STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

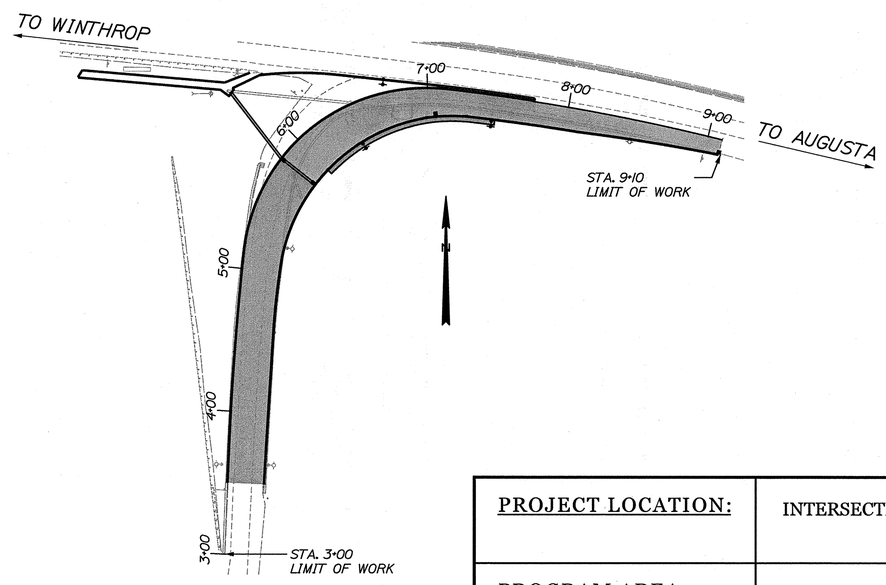
PLAN LEGEND

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

AUGUSTA
KENNEBEC COUNTY
I-95\WESTERN AVE.
STATE PROJECT NO 018857.00
PROJECT LENGTH : 0.1 MILES

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	1
General/Construction Notes	2
Typical Sections	3
Drainage/Estimated Quantities	4
Plan	5
Profile	6
Lighting/Striping Plan	7
Cross Sections	8-17
Minimum Turning Radius	18
Proposed Turning Radius	19



LAYOUT SCALE
50 0 50 100
Scale in Feet

TRAFFIC DATA: I-95 EXIT 109

Current (2015) AADT: 4318
Design Hour Volume: 1800
Design Speed (mph): 25
Functional Class: Princ. Arterial Interstate
Corridor Priority 1

TRAFFIC DATA: US 202

Current (2015) AADT: 12246
Design Hour Volume: 1960
Design Speed (mph): 35
Functional Class: Minor Arterial
Corridor Priority 1

PROJECT LOCATION:	INTERSECTION OF US 202 AND INTERSTATE 95 NORTHBOUND EXIT 109
PROGRAM AREA:	HIGHWAY: REGION 2
SCOPE OF WORK:	INTERSECTION IMPROVEMENT

WIN 18857.00 018857.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED — DATE
COMMISSIONER: 3/23/15
CHIEF ENGINEER: 3-23-15

STATE OF MAINE — JAMES O. ANDREWS — 8580 — PROFESSIONAL ENGINEER
SIGNATURE
P.E. NUMBER 8580
DATE 3-5-15

PROJECT INFORMATION
PROGRAM
PROJECT MANAGER
DESIGNER
CONSULTANT
PROJECT RESIDENT
CONTRACTOR
PROJECT COMPLETION DATE

AUGUSTA
I-95\WESTERN AVE.
TITLE SHEET

SHEET NUMBER
1
OF 19

Filename: ...\00\HIGHWAY\MSTA\001_Title.dgn Division: HIGHWAY Username: anne.lowe Date:3/5/2015

GENERAL NOTES

1. ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS OTHERWISE NOTED.
2. ALL JOINTS BETWEEN EXISTING AND PROPOSED HOT BITUMINOUS PAVEMENT SHALL BE BUTTED OR SAW CUT AS SHOWN ON THE PLANS. PAYMENT SHALL BE MADE UNDER ITEM 202.203 PAVEMENT BUTT JOINT FOR BUTT JOINTS. SAW CUT JOINTS SHALL BE CONSIDERED INCIDENTAL TO RELATED PAVING ITEMS.
3. A TEMPORARY RAMP SHALL BE CONSTRUCTED WITH HMA AT THE ENDS OF THE ROADWAY SECTION PAVED OR MILLED EACH DAY. THE USES OF MILLINGS OR RAP WILL NOT ALLOWED, BUT COLD PATCH MAY BE TEMPORARILY UTILIZED UNTIL HMA PLANTS ARE OPEN FOR THE SEASON.
4. ALL CLEARING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE. THE ACTUAL LINES FOR CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE RESIDENT.
5. ACTUAL GRUBBING LIMITS SHOWN ON PLANS MAY VARY BASED ON FIELD CONDITIONS AS DIRECTED BY THE RESIDENT. ESTIMATED GRUBBING DEPTHS IS 6 INCHES IN FIELD AREAS.
6. ALL INSLOPE AND DITCHES IN CUT AREAS SHALL BE GRADED AS SHOWN ON THE TYPICALS OR FLATTER, OR AS DIRECTED BY THE RESIDENT.
7. THE CONTRACTOR SHALL PLAN AND CONDUCT THEIR WORK ACCORDINGLY SO THAT UPON FINAL COMPLETION OF THE PROJECT THERE IS NO DROP-OFF FROM THE EDGE OF SHOULDER PAVEMENT.
8. 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.
9. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW - UNDERWATER BACKFILL AND WILL PAID FOR AS GRANULAR BORROW.
10. EXISTING INSLOPES STEEPER THAN 2:1 IN PROPOSED FILL AREAS SHALL BE BENCHED AS DIRECTED BY THE RESIDENT.
11. ANY NECESSARY CLEANING OF EXISTING PAVEMENT PRIOR TO PAVING SHALL BE INCIDENTAL TO THE RELATED PAVING ITEMS.
12. GRANULAR BORROW USED UNDER PIPES SHALL MEET THE REQUIREMENTS FOR UNDERWATER BACKFILL
13. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.
14. INLETS AND OUTLETS OF ALL CULVERTS SHALL BE RIPRAPPED UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.
15. THE CULVERT SIZES SHOWN ON THE PLANS AND CROSS SECTIONS ARE FOR SMOOTHLINED PIPES. FOR COMPARABLE CORRUGATED SIZES SEE THE DRAINAGE TABULATION.
16. A1-C AND B1-C CATCH BASINS SHALL BE SHAPE 1WITH HAUNCHED CONE, AS PER STANDARD DETAIL 604(02), UNLESS OTHERWISE NOTED ON THE PLANS.
17. PLASTIC END CAPS SHALL BE USED ON ALL DEAD-END 6-INCH TYPE B UNDERDRAIN.
18. ALL UNDERDRAIN NOT SHOWN ON THE CROSS SECTIONS WILL HAVE A FLOW LINE OF 5.5 FEET BELOW FINISH GRADE DIRECTLY ABOVE THE UNDERDRAIN AND UNDERDRAIN SAND BACKFILL PLACED TO AN ELEVATION EQUAL TO THE BOTTOM OF THE NEW GRAVEL LAYER. ALL UNDERDRAIN SHOWN ON THE CROSS SECTIONS WILL HAVE THE FLOW LINE SCALED FROM THE CROSS SECTIONS. ALL FLOW LINE ELEVATIONS ARE SUBJECT TO APPROVAL BY THE RESIDENT.
19. ALL CONNECTIONS FOR UNDERDRAIN TO ROADWAY CULVERTS WILL BE INCIDENTAL TO UNDERDRAIN PIPE ITEMS.
20. A 6 FT. X 8 FT. RIPRAP PAD SHALL BE CONSTRUCTED AT UNDERDRAIN OUTLETS.
21. 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.
22. A DELINEATOR POST (ITEM 606.356) WILL BE INSTALLED AT EACH UNDERDRAIN OUTLET.
23. 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.
24. UNLESS OTHERWISE NOTED SEEDING METHOD NO. 2 SHALL BE USED
25. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 4 INCHES UNLESS OTHERWISE NOTED OR DIRECTED.

GENERAL NOTES, (CONTINUED)

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

27. SAW CUT JOINTS SHALL BE CONSIDERED INCIDENTAL TO RELATED PAVING ITEMS.

28. REMOVAL OF EXISTING AND CURBING SHALL BE CONSIDERED INCIDENTAL TO ITEM 203.20 COMMON EXCAVATION.

29. THE CONTRACTOR IS RESPONSIBLE FOR THE CAREFUL SIDE STAKING OF EXISTING CENTERLINE AS PER STANDARD SPECIFICATION 105.6.2. SIDE STAKES SHALL BE PLACED SAFELY OUTSIDE OF THE CONSTRUCTION LIMITS AND THE EXISTING CENTERLINE GRADES SHALL BE TRANSFERRED TO THESE STAKES. THESE STAKES AND GRADES WILL BE USED TO LAYOUT CENTERLINE AND DETERMINE NEW CONSTRUCTION FINISH GRADES FROM DIFFERENTIAL ELEVATION SHEETS FURNISHED BY MAINEDOT. ALL LAYOUT, STAKES, AND GRADES WILL BE CHECKED AND MUST BE ACCEPTABLE TO THE RESIDENT.

30. 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.

31. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED, OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT. ANY REQUIRED PLUGGING OR REMOVAL SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

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

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

34. UNDETERMINED LOCATIONS SHALL BE DETERMINED BY THE RESIDENT.

35. STATIONS REFERENCED ARE APPROXIMATE.

36. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION'S BEST MANAGEMENT PRACTICES FOR EROSION CONTROL & SEDIMENT CONTROL, FEBRUARY, 2008.

CONSTRUCTION NOTES

202.20 REMOVAL OF BITUMINOUS CONCRETE PAVEMENT
QUANTITY OF EXISTING PAVEMENT REMOVAL HAS NOT BEEN DEDUCTED FROM ESTIMATE FOR COMMON EXCAVATION DUE TO UNKNOWN PAVAMENT DEPTHS. DURING CONSTRUCITON, PAVEMENT REMOVAL SHALL BE PAID UNDER ITEM 202.20 AND EXCAVATION SHALL BE PAID UNDER ITEM 203.20.

203.20 COMMON EXCAVATION
REMOVAL OF EXISTING DRAINAGE EXCEPT FOR CATCH BASINS INCIDENTAL TO THIS ITEM.

603.195-605.13 DRAINAGE ITEMS
AREAS AND STATIONS AS SHOWN ON PLANS. SEE DRAINAGE SHEET #4.

