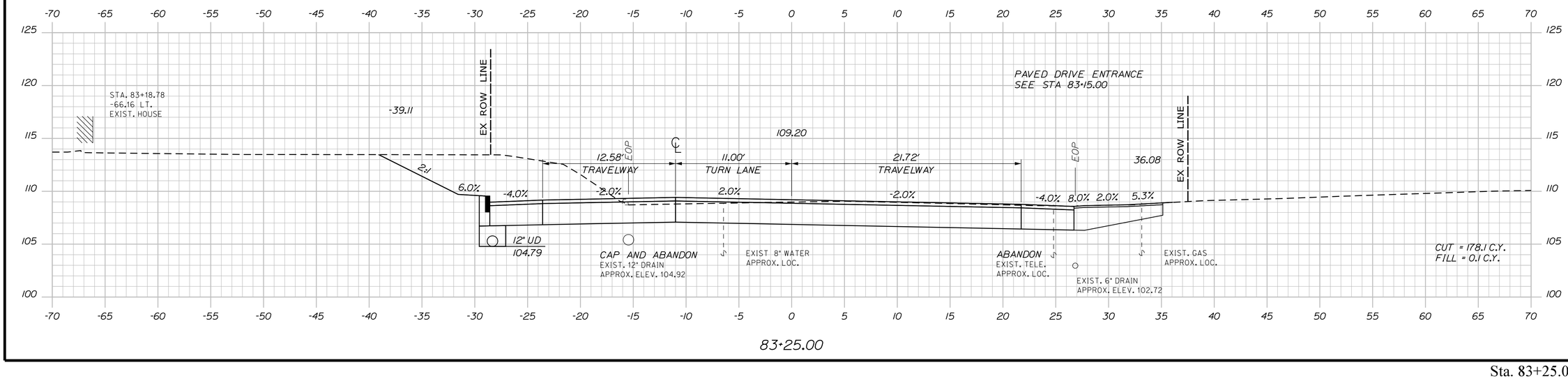
Sta. 82+82.00 to Sta. 83+15.00



83+60.00



83+50.00



83+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON		
DESIGN-DETAILED	ECF	BY	JBD
CHECKED-REVIEWED	ECF		AG
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

	DATE
	11/17/2021
SIGNATURE	11/17/2021
P.E. NUMBER	
DATE	

OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

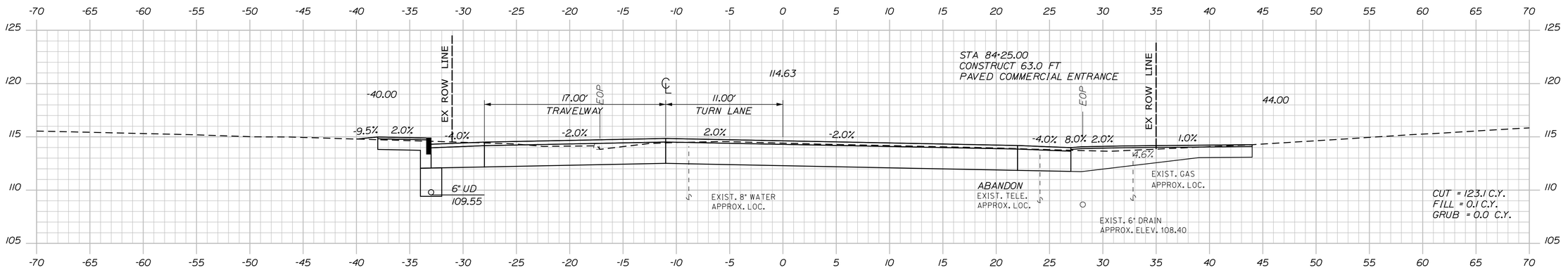
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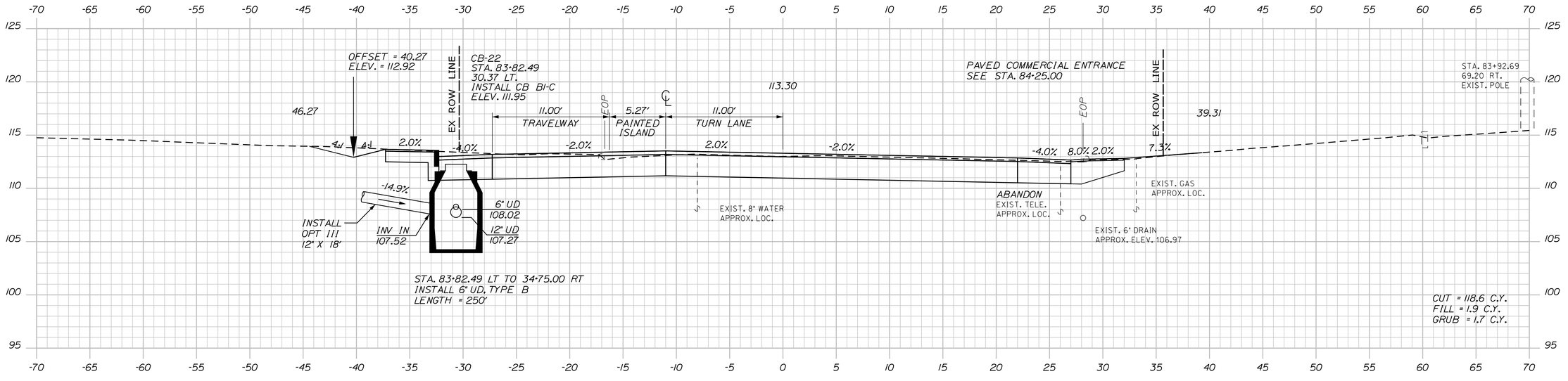
OF 218

Sta. 83+25.00 to Sta. 83+60.00

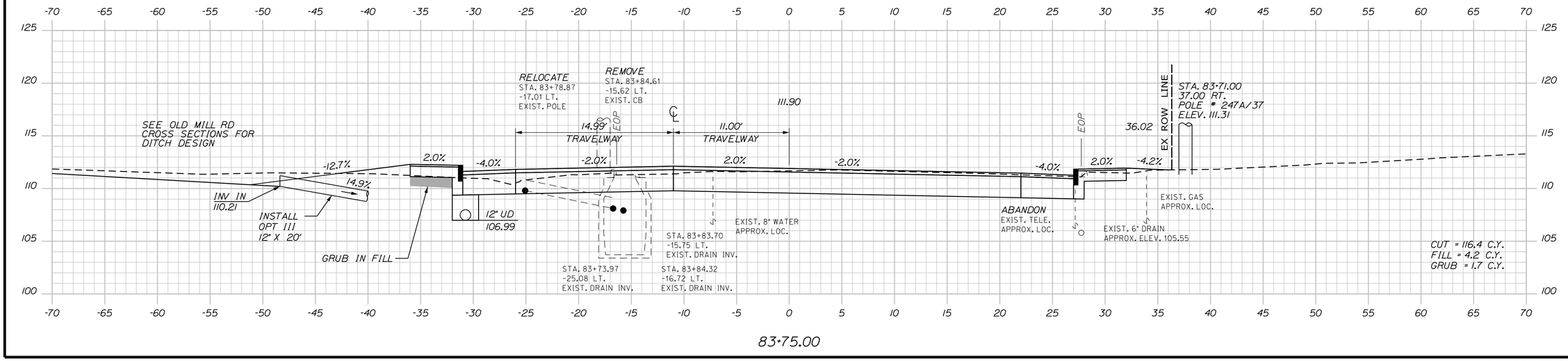
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84+25.00



84+00.00



83+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2189401

WIN
022950.01

HIGHWAY PLANS

	R. MOULTON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ECF	JBD	11/17/2021
CHECKED-REVIEWED	ECF	AG	11/17/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

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DATE

OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

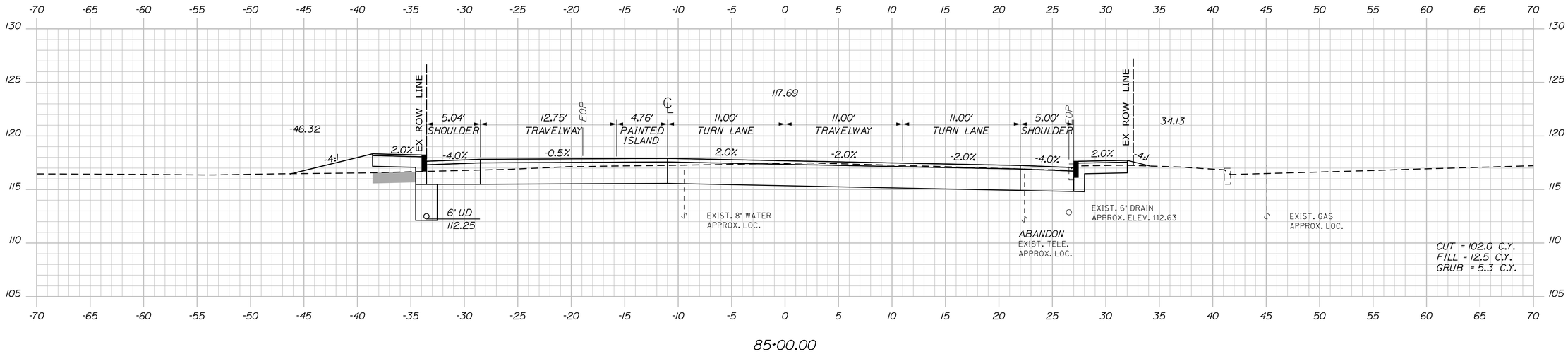
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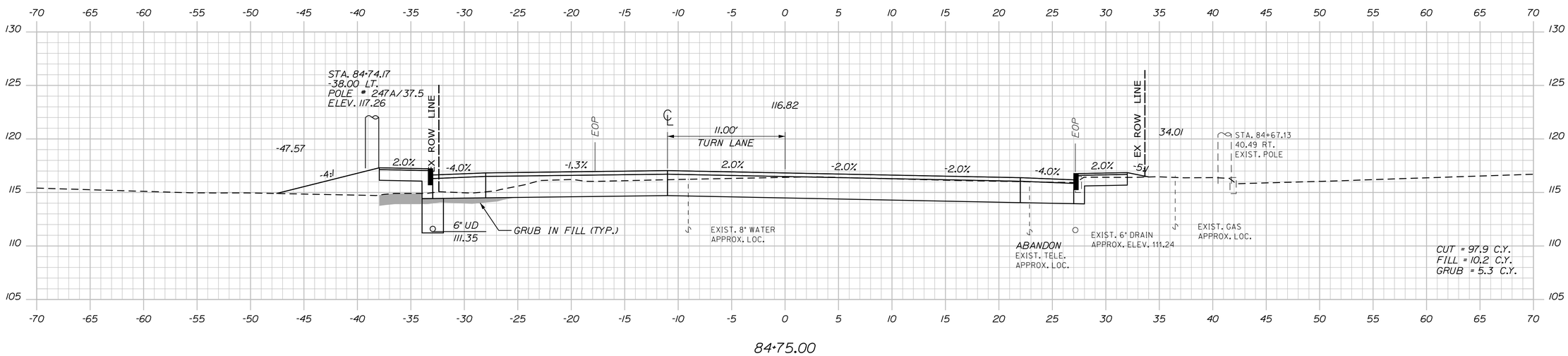
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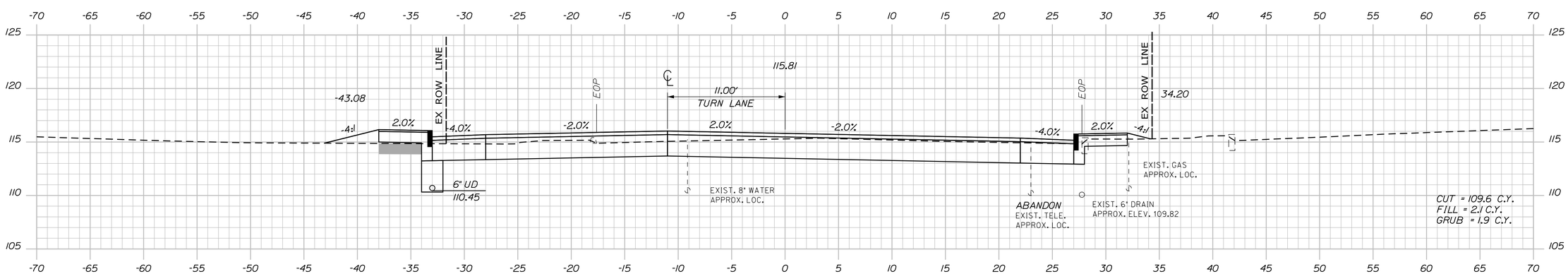
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Username: jomesdavis
Date:11/17/2021
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85+00.00



84+75.00



84+50.00

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HIGHWAY PLANS

PROJ. MANAGER	R. MOULTON			
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DESIGN3-DETAILED3				
REVISIONS 1				
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FIELD CHANGES				

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OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

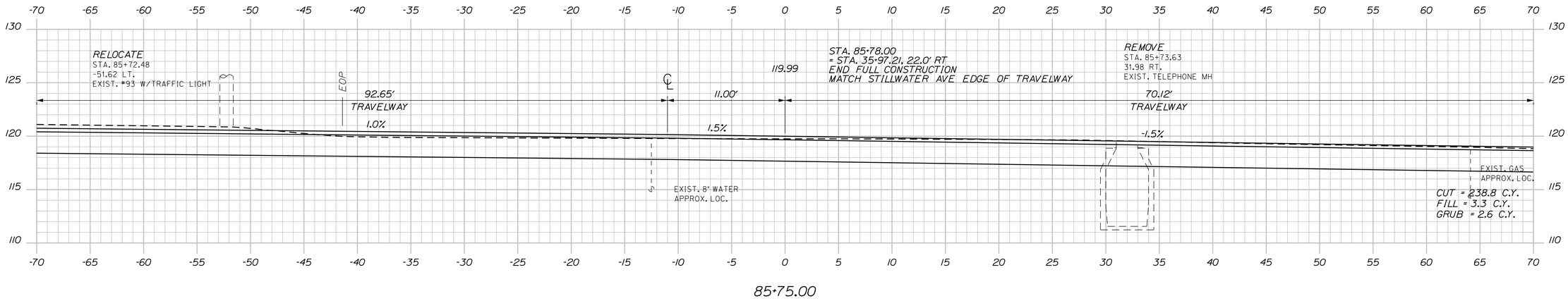
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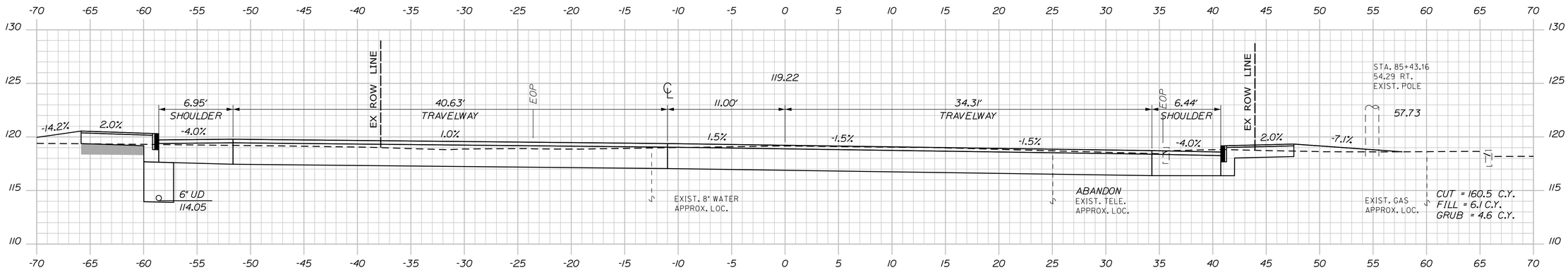
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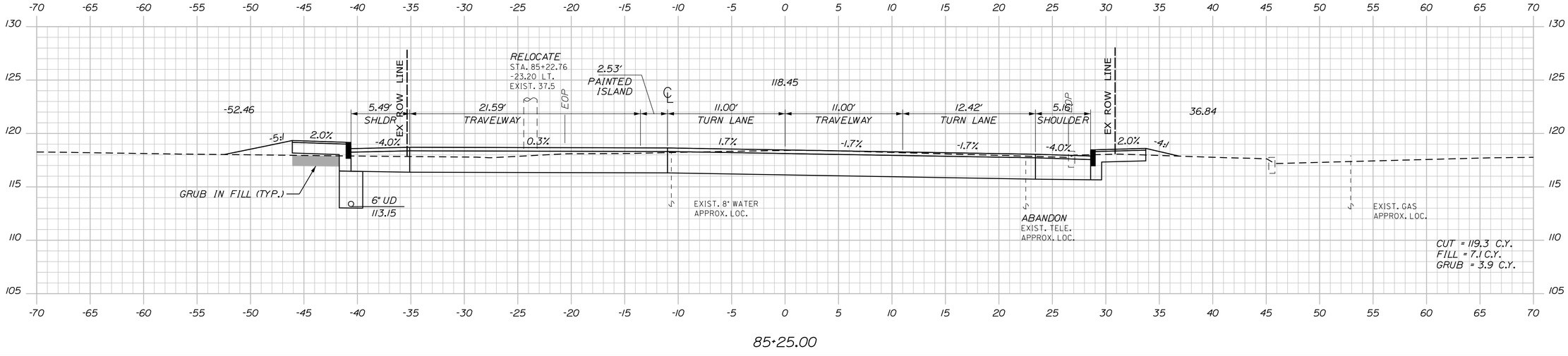
OF 218

Sta. 84+50.00 to Sta. 85+00.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021







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HIGHWAY PLANS

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R. MOULTON	JBD	11/17/2021
DESIGN-DETAILED	ECF	11/17/2021
CHECKED-REVIEWED	ECF	SIGNATURE
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
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FIELD CHANGES		

OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

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Sta. 85+25.00 to Sta. 85+75.00

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TO BE RELOCATED BY OTHERS
STA. 86+39.01
-43.59 LT.
EXIST. HYDRANT

EX ROW LINE

REMOVE
STA. 86+48.01
-30.05 LT.
EXIST. CB

EOP

7.62'
SHOULDER
-4.0%

13.4%
-2.0%

45.87'
TRAVELWAY
1.1%

120.20

REMOVE
STA. 86+47.46
12.40 RT.
EXIST. CB

38.96'
TRAVELWAY
-1.5%

7.37'
SHOULDER
-4.0

-2.0%
5.3%

58.58

6" UD
115.21

EXIST. 6" WATER
APPROX. LOC.

EXIST 8" SEWER
APPROX. ELEV. 115.18

EXIST. 6" DRAIN
APPROX. ELEV. 114.21
STA. 86+48.10
-28.98 LT.
EXIST. DRAIN INV.
STA. 86+47.78
+30.09 LT.
EXIST. DRAIN INV.

STA. 86+47.83
12.42 RT.
EXIST. DRAIN INV.
STA. 86+47.83
11.90 RT.
EXIST. DRAIN INV.
STA. 86+47.37
12.96 RT.
EXIST. DRAIN INV.

STA. 35+43.44 LT TO 88+50.00 LT
INSTALL 6" UD, TYPE B
LENGTH = 223'

STA. 37+01.49 LT TO 88+02.53 RT
INSTALL 12" UD, TYPE C
LENGTH = 218'
CUT = 163.7 C.Y.
FILL = 0.0 C.Y.

12" UD
113.57

86+50.00

STA. 86+48.34 / STA. 35+43.44
53.84 LT.
INSTALL CB, TYPE AI-C
ELEV. 120.45

6" UD
115.10

12" UD
114.60

STILLWATER AVENUE

EXIST. 6" WATER
APPROX. LOC.

EXIST 8" SEWER
APPROX. ELEV. 114.69

STA. 86+27.94
= STA. 35+97.22, 28.0' LT
BEGIN FULL CONSTRUCTION
MATCH STILLWATER AVE EDGE OF TRAVELWAY

EXIST. GAS
APPROX. LOC.
CUT = 0.0 C.Y.
FILL = 0.0 C.Y.

86+25.00

STA. 85+99.09
-47.11 RT.
EXIST. EXIST. SEWER MH

STILLWATER AVENUE

EXIST 8" SEWER
APPROX. ELEV. 114.21

STA. 85+98.96
-47.38 LT.
EXIST. DRAIN INV.

EXIST. 6" WATER
APPROX. LOC.

EXIST. GAS
APPROX. LOC.
CUT = 43.4 C.Y.
FILL = 0.0 C.Y.
GRUB = 0.0 C.Y.

86+00.00

Sta. 86+00.00 to Sta. 86+50.00

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HIGHWAY PLANS

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DESIGN3-DETAILED3		
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REVISIONS 3		
REVISIONS 4		
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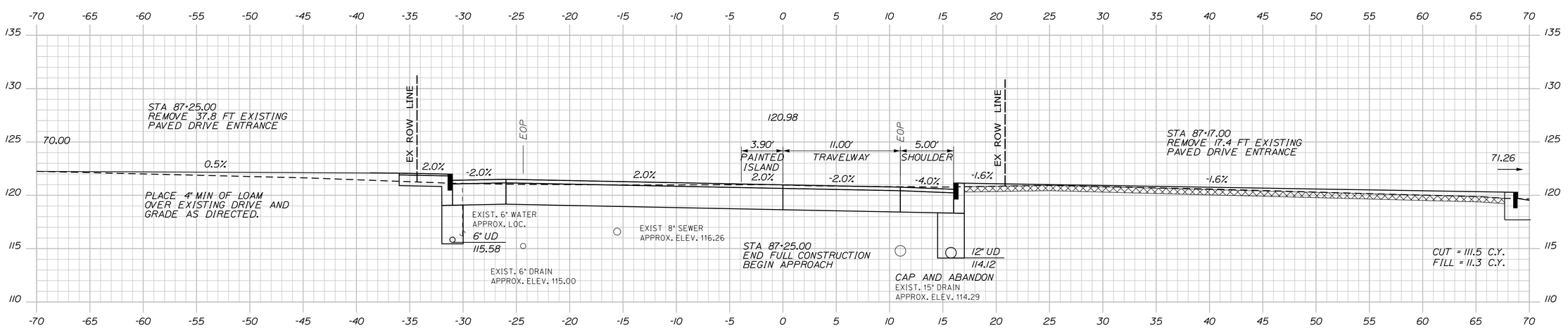
OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

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REVISIONS 4			
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PROJ. MANAGER

SIGNATURE

P.E. NUMBER

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OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

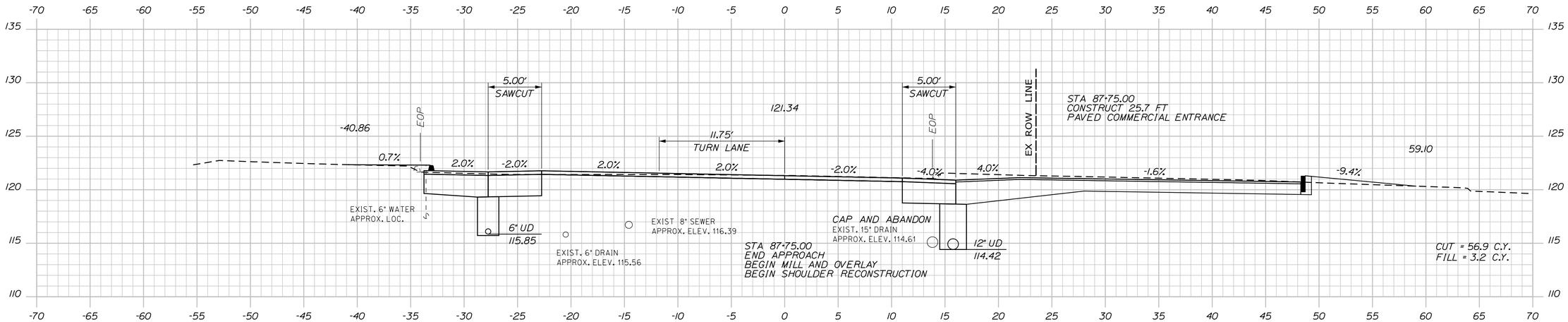
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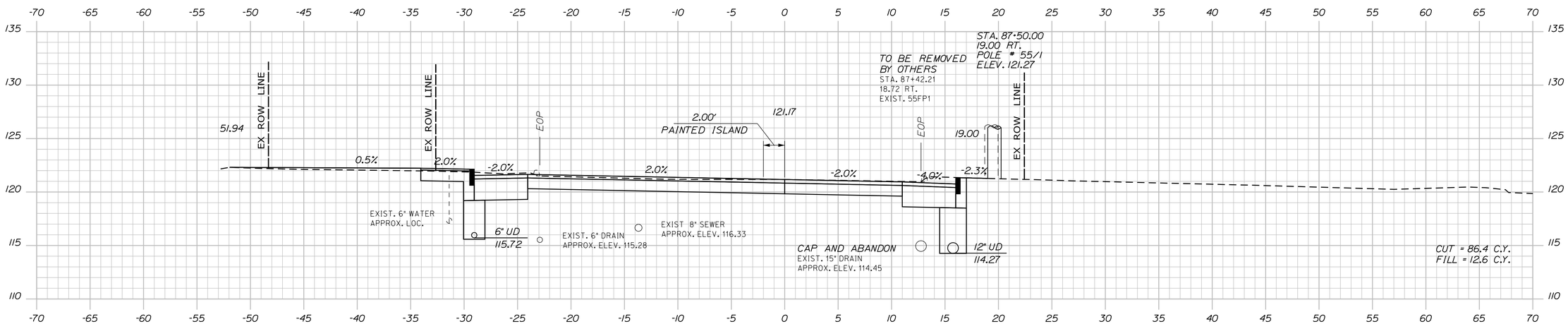
OF 218

Sta. 86+75.00 to Sta. 87+25.00

Filename: ...\054-153_Cross-Sections.dgn Division: HIGHWAY Username: jamesdavis Date:11/17/2021



87+75.00



87+50.00

Sta. 87+50.00 to Sta. 87+75.00

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HIGHWAY PLANS

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REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

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OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

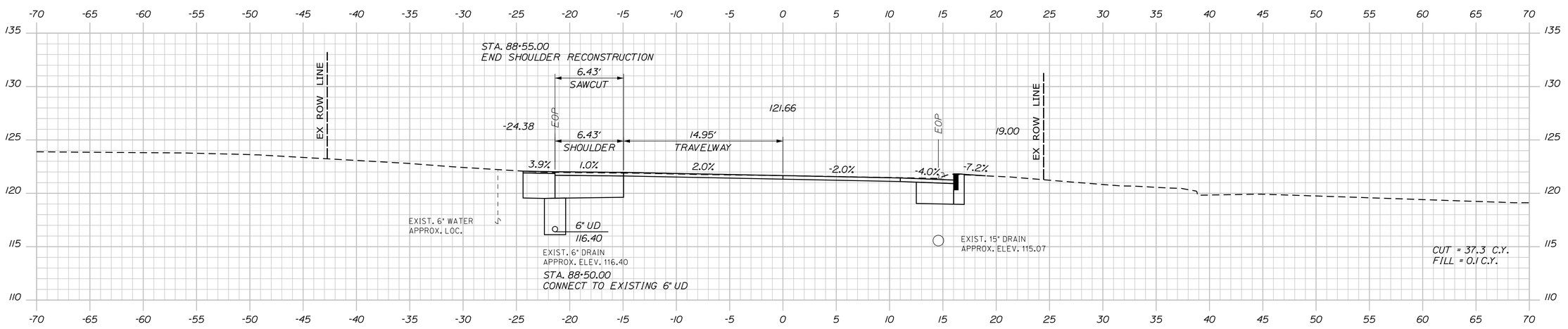
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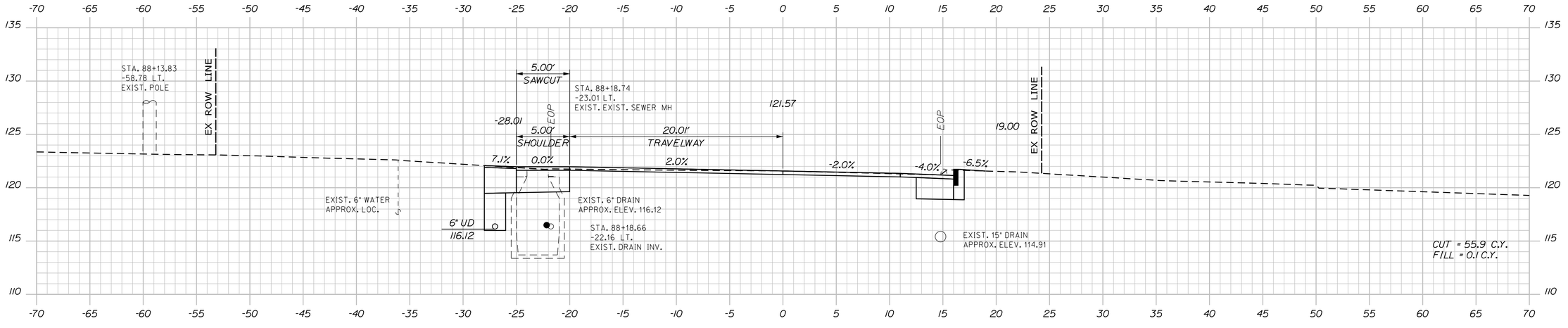
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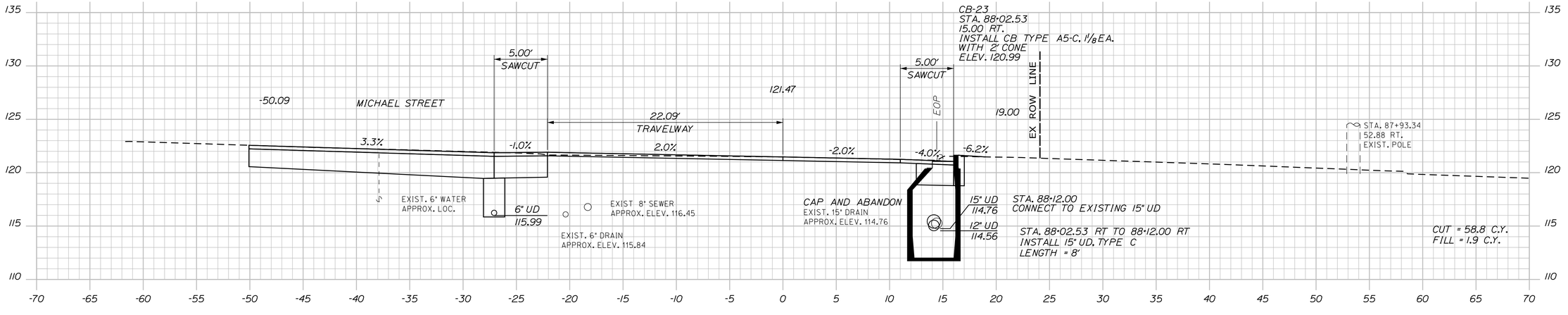
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88+50.00



88+25.00



88+00.00

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HIGHWAY PLANS

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DESIGN3-DETAILED3			
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REVISIONS 4			
FIELD CHANGES			

SIGNATURE

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OLD TOWN
COLLEGE AVENUE

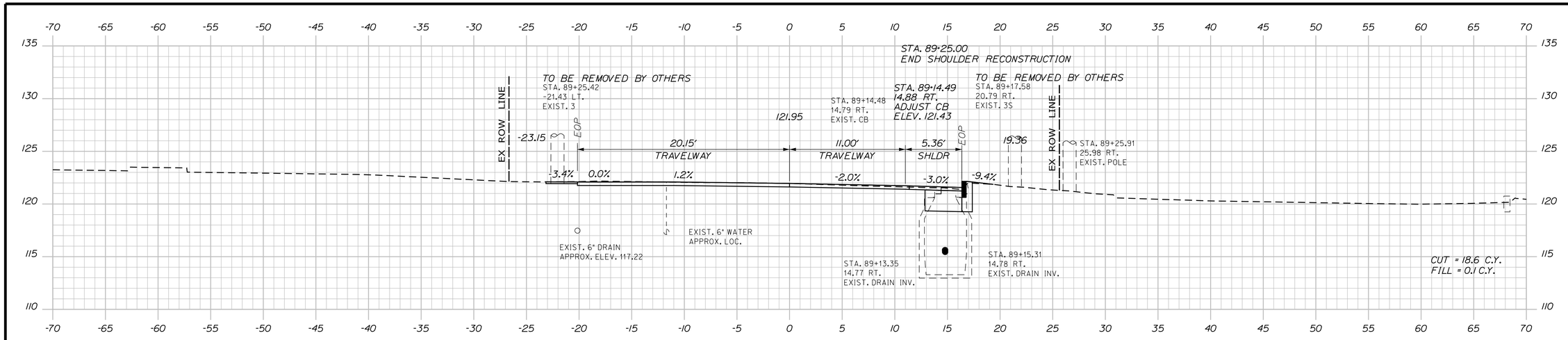
CROSS SECTIONS

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Sta. 88+00.00 to Sta. 88+50.00



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HIGHWAY PLANS

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REVISIONS 4			
FIELD CHANGES			

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OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

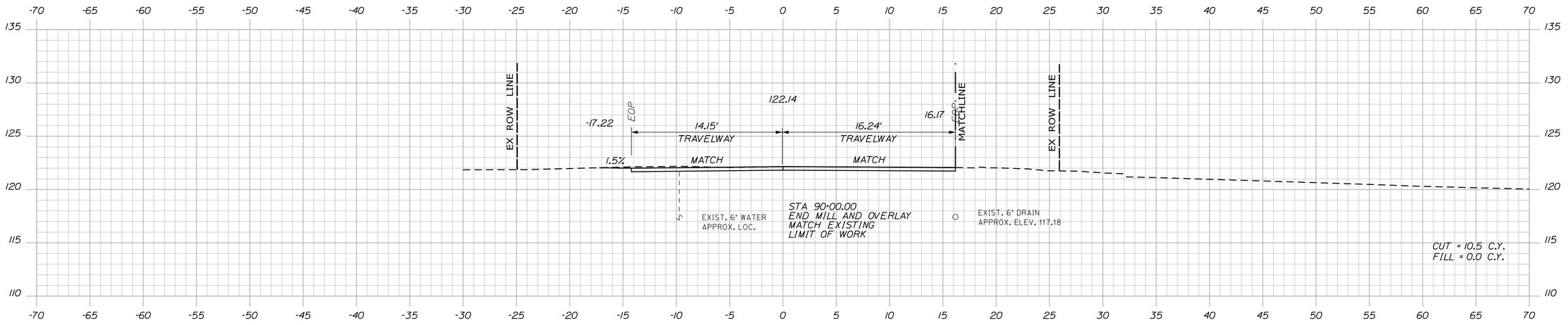
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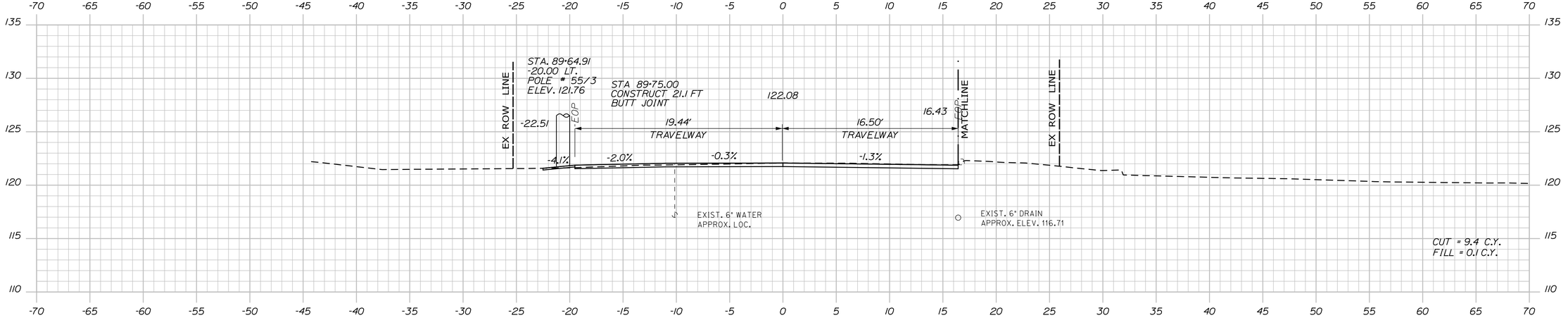
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Sta. 88+75.00 to Sta. 89+25.00

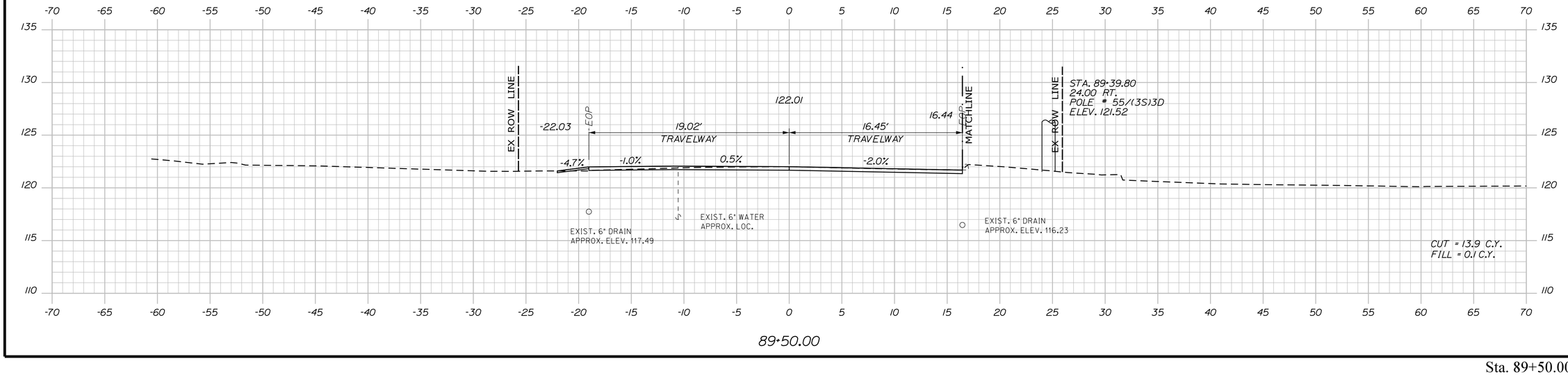
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90+00.00



89+75.00



89+50.00

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HIGHWAY PLANS

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OLD TOWN
COLLEGE AVENUE

CROSS SECTIONS

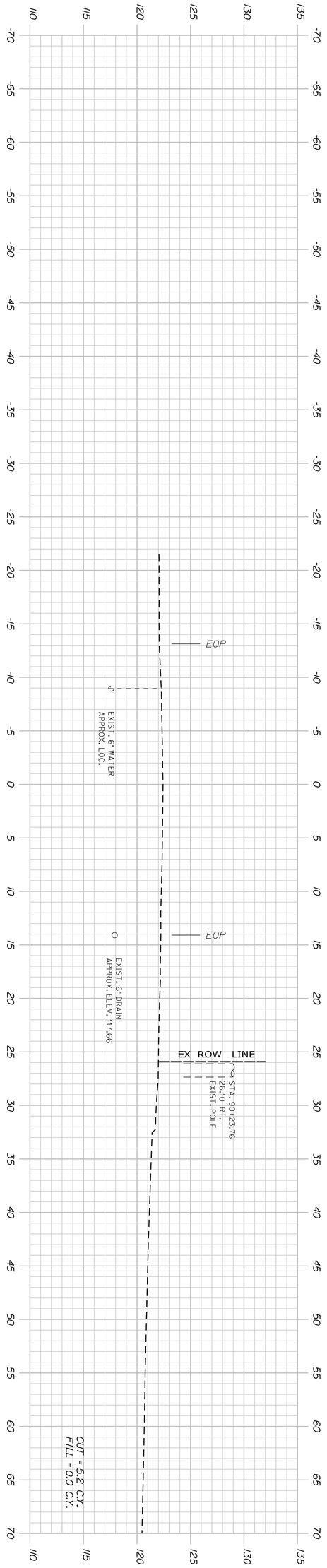
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Sta. 89+50.00 to Sta. 90+00.00

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Sta. 90+25.00 to Sta. 90+25.00

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OLD TOWN
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022950.01 HIGHWAY PLANS

Date:11/18/2021
Division: BRIDGE
Filename: ...\BRIDGE\MSTA\154_Notes_01.dgn

GENERAL BRIDGE CONSTRUCTION NOTES

1. For easements, construction limits and right of way lines, refer to the Right of Way Plans.

2. The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to related Contract Items.

3. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.

4. Protective Coating for Concrete Surfaces shall be applied to the following areas:

   All exposed surfaces of concrete curbs, sidewalks, tops of wingwalls, and wingwall sides down to one foot below proposed grade, deck fascia, and underside of overhang to the drip notch. The front side of abutments, and back side of deck ends to 12" below grade.

5. Project information referred to below may be accessed at the following MaineDOT web address: https://www.maine.gov/mdot/contractors/

6. Bidders and Contractors may access the existing bridge plans at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

7. Bidders and Contractors may access a copy of the hydrologic, hydraulic and scour report of the bridge site at the MaineDOT web address. The hydrologic, hydraulic and scour report is based on the Maine DOT's interpretation of the information obtained for the subject site. No assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.

8. Bidders and Contractors may access a copy of the project geotechnical report at the MaineDOT web address.

9. Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations.

10. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

    a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

    b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

    c. If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.

11. The existing bridges shall be removed by, and become the property of, the Contractor. The steel portions of the existing bridges may be coated with a lead-based paint system and the mortar in pier masonry joints may also contain lead. The Contractor is responsible for the containment, proper management, and disposal of all lead contaminated hazardous waste generated by the process of demolishing the bridges. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. Once the existing bridges are removed, the Contractor is solely responsible for the care, custody, and control of the components of the existing bridges and any hazardous waste generated as a result of storage, recycling, or disposal of the bridge components. The Contractor shall recycle or reuse the steel in accordance with Maine Department of Environmental Protection's "Maine Hazardous Waste Management Regulations," Chapter 850. A copy of this regulation is available at the MaineDOT's offices on Child Street in Augusta. Payment for all labor, materials, equipment, and other costs required to remove and dispose of the existing bridges will be considered incidental to the bridge removal pay item. The existing bridges shall be removed by and become the property of the Contractor.

12. The Contractor shall submit Bridge Demolition Plans to the Resident at least 10 business days prior to the start of demolition work. The plans shall outline the methods, equipment, and sequencing to be used to remove and dispose of all materials included in the existing bridges. No work related to the removal of the bridges shall be undertaken by the Contractor until MaineDOT has reviewed the Bridge Demolition Plans for appropriateness and completeness. Payment for all work necessary for developing, submitting, and finalizing the Demolition Plans will be considered incidental to the bridge removal pay item.

13. The Contractor shall field verify stream bed elevations along the upstream bridge fascia, downstream bridge fascia and along the centerline of the bridge. Streambed elevations shall be taken every five (5) feet along all three lines and provided to the Resident. The Resident will determine final proposed streambed elevation(s) based on this information. This work shall not be paid for directly. Payment shall be considered incidental to related Contract Items.

14. All embankment material below Aggregate Subbase Coarse Gravel, except as otherwise shown, shall be Granular Borrow meeting the requirements of Subsection 703.19, Material for Underwater Backfill.

15. The Contractor shall plan and conduct work so that upon completion of the project there is no drop-off from the edge of the shoulder pavement.

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth Edition 2020.

DESIGN LOADING

Live Load ..... HL - 93 Maine Modified for Strength I

HYDROLOGIC DATA

Drainage Area	326 sq mi
Design Discharge (Q50)	43,050 cfs
Check Discharge (Q100)	52,540 cfs
Headwater Elevation (Q1.1)	93.7 ft
Headwater Elevation (Q25)	98.4 ft
Headwater Elevation (Q50)	98.6-98.7 ft
Headwater Elevation (Q100)	100.2-100.3 ft
Discharge Velocity (Q1.1)	5.6-5.9 fps
Discharge Velocity (Q50)	14.3-16.0 fps
Discharge Velocity (Q100)	16.2-17.7 fps

MATERIALS

Concrete:	
Curbs and Sidewalks	Class "A2"
Pier Subfooting	Class "S"
All Other	Class "A"
Reinforcing Steel:	
Plain	ASTM A615/A615M, Grade 60
Stainless	ASTM A955/A995M, Grade 75
Structural Steel:	
All Material (except as noted)	ASTM A709, Grade 50 (Metallized)
High Strength Bolts	ASTM F3125, Grade A325, Type 1

BASIC DESIGN STRESSES

Class "S" Concrete	f 'c = 3000 psi
Class "A2" Concrete	f 'c = 3500 psi
Class "A" Concrete	f 'c = 4000 psi
Plain Reinforcing Steel	f y = 60,000 psi
Stainless Reinforcing Steel	f y = 75,000 psi
Structural Steel:	
ASTM A 709, Grade 50	F y = 50,000 psi
ASTM F 3125, Grade A 325	F u = 120,000 psi

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Interpretive Subsurface Details (Bridge No. 1) (3 Sheets)	158-160
Boring Logs (Bridge No. 1) (2 Sheets)	161-162
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MAINTENANCE OF TRAFFIC

Temporary two-lane bridge with a minimum curb to curb width of 30'-0" on the upstream side of proposed bridges, with separated temporary 5'-0" sidewalk on west side of temporary bridge.

UTILITIES

Emera Maine	Spectrum
Fairpoint Communications	Maine Fiber
Old Town Water and Sewer District	First Light

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01

PROJ. MANAGER	MICHAEL WIGHT							BY	DATE
DESIGN-DETAILED	TJ COOK							P DONOVAN	11/17/21
CHECKED-REVIEWED	CT AYERS							RS BLUNT	11/17/21
DESIGN2-DETAILED2									
DESIGN3-DETAILED3									
REVISIONS 1									
REVISIONS 2									
REVISIONS 3									
REVISIONS 4									
FIELD CHANGES									

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGES
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

BRIDGE GENERAL NOTES

SHEET NUMBER

154

OF 218

Match Highway
Project No. 22950.01
Begin WIN 22512.01
Sta. 22+84.84

End WIN 22512.01 | Begin WIN 22511.01

Sta. 25+00.00

Flow

STILLWATER RIVER

℄ Brg., Abut. No. 1
Sta. 22+87.50

℄ Brg., Abut. No. 2
Sta. 24+12.50

Steel Approach
Railing, 4-Bar
(Typ. West Side)

℄ Brg., Abut. No. 1
Sta. 25+66.50

℄ Brg., Pier No. 1 (Fixed)
Sta. 27+06.50

℄ Brg., Abut. No. 2
Sta. 28+46.50

Match Highway
Project No. 22950.01
End WIN 22511.01
Sta. 28+48.00

CURVE DATA #3
PI = 28+92.38
Δ = 0°25'22.4" Lt.

125'-0" (Bridge No. 1)
SPAN

280'-0" (Bridge No. 2)

140'-0"
Span 1

140'-0"
Span 2

25°0'0"
Skew (Typ.)

Heavy
Riprap

CONST. & MAINT. EASE. LIMITS
1003 S.F.

STORMWATER OUTFALL

22+00 | 23+00 | 24+00 | N18°58'34.8"E | 25+00 | 26+00 | STILLWATER AVE. | 27+00 | 28+00 | N18°58'34.8"E | 29+00

℄ Construction

90°0'0"
(Typ.)

Bridge Drain (Typ.)

Heavy Riprap

See Water and Sewer
Design Plans (Typ.)

Drainage to be Coordinated
with Highway Project (Typ.)
WIN 22950.01

New Utility Pole
Locations (Typ.)

Bridge Transition
Type I (Typ.)

Steel Approach Railing, 3-Bar
(Typ. East Side)

Plain
Riprap
(Typ.)

Heavy
Riprap

Bridge Drain (Typ.)

OUTLET DRAINAGE
STRUCTURE
STA. 28+85± RT.

PI = STA. 28+92.38

Top of Dam
Spillway (Typ.)
Approximate
Elevation 93.88

TOP OF TIMBER FLASHBOARDS

PAVED

LAWN

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472
BRIDGE NO. 2806

WIN 022512.01
WIN 022511.01

BRIDGE PLANS

SIGNATURE

P.E. NUMBER

DATE

	BY	DATE
PROJ. MANAGER	MICHAEL WIGHT	
DESIGN-DETAILED	TJ COOK	10/17/21
CHECKED-REVIEWED	CT AYERS	10/17/21
DESIGN2-DETAILED2	RS BLUNT	
DESIGN3-DETAILED3	P DONOVAN	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

STILLWATER BRIDGES
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

GENERAL PLAN

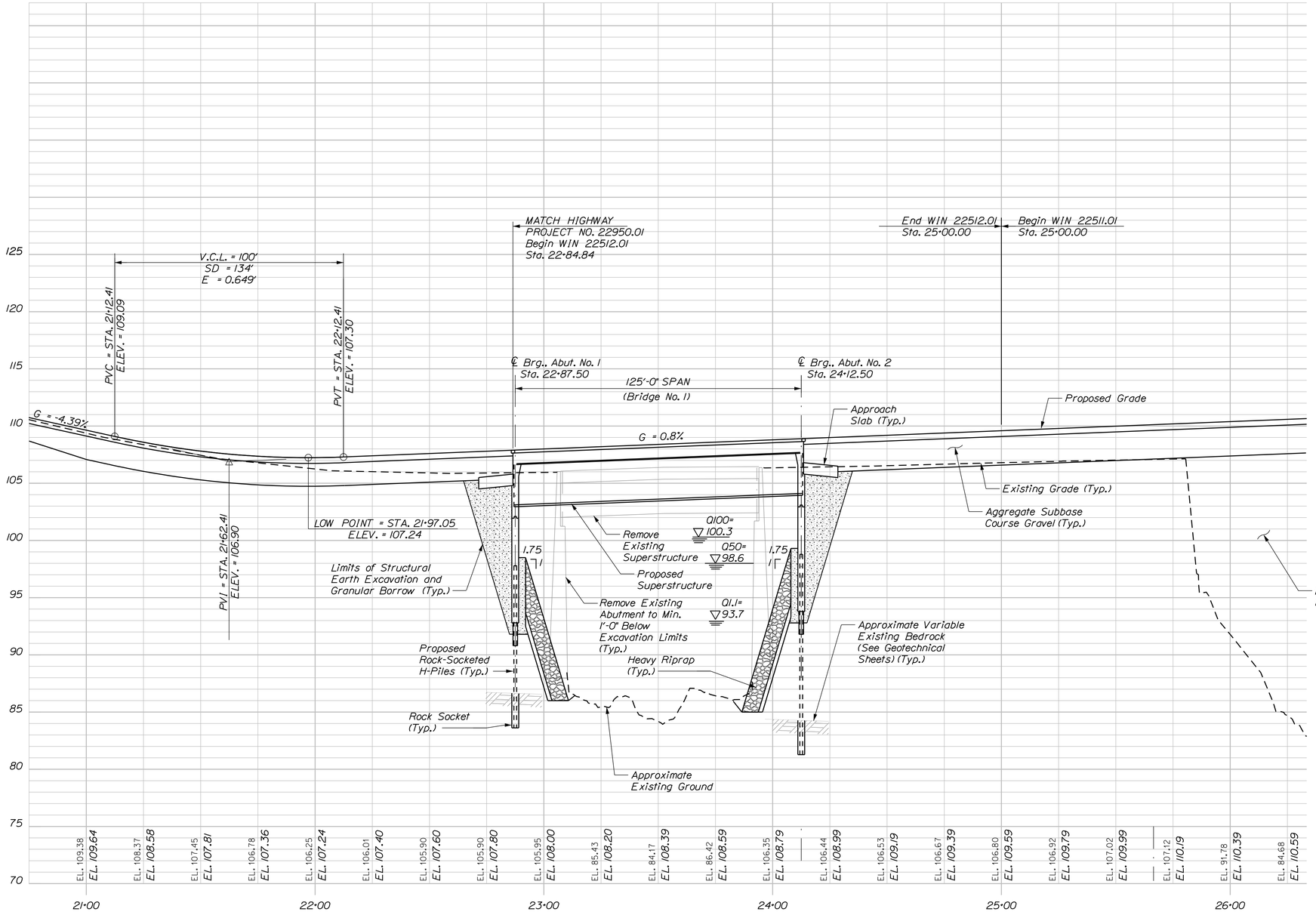
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155
OF 218

Date:11/19/2021

Division: BRIDGE

Filename: ...\BRIDGE\MSTA\155_BDPlan_ 1.dgn

Filename: ...\BRIDGE\MSTA\156_Profile_01.dgn Division: BRIDGE
Date:11/19/2021



PROFILE BRIDGE NO. 1

Horiz. 25 0 25 50

Vert. 5 0 5 10

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	MICHAEL WIGHT	
DESIGN-DETAILED	TJ COOK	P DONOVAN 11/17/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT 11/17/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

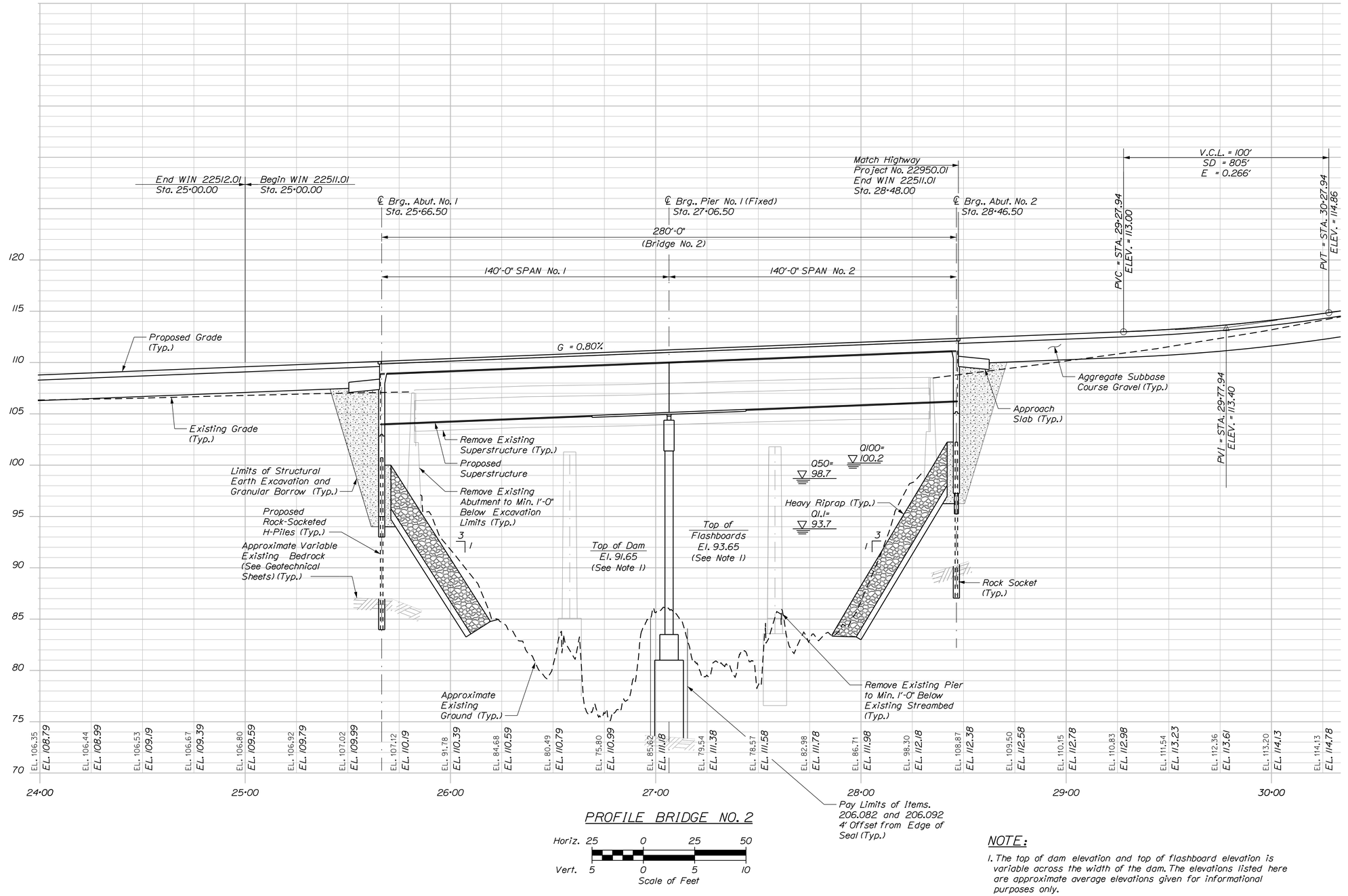
STILLWATER BRIDGES
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

PROFILE (1 OF 2)

SHEET NUMBER

156

OF 218



PROFILE BRIDGE NO. 2

Horiz. 25 0 25 50
Vert. 5 0 5 10
Scale of Feet

NOTE:

1. The top of dam elevation and top of flashboard elevation is variable across the width of the dam. The elevations listed here are approximate average elevations given for informational purposes only.

Date:11/19/2021

Filename: ...\BRIDGE\MSTA\157_Profile_02.dgn Division: BRIDGE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472
BRIDGE NO. 2806

WIN 022512.01
WIN 022511.01

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	MICHAEL WIGHT	
DESIGN-DETAILED	TJ COOK	11/17/21
CHECKED-REVIEWED	CT AYERS	11/17/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

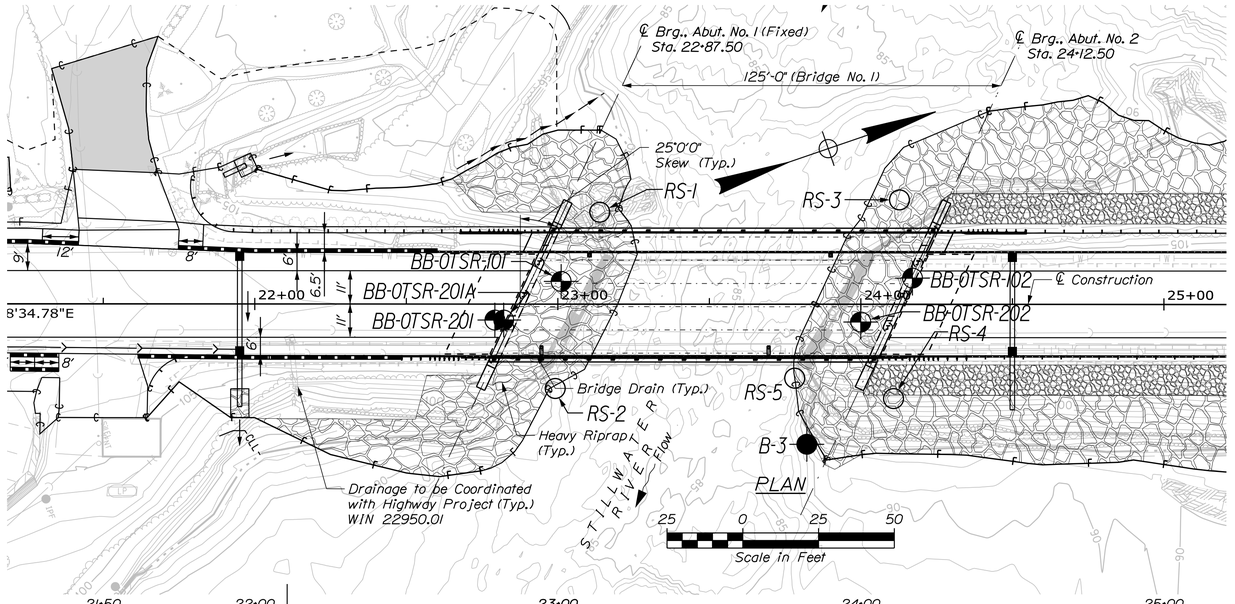
STILLWATER BRIDGES
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

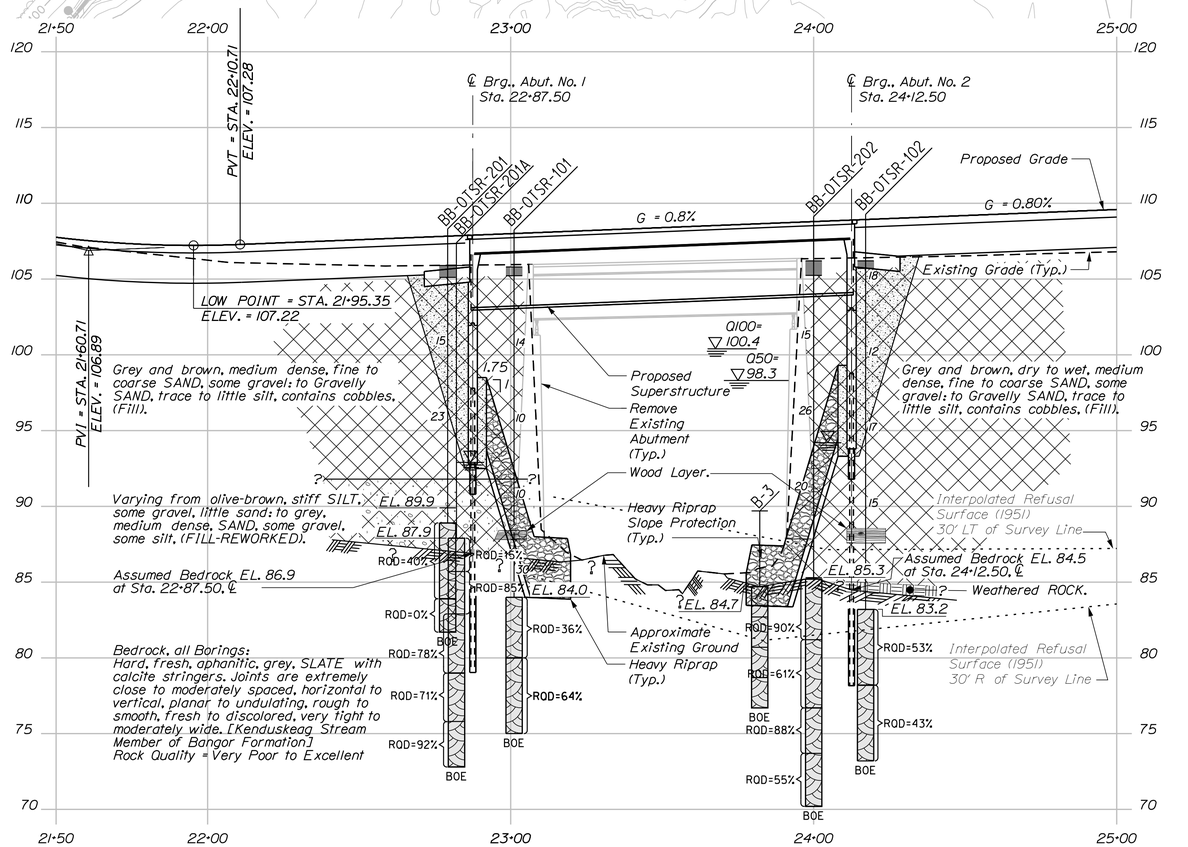
PROFILE (2 OF 2)

SHEET NUMBER

157

OF 218





PROFILE

HORIZ 25 0 25 50
VERT 5 0 5 10
SCALE

BORING LOCATION PLAN LEGEND

- BB-0STR-102 — Location and designation of 100-Series cased wash boring
- BB-0STR-202 — Location and designation of 200-Series cased wash boring
- B-3 — Approximate location and designation of B-Series boring included in 1951 bridge drawings
- RS-5 — Approximate location and designation of RS-Series rod sounding included in 1951 bridge drawings

INTERPRETIVE SUBSURFACE PROFILE LEGEND

Notes:

1) The as-drilled boring locations for BB-0TSR-100 and -200 series borings were surveyed by a MaineDOT survey crew.

2) BB-0STR-100 series borings were performed by MaineDOT and observed by MaineDOT personnel on August 16, 2015.

3) BB-0STR-200 series borings were performed by S.W. Cole and MaineDOT and observed by GZA personnel between May 19 and 21, 2020.

4) B-series boring data, RS-series rod sounding data, and interpolated refusal surface lines were interpreted from Sheet 2A of the existing bridge drawings, dated February 1951. Locations were estimated using an overlay on the existing conditions drawing rasterized, placed and scaled on the topo.dgn and should be considered approximate. Elevations are based on a conversion of of Local datum -53' = NAVD88 provided by VHB.

5) This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and rock transitions may vary and are probably more erratic. boring data are shown for borings drilled off alignment, but interpreted strata are based on the borings drilled closest to the project baseline. For more specific information refer to the exploration logs.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2251(200)

WIN 22512.01

BRIDGE NO. 1472

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	M.WIGHT		
DESIGN-DETAILED	B.REEVES	D.SHAW	
CHECKED-REVIEWED	B.REEVES	-----	-----
DESIGN2-DETAILED2	A.BLASDELL	T.WHITE	MAR 2021
DESIGN3-DETAILED3	A.BLASDELL	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

STILLWATER #1 BRIDGE
STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

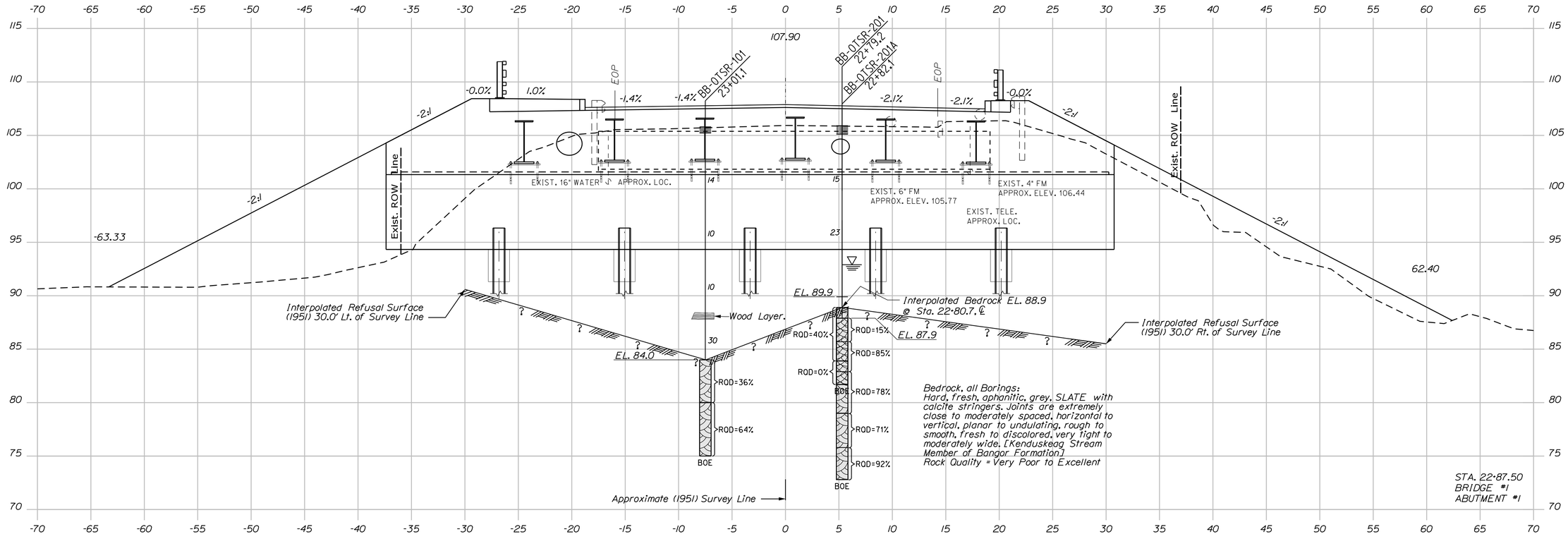
SHEET NUMBER

158

OF 218

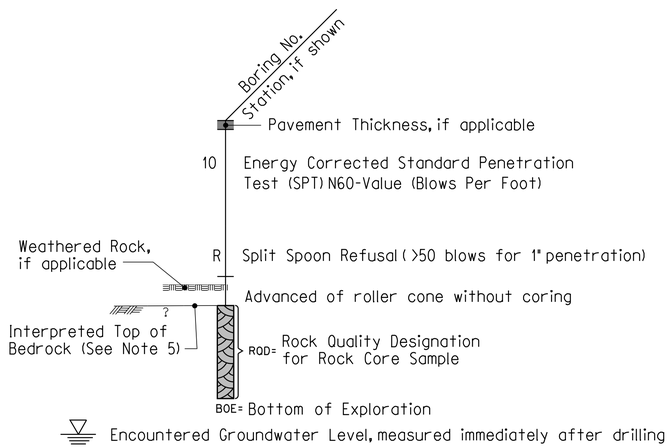
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Filename: ...\159_ISCS 22+87.50 BRG ABUT #1.dgnDivision: BRIDGE Username: PDonovan Date:11/18/2021



22+87.50 (SKEWED 25.° LOOKING UPSTATION)

INTERPRETIVE SUBSURFACE CROSS SECTION LEGEND



CROSS SECTION



Notes:

1) The as-drilled boring locations for BB-OTSR-100 and -200 series borings were surveyed by a MaineDOT survey crew.

2) BB-OSTR-100 series borings were performed by MaineDOT and observed by MaineDOT personnel on August 16, 2015.

3) BB-OSTR-200 series borings were performed by S.W. Cole and MaineDOT and observed by GZA personnel between May 19 and 21, 2020.

4) B-series boring data, RS-series rod sounding data, and interpolated refusal surface lines were interpreted from Sheet 2A of the existing bridge drawings, dated February 1951. Locations were estimated using an overlay on the existing conditions drawing rasterized, placed and scaled on the topo.dgn and should be considered approximate. Elevations are based on a conversion of of Local datum +53' = NAVD88 provided by VHB.