609.23 CURB TRANSITION SECTION B TYPE 1
STA. 9+02 RT TO STA. 9+10 RT

609.34 CURB TYPE 5
STA. 3+50 LT TO STA. 7+75 LT
STA. 3+50 RT TO STA 9+02 RT
STA. 6+09 54.1' LT TO STA. 7+75 3' LT

609.35 CURB TYPE 5 - CIRCULAR
STA. 7+75 (1.5' RADIUS)

610.08 PLAIN RIPRAP
EROSION CONTROL GEOTEXTILE TO BE PLACED AT ALL RIPRAP LOCATIONS

618.14 SEEDING - METHOD 2
SEEDING MAY BE DONE BY HAND AS DIRECTED BY RESIDENT

629.05-631.172 EQUIPMENT RENTAL ITEMS
TO BE USED AS DIRECTED BY RESIDENT

634.721 RELOCATE LIGHT POLE (INCLUDING FOUNDATION)
ANY REQUIRED CONDUIT INCIDENTAL TO THIS ITEM.

645.109 REMOVE AND SALVAGE HIGHWAY SIGNS
STA. 6+36 10.2' RT
STA. 6+17 27.5' LT
REMOVAL OF SIGN POSTS INCIDENTAL TO THIS ITEM
SALVAGED MATERIALS SHALL BE DELIVERED
TO NORTH AUGUSTA MAINTENANCE LOT

658.20 ACRYLIC LATEX COLOR FINISH - GREEN
STA. 7+00 LT TO STA. 7+75 LT

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN
18857.00

HIGHWAY PLANS

		BY	DATE
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CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

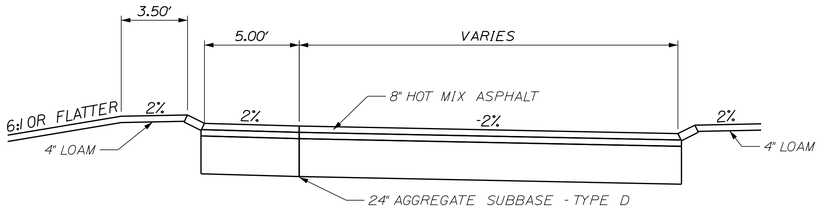
DATE

AUGUSTA
I-95/WESTERN AVENUE

GENERAL NOTES

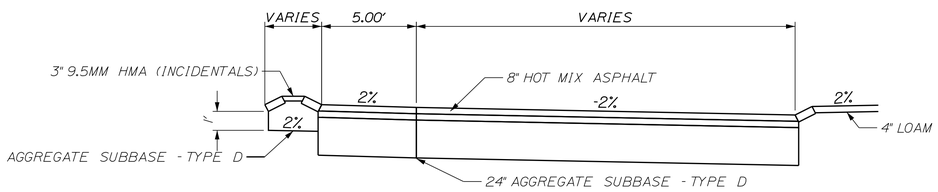
SHEET NUMBER
2
OF 19

Filename: ...\MSTA\002_GeneralNotes.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015



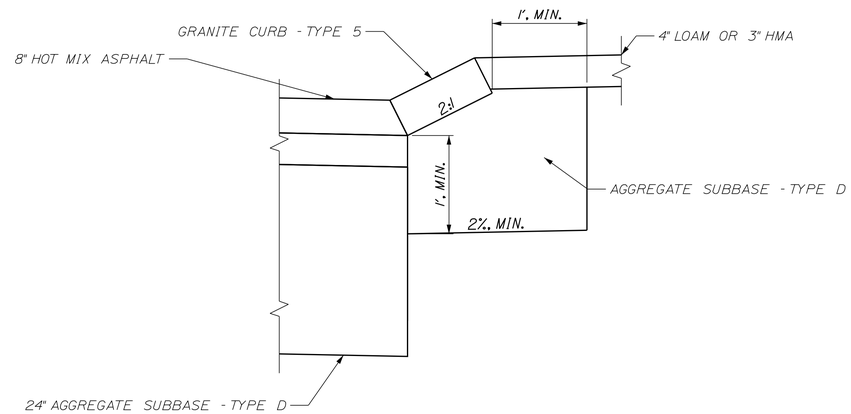
TYPICAL APPROACH SECTION: RAMP

STA. 3+50 TO STA. 6+00

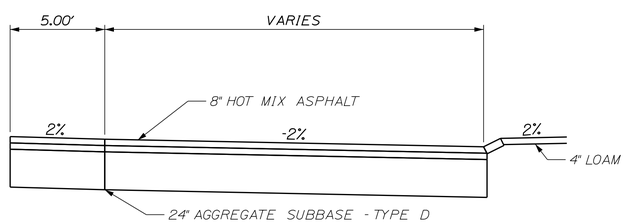


TYPICAL APPROACH SECTION: WESTERN AVE. WITH ISLAND

STA. 7+00 TO STA. 7+75



TYPICAL CURB SECTION



TYPICAL APPROACH SECTION: WESTERN AVE. WITHOUT ISLAND

STA. 7+75 TO STA. 9+10

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN 18857.00

HIGHWAY PLANS

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AUGUSTA
I-95/WESTERN AVENUE

TYPICAL SECTIONS

SHEET NUMBER

3

OF 19

Filename: ...\HIGHWAY\MSTA\003_Typical.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015

STATION	CULVERT PIPE											CATCH BASIN					PIPE ARCH				MH	UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	RCP			CMP		OPTION I		OPTION III														TYPE B		TYPE C					
								SMOOTHLINED		CORRUGATED										GAGE OR WALL THICKNESS		TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		DESCRIPTIONS	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1-C	B1-C		E	F	SPAN	RISE	LENGTH			LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
CULVERT PIPES																													
CB 2 TO STA. 6+44 0.9' LT (EXIST. CB)	12"	20'	III																										
CB 1 TO STA. 5+92 57.53' LT	24"	84'	III																										
UNDERDRAIN																													
STA. 3+50 RT TO CB 1																						233'							
CB 4 TO CB 3																								18"	205'				
CB 3 TO CB 1																								18"	122'				
CATCH BASINS																													
CB 1 (STA. 5+83 RT)													1																
CB 2 (STA. 6+50 21.2' LT)													1																
CB 3 (STA. 7+05 RT)													1																
CB 4 (STA. 9+10 RT)													1																
MISCELLANEOUS																												2-45 DEGREE ELBOWS	UNDETERMINED LOCATIONS

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.20	REMOVING BITUMINOUS CONCRETE PAVEMENT	1300	SY
202.203	PAVEMENT BUTT JOINTS	160	SY
203.20	COMMON EXCAVATION	720	CY
203.24	COMMON BORROW	50	CY
203.25	GRANULAR BORROW	5	CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	750	CY
403.2081	12.5 MM POLYMER MODIFIED HMA	125	T
403.209	HMA 9.5MM (INCIDENTALS)	20	T
403.213	HMA 12.5 MM BASE	475	T
409.15	BITUMINOUS TACK COAT - APPLIED	70	G
603.155	12" RCP CLASS III	20	LF
603.195	24" RCP CLASS III	84	LF
603.55	CONCRETE PIPE TIES	2	GP
604.092	CATCH BASIN TYPE BI-C	4	EA
604.16	ALTER CATCH BASIN TO MANHOLE	3	EA
605.09	6" UNDERDRAIN TYPE B	240	LF
605.13	18" UNDERDRAIN TYPE C	330	LF
606.356	UNDERDRAIN DELINEATOR POST	1	EA
609.26	CURB TRANSITION SECTION B TYPE 1	1	EA
609.34	CURB TYPE 5	1160	LF
609.35	CURB TYPE 5 - CIRCULAR	5	LF
610.08	PLAIN RIPRAP	10	CY
610.18	STONE DITCH PROTECTION	40	CY
613.319	EROSION CONTROL BLANKET	50	SY
615.07	LOAM	60	CY
618.14	SEEDING - METHOD 2	10	UN
619.12	MULCH	10	UN
620.58	EROSION CONTROL GEOTEXTILE	90	SY
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	1200	LF
629.05	HAND LABOR, STRAGHT TIME	20	HR
631.12	ALL PURPOSE EXCAVATOR (INC. OPERATOR)	10	HR
631.172	TRUCK - LARGE (INC. OPERATOR)	10	HR
634.721	RELOCATE LIGHT POLE (INCLUDING FOUNDATION)	3	LS
639.18	FIELD OFFICE TYPE A	1	EA
645.109	REMOVE AND SALVAGE HIGHWAY SIGNS	2	EA
652.33	DRUM	25	EA
652.34	CONE	50	EA
656.35	CONSTRUCTION SIGNS	250	SF
652.36	MAINTENANCE OF TRAFFIC CONTROL DEVICES	19	CD
652.38	FLAGGER	300	HR
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL PLAN	1	LS
658.20	ACRYLIC LATEX COLOR FINISH - GREEN	300	SY
659.10	MOBILIZATION	1	LS

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)	716	
UNDERDRAIN EXCAVATION	145	
GRUBBING IN FILL	87	
TOTAL COMMON EXCAVATION		948

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)	369	
GRUBBING IN FILL	87	
TOTAL FILL		456

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

(1) TOTAL COMMON EXCAVATION		948
DEDUCTIONS:		
GRUBBING IN CUT	0	
GRUBBING IN FILL	87	
LOAM SALVAGE IN CUT	0	
(2) TOTAL DEDUCTIONS		87
TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)		861
TOTAL AVAILABLE STRUCT. EXCAVATIONS (USUALLY UNDERDRAIN ONLY)		
TOTAL AVAILABLE NON-ROCK EXCAVATION		861

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3)TOTAL FILL		456
TOTAL AVAIL. NON-ROCK EXCAV. 861 x 0.85 = 732		
(4)TOTAL AVAILABLE EXCAVATION	=	732
BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION		-276

SURPLUS MATERIAL = 276 CY

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN 18857.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	S SMITH		
DESIGN-DETAILED	N HARTLEY		
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DESIGN2-DETAILED2			
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REVISIONS 2			
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REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

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AUGUSTA
I-95/WESTERN AVENUE

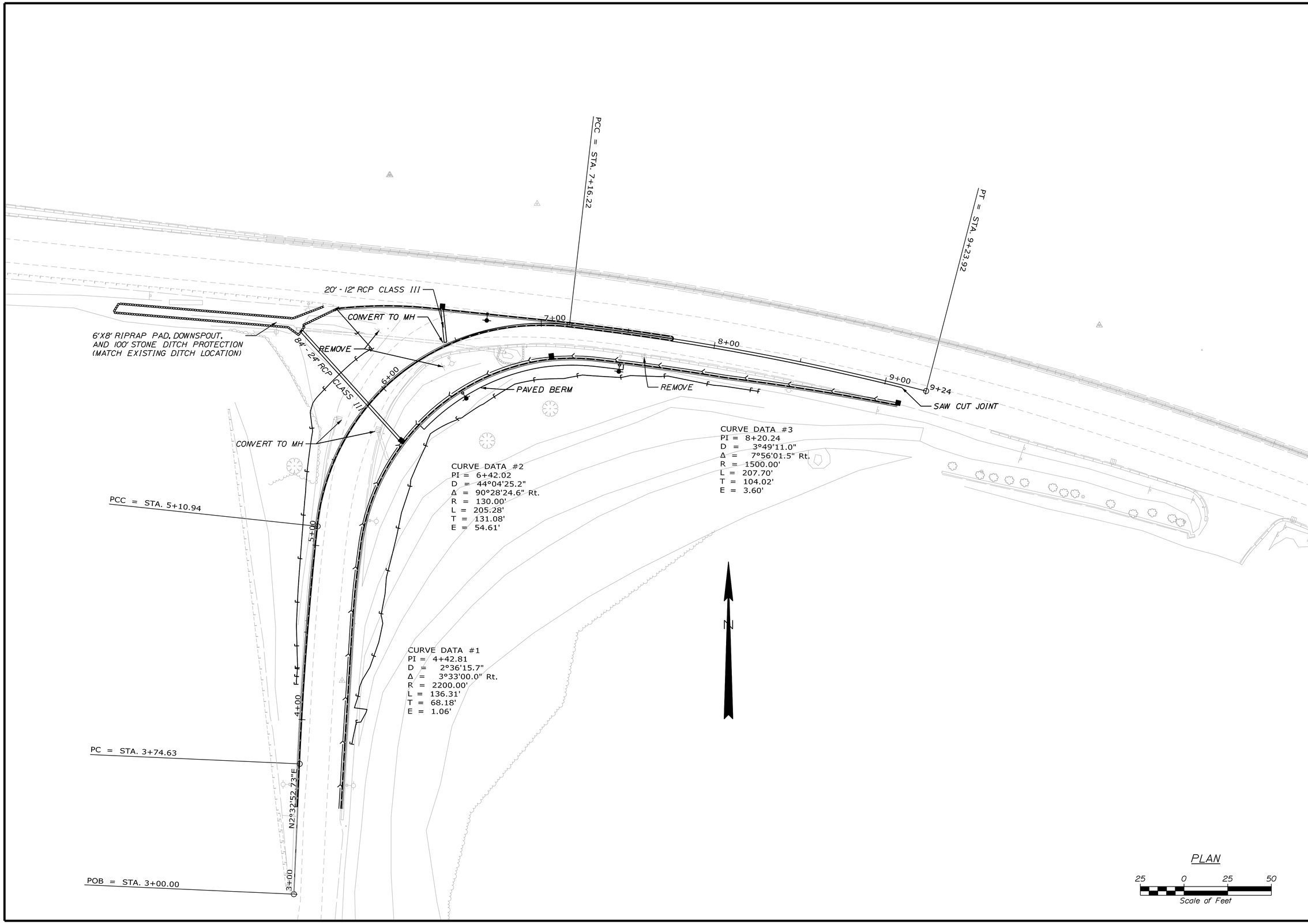
DRAINAGE SHEET/ESTIMATE

SHEET NUMBER

4

OF 19

Filename: ...\MSTA\004_Drainage_estimate.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN 18857.00

HIGHWAY PLANS

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DESIGN-DETAILED	N HARTLEY		
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REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

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DATE

AUGUSTA
I-95/WESTERN AVENUE

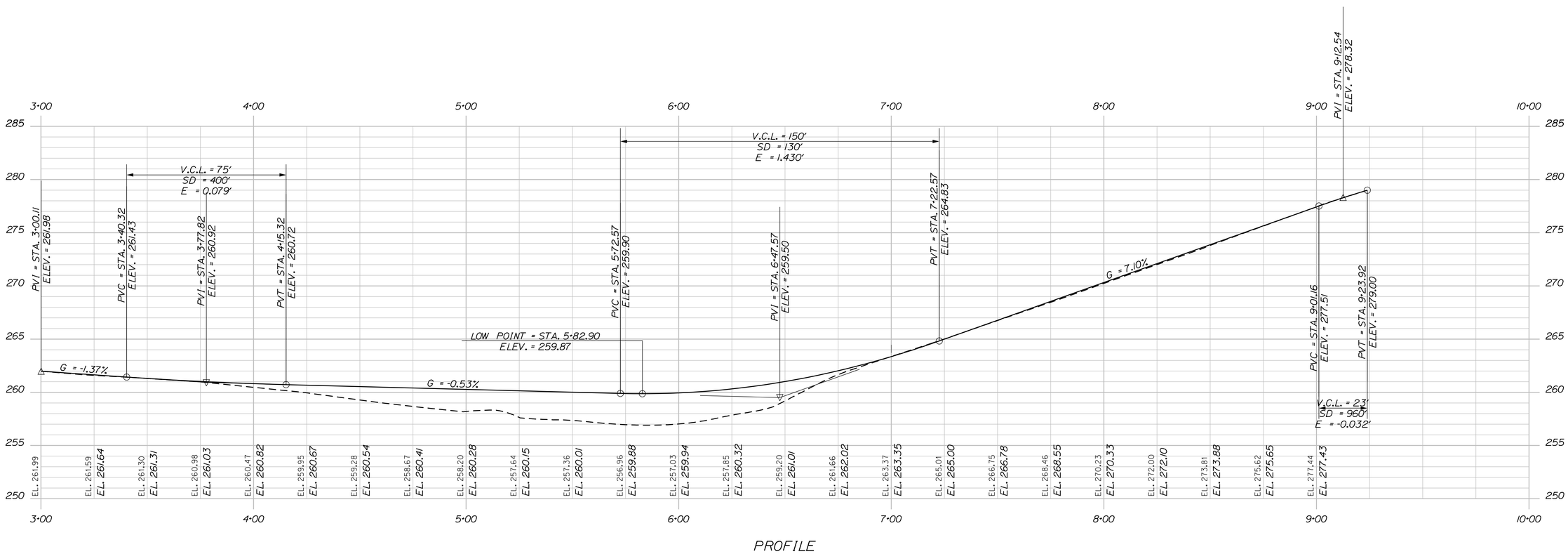
PLANS

SHEET NUMBER

5

OF 19

Filename: ...\HIGHWAY\MSTA\005_HDPlan1.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015



PROFILE

Horiz. 25 0 25 50

Vert. 5 0 5 10

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN
18857.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	S. SMITH	
DESIGN-DETAILED	N. HARTLEY	
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

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AUGUSTA
I-95/WESTERN AVENUE

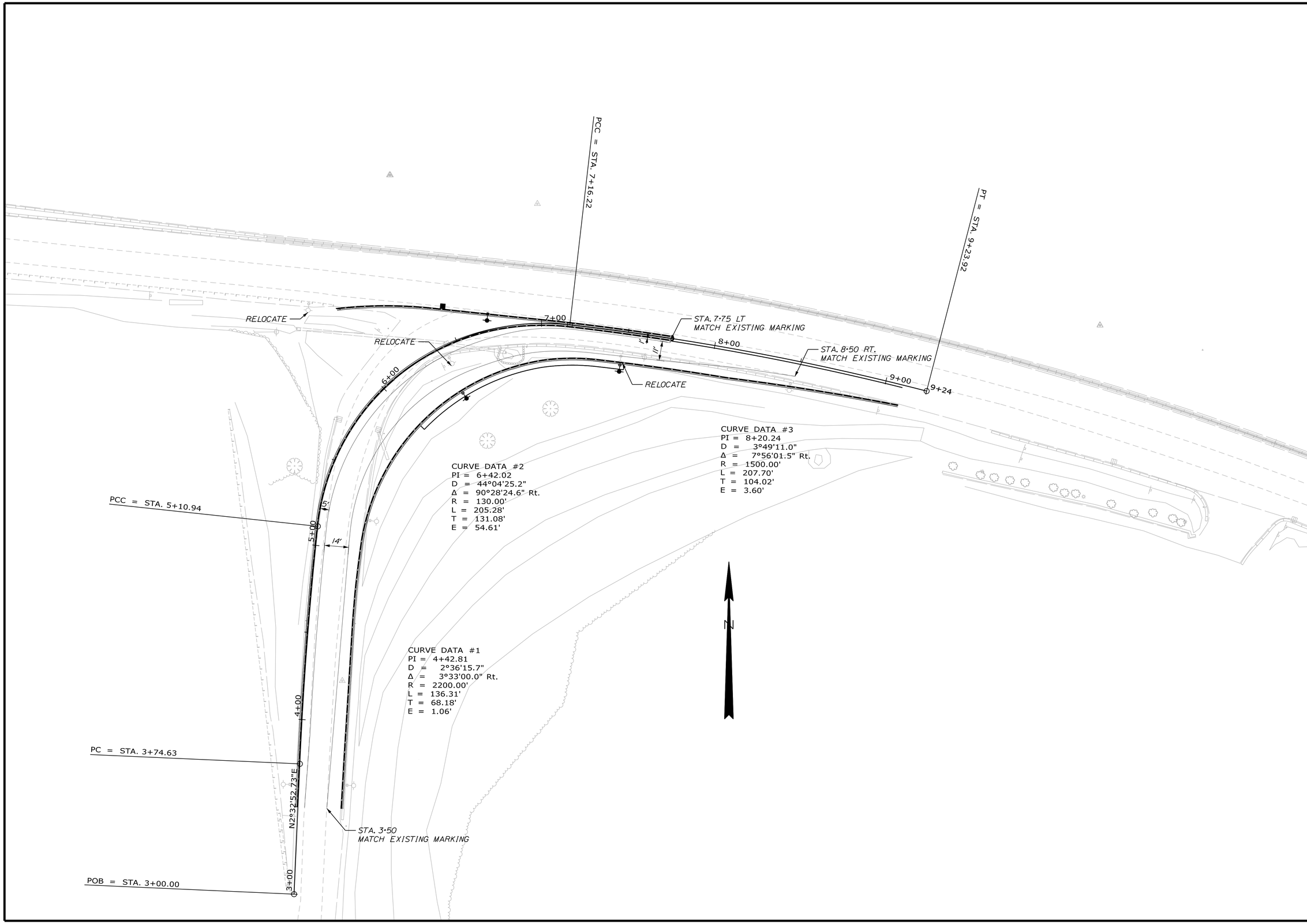
PROFILE

SHEET NUMBER

6

OF 19

Filename: ...\HIGHWAY\MSTA\006_Profile.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN 18857.00