5) This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and rock transitions may vary and are probably more erratic. boring data are shown for borings drilled off alignment, but interpreted strata are based on the borings drilled closest to the project baseline. For more specific information refer to the exploration logs.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2251(200)

WIN 22512.01

BRIDGE NO. 1472

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	M.WIGHT	
DESIGN-DETAILED	B.REEVES	-----
CHECKED-REVIEWED	D.SHAW	-----
DESIGN2-DETAILED2	A.BLAISDELL	NOV 2015
DESIGN3-DETAILED3	T.WHITE	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

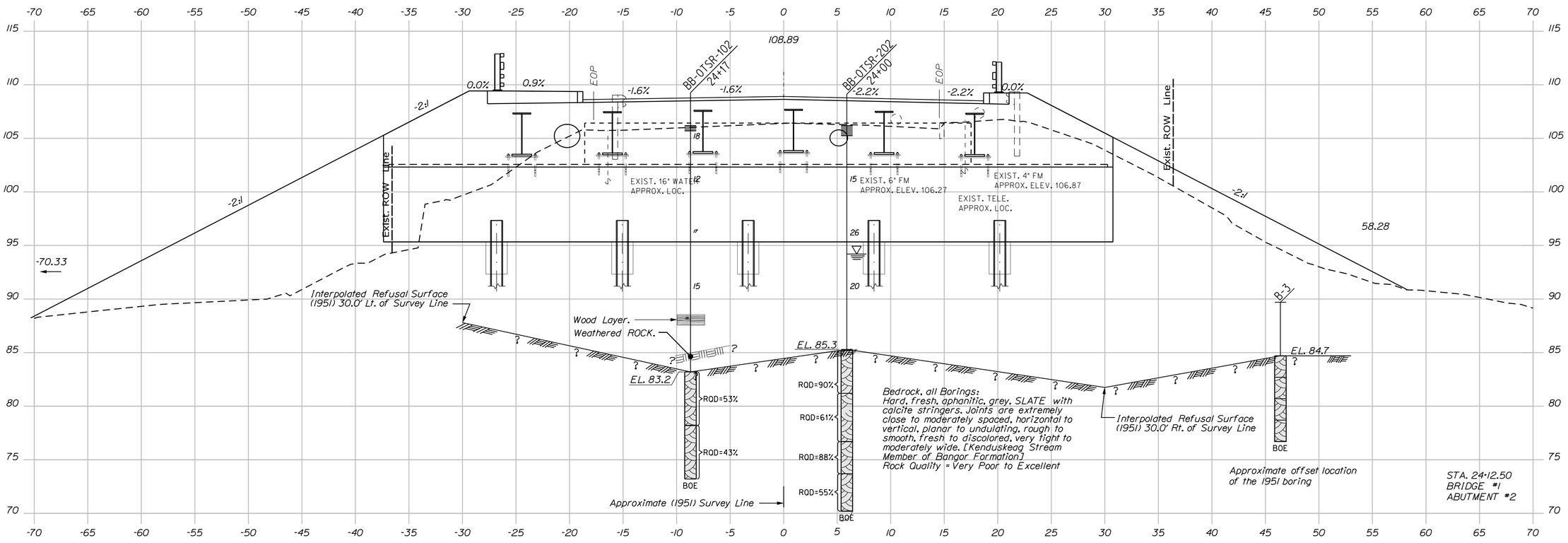
STILLWATER #1 BRIDGE
STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

INTERPRETIVE SUBSURFACE
CROSS SECTION BRG. ABUT. NO 1

SHEET NUMBER

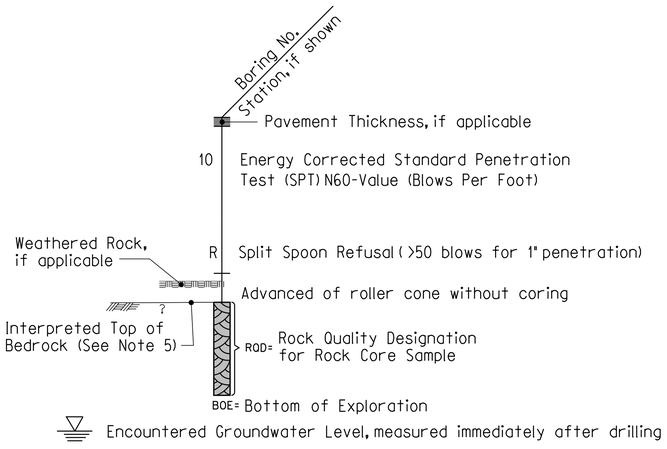
159

OF 218

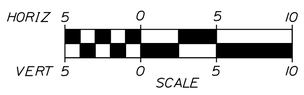


24+12.50 (SKEWED 25.° LOOKING UPSTATION)

INTERPRETIVE SUBSURFACE CROSS SECTION LEGEND



CROSS SECTION



Notes:

1) The as-drilled boring locations for BB-01STR-100 and -200 series borings were surveyed by a MaineDOT survey crew.

2) BB-01STR-100 series borings were performed by MaineDOT and observed by MaineDOT personnel on August 16, 2015.

3) BB-01STR-200 series borings were performed by S.W. Cole and MaineDOT and observed by GZA personnel between May 19 and 21, 2020.

4) B-series boring data, RS-series rod sounding data, and interpolated refusal surface lines were interpreted from Sheet 2A of the existing bridge drawings, dated February 1951. Locations were estimated using an overlay on the existing conditions drawing rasterized, placed and scaled on the topo.dgn and should be considered approximate. Elevations are based on a conversion of of Local datum '53' = NAVD88 provided by VHB.

5) This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and rock transitions may vary and are probably more erratic. boring data are shown for borings drilled off alignment, but interpreted strata are based on the borings drilled closest to the project baseline. For more specific information refer to the exploration logs.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2251(200)

WIN 22512.01

BRIDGE NO. 1472

BRIDGE PLANS

PROJ. MANAGER	M.WIGHT	BY	DATE
DESIGN-DETAILED	B.REEVES	D.SHAW	-----
CHECKED-REVIEWED	-----	-----	SIGNATURE
DESIGN2-DETAILED2	A.BLAISDELL	T.WHITE	MAR 2021
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	P.E. NUMBER
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	DATE
FIELD CHANGES	-----	-----	-----

STILLWATER #1 BRIDGE
STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

INTERPRETIVE SUBSURFACE
CROSS SECTION BRG. ABUT. NO 2

SHEET NUMBER

160

OF 218

Filename: ...\160_ISCS 24+12.50 BRG ABUT #2.dgn Division: BRIDGE Username: PDonovan Date:11/18/2021

Filename: ...\MSTA\161_BORING LOGS1.dgn Division: BRIDGE Username: PDonovan Date:11/18/2021

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Stillwater #1 Bridge #1472 carries Stillwater Avenue over
Location: Old Town, Maine

Boring No.: BB-OTSR-101
WIN: 22512.00

Driller:	Northern Test Boring	Elevation (ft.) 105.8	Auger ID/OD: 5" Dia Solid Stem
Operator:	Mike/Adam	Datum: NAVD88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	8/16/2015-8/17/2015	Drilling Methods: Cased Wash Boring	Core Barrel: NQ-2"
Boring Location:	23+01.1, 7.3 ft Lt.	Casing ID/OD: NW	Water Level*: None Observed
Hammer Efficiency Factor:	0.823	Hammer Type: Automatic ☒ Hydraulic ☐	Rope & Cathead ☐

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer WOR/C = Weight of Rods or Casing
MV = Unsuccessful Field Vane Shear Test Attempt WOH = Weight of One Person
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
N_{60} = SPT N-value corrected for Hammer Efficiency
N_{60} = (Hammer Efficiency Factor/60%)•Uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u\,(Lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
Uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
S_r = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Pen. (in.)	Sample Depth (ft.)	Blows / 6 in. Pocket Shear Strength (psf) or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	105.2		7" PAVEMENT. — 0.6	
5	10	24/14	5.00 - 7.00	5/6/4/4	10	14				Brown, dry, medium dense, Gravelly SAND, little silt, (Fill).	GM302236 A-1-b, SM WC=2.5%
10	20	24/10	10.00 - 12.00	4/3/4/6	7	10				Brown, moist, loose, Gravelly, fine to coarse SAND, little silt, occasional cobbles, (Fill).	
15	30	24/9	15.00 - 17.00	3/4/3/6	7	10	22	91.8		— 14.0	GM302237 A-4, SM WC=16.9%
							46	88.3		Olive-brown, wet, stiff, SILT, some gravel, little sand, (Fill-Reworked).	
							58	87.8		— 17.5	
							80			WOOD layer from 17.5-18.0 ft bgs. — 18.0	
20	40	21.6/14	20.00 - 21.80	4/10/12/50(3.6")	22	30	50	84.0		Grey, wet, medium dense, fine to coarse SAND, some gravel, some silt, (Fill-Reworked).	GM302238 A-1-a, GW-GM WC=11.6%
							136			160 blows for 0.8 ft. — 21.8	
	R1	48/48	21.80 - 25.80	RQD = 36%			NQ-2			Apparent Top of Bedrock at Elev. 84.0 ft. Split spoon refusal at 21.8 ft. Roller cone to 21.8 ft and start to core.	
25	R2	60/50	25.80 - 30.80	RQD = 64%				75.0		R1: Hard, fresh, aphanitic, grey, SLATE with calcite stringers from 21.8-22.4 ft. Highly fractured into gravel size pieces from 22.4-25.8 ft. Primary joints are extremely close to moderately spaced, high angle to vertical, planar to undulating, smooth, fresh, tight to moderately wide. Secondary joints are close to moderately spaced, horizontal, undulating, rough, fresh, tight to moderately wide. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Poor. R1: Core Times (min:sec) 21.8-22.8 ft (2:30) 22.8-23.8 ft (2:30) 23.8-24.8 ft (3:05) 24.8-25.8 ft (4:00) 100% Recovery	
30										R2: Hard, fresh, aphanitic, grey, SLATE. Primary joints are close to moderately spaced, high angle to vertical, planar, smooth, fresh, tight to partially open. Secondary joints are extremely close to moderately spaced, horizontal to low angle, planar to, undulating, fresh, partially open to moderately wide. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Fair. R2: Core Times (min:sec) 25.8-26.8 ft (3:40) 26.8-27.8 ft (4:15) 27.8-28.8 ft (4:25) 28.8-29.8 ft (4:25) 29.8-30.8 ft (4:20) 83% Recovery	S_u=2611 ksf
35										— 30.8 Bottom of Exploration at 30.8 feet below ground surface.	
40											
45											
50											

Remarks:
Coordinates: N514819.2689, E1754398.6980 (feet, NAD83(2011), Maine State Plane)
Auto Hammer #185

Stratification lines represent approximate boundaries between soil typest transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-OTSR-101

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Stillwater #1 Bridge #1472 carries Stillwater Avenue over
Location: Old Town, Maine

Boring No.: BB-OTSR-102
WIN: 22512.00

Driller:	MaineDOT	Elevation (ft.) 106.2	Auger ID/OD: 5" Dia Solid Stem
Operator:	Giles/Daggett/Giles	Datum: NAVD88	Sampler: Standard Split Spoon
Logged By:	B. Sloven	Rig Type: CME 45C	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	8/16/2015-8/17/2015	Drilling Methods: Cased Wash Boring	Core Barrel: NQ-2"
Boring Location:	24+17, 8.1 ft Lt.	Casing ID/OD: NW	Water Level*: None Observed
Hammer Efficiency Factor:	0.908	Hammer Type: Automatic ☒ Hydraulic ☐	Rope & Cathead ☐

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer WOR/C = Weight of Rods or Casing
MV = Unsuccessful Field Vane Shear Test Attempt WOH = Weight of One Person
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
N_{60} = SPT N-value corrected for Hammer Efficiency
N_{60} = (Hammer Efficiency Factor/60%)•Uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u\,(Lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
Uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
S_r = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Pen. (in.)	Sample Depth (ft.)	Blows / 6 in. Pocket Shear Strength (psf) or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	105.7		6" PAVEMENT. — 0.5	
5	10	24/11	1.00 - 3.00	8/3/9/12	12	18				Grey, dry, medium dense, SAND, some gravel, little silt, (Fill).	GM302230 A-1-b, SM-SW WC=3.1%
10	20	24/6	5.00 - 7.00	4/5/3/3	8	12				Grey, dry, medium dense, SAND, little silt, trace gravel, (Fill).	
15	30	24/9	10.00 - 12.00	12/5/6/4	11	17	41			Grey, dry, medium dense, SAND, some gravel, trace silt, (Fill).	GM302231 A-1-b, SM-SW WC=2.2%
							36				
							64				
							38				
	40	24/4	15.00 - 17.00	5/5/5/6	10	15	NC*			Grey, wet, medium dense, Sandy GRAVEL, trace silt, (Fill).	GM302232 A-1-a, SM-SW WC=10.0%
							28				
							42				
							NC*			NW Casing fetch at 17.5 ft bgs, abundant WOOD fiber observed in wash water return.	
							25				
20							20	86.2		— 20.0	
	MD						37			No sample at 20.0 ft bgs, core attempt, wood clogged bit, roller coned ahead to 23.0 ft bgs. Grey to white platey sand, wood in wash water return. (weathered quartz and calcite bedrock? and wood).	
							200+				
	R1	60/56	23.00 - 28.00	RQD = 53%			NQ-2	83.2		— 23.0 Apparent Top of Bedrock at Elev. 83.2 ft.	
25										R1: Hard, fresh, aphanitic, grey, SLATE with calcite stringers. Primary joints are very close to moderately spaced, horizontal to low angle, planar to undulating, rough to smooth, fresh to discolored, tight to partially open. Secondary joints are extremely close to close, moderately dipping to high angle, planar, smooth, fresh to discolored, tight to open. Rock Quality = Fair. [Kenduskeag Stream Member of Bangor Formation] R1: Core Times (min:sec) 23.0-24.0 ft (1:58) 24.0-25.0 ft (3:45) 25.0-26.0 ft (2:04) 26.0-27.0 ft (4:49) 27.0-28.0 ft (4:14) 93% Recovery	
30	R2	60/60	28.00 - 33.00	RQD = 43%			NQ-2			R2: Hard, fresh, aphanitic, grey, SLATE with calcite stringers. Primary joints are extremely close to moderately spaced, horizontal to low angle, planar to undulating, smooth to rough, fresh to discolored, tight to moderately wide. Secondary joints are extremely close to close, moderately dipping to high angle, planar, smooth, fresh to discolored, tight to moderately wide. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Poor. R2: Core Times (min:sec) 28.0-29.0 ft (3:41) 29.0-30.0 ft (5:08) 30.0-31.0 ft (2:27) 31.0-32.0 ft (2:43) 32.0-33.0 ft (3:26) 100% Recovery	S_u=1582 ksf
35								73.2		— 33.0 Bottom of Exploration at 33.0 feet below ground surface.	
40											
45											
50											

Remarks:
Coordinates: N514929.5984, E1754435.1763 (feet, NAD83(2011), Maine State Plane)
NC* = Casing blow count not recorded for 1-ft interval.

Stratification lines represent approximate boundaries between soil typest transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-OTSR-102

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2251(200)

WIN 22512.01
BRIDGE NO. 1472
BRIDGE PLANS

PROJ. MANAGER	M.WIGHT	BY	DATE
DESIGN-DETAILED	B.REEVES	D.SHAW	
CHECKED-REVIEWED	-----	-----	SIGNATURE
DESIGN2-DETAILED2	A.BLASDELL	T.WHITE	SEP 2021
DESIGN3-DETAILED3	-----	-----	P.E. NUMBER
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	DATE
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

STILLWATER #1 BRIDGE
STILLWATER RIVER
PENOBSCOT COUNTY
OLD TOWN

BORING LOGS

SHEET NUMBER
161
OF 218

Username: PDonovan Date:11/18/2021

Division: BRIDGE

Filename: ...\MSTA\162_BORING LOGS2.dgn

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Stillwater #1 Bridge #1472 carries Stillwater Avenue over
Location: Old Town, Maine

Boring No.: BB-OTSR-201
WIN: 22512.00

Driller:	S.W. Cole	Elevation (ft.)	105.9	Auger ID/OD:	4.25" Dia Solid Stem
Operator:	K. Hanscom	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	Allie Hazard	Rig Type:	ATV Mounted Rig	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	5/18/20-5/18/20	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	22+79.2, 5.3 ft Rt.	Casing ID/OD:	HW	Water Level(ft):	None Observed
Hammer Efficiency Factor:	0.977	Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; PP = Pocket Penetrometer; WU-V = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR/C = Weight of Rods or Casing; WOP = Weight of One Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); Unconcorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-value corrected for Hammer Efficiency; T_v = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test; WH = Weight of Hammer; Efficiency Factor/60%=Hammer Efficiency Factor/60%=Uncorrected

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Shear Strength (psf) or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
							SSA	105.4		9.5" Pavement.	
								104.6		0.8	
										Brown, dry, medium dense, fine to coarse SAND, some gravel, little silt, (Fill).	GM303101 A-1-a, SM WC=3.3%
5	1D	24/15	5.00 - 7.00	5/4/5/6	9	15	110				
							91				
							53				
							51				
10	2D	24/8	10.00 - 12.00	6/6/8/5	14	23	21			Grey, wet, medium dense, fine to coarse SAND, some gravel, trace silt, (Fill).	GM303102 A-1-a, SP WC=20.5%
							40				
							43				
							51				
15	3D	16.8/8	15.00 - 16.40	3/2/67(4.8")	---		38			Brown, wet, fine to coarse SAND, some gravel, little silt, (Fill). Contains wood fragments.	GM303103 A-1-a, SM WC=16.4%
								89.9		16.0	
							RC			Apparent Top of Bedrock at Elev. 89.9 ft. Increased resistance at approximately 16.0 ft bgs. Roller Coned ahead from 16.4-17.0 ft bgs. Set core up in R1.	
	R1	60/56	17.00 - 22.00	RQD = 40%			NQ-2			R1: Very hard, fresh to slightly weathered, aphanitic, grey, SLATE, with calcite stringers, Primary joints are very close to moderately spaced, low angle, planar to undulating, rough, fresh, with some silt infilling, Secondary joints are close to moderately spaced, moderately dipping to high angle, undulating to planar, rough to smooth, fresh, tight to partially open, no infilling. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Poor R1: Core Times (minssec) 17.0-18.0 ft (1102) 18.0-19.0 ft (1531) 19.0-20.0 ft (1452) 20.0-21.0 ft (1422) 21.0-22.0 ft (1422) 95% Recovery	
	R2	26.4/14	22.00 - 24.20	RQD = 0%						R2: Hard, fresh, aphanitic, grey, SLATE, with calcite stringers, Fractured to gravel pieces. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Very Poor R2: Core Times (minssec) 22.0-23.0 ft (1617) 23.0-23.4 ft (2149) 23.4-24.0 ft (2122) 24.0-24.2 ft (2147) 52% Recovery	
								81.7			
										24.2	
										Bottom of Exploration at 24.2 feet below ground surface.	

Remarks:
Coordinates: N514794.7727, E1754403.5803 (feet, NAD83(2011), Maine State Plane)
Auto Hammer #367
Bottom of R1 was left in hole, driller able to retrieve in R2.
Unable to advance beyond 24.2 ft bgs, lost drill bit, possible bent casing.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-OTSR-201

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Stillwater #1 Bridge #1472 carries Stillwater Avenue over
Location: Old Town, Maine

Boring No.: BB-OTSR-201A
WIN: 22512.00

Driller:	S.W. Cole	Elevation (ft.)	105.9	Auger ID/OD:	4.25" Dia Solid Stem
Operator:	K. Hanscom	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	Allie Hazard	Rig Type:	ATV Mounted Rig	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	5/18/20-5/18/20	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	22+82.1, 5.3 ft Rt.	Casing ID/OD:	HW	Water Level(ft):	13.0 ft bgs.
Hammer Efficiency Factor:	0.977	Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; PP = Pocket Penetrometer; WU-V = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR/C = Weight of Rods or Casing; WOP = Weight of One Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); Unconcorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-value corrected for Hammer Efficiency; T_v = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test; WH = Weight of Hammer; Efficiency Factor/60%=Hammer Efficiency Factor/60%=Uncorrected

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Shear Strength (psf) or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
							RC			See BB-OTSR-204 for material descriptions. Advanced casing to 18.0 ft bgs and started to core.	
	R1	26.4/23	18.00 - 20.20	RQD = 15%			NQ-2	87.9		18.0	
										Apparent Top of Bedrock at Elev. 87.9 ft. R1: Very hard, fresh, aphanitic, grey, SLATE, 18.0-18.5 ft: are moderately dipping joint, joint is planar, smooth, fresh, open. 18.5-18.75 ft: Highly fractured into gravel size pieces. 18.75-20.2 ft: Primary joints are extremely close, vertical, planar, smooth, fresh, tight to moderately wide, with silt infilling. Secondary joints are close, low angle, planar to undulating, smooth to rough, fresh, tight to open, with silt infilling. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Very Poor R1: Core Times (minssec) 18.0-19.0 ft (2100) 19.0-20.0 ft (2153) 20.0-20.2 ft (1148)	q_p=940 ksf
	R2	33.6/32	20.20 - 23.00	RQD = 85%						88% Recovery R2: Hard, fresh, aphanitic, grey, SLATE, with calcite stringers, Primary joints are close to moderately spaced, horizontal to low angle, planar to undulating, fresh, tight to open, One moderately dipping joint undulating, rough, fresh, moderately wide. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Good R2:Core Times (minssec) 20.2-21.0 ft (2105) 21.0-22.0 ft (3136) 22.0-23.0 ft (3139) 94% Recovery	
	R3	46.8/ 46.8	23.00 - 26.90	RQD = 78%							
	R4	38.4/ 38.4	26.90 - 30.10	RQD = 71%						R3: Hard, fresh, aphanitic, grey, SLATE, with calcite stringers, Primary joints are extremely close to moderately spaced, horizontal to low angle, planar, rough, fresh, tight to moderately wide, Secondary joints are close to moderately spaced, moderately dipping to high angle, undulating to planar, rough, fresh, tight to open, contains pits on some joint surfaces. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Good R3: Core Times (minssec) 23.0-24.0 ft (3:52) 24.0-25.0 ft (3:46) 25.0-26.0 ft (4:23) 26.0-26.9 ft (3:37) 100% Recovery R4: Hard, fresh, aphanitic, grey, SLATE, Primary joints are extremely close to close, moderately dipping to high angle, undulating to planar, rough to smooth, fresh to discolored, tight to partially open, Secondary joints are close to moderately spaced, horizontal to low angle, undulating, rough, fresh, tight to moderately wide, [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Fair R4:Core Times (minssec) 26.9-27.9 ft (5:20) 27.9-28.9 ft (4:27) 28.9-29.9 ft (5:44) 29.9-30.1 ft (2:06) 100% Recovery	
	R5	36/33	30.10 - 33.10	RQD = 92%				72.8			
										R5: Hard, fresh, aphanitic, grey, SLATE, with calcite stringers, Primary joints are close, moderately dipping to high angle, planar to undulating, rough to smooth, fresh, tight, one horizontal joint, planar, smooth, discolored, partialy open. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Excellent R5:Core Times (minssec) 30.1-31.1 ft (4:12) 31.1-32.1 ft (2:57) 32.1-33.1 ft (3:14) 92% Recovery	
										33.1	
										Bottom of Exploration at 33.1 feet below ground surface.	

Remarks:
Coordinates: N514797.5025, E1754404.5429 (feet, NAD83(2011), Maine State Plane)
Auto Hammer #367
Water level measured immediately after removal of casing.
Cave-in at 14.0 ft bgs after removal of casing.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-OTSR-201A

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Stillwater #1 Bridge #1472 carries Stillwater Avenue over
Location: Old Town, Maine

Boring No.: BB-OTSR-202
WIN: 22512.00

Driller:	S.W. Cole	Elevation (ft.)	106.2	Auger ID/OD:	4.25" Dia Solid Stem
Operator:	K. Hanscom	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	Allie Hazard	Rig Type:	ATV Mounted Rig	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	5/19/20-5/19/20	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	24+00, 5.9 ft Rt Rt.	Casing ID/OD:	HW	Water Level(ft):	None Observed
Hammer Efficiency Factor:	0.977	Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; PP = Pocket Penetrometer; WU-V = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR/C = Weight of Rods or Casing; WOP = Weight of One Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); Unconcorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-value corrected for Hammer Efficiency; T_v = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test; WH = Weight of Hammer; Efficiency Factor/60%=Hammer Efficiency Factor/60%=Uncorrected

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Shear Strength (psf) or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
							SSA	105.2		11.5" Pavement.	
								104.2		1.0	
										Brown, dry, medium dense, fine to coarse Sandy GRAVEL, little silt, (Fill).	GM303104 A-1-a, GW-GM WC=1.2%
5	1D	24/8	5.00 - 7.00	5/4/5/3	9	15	49				
							42				
							42				
							58				
10	2D	24/6	10.00 - 12.00	9/8/8/7	16	26	72			Grey, wet, medium dense, fine to coarse Sandy GRAVEL, trace silt, (Fill).	GM303105 A-1-a, GP WC=11.1%
							28				
							39				
							38				
15	3D	24/5	15.00 - 17.00	4/7/5/7	12	20	65				
							46				
							30				
							44				
							32				
							33			Grey, wet, GRAVEL, some fine to coarse sand, trace silt, (Fill).	GM303106 A-1-a, GP WC=5.8%
							46				
20	4D	10.8/4	20.00 - 20.90	6/50(4.8")	---		30				
								85.3		20.9	
	R1	48/48	21.00 - 25.00	RQD = 90%			NQ-2			Apparent Top of Bedrock at Elev. 85.3 ft. Practical spoon refusal at 20.9 ft. Advanced roller cone from 20.9-21.0 ft bgs. Set up core at 21.0 ft bgs. R1: Hard, fresh, aphanitic, grey, SLATE, with calcite stringers, Joints are extremely close to moderately spaced, high angle to vertical, planar to undulating, rough to smooth, fresh, tight to open, with silt infilling, Secondary joints are very close to close, horizontal to low angle, planar to undulating, rough to smooth, fresh, tight to partialy open, with silt infilling. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Good R1:Core Times (minssec) 21.0-22.0 ft (3:06) 22.0-23.0 ft (3:35) 23.0-24.0 ft (4:07) 24.0-25.0 ft (4:15) 100% Recovery	
25	R2	54/54	25.00 - 29.50	RQD = 61%						R2: Hard, fresh, aphanitic, grey, SLATE, with calcite stringers, Primary joints are close to moderately spaced, low angle, undulating, rough, fresh, very tight to moderately wide, One high angle joint, planar, smooth, fresh, partially open. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Fair R2:Core Times (minssec) 25.0-26.0 ft (3:47) 26.0-27.0 ft (3:06) 27.0-28.0 ft (4:14) 28.0-29.5 ft (4:18) 100% Recovery	
	R3	36/36	29.50 - 32.50	RQD = 88%						R3: Hard, fresh, aphanitic, grey, SLATE, with calcite stringers, Primary joints are close to moderately spaced, low angle, undulating, rough, fresh, very tight to moderately wide, One high angle joint, planar, smooth, fresh, partially open. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Good R3:Core Times (minssec) 29.5-30.5 ft (2:55) 30.5-31.5 ft (3:01) 31.5-32.5 ft (3:20) 100% Recovery	
	R4	42/42	32.50 - 36.00	RQD = 55%				70.2		R4: Hard, fresh, aphanitic, grey, PHYLLITE, with calcite stringers, Primary joints are very close to moderately spaced, horizontal, planar to undulating, rough to smooth, fresh, partialy open to open, Secondary joints are extremely close to moderately spaced, moderately dipping to high angle, undulating, planar, rough to smooth, fresh, partially open to moderately wide. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Fair R2:Core Times (minssec) 32.5-33.5 ft (3:15) 33.5-34.5 ft (3:28) 34.5-35.5 ft (3:56) 35.5-36.0 ft (2:30) 100% Recovery	
40										36.0	
										Bottom of Exploration at 36.0 feet below ground surface.	

Remarks:
Coordinates: N514908.7568, E1754443.5330 (feet, NAD83(2011), Maine State Plane)
Auto Hammer #367
Water level measured immediately after removal of casing.
Cave-in at 12.0 ft bgs after removal of casing. No water level reading collected. WL @ 12.0 ft.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-OTSR-202

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2251(200)

WIN 22512.01

BRIDGE NO. 1472

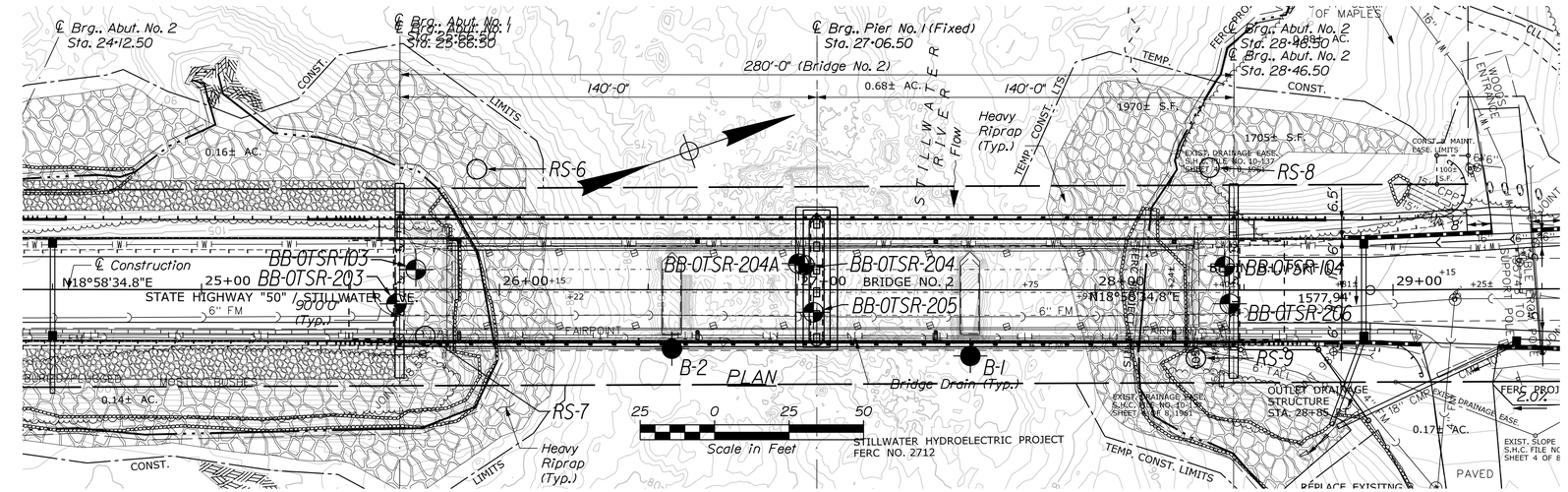
BRIDGE PLANS

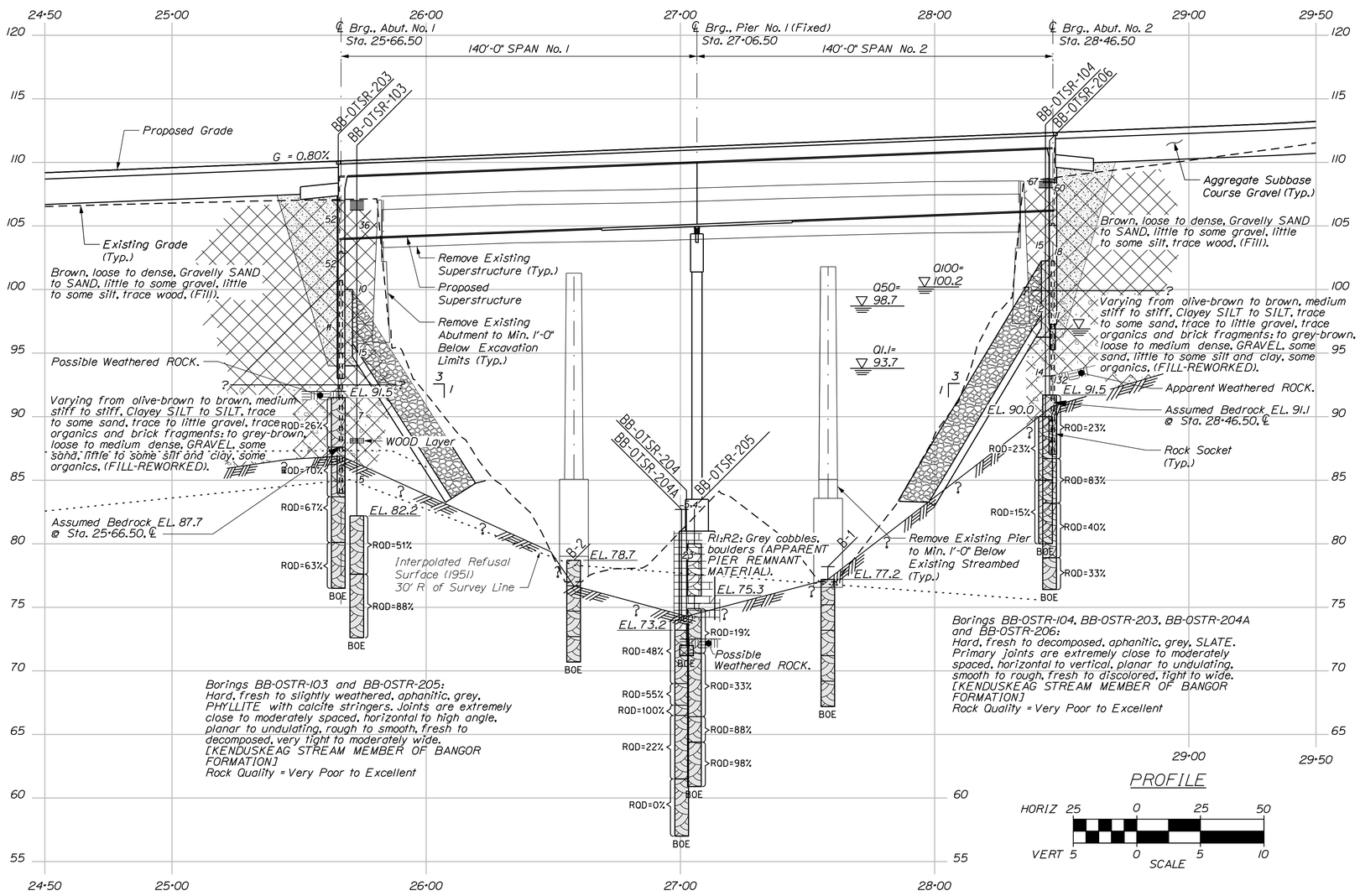
PROJ. MANAGER	M.WIGHT	BY	DATE
DESIGN-DETAILED	B.REEVES	D.SHAW	-----
CHECKED-REVIEWED	-----	-----	SIGNATURE
DESIGN2-DETAILED2	A.BLAISDELL	T.WHITE	SEP 2021
DESIGN3-DETAILED3	-----	-----	P.E. NUMBER
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	DATE
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

STILLWATER #1 BRIDGE
STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

BORING LOGS

SHEET NUMBER
162
OF 218





PROFILE

HORIZ 25 0 25 50
VERT 5 0 5 10
SCALE

BORING LOCATION PLAN LEGEND

- BB-0STR-104 — Location and designation of 100-Series cased wash boring
- BB-0STR-206 — Location and designation of 200-Series cased wash boring
- B-2 — Approximate location and designation of B-Series boring included in 1951 bridge drawings
- RS-9 — Approximate location and designation of RS-Series rod sounding included in 1951 bridge drawings

INTERPRETIVE SUBSURFACE PROFILE LEGEND

- Boring No. / Offset, if shown
- Pavement Thickness, if applicable
- 10 — Energy Corrected Standard Penetration Test (SPT) N60-Value (Blows Per Foot)
- R — Split Spoon Refusal (>50 blows for 1" penetration)
- Advanced of roller cone without coring
- RQD= Rock Quality Designation for Rock Core Sample
- BOE= Bottom of Exploration
- Weathered Rock, if applicable
- Interpreted Top of Bedrock (See Note 5)
- Encountered Groundwater Level, measured immediately after drilling

Notes:

1) The as-drilled boring locations for BB-0TSR-100 and -200 series borings were surveyed by a MaineDOT survey crew.

2) BB-0STR-100 series borings were performed by MaineDOT and observed by MaineDOT personnel on August 16, 2015.

3) BB-0STR-200 series borings were performed by S.W. Cole and MaineDOT and observed by GZA personnel between May 19 and 21, 2020.

4) B-series boring data, RS-series rod sounding data, and interpolated refusal surface lines were interpreted from Sheet 2A of the existing bridge drawings, dated February 1951. Locations were estimated using an overlay on the existing conditions drawing rasterized, placed and scaled on the topo.dgn and should be considered approximate. Elevations are based on a conversion of of Local datum +5.3' = NAVD88 provided by VHB.

5) This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and rock transitions may vary and are probably more erratic. boring data are shown for borings drilled off alignment, but interpreted strata are based on the borings drilled closest to the project baseline. For more specific information refer to the exploration logs.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2251(100)

WIN 22511.01

BRIDGE NO. 2806

BRIDGE PLANS

	M. WIGHT	B. REEVES	A.BLASDELL	
PROJ. MANAGER				
DESIGN-DETAILED	B. REEVES	-----	-----	
CHECKED-REVIEWED	-----	-----	-----	
DESIGN2-DETAILED2	A.BLASDELL	T. WHITE	-----	
DESIGN3-DETAILED3	-----	-----	-----	
REVISIONS 1	-----	-----	-----	
REVISIONS 2	-----	-----	-----	
REVISIONS 3	-----	-----	-----	
REVISIONS 4	-----	-----	-----	
FIELD CHANGES	-----	-----	-----	

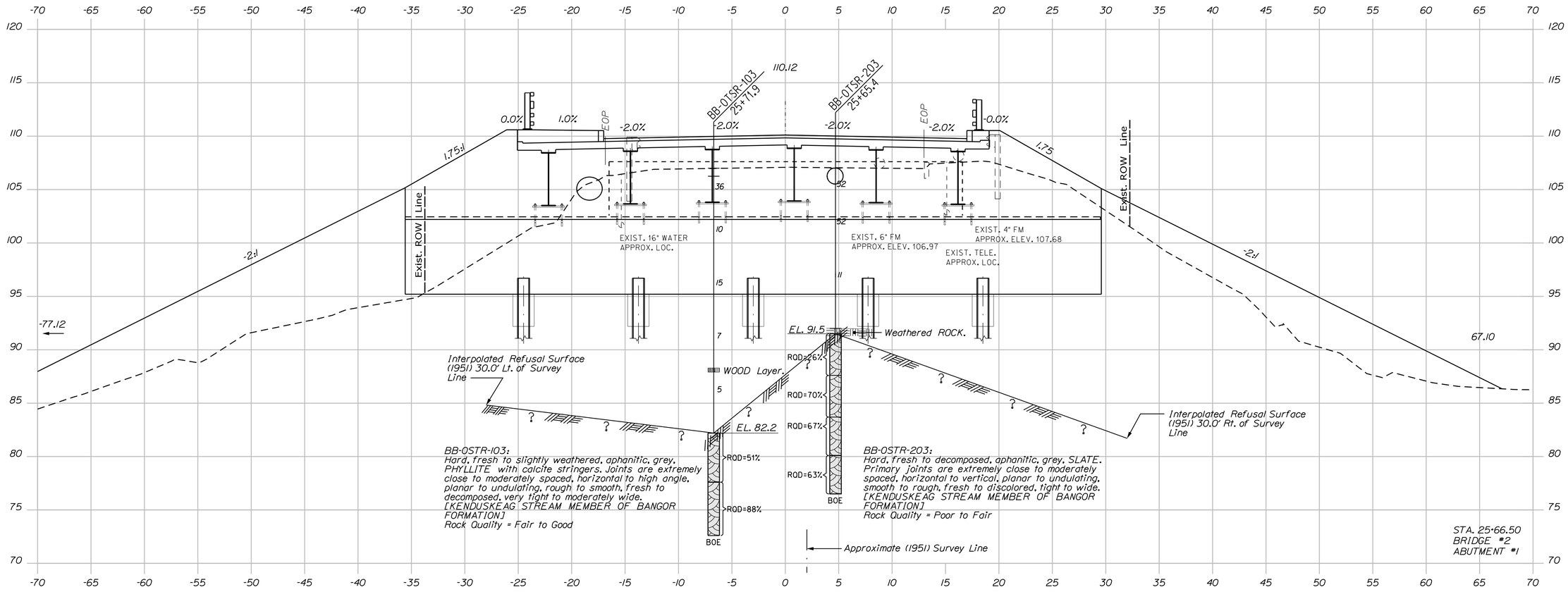
	BY	DATE
SIGNATURE	D. SHAW	-----
P.E. NUMBER	T. WHITE	MAR 2021
DATE	-----	-----

STILLWATER # 2 BRIDGE
STILLWATER RIVER
PENOBSCOT COUNTY
OLD TOWN

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

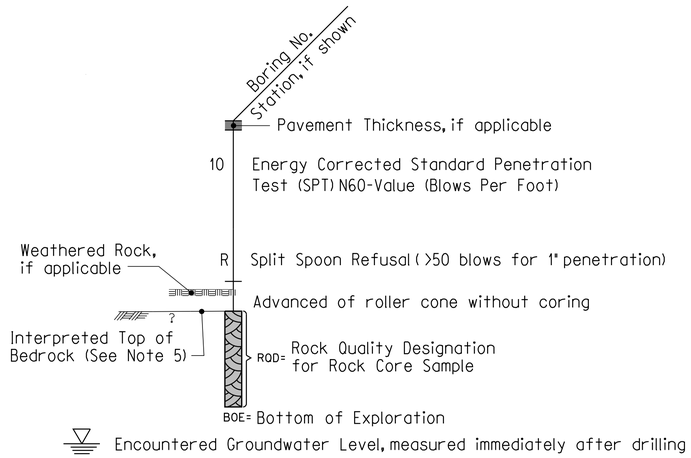
SHEET NUMBER
163
OF 218

Filename: ...\GEOTECH\MSTA\163_BLP&ISP1.dgn Username: PDonovan Division: BRIDGE Date:11/18/2021

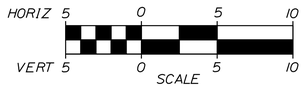


INTERPRETIVE SUBSURFACE CROSS SECTION LEGEND

25+66.50 (LOOKING UPSTATION)



CROSS SECTION



Notes:

1) The as-drilled boring locations for BB-0TSR-100 and -200 series borings were surveyed by a MaineDOT survey crew.

2) BB-0STR-100 series borings were performed by MaineDOT and observed by MaineDOT personnel on August 16, 2015.

3) BB-0STR-200 series borings were performed by S.W. Cole and MaineDOT and observed by GZA personnel between May 19 and 21, 2020.

4) B-series boring data, RS-series rod sounding data, and interpolated refusal surface lines were interpreted from Sheet 2A of the existing bridge drawings, dated February 1951. Locations were estimated using an overlay on the existing conditions drawing rasterized, placed and scaled on the topo.dgn and should be considered approximate. Elevations are based on a conversion of of Local datum -53' = NAVD88 provided by VHB.

5) This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and rock transitions may vary and are probably more erratic. boring data are shown for borings drilled off alignment, but interpreted strata are based on the borings drilled closest to the project baseline. For more specific information refer to the exploration logs.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2251(100)

WIN 22511.01

BRIDGE NO. 2806

BRIDGE PLANS

PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	B. REEVES	D. SHAW	-----
CHECKED-REVIEWED	-----	-----	SIGNATURE
DESIGN2-DETAILED2	A.BLASDELL	T. WHITE	MAR 2021
DESIGN3-DETAILED3	-----	-----	P.E. NUMBER
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	DATE
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

STILLWATER # 2 BRIDGE
STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

INTERPRETIVE SUBSURFACE
CROSS SECTION BRG. ABUT. NO 1

SHEET NUMBER

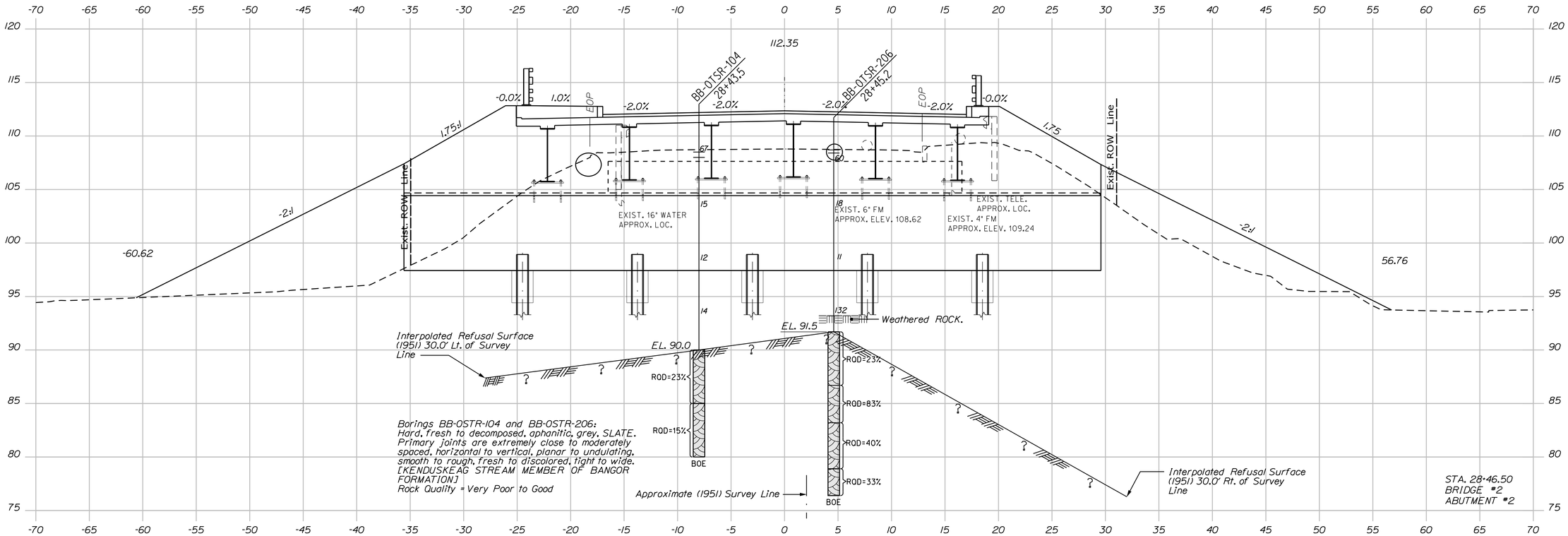
164

OF 218

Username: PDonovan Date:11/18/2021

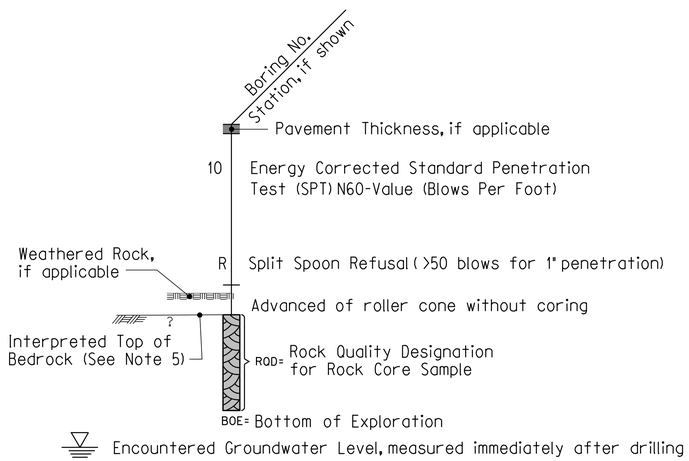
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Filename: ...\165_ISCS 28+46.50 BRG ABUT #2.dgn Division: BRIDGE Username: PDonovan Date:11/18/2021



28+46.50 (LOOKING UPSTATION)

INTERPRETIVE SUBSURFACE CROSS SECTION LEGEND



CROSS SECTION



Notes:

1) The as-drilled boring locations for BB-0TSR-100 and -200 series borings were surveyed by a MaineDOT survey crew.

2) BB-0STR-100 series borings were performed by MaineDOT and observed by MaineDOT personnel on August 16, 2015.

3) BB-0STR-200 series borings were performed by S.W. Cole and MaineDOT and observed by GZA personnel between May 19 and 21, 2020.

4) B-series boring data, RS-series rod sounding data, and interpolated refusal surface lines were interpreted from Sheet 2A of the existing bridge drawings, dated February 1951. Locations were estimated using an overlay on the existing conditions drawing rasterized, placed and scaled on the topo.dgn and should be considered approximate. Elevations are based on a conversion of of Local datum •53' = NAVD88 provided by VHB.

5) This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and rock transitions may vary and are probably more erratic. boring data are shown for borings drilled off alignment, but interpreted strata are based on the borings drilled closest to the project baseline. For more specific information refer to the exploration logs.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2251(100)

WIN 22511.01

BRIDGE NO. 2806

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	M. WIGHT	
DESIGN-DETAILED	D. SHAW	
CHECKED-REVIEWED	B. REEVES	
DESIGN2-DETAILED2	A.BLASDELL	MAR 2021
DESIGN3-DETAILED3	T. WHITE	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

STILLWATER # 2 BRIDGE
STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

INTERPRETIVE SUBSURFACE CROSS SECTION BRG. ABUT. NO 2

SHEET NUMBER

165

OF 218

Filename: ...\MSTA\166_BORING LOGS1.dgn Division: BRIDGE Username: PDonovan Date:11/18/2021

Maine Department of Transportation — Boring No.: BB-OTSR-103

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Stillwater #2 Bridge #2806 carries Stillwater Avenue over
Location: Old Town, Maine

WIN: 22511.00

Driller:	Northern Test Boring	Elevation (ft.): 107.0	Auger ID/OD: 5" Dia. Solid Stem
Operator:	Mike/Adam	Datum: NAVD88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	8/16/2015	Drilling Method: Cased Wash Boring	Core Barrel: NQ-2"
Boring Location:	25+11.9, 6.7 Ft Lt.	Casing ID/OD: HW	Water Level*: None Observed
Hammer Efficiency Factor:	0.823	Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer WOR/C = Weight of Rods or Casing
MV = Unsuccessful Field Vane Shear Test Attempt WOH = Weight of Ore Person
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
RQD = Weight of 140lb. Hammer
N_{60} = SPT N-value corrected for Hammer Efficiency
q_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
Uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = Hammer Efficiency Factor*60/5*Uncorrected
q_T = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Pattern Strength qu (psf) qp (ksf)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
							SSA	106.3		9" PAVEMENT. 0.8	
	10	24/9	1.00 - 3.00	14/13/13/12	26	36				Brown, dry, dense, fine to coarse SAND, some gravel, little to some silt, (F(1)).	
5	20	24/12	5.00 - 7.00	5/4/3/3	7	10				Brown, dry, loose, Gravelly SAND, little silt, (F(1)).	GM30233 A-1-b, SM WC=2.4%
10	30	24/7	10.00 - 12.00	7/5/6/5	11	15				Similar to above, except medium dense.	
								92.5		Olive-brown, wet, medium stiff, SILT, some sand, little gravel, little clay, trace organics, (F(1)-Reworked). 14.5	GM30234 A-4, ML WC=32.4% LL=31 PL=26 PI=5
15	40	24/12	15.00 - 17.00	7/3/2/2	5	7					
								88.3		WOOD layer from 18.7-19.1 ft bgs. 18.7	
								87.9		19.1	
										Grey-brown, wet, loose, GRAVEL, some sand, some silt, some organics, (F(1)- Reworked).	GM30235 A-2-4, GM WC=51.5% Non-Plastic
20	50	24/11	20.00 - 22.00	3/2/2/7	4	5					
	R1	52.8/60	25.00 - 29.40	RQD = 51%			NQ-2			Apparent Top of Bedrock at Elev. 82.2 ft, based on roller cone resistance 24.8 R01: Cored ahead to 29.0 ft bgs and started to core. R1: Hard, fresh, aphanitic, grey, PHYLLITE, joints are extremely close to close, horizontal to low angle, planar to undulating, rough to smooth, fresh, very tight to moderately wide. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Fair. R1\Core Times (min/sec) 25.0-26.0 ft (4:47) 26.0-27.0 ft (4:30) 27.0-28.0 ft (6:30) 28.0-29.0 ft (6:30) 29.0-29.4 ft (5:00) Core Blocked 94% Recovery R2: Hard, fresh, aphanitic, grey, PHYLLITE, Joints are moderately spaced, moderately dipping to high angle, undulating, rough, fresh, tight, [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Good. R2\Core Times (min/sec) 29.4-30.4 ft (9:00) 30.4-31.4 ft (10:20) 31.4-32.4 ft (11:29) 32.4-33.4 ft (11:15) 33.4-34.4 ft (11:45) 90% Recovery 72.6 34.4 Bottom of Exploration at 34.4 feet below ground surface.	q_p=1468 ksf
	R2	60/54	29.40 - 34.40	RQD = 88%							
25											
30											
35											
40											
45											
50											

Remarks:
Coordinates: N515075.4961, E1754487.4413 (feet, NAD83(2011), Maine State Plane)
Auto Hammer #185

Stratification lines represent approximate boundaries between soil typest transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-OTSR-103

Maine Department of Transportation — Boring No.: BB-OTSR-104

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Stillwater #2 Bridge #2806 carries Stillwater Avenue over
Location: Old Town, Maine

WIN: 22511.00

Driller:	Waine007	Elevation (ft.): 108.5	Auger ID/OD: 5" Dia. Solid Stem
Operator:	Giles/Daggett/Giles	Datum: NAVD88	Sampler: Standard Split Spoon
Logged By:	B. Sioven	Rig Type: CME 45C	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	8/16/2015	Drilling Method: Cased Wash Boring	Core Barrel: NQ-2"
Boring Location:	28+43.5, 8.0 Ft Lt.	Casing ID/OD: HW	Water Level*: None Observed
Hammer Efficiency Factor:	0.908	Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer WOR/C = Weight of Rods or Casing
MV = Unsuccessful Field Vane Shear Test Attempt WOH = Weight of Ore Person
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
RQD = Weight of 140lb. Hammer
N_{60} = SPT N-value corrected for Hammer Efficiency
q_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
Uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = Hammer Efficiency Factor*60/5*Uncorrected
q_T = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Pattern Strength qu (psf) qp (ksf)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
	10	24/15	0.00 - 2.00	12/21/23/24	44	67	SSA	108.0		6" PAVEMENT. 0.5	
										Brown, dry, very dense, Silty SAND, some gravel, little clay, (F(1)).	
5	20	24/11	5.00 - 7.00	10/7/3/4	10	15					GM30227 A-4, ML WC=11.1%
10	30	24/16	10.00 - 12.00	3/4/4/5	8	12		98.5		Brown, wet, stiff, Clayey SILT, trace sand, (F(1)-Reworked). 10.0	GM30228 A-4, ML WC=24.8% LL=31 PL=25 PI=6
15	40	18/12	15.00 - 16.50	3/4/5/30(0")	9	14		93.5		Brown, wet, medium dense, fine SAND, little silt, trace clay, (F(1)-Reworked). 15.0	GM30229 A-2-6, SC-SM WC=22.0%
										Roller Coned ahead to 18.5 ft bgs. Platey fine gravel and wood in wash water, weathered rock ?	
	R1	60/60	18.50 - 23.50	RQD = 23%			NQ-2	90.0		18.5 Apparent Top of Bedrock at Elev. 90.0 ft. Advance roller cone to 18.5 ft and start to core. R1: Hard, fresh to slightly weathered, aphanitic, grey, SLATE. Primary joints are extremely close to close, high angle to vertical, planar to undulating, smooth to rough, fresh to discolored, tight to moderately wide. Highly fractured into gravel size pieces. Secondary joints are very close to close, horizontal, planar to undulating, rough to smooth, fresh to discolored, tight to moderately wide. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Very Poor. R1\Core Times (min/sec) 18.5-19.5 ft (3:02) 19.5-20.5 ft (3:47) 20.5-21.5 ft (11:29) 21.5-22.5 ft (11:25) 22.5-23.5 ft (13:08) 100% Recovery R2: Hard, fresh to slightly weathered, aphanitic, grey, SLATE. From 23.5-26.2 ft bgs Primary joints are extremely close to close, high angle to vertical, planar to undulating, smooth to rough, fresh to discolored, tight to moderately wide. Secondary joints are very close to close, horizontal to low angle, planar to undulating, rough to smooth, fresh to discolored, tight to moderately wide. From 26.2-26.8 ft bgs highly fractured into gravel size pieces. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Very Poor R2\Core Times (min/sec) 23.5-24.5 ft (2:19) 24.5-25.5 ft (11:24) 25.5-26.5 ft (11:25) 26.5-27.5 ft (11:13) 27.5-28.5 ft (4:19) 100% Recovery 28.5 Bottom of Exploration at 28.5 feet below ground surface.	q_p=1695 ksf
	R2	60/60	23.50 - 28.50	RQD = 15%				80.0			
25											
30											
35											
40											
45											
50											

Remarks:
Coordinates: N515332.6554, E1754574.5582 (feet, NAD83(2011), Maine State Plane)

Stratification lines represent approximate boundaries between soil typest transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-OTSR-104

Maine Department of Transportation — Boring No.: BB-OTSR-203

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Stillwater #2 Bridge #2806 carries Stillwater Avenue over
Location: Old Town, Maine

WIN: 22511.00

Driller:	S.W. Cole	Elevation (ft.): 107.0	Auger ID/OD: 4.25" Dia. Solid Stem
Operator:	K. Hanscom	Datum: NAVD88	Sampler: Standard Split Spoon
Logged By:	Allie Hazard	Rig Type: ATV Mounted Rig	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	5/19/20-5/19/20	Drilling Method: Cased Wash Boring	Core Barrel: NQ-2"
Boring Location:	25+05.4, 4.7 Ft Rt.	Casing ID/OD: HW	Water Level*: None Observed
Hammer Efficiency Factor:	0.977	Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer WOR/C = Weight of Rods or Casing
MV = Unsuccessful Field Vane Shear Test Attempt WOH = Weight of Ore Person
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
RQD = Weight of 140lb. Hammer
N_{60} = SPT N-value corrected for Hammer Efficiency
q_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
Uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = Hammer Efficiency Factor*60/5*Uncorrected
q_T = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Pattern Strength qu (psf) qp (ksf)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
							SSA				
	10	24/13	1.50 - 3.50	46/18/14/16	32	52				Brown, dry, dense, gravelly, fine to coarse SAND, little silt, trace metal fragments, (F(1)), exhibits hydrocarbon odor.	GM30107 A-1-a, SM WC=2.7%
5	20	24/4	5.00 - 7.00	14/19/13/12	32	52				Brown, dry, dense, fine to coarse SAND, some gravel, little silt, (F(1)), exhibits strong hydrocarbon odor.	GM30108 A-1-b, SM WC=2.1%
10	30	24/5	10.00 - 12.00	3/5/2/3	7	11					
								92.0		15.0	
15	40 R1	4.5/4.5 48.5/43	15.00 - 15.40 19.40	75(4.5") RQD = 26%	---		HW-NQ-2	91.5		Grey, wet, very dense, gravelly, fine to coarse SAND, trace silt, apparent relic bedrock structure. possible weathered rock. 15.5	GM30109 A-1-a, SP-SM WC=7.0%
										Apparent Top of Bedrock at Elev. 91.5 ft. Advanced roller cone to 15.5 ft bgs and start to core. R1: Hard, fresh to slightly weathered, aphanitic, grey, SLATE, with calcite stringers. Primary joints are very close to close, horizontal, planar to undulating, rough to smooth, fresh to decomposed, open pitting. Secondary joints are extremely close to close, vertical to high angle, planar to undulating, smooth, fresh, very tight to open, with silt infilling. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Poor R1\Core Times (min/sec) 15.5-16.5 ft (3:27) 16.5-17.5 ft (2:40) 17.5-18.5 ft (2:40) 18.5-19.4 ft (3:05) 81% Recovery	
	R2	46.8/42	19.40 - 23.30	RQD = 70%						R2: Hard, fresh to slightly weathered, aphanitic, grey, SLATE, Primary joints are close to moderately spaced, moderately dipping to high angle, planar-smooth, fresh to decomposed, partially open to moderately wide, with silt infilling and pitting. One horizontal joints, undulating, rough, decomposed, open, with silt and sand infilling. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Fair R2\Core Times (min/sec) 19.4-20.4 ft (2:30) 20.4-21.4 ft (3:12) 21.4-22.4 ft (3:12) 22.4-23.3 ft (4:00) 83% Recovery R3: Hard, fresh to slightly weathered, aphanitic, grey, SLATE, with calcite stringers, Primary joints are extremely close to close, high angle to vertical, planar to undulating, smooth, fresh, tight to partially open, with silt infilling, Secondary joints are very close to close, horizontal, planar to undulating, rough, fresh to decomposed, tight to moderately wide, with silt and sand infilling and pitting. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Fair R3\Core Times (min/sec) 23.3-24.3 ft (2:05) 24.3-25.3 ft (2:09) 25.3-26.3 ft (2:36) 26.3-26.9 ft (2:40) 100% Recovery R4: Hard, fresh, aphanitic, grey, SLATE, with calcite stringers, One moderately dipping, undulating to stepped, rough, fresh, tight, [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Fair R4\Core Times (min/sec) 26.9-27.9 ft (3:23) 27.9-28.9 ft (3:49) 28.9-29.9 ft (4:00) 29.9-30.5 ft (2:27) 100% Recovery 30.5	
	R3	43.2/43.2	23.30 - 26.90	RQD = 67%							
25											
	R4	43.2/50	26.90 - 30.50	RQD = 63%							
30								76.5		Bottom of Exploration at 30.5 feet below ground surface.	
35											
40											
45											
50											

Remarks:
Coordinates: N515065.6361, E1754496.1962 (feet, NAD83(2011), Maine State Plane)
Auto Hammer #367
Immediately after casing removal, cave-in at 10.5 ft, no water level collected, HW @ 10.5 ft.)

Stratification lines represent approximate boundaries between soil typest transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-OTSR-203

Maine Department of Transportation — Boring No.: BB-OTSR-204

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Stillwater #2 Bridge #2806 carries Stillwater Avenue over
Location: Old Town, Maine

WIN: 22511.00

Driller:	S.W. Cole	Elevation (ft.): 83.0	Auger ID/OD: N/A
Operator:	K. Hanscom	Datum: NAVD88	Sampler: Standard Split Spoon
Logged By:	Allie Hazard	Rig Type: ATV Mounted Rig	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	5/20/20-5/20/20	Drilling Method: Cased Wash Boring	Core Barrel: NQ-2"
Boring Location:	27+02.4, 8.3 Ft Lt.	Casing ID/OD: HW	Water Level*: River Boring
Hammer Efficiency Factor:	0.977	Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer WOR/C = Weight of Rods or Casing
MV = Unsuccessful Field Vane Shear Test Attempt WOH = Weight of Ore Person
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
RQD = Weight of 140lb. Hammer
N_{60} = SPT N-value corrected for Hammer Efficiency
q_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
Uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = Hammer Efficiency Factor*60/5*Uncorrected
q_T = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Pattern Strength qu (psf) qp (ksf)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
							SSA				
	10	24/4	0.00 - 2.00	4/2/1/1	3	5	40			Grey, wet, very loose, coarse GRAVEL, little sand, large wood fragments, (Pier remnant material).	
							109			Estimated encountering Wood in the 1.0- 3.0 Ft ranges, based on casing bounce.	
							193			Observed wood in wash during roller cone advancement from 0.0-9.0 ft bgs.	
5	20	24/9	4.00 - 6.00	4/4/10/18	14	23	60			WOOD fragments, little gravel, little sand, (Pier remnant material).	
							7				
							181				
							126				
							157				
							190				
10	30	24/12	9.00 - 11.00	8/20/17/58	37	60	82	74.0		9.0	
	R1	9.6/0	11.00 - 11.80				092 SET	72.5		Grey, wet, dense, fine GRAVEL, some fine to coarse sand, little silt, (Pier remnant material). 092 blows for 0.5 ft. 10.5	
								71.2		Installed casing to 10.5 ft bgs., practical Refusal at 10.5 ft, possible Weathered Rock at 10.5 ft bgs. Roller cone to 11.0 ft to begin coring. R1: No recovery, Core barrel broke, Hole was terminated. R1: Core Times (min:sec) 11.0-11.8 ft (4:35) 11.8	
15										Bottom of Exploration at 11.8 feet below ground surface. Coring tube broke off, while bring core back up.	
20											
25											
30											
35											
40											
45											
50											

Remarks:
Coordinates: N515199.3200, E1754528.3766 (feet, NAD83(2011), Maine State Plane)
Auto Hammer #367
Bridge Deck Thickness 7.75".
20.7 ft from Top of Deck to Ground Surface.
94.85 ft from Top of Deck to Water Level.
R1: No rock returned, Core barrel snapped and broke off in hole, Core barrel and 15 ft of HW casing section and partial 5 ft casing section sheared

Stratification lines represent approximate boundaries between soil typest transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-OTSR-204

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2251(100)

WIN 22511.01

BRIDGE NO. 2806

BRIDGE PLANS

	M. WIGHT	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	B. REEVES	D. SHAW	SIGNATURE
CHECKED-REVIEWED			
DESIGN2-DETAILED2	A.BLAISDELL	T. WHITE	SEP 2021
DESIGN3-DETAILED3			P.E. NUMBER
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

STILLWATER # 2 BRIDGE
STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

BORING LOGS

SHEET NUMBER
166
OF 218

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Stillwater #2 Bridge #2806 carries Stillwater Avenue over Locations Old Town, Maine

Boring No.: BB-OTSR-204A

WIN: 22511.00

Drillers:	S.W. Cole	Elevation (ft.):	82.7	Auger ID/OD:	N/A
Operator:	K. Hanscom	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	Allie Hazard	Rig Type:	ATV Mounted Rig	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	5/20/20-5/20/20	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	27+00.5, 8.8 ft Lt.	Casing ID/OD:	HW & EW	Water Level*:	River Boring
Hammer Efficiency Factor:	0.977	Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer
MW = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR = Weight of Rods or Casing
WOP = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf), $S_{u(Lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor•60/Nuncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Shear Strength (psf) or RQD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
							SPLIT CASE			See BB-OTSR-204 for material descriptions. Advanced HW casing to 8.7 ft bgs, and started core.	
	R1	60/46	8.70 - 13.70	RQD = 48%			NQ-2	74.0		Increased casing advancement resistance at 8.5 ft. Spun casing to 8.7 ft and start to core.	
								73.2		R1:118.7-79.5 ft bgs) Grey/white, cobbles/boulders. 2-7" in long pieces recovered. (Pier remnant material).	
										Apparent Top of Bedrock at Elev. 73.2 ft. R1:Cont.: hard, fresh to decomposed, grey, SLATE, with calcite stringers. Primary joints are close, moderately dipping to high angle, undulating, rough, fresh to decomposed, partially open to moderately wide, with iron and sand infilling and pitting. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Poor R1:Core Times (minsec) 8.7-9.7 ft (3:15) 9.7-10.7 ft (2:25) 10.7-11.7 ft (2:21) 11.7-12.7 ft (4:49) 12.7-13.7 ft (4:19) 21% Recovery R2: Hard, fresh, aphanitic, grey, SLATE, with calcite stringers. Primary joints are very close to moderately spaced, horizontal, planar, smooth, fresh, moderately wide, with silt infilling. Secondary joints are extremely close, high angle to vertical, planar to undulating, fresh, tight to moderately wide, with silt infilling. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Fair R2:Core Times (minsec) 13.7-14.7 ft (3:17) 14.7-15.4 ft (3:00) 90% Recovery R3: Hard, fresh, aphanitic, grey, SLATE. One vertical joint, planar, smooth, fresh, tight to open, with silt infilling. One low angle joint, undulating, smooth, fresh, tight, with silt infilling. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Excellent R3:Core Times (minsec) 15.4-16.0 ft (5:54) 100% Recovery Advanced NW casing to 16.2 ft bgs after coring R3. R4: Hard, fresh, aphanitic, grey, SLATE. No joints in recovered core. Vug observed at bottom of sample. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Very Poor R4:Core Times (minsec) 16.2-17.2 ft (2:26) 17.2-18.2 ft (3:25) 18.2-19.2 ft (3:38) 19.2-20.2 ft (4:27) 20.2-21.2 ft (4:24) 23% Recovery R5: Hard, fresh to decomposed, aphanitic, grey, SLATE. Highly fractured into gravel size pieces. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Very Poor R5:Core Times (minsec) 21.2-22.2 ft (3:22) 22.2-23.2 ft (3:57) 23.2-24.2 ft (4:09) 24.2-25.2 ft (2:28) 25.2-25.7 ft (2:30) 17% Recovery		S_u=2633 ksf			
	R2	20.4/18	13.70 - 15.40	RQD = 55%							
	R3	7.2/7.2	15.40 - 16.00	RQD = 100%							
	R4	60/14	16.20 - 21.20	RQD = 22%							
	R5	54/9	21.20 - 25.70	RQD = 0%				57.0			
										Bottom of Exploration at 25.7 feet below ground surface.	

Remarks:

Coordinates: N515197.6347, E1754527.2465 (feet, NAD83(2011), Maine State Plane)
Auto Hammer #367
21.5 ft from Top of Deck to Ground Surface.
No water return for runs R1-R3. Installed NW casing and roller coned to 16.2 ft bgs, had water return.

Stratification lines represent approximate boundaries between soil types transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-OTSR-204A

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Stillwater #2 Bridge #2806 carries Stillwater Avenue over Locations Old Town, Maine

Boring No.: BB-OTSR-205

WIN: 22511.00

Drillers:	MaineDOT	Elevation (ft.):	82.9	Auger ID/OD:	N/A
Operator:	Wilder/Daggett	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	Allie Hazard	Rig Type:	CME45C	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	5/20/20-5/20/20	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	27+05.5, 7.5 ft Rt.	Casing ID/OD:	HW & EW	Water Level*:	River Boring
Hammer Efficiency Factor:	0.886	Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer
MW = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR = Weight of Rods or Casing
WOP = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf), $S_{u(Lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor•60/Nuncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Shear Strength (psf) or RQD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
	1D	24/1	0.00 - 2.00	4/2/1/1	3	4	SPLIT CASE			Brown, wood, some gravel. Advanced roller cone to 2.9 ft bgs, set up to core at 2.9 ft.	
	R1	16.8/16.8	2.90 - 4.30					80.0			
										R1: Grey, cobbles/boulders. 3/4-5" long pieces recovered. (Pier remnant material).	
	R2	32.4/20	4.30 - 7.00				13				
							40			R2: Grey, cobbles/boulders. 3/4-2" long pieces recovered. (Pier remnant material).	
							39				
							37				
	2D	7.2/6	7.00 - 7.60	38/40(1.2")	---		95	75.3		Brown, wet, very dense, coarse GRAVEL, little fine sand, little silt.	
	R3	42/24	8.00 - 11.50	RQD = 19%			NQ-2			Apparent Top of Bedrock at Elev. 75.3 ft. Split spoon refusal at 7.6 ft bgs. Advanced roller cone to 8.0 ft bgs and start to core. R3: Hard, fresh to slightly weathered, aphanitic, grey, PHYLLITE, with calcite stringers. 8.0-8.8 ft One high angle joint, planar, smooth, discolored, moderately wide. 9.2-9.9 ft Joint are extremely close, high angle to vertical, undulating, rough, fresh to decomposed, tight to partially open. Highly fractured into gravel size pieces from 8.8-9.2ft and 9.9-11.5 ft. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Very Poor R3:Core Times (minsec) 8.0-9.0 ft (2:32) 9.0-10.0 ft (2:00) 10.0-11.0 ft (1:02) 11.0-11.5 ft (2:00) 57% Recovery	
	R4	60/35	11.50 - 16.50	RQD = 33%							q_p=497 ksf
	R5	24/24	16.50 - 18.50	RQD = 88%						R4: Hard, fresh to slightly weathered, aphanitic, grey, PHYLLITE, with calcite stringers, 11.5-12.1 ft: Highly fractured into sand and gravel size pieces. 12.1-16.5 ft: Joints are extremely close to close, horizontal, planar, smooth, fresh, right to open with silt and sand infilling. One moderately dipping joint, undulating, smooth, discolored, partially open, with silt infilling. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Very Poor R4:Core Times (minsec) 11.5-12.5 ft (1:15) 12.5-13.5 ft (1:26) 13.5-14.5 ft (1:47) 14.5-15.5 ft (2:09) 15.5-16.5 ft (2:13) 58% Recovery	
	R6	42/42	18.50 - 22.00	RQD = 98%				60.9		R5: Hard, fresh, aphanitic, grey, PHYLLITE, with calcite stringers. Joints are are close to moderately spaced, horizontal, smooth to rough, fresh, right to moderately wide, with silt infilling. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Good R5:Core Times (minsec) 16.5-17.5 ft (2:13) 17.5-18.5 ft (2:57) 100% Recovery R6: Hard, fresh to discolored, aphanitic, grey, SLATE, with calcite stringers. Joints are extremely close to close, moderately dipping to high angle, planar, smooth, fresh to discolored, right to partially open. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Excellent R6:Core Times (minsec) 18.5-19.5 ft (2:14) 19.5-20.5 ft (2:06) 20.5-21.5 ft (2:36) 21.5-22.0 ft (2:30) 100% Recovery	
								22.0		Bottom of Exploration at 22.0 feet below ground surface.	