HIGHWAY PLANS

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FIELD CHANGES			

SIGNATURE

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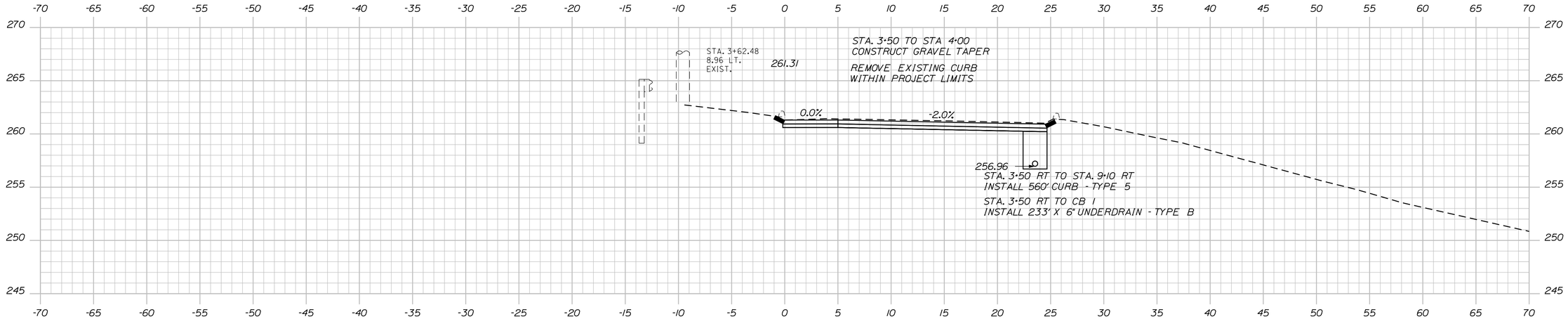
AUGUSTA
I-95/WESTERN AVENUE
LIGHTING/STRIPING PLAN

SHEET NUMBER

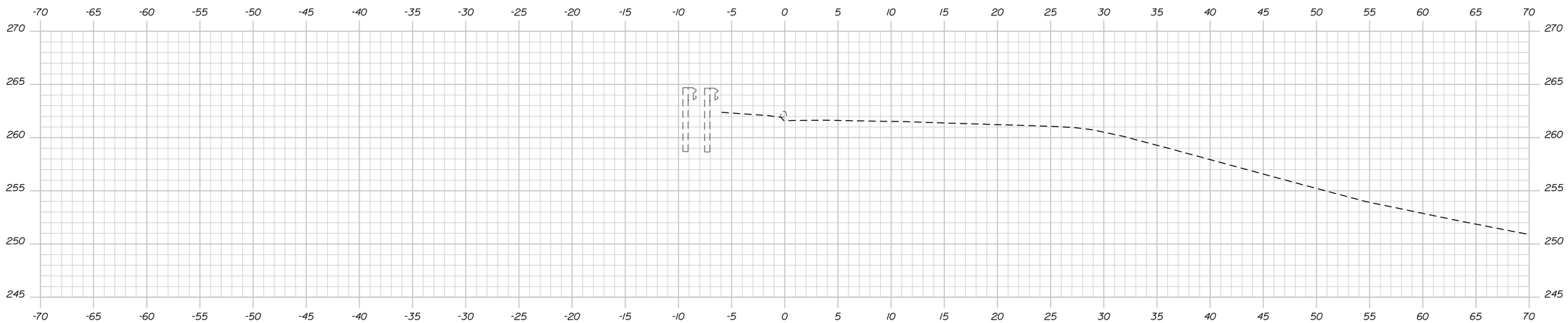
7

OF 19

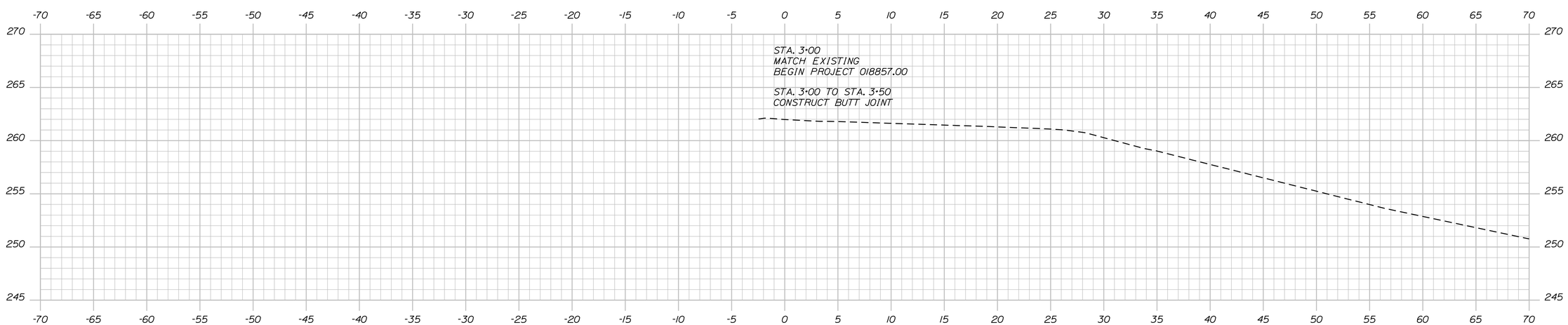
Filename: ...\MSTA\007_LIGHT_STRIPE.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015



3+50.00



3+25.00



3+00.00

Sta. 3+00.00 to Sta. 3+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN 18857.00

HIGHWAY PLANS

PROJ. MANAGER	S SMITH	BY	DATE
DESIGN-DETAILED	N HARTLEY		
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DESIGN3-DETAILED3			
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FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

AUGUSTA
I-95/WESTERN AVE.

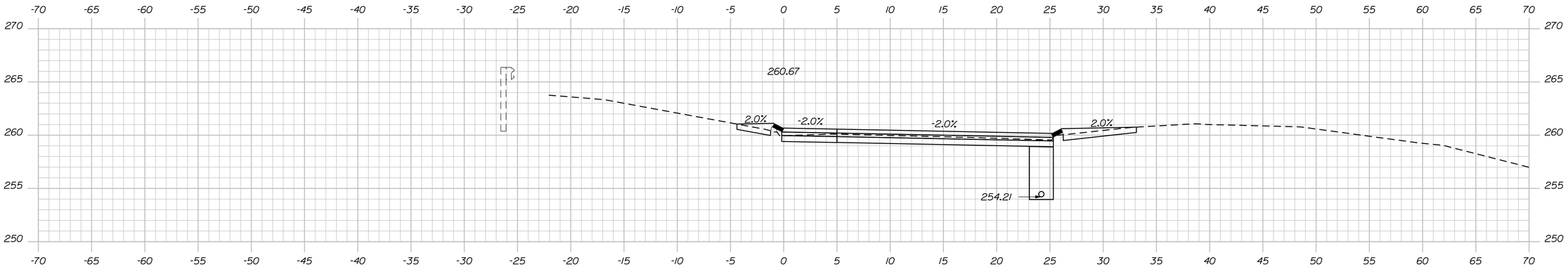
CROSS SECTIONS

SHEET NUMBER

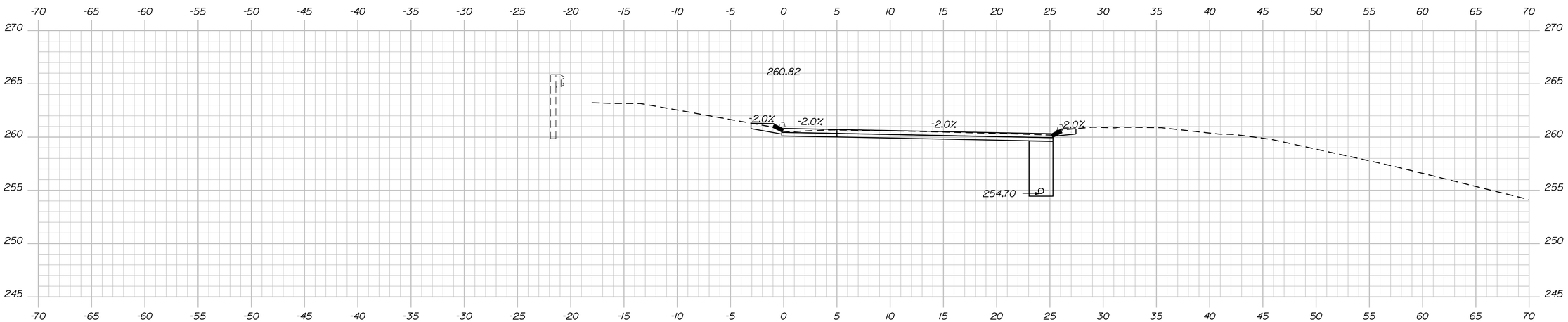
8

OF 19

Filename: ...\MSTA\008_XSECT_3+00_001.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015



4+25.00



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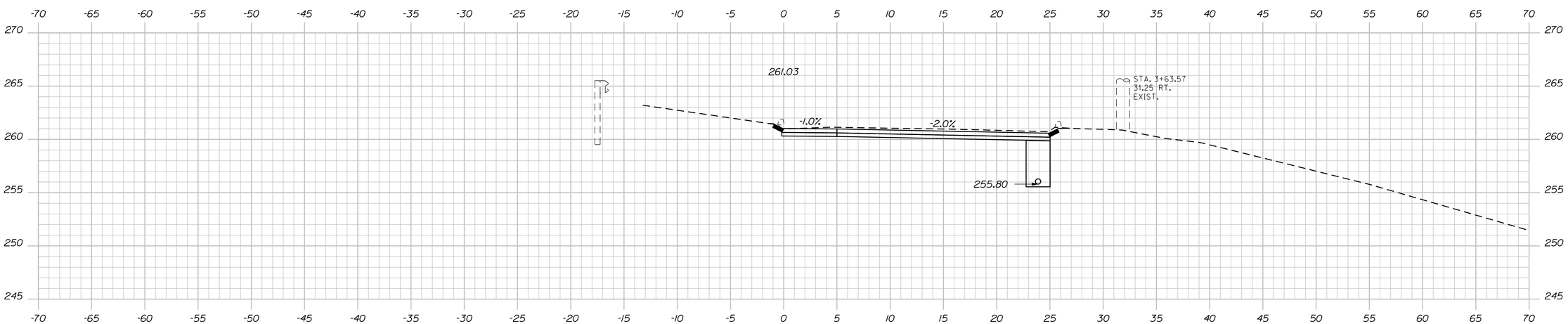


3+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN
18857.00

HIGHWAY PLANS

PROJ. MANAGER	S SMITH	BY	DATE
DESIGN-DETAILED	N HARTLEY	----	----
CHECKED-REVIEWED	----	----	----
DESIGN2-DETAILED2	----	----	----
DESIGN3-DETAILED3	----	----	----
REVISIONS 1	----	----	----
REVISIONS 2	----	----	----
REVISIONS 3	----	----	----
REVISIONS 4	----	----	----
FIELD CHANGES	----	----	----

SIGNATURE

P.E. NUMBER

DATE

AUGUSTA
I-95/WESTERN AVE.