Remarks:

Coordinates: N515197.0948, E1754544.3010 (feet, NAD83(2011), Maine State Plane)
8" Bridge Deck thickness.
22.4 ft from top of bridge deck to ground surface/mud line.
Installed NW casing to 3.0 ft, then installed NW casing w/min HW casing. Installed to 8.0 ft bgs.
No water return while coring.

Stratification lines represent approximate boundaries between soil types transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-OTSR-205

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Stillwater #2 Bridge #2806 carries Stillwater Avenue over Locations Old Town, Maine

Boring No.: BB-OTSR-206

WIN: 22511.00

Drillers:	S.W. Cole	Elevation (ft.):	108.7	Auger ID/OD:	4.25" Solid Stem
Operator:	K. Hanscom	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	Allie Hazard	Rig Type:	ATV Mounted Rig	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	5/21/20-5/21/20	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	28+45.2, 4.6 ft Rt.	Casing ID/OD:	HW	Water Level*:	11.8 ft bgs.
Hammer Efficiency Factor:	0.977	Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer
MW = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR = Weight of Rods or Casing
WOP = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf), $S_{u(Lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor•60/Nuncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6 in. Shear Strength (psf) or RQD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
								108.4		3.5" Pavement.	
								107.9		3.5-12") Brown, dry, dense, Gravelly fine SAND, some silt, strong hydrocarbon odor. (Fill), exhibits strong hydrocarbon odor. 12-18") Grey, dry, dense, Gravelly fine SAND, some silt, (Fill).	GM303110 A-1-a, SW-SM WC=2.1%
	1D	20/13	0.80 - 2.47	15/18/19/52(2")	37	60	SSA				
	2D	24/12	5.00 - 7.00	5/6/5/3	11	18	35			10-31 Brown, moist, stiff, SILTY-CLAY, little fine sand, (Fill). 31-12") Brown, dry, dense, fine SAND, little gravel, little silt, (Fill).	
							35				
							40				
							45	100.2			
							47			Brown, wet, medium stiff, Clayey SILT, .5" brick fragments at 11.3 ft bgs. (Fill-Reworked).	GM303111 A-4, CL WC=24.8% Non-Plastic
	3D	24/18	10.00 - 12.00	3/3/4/4	7	11	31				
							40				
							45				
							74				
							74				
	4D	21.4/17	15.00 - 16.80	8/47/34/37(3.6")	81	132	48	93.2		10-67) Grey, wet, medium dense, GRAVEL, little silt and clay.	GM303112 A-1-a, GW-GM WC=8.6%
								91.7		67)-6.1") Gravel with relic bedrock structure, apparent weathered rock. Roller cone and installed casing to 17.0 ft bgs.	
										Apparent Top of Bedrock at Elev. 91.7 ft. R1: Hard, fresh to slightly weathered, aphanitic, grey, SLATE, with calcite stringers. Primary joints are extremely close to close, high angle to vertical, planar, smooth, fresh to discolored, tight to wide, with pitting. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Very Poor R1:Core Times (minsec) 17.0-18.0 ft (2:38) 18.0-19.0 ft (1:59) 19.0-20.0 ft (2:44) 20.0-21.0 ft (3:48) 21.0-22.0 ft (4:39) 67% Recovery	
	R1	60/34	17.00 - 22.00	RQD = 23%			NQ-2				q_p=3280 ksf
										R2: Hard, fresh to slightly weathered, aphanitic, grey, SLATE, with calcite stringers. Joints are close, high angle, planar, smooth, fresh to discolored, tight to moderately wide, with silt infilling. Secondary joints are extremely close to moderately spaced, high angle to vertical, planar, smooth, fresh to discolored, tight, with silt infilling and pitting. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Good R2:Core Times (minsec) 22.0-23.0 ft (2:41) 23.0-24.0 ft (2:44) 24.0-25.0 ft (2:52) 25.0-25.5 ft (1:55) 100% Recovery	
	R2	42/42	22.00 - 25.50	RQD = 83%							
	R3	51.6/51.6	25.50 - 29.80	RQD = 40%						R3: Hard, fresh to slightly weathered, aphanitic, grey, SLATE, with calcite stringers. Primary joints are very close to moderately spaced, horizontal, planar to stepped, smooth, fresh to discolored, tight to moderately wide, with silt infilling. Secondary joints are extremely close to moderately spaced, high angle to vertical, planar, smooth, fresh to discolored, tight, with silt infilling and pitting. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Poor R3:Core Times (minsec) 25.5-26.5 ft (2:57) 26.5-27.5 ft (3:27) 28.5-29.5 ft (3:29) 29.5-29.8 ft (3:17) 100% Recovery	
	R4	30/20	29.80 - 32.30	RQD = 33%				76.4			
										R4: Hard, fresh to slightly weathered, aphanitic, grey, SLATE, with calcite stringers. Primary joints are very close, horizontal, planar to undulating, smooth to rough, fresh to discolored, open to moderately wide. [Kenduskeag Stream Member of Bangor Formation] Rock Quality = Poor R4:Core Times (minsec) 29.8-30.8 ft (4:18) 30.8-31.8 ft (1:43) 31.8-32.3 ft (1:43) 67% Recovery	
								72.1		Bottom of Exploration at 32.3 feet below ground surface.	

Remarks:

Coordinates: N515330.2083, E1754586.9736 (feet, NAD83(2011), Maine State Plane)
Auto Hammer #367
Dropped tape down prior to R2 run to check depth at end of R1. Measurement = 21.8 ft.
Water level taken with HW casing still in hole.
Cave-in at 11.8 ft after removal of HW casing.

Stratification lines represent approximate boundaries between soil types transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-OTSR-206

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2251(100)

WIN 22511.01

BRIDGE NO. 2806

BRIDGE PLANS

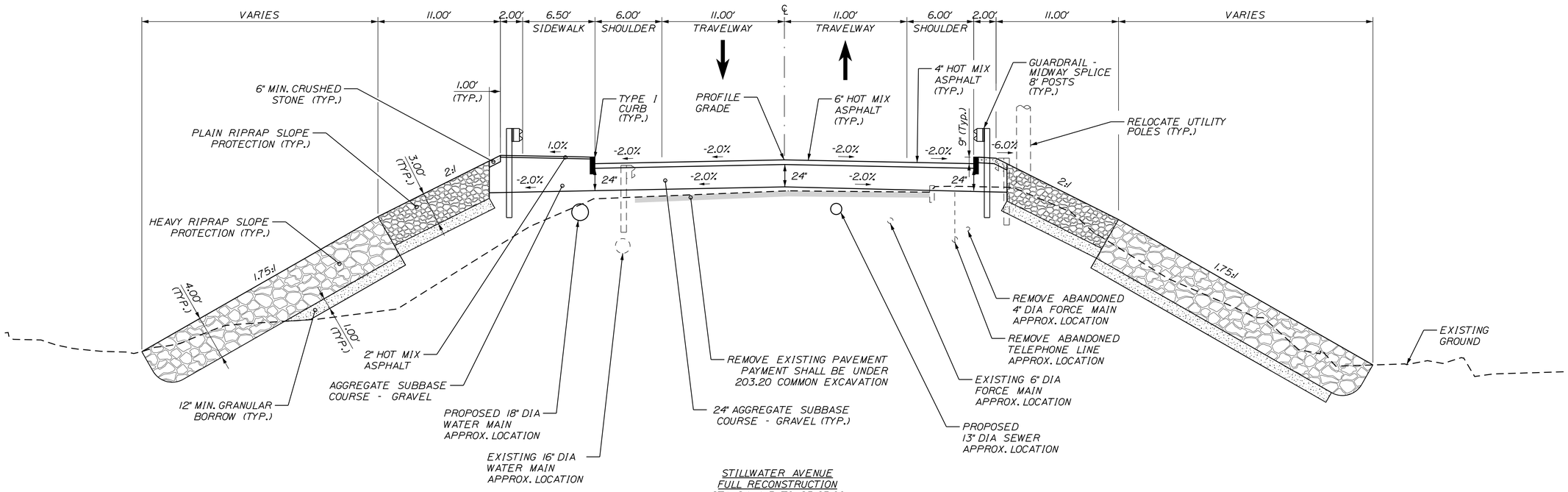
PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	B. REEVES	D. SHAW	SIGNATURE
CHECKED-REVIEWED	A.BLASDELL	T. WHITE	SEP 2021
DESIGN2-DETAILED2	A.BLASDELL		P.E. NUMBER
DESIGN3-DETAILED3			
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

STILLWATER # 2 BRIDGE
STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

BORING LOGS

SHEET NUMBER
167
OF 218

Filename: ...\MSTA\167_BORING LOGS2.dgn Division: BRIDGE Username: PDonovan Date:11/18/2021



STILLWATER AVENUE
FULL RECONSTRUCTION
STA. 24+14.15 TO 25+65.00
(ISLAND)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	11/17/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	11/17/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGES
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

ISLAND ROADWAY TYPICAL SECTION

SHEET NUMBER

168

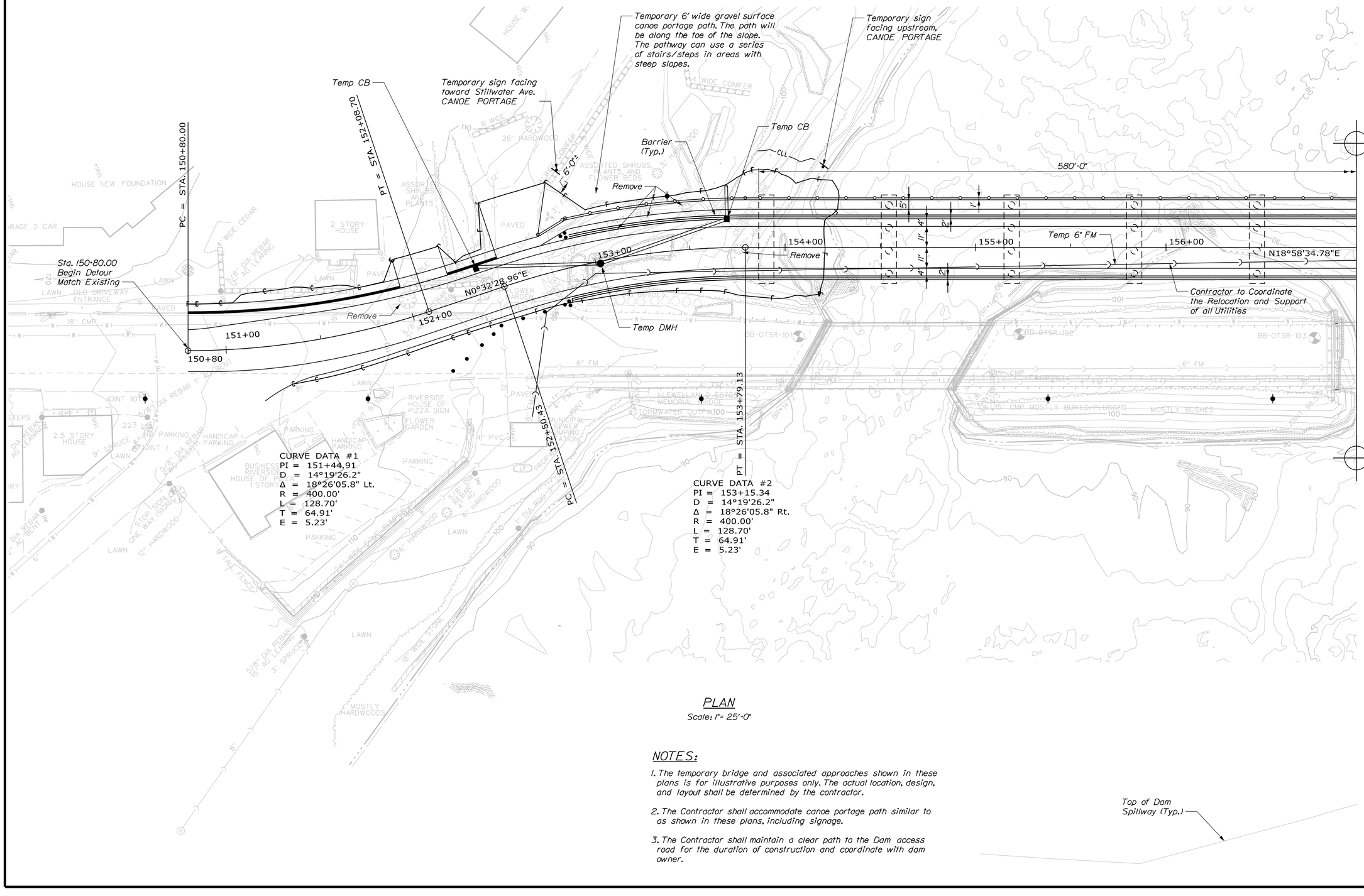
OF 218

Date:11/18/2021

Division: BRIDGE

Filename: ...\MSTA\168_Island-Sects.dgn

Date:11/18/2021
Filename: ...\BRIDGE\MSTA\169_Temp-Brg1.dgn Division: BRIDGE



PLAN
Scale: 1"= 25'-0"

NOTES:

1. The temporary bridge and associated approaches shown in these plans is for illustrative purposes only. The actual location, design, and layout shall be determined by the contractor.
2. The Contractor shall accommodate canoe portage path similar to as shown in these plans, including signage.
3. The Contractor shall maintain a clear path to the Dam access road for the duration of construction and coordinate with dam owner.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	MICHAEL WIGHT	
DESIGN-DETAILED	TJ COOK	11/17/21
CHECKED-REVIEWED	CT AYERS	11/17/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

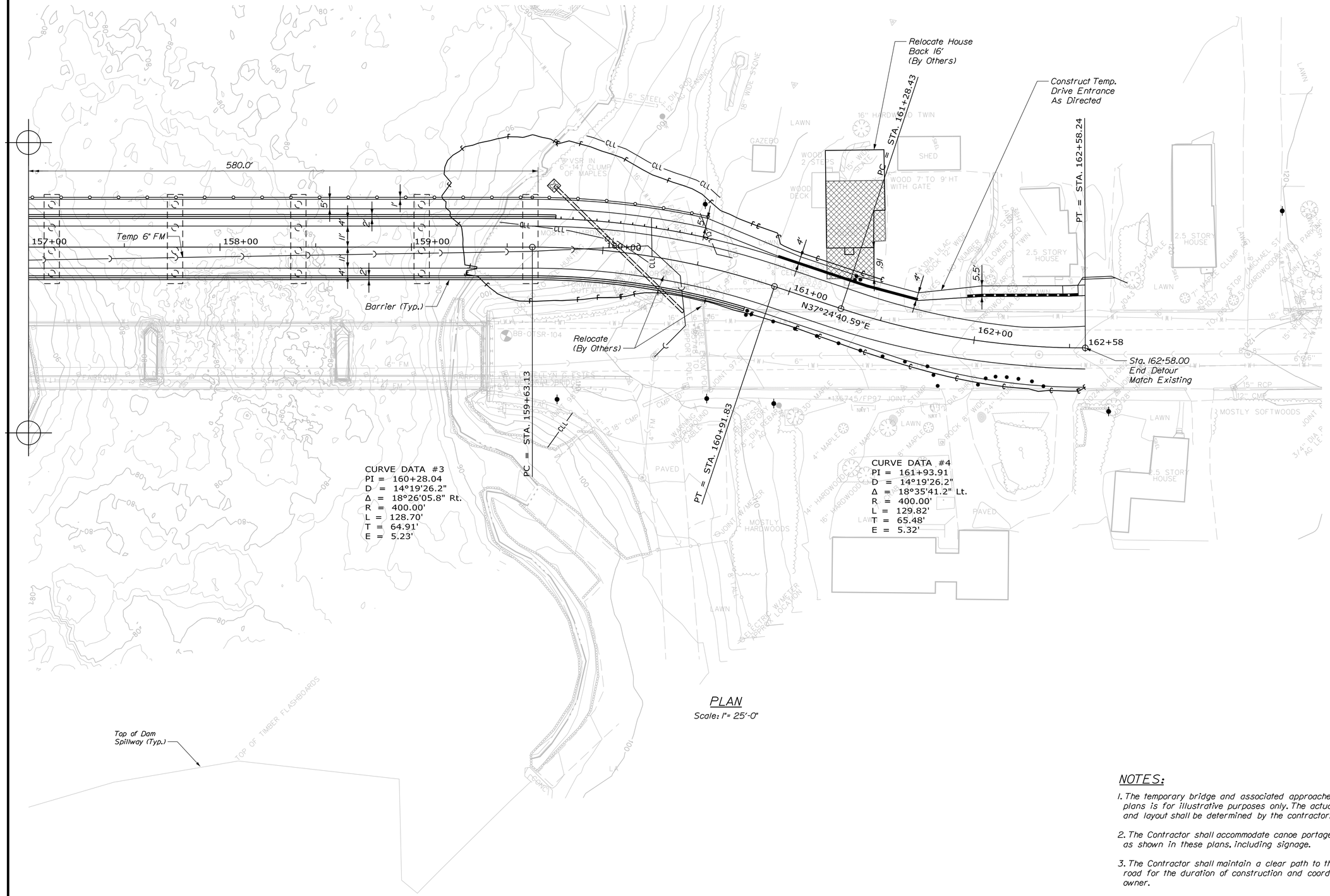
P.E. NUMBER

DATE

STILLWATER BRIDGES
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

TEMPORARY BRIDGE PLAN
(1 OF 2)

SHEET NUMBER
169
OF 218



PLAN
Scale: 1"= 25'-0"

NOTES:

1. The temporary bridge and associated approaches shown in these plans is for illustrative purposes only. The actual location, design, and layout shall be determined by the contractor.
2. The Contractor shall accommodate canoe portage path similar to as shown in these plans, including signage.
3. The Contractor shall maintain a clear path to the Dam access road for the duration of construction and coordinate with dam owner.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	BY	P DONOVAN
CHECKED-REVIEWED	CT AYERS	DATE	11/17/21
DESIGN2-DETAILED2		BY	RS BLUNT
DESIGN3-DETAILED3		DATE	11/17/21
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

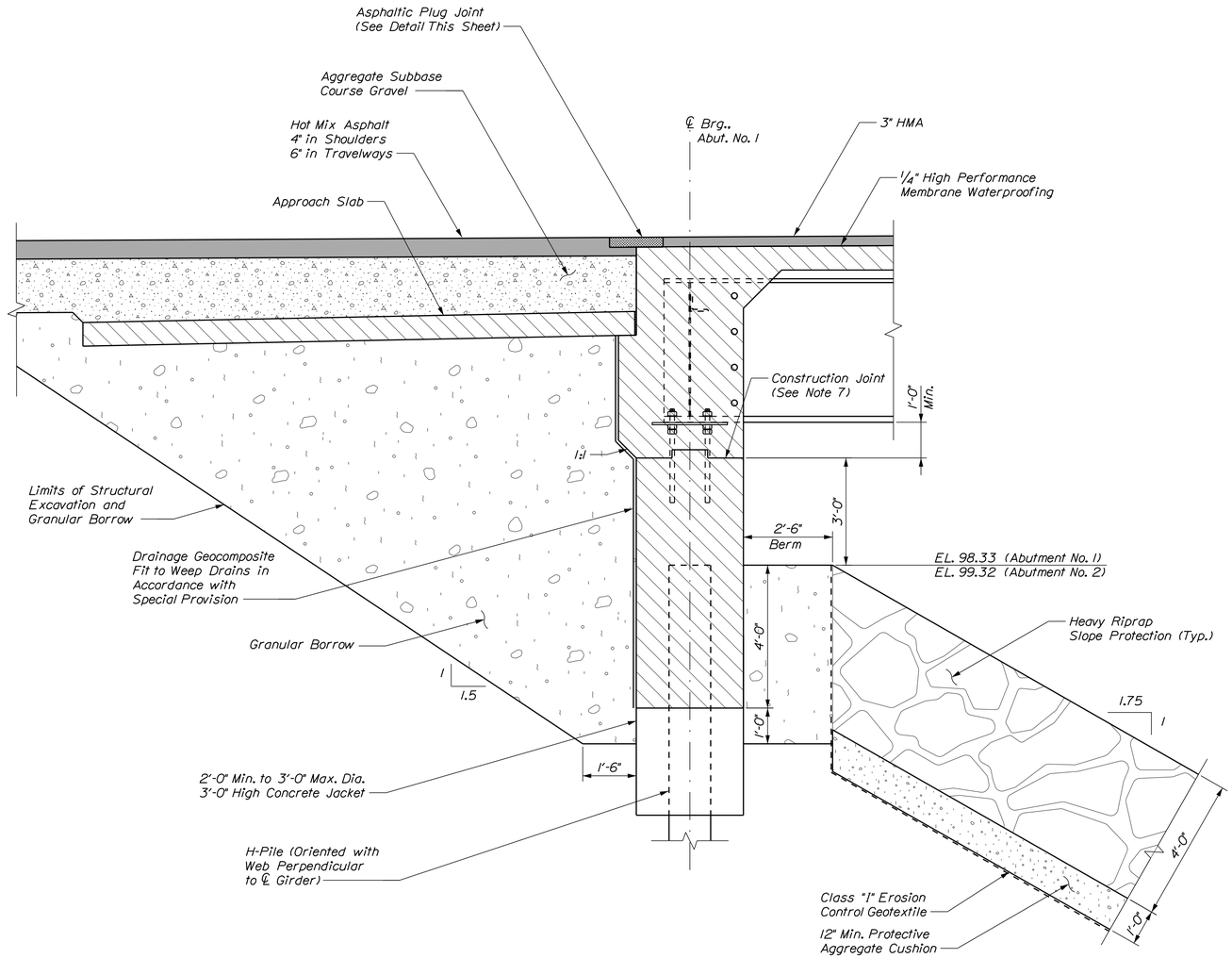
STILLWATER BRIDGES
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

TEMPORARY BRIDGE PLAN (2 OF 2)

SHEET NUMBER
170
OF 218

Date:11/18/2021

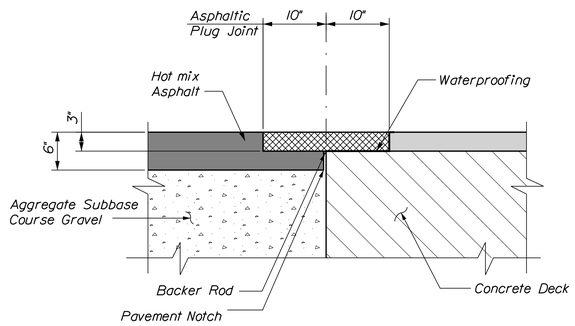
Filename: ...\BRIDGE\MSTA\170_Temp-Brg2.dgn Division: BRIDGE



BRIDGE NO. 1
TYPICAL ABUTMENT SECTION

ABUTMENT NOTES:

1. Reinforcing steel shall have a minimum concrete cover of 2 inches and 3 inches on bottom unless otherwise noted.
2. Place 4-in. diameter weep drains in the breastwall and wingwalls at 10 ft maximum spacing. The exact location will be determined by the Resident.
3. Cover joints where waterstops are not required in accordance with Standard Details Section 502.
4. Payment for concrete jacket around the tops of the H-Piles will not be paid for directly, but shall be incidental to Item 502.219, Structural Concrete, Abutment and Retaining walls. Fill Concrete may be used for the concrete jackets.
5. Omit V-groove at exposed face of horizontal construction joint at bridge seat.
6. Install Drainage Geocomposite behind the abutments and wingwalls up to the approach slab seat elevation in accordance with Special Provision Section 620, Drainage Geocomposite.
7. Concrete above the construction joint shall be paid as Structural Concrete Roadway and Sidewalk Slab on Steel Bridges. Concrete below the construction joint shall be paid as Structural Concrete, Abutments and Retaining Walls unless otherwise noted.
8. The asphaltic plug joint shall not use a bridging plate.
9. Bedrock encountered within 1'-0" of the bottom of the abutment shall be removed.



ASPHALTIC PLUG JOINT DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

ABUTMENT TYPICAL SECTION AND NOTES

SHEET NUMBER

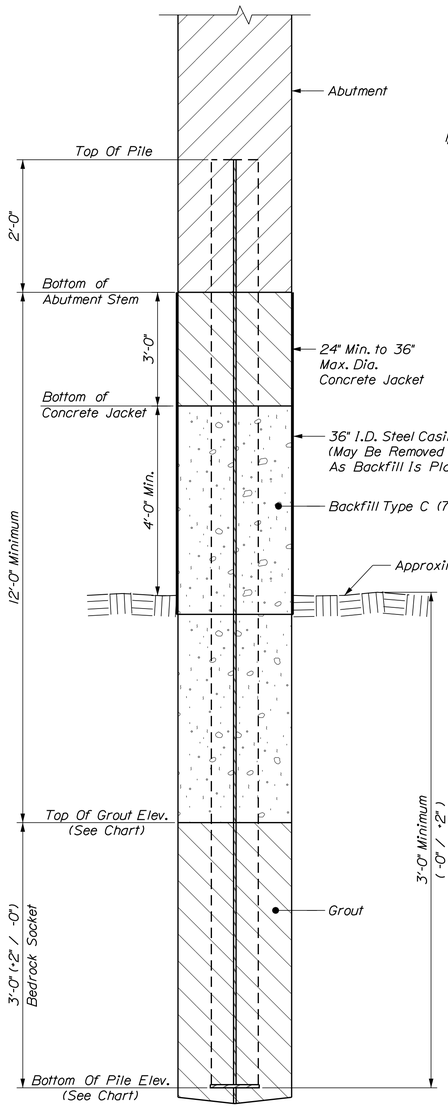
171

OF 218

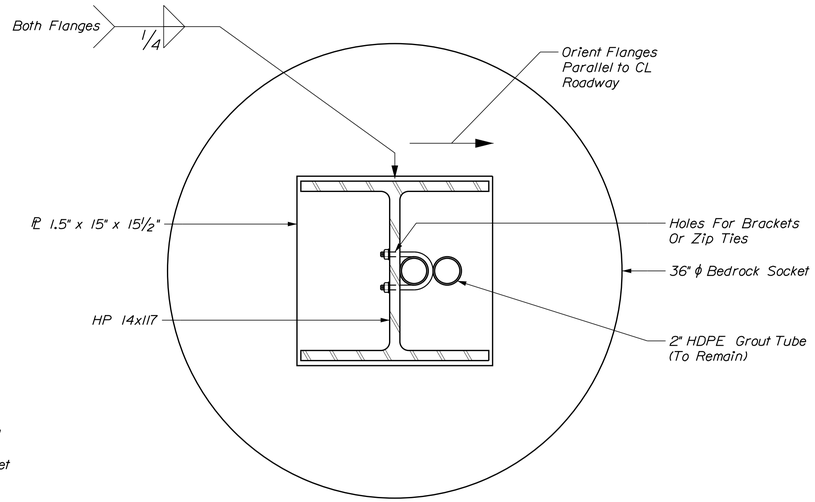
Date:11/18/2021

Division: BRIDGE

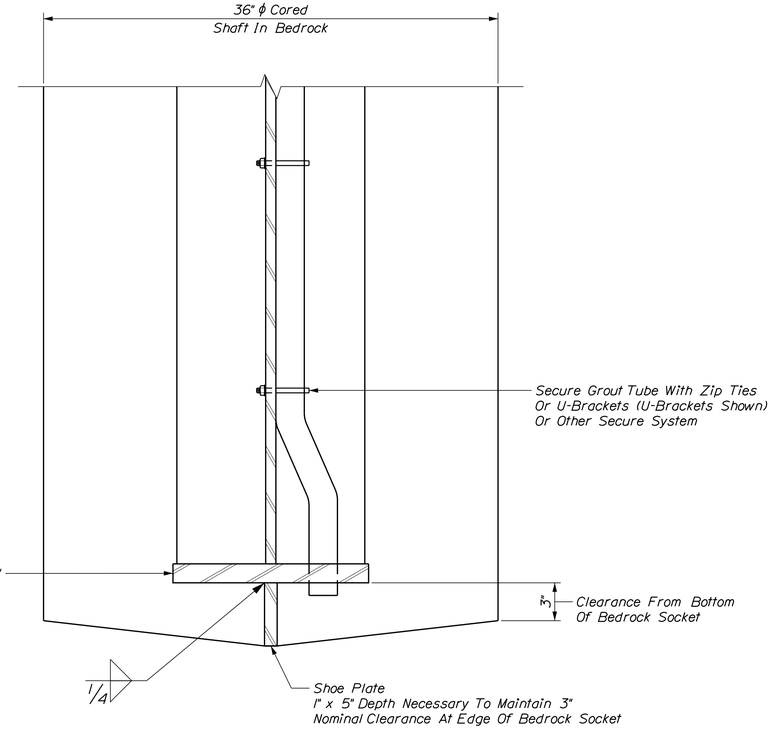
Filename: ...\MSTA\171_Brg_Abut_Typ.dgn



ROCK SOCKETED PILE DETAIL



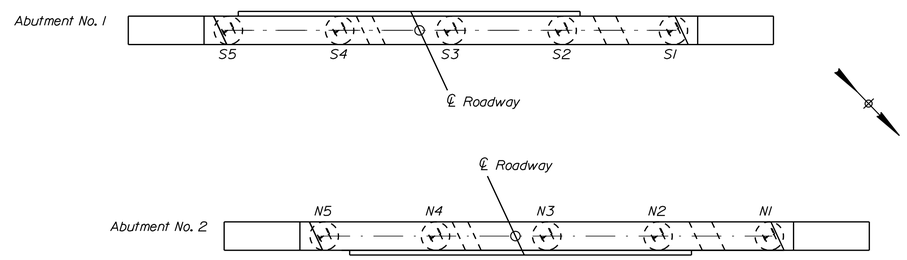
ROCK SOCKETED PILE BASE DETAIL



ROCK SOCKETED PIPE PILE

PILE NOTES

1. The maximum factored pile load is 412 kips at the Strength Limit State.
2. H-pile material shall be ASTM A572, Grade 50.
3. Estimate of piles required:
   Abutment No. 1: 5 - HP14x117, See chart below for pile length estimates
   Abutment No. 2: 5 - HP14x117, See chart below for pile length estimates
4. Piles shall be oriented as shown with the pile webs perpendicular to girder centerline. The orientation shall be within 10 degrees of the requirement.



PILE INDEX PLAN

See Abutment Sheets For Pile Layout

BRIDGE NO. 1						
Pile	BOTTOM OF ABUTMENT STEM ELEVATION	APPROX. TOP OF BEDROCK ELEVATION	ESTIMATED TOP OF GROUT ELEVATION	ESTIMATED BOTTOM OF PILE ELEVATION	APPROXIMATE CORE LENGTH (FT.)	APPROXIMATE PILE LENGTH (FT.)
S1	94.33	89.6	82.33	79.33	10.6	17
S2	94.33	86.3	82.33	79.33	7.3	17
S3	94.33	85.4	82.33	79.33	6.4	17
S4	94.33	88.4	82.33	79.33	9.4	17
S5	94.33	86.8	82.33	79.33	7.8	17
N1	95.32	86.9	83.32	80.32	6.9	17
N2	95.32	84.4	83.32	80.32	4.4	17
N3	95.32	83.9	82.90	79.90	4.0	18
N4	95.32	84.8	83.32	80.32	4.8	17
N5	95.32	83.2	82.20	79.20	4.0	19

PILE TABLE NOTES:

1. These approximate bedrock elevations have been estimated using interpretations shown on the Interpretive Subsurface Cross Sections, Sheets 159 and 160.
2. Top of rock elevations are provided to the nearest 0.1' for length calculation purposes, but they have been estimated using widely spaced explorations, and actual elevations will vary.
3. Estimated top of grout elevation is 12' below bottom of abutment stem elevation unless approximate top of bedrock is more than 11' below bottom of abutment stem, in which case estimated top of grout is 1' below approximate top of rock. This provides a minimum rock socket depth of 4' with 3' grouted embedment.
4. Top of Rock is defined as penetration of the full diameter of the rock excavation equipment beneath the bedrock surface, as determined by the Resident.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	M JOHNESCU	P DONOVAN	9/28/21
CHECKED-REVIEWED	AR BLASDELL	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

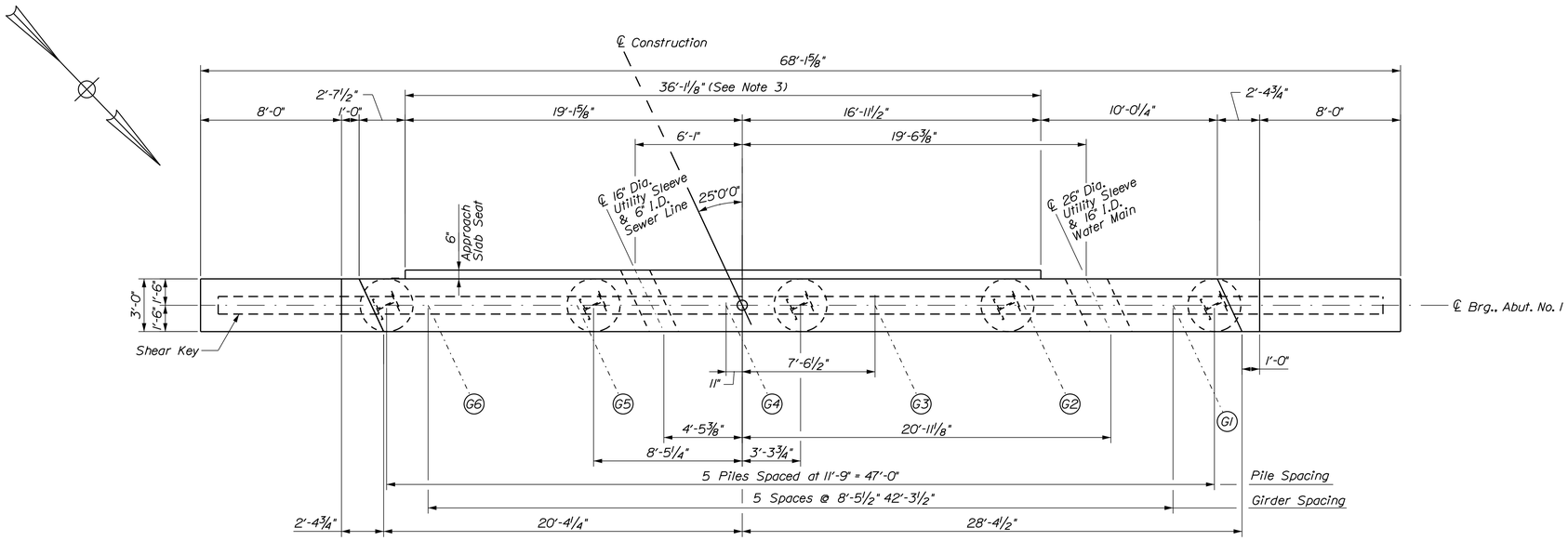
PILE DETAILS

SHEET NUMBER
172
OF 218

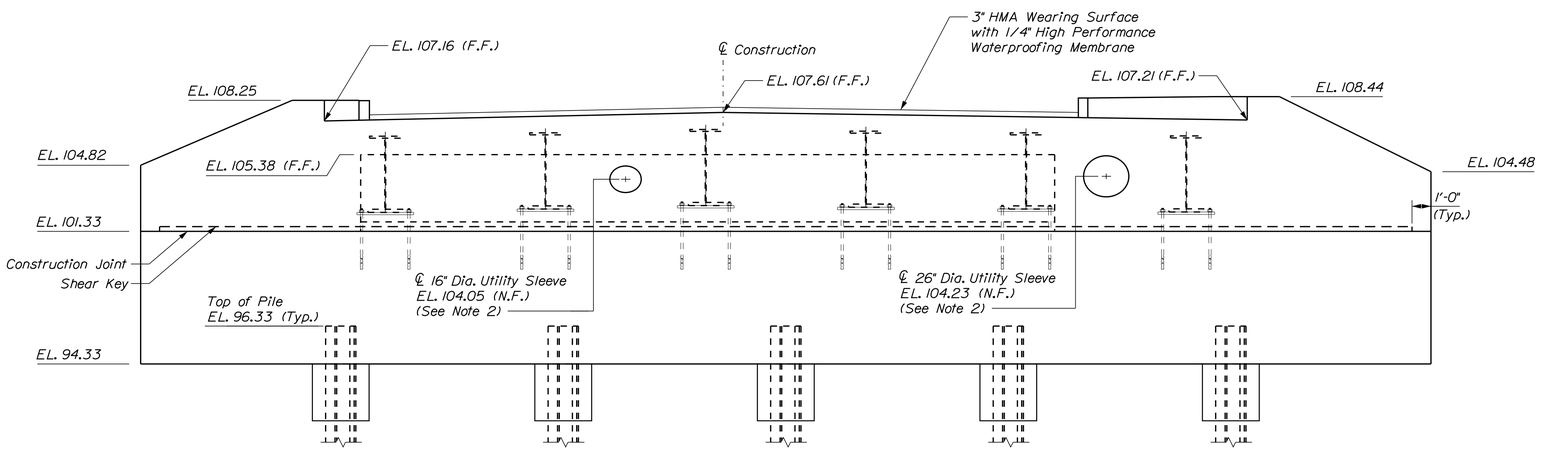
Date:11/18/2021

Division: BRIDGE

Filename: ...\MSTA\172_Pile_Details.dgn



PLAN
Scale: 1/4" = 1'-0"



ELEVATION
Scale: 1/4" = 1'-0"

BOTTOM OF GIRDER ELEVATION @ ℄ BEARING						
Girder	G1	G2	G3	G4	G5	G6
Elevation	102.35	102.47	102.60	102.69	102.51	102.33

NOTE

1. All abutment elevations are shown at center line of bearing except the utility sleeve, which is shown at the near face of abutment, and the top of backwall and the approach slab seat, which are shown at the far face of abutment.
2. Slope of utility sleeve to match roadway grade. See utility plans for utility sleeve and abutment penetration details.
3. The approach slab width has been modified from Standard Detail 502(02) to be 1'-0" from the sidewalk curb instead of 6".

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

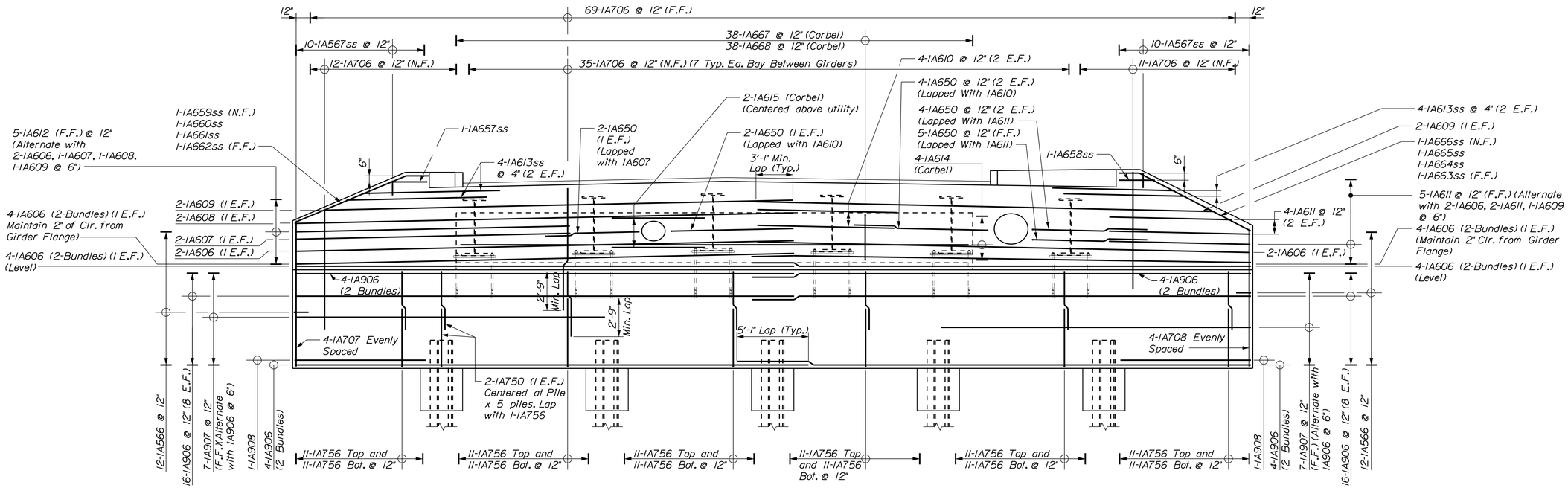
DATE

STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

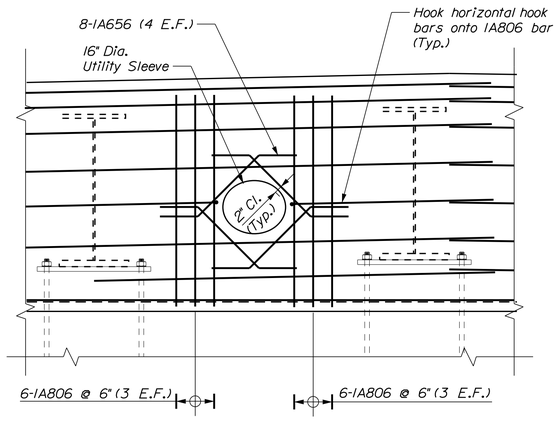
ABUTMENT 1
PLAN AND ELEVATION

SHEET NUMBER
173
OF 218

Date:11/18/2021
Division: BRIDGE
Filename: ...\MSTA\173_Brg1-Abut_01.dgn

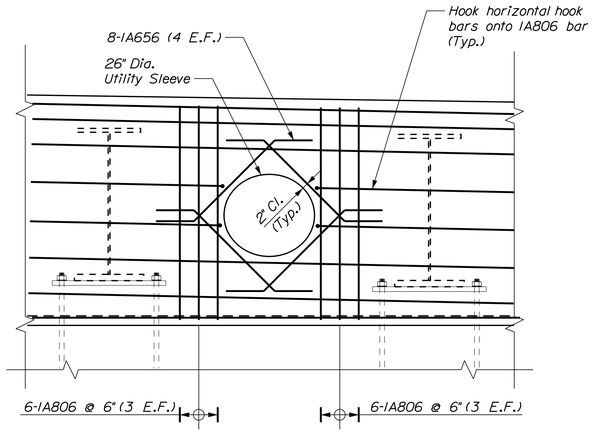


ELEVATION



SEWER MAIN BLOCKOUT REINFORCING DETAIL

(N.F. Shown, F.F. Similar)



WATER MAIN BLOCKOUT REINFORCING DETAIL

(N.F. Shown, F.F. Similar)

NOTES:

1. Field trim IA706, IA614, IS750ss & IS751ss bars to fit around the utility sleeves in the backwall.
2. The bar mark initial number designates bridge number for bar location. Example: IA806 is a bridge 1 abutment bar.

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

ABUTMENT 1 REINFORCING ELEVATION

SHEET NUMBER

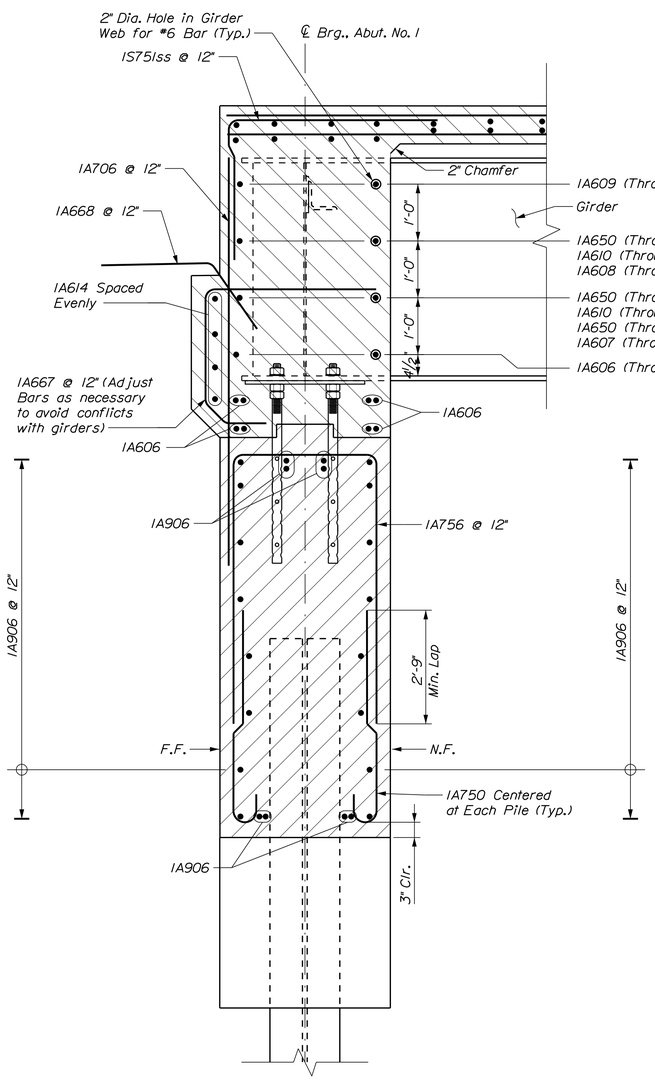
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OF 218

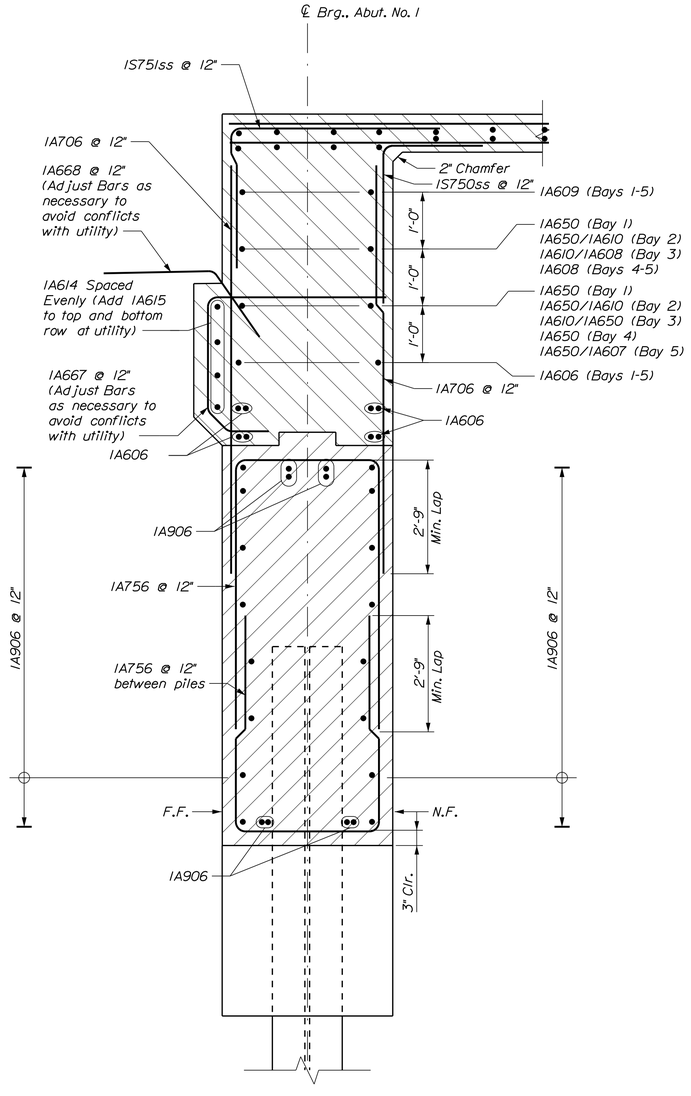
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Division: BRIDGE

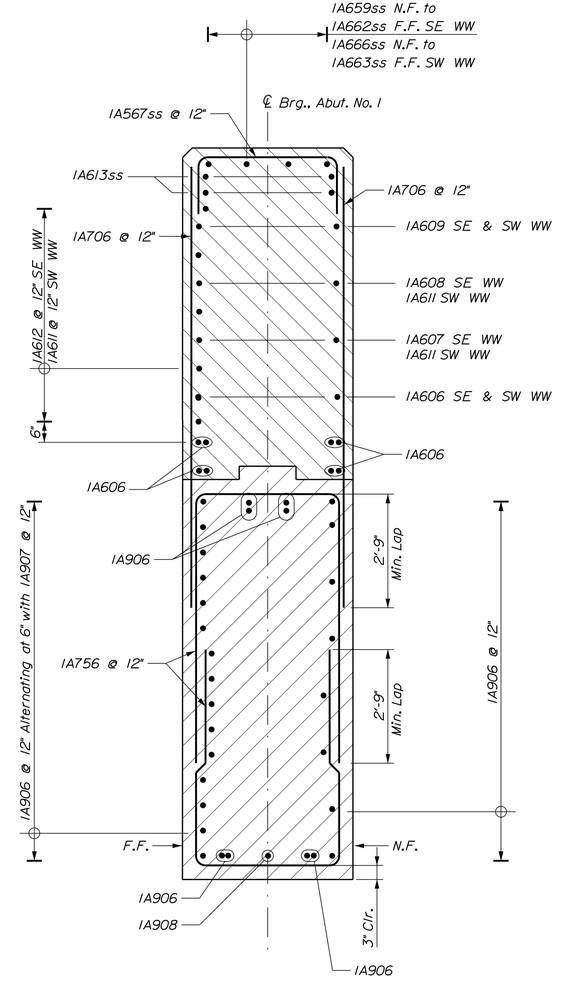
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TYPICAL ABUTMENT SECTION AT GIRDER/PILE



TYPICAL ABUTMENT SECTION BETWEEN GIRDERS/PILES



TYPICAL WINGWALL SECTION

NOTES:

1. Bar marks that begin with 'A' are at Abutment 1. Bar marks that begin with 'B' are at Abutment 2.

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
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REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

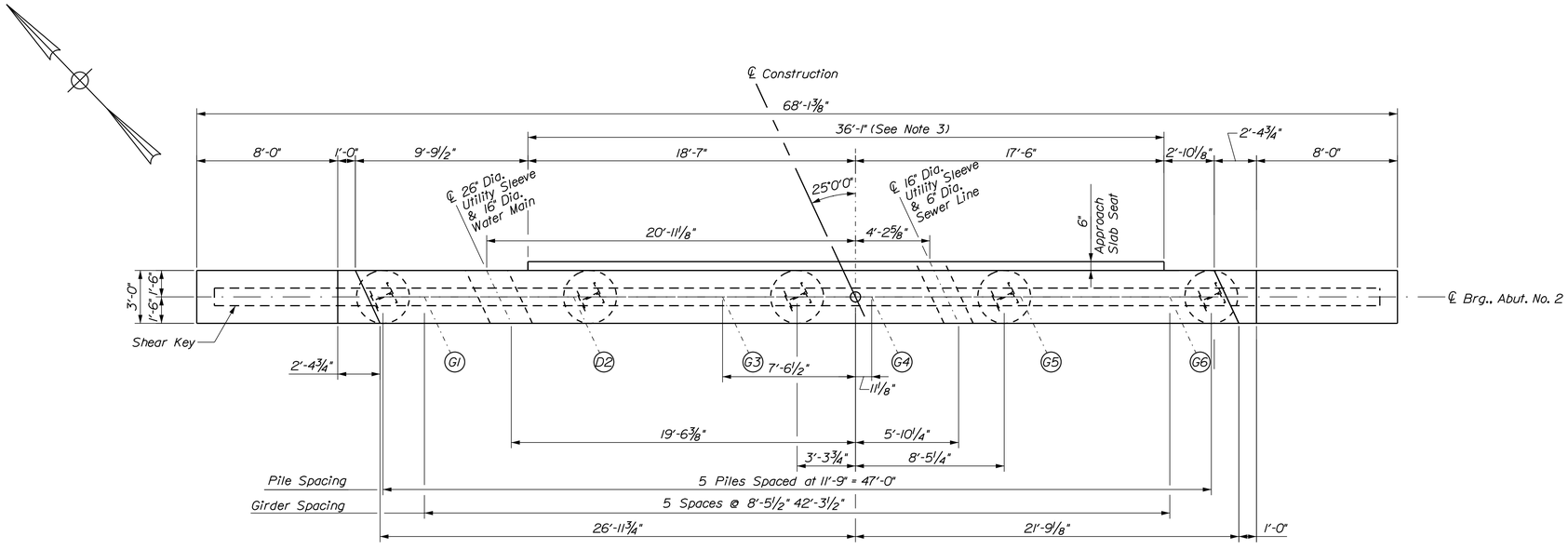
STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

ABUTMENT 1
REINFORCING SECTIONS

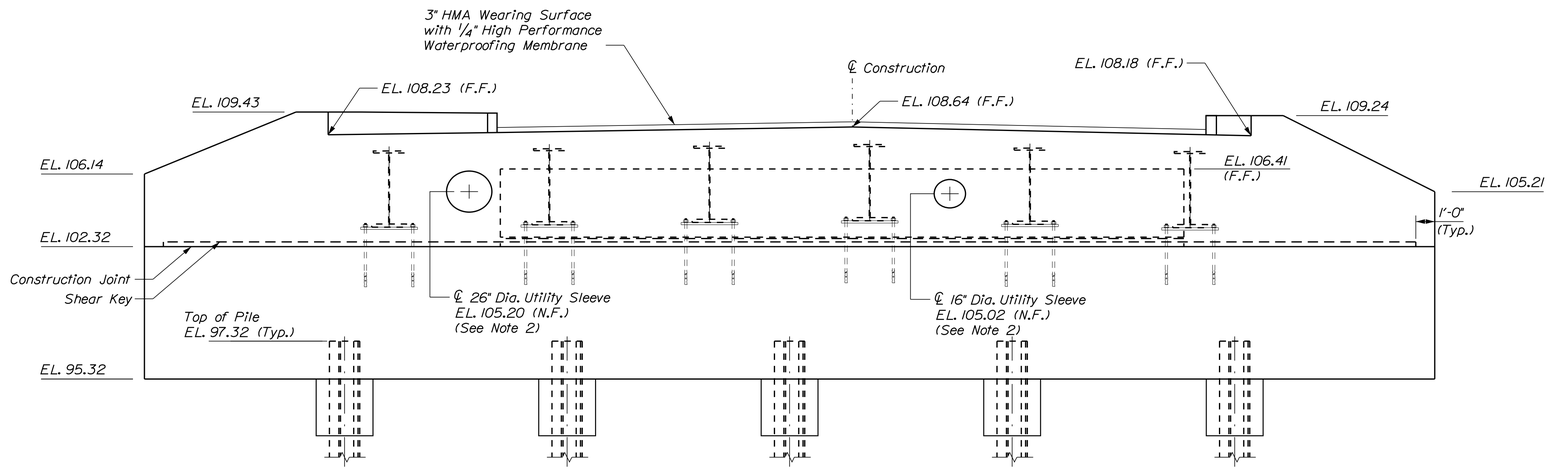
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175
OF 218

Date:11/18/2021
Division: BRIDGE
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Date:11/18/2021
Division: BRIDGE
Filename: ...\MSTA\176_Brg1-Abut_02.dgn



PLAN



ELEVATION

BOTTOM OF GIRDER ELEVATION @ ℄ BEARING						
Girder	G1	G2	G3	G4	G5	G6
Elevation	103.35	103.47	103.60	103.69	103.50	103.32

NOTES

1. All abutment elevations are shown at center line of bearing except the utility sleeve, which is shown at the near face of abutment, and the top of backwall and the approach slab seat, which are shown at the far face of abutment.
2. Slope of utility sleeve to match roadway grade. See utility plans for utility sleeve and abutment penetration details.
3. The approach slab width has been modified from Standard Detail 502(02) to be 1'-0" from the sidewalk curb instead of 6".

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

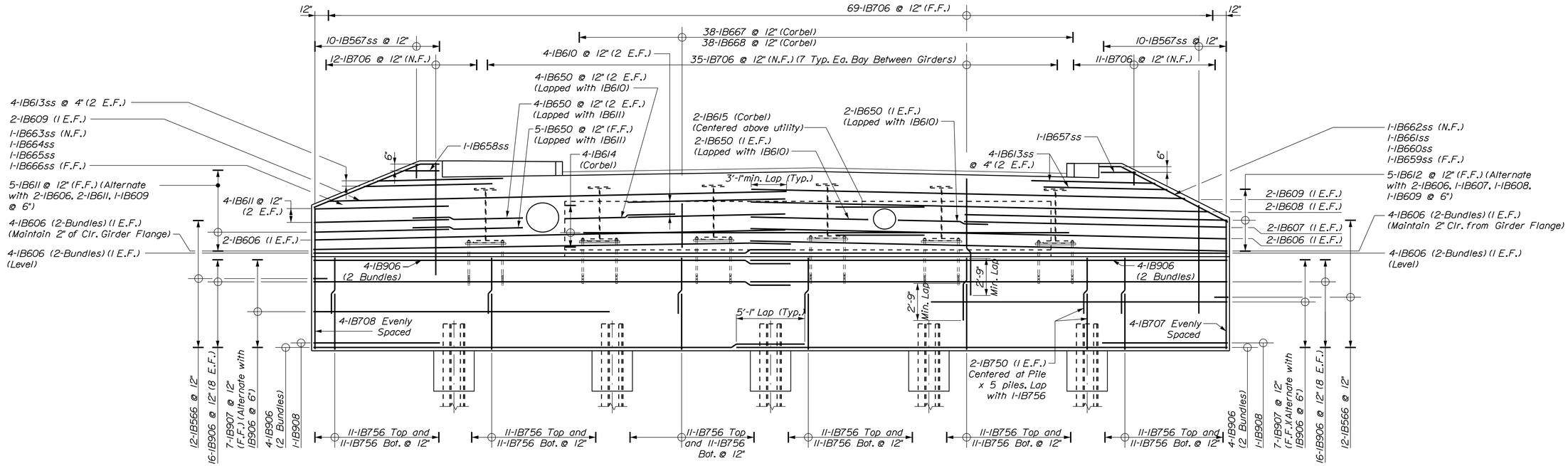
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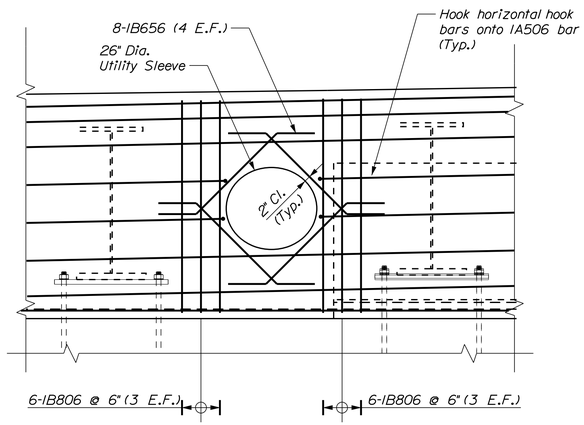
STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

ABUTMENT 2
PLAN AND ELEVATION

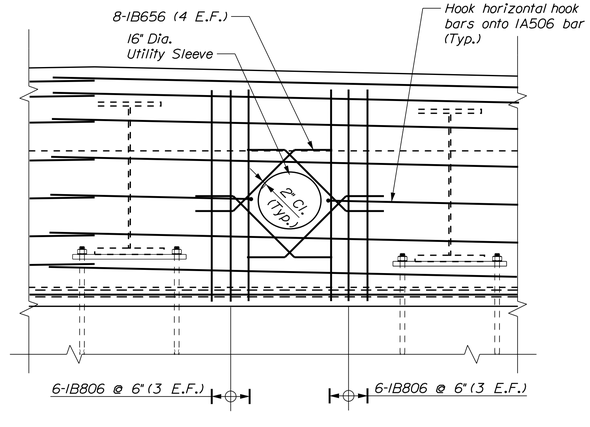
SHEET NUMBER
176
OF 218



ELEVATION



WATER MAIN BLOCKOUT
REINFORCING DETAIL
(N.F. Shown, F.F. Similar Plus added
Reinforcement in the Wingwall)



SEWER MAIN BLOCKOUT
REINFORCING DETAIL
(N.F. Shown, F.F. Similar)

NOTES:

1. Field trim IB706, IB614, IS750ss, and IS751ss bars to fit around the utility sleeves in the backwall.
2. Bar marks include a 1 or 2 in the front designating the bridge number Example: 1A806 is a bridge 1 abutment bar.

KEY
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

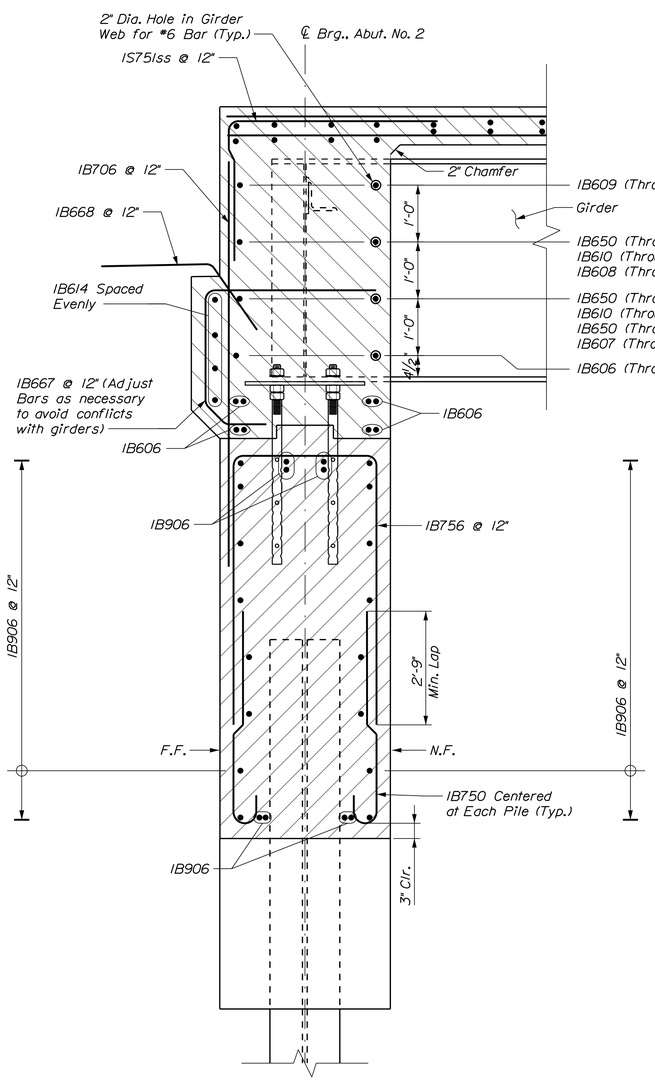
DATE

STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

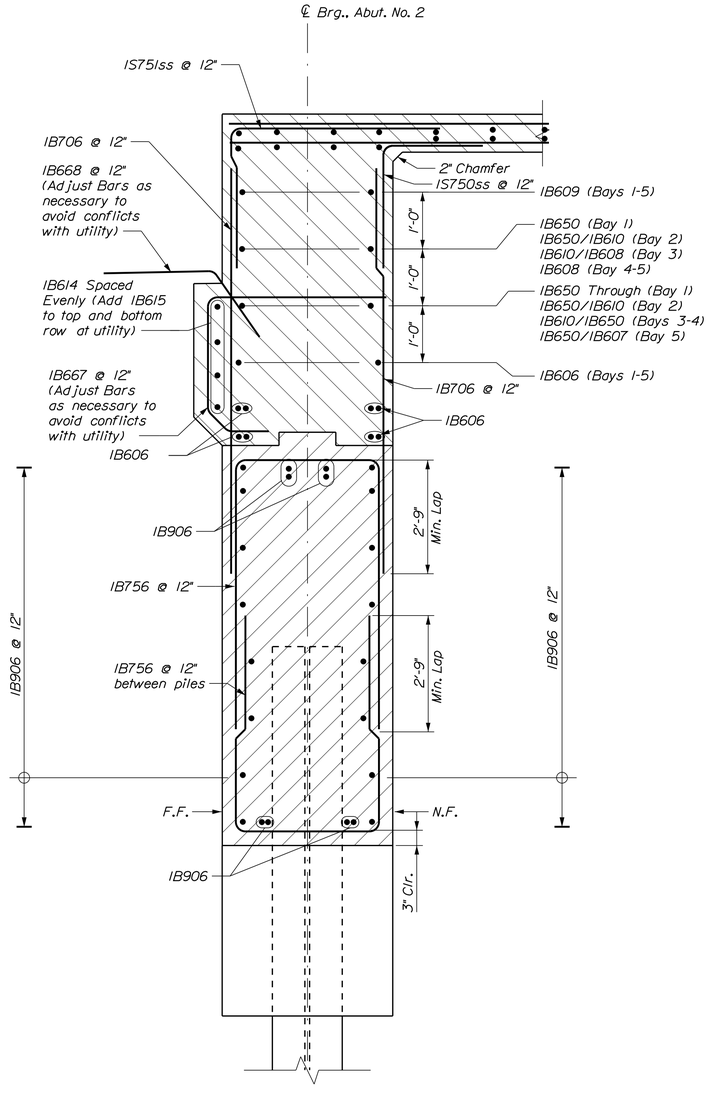
ABUTMENT 2
REINFORCING ELEVATION

SHEET NUMBER
177
OF 218

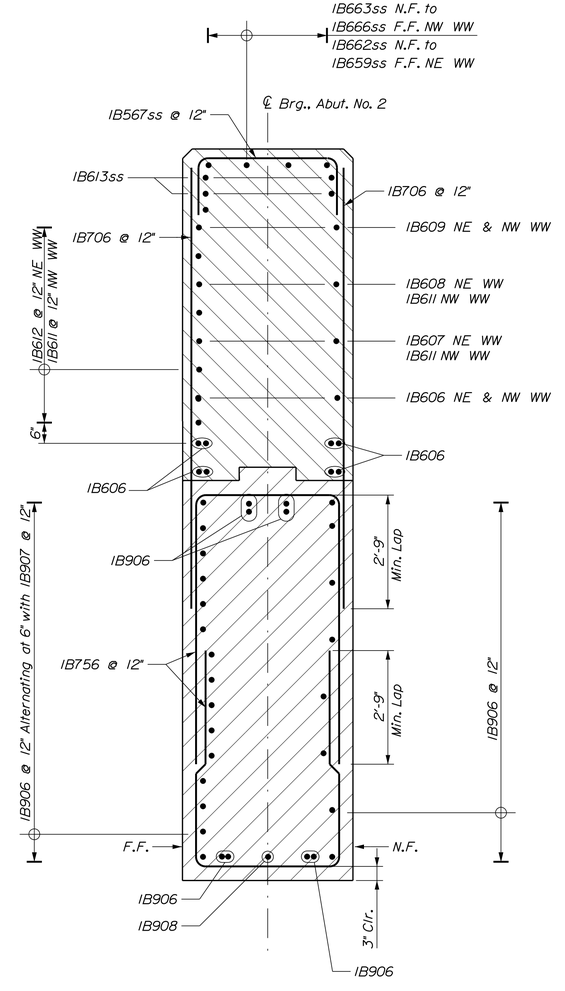
Date:11/18/2021
Division: BRIDGE
Filename: ...\MSTA\177_Brg1-Abut_02_Ref.dgn



TYPICAL ABUTMENT SECTION AT GIRDER/PILE



TYPICAL ABUTMENT SECTION BETWEEN GIRDERS/PILES



TYPICAL WINGWALL SECTION

NOTE:

1. Bar marks that begin with 'A' are at Abutment 1. Bar marks that begin with 'B' are at Abutment 2.

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

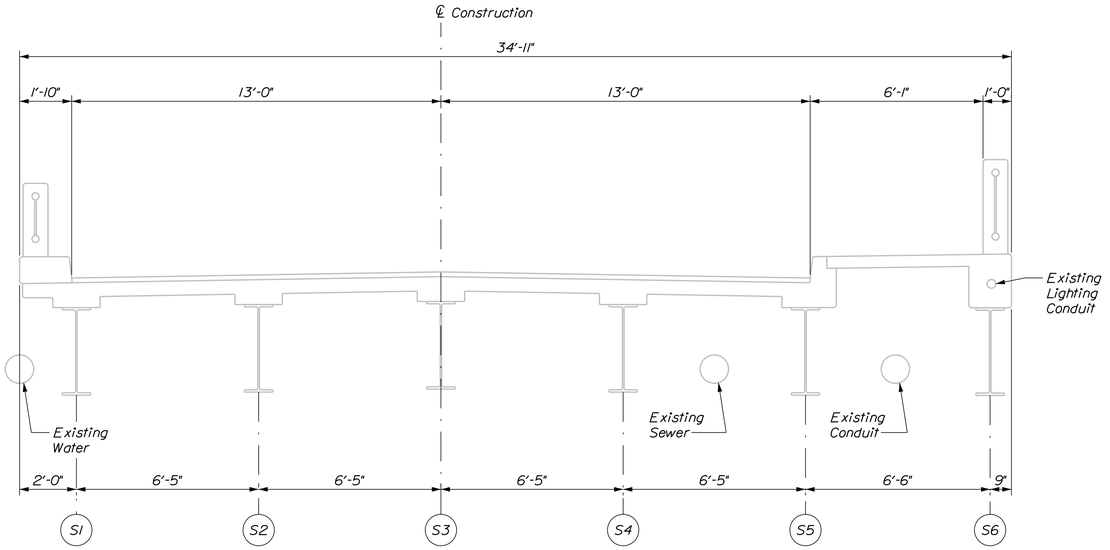
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STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

ABUTMENT 2 REINFORCING SECTIONS

SHEET NUMBER
178
OF 218

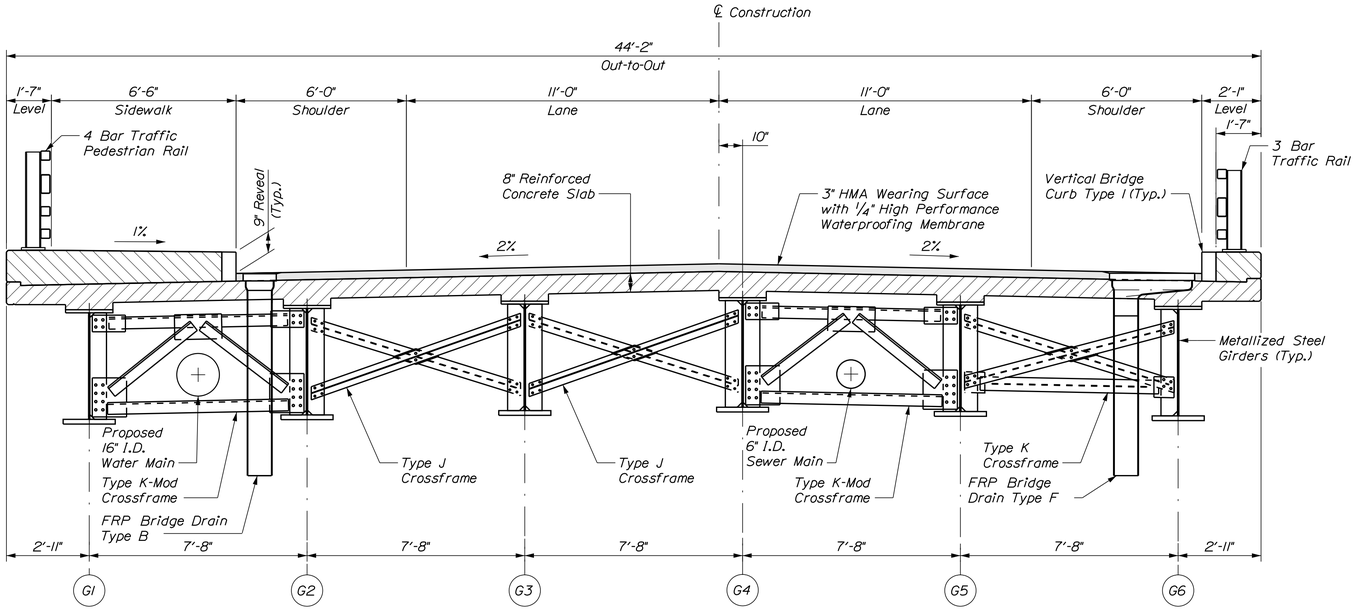
Date:11/18/2021
Filename: ...\MSTA\178_Brg1-Abut_02_Sec.dgn Division: BRIDGE



EXISTING TYPICAL SECTION

SUPERSTRUCTURE NOTES

1. The theoretical blocking used for design of the structure is 4 inches at the centerline of bearing of the abutments. Refer to Standard Detail 502 for blocking details.
2. Reinforcing shall have a minimum concrete cover of 2 inches unless otherwise noted.
3. Form a one inch V-groove on the fascia at the horizontal joint between the curb and slab.
4. Superstructure slab and upper portions of the abutments shall be placed in one continuous operation and shall be kept plastic until the entire placement has been made.
5. Precast Deck Panels shall not be used.
6. Adjust Reinforcing to fit around the bridge drains in a manner approved by the Resident. Do not cut transverse reinforcing bars.
7. Mortar for bedding and for joints in the granite curb shall contain an approved non-shrink additive.