CROSS SECTIONS

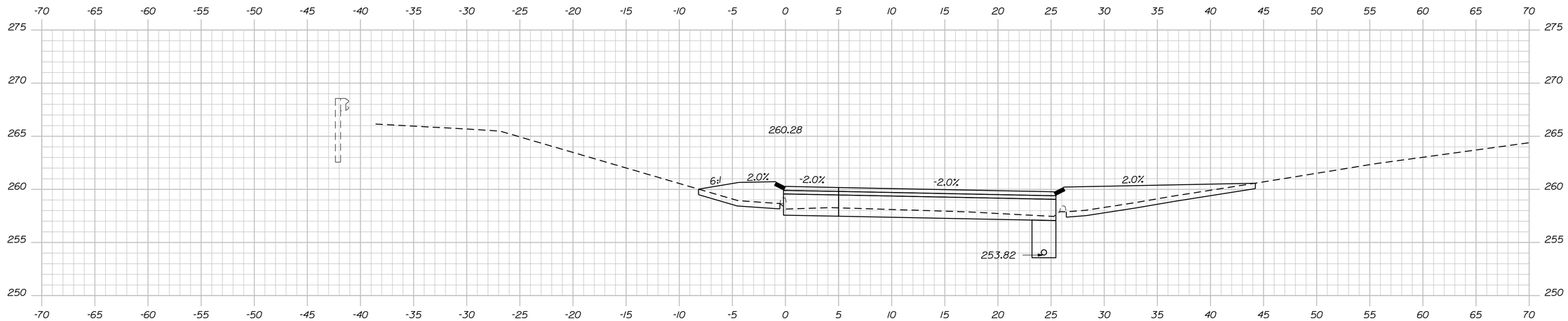
SHEET NUMBER

9

OF 19

Sta. 3+75.00 to Sta. 4+25.00

Filename: ...\MSTA\009_XSECT_3+75_002.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015



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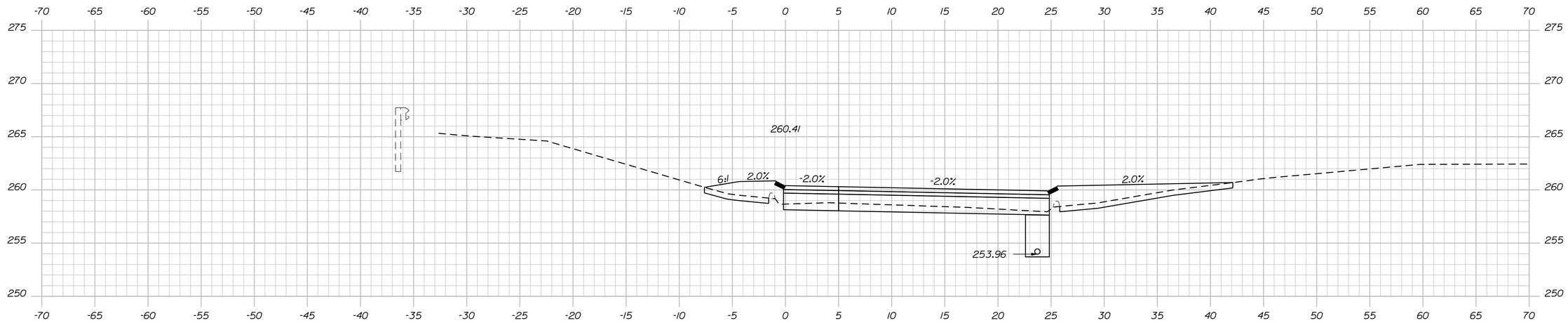

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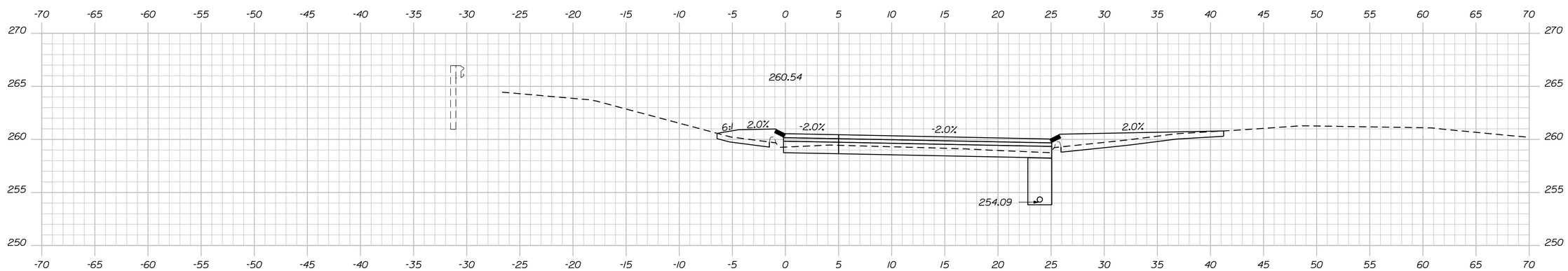


4+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN
18857.00

HIGHWAY PLANS

PROJ. MANAGER	S SMITH	BY	DATE
DESIGN-DETAILED	N HARTLEY		
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

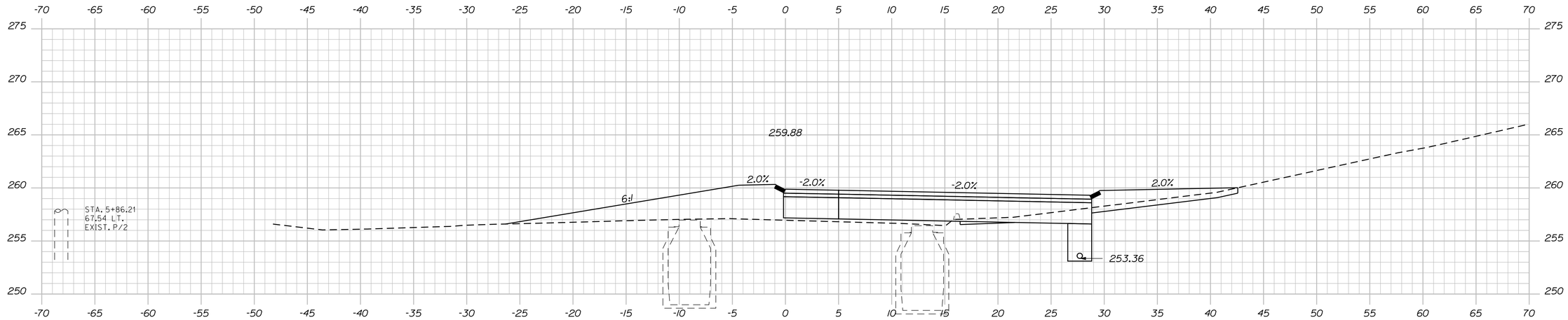
AUGUSTA
I-95/WESTERN AVE.

CROSS SECTIONS

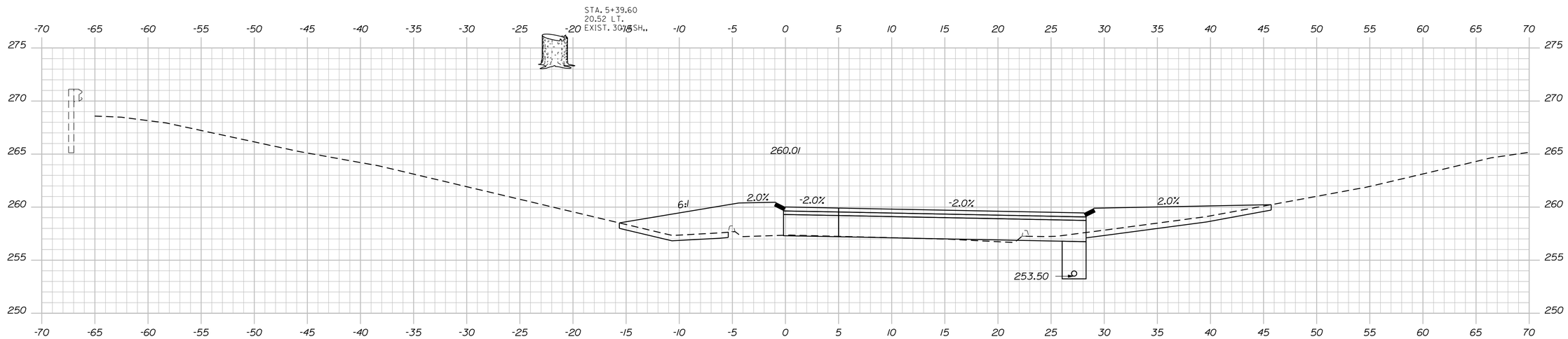
SHEET NUMBER
10
OF 19

Filename: ...\MSTA\010_XSECT_4+50_003.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015

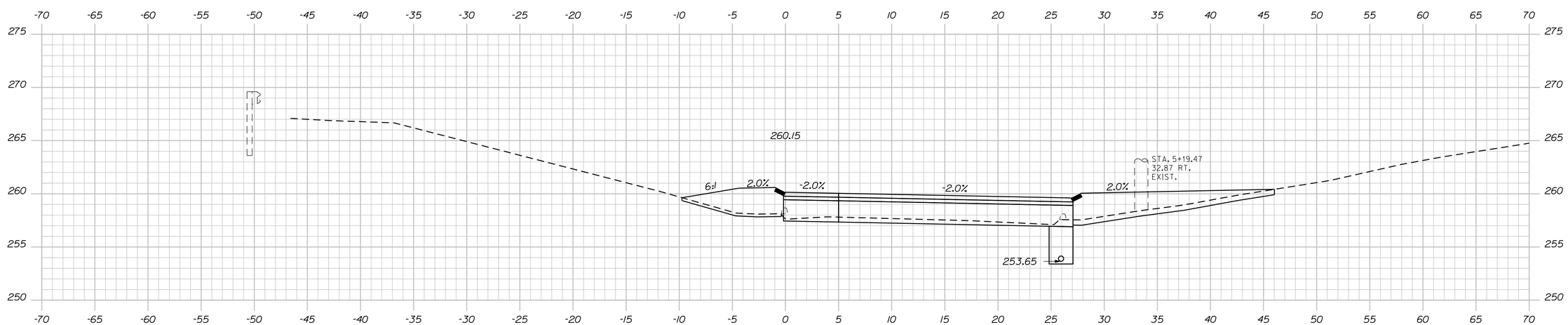
Sta. 4+50.00 to Sta. 5+00.00



5+75.00



5+50.00



5+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN
18857.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	S SMITH		
DESIGN-DETAILED	N HARTLEY		
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

AUGUSTA
I-95/WESTERN AVE.

CROSS SECTIONS

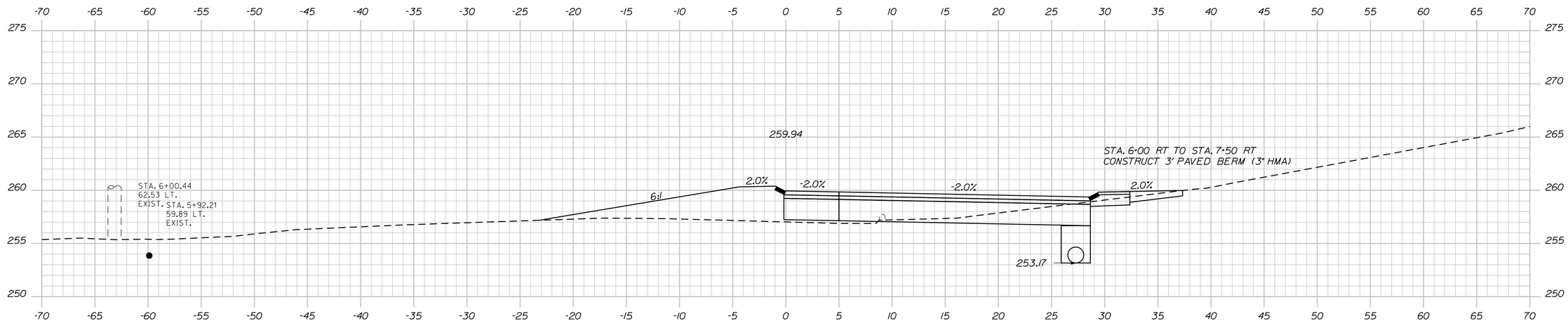
SHEET NUMBER

11

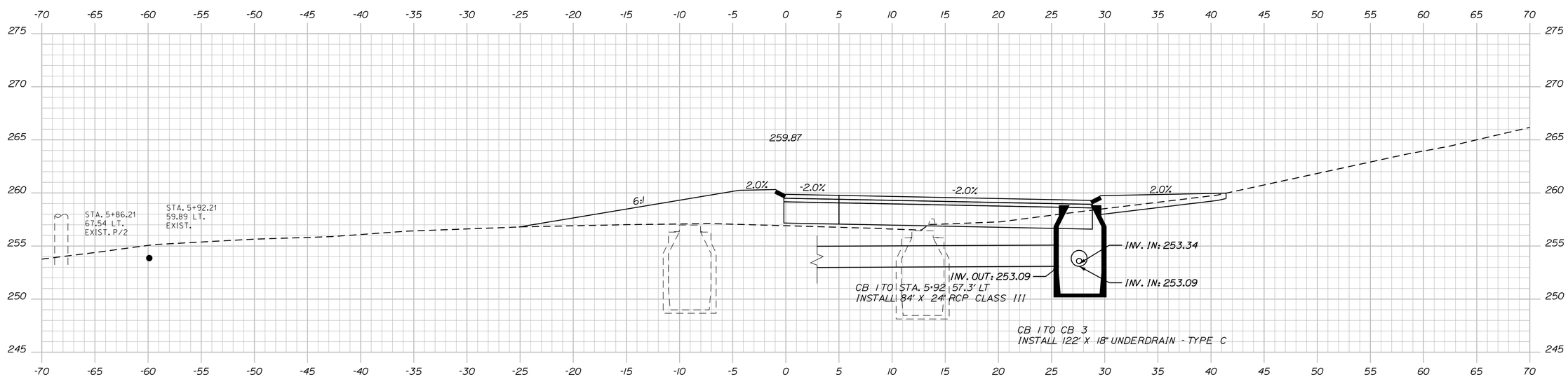
OF 19

Filename: ...\MSTA\011_XSECT_5+25_004.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015

Sta. 5+25.00 to Sta. 5+75.00



6+00.00



5+83.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN
18857.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	S SMITH		
DESIGN-DETAILED	N HARTLEY		
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

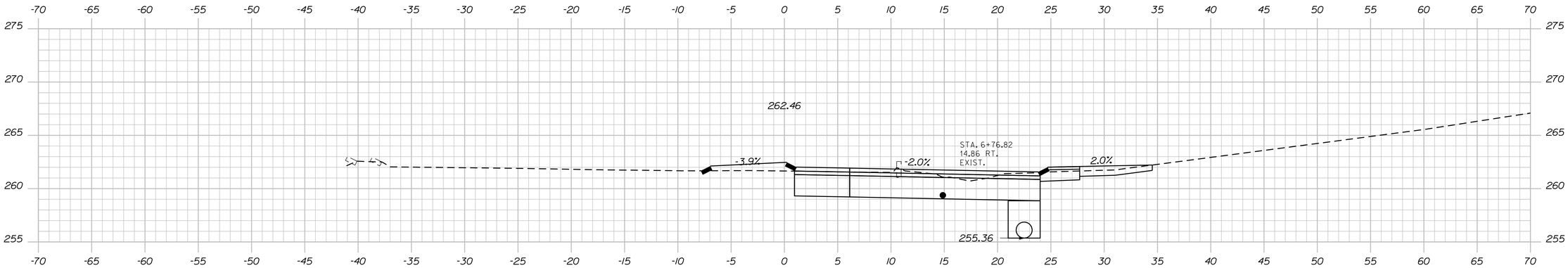
AUGUSTA
I-95/WESTERN AVE.

CROSS SECTIONS

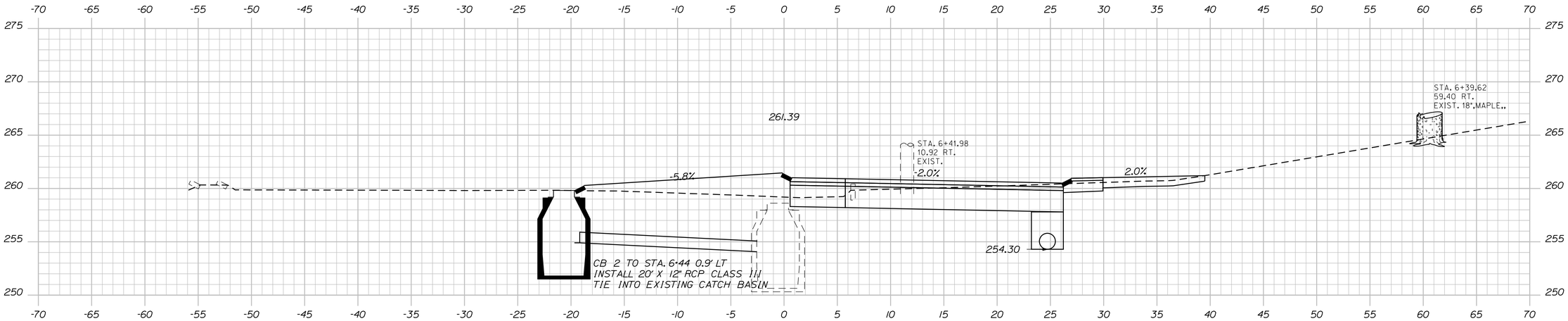
SHEET NUMBER
12
OF 19

Sta. 5+83.00 to Sta. 6+00.00

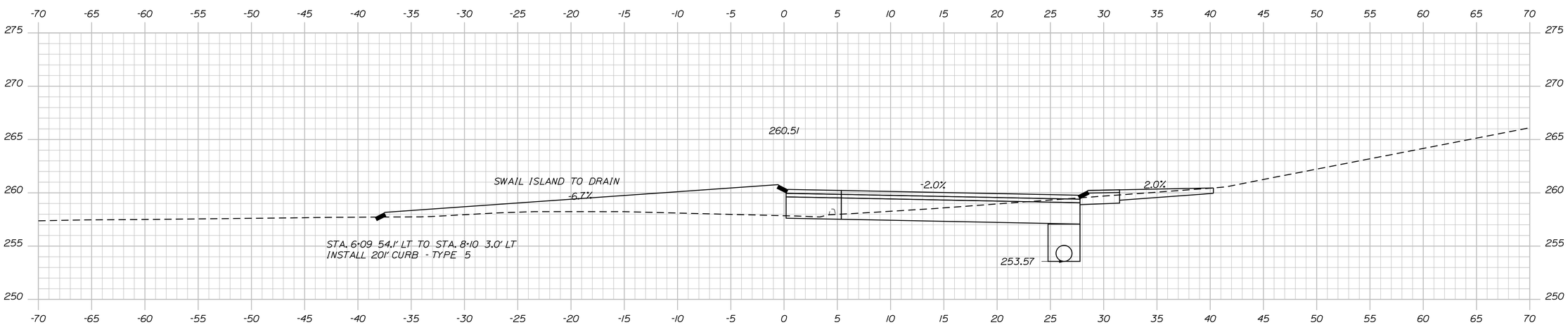
Filename: ...\MSTA\012_XSECT_5+83_005.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015



6+75.00



6+50.00



6+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN
18857.00

HIGHWAY PLANS

PROJ. MANAGER	S SMITH	BY	DATE
DESIGN-DETAILED	N HARTLEY		
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

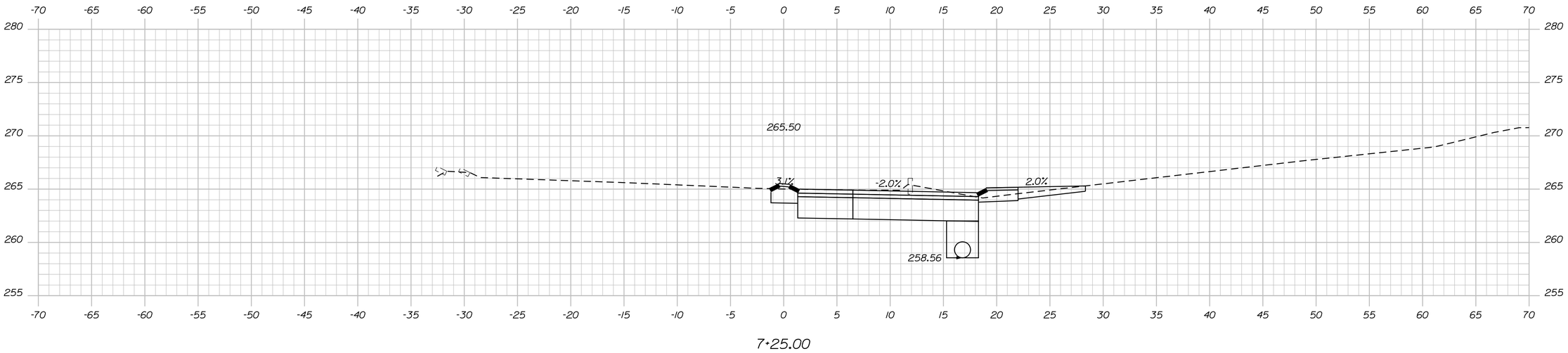
AUGUSTA
I-95/WESTERN AVE.