BRIDGE NO. 1
PROPOSED TYPICAL SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

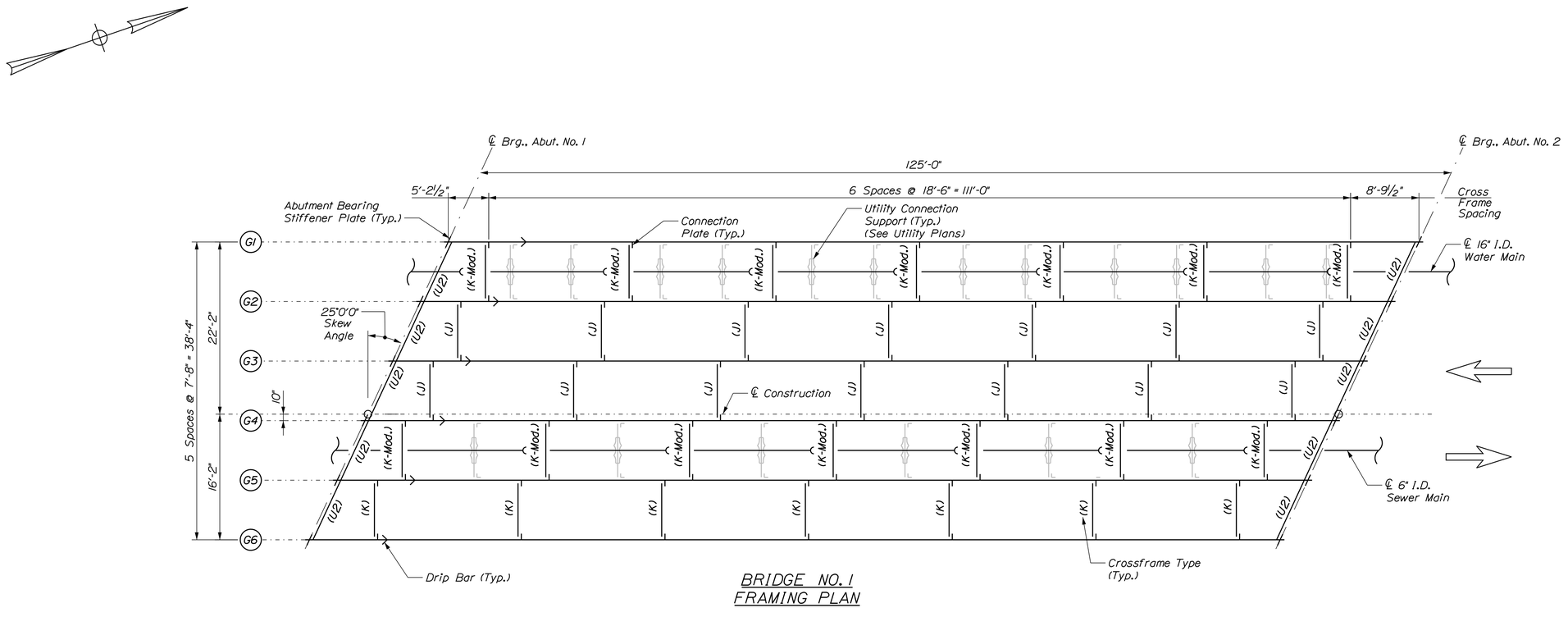
STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

SUPERSTRUCTURE
SECTIONS AND NOTES

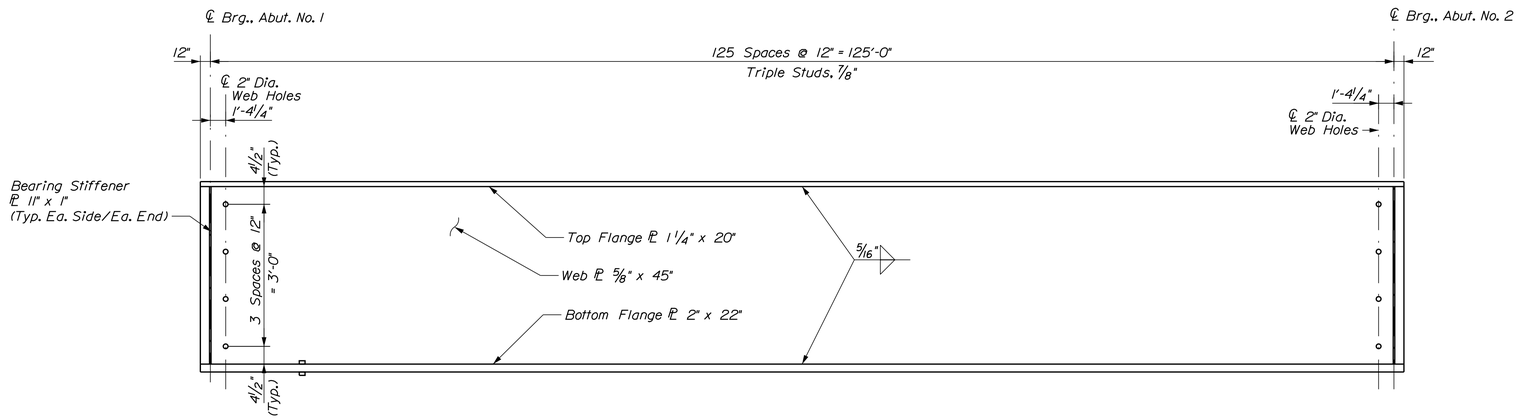
SHEET NUMBER
179
OF 218

Date:11/18/2021

Filename: ...\BRIDGE\MSTA\179_Brg-Typ_01.dgn Division: BRIDGE



BRIDGE NO. 1
FRAMING PLAN



WELDED PLATE GIRDER ELEVATION

(Connection Plates Shown in Plan View)
378 Studs per Girder x 6 Girders = 2268 Studs

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

FRAMING PLAN AND GIRDER ELEVATION

SHEET NUMBER

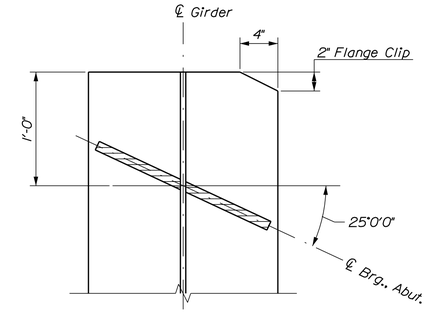
180

OF 218

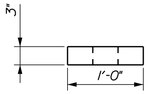
Date:11/18/2021

Division: BRIDGE

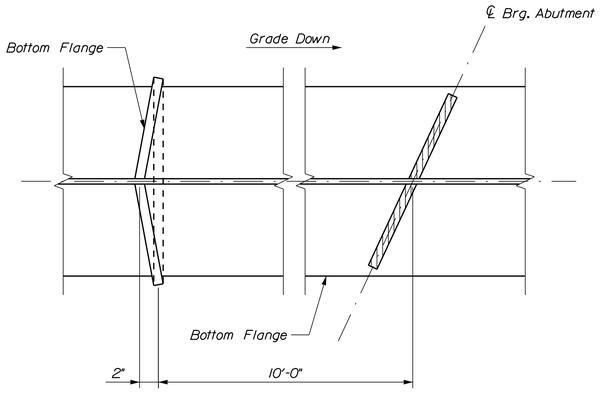
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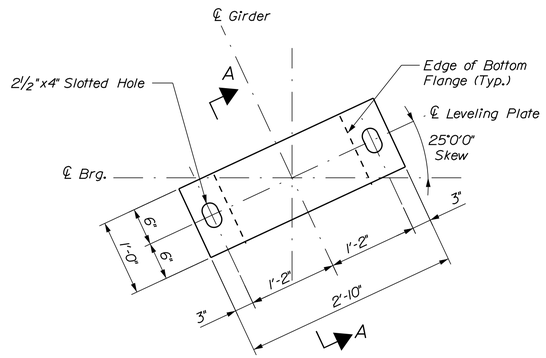
BEAM END PLAN DETAIL
Not to Scale



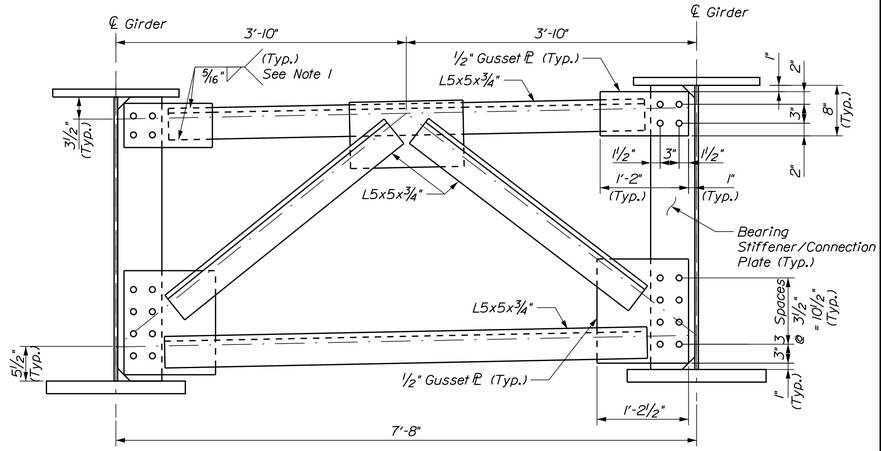
SECTION A-A



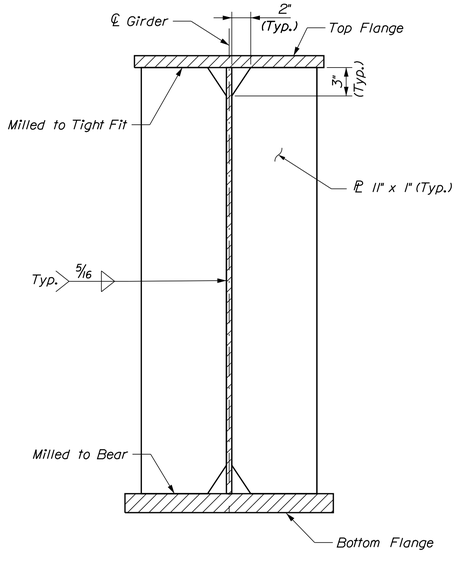
DRIP BAR PLAN
Not to Scale



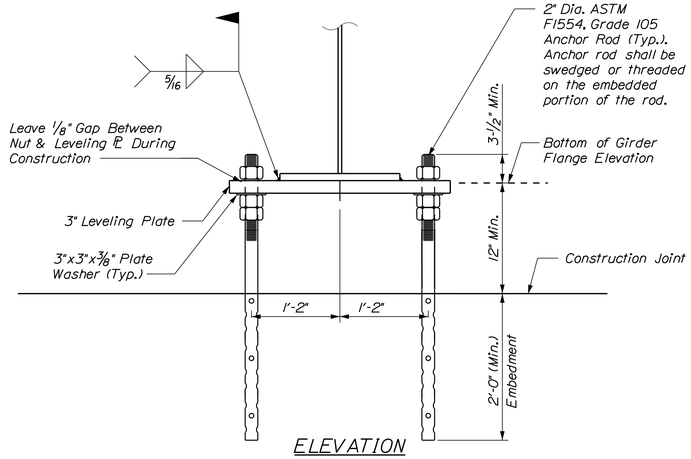
LEVELING PLATE PLAN



TYPE K-MOD CROSSFRAME

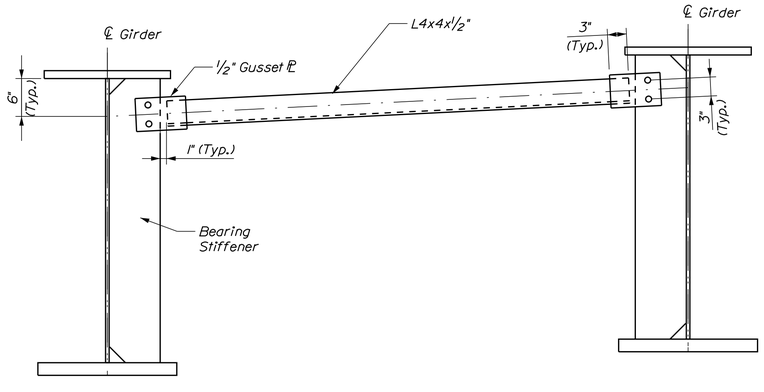


BEARING STIFFENER AT ABUTMENT
Not to Scale



ELEVATION

LEVELING PLATE DETAIL



TYPE U2 DIAPHRAGM

NOTES:

1. Terminate all welds 5/8" +/- 1/8" from plate edges. Side welds shall be 6" minimum.
2. Payment for fabrication and installation of the girder support assemblies at the abutments will be considered incidental to related Contract items.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	BY	P. DONOVAN
CHECKED-REVIEWED	CT AYERS	DATE	9/28/21
DESIGN2-DETAILED2		RS BLUNT	9/28/21
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

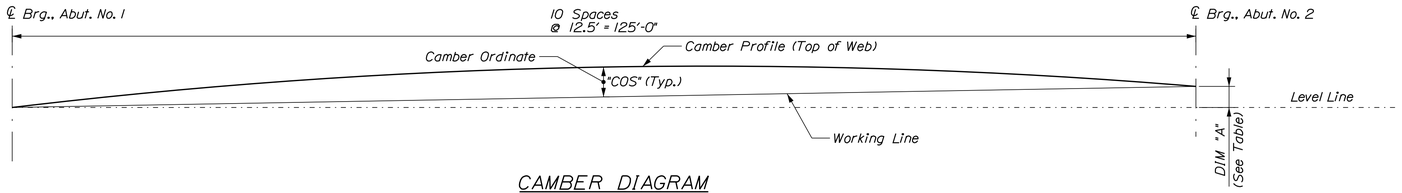
DATE

STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

STRUCTURAL STEEL DETAILS

SHEET NUMBER
181
OF 218

Date:11/18/2021
Division: BRIDGE
Filename: ...\BRIDGE\MSTA\181_Beam_Det.dgn



CAMBER DIAGRAM

STRUCTURAL STEEL NOTES

1. Camber ordinates, as shown, are computed to compensate for all dead load deflections and curvature of the finished grade profile.
2. No transverse butt weld splices will be allowed in the flange plates or web plates within 10 percent of the span length from the point of maximum positive moment. Butt weld splices in flanges shall be not less than 1 foot from transverse butt welds in the web plates and no transverse web or flange butt welds shall be located within 1 foot of other transverse welds (e.g. connection plates to web welds) on either flange or web.
3. Sections of flange plates or web plates between transverse shop splices or between a transverse shop splice and a field splice shall not be less than 10 feet in length unless otherwise shown on the plans.
4. Bearing stiffeners shall be plumb after erection and dead loading of the structure.
5. Crossframe or diaphragm connection plates may be either plumb or normal to the top flange and shall be $\frac{1}{2}$" thick.
6. All Diaphragm & Crossframe notes in Standard Detail 504(07) shall apply.
7. All web and bottom flange plates shall conform to Zone 2 Charpy V-Notch impact test requirements of AASHTO M270.
8. Install all crossframes with horizontal angle legs oriented upstation.
9. All bolts, nuts, and washers shall be hot dip galvanized in accordance with ASTM A153.
10. Structural steel, including the girders, stiffeners, and connection plates shall be coated in accordance with Standard Specification 506, Shop Applied Protective Coating - Steel (Thermal Spray Coating). At the Contractor's option, crossframes shall be coated in accordance with either Standard Specification Section 506, Shop Applied Protective Coating - Steel (Thermal Spray Coating) or Standard Specification Section 506, Shop Applied Protective Coating - Steel (Hot Dip Galvanizing). Payment for structural steel coatings will be made under Item No. 506.9105, Thermal Spray Coating - Shop Applied.
11. Structural steel was designed with a vertical construction load of 50 psf and a lateral wind velocity of 55 mph.
12. Bolted diaphragms or crossframe connections shall be made using $\frac{7}{8}$" dia., ASTM F3125, Grade A325 Type 1 H.S. bolts. Hole size shall be $\frac{15}{16}$" dia. The minimum edge distance shall be $1\frac{1}{2}$" U.N.O. Oversized or short-slotted holes are not permitted.
13. The table of deflections assumes that empty utilities are hung prior to deck placement, and that the fluid weight of utilities is applied only after the deck is fully cured. The Contractor shall adjust accordingly if these assumptions are incorrect at the time of deck placement.

TABLE OF CAMBER ORDINATES ("COS") (INCHES)

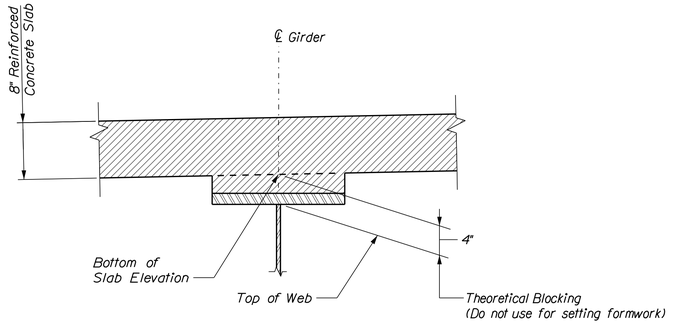
Girder	℄ Brg., Abut.No. 1 0.0'	12.5'	25.0'	37.5'	50.0'	62.5'	75.0'	87.5'	100.0'	112.5'	℄ Brg., Abut.No. 2 125.0'	DIM "A" (ft)
1	0.00	2.16	4.08	5.58	6.54	6.87	6.54	5.58	4.08	2.16	0.00	1.00
2	0.00	2.28	4.31	5.90	6.91	7.25	6.91	5.90	4.31	2.28	0.00	1.00
3	0.00	2.28	4.31	5.90	6.91	7.25	6.91	5.90	4.31	2.28	0.00	1.00
4	0.00	2.28	4.31	5.90	6.91	7.25	6.91	5.90	4.31	2.28	0.00	1.00
5	0.00	2.28	4.31	5.90	6.91	7.25	6.91	5.90	4.31	2.28	0.00	1.00
6	0.00	2.16	4.08	5.58	6.54	6.87	6.54	5.58	4.08	2.16	0.00	1.00

TABLE OF DEFLECTIONS (INCHES)

Girder	LOAD	℄ Brg., Abut.No. 1 0.0'	12.5'	25.0'	37.5'	50.0'	62.5'	75.0'	87.5'	100.0'	112.5'	℄ Brg., Abut.No. 2 125.0'
Exterior	Steel Dead Load	0.00	0.60	1.14	1.56	1.83	1.92	1.83	1.57	1.14	0.60	0.00
	Fluid Dead Load	0.00	1.03	1.94	2.66	3.12	3.27	3.12	2.66	1.94	1.03	0.00
	Superimposed Dead Load	0.00	0.52	0.99	1.36	1.59	1.67	1.59	1.36	0.99	0.52	0.00
	Total	0.00	2.16	4.08	5.58	6.54	6.87	6.54	5.58	4.08	2.16	0.00
Interior	Steel Dead Load	0.00	0.61	1.16	1.59	1.86	1.95	1.86	1.59	1.16	0.61	0.00
	Fluid Dead Load	0.00	1.16	2.20	3.01	3.52	3.70	3.52	3.01	2.20	1.16	0.00
	Superimposed Dead Load	0.00	0.50	0.95	1.31	1.53	1.61	1.53	1.31	0.95	0.50	0.00
	Total	0.00	2.28	4.31	5.90	6.91	7.25	6.91	5.90	4.31	2.28	0.00

BOTTOM OF SLAB ELEVATIONS (FEET)

Girder	℄ Brg., Abut.No. 1 0.0'	12.5'	25.0'	37.5'	50.0'	62.5'	75.0'	87.5'	100.0'	112.5'	℄ Brg., Abut.No. 2 125.0'
1	106.60	106.83	107.04	107.23	107.39	107.51	107.59	107.63	107.64	107.62	107.59
2	106.72	106.96	107.19	107.38	107.54	107.66	107.74	107.78	107.78	107.76	107.72
3	106.85	107.09	107.31	107.51	107.67	107.79	107.87	107.91	107.91	107.88	107.84
4	106.94	107.18	107.40	107.60	107.76	107.88	107.96	108.00	108.00	107.98	107.94
5	106.76	107.00	107.22	107.42	107.58	107.70	107.78	107.81	107.82	107.79	107.75
6	106.58	106.80	107.02	107.21	107.37	107.49	107.57	107.61	107.62	107.60	107.57



BLOCKING DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

	BY	DATE
PROJ. MANAGER MICHAEL WIGHT		
DESIGN-DETAILED TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

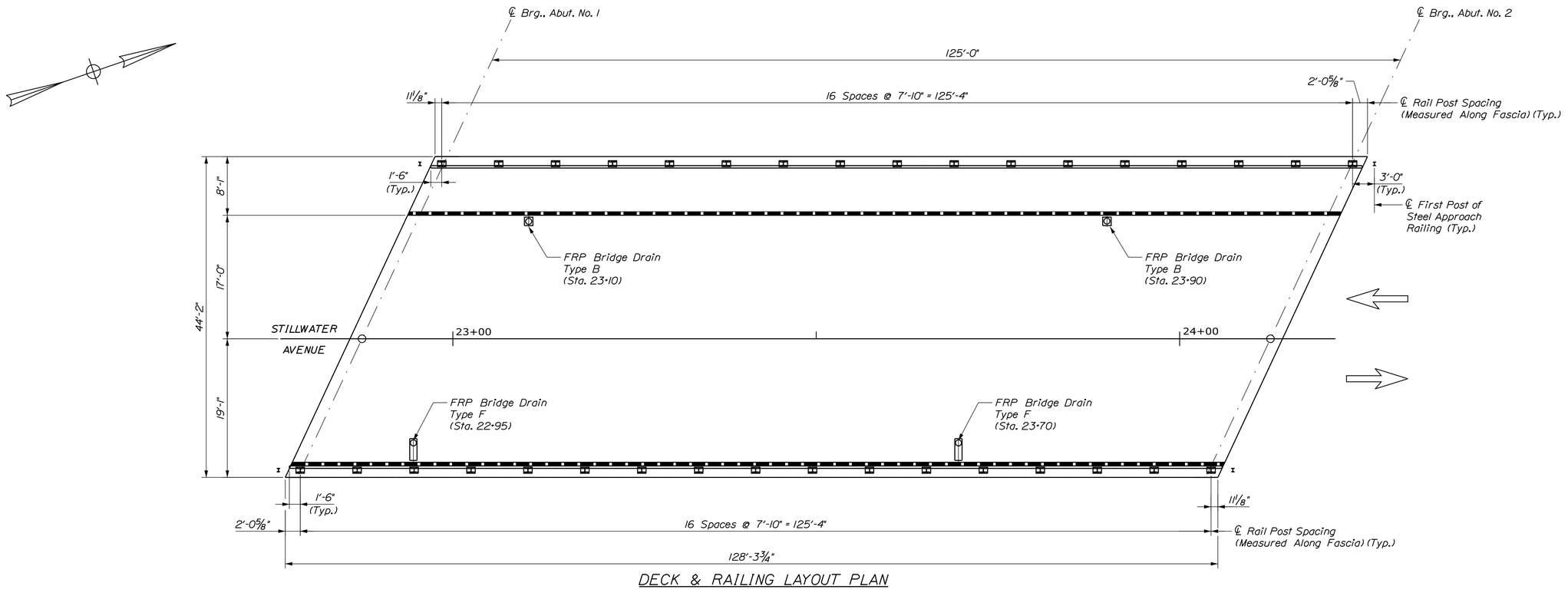
DATE

STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

STRUCTURAL STEEL NOTES, CAMBER DIAGRAM, AND TABLES

SHEET NUMBER
182
OF 218

Date:11/18/2021
Filename: ...\BRIDGE\MSTA\182_Camber_01.dgn Division: BRIDGE



DECK & RAILING LAYOUT PLAN

Date:11/18/2021

Division: BRIDGE

Filename: ...\MSTA\183_Brg1_Railing_1.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472
BRIDGE NO. 2806

WIN 022512.01
WIN 022511.01

BRIDGE PLANS

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	BY	P DONOVAN
CHECKED-REVIEWED	CT AYERS	DATE	9/28/21
DESIGN2-DETAILED2		BY	RS BLUNT
DESIGN3-DETAILED3		DATE	9/28/21
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

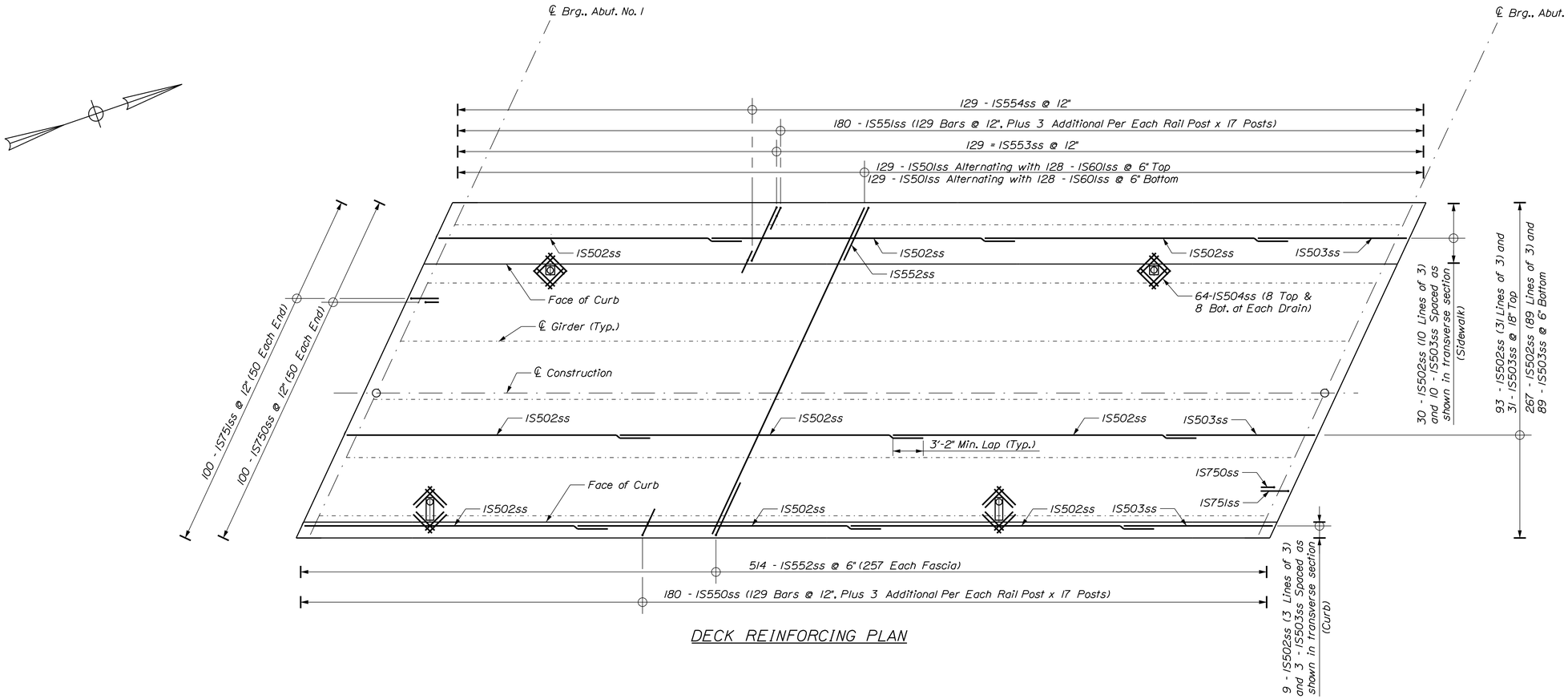
STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

DECK AND RAILING LAYOUT PLAN

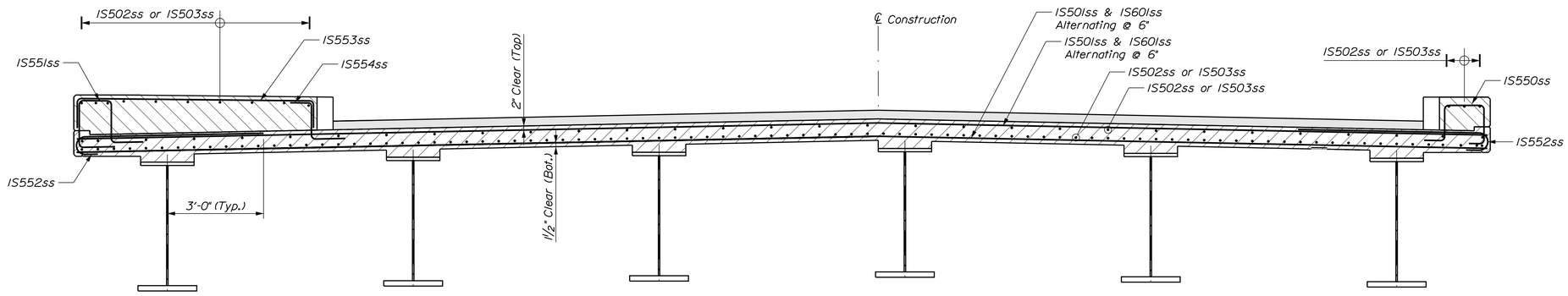
SHEET NUMBER

183

OF 218



DECK REINFORCING PLAN



TRANSVERSE REINFORCING SECTION

NOTES:

1. All reinforcing steel in the deck shall be stainless steel unless noted otherwise.
2. Alternate IS503ss Bars at opposite end of deck.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	BY	P DONOVAN
CHECKED-REVIEWED	CT AYERS	BY	RS BLUNT
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

DATE 9/28/21
DATE 9/28/21

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

DECK REINFORCEMENT PLAN AND SECTION

SHEET NUMBER
184
OF 218

Date:11/18/2021
Division: BRIDGE
Filename: ...\BRIDGE\MSTA\184_Deck_Ref1.dgn

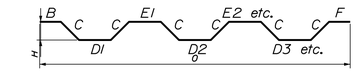
STRAIGHT BARS

MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION
1A606	20	35'-6"	Abutment 1				
1A607	2	19'-1"					
1A608	2	35'-3"					
1A609	4	32'-11"					
1A610	4	11'-0"					
1A611	9	10'-3"					
1A612	5	18'-9"					
1A613ss	8	9'-4"					
1A614	4	35'-9"					
1A615	2	6'-3"					
1A706	127	9'-9"					
1A707	4	10'-6"					
1A708	4	10'-4"					
1A806	24	5'-1"					
1A906	48	36'-6"					
1A907	14	21'-11"					
1A908	2	9'-5"					
1B606	20	35'-6"	Abutment 2				
1B607	2	19'-1"					
1B608	2	34'-1"					
1B609	4	33'-7"					
1B610	4	11'-0"					
1B611	9	10'-3"					
1B612	5	18'-9"					
1B613ss	8	9'-9"					
1B614	4	35'-9"					
1B615	2	6'-3"					
1B706	127	9'-9"					
1B707	4	9'-11"					
1B708	4	10'-11"					
1B806	24	5'-1"					
1B906	48	36'-6"					
1B907	14	21'-11"					
1B908	2	9'-5"					
1S501ss	258	48'-2"	Deck Slab/Curb				
1S502ss	399	40'-0"					
1S503ss	133	17'-2"					
1S504ss	64	3'-0"					
1S505ss	28	6'-3"					
1S506ss	14	4'-11"					
1S507ss	14	5'-8"					
1S601ss	256	48'-2"					
1S602ss	26	3'-0"					
1AS506	32	35'-3"	Approach Slab				
1AS606	130	15'-0"					

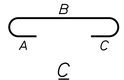
BENT BARS

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
1A566	24	4'-6"	S	0'-0"	1'-0"	2'-6"	1'-0"			0'-0"				Abutment 1
1A567ss	20	4'-8"	S	0'-0"	1'-0"	2'-8"	1'-0"			0'-0"				
1A650	17	9'-9"	C	0'-8"	9'-1"	0'-0"								
1A656	16	5'-10"	SJ	1'-6"	2'-10"	1'-6"	0'-0"	0'-0"						
1A657ss	1	8'-10"	G	3'-7 1/2"	0'-0"	2'-9"	2'-5 1/2"	1'-2"	2'-6"					
1A658ss	1	8'-11"	G	3'-8"	0'-0"	2'-9"	2'-6"	1'-2"	2'-6"					
1A659ss	1	10'-4"	V				2'-0"	8'-4"			3'-4"			
1A660ss	1	9'-11"	V				1'-7"	8'-4"			3'-4"			
1A661ss	1	9'-6"	V				1'-2"	8'-4"			3'-4"			
1A662ss	1	9'-1"	V				0'-9"	8'-4"			3'-4"			
1A663ss	1	10'-7"	V				2'-0"	8'-7"			3'-10"			
1A664ss	1	10'-2"	V				1'-7"	8'-7"			3'-10"			
1A665ss	1	9'-9"	V				1'-2"	8'-7"			3'-10"			
1A666ss	1	9'-4"	V				0'-9"	8'-7"			3'-10"			
1A667	38	7'-9"	G	3'-2"	3'-2"	0'-8"	0'-9"	0'-6"	0'-6"					
1A668	38	3'-0"	V				1'-6"	1'-6"			1'-1"			
1A750	10	5'-6"	C	0'-10"	4'-8"	0'-0"								
1A756	137	12'-0"	S	0'-0"	4'-8"	2'-8"	4'-8"			0'-0"				
1B566	24	4'-6"	S	0'-0"	1'-0"	2'-6"	1'-0"			0'-0"				Abutment 2
1B567ss	20	4'-8"	S	0'-0"	1'-0"	2'-8"	1'-0"			0'-0"				
1B650	17	9'-9"	C	0'-8"	9'-1"	0'-0"								
1B656	16	5'-10"	SJ	1'-6"	2'-10"	1'-6"	0'-0"	0'-0"						
1B657ss	1	8'-2"	G	3'-3 1/2"	0'-0"	2'-9"	2'-1 1/2"	1'-2"	2'-6"					
1B658ss	1	9'-6"	G	3'-11 1/2"	0'-0"	2'-9"	2'-9 1/2"	1'-2"	2'-6"					
1B659ss	1	10'-7"	V				2'-0"	8'-7"			3'-11"			
1B660ss	1	10'-2"	V				1'-7"	8'-7"			3'-11"			
1B661ss	1	9'-9"	V				1'-2"	8'-7"			3'-11"			
1B662ss	1	9'-4"	V				0'-9"	8'-7"			3'-11"			
1B663ss	1	10'-3"	V				2'-0"	8'-3"			3'-2"			
1B664ss	1	9'-10"	V				1'-7"	8'-3"			3'-2"			
1B665ss	1	9'-5"	V				1'-2"	8'-3"			3'-2"			
1B666ss	1	9'-0"	V				0'-9"	8'-3"			3'-2"			
1B667	38	7'-9 1/2"	G	3'-2"	3'-2 1/2"	0'-8"	0'-9"	0'-6"	0'-6"					
1B668	38	3'-0"	V				1'-6"	1'-6"			1'-1"			
1B750	10	5'-6"	C	0'-10"	4'-8"	0'-0"								
1B756	137	12'-0"	S	0'-0"	4'-8"	2'-8"	4'-8"			0'-0"				
1S550ss	180	5'-8"	S	0'-10"	1'-4"	1'-4"	1'-4"			0'-10"				Deck Slab/Curb
1S551ss	180	6'-0"	S	0'-10"	1'-6"	1'-4"	1'-6"			0'-10"				
1S552ss	514	6'-8"	C	0'-7"	6'-1"	0'-0"								
1S553ss	129	9'-8"	S	0'-0"	0'-10"	8'-0"	0'-10"			0'-0"				
1S554ss	129	3'-3"	S	0'-0"	0'-0"	1'-0"	1'-3"			1'-0"				
1S555ss	14	2'-8"	S	0'-0"	1'-0"	0'-8"	1'-0"							
1S556ss	14	2'-10"	S	0'-0"	1'-0"	0'-10"	1'-0"							
1S750ss	100	4'-0"	L	2'-0"	2'-0"									
1S751ss	100	8'-2"	L	4'-1"	4'-1"									

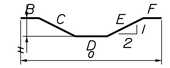
TYPE - BENDING DIAGRAMS



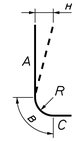
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C



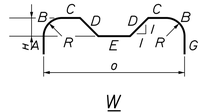
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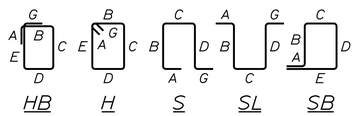
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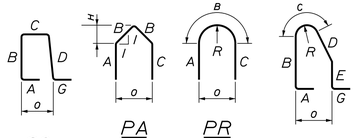


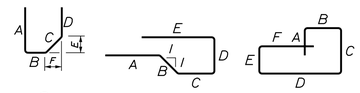
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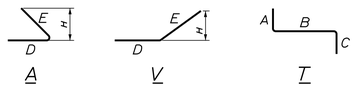


W









All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing Bar: ASTM A 615/A 615M, Grade 60
ASTM A 955, Grade 75

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size of the bar:

   Mark "A502" = bar size #5
   Mark "P805" = bar size #8
   Mark "S650" = bar size #6

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case will be based on crank bars as scheduled on the plans.

3. Bar Marks ending in a letter indicate the following:

   ss = Stainless Steel
   G = GFRP

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

WIN 022512.01
WIN 022511.01

BRIDGE NO. 1472
BRIDGE NO. 2806

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	BY	DATE
CHECKED-REVIEWED	CT AYERS	P DONOVAN	9/28/21
DESIGN2-DETAILED2		RS BLUNT	9/28/21
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 1
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

REINFORCING SCHEDULE

SHEET NUMBER

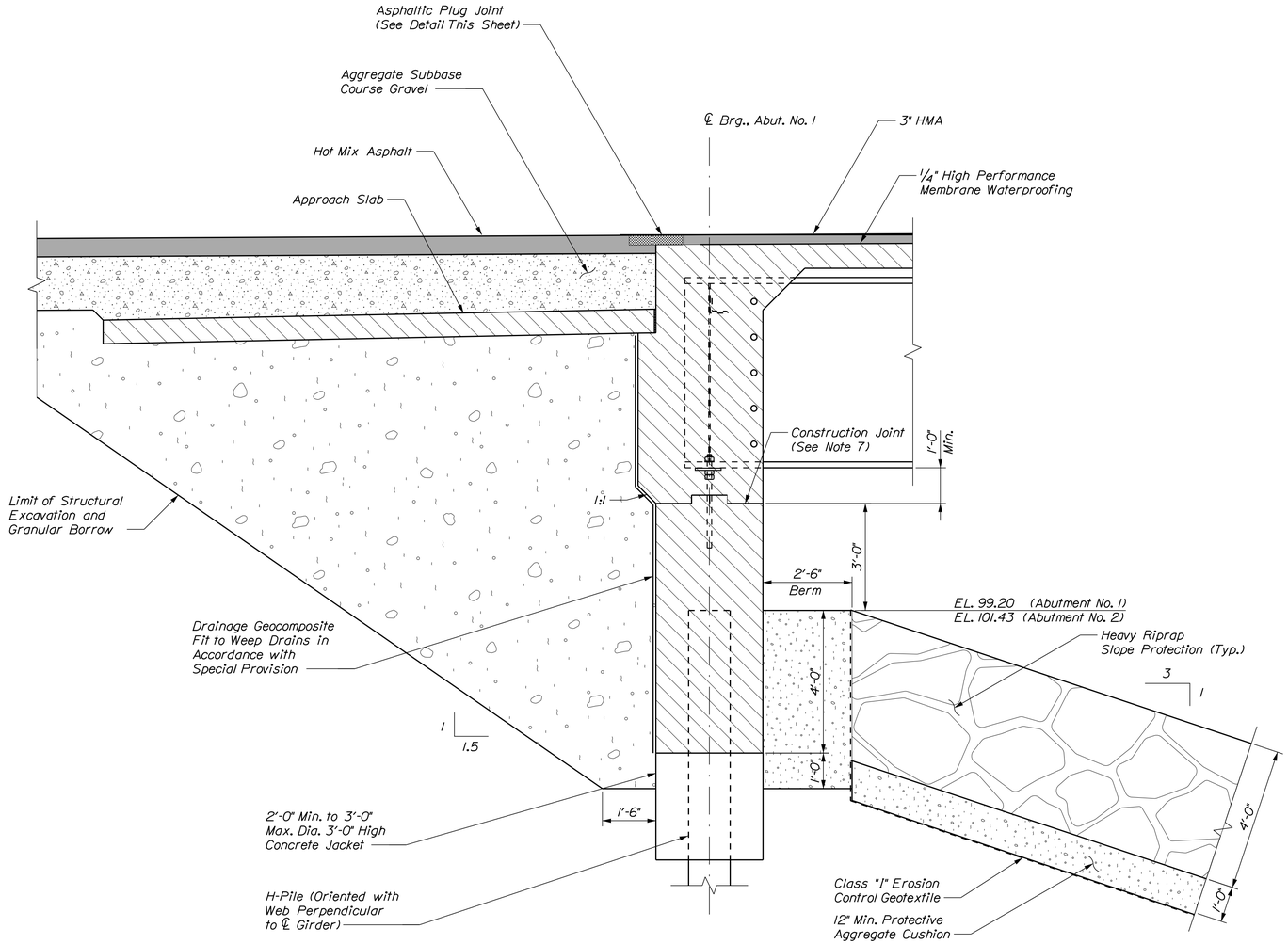
185

OF 218

Date: 11/18/2021

Division: BRIDGE

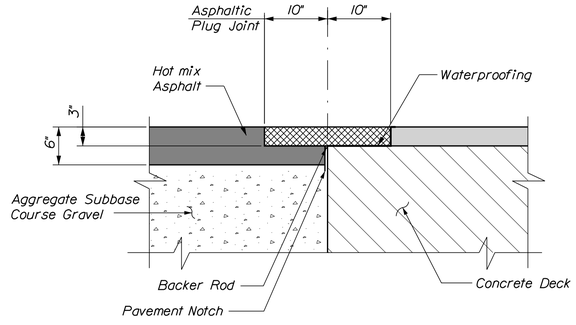
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BRIDGE NO. 2
TYPICAL ABUTMENT SECTION

ABUTMENT NOTES:

1. Reinforcing steel shall have a minimum concrete cover of 2 inches and 3 inches on the bottom unless otherwise noted.
2. Place 4-in. diameter weep drains in the breastwall and wingwalls at 10 ft maximum spacing. The exact location will be determined by the Resident.
3. Cover joints where waterstops are not required in accordance with Standard Details Section 502.
4. Payment for concrete jacket around the tops of the H-Piles will not be paid for directly, but shall be incidental to Item 502.219, Structural Concrete, Abutment and Retaining walls. Fill Concrete may be used for the concrete jackets.
5. Omit V-groove at exposed face of horizontal construction joint at bridge seat.
6. Install Drainage Geocomposite behind the abutments and wingwalls up to the approach slab seat elevation in accordance with Special Provision Section 620, Drainage Geocomposite.
7. Concrete above the construction joint shall be paid as Structural Concrete Roadway and Sidewalk Slab on Steel Bridges. Concrete below the construction joint shall be paid as Structural Concrete, Abutments and Retaining Walls unless otherwise noted.
8. The asphaltic plug joint shall not use a bridging plate.
9. Bedrock encountered within 1'-0" of the bottom of abutment shall be removed.



ASPHALTIC PLUG JOINT DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	MICHAEL WIGHT	
DESIGN-DETAILED	TJ COOK	9/28/21
CHECKED-REVIEWED	CT AYERS	9/28/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

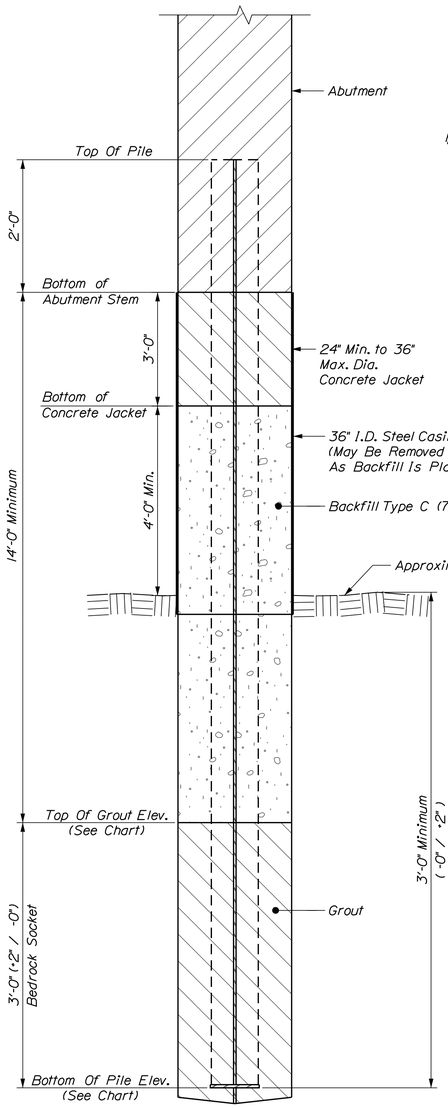
DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

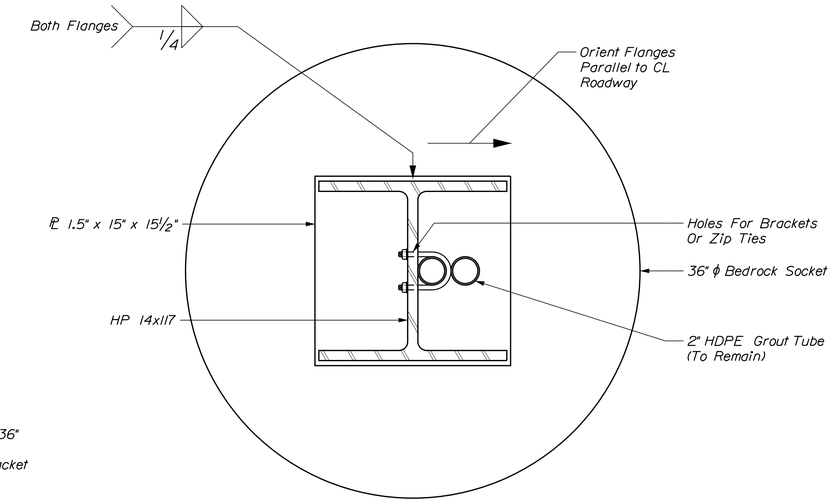
ABUTMENT TYPICAL SECTION AND NOTES

SHEET NUMBER
186
OF 218

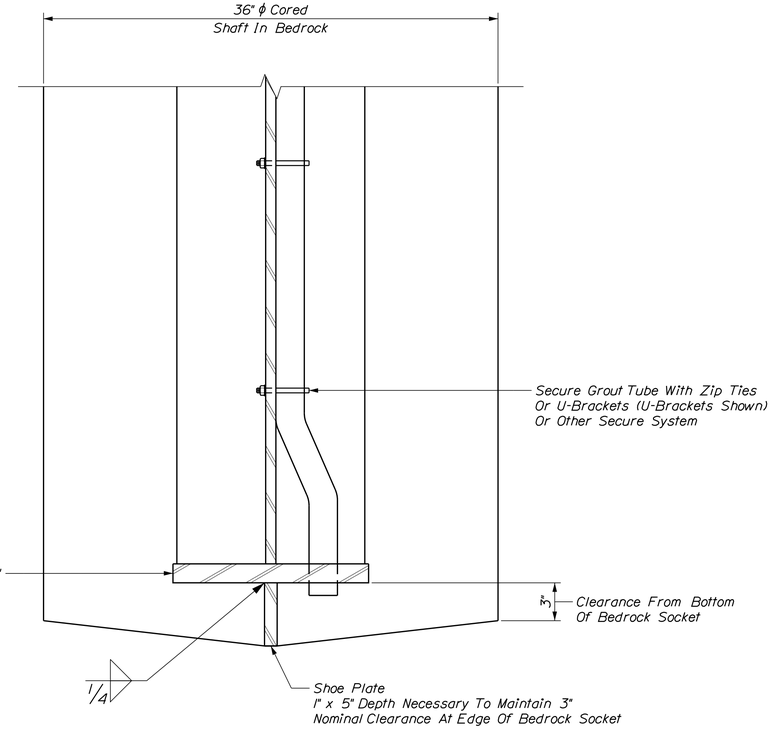
Date:11/18/2021
Division: BRIDGE
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ROCK SOCKETED PILE DETAIL



ROCK SOCKETED PILE BASE DETAIL



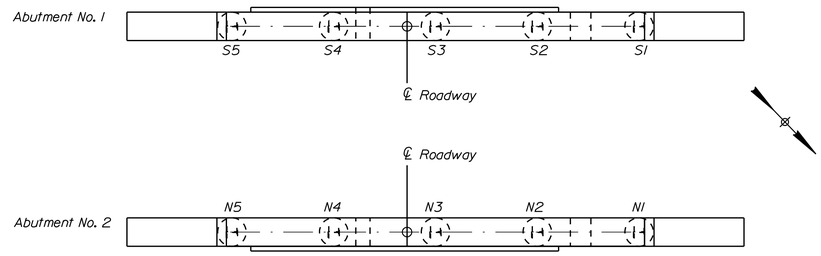
ROCK SOCKETED PIPE PILE

PILE NOTES

1. The maximum factored pile load is 427 kips at the Strength Limit State.
2. H-pile material shall be ASTM A572, Grade 50.
3. Estimate of piles required:

   Abutment No. 1: 5 ~ HP14x117, See chart below for pile length estimates
   Abutment No. 2: 5 ~ HP14x117, See chart below for pile length estimates

4. Piles shall be oriented as shown with the pile webs perpendicular to girder centerline. The orientation shall be within 10 degrees of the requirement.



PILE INDEX PLAN
See Abutment Sheets For Pile Layout

BRIDGE NO. 2						
Pile	BOTTOM OF ABUTMENT STEM ELEVATION	APPROX. TOP OF BEDROCK ELEVATION	ESTIMATED TOP OF GROUT ELEVATION	ESTIMATED BOTTOM OF PILE ELEVATION	APPROX. CORE LENGTH (FT.)	APPROX. PILE LENGTH (FT.)
S1	95.20	84.4	81.20	78.20	6.5	19
S2	95.20	83.1	81.20	78.20	5.2	19
S3	95.20	85.2	81.20	78.20	7.3	19
S4	95.20	90.2	81.20	78.20	12.3	19
S5	95.20	86.7	81.20	78.20	8.8	19
N1	97.43	87.8	83.43	80.43	7.7	19
N2	97.43	89.1	83.43	80.43	9.0	19
N3	97.43	90.6	83.43	80.43	10.5	19
N4	97.43	89.8	83.43	80.43	9.7	19
N5	97.43	83.9	82.90	79.90	4.0	20

PILE TABLE NOTES:

1. These approximate bedrock elevations have been estimated using interpretations shown on the Interpretive Subsurface Cross Sections, Sheets 164 and 165.
2. Top of rock elevations are provided to the nearest 0.1' for length calculation purposes, but they have been estimated using widely spaced explorations, and actual elevations will vary.
3. Estimated top of grout elevation is 12' below bottom of abutment stem elevation unless approximate top of bedrock is more than 11' below bottom of abutment stem, in which case estimated top of grout is 1' below approximate top of rock. This provides a minimum rock socket depth of 4' with 3' grouted embedment.
4. Top of Rock is defined as penetration of the full diameter of the rock excavation equipment beneath the bedrock surface, as determined by the Resident.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	M JOHNESCU	P DONOVAN	9/28/21
CHECKED-REVIEWED	AR BLASDELL	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

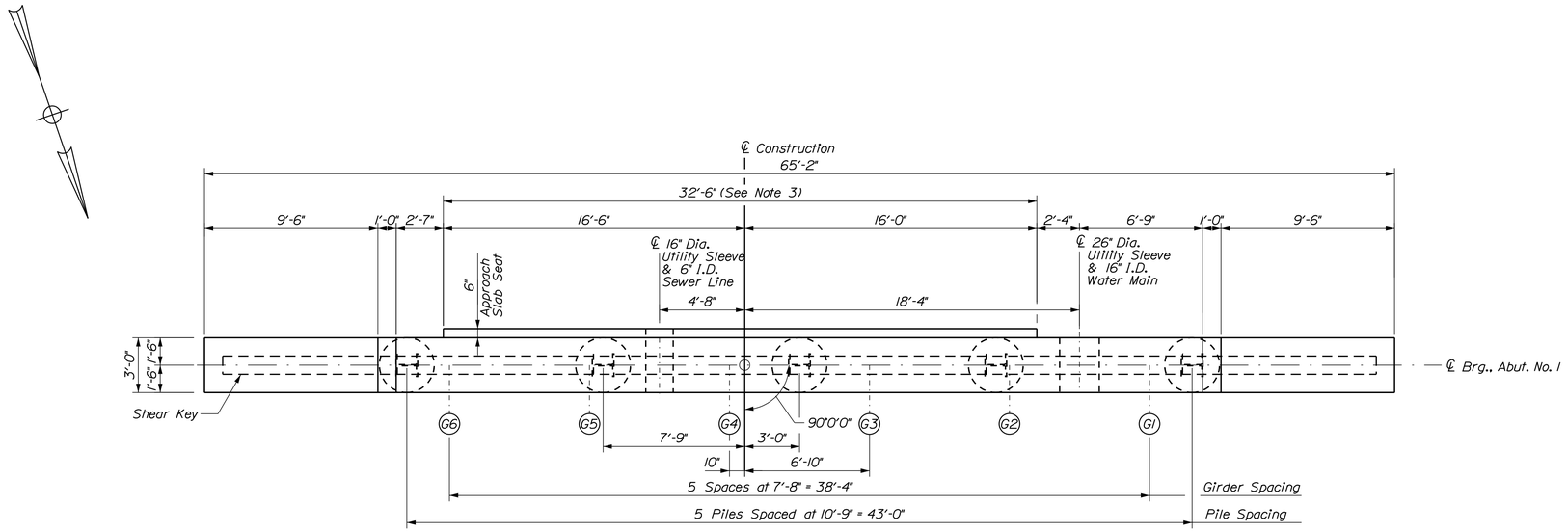
SIGNATURE
P.E. NUMBER
DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

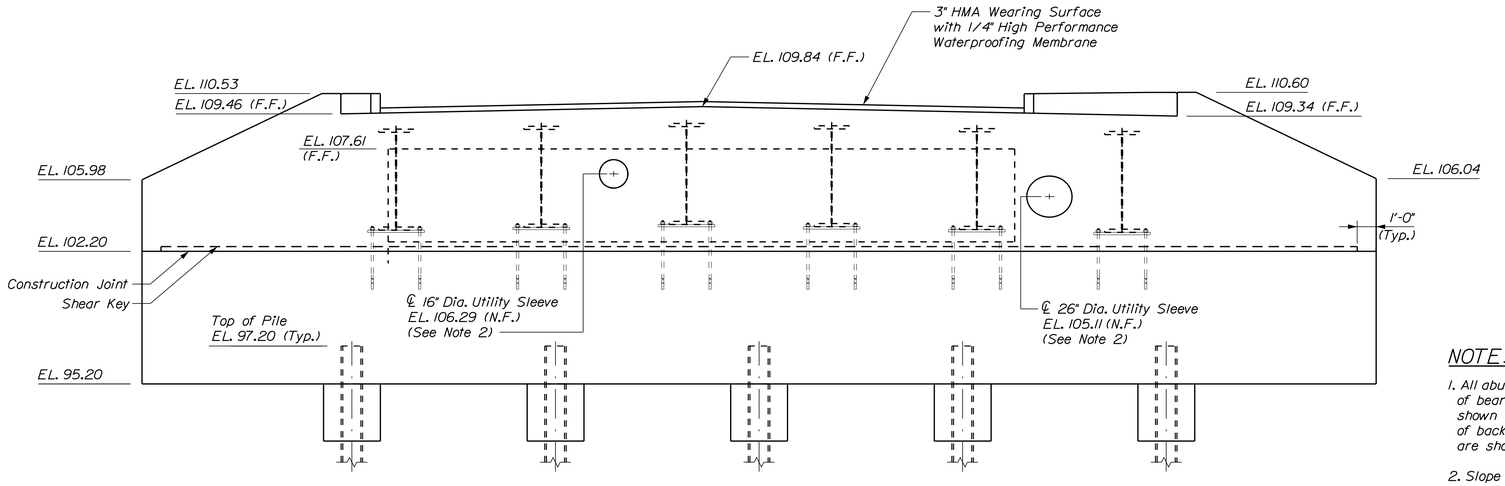
PILE DETAILS

SHEET NUMBER
187
OF 218

Date:11/18/2021
Division: BRIDGE
Filename: ...\MSTA\187_Pile_Details.dgn



PLAN
Scale: 1/4" = 1'-0"



ELEVATION
Scale: 1/4" = 1'-0"

BOTTOM OF GIRDER ELEVATION @ ℄ BEARING						
Girder	G1	G2	G3	G4	G5	G6
Elevation	103.20	103.35	103.50	103.62	103.47	103.32

NOTES:

1. All abutment elevations are shown at center line of bearing except the utility sleeve, which is shown at the near face of abutment, and the top of backwall and the approach slab seat, which are shown at the far face of abutment.
2. Slope of utility sleeve to match roadway grade. See utility plans for utility sleeve and abutment penetration details.
3. The approach slab width has been modified from Standard Detail 502(02) to be 1'-0" from the sidewalk curb instead of 6".

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

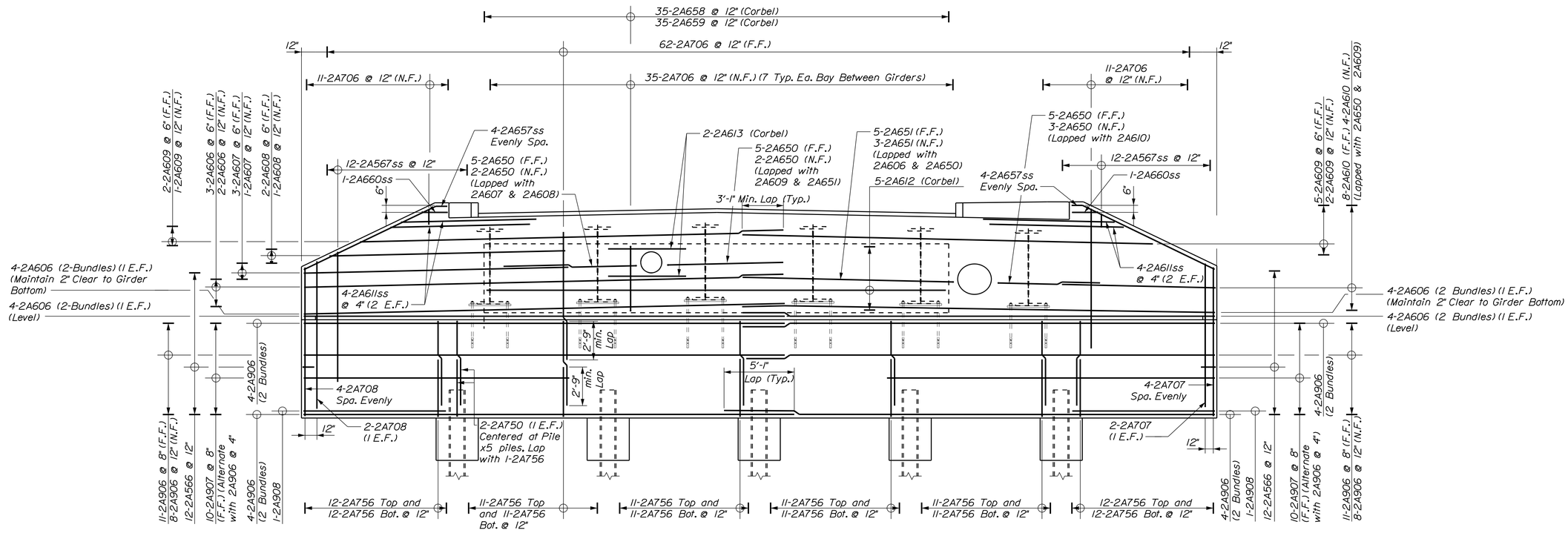
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STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

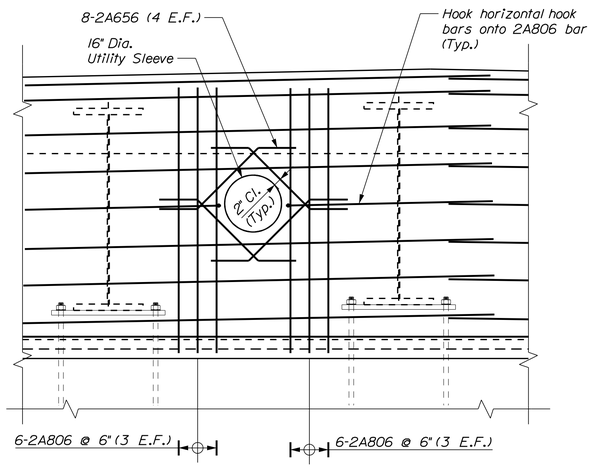
ABUTMENT 1
PLAN AND ELEVATION

SHEET NUMBER
188
OF 218

Date:11/18/2021
Division: BRIDGE
Filename: ...\MSTA\188_Brg2-Abut_01.dgn

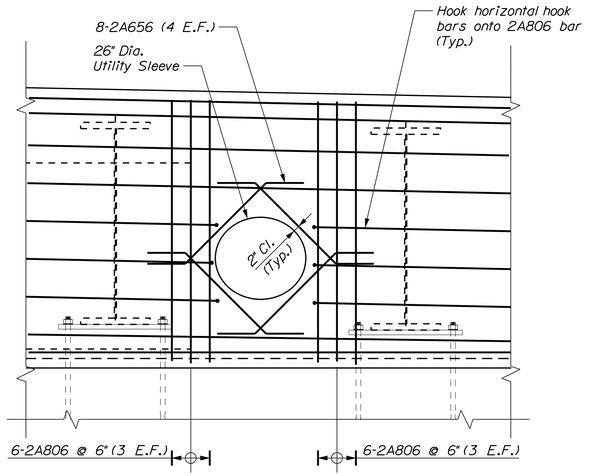


ELEVATION



SEWER MAIN BLOCKOUT REINFORCING DETAIL

(N.F. Shown, F.F. Similar)



WATER MAIN BLOCKOUT REINFORCING DETAIL

(N.F. Shown, F.F. Similar)

NOTES:

1. Field trim 2A706, 2A612, 2S750ss, and 2S751ss bars to fit around the utility sleeves.
2. The bar mark initial number designates bridge number for bar location. Example: 1A806 is a bridge 1 abutment bar.

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

ABUTMENT 1 REINFORCING ELEVATION

SHEET NUMBER

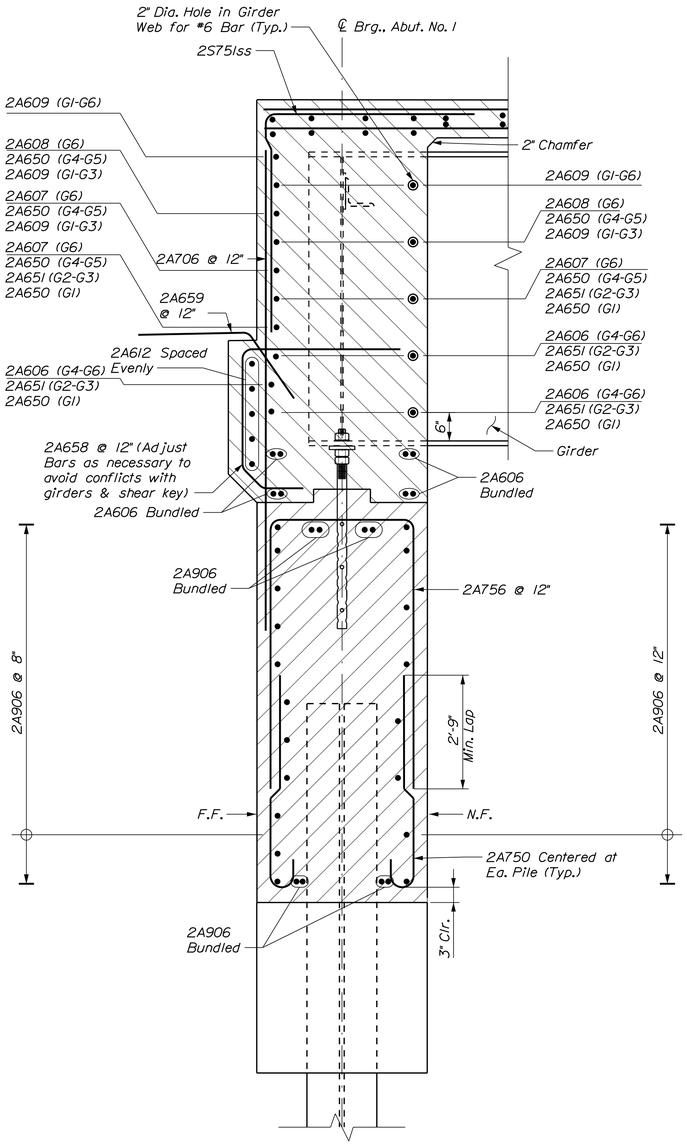
189

OF 218

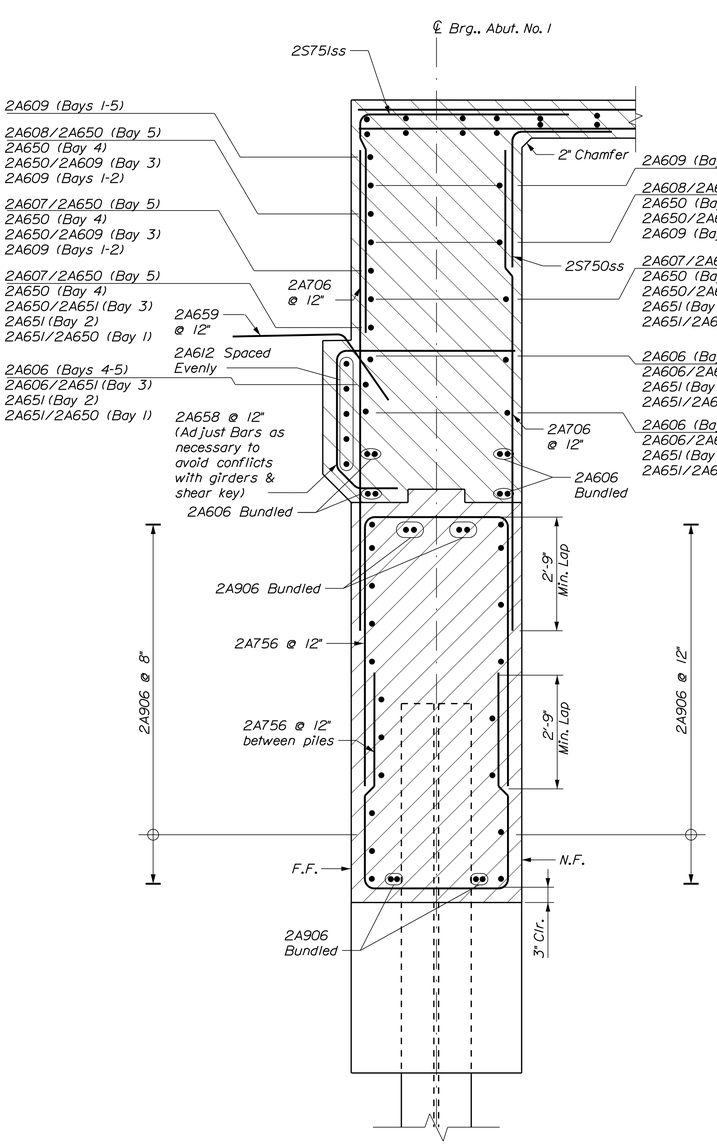
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Division: BRIDGE

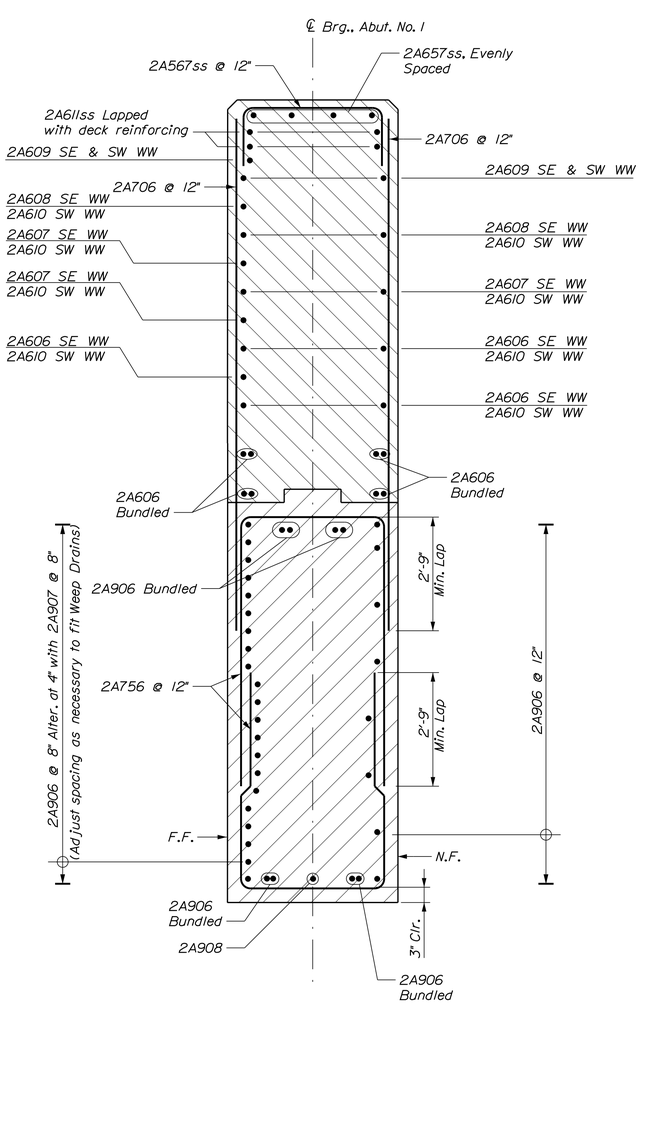
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TYPICAL ABUTMENT SECTION AT GIRDER/PILE



TYPICAL ABUTMENT SECTION BETWEEN GIRDERS/PILES



TYPICAL WINGWALL SECTION

NOTES:

1. Bar marks that begin with 'A' are at Abutment 1. Bar marks that begin with 'B' are at Abutment 2.

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	MICHAEL WIGHT	
DESIGN-DETAILED	TJ COOK	9/28/21
CHECKED-REVIEWED	CT AYERS	9/28/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

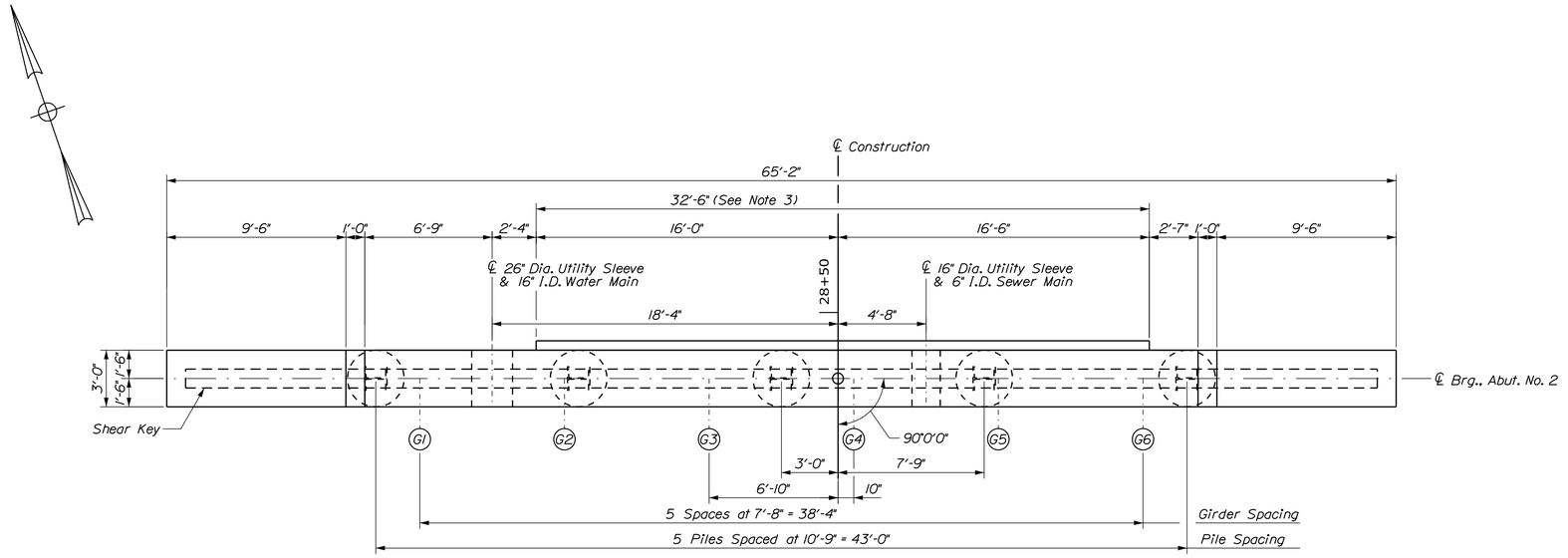
DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

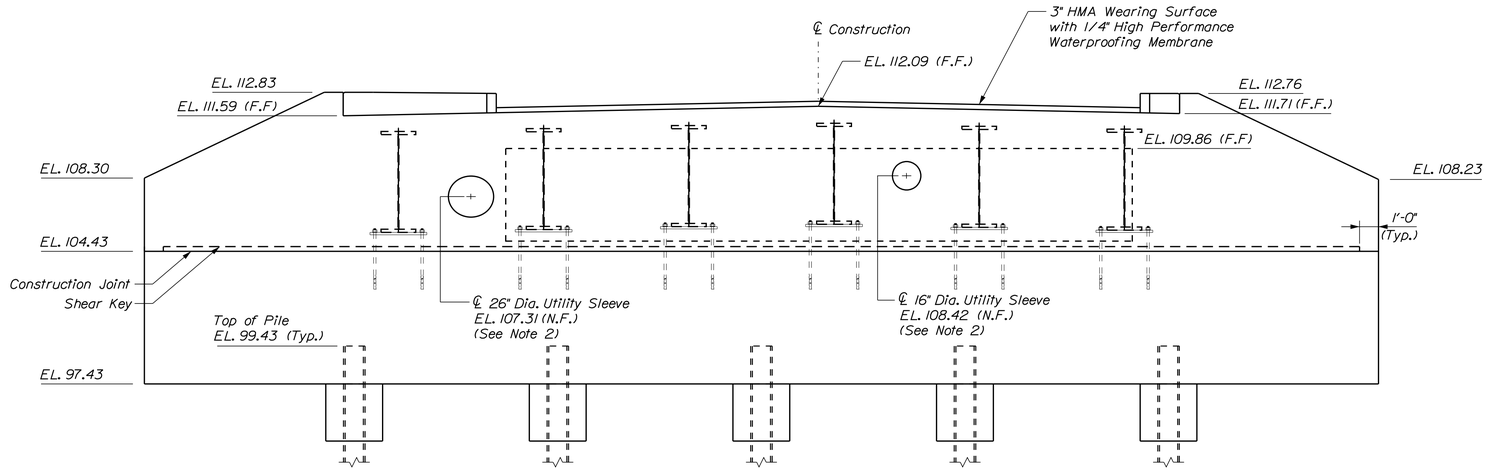
ABUTMENT 1
REINFORCING SECTIONS

SHEET NUMBER
190
OF 218

Date:11/18/2021
Filename: ...\MSTA\190_Brg2-Abut_01_Sec.dgn Division: BRIDGE



PLAN
Scale: 1/4" = 1'-0"



ELEVATION
Scale: 1/4" = 1'-0"

BOTTOM OF GIRDER ELEVATION @ ℄ BEARING						
Girder	G1	G2	G3	G4	G5	G6
Elevation	105.43	105.58	105.74	105.86	105.70	105.55

NOTES:

1. All abutment elevations are shown at center line of bearing except the utility sleeve, which is shown at the near face of abutment, and the top of backwall and the approach slab seat, which are shown at the far face of abutment.
2. Slope of utility sleeve to match roadway grade. See utility plans for utility sleeve and abutment penetration details.
3. The approach slab width has been modified from Standard Detail 502(02) to be 1'-0" from the sidewalk curb instead of 6".

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	BY	P DONOVAN
CHECKED-REVIEWED	CT AYERS	BY	RS BLUNT
DESIGN2-DETAILED2		BY	
DESIGN3-DETAILED3		BY	
REVISIONS 1		BY	
REVISIONS 2		BY	
REVISIONS 3		BY	
REVISIONS 4		BY	
FIELD CHANGES		DATE	9/28/21
		DATE	9/28/21

SIGNATURE

P.E. NUMBER

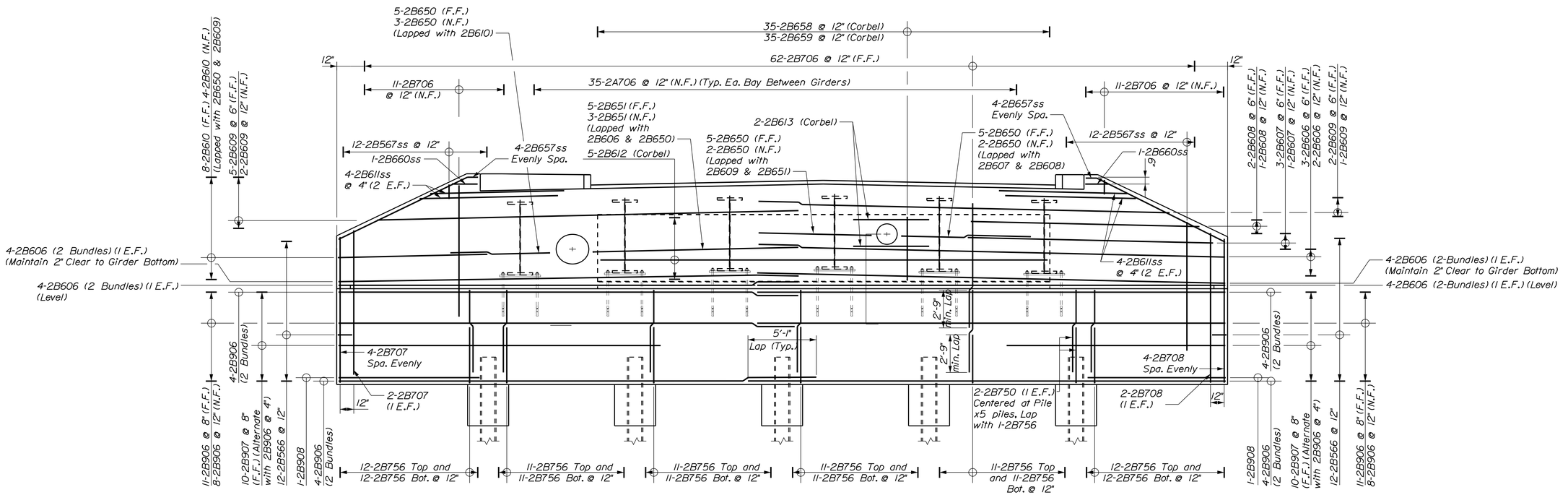
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STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

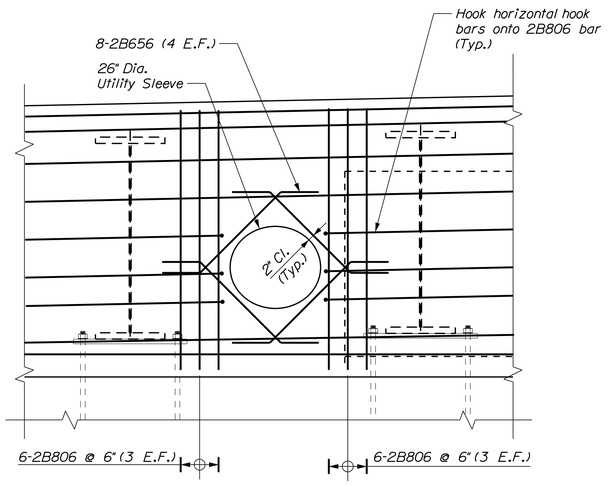
ABUTMENT 2
PLAN AND ELEVATION

SHEET NUMBER
191
OF 218

Date:11/18/2021
Division: BRIDGE
Filename: ...\MSTA\191_Brg2-Abut_02.dgn

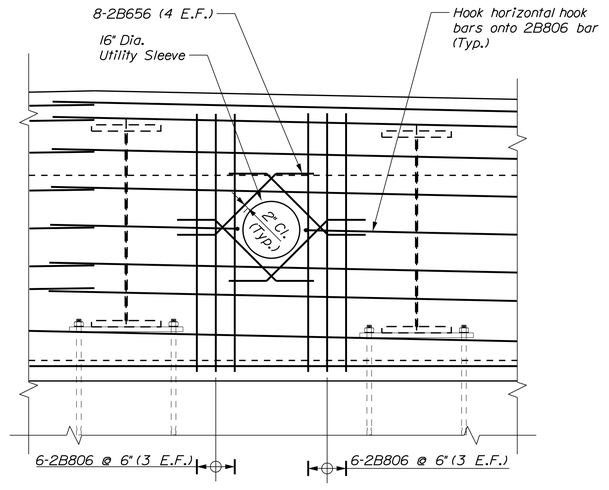


ELEVATION



WATER MAIN BLOCKOUT
REINFORCING DETAIL

(N.F. Shown, F.F. Similar Plus added Reinforcement in the Wingwall)



SEWER MAIN BLOCKOUT
REINFORCING DETAIL

(N.F. Shown, F.F Similar)

NOTES:

1. Field trim 2B706, 2B612, 2S750ss, and 2S751ss bars to fit around the utility sleeves.
2. The bar mark initial number designates bridge number for bar location. Example: 1A806 is a bridge 1 abutment bar.

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472
BRIDGE NO. 2806

WIN 022512.01
WIN 022511.01

BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

ABUTMENT 2 REINFORCING ELEVATION

SHEET NUMBER

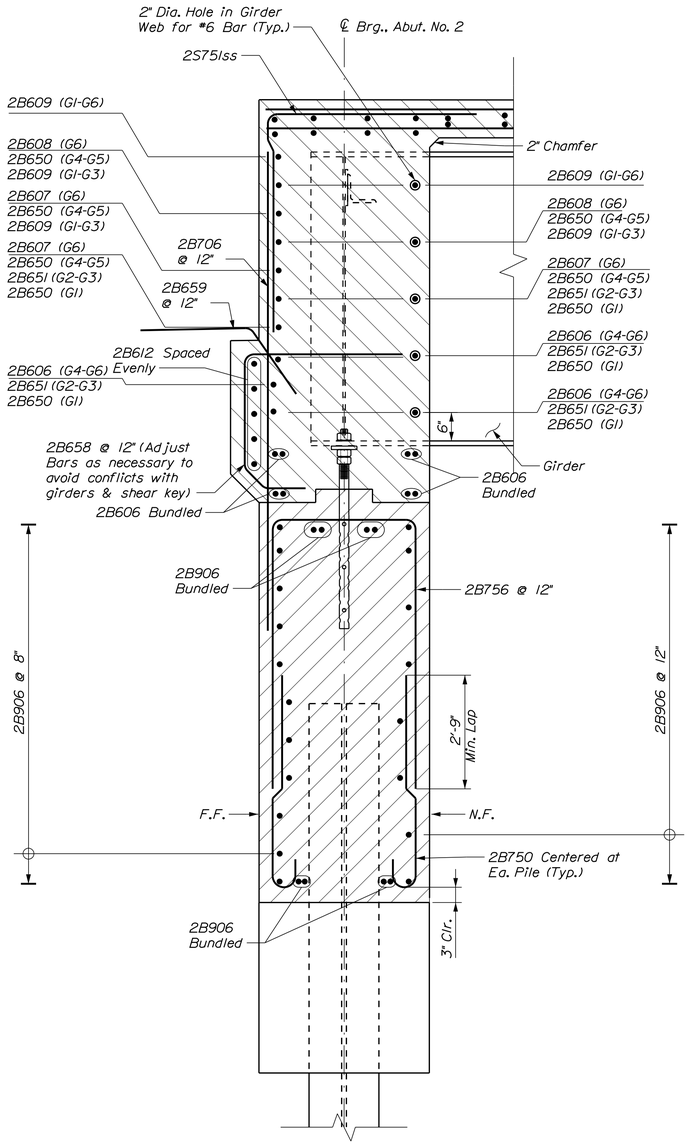
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OF 218

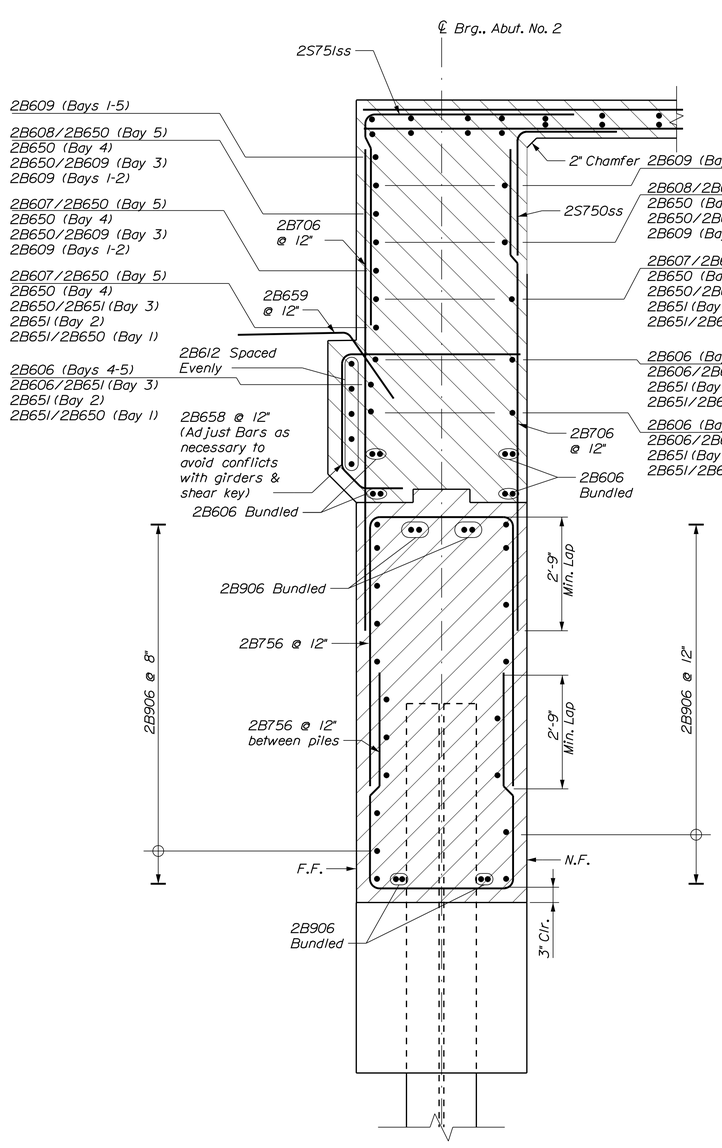
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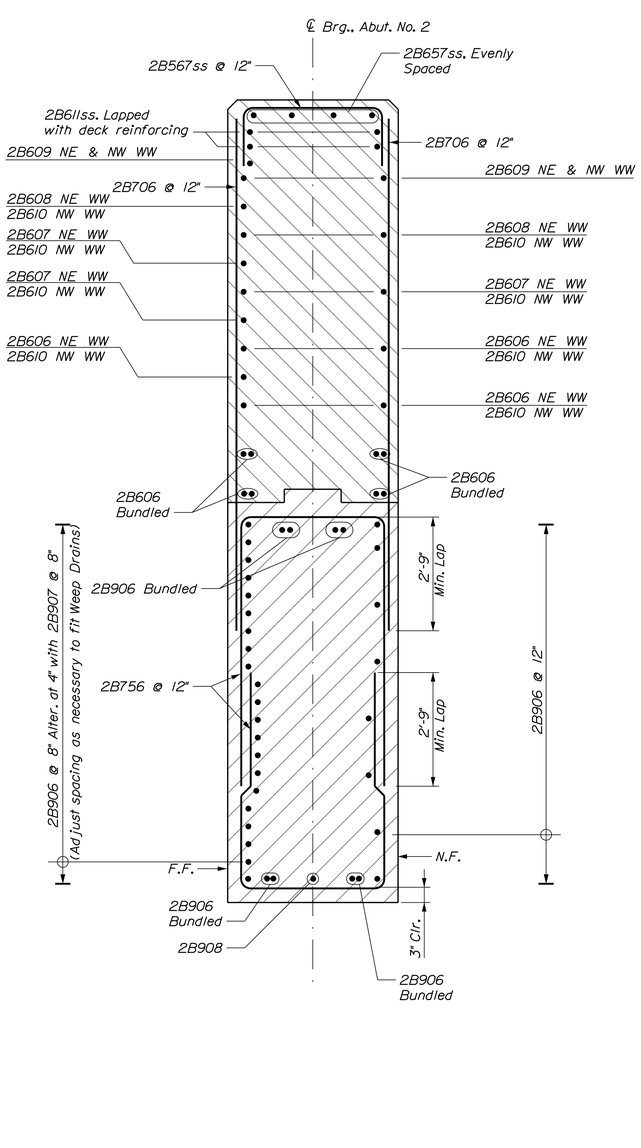
Date:11/18/2021
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TYPICAL ABUTMENT SECTION AT GIRDER/PILE



TYPICAL ABUTMENT SECTION BETWEEN GIRDERS/PILES



TYPICAL WINGWALL SECTION

NOTES:

1. Bar marks that begin with 'A' are at Abutment 1. Bar marks that begin with 'B' are at Abutment 2.

KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

	BY	DATE
PROJ. MANAGER MICHAEL WIGHT		
DESIGN-DETAILED TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

ABUTMENT 2 REINFORCING SECTIONS

SHEET NUMBER
193
OF 218

PIER DESIGN CRITERIA:

1. Controlling AASHTO Load Combination - Strength.
2. Buoyancy: Water level assumed at EL. 98.6 (Q50).
3. Stream flow: Velocity of 16.2 fps skewed at 15° to longitudinal centerline of pier.
4. Wind: 115 mph or 31 psf.
5. Ice: Thickness 1.5 feet, pressure is 30 ksf at EL. 93.7 and 14 ksf at 98.7, 30% of the nose force applied transverse to pier.

PIER NOTES:

1. The maximum factored applied footing pressure is 28.0 ksf at the Strength I Limit State. The maximum factored applied seal concrete subfooting pressure is 17.8 ksf at the Strength I Limit State.
2. Reinforcing steel shall have a minimum concrete cover of 3 inches unless otherwise noted.
3. Pier nose armor angle protection shall be extended from the top of the footing to bottom of pier cap.
4. Nose armor angle, including anchor studs, shall be cleaned and galvanized in accordance with Section 506 of the Standard Specifications. Payment for furnishing and placing Nose Armor angle shall be incidental to Pay Item 502.239 - Structural Concrete Piers.
5. At the option of the Resident, bedrock which protrudes above a horizontal plane 12 inches below the proposed bottom of footing elevation may be removed. Payment for bedrock removal shall be made under Item No. 206.092 Structural Rock Excavation - Major Structures.
6. The bedrock will vary in nature, slope, and degree of fracturing. Bedrock elevations shown are estimated based on boring information. Actual rock elevations may vary. After the foundation excavations are completed and all unsound bedrock removed, the Contractor shall survey the foundation bedrock and provide the exact bedrock elevations to the Resident for review and approval by the Engineer.

SEAL COFFERDAM NOTES:

1. When sheet piling is used for seal cofferdams, appropriate rolled corners shall be used, and the inside face of the sheet piling shall be at or outside of the seal concrete dimensions shown.
2. The seal concrete placement dimensions shown represent the minimum seal size necessary to meet design requirements and are not based on the use of any particular sheet pile section.
3. The horizontal pay limit for seal concrete will be to the dimensions shown on the plans. No additional payment will be made for concrete placed outside these limits.
4. The depth of seal is set for a water elevation of 97.4 and a typical top of rock elevation of 73.5. If the water elevation at the time of construction is higher, the seal shall be adjusted as approved by the Resident.
5. Seal concrete shall be placed on bedrock cleaned of weathered rock, loose fractured bedrock, boulders, and soil. Where the bedrock surface slope exceeds 4H:1V, the bedrock surface shall be benched in level steps or made completely level. Cofferdam excavation inspection and reporting shall be in accordance with Special Provision Section 511 - Cofferdams.
6. The seal shall be cored full depth in at least four (4) locations to ensure that the seal is satisfactorily placed. The final core run shall sample the bedrock interface and a minimum of one (1) foot of bedrock. Seal core locations will be approved by the Department. Seal concrete cores will be a minimum three (3) inch outer diameter and be stored in boxes and labeled. In the event that voids or other defects are indicated, the Contractor shall correct the defects in a manner approved by the Department. For each core that reveals a defect, two (2) additional cores shall be taken in approximately the same are in locations approved by the Department. All core holes shall be filled using non-shrink grout selected from the MaineDOT Qualified Products List of Grout Materials. The cost of coring and repairs will be considered incidental to related pay items.
7. If the bedrock elevations vary from the elevations assumed in the development of these plans, the pier seal may need to be modified. The Contractor shall grant the Department 10 Working Days to modify the Plans from the date the Resident accepts the bedrock survey.

PIER EXCAVATION NOTES:

1. The Contractor is informed that the location of the new pier is at approximately the same location as the old rough-cut granite masonry pier supporting the old covered bridge, as described in the record plans, dated February 1951. Per the record plans, the granite masonry pier was removed to below streamwater elevation to construct the existing bridge. Data from a subsurface multibeam survey of the streambed conducted in 2020 indicates that at least most, and probably all the removed granite masonry was deposited in the streambed in the vicinity of the pier. Furthermore, rock core investigations indicate that the granite masonry pier was founded on bedrock. Therefore, tight fitting granite masonry stones are anticipated to be present from approximately the existing streambed elevation to bedrock elevation located within the footprint of the old pier, and somewhat loosely strewn granite masonry stones are anticipated outside of this footprint.
2. Removal of all granite masonry stones as necessary for the installation and construction of the pier shall be paid for under Pay Items 206.082, Structural Earth Excavation - Major Structures, and 206.092, Structural Rock Excavation - Major Structures, as appropriate per the definitions given in section 206.01 of the MaineDOT Standard Specifications.
3. The pay limits for excavation items 206.082 and 206.092 as required for the removal of existing granite masonry for the construction of the new pier are defined as vertical neat lines offset horizontally 4 feet from all edges of the pier subfooting (seal concrete). The pay limits for any excavation of bedrock shall be per the MaineDOT Standard Specification. The quantity of all portions of stones necessary for removal for the installation and construction of the pier outside the aforementioned neat lines shall be paid for under Items 206.082 and 206.092 as appropriate for the sizing criteria of 2 CY each per the definitions given in section 206.01 of the Standard Specifications.
4. Pre-excavation necessary to remove subsurface obstructions, such as granite masonry stones, boulders, or rock layers, in order to install the cofferdam at the pier may be conducted within a silt boom. Once pre-excavation progresses to the point that the cofferdam can be installed, any remaining structural excavation shall be performed within the completed cofferdam.

Date:11/18/2021

Division: BRIDGE

Filename: ...\MSTA\194_Pier_Notes_01.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	CN WALTON	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

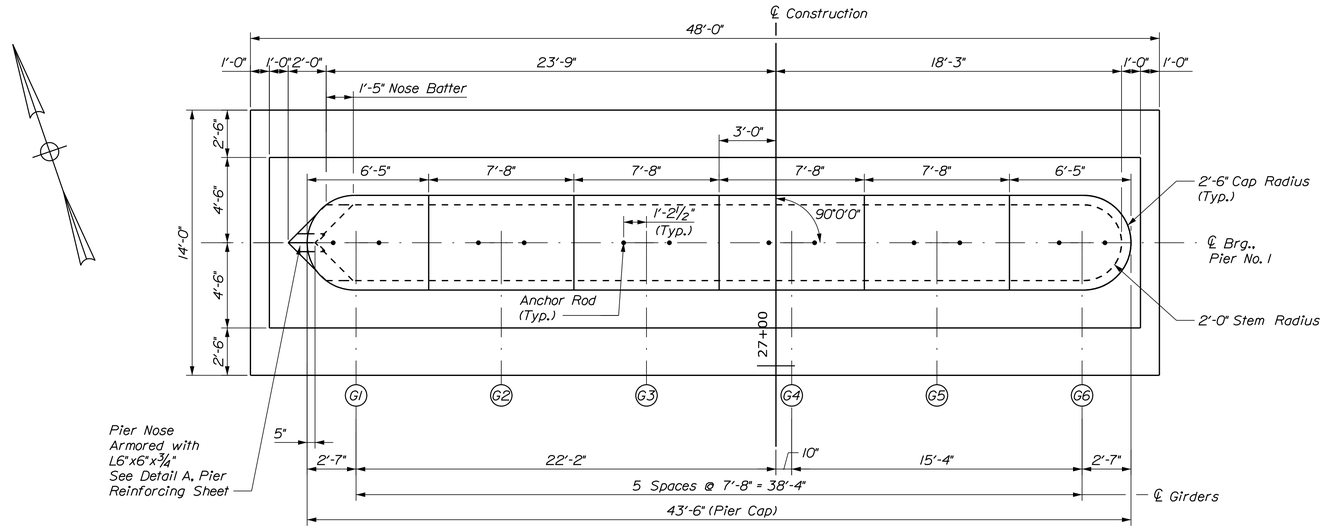
STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

PIER NOTES

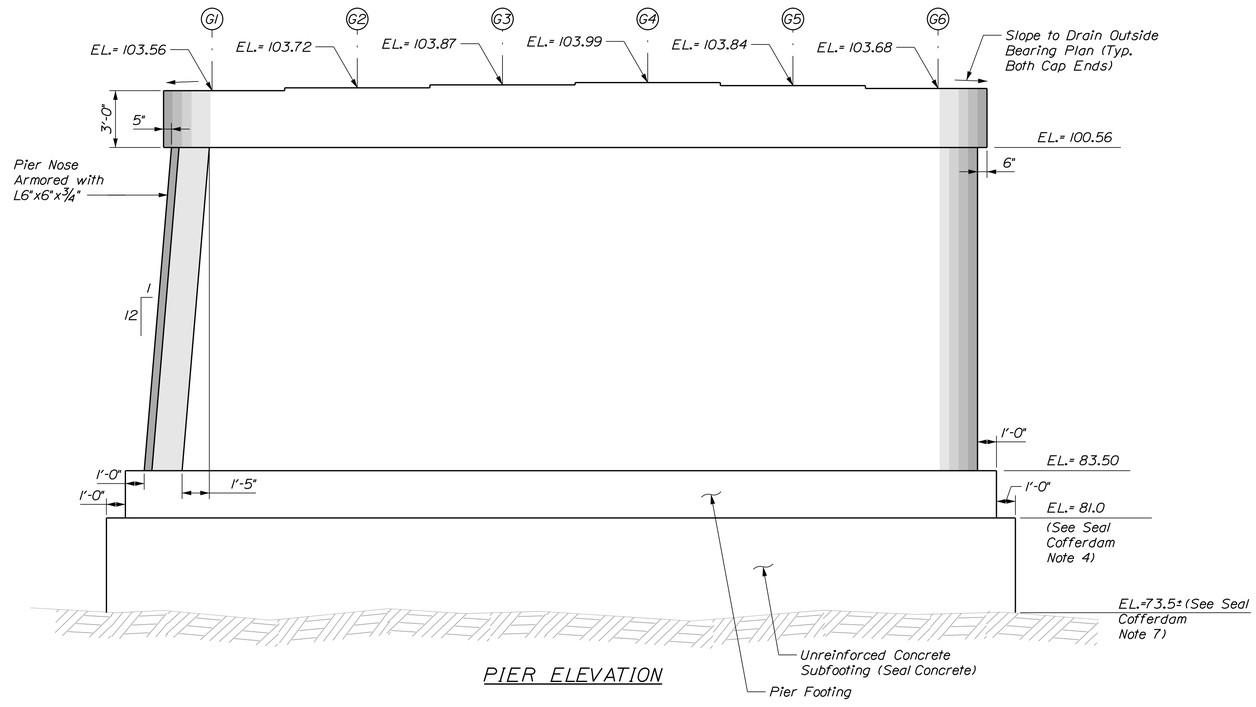
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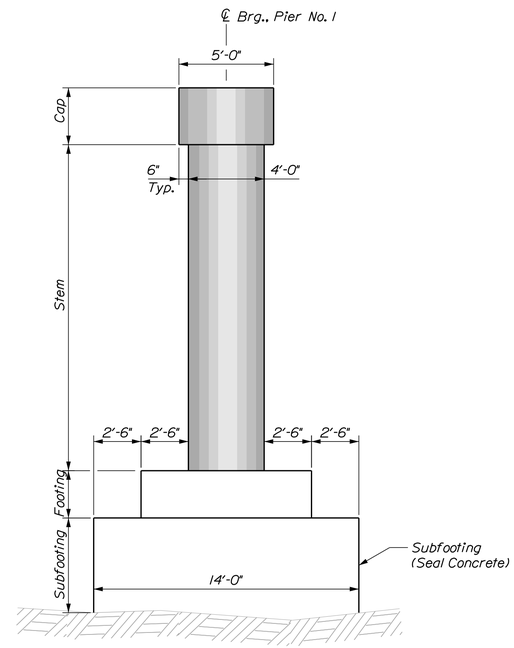
OF 218



PIER PLAN



PIER ELEVATION



PIER SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	CN WALTON	BY	P DONOVAN
CHECKED-REVIEWED	CT AYERS	BY	RS BLUNT
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES		DATE	9/28/21
		DATE	9/28/21

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

PIER PLAN, ELEVATION, AND SECTION

SHEET NUMBER

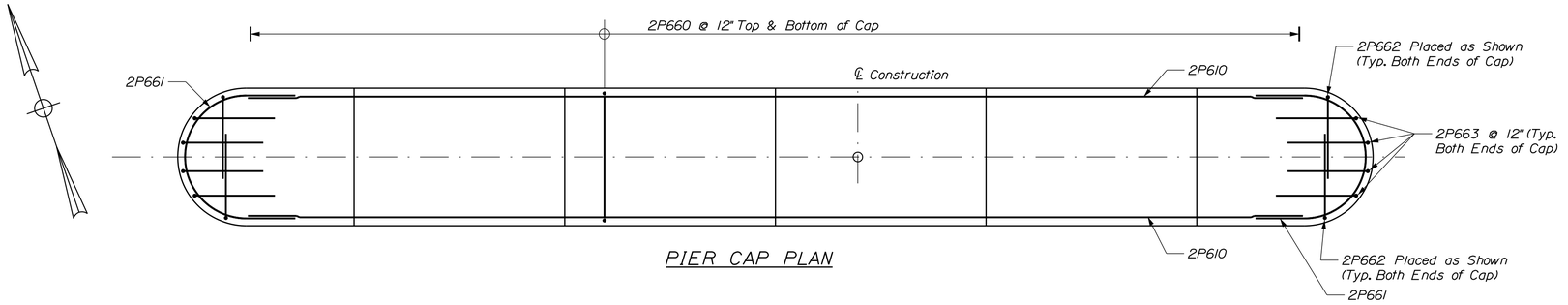
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OF 218

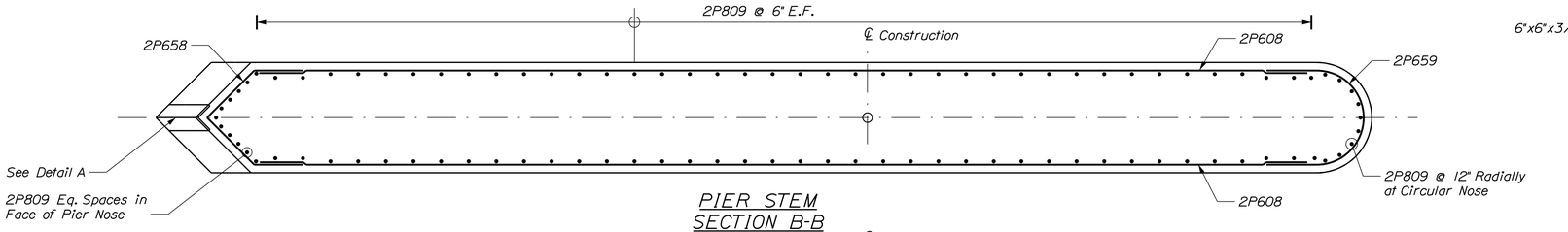
Date:11/18/2021

Division: BRIDGE

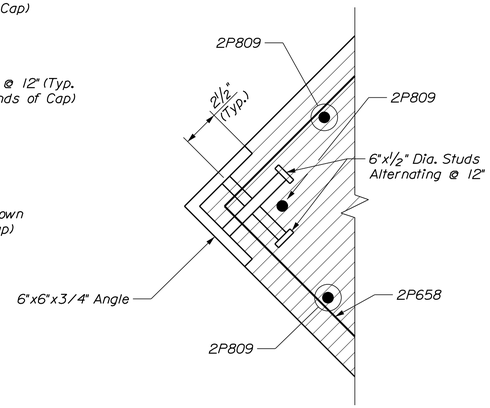
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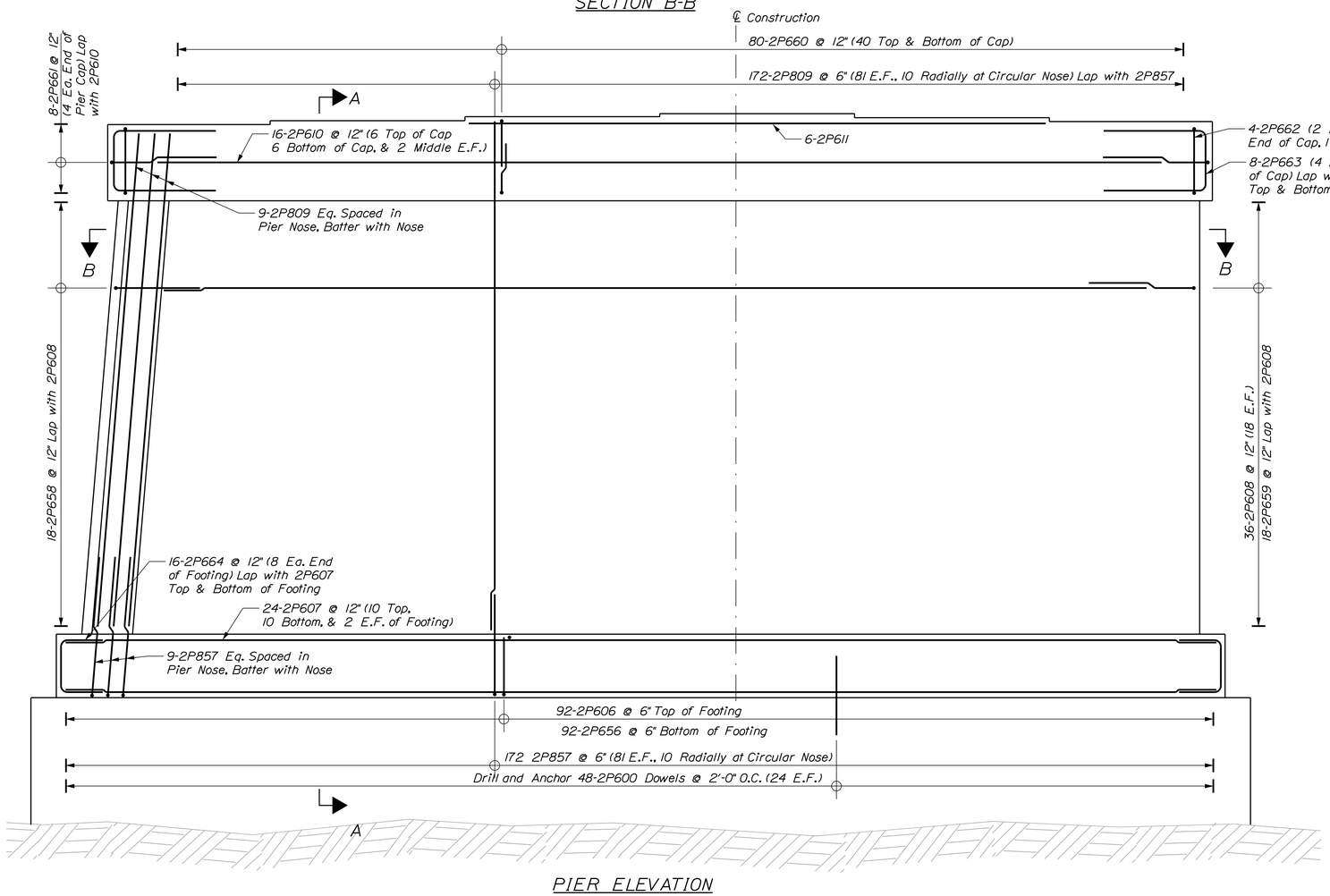
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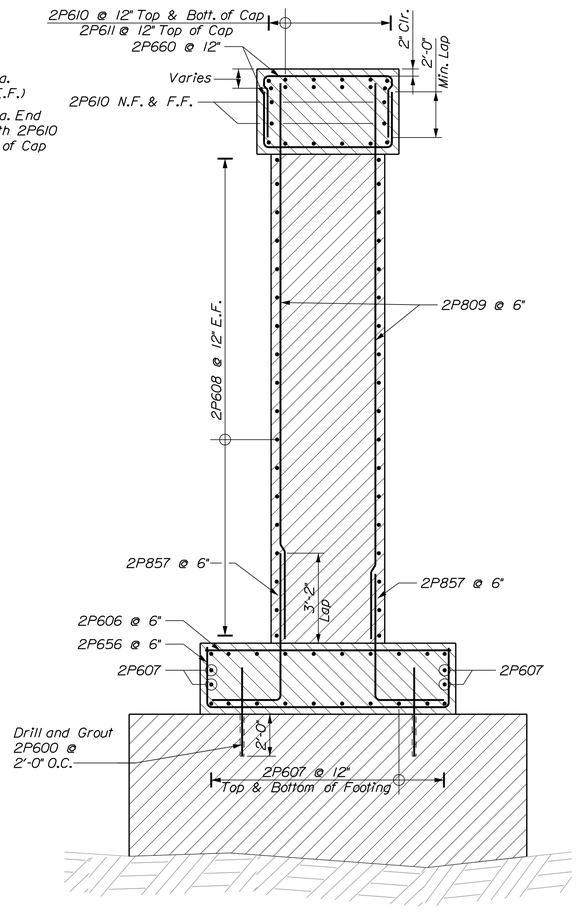
PIER STEM SECTION B-B



DETAIL A



PIER ELEVATION



SECTION A-A

Date:11/18/2021

Filename: ...\MSTA\196_Pier_Reinf_01.dgn Division: BRIDGE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01

P.E. NUMBER

DATE

SIGNATURE

	BY	DATE
PROJ. MANAGER MICHAEL WIGHT		
DESIGN-DETAILED CN WALTON	P DONOVAN	9/28/21
CHECKED-REVIEWED CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

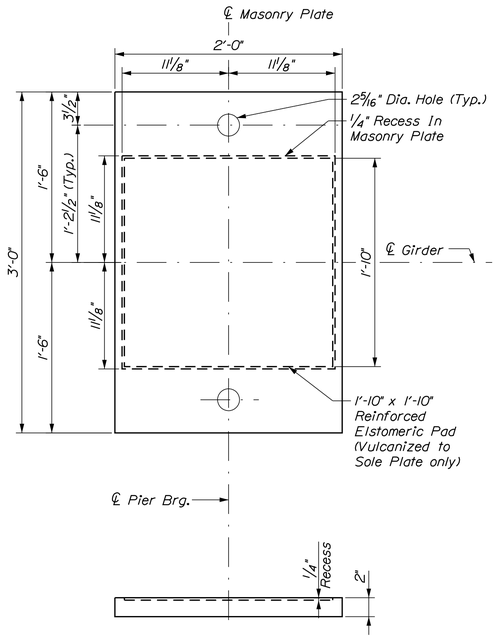
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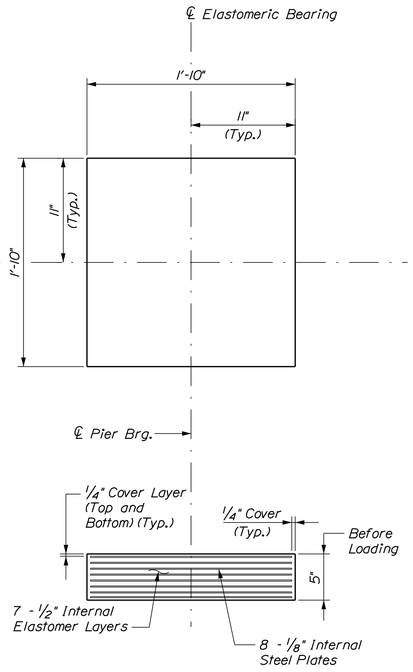
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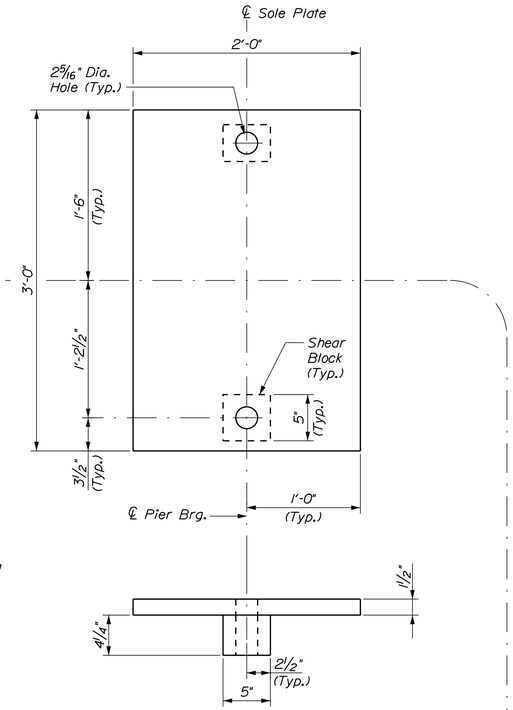
Date:11/18/2021
Division: BRIDGE
Filename: ...\MSTA\197_Pier_Bearing_Det.dgn



MASONRY PLATE



ELASTOMERIC BEARING



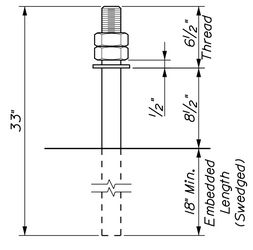
SOLE PLATE

ANCHOR ROD NOTE

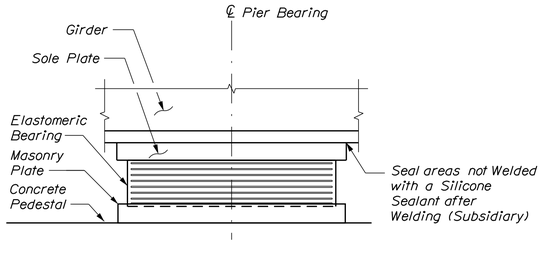
1. For drilling and anchoring rods, the anchoring material shall be chosen from the MaineDOT prequalified list and shall be submitted to the Resident for approval.

ELASTOMERIC BEARING NOTES

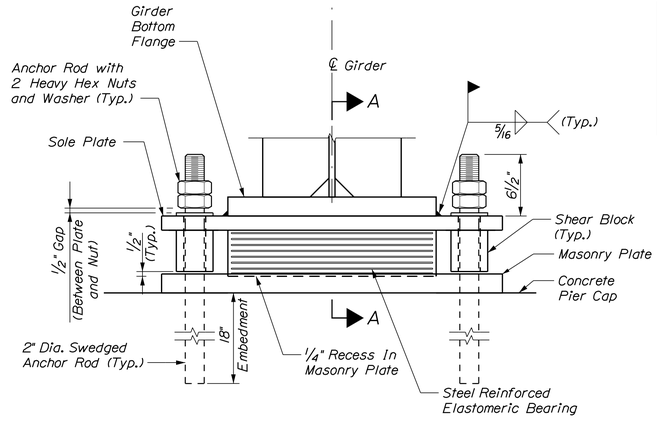
1. The shear modulus of the elastomer shall be 115 psi.
2. Vulcanization of the elastomer to the steel plates shall be done during the primary mold process. The sole plate shall be vulcanized to the elastomer.
3. Masonry plates, sole plates and shear blocks shall meet the requirements of ASTM A709, Grade 50 or 50W. Anchor rods shall meet the requirements of ASTM F1554, Grade 105 and shall be swedged on the embedded portion of the rod.
4. Masonry plates shall be galvanized in accordance with Section 506. Sole plates for steel superstructures shall be treated in the same manner as the structural steel. Anchor rods, washers, nuts and shear blocks shall be galvanized to ASTM A153 or ASTM B695, Class 50, Type 1.
5. All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge and a direction arrow that points upstation. All marks shall be permanent and shall be visible after the bearing is installed.
6. Bearings shall be covered during shipping and at any time prior to installation that the bearings may be exposed to sunlight.
7. The superstructure may be erected when the ambient air temperature is within the range of 65 °F and 90 °F. If the ambient air temperature is outside this range, the bearings shall be reset as directed by the Resident.
8. All necessary precautions shall be taken to protect bearing components from field weld flash and spatter. Heat from welding operations shall be controlled such that steel adjacent to the elastomer does not exceed 200 °F. The temperature shall be verified by the use of temperature indicating crayons or other suitable means.
9. Upset the threads on the anchor rods after assembly of the bearing.
10. The Contractor shall not weld the girders to the sole plate until after all adjustments have been made in accordance with Standard Specification Section 523.094.
11. Bearings shall be reset after the full dead load placement. The bridge shall be jacked to allow each bearing to return to its neutral position. Payment shall be incidental to related contract items.
12. Any shim plate that may be required during construction shall be Stainless Steel Type 304. Payment shall be incidental to related contract items.
13. The "Bearing Design Load" for each bearing as noted in Standard Specifications, Subsection 523.23.4, is 574 kips. This is the total load for the Service I load combination, without impact.



ANCHOR BOLT DETAIL

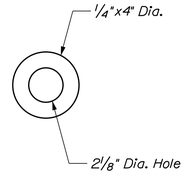


SECTION A-A



ELEVATION

BEARING DESIGN CRITERIA		
CRITERIA	PIERS	
Unfactored Dead Load	339	Kips
Unfactored Live Load	235	Kips
Max. Longitudinal Displacement	0	Inches
Rotational Tolerance	0.005	Rad
Dead + Live Load Rotation	0.002	Rad



WASHER DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

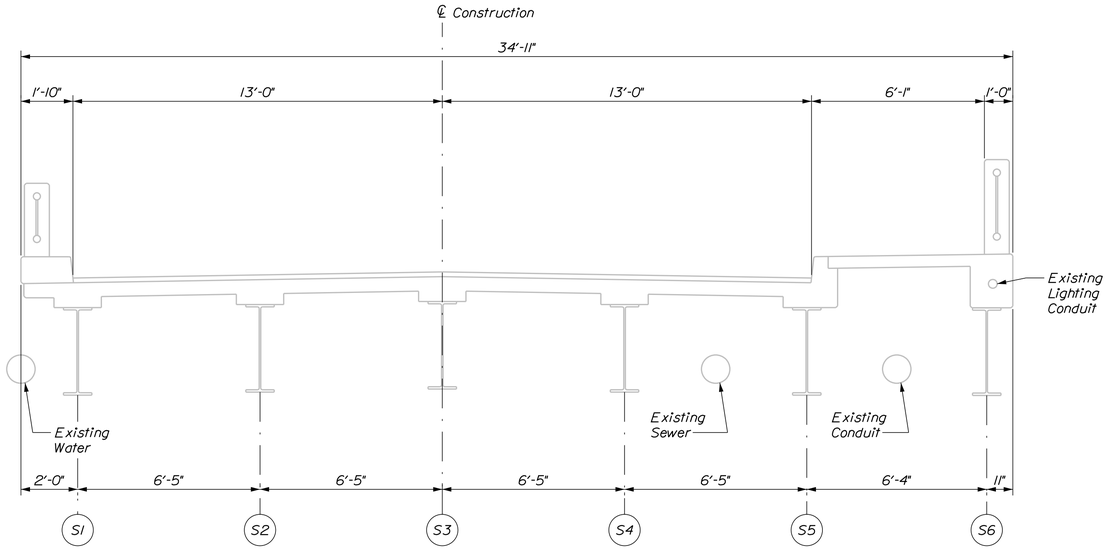
PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	BY	P DONOVAN
CHECKED-REVIEWED	CTA FERS	BY	RS BLUNT
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

DATE 9/28/21
DATE 9/28/21
SIGNATURE
P.E. NUMBER
DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

PIER BEARING DETAILS

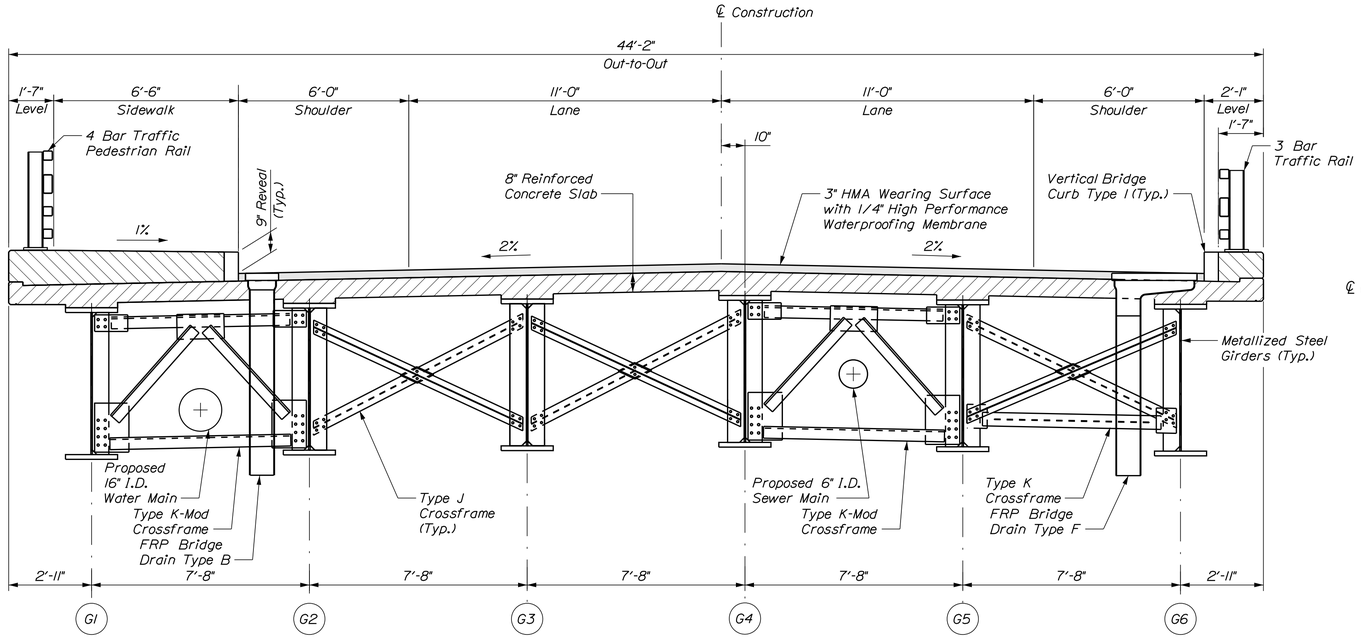
SHEET NUMBER
197
OF 218



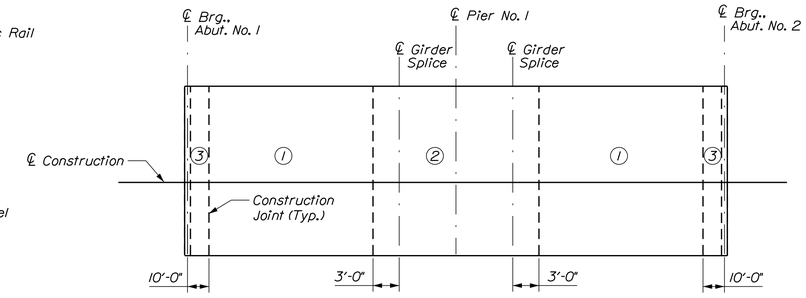
EXISTING TYPICAL SECTION
Scale: 3/8" = 1'-0"

SUPERSTRUCTURE NOTES

1. The theoretical blocking used for design of the structure is 5 1/4 inches at the centerline of bearing of the abutments. Refer to Standard Detail 502 for blocking details.
2. Reinforcing shall have a minimum concrete cover of 2 inches unless otherwise noted.
3. Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.
4. Superstructure slab concrete shall be placed in the sequence as directed in the "Deck Placement Sequence". A minimum of 5 days shall elapse between successive partial placements.
5. Precast Deck Panels shall not be used.
6. Adjust reinforcing to fit around the bridge drains in a manner approved by the Resident. Do not cut transverse reinforcing bars.
7. Mortar for bedding and for joints in the granite curb shall contain an approved non-shrink additive.



BRIDGE NO. 2
PROPOSED TYPICAL SECTION



DECK PLACEMENT SEQUENCE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT		
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CHECKED-REVIEWED	CT AYERS	BY	RS BLUNT
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
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REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

	DATE
	9/28/21
	9/28/21

SIGNATURE

P.E. NUMBER

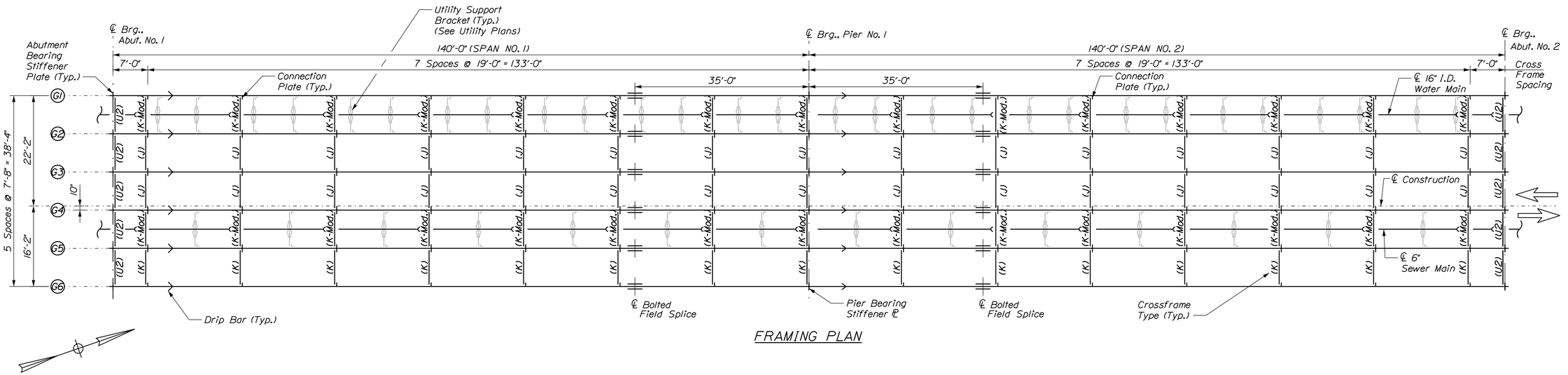
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STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

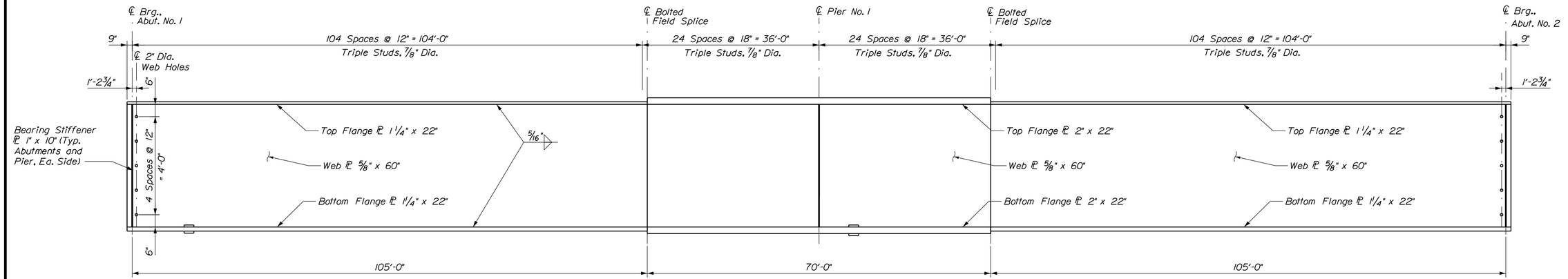
SUPERSTRUCTURE
SECTIONS AND NOTES

SHEET NUMBER
198
OF 218

Date:11/18/2021
Filename: ...\BRIDGE\MSTA\198_Brg-Typ_02.dgn Division: BRIDGE

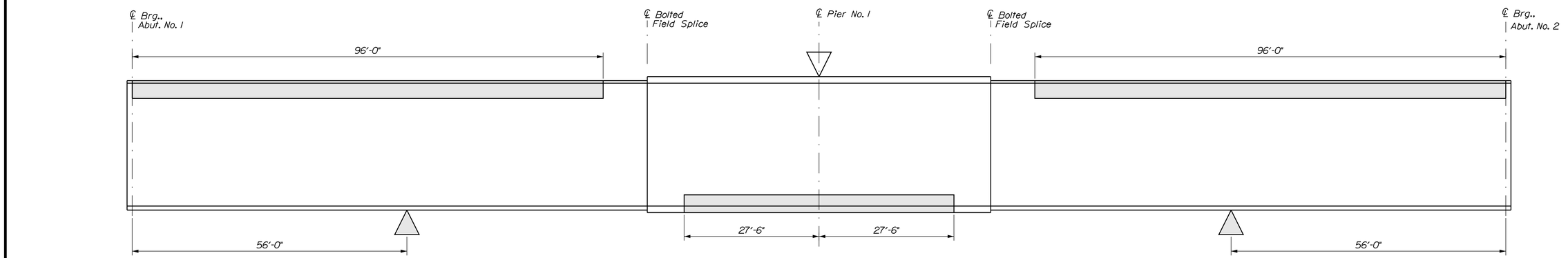


FRAMING PLAN



GIRDER ELEVATION

771 Studs per Girder x 6 Girders = 4626 Studs



GIRDER STRESS DIAGRAM

Shaded area are always in compression
Other area are in tension or have stress reversal.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

WIN 022512.01
WIN 022511.01

BRIDGE NO. 1472
BRIDGE NO. 2806

PROJ. MANAGER	MICHAEL WIGHT	BY
DESIGN-DETAILED	TJ COOK	P DONOVAN
CHECKED-REVIEWED	CT AYERS	RS BLUNT
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		

	DATE
REVISIONS 1	9/28/21
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

FRAMING PLAN AND GIRDER ELEVATION

SHEET NUMBER

199

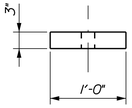
OF 218

Date:11/18/2021

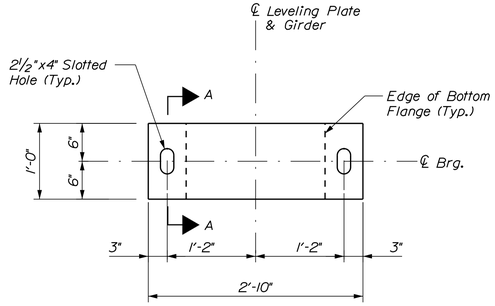
Division: BRIDGE

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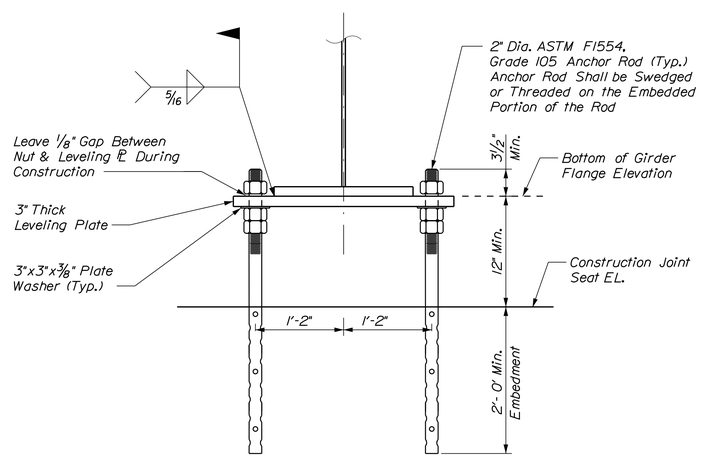
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SECTION A-A

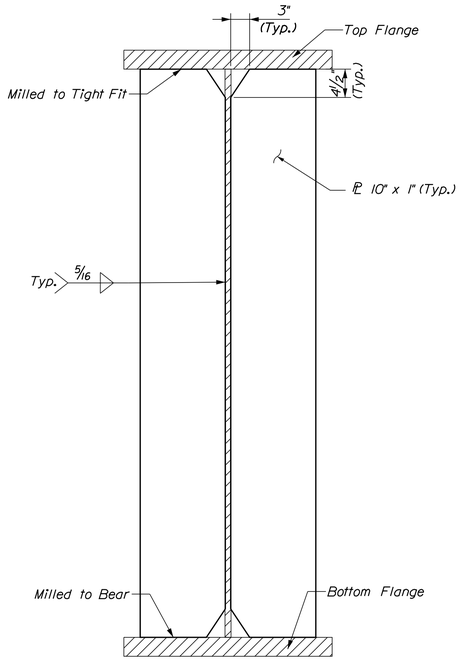


PLAN

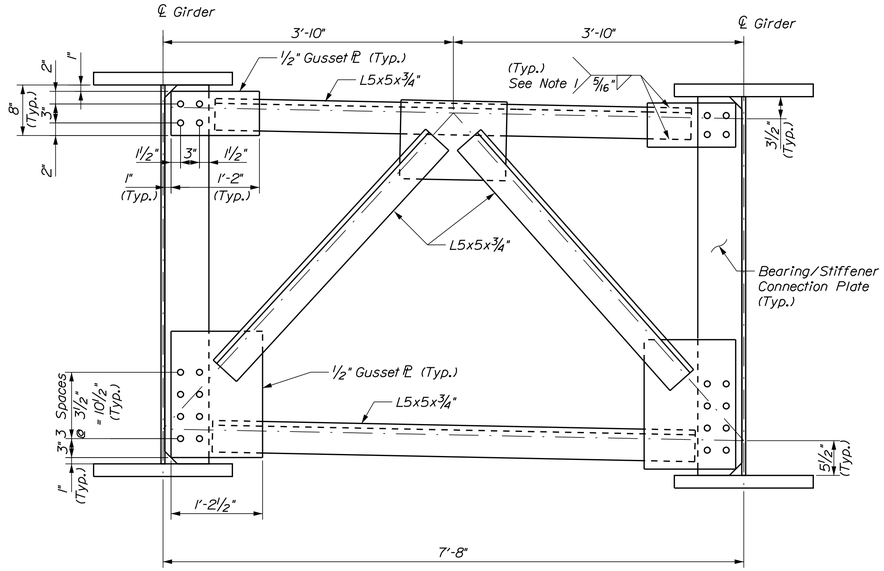


ELEVATION

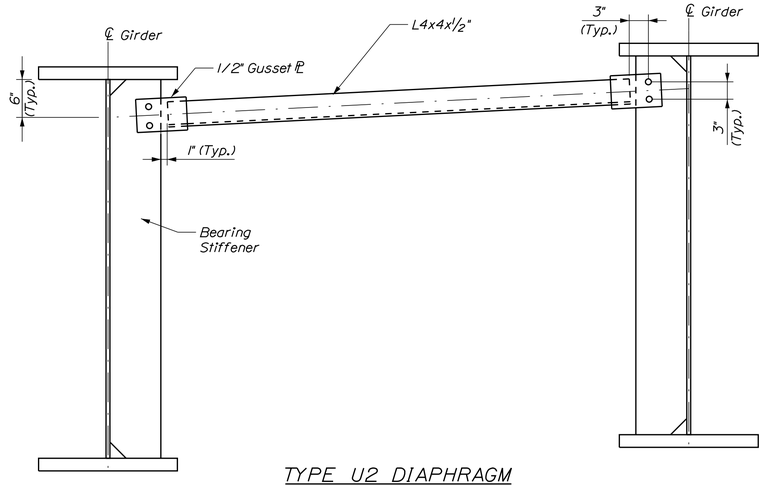
LEVELING PLATE DETAIL
(Typ. at Abutments)



BEARING STIFFENER
AT ABUTMENT & PIER



TYPE K-MOD CROSSFRAME



TYPE U2 DIAPHRAGM

NOTES

1. Terminate all welds 5/8" +/- 1/8" from plate edges. Side welds shall be 6" minimum.
2. Payment for fabrication and installation of the girder support assemblies at the abutments will be considered incidental to related Contract items.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	BY	P DONOVAN
CHECKED-REVIEWED	CT AYERS	RS BLUNT	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
DATE		9/28/21	9/28/21

SIGNATURE

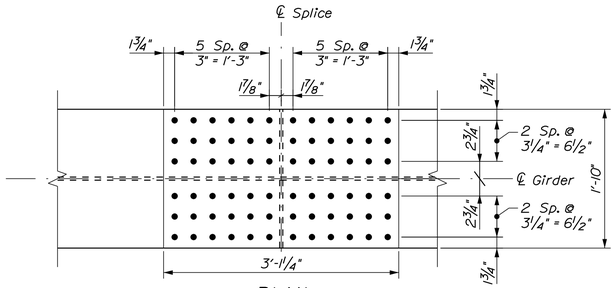
P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

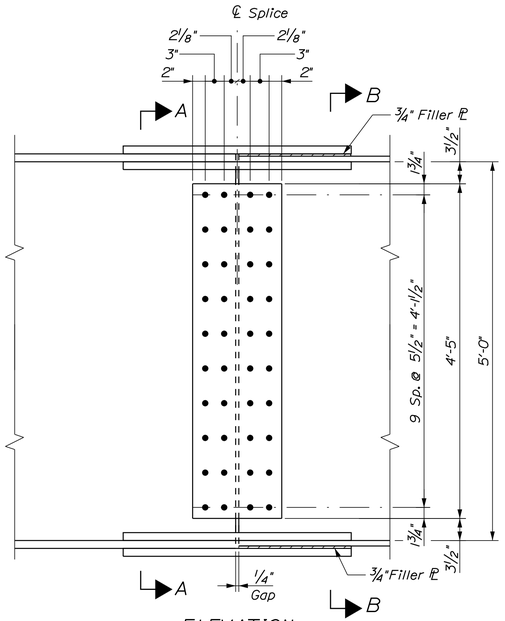
STRUCTURAL STEEL DETAILS

SHEET NUMBER
200
OF 218

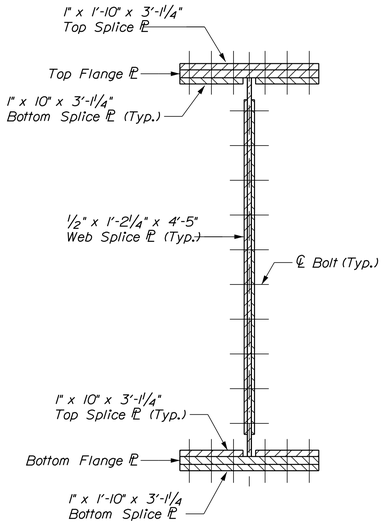


PLAN
TOP FLANGE

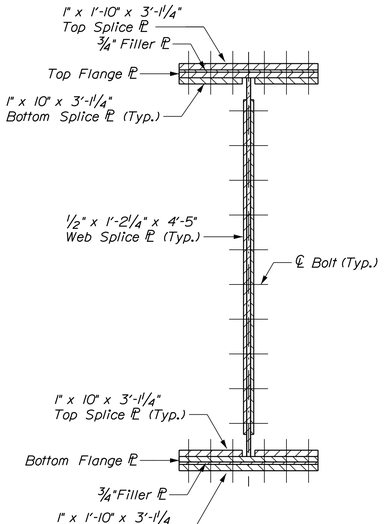
(Shear Studs, Filler Plate and Splice Plates Not Shown for Clarity)



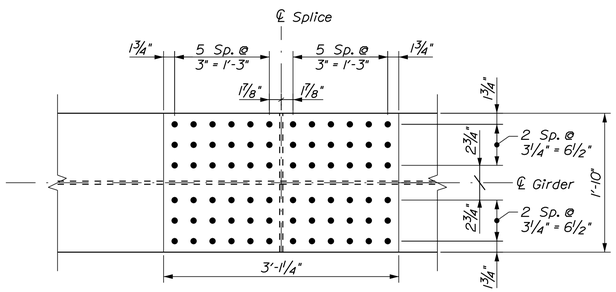
ELEVATION



SECTION A-A



SECTION B-B



PLAN
BOTTOM FLANGE

BOLTED FIELD SPLICE

(Shear Studs, Filler Plate and Splice Plates Not Shown for Clarity)

Date:11/18/2021

Division: BRIDGE

Filename: ...\MSTA\201_Str_Splice_Det.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472
BRIDGE NO. 2806

WIN 022512.01
WIN 022511.01

BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

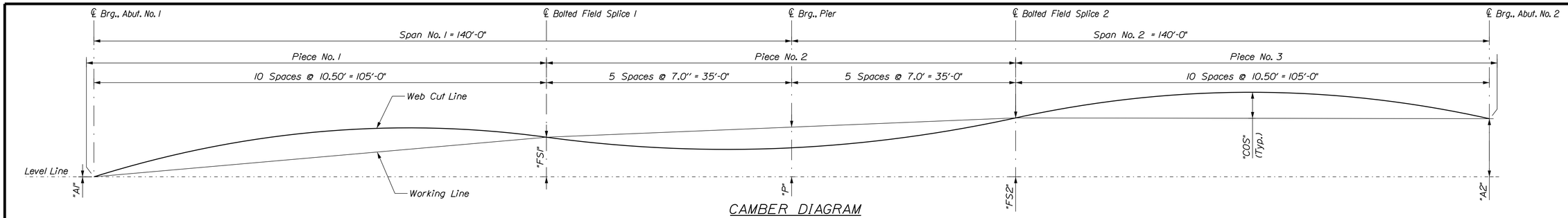
STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

GIRDER SPLICE DETAILS

SHEET NUMBER

201

OF 218



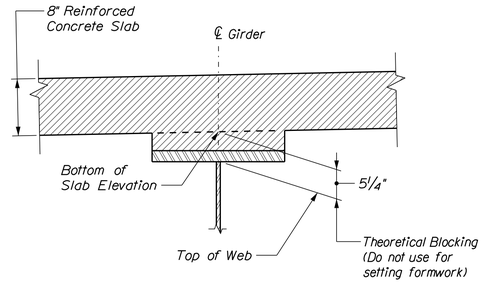
CAMBER DIAGRAM

STRUCTURAL STEEL NOTES

1. Camber ordinates, as shown, are computed to compensate for all dead load deflections and curvature of the finished grade profile.
2. No transverse butt weld splices will be allowed in the flange plates or web plates within 10 percent of the span length from the point of maximum positive moment. Butt weld splices in flanges shall be not less than 1 foot from transverse butt welds in the web plates and no transverse web or flange butt welds shall be located within 1 foot of other transverse welds (e.g. connection plates to web welds) on either flange or web. No transverse butt-weld splices will be allowed in areas of stress reversal.
3. Sections of flange plates or web plates between transverse shop splices or between a transverse shop splice and a field splice shall not be less than 10 feet in length unless otherwise shown on the plans.
4. Bearing stiffeners shall be plumb after erection and dead loading of the structure.
5. Crossframe or diaphragm connection plates may be either plumb or normal to the top flange and shall be 1/2" thick.
6. All Diaphragm & Crossframe notes in Standard Detail 504(07) shall apply.
7. All web and bottom flange plates shall conform to Zone 2 Charpy V-Notch impact test requirements of AASHTO M270.
8. Install all crossframes with horizontal angle legs oriented upstation.
9. All bolts, nuts, and washers shall be hot dip galvanized in accordance with ASTM A153.
10. Structural steel, including the girders, stiffeners, and connection plates shall be coated in accordance with Standard Specification 506, Shop Applied Protective Coating - Steel (Thermal Spray Coating). At the Contractor's option, crossframes shall be coated in accordance with either Standard Specification Section 506, Shop Applied Protective Coating - Steel (Thermal Spray Coating) or Standard Specification Section 506, Shop Applied Protective Coating - Steel (Hot Dip Galvanizing). Payment for structural steel coatings will be made under Item No. 506.9105, Thermal Spray Coating - Shop Applied.
11. Structural steel was designed with a vertical construction load of 50 psf and a lateral wind velocity of 55 mph.
12. Bolted diaphragms or crossframe connections shall be made using 7/8" dia., ASTM F3125, Grade A325 Type 1 H.S. bolts. Hole size shall be 15/16" dia. The minimum edge distance shall be 1 1/2" U.N.O. Oversized or short-slotted holes are not permitted.
13. The table of deflections assumes that empty utilities are hung prior to deck placement, and that the fluid weight of utilities is applied only after the deck is fully cured. The Contractor shall adjust accordingly if these assumptions are incorrect at the time of deck placement.
14. Bolted field splice connections shall be made using 7/8" diameter, ASTM F3125, Grade A325 high strength bolts. Bolt hole size shall be 15/16" diameter.
15. Filler plates shall be steel conforming to the requirements of ASTM A709, Grade 50.