CROSS SECTIONS

SHEET NUMBER
13
OF 19

Filename: ...\MSTA\013_XSECT_6+25_006.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015

Sta. 6+25.00 to Sta. 6+75.00



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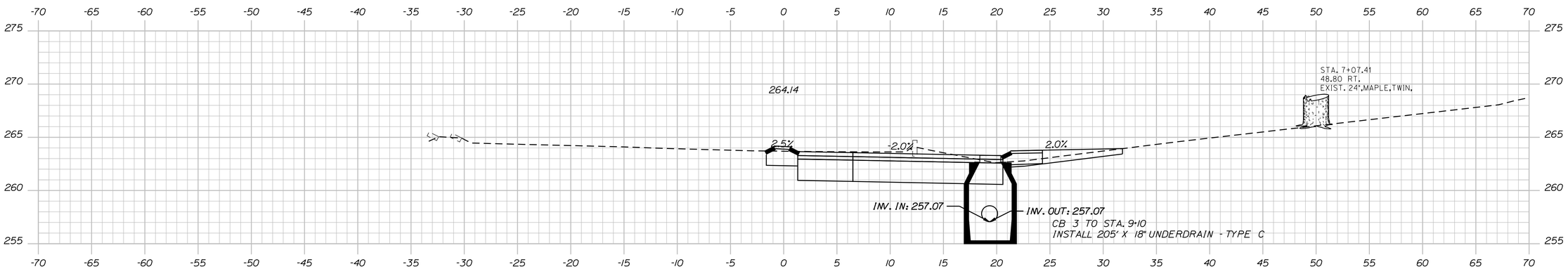

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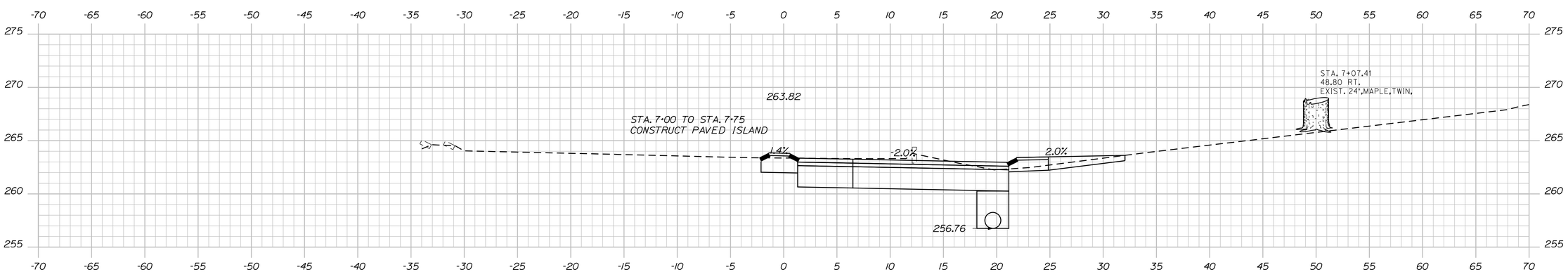


7+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN 18857.00

HIGHWAY PLANS

PROJ. MANAGER	S SMITH	BY	DATE
DESIGN-DETAILED	N HARTLEY		
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

AUGUSTA
I-95/WESTERN AVE.

CROSS SECTIONS

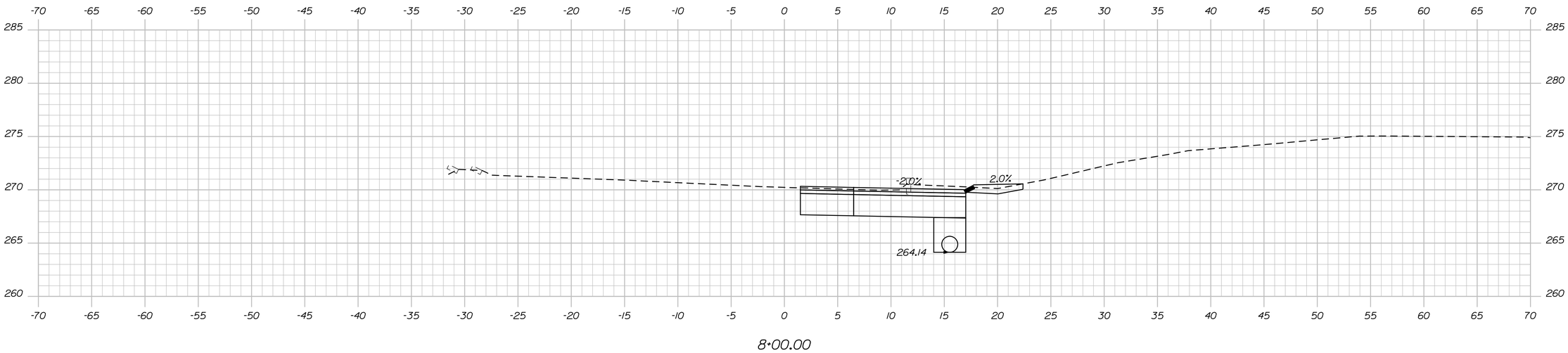
SHEET NUMBER

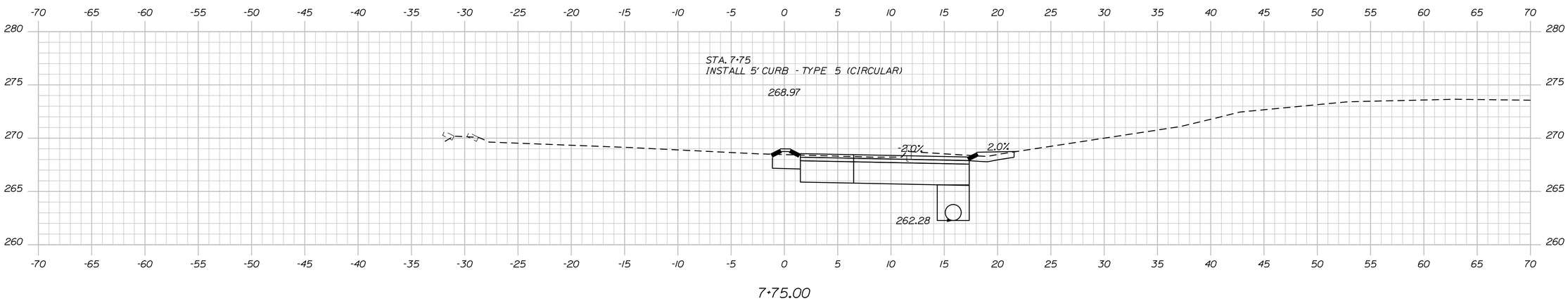
14

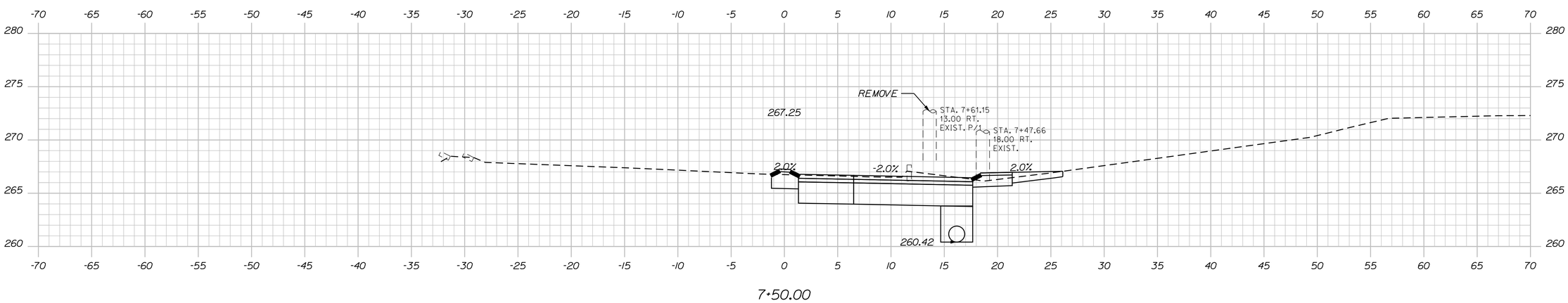
OF 19

Sta. 7+00.00 to Sta. 7+25.00

Filename: ...\MSTA\014_XSECT_7+00_007.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN
18857.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	S SMITH	
DESIGN-DETAILED	N HARTLEY	
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

AUGUSTA
I-95/WESTERN AVE.