TABLE OF CAMBER DIMENSIONS (FEET)

Girder	"A1"	"FS1"	"P"	"FS2"	"A2"
1	0.00	0.93	1.20	1.48	2.23
2	0.00	0.93	1.21	1.49	2.23
3	0.00	0.93	1.21	1.49	2.23
4	0.00	0.93	1.21	1.49	2.23
5	0.00	0.93	1.21	1.49	2.23
6	0.00	0.93	1.20	1.48	2.23



BLOCKING DETAIL

TABLE OF CAMBER ORDINATES ("COS")(INCHES)

Girder	"A1"	PIECE NO. 1									"FS1"	PIECE NO. 2									"FS2"	PIECE NO. 3									"A2"
Location	0.00	10.50'	21.00'	31.50'	42.00'	52.50'	63.00'	73.50'	84.00'	94.50'	105.00'	112.00'	119.00'	126.00'	133.00'	140.00'	147.00'	154.00'	161.00'	168.00'	175.00'	185.50'	196.00'	206.50'	217.00'	227.50'	238.00'	248.50'	259.00'	269.50'	280.00'
1	0.00	0.64	1.21	1.65	1.92	2.01	1.89	1.60	1.15	0.60	0.00	-0.32	-0.60	-0.84	-1.00	-1.06	-1.00	-0.84	-0.60	-0.32	0.00	0.60	1.15	1.60	1.89	2.01	1.92	1.65	1.21	0.64	0.00
2	0.00	0.68	1.28	1.75	2.03	2.12	2.00	1.69	1.22	0.63	0.00	-0.34	-0.64	-0.89	-1.06	-1.12	-1.06	-0.89	-0.64	-0.34	0.00	0.63	1.22	1.69	2.00	2.12	2.03	1.75	1.28	0.68	0.00
3	0.00	0.68	1.28	1.75	2.03	2.12	2.00	1.69	1.22	0.63	0.00	-0.34	-0.64	-0.89	-1.06	-1.12	-1.06	-0.89	-0.64	-0.34	0.00	0.63	1.22	1.69	2.00	2.12	2.03	1.75	1.28	0.68	0.00
4	0.00	0.68	1.28	1.75	2.03	2.12	2.00	1.69	1.22	0.63	0.00	-0.34	-0.64	-0.89	-1.06	-1.12	-1.06	-0.89	-0.64	-0.34	0.00	0.63	1.22	1.69	2.00	2.12	2.03	1.75	1.28	0.68	0.00
5	0.00	0.68	1.28	1.75	2.03	2.12	2.00	1.69	1.22	0.63	0.00	-0.34	-0.64	-0.89	-1.06	-1.12	-1.06	-0.89	-0.64	-0.34	0.00	0.63	1.22	1.69	2.00	2.12	2.03	1.75	1.28	0.68	0.00
6	0.00	0.64	1.21	1.65	1.92	2.01	1.89	1.60	1.15	0.60	0.00	-0.32	-0.60	-0.84	-1.00	-1.06	-1.00	-0.84	-0.60	-0.32	0.00	0.60	1.15	1.60	1.89	2.01	1.92	1.65	1.21	0.64	0.00

TABLE OF DEFLECTIONS (INCHES)

Girder	LOAD	SPAN NO. 1													Pier	SPAN NO. 2												
		0.0'	10.0'	20.0'	30.0'	40.0'	50.0'	60.0'	70.0'	80.0'	90.0'	100.0'	110.0'	120.0'	130.0'	140.0'	150.0'	160.0'	170.0'	180.0'	190.0'	200.0'	210.0'	220.0'	230.0'	240.0'	250.0'	260.0'	270.0'	280.0'
Exterior	Steel Dead Load	0.00	0.19	0.36	0.51	0.61	0.67	0.68	0.65	0.57	0.47	0.35	0.22	0.11	0.03	0.00	0.03	0.11	0.22	0.35	0.47	0.57	0.65	0.68	0.67	0.61	0.51	0.36	0.19	0.00
	Fluid Dead Load	0.00	0.33	0.63	0.88	1.06	1.17	1.18	1.12	0.99	0.81	0.60	0.38	0.19	0.05	0.00	0.05	0.19	0.38	0.60	0.81	0.99	1.12	1.18	1.17	1.06	0.88	0.63	0.33	0.00
	Superimposed Dead Load	0.00	0.19	0.37	0.51	0.62	0.68	0.69	0.65	0.58	0.48	0.35	0.23	0.11	0.03	0.00	0.03	0.11	0.23	0.35	0.48	0.58	0.65	0.69	0.68	0.62	0.51	0.37	0.19	0.00
	Total	0.00	0.71	1.36	1.90	2.29	2.51	2.55	2.43	2.15	1.76	1.30	0.83	0.42	0.12	0.00	0.12	0.42	0.83	1.30	1.76	2.15	2.43	2.55	2.51	2.29	1.90	1.36	0.71	0.00
Interior	Steel Dead Load	0.00	0.19	0.37	0.51	0.62	0.68	0.69	0.66	0.58	0.48	0.35	0.23	0.11	0.03	0.00	0.03	0.11	0.23	0.35	0.48	0.58	0.66	0.69	0.68	0.62	0.51	0.37	0.19	0.00
	Fluid Dead Load	0.00	0.38	0.72	1.00	1.20	1.32	1.34	1.27	1.12	0.92	0.68	0.43	0.22	0.06	0.00	0.06	0.22	0.43	0.68	0.92	1.12	1.27	1.34	1.32	1.20	1.00	0.72	0.38	0.00
	Superimposed Dead Load	0.00	0.19	0.36	0.50	0.60	0.66	0.67	0.64	0.56	0.46	0.34	0.22	0.11	0.03	0.00	0.03	0.11	0.22	0.34	0.46	0.56	0.64	0.67	0.66	0.60	0.50	0.36	0.19	0.00
	Total	0.00	0.75	1.44	2.01	2.42	2.65	2.70	2.56	2.27	1.86	1.37	0.88	0.44	0.13	0.00	0.13	0.44	0.88	1.37	1.86	2.27	2.56	2.70	2.65	2.42	2.01	1.44	0.75	0.00

BOTTOM OF SLAB ELEVATIONS (FEET)

Girder	SPAN NO. 1														SPAN NO. 2												
	0.0'	10.0'	20.0'	30.0'	40.0'	50.0'	60.0'	70.0'	80.0'	90.0'	100.0'	110.0'	120.0'	130.0'	140.0'	0.0'	10.0'	20.0'	30.0'	40.0'	50.0'	60.0'	70.0'	80.0'	90.0'	100.0'	110.0'	120.0'	130.0'	140.0'
1	108.74	108.89'	108.98	109.10	109.20	109.29	109.37	109.45	109.51	109.56	109.62	109.67	109.72	109.78	109.86	109.86	109.94	110.04	110.15	110.25	110.36	110.47	110.56	110.65	110.73	110.79	110.85	110.90	110.94	110.97
2	108.89	109.02'	109.14	109.26	109.36	109.46	109.54	109.61	109.67	109.73	109.78	109.82	109.88	109.94	110.01	110.01	110.10	110.20	110.30	110.41	110.52	110.63	110.73	110.81	110.89	110.96	111.01	111.05	111.09	111.12
3	109.05	109.17'	109.30	109.41	109.52	109.61	109.69	109.76	109.82	109.88	109.93	109.98	110.03	110.09	110.16	110.16	110.25	110.35	110.46	110.57	110.68	110.78	110.88	110.97	111.04	111.11	111.16	111.21	111.25	111.28
4	109.17	109.29'	109.42	109.53	109.64	109.73	109.81	109.88	109.94	110.00	110.05	110.10	110.15	110.21	110.28	110.28	110.37	110.47	110.58	110.69	110.80	110.90	111.00	111.09	111.16	111.23	111.28	111.33	111.37	111.40
5	109.01	109.14'	109.26	109.38	109.48	109.58	109.66	109.73	109.79	109.85	109.90	109.94	110.00	110.06	110.13	110.13	110.22	110.32	110.42	110.53	110.64	110.75	110.85	110.93	111.01	111.08	111.13	111.17	111.21	111.24
6	108.86	108.98'	109.10	109.22	109.32	109.41	109.49	109.57	109.63	109.68	109.74	109.79	109.84	109.90	109.98	109.98	110.06	110.16	110.27	110.37	110.48	110.59	110.68	110.77	110.85	110.91	110.97	111.02	111.06	111.09

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	REVISIONS 1	
CHECKED-REVIEWED	CT AYERS	REVISIONS 2	
DESIGN2-DETAILED2		REVISIONS 3	
DESIGN3-DETAILED3		REVISIONS 4	
		FIELD CHANGES	

	BY	DATE
DESIGNED	P DONOVAN	9/28/21
DETAILED	RS BLUNT	9/28/21
CHECKED		
QUALITY CONTROL		
APPROVED		

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

STRUCTURAL STEEL NOTES, CAMBER DIAGRAM, AND TABLES

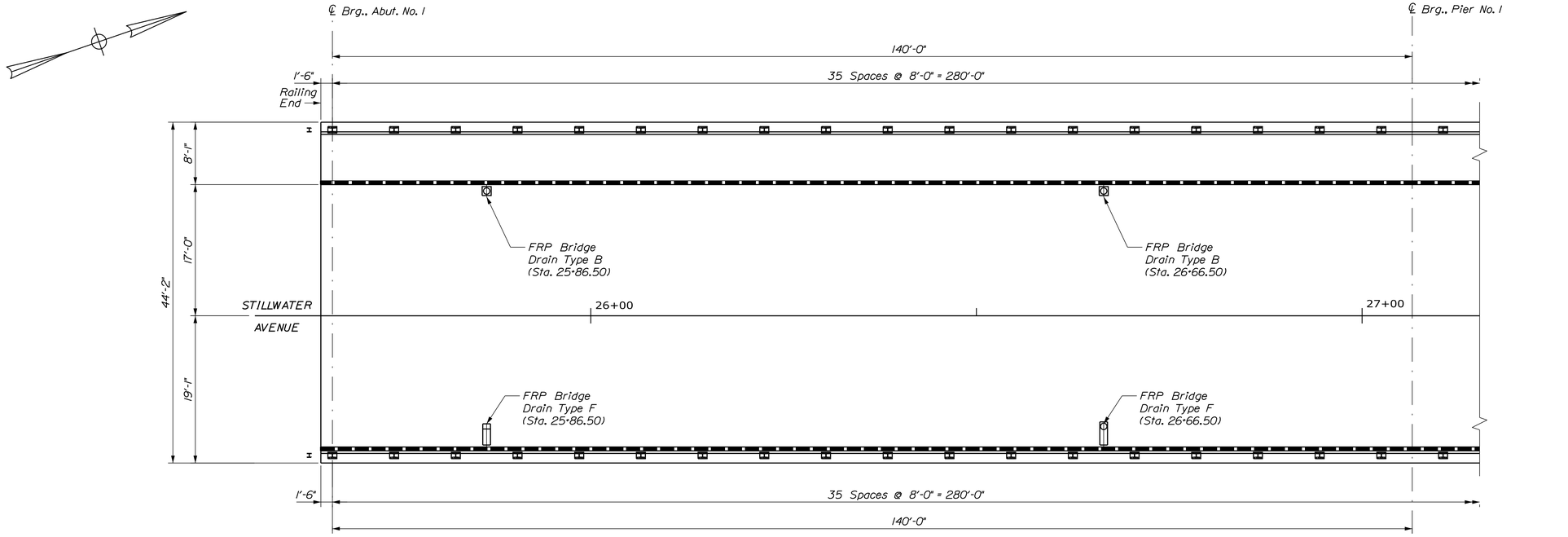
SHEET NUMBER

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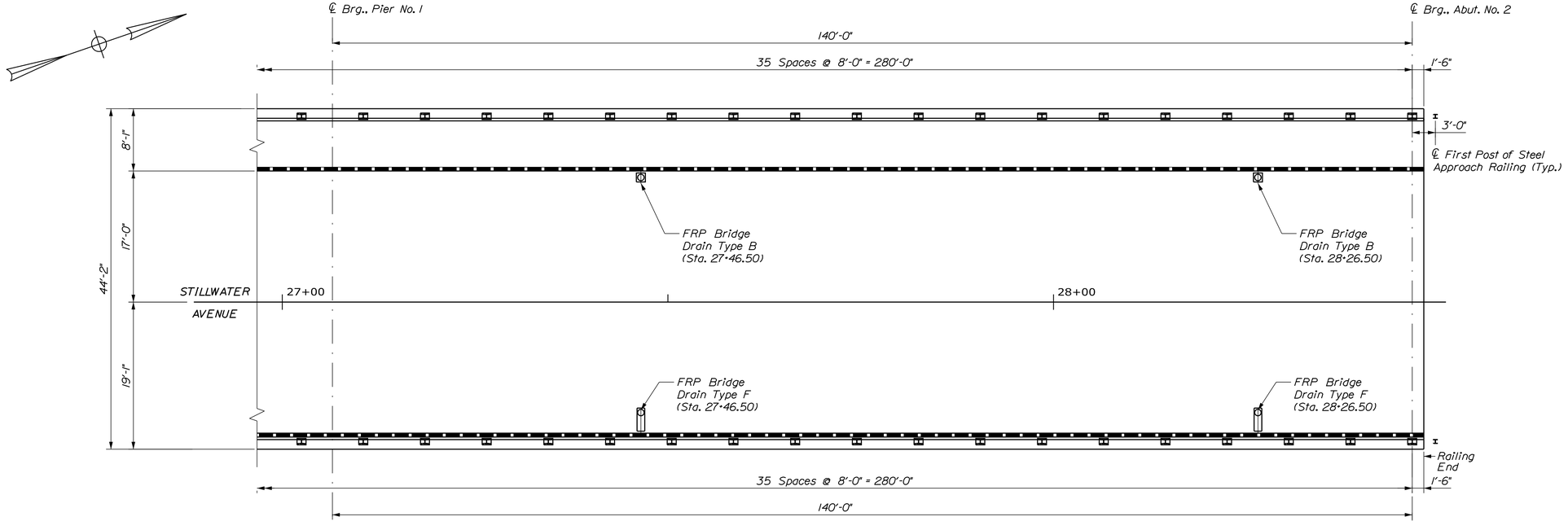
OF 218

Date:11/18/2021

Filename: ...\BRIDGE\MSTA\202_Camber_01.dgn Division: BRIDGE



DECK & RAILING PLAN
SPAN NO. 1



DECK & RAILING PLAN
SPAN NO. 2

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	MICHAEL WIGHT	
DESIGN-DETAILED	TJ COOK	9/28/21
CHECKED-REVIEWED	CT AYERS	9/28/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1	P DONOVAN	9/28/21
REVISIONS 2	RS BLUNT	9/28/21
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

DECK AND RAILING LAYOUT PLAN

SHEET NUMBER

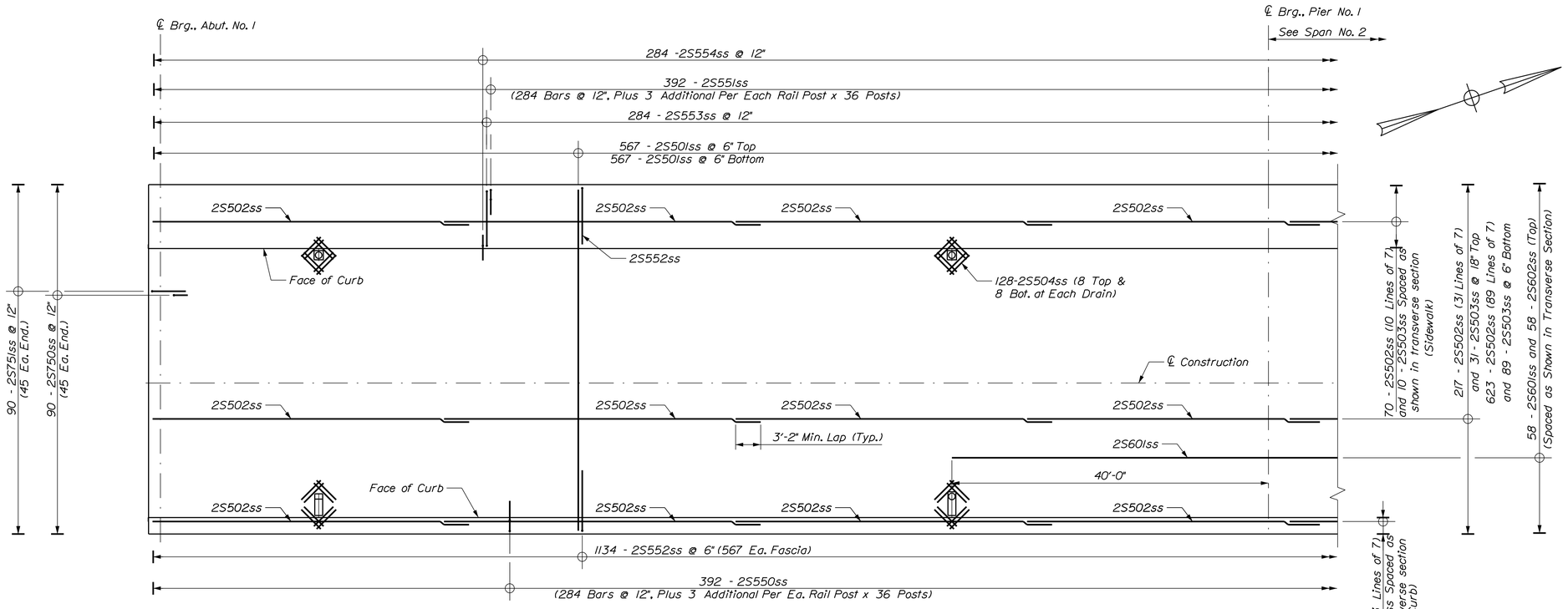
203

OF 218

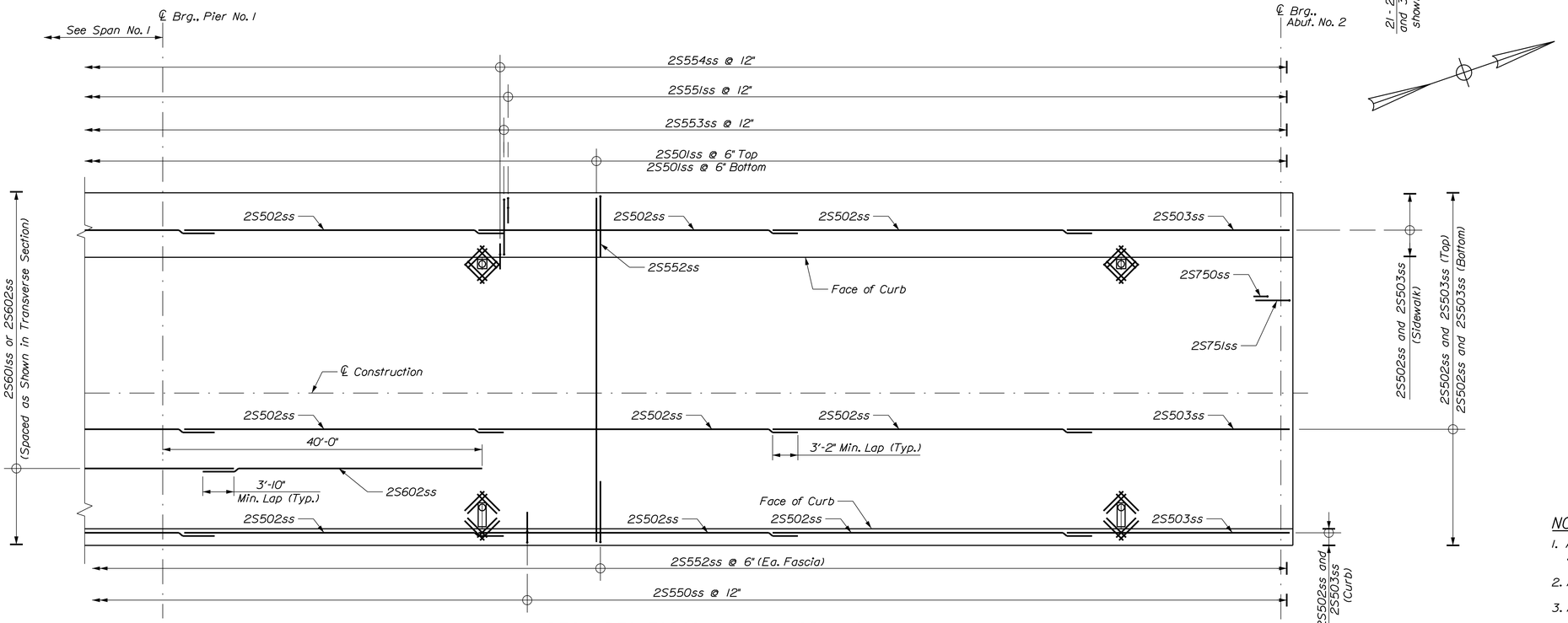
Date:11/18/2021

Division: BRIDGE

Filename: ...\MSTA\203_Brg2_Railing_2.dgn



DECK REINFORCING PLAN - SPAN 1



DECK REINFORCING PLAN - SPAN 2

NOTE

1. All reinforcing steel in the deck shall be stainless steel unless noted otherwise.
2. Alternate 2S503ss Bars at opposite end of deck.
3. Alternate position of 2S601ss and 2S602ss (Typ.)

Date:11/18/2021

Division: BRIDGE

Filename: ...\204_Brg2_Deck-Ref-Plan.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472 WIN 022512.01
BRIDGE NO. 2806 WIN 022511.01
BRIDGE PLANS

P.E. NUMBER

DATE

SIGNATURE

PROJ. MANAGER	MICHAEL WIGHT	BY	DATE
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

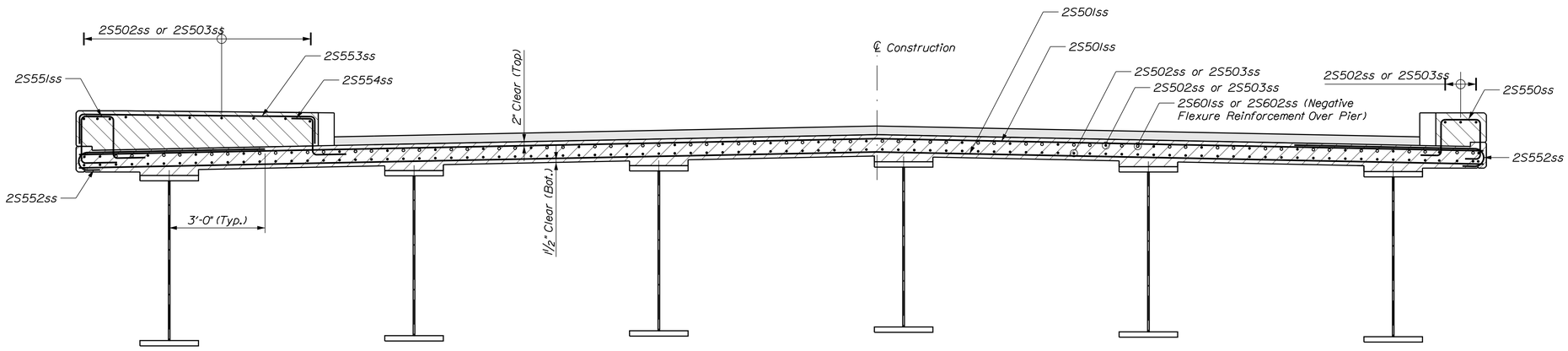
STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

DECK REINFORCEMENT PLAN

SHEET NUMBER

204

OF 218



TRANSVERSE REINFORCING SECTION

Date:11/18/2021

Division: BRIDGE

Filename: ...\MSTA\205_Brg2_Deck-Ref.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1472
BRIDGE NO. 2806

WIN 022512.01
WIN 022511.01

BRIDGE PLANS

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	BY	P DONOVAN
CHECKED-REVIEWED	CT AYERS		RS BLUNT
DESIGN2-DETAILED2		DATE	9/28/21
DESIGN3-DETAILED3			9/28/21
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

DECK REINFORCEMENT SECTION

SHEET NUMBER

205

OF 218

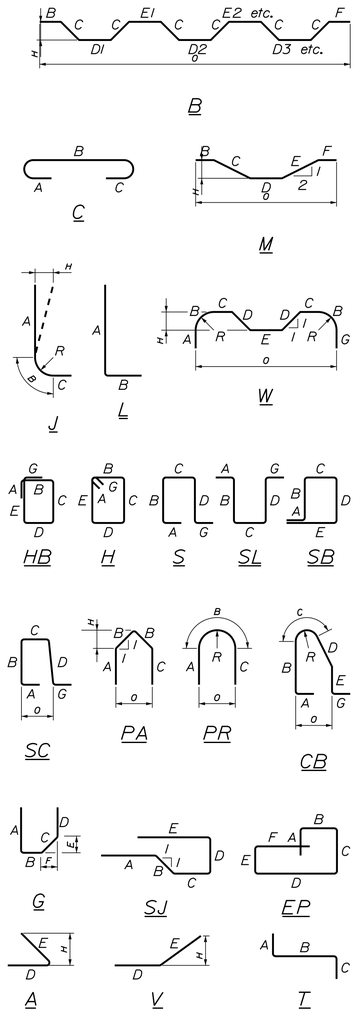
STRAIGHT BARS

MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION
2A606	21	34'-0"	Abutment 1				
2A607	4	16'-10"					
2A608	3	15'-6"					
2A609	10	30'-11"					
2A610	12	8'-6"					
2A611ss	8	7'-6"					
2A612	5	32'-2"					
2A613	2	6'-9"					
2A706	119	11'-0"					
2A707	6	10'-5"					
2A708	6	10'-3"					
2A806	24	6'-3"					
2A906	54	35'-0"					
2A907	20	22'-8"					
2A908	2	9'-11"					
2B606	21	34'-0"	Abutment 2				
2B607	4	16'-10"					
2B608	3	15'-6"					
2B609	10	30'-11"					
2B610	12	8'-6"					
2B611ss	8	7'-6"					
2B612	5	32'-2"					
2B613	2	6'-9"					
2B706	119	11'-0"					
2B707	6	10'-5"					
2B708	6	10'-3"					
2B806	24	6'-3"					
2B906	54	35'-0"					
2B907	20	22'-8"					
2B908	2	9'-11"					
2P600	48	3'-0"	Pier				
2P606	92	8'-6"					
2P607	24	45'-4"					
2P608	36	38'-3"					
2P809	181	19'-9"					
2P610	16	38'-6"					
2P611	6	22'-6"					
2S501ss	1134	43'-8"	Deck Slab/Curb				
2S502ss	931	40'-0"					
2S503ss	133	24'-10"					
2S504ss	128	3'-0"					
2S505ss	28	5'-8"					
2S506ss	14	4'-11"					
2S507ss	14	5'-8"					
2S601ss	58	60'-0"					
2S602ss	58	23'-10"					
2S603ss	26	3'-0"					
2AS506	32	32'-0"	Approach Slab				
2AS606	130	15'-0"					

BENT BARS

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
2A566	24	4'-6"	S	0'-0"	1'-0"	2'-6"	1'-0"			0'-0"				Abutment 1
2A567ss	24	4'-8"	S	0'-0"	1'-0"	2'-8"	1'-0"			0'-0"				
2A650	22	11'-1"	C	0'-8"	10'-5"	0'-0"								
2A651	8	16'-4"	C	0'-8"	15'-8"	0'-0"								
2A656	16	5'-10"	SJ	1'-6"	2'-10"	1'-6"	0'-0"	0'-0"						
2A657ss	8	11'-0"	V				0'-10"	10'-2"			4'-5"			
2A658	35	9'-6 1/2"	G	3'-2"	4'-11½"	0'-8"	0'-9"	0'-6"	0'-6"					
2A659	35	3'-0"	V				1'-6"	1'-6"			1'-1"			
2A660ss	2	6'-8"	S	0'-0"	2'-1"	2'-6"	2'-1"			0'-0"				
2A750	10	5'-6"	C	0'-10"	4'-8"	0'-0"								
2A756	141	12'-0"	S	0'-0"	4'-8"	2'-8"	4'-8"			0'-0"				
2B566	24	4'-6"	S	0'-0"	1'-0"	2'-6"	1'-0"			0'-0"				Abutment 2
2B567ss	24	4'-8"	S	0'-0"	1'-0"	2'-8"	1'-0"			0'-0"				
2B650	22	11'-1"	C	0'-8"	10'-5"	0'-0"								
2B651	8	16'-4"	C	0'-8"	15'-8"	0'-0"								
2B656	16	5'-10"	SJ	1'-6"	2'-10"	1'-6"	0'-0"	0'-0"						
2B657ss	8	11'-0"	V				0'-10"	10'-2"			4'-5"			
2B658	35	9'-6 1/2"	G	3'-2"	4'-11½"	0'-8"	0'-9"	0'-6"	0'-6"					
2B659	35	3'-0"	V				1'-6"	1'-6"			1'-1"			
2B660ss	2	6'-8"	S	0'-0"	2'-1"	2'-6"	2'-1"			0'-0"				
2B750	10	5'-6"	C	0'-10"	4'-8"	0'-0"								
2B756	141	12'-0"	S	0'-0"	4'-8"	2'-8"	4'-8"			0'-0"				
2P656	92	12'-6"	U	2'-0"	8'-6"	2'-0"								Pier
2P857	181	6'-9"	L	5'-5"	1'-4"	0								
2P658	18	11'-11 1/2"	PA	3'-6"	2'-5¾"	3'-6"					1'-9"	3'-6"		
2P659	18	9'-5"	PR	2'-0"	5'-5"	2'-0"						3'-6"	1'-9"	
2P660	80	9'-6"	U	2'-6"	4'-6"	2'-6"								
2P661	8	10'-10"	PR	2'-0"	6'-10"	2'-0"						4'-4½"	2'-4"	
2P662	4	9'-0"	U	3'-3"	2'-6"	3'-3"								
2P663	8	6'-4"	U	2'-0"	2'-4"	2'-0"								
2P664	16	6'-0"	U	2'-0"	2'-0"	2'-0"								
2S550ss	392	5'-7"	S	0'-10"	1'-4"	1'-3"	1'-4"			0'-10"				Deck Slab/Curb
2S551ss	392	5'-11"	S	0'-10"	1'-6"	1'-3"	1'-6"			0'-10"				
2S552ss	1134	6'-4"	C	0'-7"	5'-9"	0'-0"								
2S553ss	284	8'-11"	S	0'-0"	0'-10"	7'-3"	0'-10"			0'-0"				
2S554ss	284	3'-2"	S	0'-0"	0'-0"	1'-0"	1'-2"			1'-0"				
2S555ss	14	2'-8"	S	0'-0"	1'-0"	0'-8"	1'-0"							
2S556ss	14	2'-10"	S	0'-0"	1'-0"	0'-10"	1'-0"							
2S750ss	90	4'-0"	L	2'-0"	2'-0"									
2S751ss	90	8'-2"	L	4'-1"	4'-1"									

TYPE - BENDING DIAGRAMS



All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing Bar: ASTM A 615/A 615M, Grade 60
ASTM A 955, Grade 75

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size of the bar:

   Mark "A502" = bar size #5
   Mark "P805" = bar size #8
   Mark "S650" = bar size #6

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case will be based on crank bars as scheduled on the plans.

3. Bar Marks ending in a letter indicate the following:

   ss = Stainless Steel
   G = GFRP

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

WIN 022512.01
WIN 022511.01

BRIDGE NO. 1472
BRIDGE NO. 2806

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	P DONOVAN	9/28/21
CHECKED-REVIEWED	CT AYERS	RS BLUNT	9/28/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGE NO. 2
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

REINFORCING SCHEDULE

SHEET NUMBER

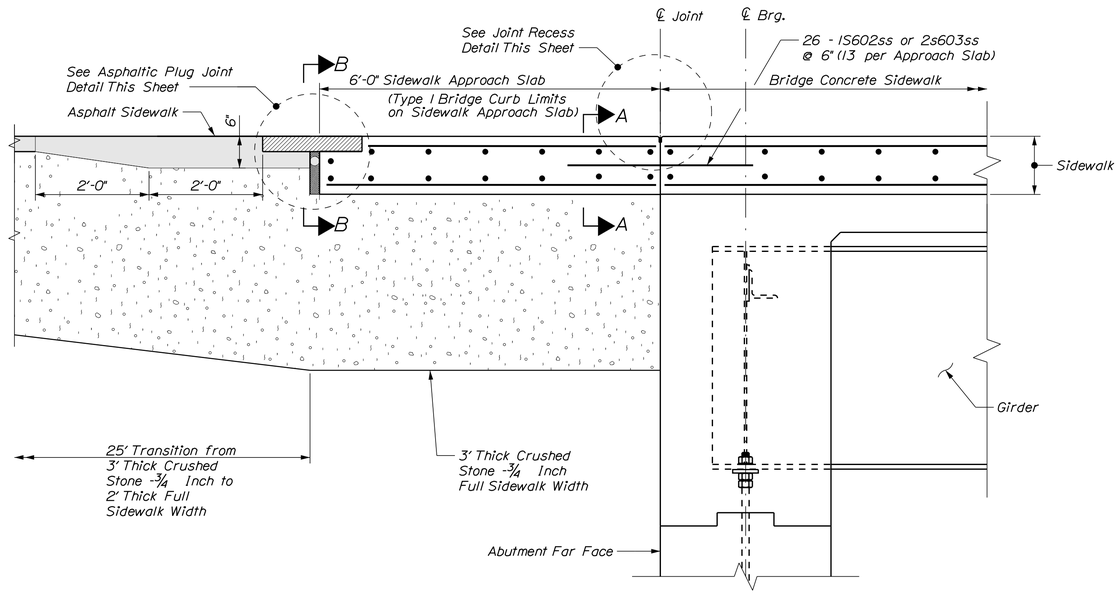
206

OF 218

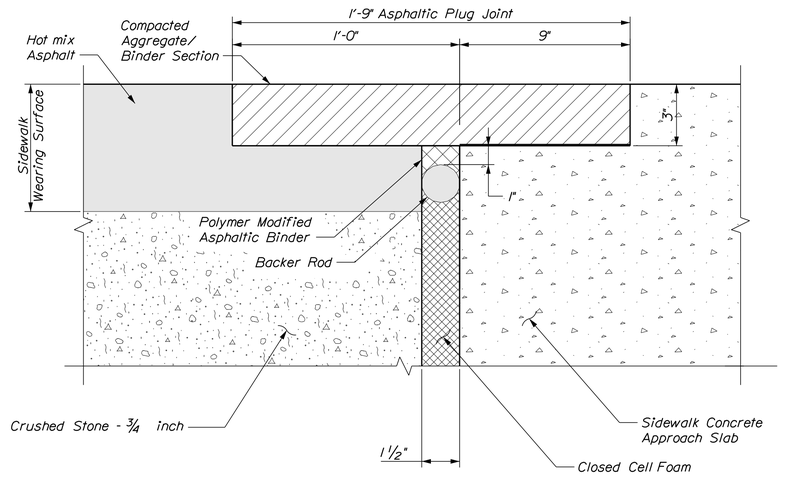
Date:11/18/2021

Division: BRIDGE

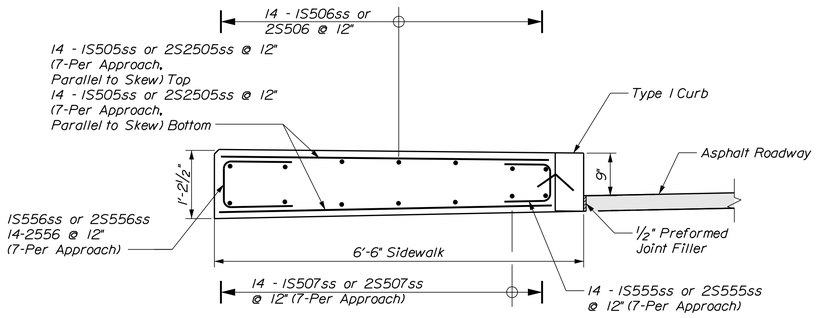
Filename: ...\MSTA\206_Reinf_Sch_02.dgn



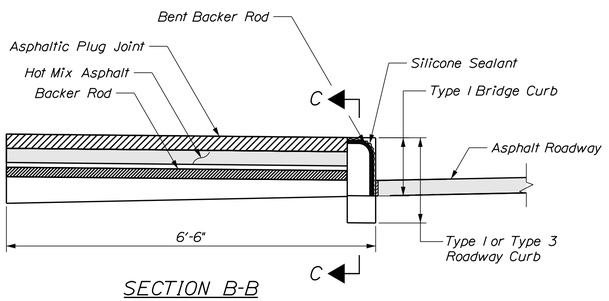
SIDEWALK APPROACH SLAB SECTION



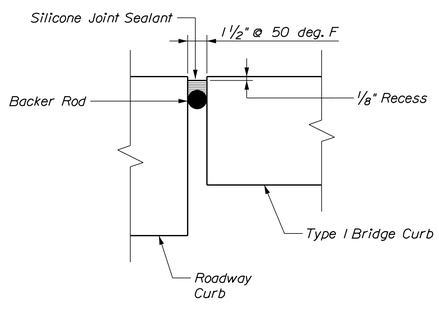
ASPHALTIC PLUG JOINT DETAIL
Scale: 3" = 1'-0"



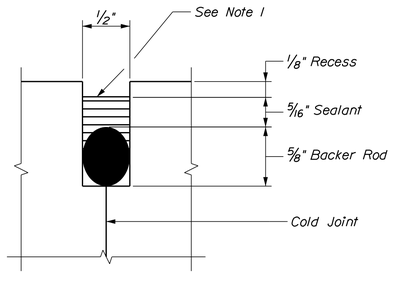
SECTION A-A



SECTION B-B



SECTION C-C



JOINT RECESS DETAIL AT SIDEWALK

NOTES:

1. Fill the sidewalk joint recess with a structural joint material, liquid sealant as directed by Resident. If the recess is saw cut, water blast immediately following cutting to remove any residual slurry before it dries. Clean the vertical faces of the recess by abrasive blast and air blow the residue from the recess. Prime the vertical faces with the manufacturer's recommended primer and allow to dry. Place a 5/8" dia. soft closed cell backer road in the bottom of the recess. Pour the Silicone sealant to a depth of approximately 5/16". Payment to be included in the unit price bid for the approach slab.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

WIN 022512.01
WIN 022511.01

BRIDGE NO. 1472
BRIDGE NO. 2806

	BY	DATE
PROJ. MANAGER	MICHAEL WIGHT	
DESIGN-DETAILED	TJ COOK	11/17/21
CHECKED-REVIEWED	CT AYERS	11/17/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

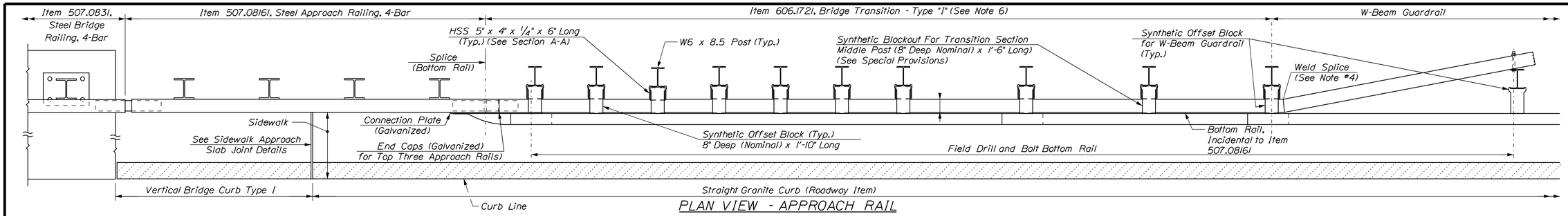
DATE

STILLWATER BRIDGES
OVER STILLWATER RIVER
OLD TOWN PENOBSCOT COUNTY

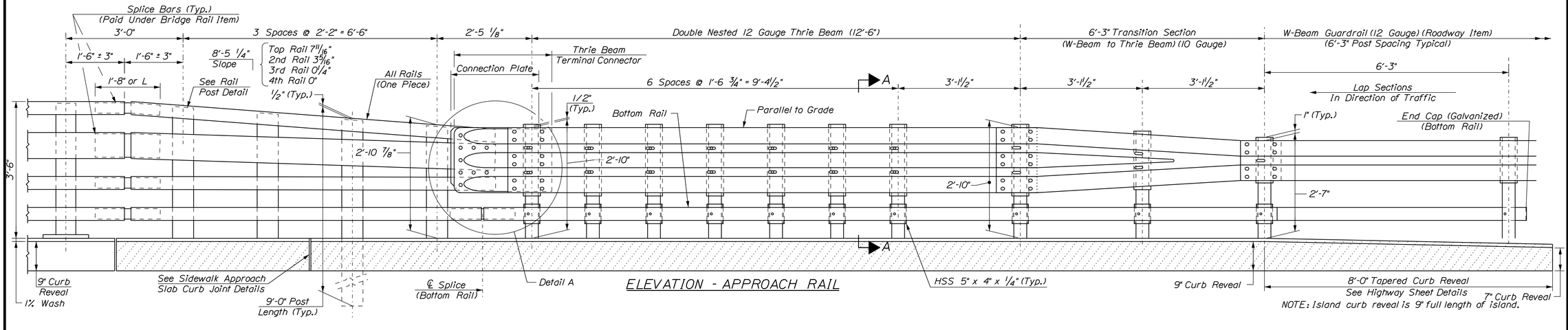
SIDEWALK
APPROACH SLAB DETAILS

SHEET NUMBER
207
OF 218

Date:11/18/2021
Division: BRIDGE
Filename: ...\MSTA\207_Sidewalk_Jt_Det.dgn

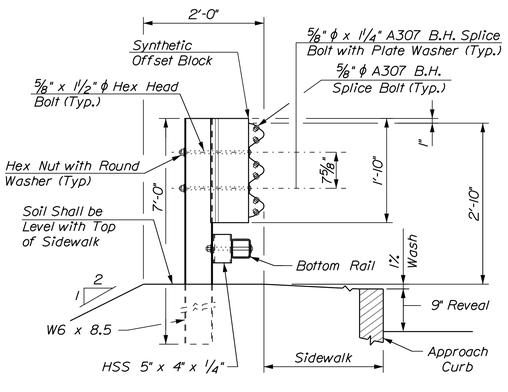


PLAN VIEW - APPROACH RAIL

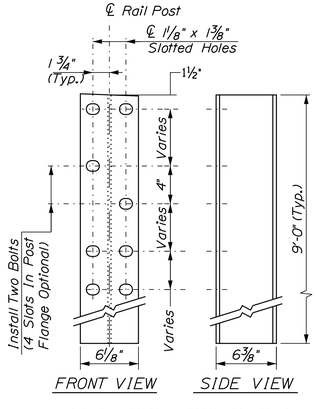


ELEVATION - APPROACH RAIL

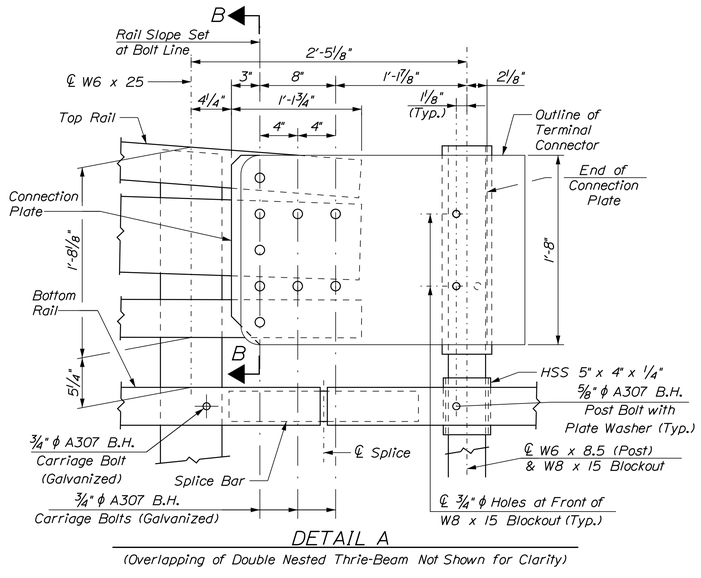
NOTE: Island curb reveal is 9" full length of island.



SECTION A-A (POST RAIL ASSEMBLY)



RAIL POST (W6 X 25)



DETAIL A

(Overlapping of Double Nested Thrie-Beam Not Shown for Clarity)

NOTES: STEEL BRIDGE RAILING, 4-BAR

1. Refer to Steel Bridge Railing and Steel Approach Railing, 3-Bar Standard Details for additional details, notes, and material specifications. For Section B-B, refer to Standard Detail 507(24).
2. Rail bar welds shall have a minimum penetration of 80% as demonstrated by a test weld performed by the fabricator.
3. The precast concrete vertical or transition curb shall meet the provisions of Section 609 - Curbing of the Standard Specifications. The bridge end of the curb shall be saw-cut in the field to fit the sidewalk approach slab joint details. Where curbing is specified on the adjacent highway, the transition shall be modified accordingly.
4. After installation of the guard rail is complete, upset the threads on the anchor bolts in three (3) places around each bolt, at the junction of the nut and the exposed thread, with a center punch or similar tool.
5. Splice Bar (bent): Weld splice bar to fit bend. Use complete joint penetration butt weld (B-U2). End splice bars to be paid under Bridge Railing Item.
6. Standard Bridge Transition may require longer posts to account for higher rail height. No additional payment will be made for the modification.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

WIN 022512.01
WIN 022511.01

BRIDGE NO. 1472
BRIDGE NO. 2806

PROJ. MANAGER	MICHAEL WIGHT		
DESIGN-DETAILED	TJ COOK	DATE	11/17/21
CHECKED-REVIEWED	CT AYERS	BY	P DONOVAN / RS BLUNT
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STILLWATER BRIDGES
OVER STILLWATER RIVER
OLD TOWN — PENOBSCOT COUNTY

BRIDGE RAIL TRANSITION DETAILS (4-BAR)

SHEET NUMBER

208

OF 218

Date:11/18/2021

Division: BRIDGE

Filename: ...\208_4Bar_Trans_Rail_02.dgn

PLAN LEGEND

Town, County, State	New R/W Along Existing R/W		Existing	Proposed		Existing	Proposed
Approx. Property Lines P.L.	Building	Clearing Limit Line	Sanitary Sewer		Traveled Way		
Existing Right of Way	Trees Conifer	Deciduous	Telephone Line		Ditch		
Limits of Wrought Portion L.O.W.P.	Tree Line	Bush Line	Electric Line	E	Catch Basin		
Control Of Access C.O.A.	Water Edge		Water Line	W	Manhole		
New Right of Way	Ledge	Rock/Boulder Flag Pole	Underdrain Line		Sewer Manhole		
New Easement	Fence CHAIN LINK	BARB WIRE STOCKADE	Gas Line		Utility Pole		
New Temporary Rights	Sign	Well WELL Mailbox	Guardrail		Fire Hydrant		
New R/W Within Existing R/W			Culvert		Curbing		

Cut Line C—C—C Fill Line F—F—F
Stonewall Retaining Wall
Baseline 10+00 11+00 12+00
Monument Traverse Point
Iron Rod Found ● IRF Pipe Found ● IPF
Replacement Pin Set ⊙

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and
recorded in Plan Bk _____, Pg._____
Attest: _____
REGISTER

GRID 19XX ZONE

TOWN/CITY LINE
CITY OF OLD TOWN
TOWN OF ORONO

CURVE DATA #1
PI = 4+00.00
Δ = 0°29'00.1" Lt.

UNIVERSITY OF MAINE SYSTEM

ITEM NO. (3) OMITTED

PI = STA. 4+00.00

PC = STA. 8+14.04

EXISTING SLOPE EASE.
S.H.C. FILE NO. 10-290

EASEMENT

SEE D.O.T. FILE NO. 10-397, 2000
SHEET 2 OF 2

1+00 BEGIN B.L.
300.00' +75
2+00 +49±
3+00 N33°47'42.2"E
4+00 +23± +24± +50
414.04'
5+00 +23±
6+00 +20 +70
7+00 N33°18'42.1"E
8+00 +50 +67± +69± +02± +03± +25

690± S.F. TEMP.
0.08± AC. LIMITS
1470± S.F. CONST.
515± S.F. LIMITS
TEMP.
200± S.F. CONST.
LTS.
EX. SLOPE EASE.
375± S.F. TEMP.
1340± S.F. CONST.
S.H.C. 10-137
EXISTING DRAIN. STRUCTURE EASE. S.H.C. 10-290 OUTLET PIPE
P.L.

R/W REFERENCES

SEE D.O.T. FILE NO. 10-206
SHEET 1 OF 1, 1972

SEE D.O.T. FILE NO. 10-290
SHEET 2 & 3 OF 3, 1983

BEGINNING OF PROJECT TO COLLEGE AVE.
S.H.C. FILE NO. 10-137, 1961

BEGINNING OF PROJECT TO T.L.
D.O.T. FILE NO. 10-397
SHEET 2 OF 2, 2000

BENNOCH ROAD NORTH
D.O.T. FILE NO. 10-243
SHEET 1 OF 7, 1978

BENNOCH ROAD SOUTH
PENOBSCOT REGISTRY OF DEEDS
VOL. 7, PAGE 174, 4 RODS, 1863

FRANKLIN STREET
OLD TOWN ROAD RECORDS
VOL. 1, PAGE 96

SOUTH SPRING STREET

SPRING STREET

FREE STREET

MICHAEL STREET

COLLEGE AVE. SOUTH

COLLEGE AVE. NORTH
D.O.T. FILE NO. 10-353, 1993

COLLEGE AVE. TO END OF PROJECT
D.O.T. FILE NO. 10-471, 2012

OLD MILL ROAD

BRUCE A. HAMEL
DEBORAH P. HAMEL
ITEM NO. (1)
TEMP. CONST. RIGHTS = 690± S.F. (1)
TOTAL AREA = 1.25± AC. (DEED)

BRUCE A. HAMEL
DEBORAH P. HAMEL
ITEM NO. (2)
TEMP. CONST. RIGHTS = 0.08± AC. (1)
TOTAL AREA = 7.53± AC. (TOWN)

BRUCE A. HAMEL
ITEM NO. (4)
TEMP. CONST. RIGHTS = 1470± S.F. (1)
TOTAL AREA = 0.98± AC. (TOWN)

LECLAIR PROPERTIES, LLC
ITEM NO. (5)
TEMP. CONST. RIGHTS = 515± S.F. (2)
TOTAL AREA = 1.12± AC. (TOWN)

MELISSA A. JORDAN
F/K/A MELISSA A. MCHUGH
ITEM NO. (6)
TEMP. CONST. RIGHTS = 375± S.F. (1)
TOTAL AREA = 0.25± AC. (OWNER)

~~GINGER A. BROWN~~
~~PHILIP W. BROWN~~
JENNIFER MULLINS
DAKOTA HORNE
ITEM NO. (7)
TEMP. CONST. RIGHTS = 1340± S.F. (1)
TOTAL AREA = 1.75± AC. (OWNER)

PENOBSCOT RENTALS, LLC
ITEM NO. (8)
TEMP. CONST. RIGHTS = 1340± S.F. (1)
TOTAL AREA = 0.71± AC. (TOWN)

WIN 022950.01

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	T.L.B.	T.L.B.
FINAL RIGHT OF WAY		
AREAS		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-0460
OLD TOWN
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

BRUCE A. VAN NOTE
COMMISSIONER

JOYCE NOEL TAYLOR
CHIEF ENGINEER

DATE

STATE HIGHWAY "50"
STILLWATER AVENUE
OLD TOWN PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2295001 (PART II)

JULY 2021	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-525
SCALE 1" = 25'	SHEET 1 OF 10	

SHEET NUMBER
209
OF 218

Username: Terri.L.Blair Date:11/18/2021
Filename: ...\00\ROW\MSTA\001_RWPLAN1.dgn Division: ROW

Filename: ...\00\ROW\MSTA\002_RWPLAN2.dgn Division: ROW Username: Terri.L.Blair Date:11/18/2021

PLAN LEGEND

Town, County, State		New R/W Along Existing R/W			Existing	Proposed	
Approx. Property Lines P.L.		Building	Clearing Limit Line	Sanitary Sewer			Traveled Way
Existing Right of Way		Trees Conifer	Deciduous	Telephone Line			Ditch
Limits of Wrought Portion L.O.W.P.		Tree Line	Bush Line	Electric Line	E	E	Catch Basin
Control Of Access C.O.A.		Water Edge		Water Line	W	W	Manhole
New Right of Way		Ledge	Rock/Boulder Flag Pole	Underdrain Line			Sewer Manhole
New Easement		Fence CHAIN LINK	BARB WIRE STOCKADE	Gas Line			Utility Pole
New Temporary Rights		Sign	Well WELL Mailbox	Guardrail			Fire Hydrant
New R/W Within Existing R/W				Culvert			Curbing

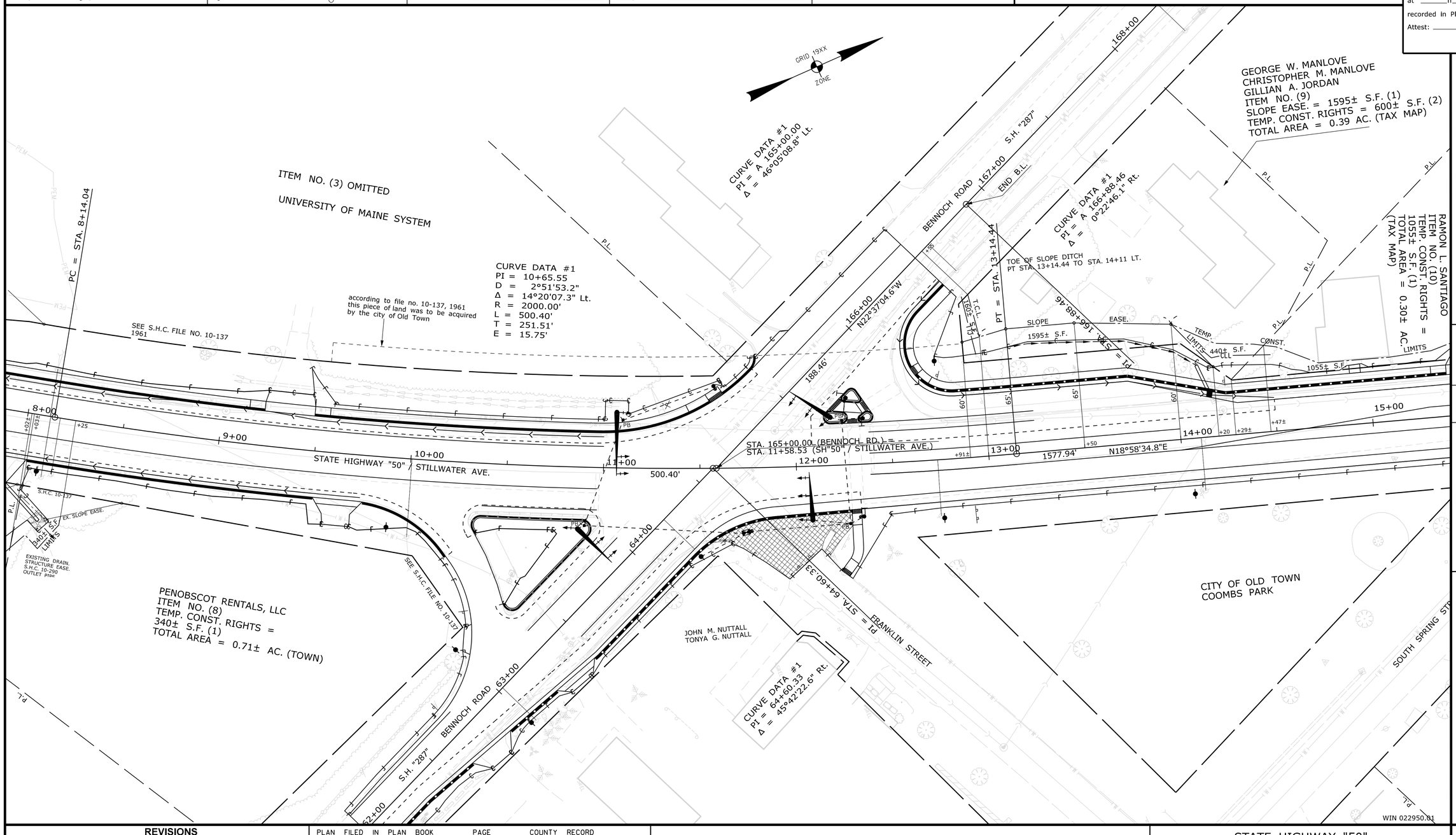
Cut Line C C C	Fill Line F F F		
Stonewall	Retaining Wall		
Baseline 10+00	11+00	12+00	
Monument	Traverse Point		
Iron Rod Found IRF	Pipe Found IPF		
Replacement Pin Set			

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and
recorded in Plan Bk _____, Pg. _____
Attest: _____
REGISTER



REVISIONS NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

ITEM	CHECKED
EXISTING CONDITION PLAN	T.L.B.
FINAL RIGHT OF WAY	T.L.B.
AREAS	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
OLD TOWN
RIGHT OF WAY MAP

STATE HIGHWAY "50"
STILLWATER AVENUE
OLD TOWN PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2295001 (PART II)

JULY 2021	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-525
SCALE 1" = 25'	SHEET 2 OF 10	

SHEET NUMBER
210
OF 218

Username: Terri.L.Blair Date:11/18/2021

Division: ROW

Filename: ...\00\ROW\MSTA\003_RWPLAN3.dgn

PLAN LEGEND

Town, County, State		New R/W Along Existing R/W		Existing	Proposed	Existing	Proposed
Approx. Property Lines	P.L.	Building	Clearing Limit Line	Sanitary Sewer		Traveled Way	
Existing Right of Way		Trees Conifer	Deciduous	Telephone Line		Ditch	
Limits of Wrought Portion	L.O.W.P.	Tree Line	Bush Line	Electric Line		Catch Basin	
Control Of Access	C.O.A.	Water Edge		Water Line		Manhole	
New Right of Way		Ledge	Rock/Boulder Flag Pole	Underdrain Line		Sewer Manhole	
New Easement		Fence CHAIN LINK	BARB WIRE STOCKADE	Gas Line		Utility Pole	
New Temporary Rights		Sign	Well Mailbox	Guardrail		Fire Hydrant	
New R/W Within Existing R/W				Culvert		Curbing	

Cut Line C C C	Fill Line F F F	
Stonewall	Retaining Wall	
Baseline 10+00	11+00 12+00	
Monument	Traverse Point	
Iron Rod Found IRF	Pipe Found IPF	
Replacement Pin Set		

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and
recorded in Plan Bk _____, Pg. _____
Attest: _____
REGISTER

GEORGE W. MANLOVE
CHRISTOPHER M. MANLOVE
GILLIAN A. JORDAN
ITEM NO. (9)
SLOPE EASE. = 1595± S.F. (1)
TEMP. CONST. RIGHTS = 600± S.F. (2)
TOTAL AREA = 0.39 AC. (TAX MAP)

RAMON L. SANTIAGO
ITEM NO. (10)
TEMP. CONST. RIGHTS = 1055± S.F. (1)
TOTAL AREA = 0.30± AC. (TAX MAP)

KEITH MANAKER
LAWRENCE MANAKER

ORONO PROPERTIES, LLC
PARCEL NO. (11)
LAND = 342± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 945± S.F. (1)
TOTAL AREA = 0.17± AC. (TAX MAP)

OWEN J. FOLSOM
ROSEMARY FOLSOM
ITEM NO. (12) OMITTED

NICLAS ERHARDT
DEVON DEMARCO
ITEM NO. (15)
CONST. & MAINT. EASE. 270± S.F. (1)
TEMP. CONST. RIGHTS =0.10 (2)
TEMP. ROAD RIGHTS = 0.20± AC. (1)
TOTAL AREA = 1.09± AC. (TAX MAP)

ANDREW R. PERRY
BETH A. PERRY
ITEM NO. (14)
TEMP. CONST. RIGHTS = 440± S.F. (1)
TEMP. ROAD RIGHTS = 935± S.F. (1)
TOTAL AREA = 0.25± AC. (OWNER)

CITY OF OLD TOWN
COOMBS PARK

ANTONIOS N. DIMOULAS
PARCEL NO. (13)
LAND = 222± S.F.
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 735± S.F. (3)
TOTAL AREA = 0.26± AC. (TAX MAP)

SPRING STREET
SOUTH SPRING STREET
FREE STREET
STATE HIGHWAY "50" / STILLWATER AVE.
N18°58'34.8"E
1577.94'
FERC PROJECT LIMITS
STILLWATER BRIDGE
OVER
STILLWATER RIVER
BRIDGE NOS. 1472 & 2806
022950.01
WINS 022511.00
022512.00

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD					
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

ITEM	CHECKED	TECH
EXISTING CONDITION PLAN	T.L.B.	T.L.B.
FINAL RIGHT OF WAY		
AREAS		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
OLD TOWN
RIGHT OF WAY MAP

STATE HIGHWAY "50"
STILLWATER AVENUE
OLD TOWN PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2295001 (PART II)
FEDERAL AID PROJECT NO. STP-2251(200) BRIDGE NO. 1
FEDERAL AID PROJECT NO. STP-2251(100) BRIDGE NO. 2

JULY 2021	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-525
SCALE 1" = 25'	SHEET 3 OF 10	

SHEET NUMBER
211
OF 218

Filename: ...\00\ROW\MSTA\004_RWPLAN4.dgn Username: Terri.L.Blair Division: ROW Date:11/18/2021

PLAN LEGEND

Town, County, State	New R/W Along Existing R/W	Sanitary Sewer	Existing / Proposed	Traveled Way	Existing / Proposed	Cut Line	Fill Line
Approx. Property Lines P.L.	Building / Clearing Limit Line	Telephone Line		Ditch		Stonewall	Retaining Wall
Existing Right of Way	Trees Conifer / Deciduous	Electric Line		Catch Basin		Baseline 10+00	11+00 12+00
Limits of Wrought Portion L.O.W.P.	Tree Line / Bush Line	Water Line		Manhole		Monument	Traverse Point
Control Of Access C.O.A.	Water Edge	Underdrain Line		Sewer Manhole		Iron Rod Found IRF	Pipe Found IPF
New Right of Way	Ledge / Rock/Boulder / Flag Pole	Gas Line		Utility Pole		Replacement Pin Set	
New Easement	Fence CHAIN LINK / BARB WIRE / STOCKADE	Guardrail		Fire Hydrant			
New Temporary Rights	Sign / Well / Mailbox	Culvert		Curbing			
New R/W Within Existing R/W							

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and
recorded in Plan Bk _____, Pg. _____
Attest: _____
REGISTER

NICLAS ERHARDT
DEVON DEMARCO
ITEM NO. (15)
CONST. & MAINT. EASE. 270± S.F. (1)
TEMP. CONST. RIGHTS =0.10 (2)
TEMP. ROAD RIGHTS = 0.20± AC. (1)
TOTAL AREA = 1.09± AC. (TAX MAP)

ANDREW R. PERRY
BETH A. PERRY
ITEM NO. (14)
TEMP. CONST. RIGHTS = 440± S.F. (1)
TEMP. ROAD RIGHTS = 935± S.F. (1)
TOTAL AREA = 0.25± AC. (OWNER)

BLACK BEAR HYDRO PARTNERS, LLC
ITEM NO. (18)
DRAINAGE EASE. = (1)
TEMP. CONST. RIGHTS = 0.56± AC. (6)
TEMP. ROAD RIGHTS = 0.68± AC. (1)
TOTAL AREA = 1.65± AC. (SURVEY)

CITY OF OLD TOWN
ITEM NO. (16)
DRAIN. EASE. = (1)
TEMP. CONST. RIGHTS = 1350± S.F. (1)
TOTAL AREA = 0.08± AC. (TAX MAP)

GRID 19XX ZONE

STILLWATER RIVER

STILLWATER HYDROELECTRIC PROJECT
FERC NO. 2712

APPROX. LOCATION OF 85' x 99' PERPETUAL EASE. BURDENING LOCUS TO CITY OF OLD TOWN PENOBSCOT COUNTY REGISTRY OF DEEDS B2254-P100 04/03/1972

APPROX. LOCATION OF FORMER CANAL

FERC PROJECT LIMITS

ROAD CL

TEMP. ROAD LIMITS

0.68± AC.
0.20± AC.
0.06± AC.
0.16± AC.
0.14± AC.

1175± S.F.
440± S.F.
935± S.F.
270± S.F.
80± S.F.
280± S.F.
1350± S.F.
1205± S.F.

EXIST. DRAINAGE EASE. S.H.C. FILE NO. 10-137 SHEET 4 OF 8, 1961

EXIST. DRAINAGE EASE. S.H.C. FILE NO. 10-137 SHEET 4 OF 8

BENEFITTING TOWN OF OLD TOWN

OUTLET DRAINAGE STRUCTURE STA. 21+95± RT.

BRIDGE NO. 1
1577.94'
N18°58'34.8"E

BRIDGE NO. 2

STATE HIGHWAY "50" / STILLWATER AVE.

21+00 22+00 23+00 24+00 25+00 26+00 27+00

STILLWATER BRIDGE
OVER
STILLWATER RIVER

BRIDGE NOS. 1472 & 2806

022950.01
WINS 022511.00
022512.00

REVISIONS NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE	COUNTY RECORD NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

ITEM	CHECKED TECH
EXISTING CONDITION PLAN	T.L.B.
FINAL RIGHT OF WAY	T.L.B.
AREAS	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
OLD TOWN
RIGHT OF WAY MAP

STATE HIGHWAY "50"
STILLWATER AVENUE
OLD TOWN PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2295001 (PART II)
FEDERAL AID PROJECT NO. STP-2251(200) BRIDGE NO. 1
FEDERAL AID PROJECT NO. STP-2251(100) BRIDGE NO. 2

JULY 2021	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-525
SCALE 1" = 25'	SHEET 4 OF 10	

SHEET NUMBER
212
OF 218

PLAN LEGEND

Town, County, State		New R/W Along Existing R/W		Existing	Proposed	Existing	Proposed
Approx. Property Lines P.L.		Building	Clearing Limit Line	Sanitary Sewer		Traveled Way	
Existing Right of Way		Trees Conifer	Deciduous	Telephone Line		Ditch	
Limits of Wrought Portion L.O.W.P.		Tree Line	Bush Line	Electric Line		Catch Basin	
Control Of Access C.O.A.		Water Edge		Water Line		Manhole	
New Right of Way		Ledge	Rock/Boulder Flag Pole	Underdrain Line		Sewer Manhole	
New Easement		Fence CHAIN LINK	BARB WIRE STOCKADE	Gas Line		Utility Pole	
New Temporary Rights		Sign	Well Mailbox	Guardrail		Fire Hydrant	
New R/W Within Existing R/W				Culvert		Curbing	

Cut Line C C C	Fill Line F F F	
Stonewall	Retaining Wall	
Baseline 10+00 11+00 12+00		
Monument	Traverse Point	
Iron Rod Found IRF	Pipe Found IPF	
Replacement Pin Set		

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and
recorded in Plan Bk _____, Pg. _____
Attest: _____
REGISTER

STILLWATER RIVER

STILLWATER HYDROELECTRIC PROJECT
FERC NO. 2712

DEBORAH L. PATTEN
LISA JEANNE PATTEN
ITEM NO. (17)
CONST. & MAINT. EASE. = 100± S.F. (1)
TEMP. CONST. RIGHTS = 0.08± AC. (2)
TEMP. ROAD RIGHTS = 0.08± AC. (1)
TOTAL AREA = .016± AC. (CALC.)

0.08± AC.
LOT 1
0.68± AC.

CURVE DATA #2
PI = 28+92.38
Δ = 0°25'22.4" Lt.
PI = STA. 28+92.38

1970± S.F.
1705± S.F.
EXIST. DRAINAGE EASE. S.H.C. FILE NO. 10-137 SHEET 4 OF 8, 1961
CONST. & MAINT. EASE. LIMITS
100± S.F.

BRIDGE NO. 2
BEGIN B.L. PART I
N18°55'34.8"E 1577.94'±
199.97'
N18°33'12.4"E
107.65' (PART I)
N18°48'59.4"E
682.37'
END B.L. PART I
STATE HIGHWAY "50" / STILLWATER AVE.
243' TOTAL ALONG PRESENT R/W
(571'± TOTAL ALONG PRESENT R/W)

27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00

OUTLET DRAINAGE STRUCTURE STA. 28+85 RT.
EXIST. DRAINAGE EASE. S.H.C. FILE NO. 10-137 SHEET 4 OF 8, 1961
0.17± AC.
EXIST. SLOPE EASE. S.H.C. FILE NO. 10-137 SHEET 4 OF 8, 1961
RÉPLACE EXISITNG RIP RAP
TEMP. CONST. LIMITS

FOR ITEM NO. 44 SEE SHEET 10
SHOWS AS A ROW ON TAX MAP 10-137 SHOWED UP ON THE 1961 PLANS AS SHOWN

CHRISTOPHER M. MANLOVE
JANE C. ADAMS
ITEM NO. (19)
TEMP. CONST. RIGHTS = 940± S.F. (1)
TEMP. ROAD RIGHTS = 1750± S.F. (1)
BUILDINGS = (1)
TOTAL AREA = 0.65± AC. (TAX MAP)

NOTE: RIGHTS TAKEN TO RAZE OR REMOVE BUILDING AT STA. 30+35 LT.

JOHN J. PEDERSEN
ITEM NO. (21)
TEMP. CONST. RIGHTS = 190± S.F. (1)
TOTAL AREA = 0.18± AC. (TAX MAP)

STEVEN C. ROPER
ITEM NO. (23)
TEMP. CONST. RIGHTS = 225± S.F. (1)
TOTAL AREA = 0.13± AC. (TAX MAP)

JONATHAN PARKER
PARCEL NO. (25)
LAND = 327± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
DRAIN. EASE. = 120± S.F. (1)
TEMP. CONST. RIGHTS = 910± S.F. (1)
TOTAL AREA = 0.25± AC. (TAX MAP)

TRUCK TASK LLC
(PER TAX RECORDS)
PARCEL NO. (29)
LAND = 176± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 205± S.F. (1)
TOTAL AREA = 0.52± AC. (TAX MAP)

DAVID E. GRANT
PARCEL NO. (27)
LAND = 423± S.F. (1) (EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 765± S.F. (1)
TOTAL AREA = 0.14± AC. (TAX MAP)
ROW BENEFITTING WESTERLY ABUTTER FOR ACCESS

DRAINAGE STRUCTURE STA. 32+57 TO STA. 32+68 LT.

MICHAEL STREET

910± S.F.
765± S.F.
205± S.F.
705± S.F.
415± S.F.
423± S.F.
327± S.F.
176± S.F.
315± S.F.
795± S.F.
278± S.F.
195± S.F.
410± S.F.
330± S.F.
389± S.F.
785± S.F.
350± S.F. T.C.L.
940 S.F.
1750± S.F.
225± S.F.
190± S.F.

SANDRA J. RUSSELL
WILLIAM E. RUSSELL
PARCEL NO. (20)
LAND = 389± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 1465± S.F. (3)
TOTAL AREA = 0.48± AC.

CURVE DATA #2
PI = 30+92.35
Δ = 0°15'47.0" Rt
PI = STA. 30+92.35

NATALIA ERB
PARCEL NO. (22)
LAND = 195± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 410± S.F. (1)
TOTAL AREA = 0.13± AC. (TAX MAP)

ESTATE OF ANNE C. HABERER
PARCEL NO. (24)
LAND = 278± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 795± S.F. (1)
TOTAL AREA = 0.34± AC. (TAX MAP)

BRUCE A. HAMEL
DEBORAH P. HAMEL
PARCEL NO. (26)
LAND TAKEN = 293± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 315± S.F. (1)
TOTAL AREA = 0.30± AC. (TAX MAP)

JOSEPH L. ALEX
JOANNE D. ALEX
PARCEL NO. (28)
LAND = 415± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 705± S.F. (1)
TOTAL AREA = 0.51± AC. (TAX MAP)

BLACK BEAR HYDRO PARTNERS, LLC
ITEM NO. (18)
DRAINAGE EASE. = (1)
TEMP. CONST. RIGHTS = 0.56± AC. (6)
TEMP. ROAD RIGHTS = 0.68± AC. (1)
TOTAL AREA = 1.65± AC. (SURVEY)

STILLWATER HYDROELECTRIC PROJECT
FERC NO. 2712

STILLWATER BRIDGE
OVER
STILLWATER RIVER
BRIDGE NOS. 1472 & 2806
022950.01
WINS 022511.00
022512.00

ITEM	CHECKED	TECH
EXISTING CONDITION PLAN	T.L.B.	T.L.B.
FINAL RIGHT OF WAY PLAN		
AREAS		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
OLD TOWN
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
	PART I	COND.	09-13-21	16190	6

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "50"
STILLWATER AVENUE
OLD TOWN PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2295001 (PART I & PART II)
FEDERAL AID PROJECT NO. STP-2251(200) BRIDGE NO. 1
FEDERAL AID PROJECT NO. STP-2251(100) BRIDGE NO. 2

JULY 2021 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 10-525
SCALE 1" = 25' | SHEET 5 OF 10

SHEET NUMBER
213
OF 218

Username: Terri.L.Blair Date:11/18/2021
Filename: ...\00\ROW\MSTA\005_RWPLAN5.dgn Division: ROW

Filename: ...\00\ROW\MSTA\006_RWPLAN6.dgn Username: Terri.L.Blair Date:11/18/2021 Division: ROW

PLAN LEGEND

			Existing	Proposed		Existing	Proposed		
Town, County, State	Building	Sanitary Sewer			Traveled Way			Cut Line	Fill Line
Approx. Property Lines P.L.	Trees Conifer / Deciduous	Telephone Line			Ditch			Stonewall	Retaining Wall
Existing Right of Way	Tree Line / Bush Line	Electric Line			Catch Basin			Baseline 10+00 11+00 12+00	
Limits of Wrought Portion L.O.W.P.	Water Edge	Water Line			Manhole			Monument	Traverse Point
Control Of Access C.O.A.	Ledge / Rock/Boulder / Flag Pole	Underdrain Line			Sewer Manhole			Iron Rod Found IRF	Pipe Found IPF
New Right of Way	Fence CHAIN LINK / BARB WIRE / STOCKADE	Gas Line			Utility Pole			Replacement Pin Set	
New Easement	Sign / Well / Mailbox	Guardrail			Fire Hydrant				
New Temporary Rights		Culvert			Curbing				
New R/W Within Existing R/W									

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and
recorded in Plan Bk _____, Pg. _____
Attest: _____
REGISTER

TRUCK TASK LLC
(PER TAX RECORDS)
PARCEL NO. (29)
LAND = 176± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 205± S.F. (1)
TOTAL AREA = 0.52± AC.
(TAX MAP)

JENNIFER M. WHITNEY-DUDLEY
F/K/A JENNIFER M. WHITNEY
PARCEL NO. (32)
LAND TAKEN = 0.18± AC. (ENTIRE LOT)
BUILDINGS = (1)

ELIZABETH J. GOUIN
PARCEL NO. (30)
LAND = 700± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 730± S.F. (1)
TOTAL AREA = 0.32± AC.
(TAX MAP)

(EASE. FOR ROW BENEFITTING WESTERLY ABUTTER)
RIGHTS = 0.14± AC.

DOUGLAS G. QUAGLIAROLI
LINDA P. QUAGLIAROLI
PARCEL NO. (33)
LAND = 711± S.F. (2)
(EASE. FOR HIGHWAY PURPOSES)
SIGNAL SYSTEM EASE. - 365± S.F. (1)
TEMP. CONST. RIGHTS = 0.07± AC. (1)
TOTAL AREA = 0.16± AC.(TAX MAP)

MCDONALD'S CORPORATION
PARCEL NO. (35)
LAND = 146± S.F. (1)
(EASE FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 0.22± AC. (3)
TOTAL AREA = 1.21± AC.(TAX MAP)

CURVE DATA #4
PI = 87+65.97
D = 23°52'23.7"
Δ = 22°54'43.0" Rt.
R = 240.00'
L = 95.97'
T = 48.64'
E = 4.88'

CURVE DATA #2
PI = 37+74.72
Δ = 0°22'54.5" Lt.

NOTE:
ITEM 44 SEE SHEETS 5 & 10
CP 45 OMITTED

ROBERT L. LEIGHTON, JR.
ITEM NO. (41)
TEMP. CONST. RIGHTS = 540± S.F. (1)
TOTAL AREA = 1.26± AC. (TAX MAP)

ARDENT VENTURES, LLC
ITEM NO. (42)
TEMP. CONST. RIGHTS = 1070± S.F. (2)
TOTAL AREA = 1.12± AC.
(TAX MAP)

GOVERNO
ITEM NO.
TEMP. CO
355± S.F
TOTAL AR
(TAX MAP

LOT PLAN TH
GOVERNOR'S RE
BY THE AMES CO
DATED 9-15

KEEL & RUDDER, LLC
PARCEL NO. (31)
LAND = 0.14± AC. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 1900± S.F. (2)
TOTAL AREA = 0.54± AC.
(CALC.)

JOSEPH L. ALEX
JOANNE D. ALEX
PARCEL NO. (28)
LAND = 415± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
TEMP. CONST. RIGHTS = 705± S.F. (1)
TOTAL AREA = 0.51± AC.
(TAX MAP)

STILLWATER ALSID, LLC
PARCEL NO. (34)
LAND = 636± S.F. (1)
(EASE. FOR HIGHWAY PURPOSES)
SIGNAL SYSTEM EASE. = 265± S.F. (1)
TEMP. CONST. RIGHTS = 0.05± AC. (2)
TOTAL AREA = 0.84± AC. (TAX MAP)

CURVE DATA #3
PI = 85+31.93
D = 5°43'46.5"
Δ = 7°10'00.1" Rt.
R = 1000.00'
L = 125.08'
T = 62.62'
E = 1.96'

R.H. FOSTER ENERGY, LLC
ITEM NO. (40) OMITTED

R.H. FOSTER ENERGY
ITEM NO. (40) OMIT

CURVE DATA #2
PI = 42+29.58
D = 6°31'35.6"
Δ = 23°40'57.2" Rt.
R = 877.89'
L = 362.86'
T = 184.06'
E = 19.09'

PC = STA. 40+45.52

STATE HIGHWAY "50" / U.S. ROUTE 2A / STILLWATER AVE.
STA. 35+97.13 S.H. "50" / STILLWATER AVE. =
STA. 86+00.00 COLLEGE AVE.

COLLEGE AVENUE
STATE HIGHWAY "748"
U.S. ROUTE 2A
N 78°11'25.3" W
119.62'

N18°48'59.4"E 682.37'
N18°26'04.9"E 270.80'
U. S. ROUTE 2A

PC = STA. 87+12.33
PT = STA. 85+94.39
PC = STA. 84+69.31

REVISIONS NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
	PART I	COND.	09-13-21	16190	6

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

ITEM	CHECKED	TECH
EXISTING CONDITION PLAN		
FINAL RIGHT OF WAY	T.L.B.	T.L.B.
AREAS	T.L.B.	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
OLD TOWN
RIGHT OF WAY MAP

WIN 022950.01

STATE HIGHWAY "50"
STILLWATER AVENUE
OLD TOWN PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2295001 (PART I & PART II)

JULY 2021	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-525
SCALE 1" = 25'	SHEET 6 OF 10	

SHEET NUMBER
214
OF 218

Filename: ...\00\ROW\MSTA\007_RWPLAN7.dgn Username: Terri.L.Blair Date:11/18/2021 Division: ROW

PLAN LEGEND

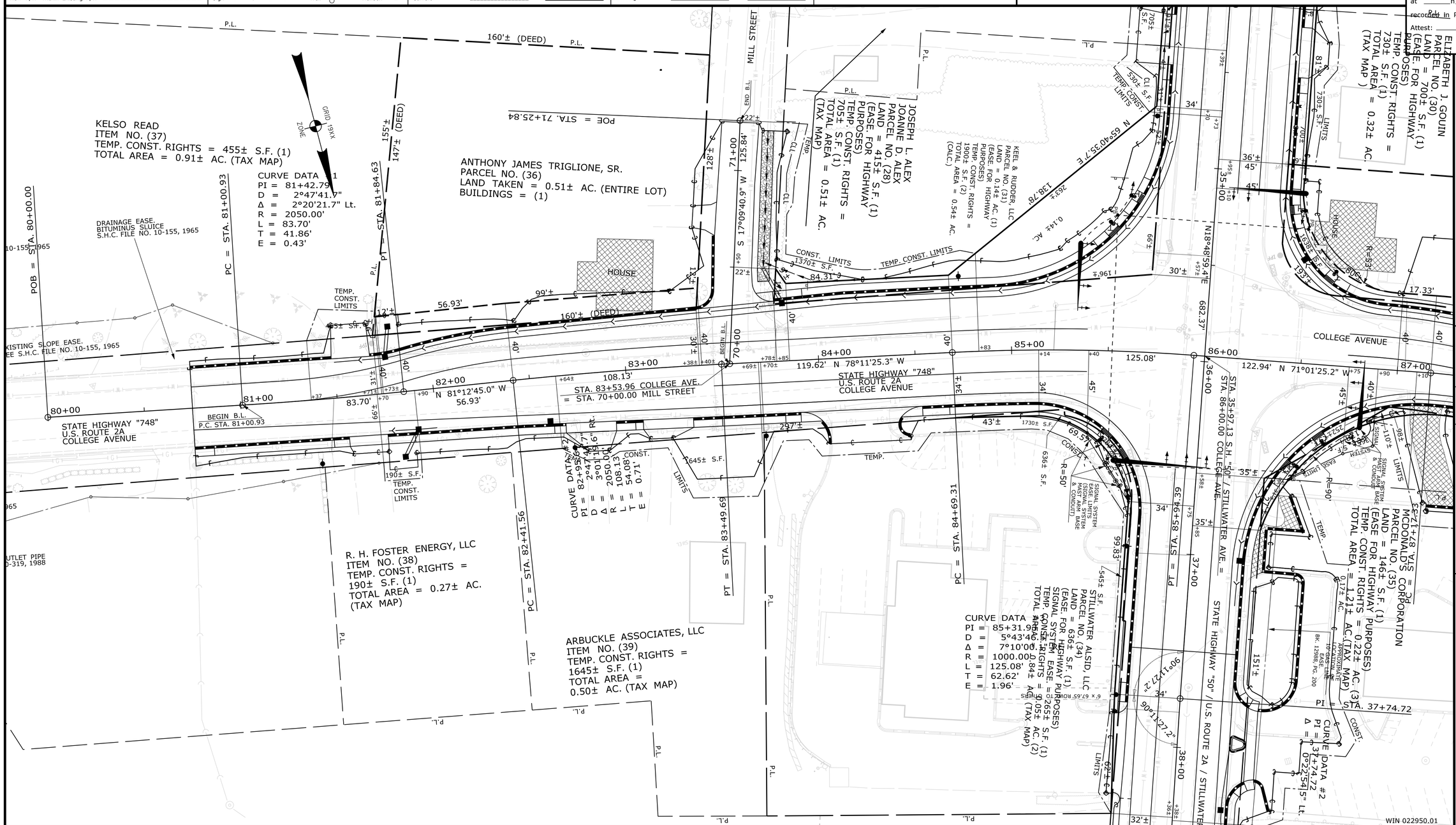
Town, County, State		New R/W Along Existing R/W		Existing	Proposed	Existing	Proposed
Approx. Property Lines	P.L.	Building	Clearing Limit Line	Sanitary Sewer		Traveled Way	
Existing Right of Way		Trees Conifer	Deciduous	Telephone Line		Ditch	
Limits of Wrought Portion	L.O.W.P.	Tree Line	Bush Line	Electric Line		Catch Basin	
Control Of Access	C.O.A.	Water Edge		Water Line		Manhole	
New Right of Way		Ledge	Rock/Boulder Flag Pole	Underdrain Line		Sewer Manhole	
New Easement		Fence CHAIN LINK	BARB WIRE STOCKADE	Gas Line		Utility Pole	
New Temporary Rights		Sign	Well Mailbox	Guardrail		Fire Hydrant	
New R/W Within Existing R/W				Culvert		Curbing	

Cut Line C C C	Fill Line F F F	Monument	Traverse Point
Stonewall	Retaining Wall	Iron Rod Found IRF	Pipe Found IPF
Baseline 10+00 11+00 12+00		Replacement Pin Set	

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and
recorded in Plan Bk _____, Pg. _____
Attest: _____
REGISTER



REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD					
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
	PART I	COND.	09-13-21	16190	6

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	B.D.M.	D.S.G.
FINAL RIGHT OF WAY	T.L.B.	P.N.S.
AREAS	T.L.B.	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
OLD TOWN
RIGHT OF WAY MAP

STATE HIGHWAY "50"
STILLWATER AVENUE
OLD TOWN PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2295001 (PART I & PART II)

JULY 2021	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-525
SCALE 1" = 25'	SHEET 7 OF 10	

SHEET NUMBER
215
OF 218

Filename: ...\00\ROW\MSTA\008_RWPLAN8.dgn Division: ROW Username: Terri.L.Blair Date:11/18/2021

PLAN LEGEND

Town, County, State	New R/W Along Existing R/W		Existing	Proposed		Existing	Proposed
Approx. Property Lines P.L.	Building	Clearing Limit Line	Sanitary Sewer		Traveled Way		
Existing Right of Way	Trees Conifer	Deciduous	Telephone Line		Ditch		
Limits of Wrought Portion L.O.W.P.	Tree Line	Bush Line	Electric Line		Catch Basin		
Control Of Access C.O.A.	Water Edge		Water Line		Manhole		
New Right of Way	Ledge	Rock/Boulder Flag Pole	Underdrain Line		Sewer Manhole		
New Easement	Fence CHAIN LINK	BARB WIRE STOCKADE	Gas Line		Utility Pole		
New Temporary Rights	Sign	Well WELL Mailbox	Guardrail		Fire Hydrant		
New R/W Within Existing R/W			Culvert		Curbing		

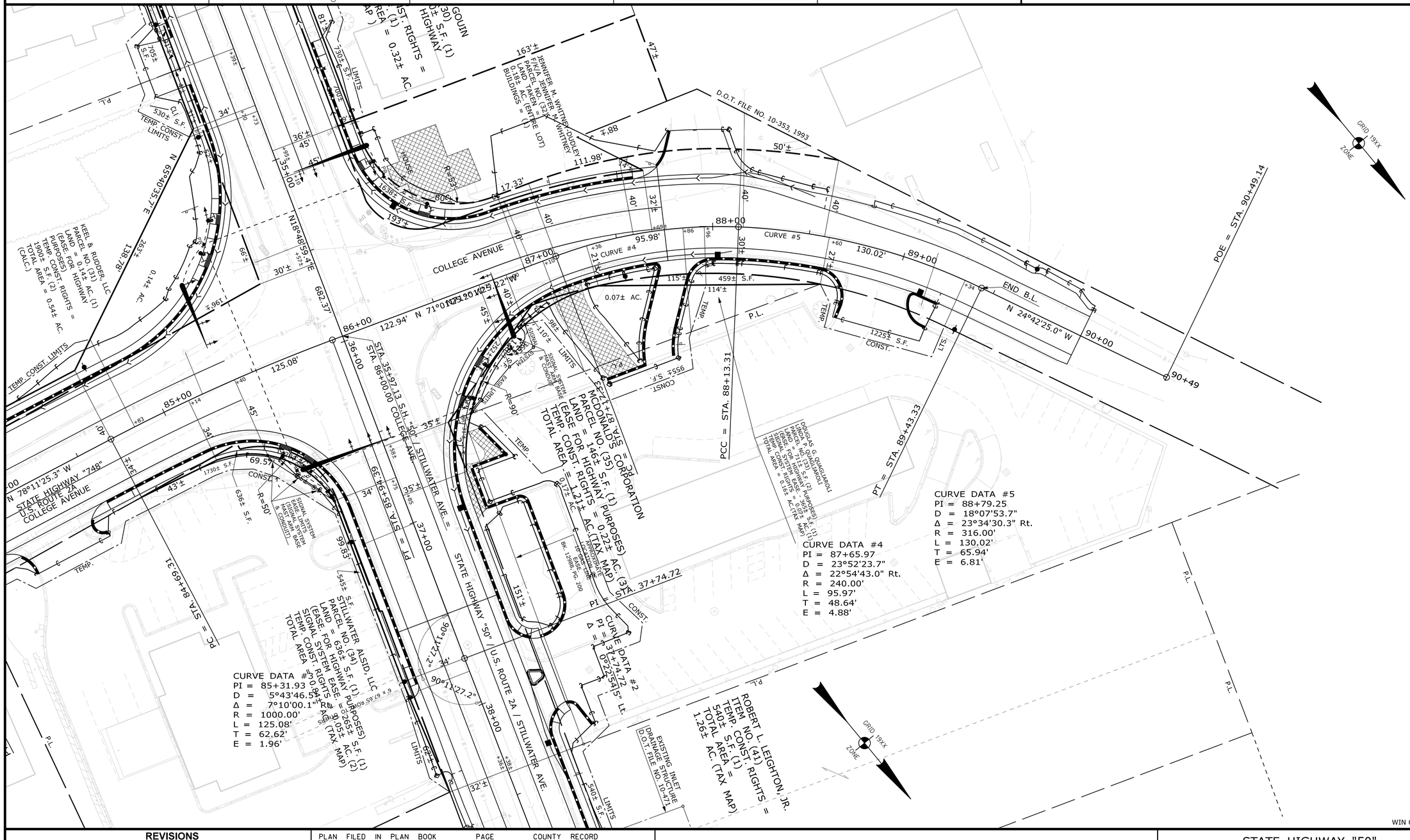
Cut Line	Fill Line	
Stonewall	Retaining Wall	
Baseline 10+00 11+00 12+00		
Monument	Traverse Point	
Iron Rod Found IRF	Pipe Found IPF	
Replacement Pin Set		

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and
recorded in Plan Bk _____, Pg. _____
Attest: _____
REGISTER



TECH	CHECKED
ITEM	
EXISTING CONDITION PLAN	T.L.B. / T.L.B.
FINAL RIGHT OF WAY	T.L.B. / T.L.B.
AREAS	T.L.B. / T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
OLD TOWN
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
	PART I	COND.	09-13-21	16190	6

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "50"
STILLWATER AVENUE
OLD TOWN PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2295001 (PART I & II)

JULY 2021	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-525
SCALE 1" = 25'	SHEET 8 OF 10	

SHEET NUMBER
216
OF 218

Filename: ...\00\ROW\MSTA\009_RWPLAN9.dgn Division: ROW Usernome: Terri.L.Blair Date:11/18/2021

PLAN LEGEND

Town, County, State	New R/W Along Existing R/W	Sanitary Sewer	Existing / Proposed	Traveled Way	Existing / Proposed	Cut Line	Fill Line
Approx. Property Lines P.L.	Building / Clearing Limit Line	Telephone Line		Ditch		Stonewall	Retaining Wall
Existing Right of Way	Trees Conifer / Deciduous	Electric Line		Catch Basin		Baseline 10+00 11+00 12+00	
Limits of Wrought Portion L.O.W.P.	Tree Line / Bush Line	Water Line		Manhole		Monument	Traverse Point
Control Of Access C.O.A.	Water Edge	Underdrain Line		Sewer Manhole		Iron Rod Found IRF	Pipe Found IPF
New Right of Way	Ledge / Rock/Boulder	Gas Line		Utility Pole		Replacement Pin Set	
New Easement	Fence CHAIN LINK / BARB WIRE / STOCKADE	Guardrail		Fire Hydrant			
New Temporary Rights	Sign / Well / Mailbox	Culvert		Curbing			
New R/W Within Existing R/W							

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and
recorded in Plan Bk _____, Pg._____
Attest: _____
REGISTER

LOT PLAN THIS AREA
GOVERNOR'S RESTAURANT
BY THE AMES CORPORATION
DATED 9-15-2000

NOTE:
FOR ITEM NO. 44 SEE SHEETS 5 & 10

GRID ISKX ZONE

ARDENT VENTURES, LLC
ITEM NO. (42)
TEMP. CONST. RIGHTS = 1070± S.F. (2)
TOTAL AREA = 1.12± AC.
(TAX MAP)

GOVERNOR'S RESTAURANT
ITEM NO. (43)
TEMP. CONST. RIGHTS = 355± S.F. (1)
TOTAL AREA = 1.08 AC.
(TAX MAP)

TEMP. 820± S.F.
CONST. 355± S.F.
LTS

STATE HIGHWAY "50" / STILLWATER AVE.
362.86'
40+00 41+00 +76± +27± +50 42+00

U. S. ROUTE 2A
362.86'
43+00 44+00 END B.L. N42°07'02.15"E 45+00 45+54

S.H.C. FILE NO. 10-137
EXISTING INLET
DRAIN STRUCTURE
D.O.T. FILE NO. 10-471
DRAINAGE EASE. EXIST. LIMITS

POE = STA. 45+54.09

EXISTING OUTLET
DRAINAGE STRUCTURES (4)
SEE D.O.T. FILE NO. 10-471, 2011

EXISTING SLOPE EASEMENT
SEE D.O.T. FILE NO. 10-471, 2011

METAL SLUICE
EXIST.DRAIN. EASE.
S.H.C. FILE NO. 10-137
D.O.T. FILE NO. 10-344

EXIST. SLOPE EASE. LIMITS EXIST. SLOPE EASE. LIMITS

R.H. FOSTER ENERGY, LLC

ITEM NO. (40) OMITTED

CURVE DATA #2
PI = 42+29.58
D = 6°31'35.6"
Δ = 23°40'57.2" Rt.
R = 877.89'
L = 362.86'
T = 184.06'
E = 19.09'

PC = STA. 40+45.52

PT = STA. 44+08.38

WIN 022950.01

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	T.L.B.	T.L.B.
FINAL RIGHT OF WAY PLAN		
AREAS		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
OLD TOWN
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "50"
STILLWATER AVENUE
OLD TOWN PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2295001 (PART II)

JULY 2021 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 10-525
SCALE 1" = 25' | SHEET 9 OF 10

SHEET NUMBER
217
OF 218

Filename: ...\00\ROW\MSTA\010_RWPLAN10.dgn Division: ROW Username: Terri.L.Blair Date:11/18/2021

PLAN LEGEND

Town, County, State
Approx. Property Lines — P.L.
Existing Right of Way
Limits of Wrought Portion — L.O.W.P.
Control Of Access — C.O.A.
New Right of Way
New Easement
New Temporary Rights
New R/W Within Existing R/W

New R/W Along Existing R/W
Building
Clearing Limit Line
Trees — Conifer — Deciduous
Tree Line — Bush Line
Water Edge
Ledge — Rock/Boulder — Flag Pole
Fence — CHAIN LINK — BARB WIRE — STOCKADE
Sign — Well — Mailbox

	Existing	Proposed
Sanitary Sewer		
Telephone Line		
Electric Line		
Water Line		
Underdrain Line		
Gas Line		
Guardrail		
Culvert		

	Existing	Proposed
Traveled Way		
Ditch		
Catch Basin		
Manhole		
Sewer Manhole		
Utility Pole		
Fire Hydrant		
Curbing		

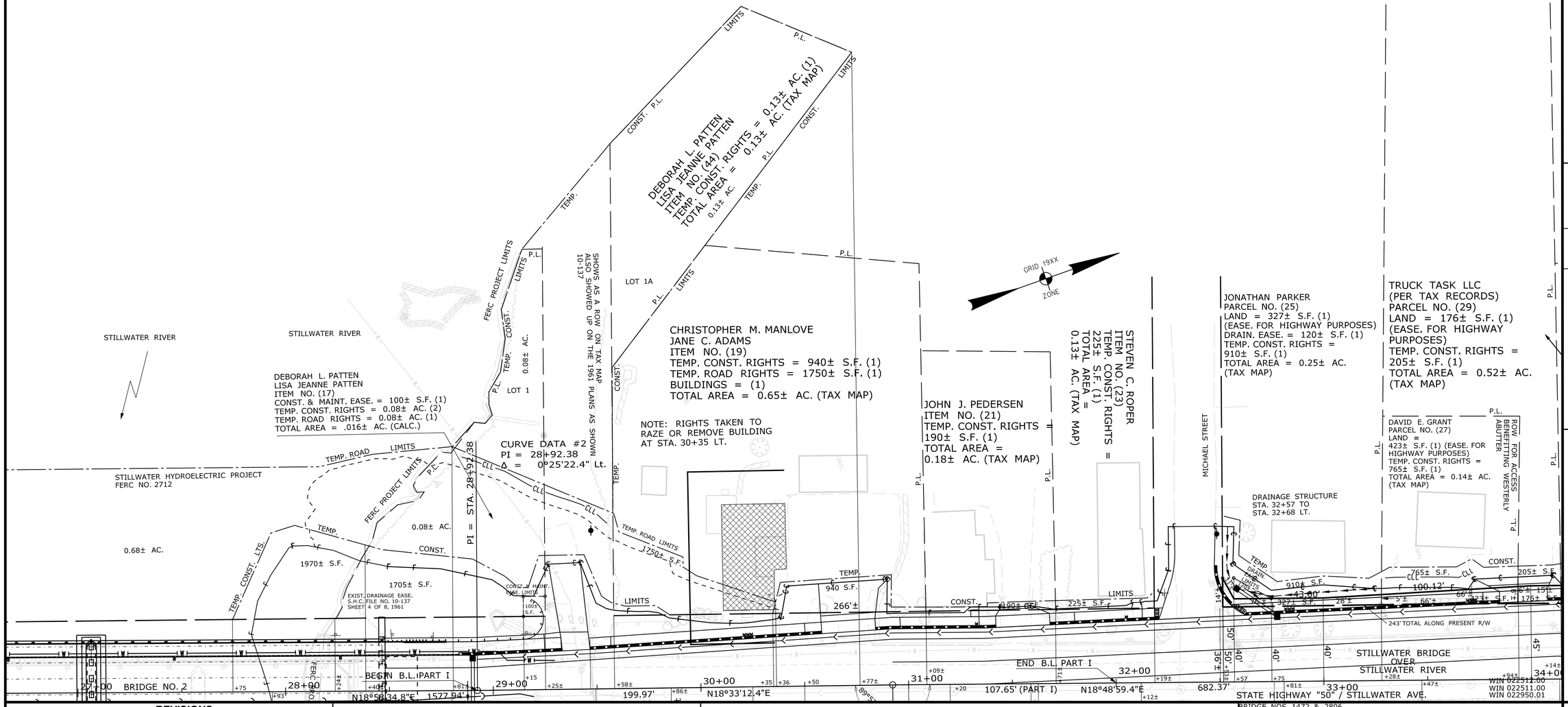
Cut Line — Fill Line
Stonewall — Retaining Wall
Baseline — 10+00 — 11+00 — 12+00
Monument — Traverse Point
Iron Rod Found ● IRF — Pipe Found ● IPF
Replacement Pin Set

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and
recorded in Plan Bk _____, Pg._____
Attest: _____
REGISTER



TECH	CHECKED
T.L.B.	T.L.B.
T.L.B.	T.L.B.

ITEM	
EXISTING CONDITION PLAN	
FINAL RIGHT OF WAY	
AREAS	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
OLD TOWN
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
PART I		COND.	09-13-21	16190	6

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

BRIDGE NOS. 1472 & 2806

STATE HIGHWAY "50"
STILLWATER AVENUE
OLD TOWN PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2295001 (PART I & II)
FEDERAL AID PROJECT NO. STP-2251(200) BR. NO.1
FEDERAL AID PROJECT NO. STP-2251(100) BR. NO.2

JULY 2021	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-525
SCALE 1" = 25'	SHEET 10 OF 10	

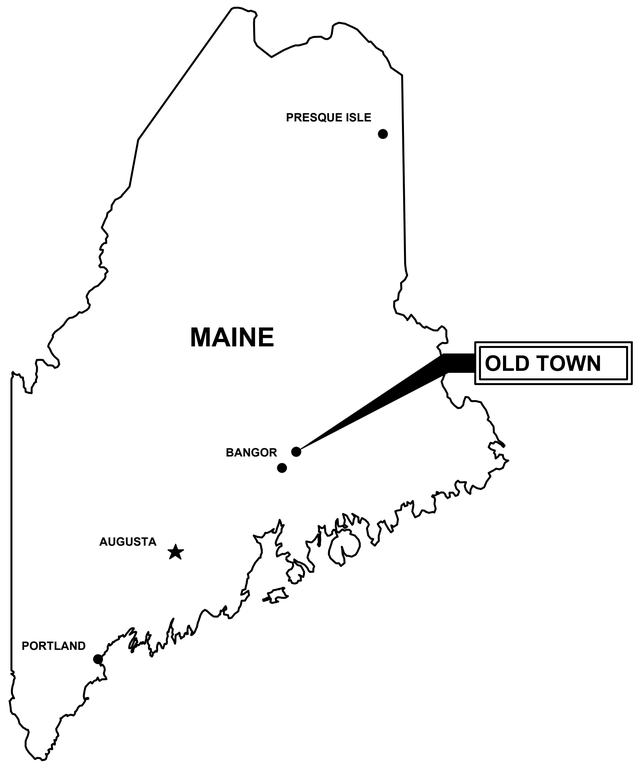
SHEET NUMBER
218
OF 218

CITY OF OLD TOWN, MAINE

CONTRACT DRAWINGS FOR

STILLWATER AVENUE PUMP STATION FORCE MAIN REPLACEMENT FEDERAL AID PROJECT # 2189401

NOVEMBER 2021



DRAWING INDEX

GENERAL

---	COVER SHEET

CIVIL

C-1	GENERAL NOTES, LEGEND, ABBREVIATIONS, AND DETAILS
C-2	PLAN AND PROFILE I - BRIDGE NO.1
C-3	PLAN AND PROFILE I - BRIDGE NO.2
C-4	SEWER FORCE MAIN DETAILS
C-5	SEWER FORCE MAIN BRIDGE SUPPORT DETAILS

STATE OF MAINE
BENJAMIN W. STILES
14081
LICENSED PROFESSIONAL ENGINEER
11/23/2021

WRIGHT-PIERCE
Engineering a Better Environment

888.621.8156 | www.wright-pierce.com

WP PROJECT No. 20593

LAST SAVED BY: DON.SAVAGE 11/23/2021 8:33 AM

GENERAL NOTES

1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).

2. CONTRACTOR SHALL NOTE THAT, IN GENERAL, ALL EXISTING CONDITION INFORMATION ON THE DRAWINGS ARE SHOWN WITH A LIGHTER LINE WEIGHT AND WITH A SLANTED TYPE TEXT. REFER TO MAINE DOT DRAWINGS FOR ADDITIONAL INFORMATION ON BRIDGE STRUCTURE.

3. ALL EXISTING SEWER AND STORM DRAIN LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE. ANY EXISTING SEWERS, STORM DRAIN LINES OR CULVERTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

4. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. INJURY TO ANY SUCH STRUCTURES CAUSED BY OR RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY.

5. FORCE MAINS SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS INDICATED ON THE DRAWINGS. NO CRESTS IN NEW PIPING WILL BE PERMITTED UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL BENDS SHALL BE SUITABLY RESTRAINED BY CAST-IN-PLACE CONCRETE THRUST BLOCKS. DUCTILE IRON RETAINER GLANDS MAY BE USED IN LIEU OF THRUST BLOCKS ON DUCTILE IRON FORCE MAINS ONLY. THE NUMBER OF JOINTS ON EACH SIDE OF THE BENDS REQUIRING RETAINER GLANDS SHALL BE DETERMINED BY STANDARDS SET FORTH BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION. TEST PRESSURE FOR THE PRESSURE AND LEAKAGE TEST SHALL BE 100-PSI OR GREATER AS OUTLINED IN SPECIFICATION SECTION 02755.

EXISTING SITE CONDITIONS

1. THE LOCATIONS OF UNDERGROUND UTILITIES AND STRUCTURES, AS SHOWN ON THE DRAWINGS, ARE APPROXIMATE AND MAY NOT BE COMPLETE. NO GUARANTEE IS MADE THAT UTILITIES OR STRUCTURES WILL BE ENCOUNTERED WHERE SHOWN, OR THAT ALL UNDERGROUND UTILITIES AND STRUCTURES ARE SHOWN. ALL LOCATIONS AND SIZES OF EXISTING UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD WITH TEST PITS AS REQUIRED PRIOR TO BEGINNING CONSTRUCTION OF NEW FACILITIES OR PIPING THAT MAY BE AFFECTED. THE CONTRACTOR WILL REALIGN NEW PIPE LOCATIONS AS REQUIRED TO CONFORM TO EXISTING LINES AND AS APPROVED BY THE ENGINEER.
2. PRIVATE UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO, SEWER LINES, WATER LINES AND BURIED ELECTRICAL SERVICE ENTRANCES ARE NOT SHOWN. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION AND SIZE OF EXISTING UTILITIES IN THE FIELD WITH THE RESPECTIVE UTILITY COMPANY REPRESENTATIVE PRIOR TO COMMENCING WORK. REFER TO MAINE DOT DRAWINGS AND SPECIFICATIONS REGARDING COORDINATION REQUIREMENTS.

SITE DEMOLITION

1. DEMOLISH/REMOVE EXISTING PIPING AS REQUIRED FOR CONSTRUCTION OF NEW FACILITIES. ALL PIPING, EQUIPMENT AND MATERIALS TO BE DEMOLISHED AND/OR REMOVED FROM SERVICE SHALL BE COORDINATED WITH THE OWNER AND ENGINEER BEFORE COMMENCING THAT WORK. EXISTING PIPING THAT NEEDS TO BE REMOVED TO CONSTRUCT THE NEW FACILITIES, BUT IS TO REMAIN, SHALL BE REINSTALLED/REPLACED AS NEEDED. EXISTING PIPES AND CONDUIT DESIGNATED AS "ABANDONED" MAY BE REMOVED IF THE CONTRACTOR SO CHOOSES. IF ABANDONED PIPE CONFLICTS WITH NEW SITE PIPING OR FACILITIES, THEN A PORTION OF THE ABANDONED PIPE SHALL BE REMOVED, AND THE NEW ENDS OF ABANDONED PIPE CAPPED OR PLUGGED WITH CONCRETE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF ALL DEMOLISHED PIPING, EQUIPMENT AND MATERIALS. DISPOSAL SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS.

3. THE CONTRACTOR SHALL KEEP A RECORD OF DEMOLITION AS PART OF THE PROJECT RECORD DOCUMENTS IN ACCORDANCE WITH SPECIFICATION SECTION 01720.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPROPRIATE DISPOSAL OF FLOWS RESULTING FROM PRECIPITATION AND GROUNDWATER DEWATERING OPERATIONS.

SITE CLEARING, GRUBBING AND GRADING

1. CONTRACTOR SHALL PROVIDE PROPER EROSION CONTROL AND DRAINAGE MEASURES IN ALL AREAS OF WORK. REFER TO MAINE DOT REQUIREMENTS FOR EROSION CONTROL.

2. THE CONTRACTOR SHALL NOT HAVE ANY RIGHT OF PROPERTY IN ANY MATERIALS TAKEN FROM ANY EXCAVATION. SUITABLE EXCAVATED MATERIAL MAY BE INCORPORATED IN THE PROJECT, WITH EXCESS MATERIAL DISPOSED OF AT A LOCATION PROVIDED BY THE CONTRACTOR. THESE PROVISIONS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF OBLIGATIONS TO PROPERLY DISPOSE OF AND REPLACE ANY MATERIAL DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING. THE CONTRACTOR SHALL DISPOSE OF UNSUITABLE AND EXCESS MATERIAL IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE CONTRACT DOCUMENTS.

CIVIL SITE LAYOUT

1. FOR EASEMENTS, CONSTRUCTION LIMITS AND RIGHT OF WAY LINES, REFER TO THE MAINE DOT DRAWINGS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THIS PROVIDED LAYOUT INFORMATION THROUGHOUT THE COURSE OF CONSTRUCTION. REPORT ANY LAYOUT DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

3. IN GENERAL, THE GIVEN STRUCTURE LOCATIONS ARE TO THE OUTSIDE FACE OF THE STRUCTURE FOUNDATION WALL, NOT FOOTINGS. RADII SHOWN FOR ROADS ARE TO EDGE OF PAVEMENT.

4. WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE DISTANCES FROM THE DRAWINGS. REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

5. ALL ELEVATIONS REFER TO THE NAVD88 DATUM. SEWER FORCE MAIN DRAWINGS ARE BASED ON DOT SURVEY. REFER TO DOT DRAWINGS FOR INFORMATION ON COORDINATE SYSTEM AND PROJECT BENCH MARKS. CONTRACTOR SHALL VERIFY BENCHMARK ELEVATIONS PRIOR TO USING IN CONSTRUCTION.

CIVIL SITE PIPING

1. PROVIDE CAST OR DUCTILE IRON WALL CASTINGS, OR GALVANIZED STEEL PIPE SLEEVES, FOR ALL PIPE PENETRATIONS MADE THROUGH CONCRETE FOUNDATIONS, WALLS AND SLABS. ALL WALL SLEEVES AND WALL CASTINGS SHALL HAVE WATERSTOPS. SEE CIVIL DRAWINGS FOR DETAIL AND LOCATIONS OF PENETRATIONS.

2. TRENCH INSULATION SHALL BE USED WHERE DEPTH OF COVER IS LESS THAN 5.5-FEET. REFER TO THE CIVIL DETAIL DRAWINGS FOR THE TRENCH INSULATION DETAIL.

3. TRENCH INSULATION SHALL BE USED WHEN THERE IS LESS THAN 2-FEET BETWEEN THE SEWER OR FORCE MAIN AND A CULVERT. REFER TO THE CIVIL DETAIL DRAWINGS FOR THE TRENCH INSULATION DETAIL.

4. MANHOLES ARE 4-FEET IN DIAMETER UNLESS OTHERWISE NOTED. THE TOP OF MANHOLE FRAMES SHALL BE SET FLUSH WITH FINISH GRADE, UNLESS OTHERWISE NOTED ON DRAWINGS. SEWER MANHOLE INVERTS SHOWN ON THE DRAWINGS ARE TO THE INSIDE FACE OF THE MANHOLE.

5. CONTRACTOR SHALL RE-SHAPE INVERTS AS REQUIRED WHEN CONNECTING INTO EXISTING MANHOLES.

6. REFER TO SPECIFICATION SECTION 02200 FOR PIPE AND STRUCTURE BEDDING AND BACKFILL REQUIREMENTS.

7. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS, AND ADDITIONAL PIPE AS REQUIRED TO COMPLETE THE CONNECTION. CONTRACTOR SHALL VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. TEST PITS SHALL BE USED AS REQUIRED.

8. ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED ON THE CIVIL EXISTING CONDITIONS AND DEMOLITION PLAN. ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

LEGEND

EXISTING		PROPOSED
8" S	SEWER	8"S
4" FM	SEWER FORCE MAIN	4"FM
	TEMPORARY SEWER FORCE MAIN	4"FM
SMH	SEWER MANHOLE	SMH
	MATCHLINE	

NOTES:
1. WORK BY OTHERS SHOWN IN THESE PLANS IS INDICATED BY THE FADED/LIGHT LINE WORK. REFER TO THOSE PLANS FOR EXISTING AND/OR PROPOSED WORK.
2. FOR ALL OTHER LEGEND SYMBOLS, AND ABBREVIATIONS, REFER TO MDOT DRAWINGS

CIVIL ABBREVIATIONS

CI	CAST IRON
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DEMO	DEMOLITION
DMH	DRAIN MANHOLE
DI	DUCTILE IRON
DWG	DRAWING
EL	ELEVATION
FM	FORCE MAIN
FT	FEET
G	GAS
INV	INVERT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
N	NORTH
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
S	SLOPE, SEWER
SD	STORM DRAIN
SMH	SANITARY SEWER MANHOLE
STA	STATION
T, XFMR	TRANSFORMER
TOS	TOP OF STRUCTURE
TYP	TYPICAL

NO	REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

PROJECT NO: 20593
DESIGNED: B.STILES
CAD COORD: D.SAVAGE
CAD: D.SAVAGE
CHECKED: K.OBERY
DATE: 11/23/21
APPROVED: B.STILES
DATE: 11/23/21
SUBMISSION: CONTRACT DRAWINGS

STATE OF MAINE BENJAMIN W. STILES 14081 REGISTERED PROFESSIONAL ENGINEER 11/23/2021

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207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

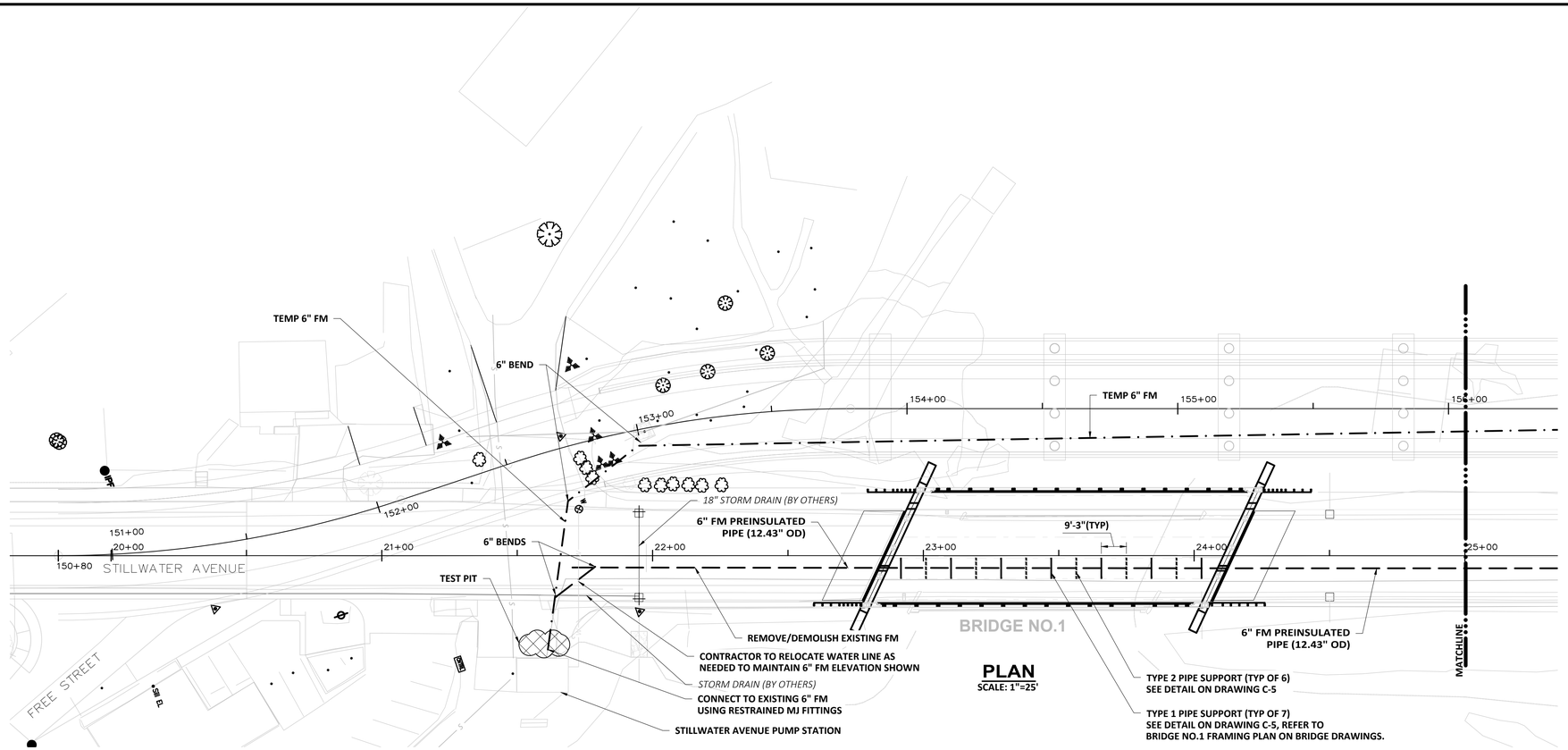
STILLWATER AVENUE
PUMP STATION FORCE
MAIN REPLACEMENT

GENERAL NOTES, LEGEND, AND ABBREVIATIONS

DRAWING
C-1

J:\ENG\ME\OLDTOWN\20593-STILLWATERFM_DOT-BRIDGE\DRAWINGS\OLDTOWN-BRIDGE\CIV\C-1 NOTES.DWG | 22x34 | 1:10.1236d677 | ---- | 11/23/2021 8:37:40 AM | DON.SAVAGE

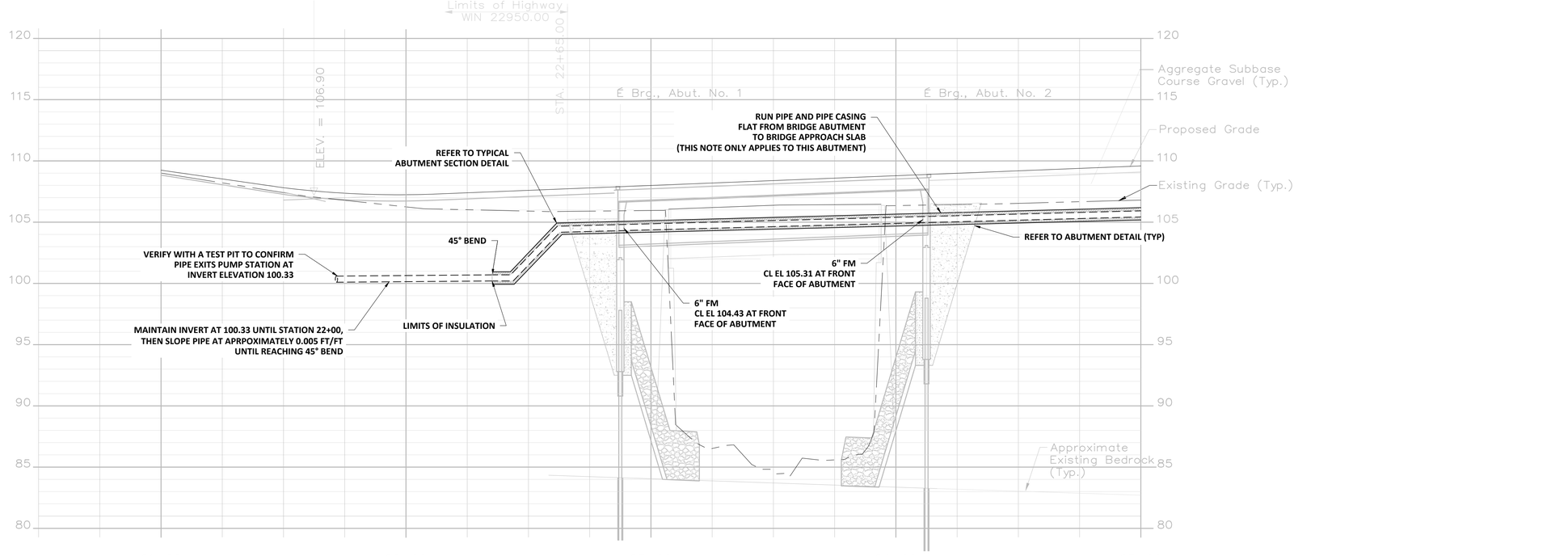
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PLAN
SCALE: 1"=25'

NOTES:

1. FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS REFER TO C-1
2. ALL BRIDGE AND ROADWAY WORK TO BE PERFORMED UNDER MDOT DRAWING SCOPE OF WORK. CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS WITH BRIDGE AND ROADWORK COVERED UNDER MDOT DRAWINGS.
3. PIPE SUPPORTS ALTERNATE BETWEEN TYPE 1 AND TYPE 2 SUPPORTS. REFER TO DRAWING C-5 FOR DETAILS. TYPE 1 SUPPORTS ARE LOCATED NEAREST TO EACH ABUTMENT AND ARE INDICATED ON THE DRAWINGS WITH A SOLID LINE. CONTRACTOR TO REFER TO MDOT FRAMING PLAN FOR EXACT SPACING OF TYPE 1 SUPPORTS. TYPE 2 SUPPORTS TO BE EVENLY SPACED BETWEEN ADJACENT TYPE 1 SUPPORTS AND ARE INDICATED ON THE DRAWINGS A DASHED LINE.
4. EXTEND CASING AT EACH ABUTMENT TO THE EXTENT OF THE DOT APPROACH SLAB. REFER TO DOT DRAWINGS FOR EXTENT OF APPROACH SLAB ON EACH SIDE OF EACH BRIDGE.
5. SEWER FORCE MAIN IS 6" DIAMETER WITH APPROXIMATE OUTSIDE DIAMETER OF 12.43" FOR THE INSULATION AND HDPE JACKET. CONTRACTOR TO COORDINATE ABUTMENT CASING, CASING SPACERS, LINK SEALS, AND PIPE HANGER WITH ACTUAL OUTSIDE DIAMETER OF PROPOSED PRE-INSULATED FORCE MAIN.



FORCEMAIN PROFILE - BRIDGE NO.1
SCALE: 1"=25'

0 20 40

NO	REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

PROJECT NO: 20593
DESIGNED: B.STILES
CAD COORD: D.SAVAGE
CAD: D.SAVAGE
CHECKED: K.OBERY
DATE: 11/23/21
APPROVED: B.STILES
DATE: 11/23/21
SUBMISSION: CONTRACT DRAWINGS

STATE OF MAINE
BENJAMIN W. STILES
14081
REGISTERED PROFESSIONAL ENGINEER
11/23/2021

WRIGHT-PIERCE
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STILLWATER AVENUE PUMP STATION FORCE MAIN REPLACEMENT

SEWER FORCE MAIN PLAN AND PROFILE I BRIDGE NO. 1

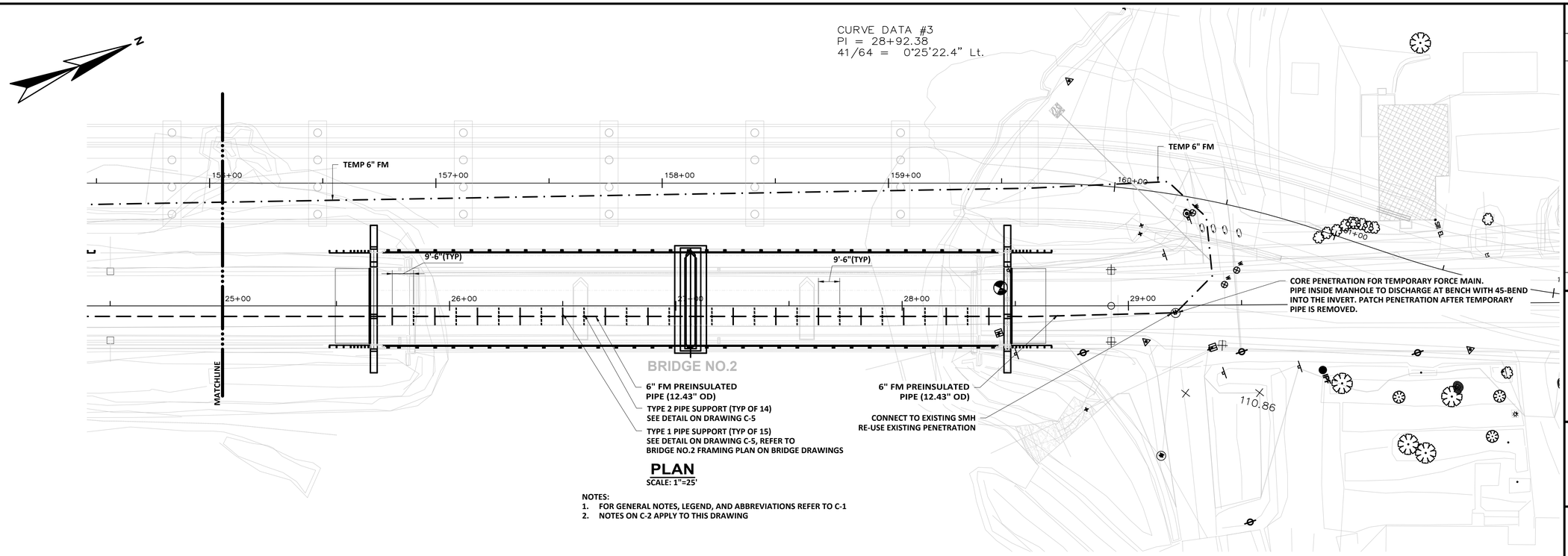
DRAWING
C-2

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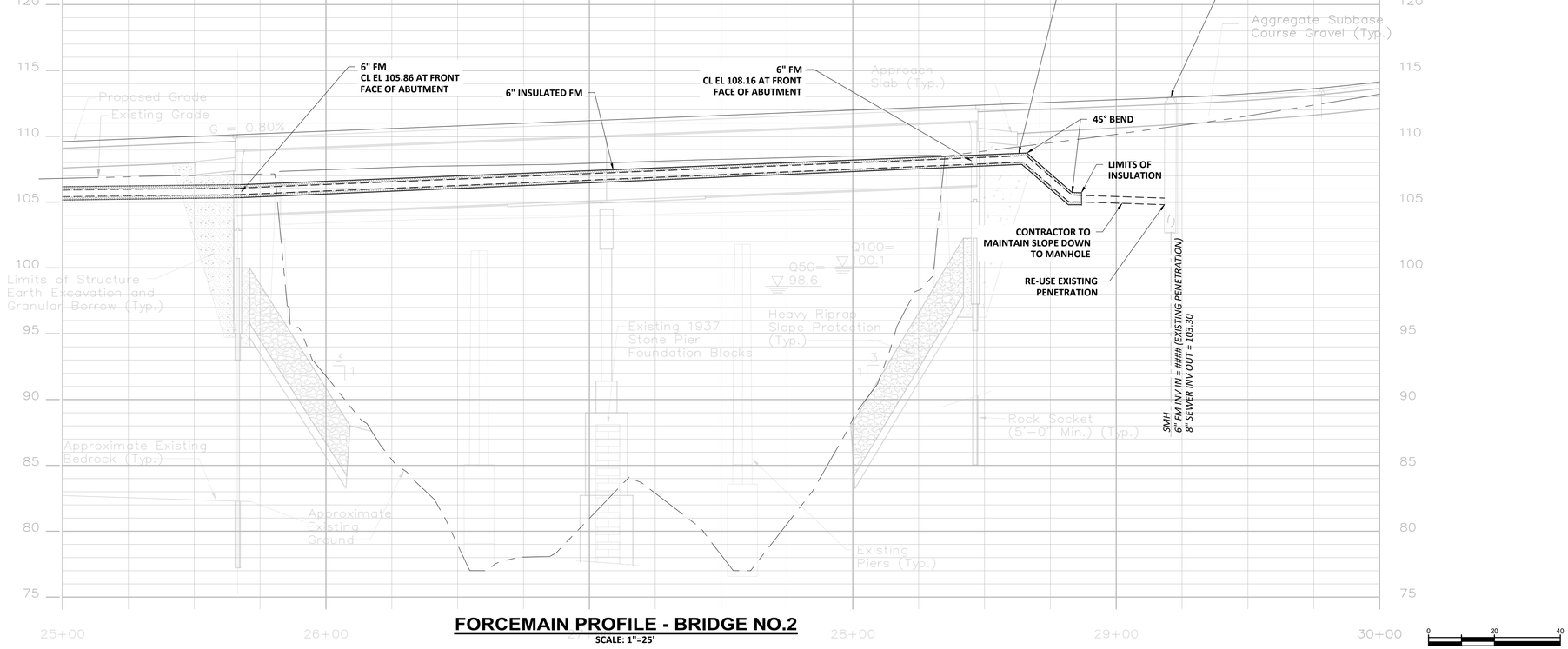
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CURVE DATA #3
PI = 28+92.38
41/64 = 0°25'22.4" Lt.



PLAN
SCALE: 1"=25'

NOTES:
1. FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS REFER TO C-1
2. NOTES ON C-2 APPLY TO THIS DRAWING



FORCEMAIN PROFILE - BRIDGE NO.2
SCALE: 1"=25'

NO	REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

PROJECT NO: 20593
DESIGNED: B.STILES
CAD COORD: D.SAVAGE
CAD: D.SAVAGE
CHECKED: K.OBERY
DATE: 11/23/21
APPROVED: B.STILES
DATE: 11/23/21
SUBMISSION: CONTRACT DRAWINGS

STATE OF MAINE BENJAMIN W. STILES 14081 REGISTERED PROFESSIONAL ENGINEER 11/23/2021

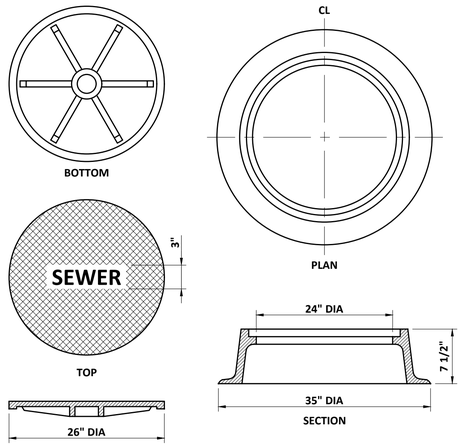
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11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

STILLWATER AVENUE
PUMP STATION FORCE
MAIN REPLACEMENT

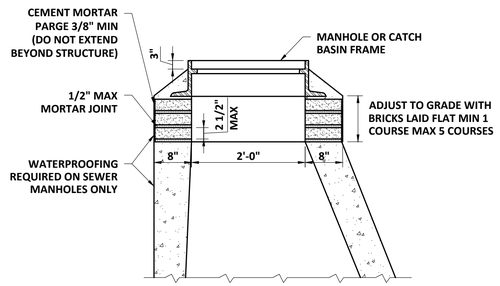
SEWER FORCE MAIN PLAN AND PROFILE II
BRIDGE NO. 2

DRAWING
C-3

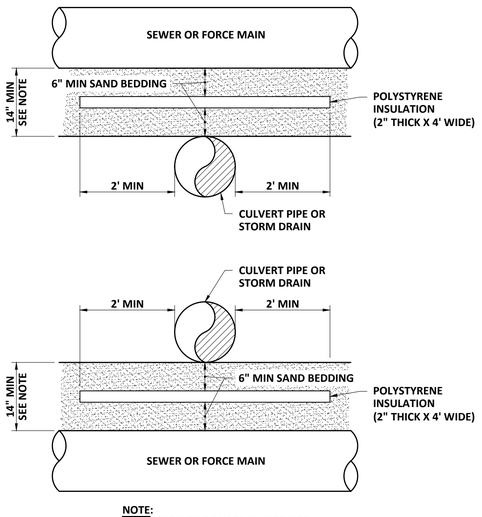
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MANHOLE
STANDARD COVER AND FRAME
SCALE: NTS

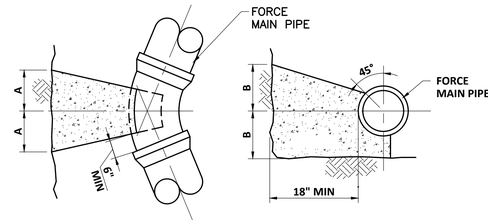


MANHOLE AND CATCH BASIN
FRAME INSTALLATION
SCALE: NTS



NOTE:
INSULATION TO BE USED WHERE PIPE SEPARATION IS 24" OR LESS.

CULVERT PIPE / STORM DRAIN CROSSING
SCALE: NTS

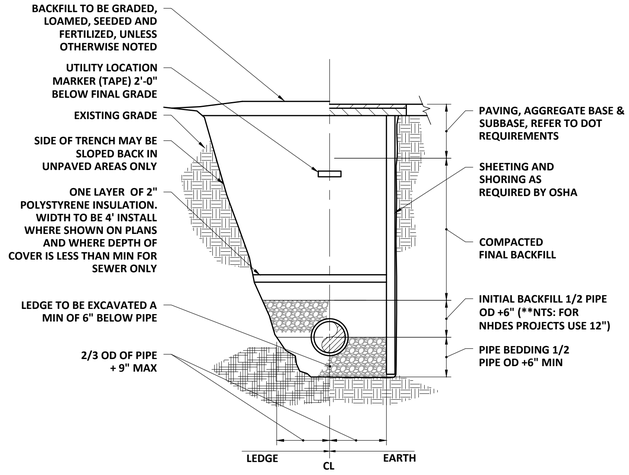


PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND	
	A	B	A	B	A	B
6"	18"	12"	12"	9"	9"	9"
8"	24"	15"	15"	12"	12"	12"
10"	24"	20"	15"	15"	12"	12"
12"	24"	24"	18"	18"	15"	12"

NOTES:
1. THRUST BLOCK SIZES ABOVE ARE BASED ON A SOIL BEARING CAPACITY OF 1000 PSF AND TEST PRESSURES OF 100 PSI. CONTRACTOR SHALL NOTIFY THE ENGINEER IF LOW BEARING STRENGTH SOILS ARE ENCOUNTERED.

2. RETAINER GLANDS MAY BE USED IN LIEU OF THRUST BLOCKS ON DUCTILE IRON FORCE MAINS ONLY. INSTALL IN COMPLIANCE WITH DUCTILE IRON & PIPE MANUFACTURERS STANDARDS.

FORCE MAIN THRUST BLOCK
SCALE: "NTS"



NOTES:
1. ALL EXCAVATION MUST MEET OSHA STANDARDS.

2. INSTALL 3 FOOT LONG IMPERVIOUS MATERIAL DAM IN BEDDING/INITIAL BACKFILL MATERIAL EVERY 100' AND WHERE SHOWN ON PLANS TO PREVENT TRENCH GROUNDWATER FROM BEING CHANNELED ALONG BEDDING/INITIAL BACKFILL.

3. SEE SPECIFICATIONS FOR BEDDING AND BACKFILL REQUIREMENTS.

PIPE TRENCH
SCALE: "NTS"

NO	REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

PROJECT NO: 20593
DESIGNED: B.STILES
CAD COORD: D.SAVAGE
CAD: D.SAVAGE
CHECKED: K.OBERY
DATE: 11/23/21
APPROVED: B.STILES
DATE: 11/23/21
SUBMISSION: CONTRACT DRAWINGS

STATE OF MAINE BENJAMIN W. STILES 14081 REGISTERED PROFESSIONAL ENGINEER 11/23/2021

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11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

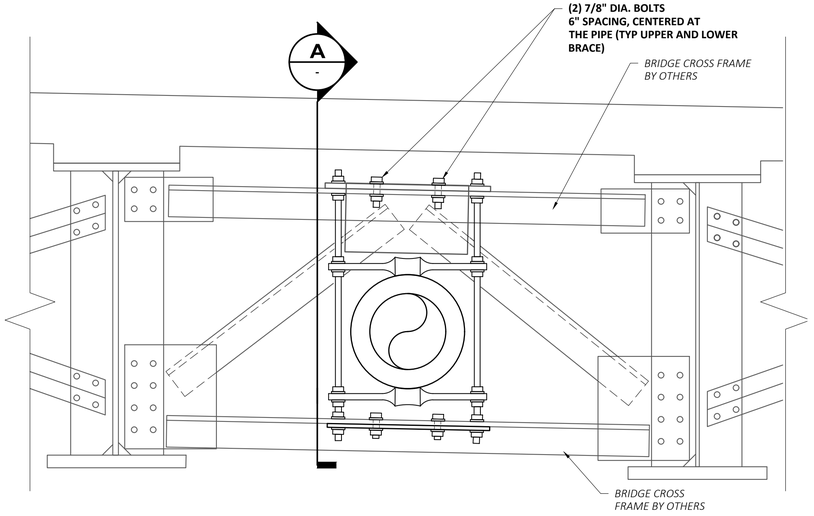
STILLWATER AVENUE
PUMP STATION FORCE MAIN REPLACEMENT

SEWER FORCE MAIN DETAILS

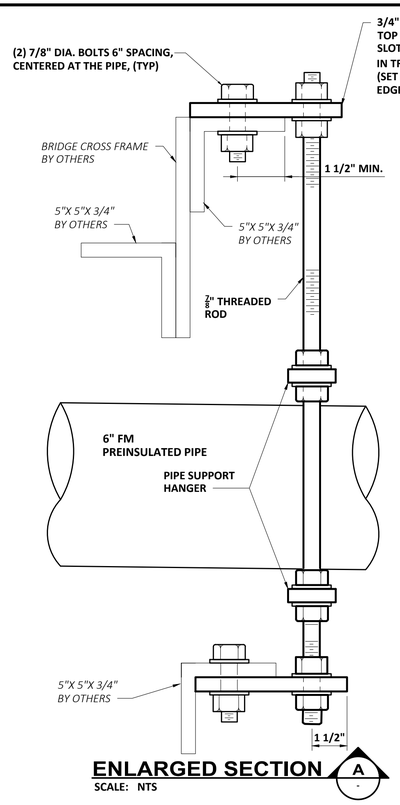
DRAWING
C-4

J:\ENG\ME\OLDTOWN\20593-STILLWATERFM_DOT-BRIDGE\DRAWINGS\OLDTOWN-BRIDGE\CIV\C-5 PROFILE & SECTIONS.DWG | C-5 PROFILE & SECTIONS | 1:10.1236467 | ---- | 11/23/2021 8:38:28 AM | DON.SAVAGE

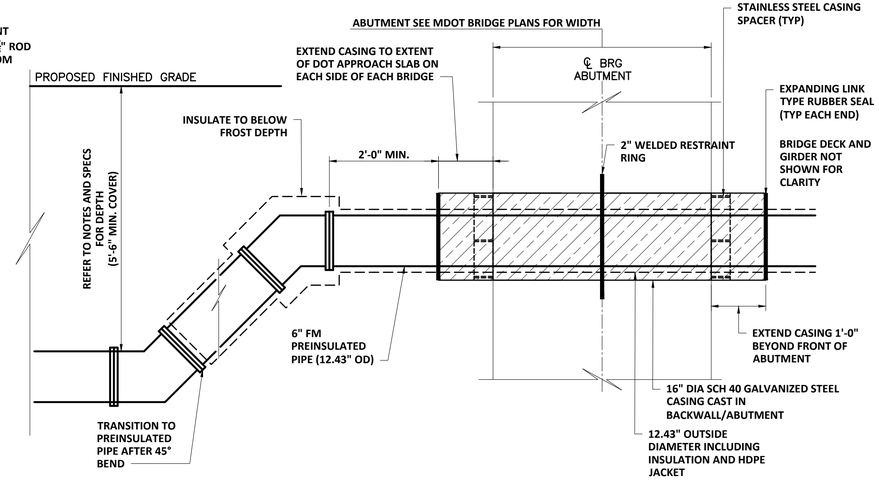
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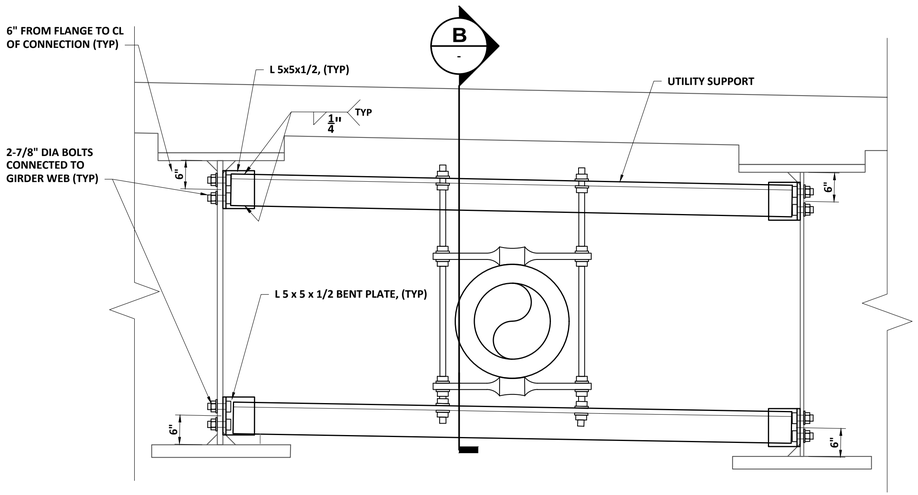
PIPE SUPPORT TYPE-1
(UTILITY SUPPORT)
SCALE: 1"= 1'-0"



ENLARGED SECTION A
SCALE: NTS

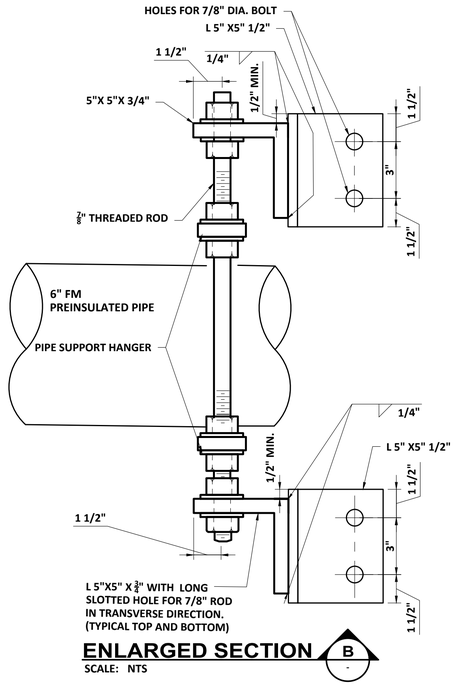


TYPICAL ABUTMENT SECTION @ SEWER
SCALE: NTS

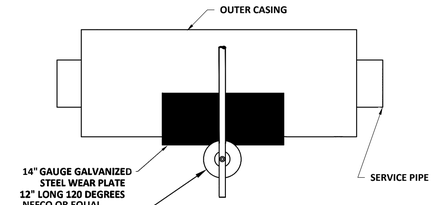


PIPE SUPPORT TYPE-2
(UTILITY SUPPORT DIAPHRAM)
SCALE: 1"= 1'-0"

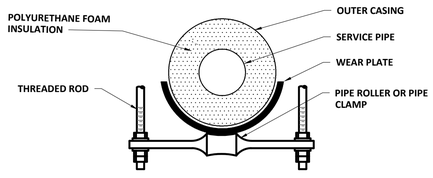
PIPE SUPPORT NOTES:
1. CONTRACTOR TO PERFORM ALL WELDS PRIOR TO HDG OF ENTIRE DIAPHRAGM ASSEMBLY INCLUDING UTILITY SUPPORTS.
2. HDG SHALL BE IN ACCORDANCE WITH ASTM A 153 FOR HARDWARE AND ASTM A 123 FOR STRUCTURAL STEEL SHAPES.



ENLARGED SECTION B
SCALE: NTS



END VIEW
NOT TO SCALE



END VIEW
NOT TO SCALE

ROLLING AND FIXED
SUPPORT WEAR PLATE DETAIL
SCALE: NTS

NO	REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

PROJECT NO: 20593
DESIGNED: B.STILES
CAD COORD: D.SAVAGE
CAD: D.SAVAGE
CHECKED: J.GALLANT
DATE: 11/23/21
APPROVED: B.STILES
DATE: 11/23/21
SUBMISSION: CONTRACT DRAWINGS

STATE OF MAINE
BENJAMIN W. STILES
14081
REGISTERED PROFESSIONAL ENGINEER
11/23/2021

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STILLWATER AVENUE
PUMP STATION FORCE
MAIN REPLACEMENT

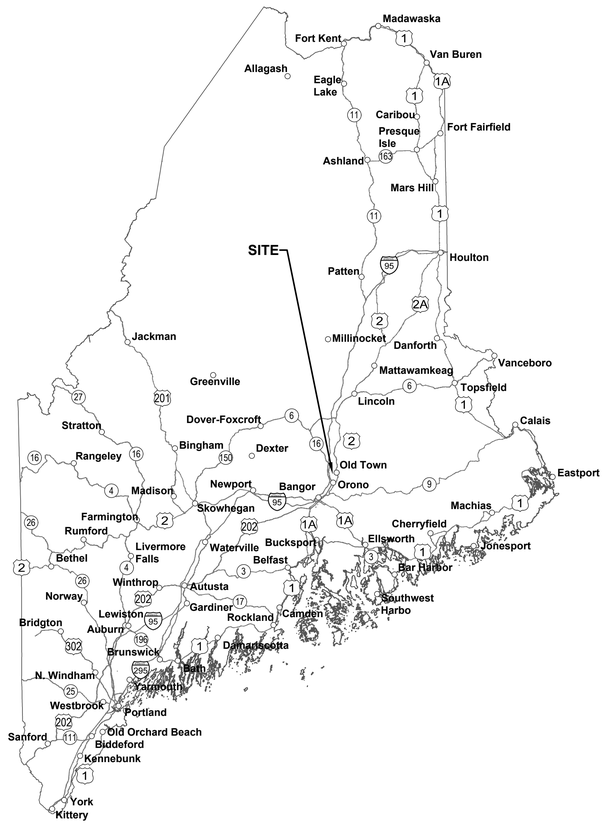
GENERAL NOTES, LEGEND, AND ABBREVIATIONS

DRAWING
C-5

J:\ENG\WE\OLDTOWN\20593-STILLWATERFM_DOT-BRIDGE\DRAWINGS\OLDTOWN-BRIDGE\CIVIL\C-4 DETAILS-I.DWG | 22x34 | 1:10.1236427 7 | ---- | 11/23/2021 8:38:36 AM | DON.SAVAGE

OLD TOWN WATER DISTRICT
STILLWATER AVENUE WATERMAIN REPLACEMENT
MDOT WIN 22511.00, 22512.00 & 22950.00

OLD TOWN, MAINE





NOVEMBER 17, 2021

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
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INDEX OF DRAWINGS

G001	COVER SHEET
C101	PROPOSED WATER SYSTEM IMPROVEMENTS
C102	PROPOSED WATER SYSTEM IMPROVEMENTS
C103	PROPOSED WATER SYSTEM IMPROVEMENTS
C501	PROPOSED WATER SYSTEM NOTES & DETAILS
S101	PROPOSED WATER MAIN BRIDGE CROSSING PLAN & DETAILS
S102	PROPOSED WATER MAIN BRIDGE CROSSING PLAN & DETAILS

PROPOSED 10" DI 45° FITTING
PROPOSED 12" x 10" DI REDUCER
CONNECT TO EXISTING 10" CI WATER MAIN
PROPOSED 12" GATE VALVE, USE FOSTER ADAPTER TO CONNECT TO PROPOSED TEE
PROPOSED 12" x 12" x 6" DI TEE
PROPOSED 12" DI MAIN
PROPOSED 6" DI MAIN
PROPOSED 6" PIPE CAP
PROPOSED 6"x6"x6" DI TEE
PROPOSED 6" GATE VALVE, USE FOSTER ADAPTER TO CONNECT TO PROPOSED TEE
PROPOSED HYDRANT ASSEMBLY
CONNECT TO EXISTING 6" GATE VALVE
EXISTING 6" CI WATER MAIN, TO REMAIN
APPROXIMATE LOCATION OF EXISTING 10" DIA. PVC GRAVITY SEWER MAIN, TO REMAIN
MUNICIPAL SEWER PUMPING STATION
PROPOSED 6" DI WATER MAIN, APPROX. 60 LF
PROPOSED 6" DI WATER MAIN, APPROX. 6 LF
PROPOSED 1" TYPE K COPPER WATER SERVICE. CONNECT TO PROPOSED 12" DI WATER MAIN
PROPOSED 12" DI WATER MAIN, APPROX. 800 LF
EDGE OF POTATO FIELD
EXISTING CONCRETE ROADWAY TO REMAIN. CONTRACTOR TO REPAIR CONCRETE ROAD, AS NECESSARY FOR WATER MAIN AND SERVICE INSTALLATION, SEE DETAIL. COSTS FOR REPAIR OF CONCRETE ROAD SHALL BE INCLUDED IN WATER MAIN AND SERVICE BID ITEM. CONTRACTOR MAY BORE WATER SERVICES UNDER EXISTING CONCRETE ROAD
PROPOSED 1" TYPE K COPPER WATER SERVICE. CONNECT TO PROPOSED 12" DI WATER MAIN
PROPOSED 1" TYPE K COPPER WATER SERVICE. CONNECT TO PROPOSED 12" DI WATER MAIN
EXISTING 6" CI WATER MAIN TO BE ABANDONED IN PLACE. FILL WITH FLOWABLE FILL
EXISTING 6" CI WATER MAIN TO BE ABANDONED IN PLACE. FILL WITH FLOWABLE FILL
MATCH LINE
PROPOSED HYDRANT ASSEMBLY
EXISTING HYDRANT ASSEMBLY AND GATE VALVE TO BE REMOVED
REMOVE EXISTING CONCRETE ROADWAY, AS NECESSARY, FOR THE INSTALLATION OF PROPOSED WATER MAIN AND WATER SERVICES, COST SHALL BE INCIDENTAL TO THE PROPOSED WATER MAIN AND SERVICES, TYP.
MDOT STILLWATER AVENUE PROJECT LIMIT OF WORK, STA 2+00
APPROXIMATE LOCATION OF EXISTING 4" DIA. PVC FORCE MAIN, TO REMAIN
EXISTING 6" CI WATER MAIN, TO REMAIN
PAVED APRON
STONE
CONC 2 STEPS
WOOD 2 STEPS
HOUSE 1 STORY
HOUSE 1.5 STORY
HOUSE 2 STORY
STORY
OHW
JOINT
2+00
3+00
4+00
5+00
6+00
7+00
8+00

PROPOSED HYDRANT ASSEMBLY
EXISTING 6" ABANDONED WATER MAIN TO REMAIN. DO NOT CONNECT TO PROPOSED 12" DI WATER MAIN
CONTRACTOR TO PROVIDE FOSTER ADAPTER TO CONNECT PROPOSED HYDRANT AND PROPOSED GATE VALVE
PROPOSED 6" GATE VALVE
PROPOSED 12" DI WATER MAIN, APPROX. 260 LF
EXISTING 12" DI TRANSMISSION WATER MAIN, TO REMAIN
MDOT STILLWATER AVENUE PROJECT LIMIT OF WORK BENNOCH RD STA 166+50
BENNOCH ROAD
HOUSE 2.5 STORY
HOUSE 2 STORY
SHED
EXISTING 12" DI DISTRIBUTION WATER MAIN, TO REMAIN
PROPOSED 12" DIA. DI WATER MAIN DOES NOT CONNECT TO EXISTING 12" DIA. DI WATER MAINS ON BENNOCH ROAD
PROPOSED 6" DI HYDRANT TEE
PROPOSED 12" DI 22.5° FITTING
EXISTING 10" CI WATER MAIN TO BE ABANDONED IN PLACE. FILL WITH FLOWABLE FILL
PEDESTRIAN CROSSWALK SIGNAL
OLD TOWN
REMOVE EXISTING 10" TAPPING SADDLE AND VALVE AND REPLACE WITH PROPOSED WATER MAIN
MONUMENT-ROCK WITH PLAQUE
EXISTING 10" CI WATER MAIN, TO REMAIN
STILLWATER AVENUE
EXISTING 6" CI WATER MAIN TO BE ABANDONED IN PLACE. FILL WITH FLOWABLE FILL
EXISTING 6" GATE VALVE TO REMAIN
EXISTING 12" DI WATER MAIN TO REMAIN
EXISTING HYDRANT ASSEMBLY TO BE REMOVED
PROPOSED 6" PIPE CAP
MDOT STILLWATER AVENUE PROJECT LIMIT OF WORK BENNOCH RD STA 62+00
FRANKLIN STREET
PROPOSED 12" DI WATER MAIN DOES NOT CONNECT TO EXISTING 12" DIA. DI WATER MAINS ON BENNOCH ROAD
PROPOSED 12" DI WATER MAIN
PROPOSED 10" PIPE CAP, INSTALL FOLLOWING COMPLETION OF PROPOSED 12" DI MAIN
PROPOSED 12" DI 45° FITTINGS TO OFFSET FROM EXISTING MAIN
PROPOSED 12" x 12" x 12" DI TEE
PROPOSED 12" GATE VALVE, USE FOSTER ADAPTER TO CONNECT TO PROPOSED TEE
PROPOSED 12" x 10" DI REDUCER, CONNECT TO EXISTING 10" DIA. CI MAIN
PROPOSED 12" GATE VALVE, USE FOSTER ADAPTER TO CONNECT TO PROPOSED TEE
EXISTING CONNECTION TO 12" DI DISTRIBUTION MAIN, TO REMAIN
EXISTING 12" DI TRANSMISSION MAIN TO REMAIN
EXISTING 12" DI DISTRIBUTION MAIN TO REMAIN
EXISTING 12" DI WATER MAIN, TO REMAIN
EXISTING 12" DI 90° ELBOW, TO REMAIN
EXISTING 12" DI WATER MAIN, TO REMAIN
MDOT STILLWATER AVENUE PROJECT LIMIT OF WORK SPRING STREET
CONTRACTOR TO PERFORM TEST PIT ON EXISTING WATER SERVICE TO CONFIRM CONNECTION TO 16" CI TRANSMISSION WATER MAIN
EXISTING 16" GATE VALVE, TO REMAIN
COORDINATE WITH WATER DISTRICT FOR SYSTEM SHUTDOWN, TYP.
SPRING STREET
PROPOSED 1" TYPE K COPPER WATER SERVICE. CONNECT TO EXISTING 16" CI MAIN ON SPRING STREET
EXISTING 6" GATE VALVE, TO REMAIN. CONTRACTOR TO INSTALL PIPE CAP TO ABANDON 6" CI MAIN
EXISTING 16" DI TRANSMISSION WATER MAIN, TO REMAIN
EXISTING 6" CI WATER MAIN TO BE ABANDONED IN PLACE. FILL WITH FLOWABLE FILL
MATCH LINE
EXISTING HYDRANT ASSEMBLY, TO REMAIN
APPROXIMATE LOCATION OF EXISTING WATER SERVICE CONNECTION, TYP.
EXISTING 16" CI TRANSMISSION WATER MAIN, TO REMAIN
MDOT STILLWATER AVENUE PROJECT LIMIT OF WORK SPRING STREET
GRANITE
COOMBS PARK
3.5' X 1' X 4.5' HT.
TELEPHONE
CONC WASH
WOOD
W/METER
ELECTRIC
PAVED
CONC
12" PINE
14" PINE
16" PINE
12" PINE
12+00
13+00
14+00
15+00
16+00
17+00
18+00

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)
1 inch = 30 ft.

PLAN REFERENCE:

INFORMATION BASED ON FILES CREATED BY MAINE DOT.

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824
WWW.HALEYWARD.COM

PROJECT

OLD TOWN WATER DISTRICT
OLD TOWN, MAINE
STIILLWATER AVE WATER MAIN REPLACEMENT
MDOT WIN 22511.00, 22512.00 & 22950.00

TITLE

PROPOSED WATER SYSTEM IMPROVEMENTS

STATE OF MAINE
Nathan Gustafson
13589
11/17/2021
LICENSED PROFESSIONAL ENGINEER

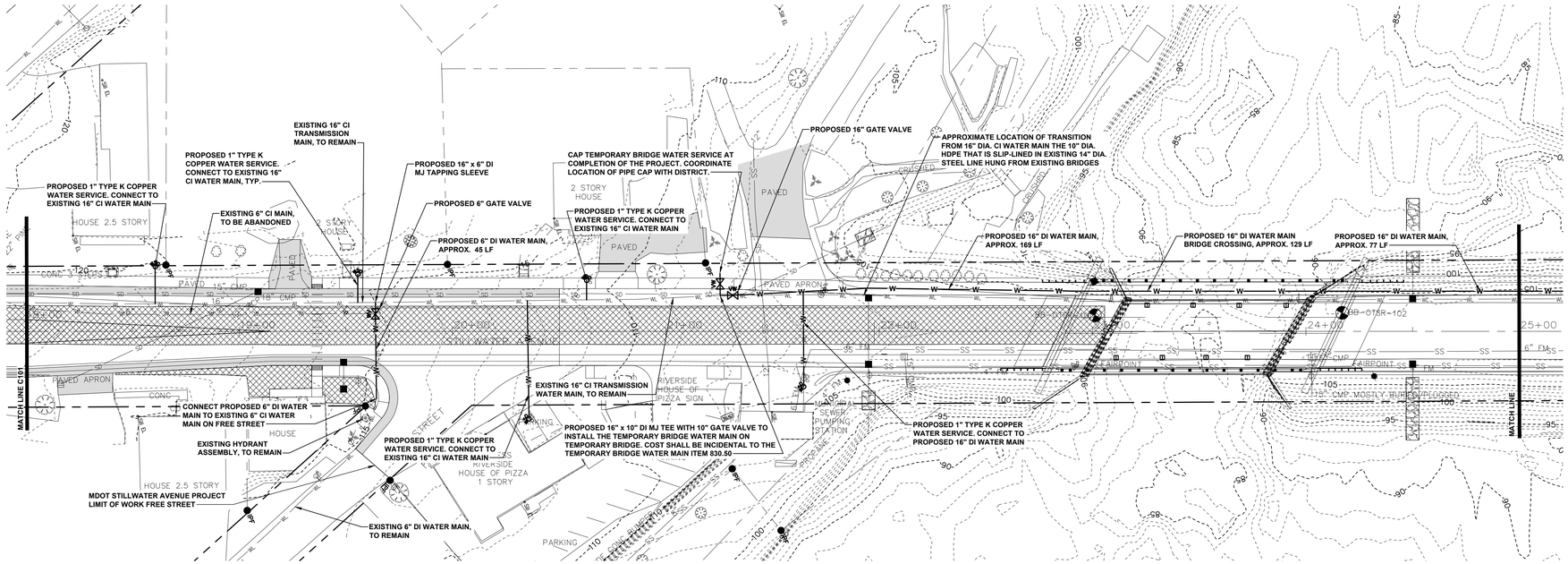
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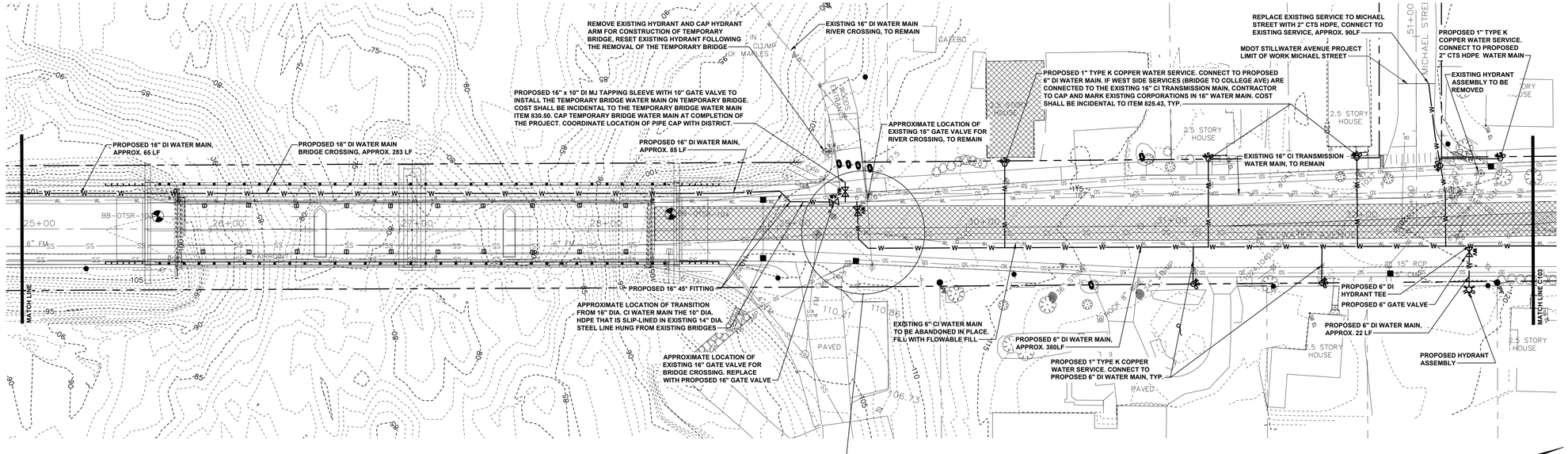
DRAWN BY	DESIGNED BY	CHECKED BY
WAB	NAG	NAG

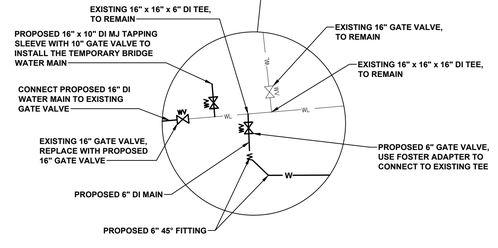
PROJECT No. 10345.003

DRAWING No. **C101** REV.

FILE LOCATION: P:\10345-OLD_TOWN_WATER_DIST\003-STILLWATER BRIDGE WIM\CPR\02-CAD_DRAWINGS\CIVIL\DESIGN_DWGS\10345.003-C-SP.DWG, 2021.11.17, 8:29 AM







PLAN REFERENCE:
INFORMATION BASED ON FILES CREATED BY MAINE DOT.

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)
1 inch = 30 ft.

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

FOR CONSTRUCTION

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ENGINEERING | ENVIRONMENTAL | SURVEYING
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824
WWW.HALEYWARD.COM

PROJECT

OLD TOWN WATER DISTRICT
OLD TOWN, MAINE
STILLWATER AVE WATER MAIN REPLACEMENT
MDOT WIN 22511.00, 22512.00 & 22950.00

TITLE

PROPOSED WATER SYSTEM IMPROVEMENTS

STATE OF MAINE
Nathan Gustafson
13689
11/17/2021
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2021.11.17	1"=30'

DRAWN BY	DESIGNED BY	CHECKED BY
WAB	NAG	NAG

PROJECT No. 10345.003

DRAWING No. **C102** REV.

FILE LOCATION: P:\10345-OLD_TOWN_WATER_DIST\003-STILLWATER BRIDGE WM-CPR02-CAD_DRAWINGS\CIVIL\DESIGN_DWGS\10345.003-C-SP.DWG, 2021.11.17, 8:29 AM

PROPOSED 1" TYPE K COPPER WATER SERVICE. CONNECT TO PROPOSED 6" DI WATER MAIN. IF WEST SIDE SERVICES (BRIDGE TO COLLEGE AVE) ARE CONNECTED TO THE EXISTING 16" CI TRANSMISSION MAIN, CONTRACTOR TO CAP AND MARK EXISTING CORPORATIONS IN 16" WATER MAIN. COST SHALL BE INCIDENTAL TO ITEM 825.43, TYP.

EXISTING 6" DI WATER MAIN, TO REMAIN

EXISTING HYDRANT ASSEMBLY TO BE REMOVED

PROPOSED 6" 45° FITTING

PROPOSED HYDRANT ASSEMBLY

REPLACE EXISTING GATE VALVE WITH PROPOSED 6" GATE VALVE. CONNECT TO EXISTING 6" MAIN

EXISTING 16" CI TRANSMISSION WATER MAIN, TO REMAIN

PROPOSED 6" DI WATER MAIN, APPROX. 30 LF

EXISTING 16" CI TRANSMISSION WATER MAIN, TO REMAIN

INLET DRAINAGE STRUCTURE STA. 103+60 LT.

8" DIA BOLLARD

8" DIA BOLLARD W/HANDICAPP

MATCH LINE C102

EXISTING 6" CI WATER MAIN TO BE ABANDONED IN PLACE. FILL WITH FLOWABLE FILL

PROPOSED 6" DI WATER MAIN, APPROX. 283 LF

PROPOSED 1" TYPE K COPPER WATER SERVICE. CONNECT TO PROPOSED 6" DI WATER MAIN, TYP.

EXISTING GATE VALVE TO BE REMOVED

CONNECT PROPOSED 6" DI WATER MAIN TO EXISTING 6" GATE VALVE

EXISTING 12" DI WATER MAIN, TO REMAIN

MAINE SAVINGS BANK

EXISTING 12" DI WATER MAIN, TO REMAIN

EXISTING HYDRANT TO REMAIN

EXISTING 16" CI TRANSMISSION WATER MAIN, TO REMAIN

MDOT STILLWATER AVENUE PROJECT LIMIT OF WORK STA 42+00

MDOT STILLWATER AVENUE PROJECT LIMIT OF WORK COLLEGE AVE. STA 90+00

EXISTING 6" GATE VALVE, TO REMAIN

EXISTING 6" DI WATER MAIN, TO REMAIN

EXISTING 12" GATE VALVE, TO REMAIN

EXISTING WATER SERVICES ON COLLEGE AVENUE TO REMAIN, TYP.

EXISTING 12" DI WATER MAIN, TO REMAIN

MDOT STILLWATER AVENUE PROJECT LIMIT OF WORK COLLEGE AVE. STA 80+75

CONNECT PROPOSED 6" DI WATER MAIN TO EXISTING 6" GATE VALVE

PROPOSED 6" DI WATER MAIN, APPROX. 120LF

CONNECT PROPOSED 6" DI WATER MAIN TO EXISTING 6" CI WATER MAIN ON OLD MILL ROAD

MDOT STILLWATER AVENUE PROJECT LIMIT OF WORK OLD MILL ROAD STA 71+25

PLAN REFERENCE:
INFORMATION BASED ON FILES CREATED BY MAINE DOT.

GRAPHIC SCALE
30 0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
One Merchants Plaza, Suite 701
Bangor, Maine 04401
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PROJECT

OLD TOWN WATER DISTRICT
OLD TOWN, MAINE
STILLWATER AVE WATER MAIN REPLACEMENT
MDOT WIN 22511.00, 22512.00 & 22950.00

TITLE

PROPOSED WATER SYSTEM IMPROVEMENTS

STATE OF MAINE
Nathan Gustafson
13689
11/17/2021
LICENSED PROFESSIONAL ENGINEER

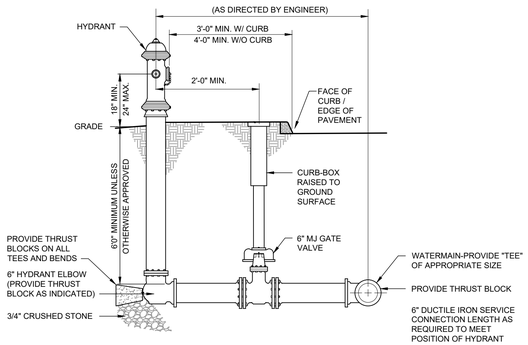
DATE	SCALE
2021.11.17	1"=30'

DRAWN BY	DESIGNED BY	CHECKED BY
WAB	NAG	NAG

PROJECT No. 10345.003

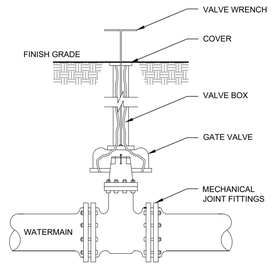
DRAWING No. **C103** REV.

FILE LOCATION: P:\10345-OLD_TOWN_WATER_DIST\003-STILLWATER BRIDGE WM-CPROJ-CAD_DRAWINGS\CIVIL\DESIGN_DWGS\10345-003-C-SP.DWG, 2021.11.17, 8:29 AM



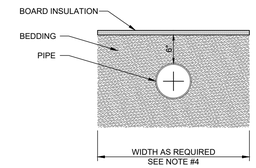
TYPICAL HYDRANT ASSEMBLY DETAIL

N.T.S.



TYPICAL GATE VALVE DETAIL

N.T.S.



NOTES:

1. WATER AND SEWER PIPING SHALL BE INSULATED WITH 2" RIGID INSULATION BLUE BOARD BY DOW CO. SM. EXTRUDED POLYSTYRENE, (OR APPROVED EQUAL) TO BE USED IF EARTHEN COVER IS LESS THAN 6'-0".
2. CONTRACTOR MAY HAVE TO SUPPLY MORE THAN ONE LAYER OF BLUE BOARD INSULATION, IN AREAS THAT HAVE MINIMAL EARTHEN COVER TO MAINTAIN THE INSULATION VALUE OF 6'-0" COVER. 2" BLUE BOARD INSULATION HAS THE INSULATION VALUE OF APPROXIMATELY 1'-6" OF EARTHEN COVER. INSULATE PIPE TO EQUAL 6'-0" OF COVER.
3. MAINTAIN A MINIMUM of 12" OF EARTHEN COVER OVER INSULATION AS A MECHANICAL PROTECTION. LOAM AND SEED AS NECESSARY TO PREVENT EROSION.
4. INSULATION TO BE 2 FEET WIDE FOR PIPES LESS THAN 6 INCHES IN DIAMETER AND 4 FEET WIDE FOR PIPES 6 INCHES IN DIAMETER AND LARGER, OR AS DIRECTED BY THE ENGINEER.
5. CENTER INSULATION OVER PIPES.
6. WHERE EARTHEN COVER IS LESS THAN 3'-0" INSULATE TRENCH WALLS TO BOTTOM OF TRENCH.

TYPICAL TRENCH PIPE INSULATION DETAIL

N.T.S.

LEGEND:

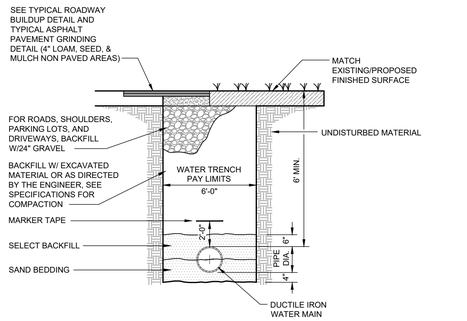
GATE VALVE	
WATER SHUTOFF	
HYDRANT	
WATERLINE	W
CONCRETE ROAD	

ABBREVIATIONS:

CI	CAST IRON
DI	DUCTILE IRON
LF	LINEAR FEET
DIA.	DIAMETER
CL	CENTER LINE

GENERAL CONSTRUCTION NOTES

1. THIS PROJECT IS FUNDED IN PART BY USDA RURAL DEVELOPMENT, THE MAINE DRINKING WATER PROGRAM STATE REVOLVING FUND PROGRAM (SRF) AND THE OLD TOWN WATER DISTRICT. THE CONTRACTOR MUST FOLLOW ALL APPLICABLE FUNDING AGENCY REGULATIONS AND REQUIREMENTS.
2. THE CONTRACTOR SHALL COORDINATE ALL UTILITY CONSTRUCTION WITH THE OLD TOWN WATER DISTRICT, UTILITY COMPANIES, DIG SAFE, EMERGENCY SERVICES AND MAINE DEPARTMENT OF TRANSPORTATION (MDOT) WHERE APPLICABLE. CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK TO ALLOW SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF ALL BURIED UTILITIES. CONTRACTOR SHALL ALSO CONTACT "DIG SAFE", TELEPHONE NO 811 OR 888-DIG-SAFE. REPAIR OF ANY DAMAGED UTILITY WILL BE INCIDENTAL TO THIS PROJECT
3. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER IN WRITING OF ANY CONDITION OR OCCURRENCE THAT REPRESENTS A CHANGE IN THE SANITARY SEWER SYSTEM AND WATER SYSTEM PROJECT SCOPE. VERBAL NOTIFICATION IS REQUIRED PRIOR TO PROCEEDING WITH THE WORK OF THE PROJECT AND WRITTEN NOTIFICATION MUST BE PROVIDED. REQUESTS FOR FEE ADJUSTMENTS WILL NOT BE CONSIDERED UNLESS PROPER NOTICE IS GIVEN
4. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING PIPE SIZES, INVERTS, AND LOCATIONS, AND SHALL INCLUDE IN SUBMITTAL PRIOR TO ORDERING.
5. ALL WATER MAINS AND SERVICES WILL HAVE A MINIMUM 6.0 FEET OF COVER UNLESS NOTED OTHERWISE OR APPROVED BY THE ENGINEER.
6. DECHLORINATION OF DISINFECTION WATER WILL BE A REQUIREMENT DURING THE PIPE DISINFECTION PROCESS.
7. THE CONTRACTOR SHALL PROVIDE THRUST BLOCKS AT ALL TEES AND BENDS IN THE NEW WATER MAIN PIPING UNLESS NOTED OTHERWISE.
8. CONTRACTOR SHALL BACKFILL TRENCH FOLLOWING EACH DAYS CONSTRUCTION. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT UNLESS APPROVED BY ENGINEER AND PROPERLY BARRICADED (IE. SNOW FENCING, CHAIN LINK FENCING, JERSEY BARRIER OR APPROVED EQUAL. CAUTION RIBBON AND EQUIPMENT PLACEMENT WILL NOT BE APPROVED AS BARRICADING. CONTRACTOR IS RESPONSIBLE TO MAINTAIN TRENCH AS DIRECTED BY THE ENGINEER
9. ALL UTILITY MATERIALS SCHEDULED FOR REMOVAL SHALL BE DISPOSED OF IN A LEGAL MANNER BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE OWNER HAS THE FIRST RIGHT AND REFUSAL FOR ANY DEMOLITION MATERIALS.
10. DISPOSAL OF SURPLUS SOIL MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, SURPLUS MATERIAL SHALL NOT BE DISPOSED OF ON THE PROJECT SITE. DISPOSAL SHALL BE MADE ONLY AT WASTE AREAS WHICH ARE LICENSED TO ACCEPT SUCH MATERIALS, UNLESS THE MATERIAL IS ACCEPTABLE FOR USE AS FILL IN OTHER AREAS OF THE PROJECT. THE OWNER HAS THE FIRST RIGHT AND REFUSAL FOR ANY SURPLUS SOIL MATERIALS.
11. ALL PROPOSED WATER MAIN PIPING SHALL BE CLASS 52 DUCTILE IRON.
12. ALL PROPOSED WATER SERVICE PIPING SHALL BE 1" TYPE K COPPER UNLESS OTHERWISE NOTED.
13. INSTALL FOUR BRONZE WEDGES AT ALL DUCTILE IRON BELL & SPIGOT JOINTS IN WATER MAIN, COST INCIDENTAL TO WATER MAIN INSTALLATION.
14. ALL MATERIALS, COMPONENTS, PRODUCTS, SYSTEMS AND COATINGS THAT COME INTO CONTACT WITH DRINKING WATER MUST BE CERTIFIED TO MEET NSF/ANSI STANDARD 61.
15. JOINTS SHALL BE RUBBER GASKETED PUSH-ON OR MECHANICAL JOINT TYPE. GASKETS SHALL BE MADE OF SBR RUBBER. FOR WATER MAIN LOCATED WITHIN PETROLEUM HYDROCARBON AND/OR CHLORINATED SOLVENT CONTAMINATED SOILS, GASKETS SHALL BE MADE OF OIL RESISTANT BUNA-N (NITRILE) RUBBER. WHEN CONTAMINATED SOIL IS ENCOUNTERED UNEXPECTEDLY IN THE FIELD, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. ALL JOINTS SHALL BE IN CONFORMANCE WITH REQUIREMENTS OF ANSI/AWWA C111/A21.11.
16. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE TO THE RESIDENCES, AS NEEDED, TO MAINTAIN WATER SERVICE DURING THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL MAINTAIN TEMPORARY WATER THROUGHOUT CONSTRUCTION OF THE PROJECT. A PAY ITEM HAS BEEN PROVIDED FOR THIS WORK. THE CONTRACTOR SHALL PROVIDE A TEMPORARY WATER SERVICE PLAN TO THE OWNER AND ENGINEER FOR APPROVAL PRIOR TO INSTALLATION SYSTEM. COST TO PROVIDE PLAN SHALL BE INCIDENTAL TO ITEM. TEMPORARY WATER SERVICE PLAN SHALL INCLUDE PIPE MATERIAL, PIPE ROUTING, BURIAL DEPTHS WHERE NEEDED, DISINFECTION PROCESS AND ANY OTHER INFORMATION THAT MAY BE REQUIRED FOR APPROVAL.
17. EXISTING FIRE HYDRANTS TO REMAIN ACTIVE AT ALL TIMES, UNTIL REPLACEMENT WITH NEW HYDRANT.
18. AT THE END OF EACH DAY'S WORK, THE CONTRACTOR SHALL SPRAY THE INSIDE OF THE END OF WATER PIPE WITH SODIUM HYPOCHLORITE AND BLOCK PIPE OVERNIGHT WITH SANITARY WATERTIGHT PLUG TO PREVENT ANIMALS FROM ENTERING PIPE.
19. WHERE THERE IS LESS THAN TEN FEET OF HORIZONTAL SEPARATION BETWEEN THE SANITARY SEWER MAIN AND THE WATER MAIN, PROVIDE 18" OF VERTICAL SEPARATION BETWEEN THE BOTTOM OF THE WATER MAIN AND THE TOP OF THE SEWER.
20. PROPOSED SERVICES SHALL BE PROVIDED FROM THE NEW MAIN TO THE RIGHT-OF-WAY, OR AS INDICATED ON THE PLANS.
21. THE CONTRACTOR SHALL PROVIDE MECHANICAL JOINT CAPS ON ALL EXISTING WATER MAINS THAT ARE TO BE ABANDONED FOR THIS PROJECT. THE CAP SHALL BE PLACED ON THE EXISTING WATER MAIN AFTER THE EXISTING MAIN HAS BEEN CUT FOR THE CONNECTION OF THE NEW WATER MAIN AND BEFORE THE TRENCH IS BACKFILLED.
22. CONTRACTOR SHALL MAINTAIN WATER SERVICE TO RESIDENTS AT ALL TIMES. CONTRACTOR SHALL COORDINATE CONNECTION OF SERVICES TO THE NEW MAINS WITH THE OLD TOWN WATER DISTRICT.
23. THE CONTRACTOR SHALL ASSUME THAT ALL BUILDINGS HAVE A WATER SERVICE, WHETHER SHOWN ON THE DRAWINGS OR NOT. SERVICE LOCATIONS WHERE SHOWN ARE APPROXIMATE AND HAVE BEEN COMPILED FROM FIELD SURVEY, TOWN RECORDS AND WATER DISTRICT RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LOCATION OF ALL SERVICE LOCATIONS.
24. COORDINATE DISRUPTION OF PRIVATE UTILITY SERVICES WITH LANDOWNERS AT LEAST TWO DAYS (48 HOURS) PRIOR TO DISRUPTION. ALL UTILITY COORDINATION IS RESPONSIBILITY OF CONTRACTOR.
25. WATER SERVICES SHALL NOT BE DISCONTINUED AT ANY HOUSE PRIOR TO 10:00 AM WITHOUT WRITTEN NOTIFICATION TO THE PROPERTY OWNER.
26. ALL EXISTING WATER MAINS ABANDONED SHALL BE CAPPED AND FILLED WITH FLOWABLE FILL, COST SHALL BE INCIDENTAL TO PROJECT.
27. THE CONTRACTOR SHALL RAISE ALL EXISTING UTILITY COVERS AND BOXES TO MATCH NEW ELEVATIONS AS INDICATED ON THE DRAWINGS.
28. THE OLD TOWN WATER DISTRICT REQUIRES THAT UPON COMPLETION OF CONSTRUCTION, A COMPLETE SET OF "AS-BUILT" DRAWINGS THAT REFLECT ANY AND ALL MODIFICATIONS WITHIN THE PUBLIC RIGHT OF WAY INCLUDING MODIFICATIONS TO THE WATER SYSTEM WITHIN THE PROJECT LIMITS BE SUBMITTED TO THE OLD TOWN WATER DISTRICT. THESE DRAWINGS SHALL BE SUBMITTED IN BOTH DIGITAL (CAD) DRAWING AND HARD COPY FORMAT. A CAD FILE WILL BE AVAILABLE TO THE CONTRACTOR.

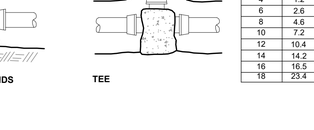


NOTE:

1. MATCH EXISTING SURFACE FINISH, EXCEPT WHERE NOTED. IN LAWN AREAS INSTALL 4" OF LOAM AND SEED AND MULCH.

TYPICAL TRENCH DETAIL - DUCTILE IRON WATER MAIN

N.T.S.



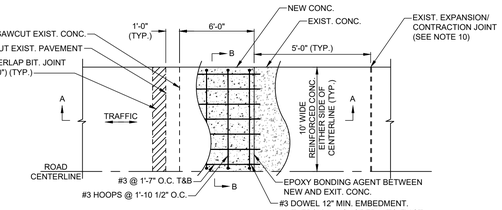
NOTE:
2" RIGID INSULATION SHALL BE BLUEBOARD S.M. EXTRUDED POLYSTYRENE, R-10 RATING BY DOW CO. OR APPROVED EQUAL.

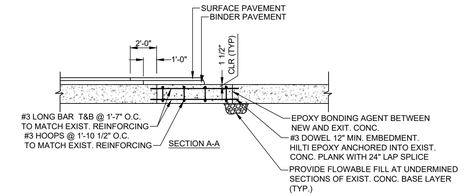
WATER/SEWER MAIN UNDER CULVERT/STORM DRAIN

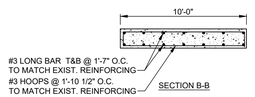
WATER/SEWER MAIN ABOVE CULVERT/STORM DRAIN

TYPICAL PIPE CROSSING INSULATION DETAIL

N.T.S.





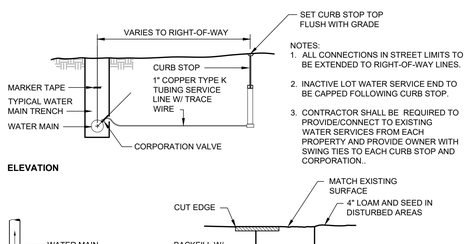


NOTES:

1. DESIGN INTENT IS TO REPLACE EXISTING CONCRETE ROAD BASE "IN KIND" AND MATCH EXISTING DIMENSIONS, THICKNESS, AND REINFORCEMENT.
2. THE EXISTING CONCRETE ROAD BASE REPAIR WORK SHALL BE PERFORMED ONE LANE AT A TIME TO MAINTAIN TRAFFIC.
3. THE EXISTING PAVEMENT AND CONCRETE ROAD BASE MATERIALS SHALL BE CUT TO FULL DEPTH AND REMOVED AS REQUIRED TO COMPLETE NEW UTILITY INSTALLATION. A DIAMOND BLADE SAW SHALL BE REQUIRED TO INDUCE A CLEAN AND NEAT CUT OF THE EXISTING CONCRETE.
4. EXISTING ROAD AGGREGATES AND NATIVE SUB SOILS SHALL BE REMOVED AS REQUIRED FOR NEW UTILITY INSTALLATION AND KEPT SEGREGATED FOR REPLACEMENT IN-PLACE AND COMPACTED TO REQUIRED FIELD DENSITIES.
5. REINFORCEMENT SHALL BE #3 ASTM A 615, GRADE 60, DEFORMED BARS PLACED AS SHOWN ON DETAIL INCLUDING DRILLING AND DOWELING EPOXY ANCHORED DOWELS AS SHOWN, LONGITUDINAL BARS AS SHOWN, AND REINFORCEMENT HOOPS AS SHOWN. ALL REINFORCEMENT SHALL BE WIRED TIED TOGETHER PER APPLICABLE AMERICAN CONCRETE INSTITUTE (ACI) AND CONCRETE REINFORCING STEEL INSTITUTE (CRSI) STANDARDS.
6. PROVIDE EPOXY BONDING AGENT BETWEEN NEW AND EXISTING CONCRETE SURFACES.
7. CONCRETE SHALL BE 5000 PSI, CLASS LP APPROVED MDOT MIX DESIGN WITH ACCELERATOR ADMIXTURE TO PROVIDE A MINIMUM 3000 PSI CONCRETE STRENGTH FOR SUCCEEDING PAVING AND TRAFFIC.
8. CONCRETE SHALL BE CURED A MINIMUM OF 24 HOURS BY EITHER MOISTURE CURED WATER AND POLY/BURLAP COVER OR APPLICABLE DISSIPATING CURING COMPOUND MEETING ASTM C 309, AASHTO M 148, EQUAL TO HARRIS EMULSION KURSEAL 309.
9. TEST SPECIMENS SHALL BE COORDINATED TO VERIFY MINIMUM 3000 PSI CONCRETE STRENGTH FOR APPLICATION OF BITUMINOUS PAVEMENT AND TRAFFIC LOADS.
10. THIS DETAIL IS APPLICABLE FOR CONCRETE ROAD BASE REPAIR SECTIONS WITH NO EXPANSION/CONTRACTION JOINTS. PROVIDE MINIMUM 5'-0" OFFSET BETWEEN SAW CUT JOINTS FOR PIPE CROSSINGS AND EXISTING EXPANSION/CONTRACTION JOINTS.

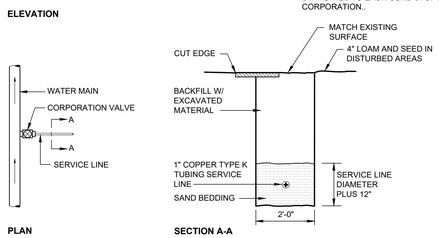
CONCRETE ROAD REPAIR DETAIL

N.T.S.



NOTES:
1. ALL CONNECTIONS IN STREET LIMITS TO BE EXTENDED TO RIGHT-OF-WAY LINES.
2. INACTIVE LOT WATER SERVICE END TO BE CAPPED FOLLOWING CURB STOP.
3. CONTRACTOR SHALL BE REQUIRED TO PROVIDE/CONNECT TO EXISTING WATER SERVICES FROM EACH PROPERTY AND PROVIDE OWNER WITH SWING TIES TO EACH CURB STOP AND CORPORATION..

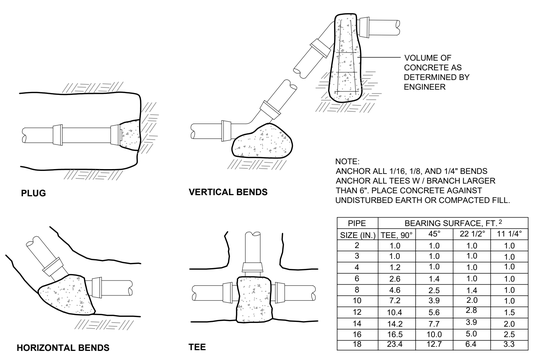
ELEVATION



PLAN **SECTION A-A**

TYPICAL WATER SERVICE DETAIL

N.T.S.



NOTE:
ANCHOR ALL 1/16, 1/8, AND 1/4" BENDS
ANCHOR ALL TEES W / BRANCH LARGER THAN 6". PLACE CONCRETE AGAINST UNDISTURBED EARTH OR COMPACTED FILL.

PIPE	BEARING SURFACE, FT.^{2}			
SIZE (IN.)	TEE, 90°	45°	22 1/2°	11 1/4°
2	1.0	1.0	1.0	1.0
3	1.0	1.0	1.0	1.0
4	1.2	1.0	1.0	1.0
6	2.6	1.4	1.0	1.0
8	4.6	2.5	1.4	1.0
10	7.2	3.9	2.0	1.0
12	10.4	5.6	2.8	1.5
14	14.2	7.7	3.9	2.0
16	16.5	10.0	5.0	2.5
18	23.4	12.7	6.4	3.3

ANCHORAGE DETAILS

N.T.S.

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
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Bangor, Maine 04401
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PROJECT

OLD TOWN WATER DISTRICT
OLD TOWN, MAINE
STILLWATER AVE WATER MAIN REPLACEMENT
MDOT WIN 22511.00, 22512.00 & 22950.00

TITLE

PROPOSED WATER SYSTEM NOTES & DETAILS

STATE OF MAINE
Nathan Gustafson
13589
11/17/2021
LICENSED PROFESSIONAL ENGINEER

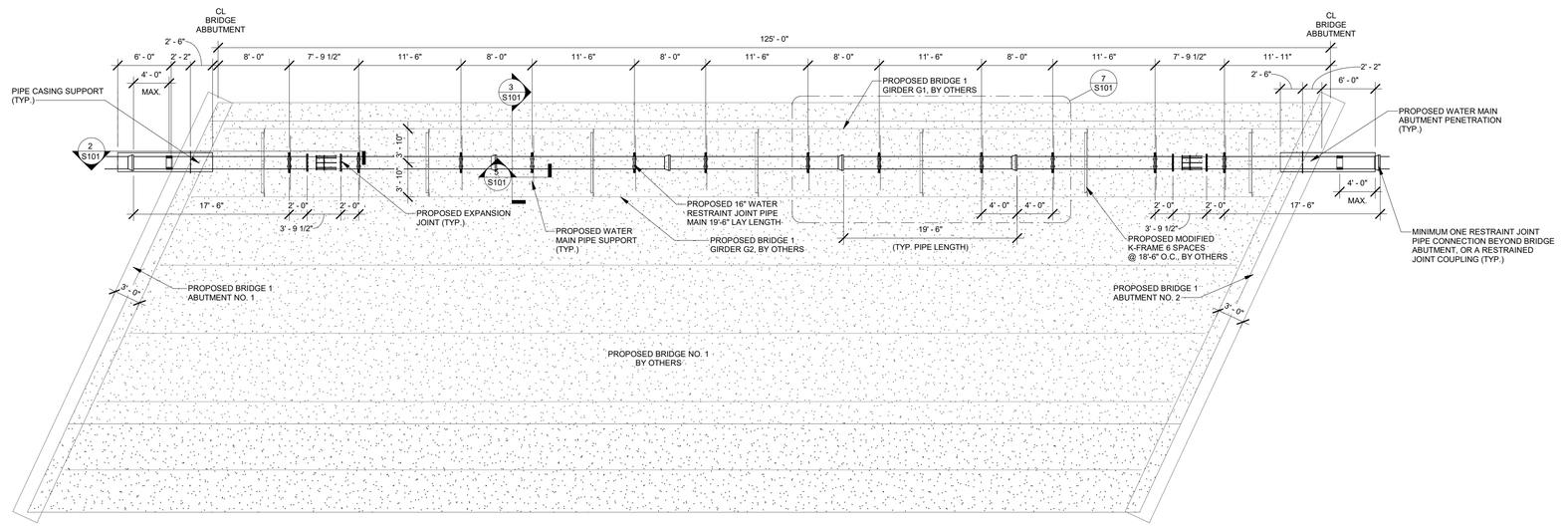
DATE	SCALE
2021.11.17	NTS

DRAWN BY	DESIGNED BY	CHECKED BY
WAB	NAG	NAG

PROJECT No. 10345.003

DRAWING No. **C501** REV.

FILE LOCATION: P:\10345-OLD_TOWN_WATER_DIST\00-STILLWATER BRIDGE WM-OP\02-CAD_DRAWINGS\CIVIL\DSGN_DWGS\10345.003-C-DT.DWG, 2021.11.17, 8:59 AM



1 S101 BRIDGE 1 WATER MAIN PIPE SUPPORT PLAN

SCALE: 1/8" = 1'-0"

GENERAL NOTES:

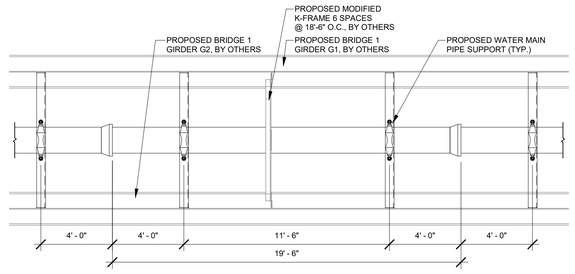
1. DESIGN BASED ON INFORMATION PROVIDED BY MAINE DEPARTMENT OF TRANSPORTATION (MDOT) AND VANASSE HANGEN BRUSTLIN (VHB).
2. PIPE SUPPORT SYSTEM DESIGN BASED ON DEAD LOAD OF 90 PLF AND LIVE LOAD OF 90 PLF, ALONG THE LENGTH OF THE PIPE.

GENERAL CONSTRUCTION NOTES:

1. SELECTED CONTRACTOR SHALL BE RESPONSIBLE FOR FABRICATION OF PIPE SUPPORT HANGER BEAM AND ITS COMPONENTS AS SHOWN ON THE DRAWINGS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTION PROCEDURES, SEQUENCING, AND FOR COMPLYING WITH ALL APPLICABLE SAFETY REGULATIONS DURING THE WORK.

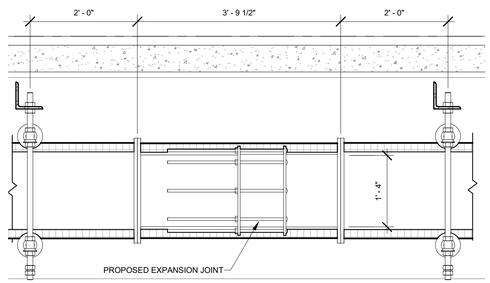
STRUCTURAL STEEL NOTES:

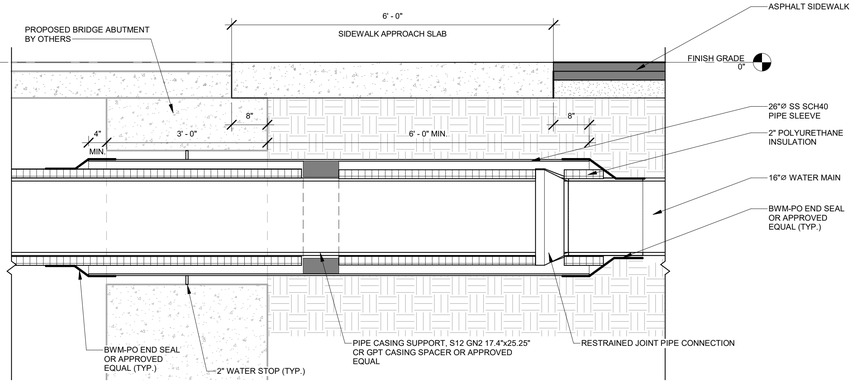
1. ALL STRUCTURAL STEEL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND THE "AISC CODE OF STANDARD PRACTICE."
2. PIPE SUPPORT BEAMS: STRUCTURAL STEEL ANGLES CONFORMING TO ASTM A36 WITH A MINIMUM YIELD STRESS OF Fy = 36,000 PSI
3. CONNECTION PLATES: STEEL PLATES CONFORMING TO ASTM A36 WITH A MINIMUM YIELD STRESS OF Fy = 36,000 PSI.
4. ALL CONNECTION BOLTS SHALL CONFORM TO ASTM A325.
5. ALL WELDING SHALL CONFORM TO AWS D1.1, LATEST EDITION. WELDING ELECTRODES SHALL BE E70XX.
6. ALL STEEL BEAMS SHALL BE CUT FROM FULL LENGTH STOCK. UNAUTHORIZED SPLICES WILL BE CAUSE FOR REJECTION.



7 S101 TYPICAL PIPE SUPPORT SPACING KEY

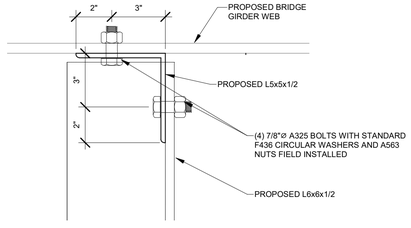
SCALE: 1/4" = 1'-0"





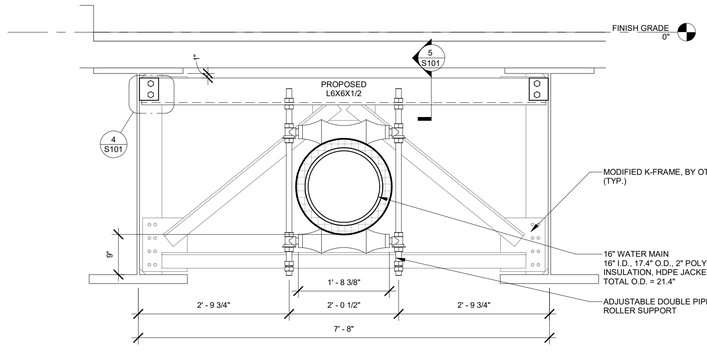
2 S101 TYPICAL EXPANSION JOINT & ABUTMENT PENETRATION DETAIL

SCALE: 3/4" = 1'-0"



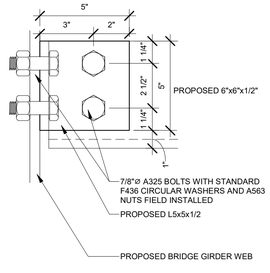
6 S101 TYPICAL STEEL CONNECTION PLAN VIEW

SCALE: 3" = 1'-0"



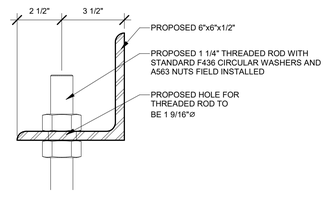
3 S101 TYPICAL WATER MAIN PIPE SUPPORT DETAIL - BRIDGE 1

SCALE: 3/4" = 1'-0"



4 S101 TYPICAL STEEL FRAMING CONNECTION DETAIL

SCALE: 3" = 1'-0"



5 S101 TYPICAL HANGER TO ANGLE CONNECTION DETAIL

SCALE: 3" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

FOR CONSTRUCTION

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PROJECT

OLD TOWN WATER DISTRICT
OLD TOWN. MAINE
STILLWATER AVE WATER MAIN REPLACEMENT
MDOT WIN 22511.00, 22512.00 & 22950.00

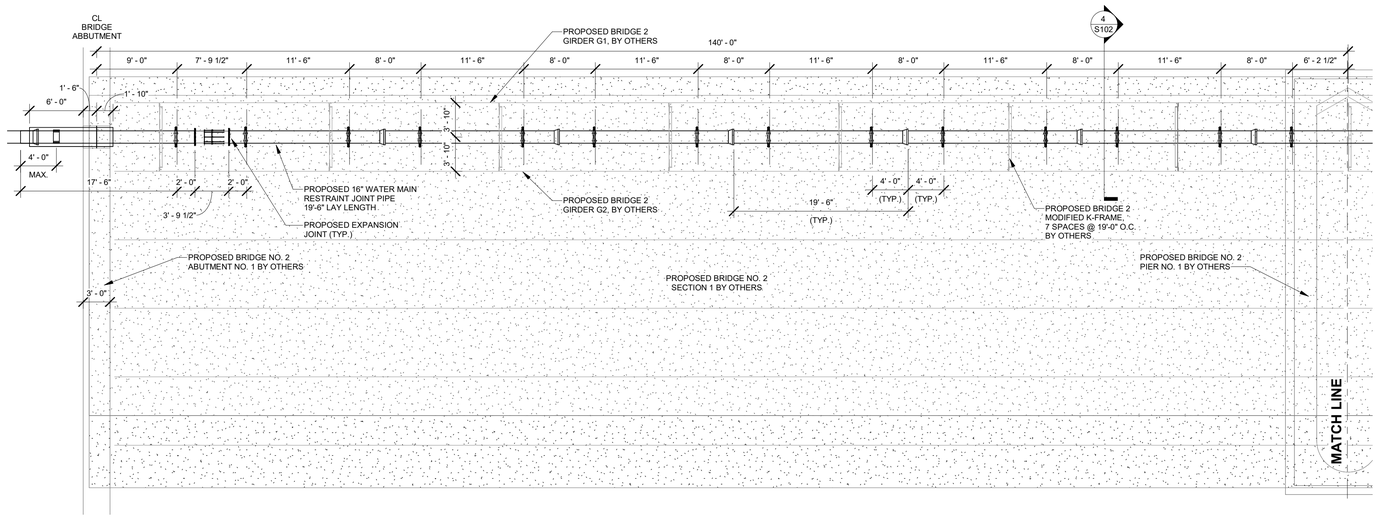
TITLE

PROPOSED BRIDGE WATER MAIN PIPE SUPPORT PLAN AND DETAILS

STATE OF MAINE — CHRISTOPHER W. SNOWDEAL — 11/17/2021 — No. 13761 — REGISTERED PROFESSIONAL ENGINEER

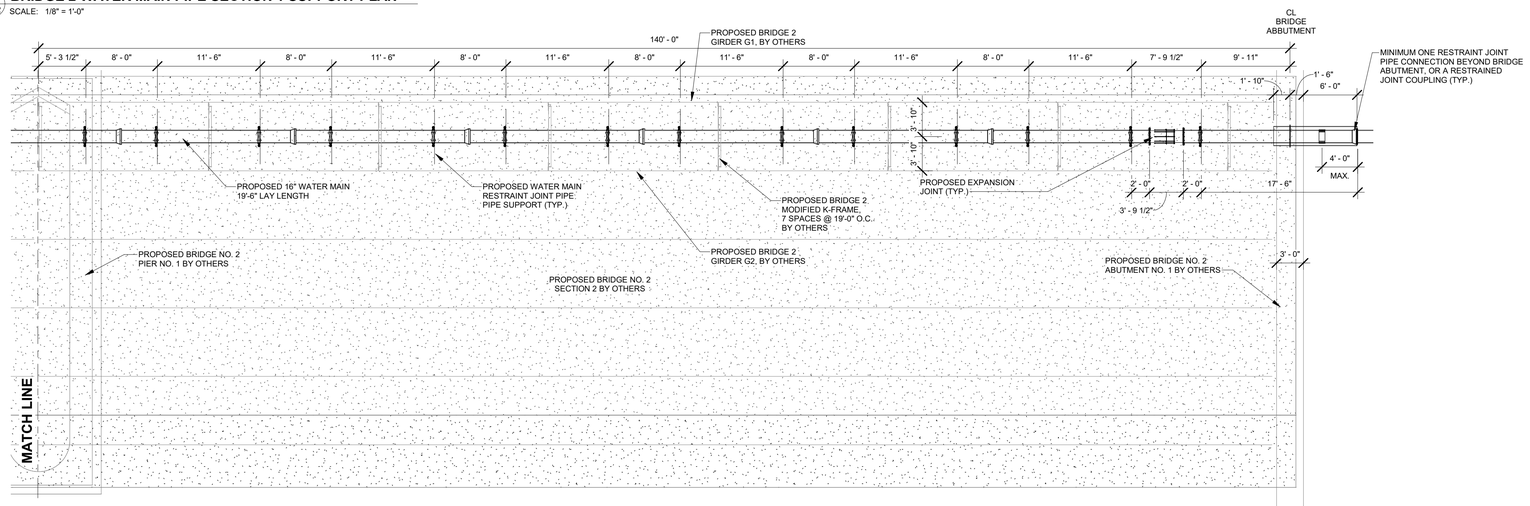
DATE	SCALE
2021.11.17	As indicated
DRAWN BY: BTH/JNB	DESIGNED BY: CDL
CHECKED BY: CWS	
PROJECT No.: 10345.003	
DRAWING NO.: **S101**	REV.

P:\10345-Old_Town_Water_Dist\003-Stillwater Bridge WM-OPR\02-Cad_Drawings\Structural\10345.003-S-PIPE SUPPORT.rvt



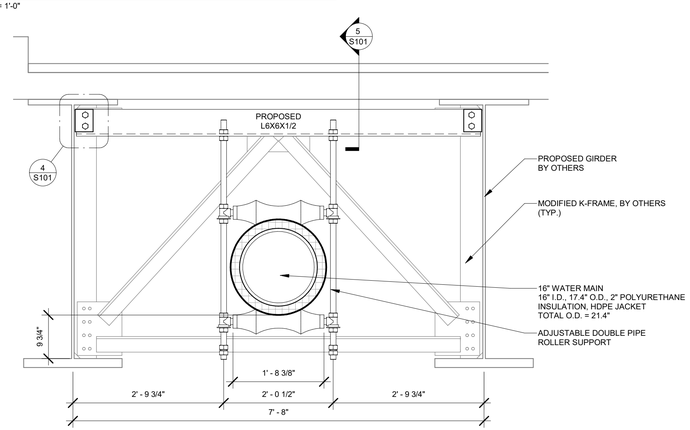
1 S102 BRIDGE 2 WATER MAIN PIPE SECTION 1 SUPPORT PLAN

SCALE: 1/8" = 1'-0"



2 S102 BRIDGE 2 WATER MAIN PIPE SECTION 2 SUPPORT PLAN

SCALE: 1/8" = 1'-0"



1 S102 TYPICAL WATER MAIN PIPE SUPPORT DETAIL - BRIDGE 2

SCALE: 3/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

FOR CONSTRUCTION

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PROJECT

OLD TOWN WATER DISTRICT
OLD TOWN, MAINE
STILLWATER AVE WATER MAIN REPLACEMENT
MDOT WIN 22511.00, 22512.00 & 22950.00

TITLE

PROPOSED BRIDGE WATER MAIN PIPE SUPPORT PLAN AND DETAILS

STATE OF MAINE
CHRISTOPHER W. SNOWDEAL
11/17/2021
No. 13764
REGISTERED PROFESSIONAL ENGINEER

DATE	SCALE
2021.11.17	As indicated
DRAWN BY: BTH/JNB	DESIGNED BY: CDL	CHECKED BY: CWS
PROJECT No.	10345.003
DRAWING NO.	REV.
S102	

P:\10345-Old_Town_Water_Dist\03-Stillwater Bridge WM-CPR\02-Cad_Drawings\Structural\10345-003-S-PIPE SUPPORT.rvt