CROSS SECTIONS

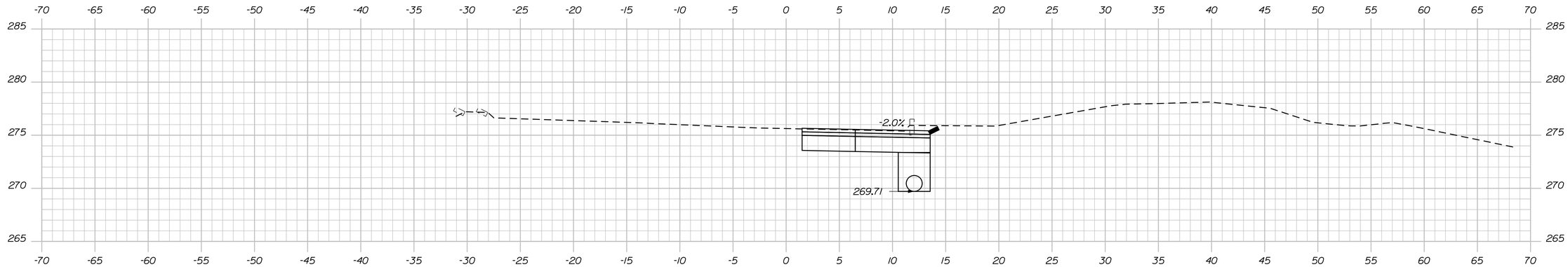
SHEET NUMBER

15

OF 19

Filename: ...\MSTA\015_XSECT_7+50_008.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015

Sta. 7+50.00 to Sta. 8+00.00



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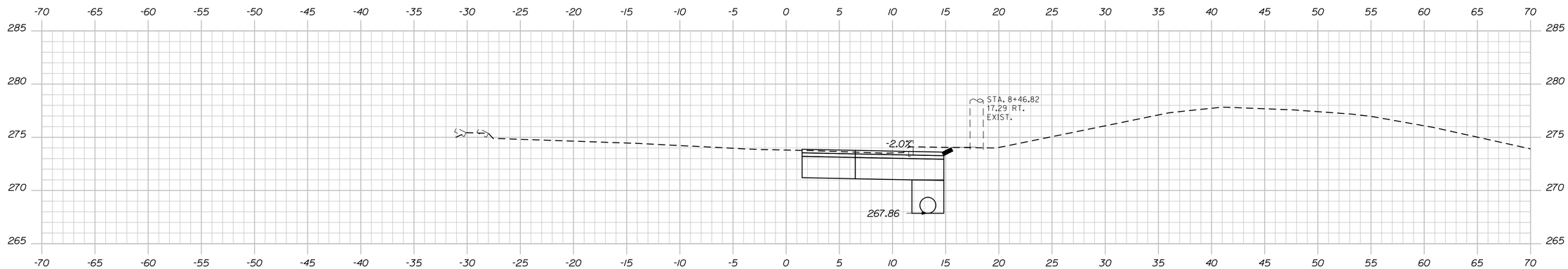

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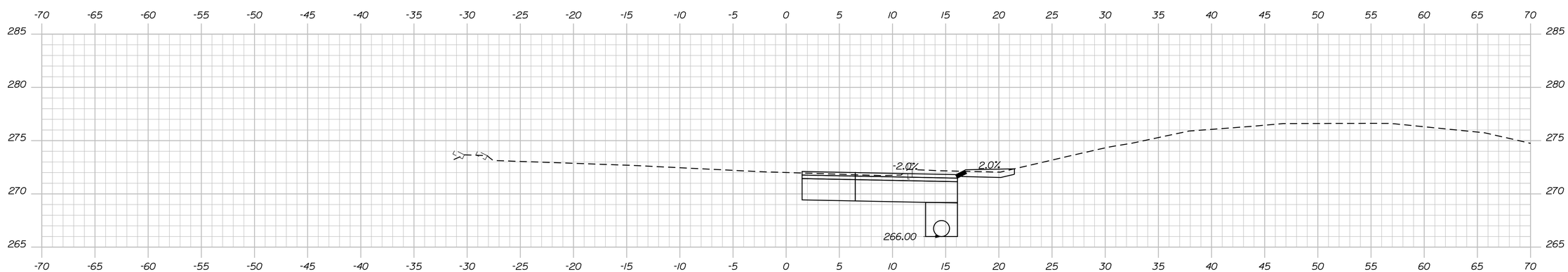


8+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN
18857.00

HIGHWAY PLANS

PROJ. MANAGER	S SMITH	BY	DATE
DESIGN-DETAILED	N HARTLEY	----	----
CHECKED-REVIEWED	----	----	----
DESIGN2-DETAILED2	----	----	----
DESIGN3-DETAILED3	----	----	----
REVISIONS 1	----	----	----
REVISIONS 2	----	----	----
REVISIONS 3	----	----	----
REVISIONS 4	----	----	----
FIELD CHANGES	----	----	----

SIGNATURE

P.E. NUMBER

DATE

AUGUSTA
I-95/WESTERN AVE.

CROSS SECTIONS

SHEET NUMBER

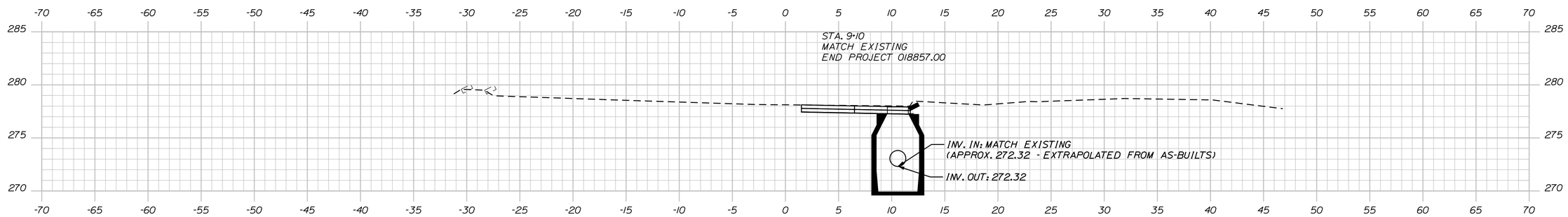
16

OF 19

Sta. 8+25.00 to Sta. 8+75.00

Filename: ...\MSTA\016_XSECT_8+25_009.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015

Filename: ...\MSTA\017_XSECT_9+00_010.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015



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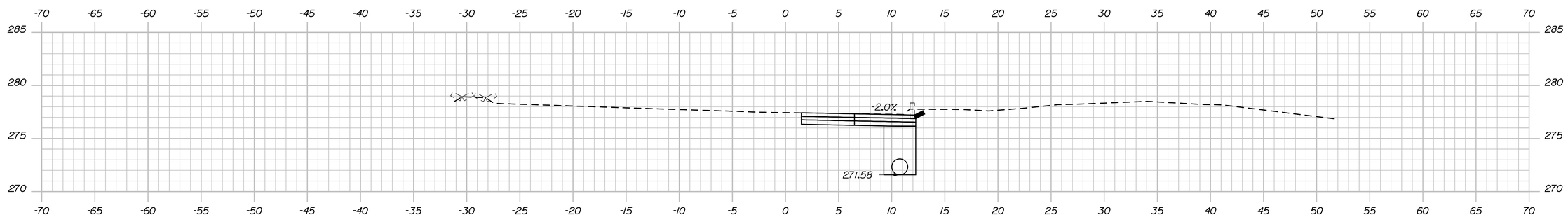

9+00.00

PROJ. MANAGER	S SMITH	BY	DATE
DESIGN-DETAILED	N HARTLEY		
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
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FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN 18857.00

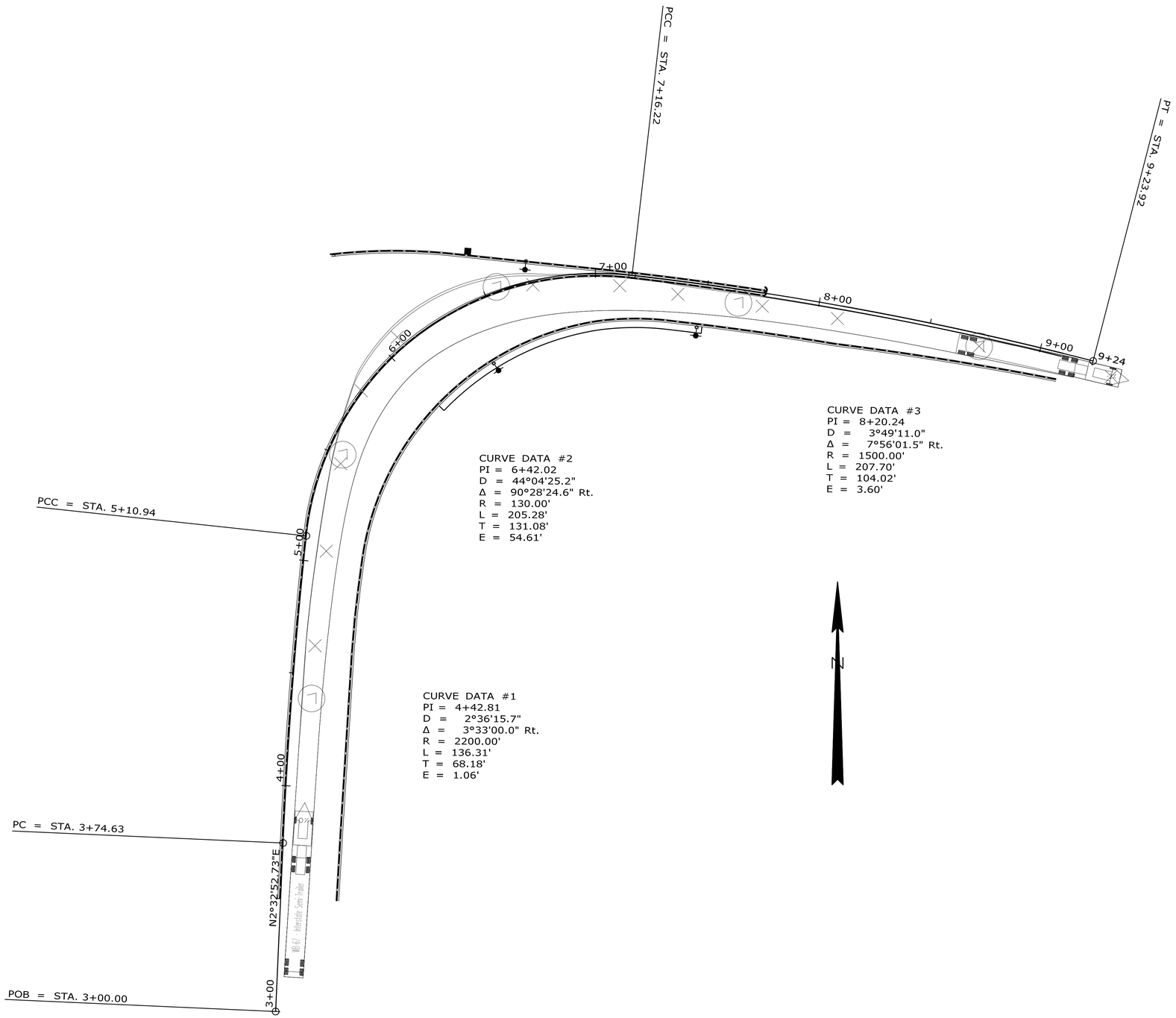
HIGHWAY PLANS

AUGUSTA
I-95 X WESTERN AVE.

CROSS SECTIONS

SHEET NUMBER
17
OF 19

Sta. 9+00.00 to Sta. 9+00.00



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HSIP-1885(700)

WIN 18857.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	S SMITH		
DESIGN-DETAILED	N HARTLEY		
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

AUGUSTA
I-95/WESTERN AVENUE

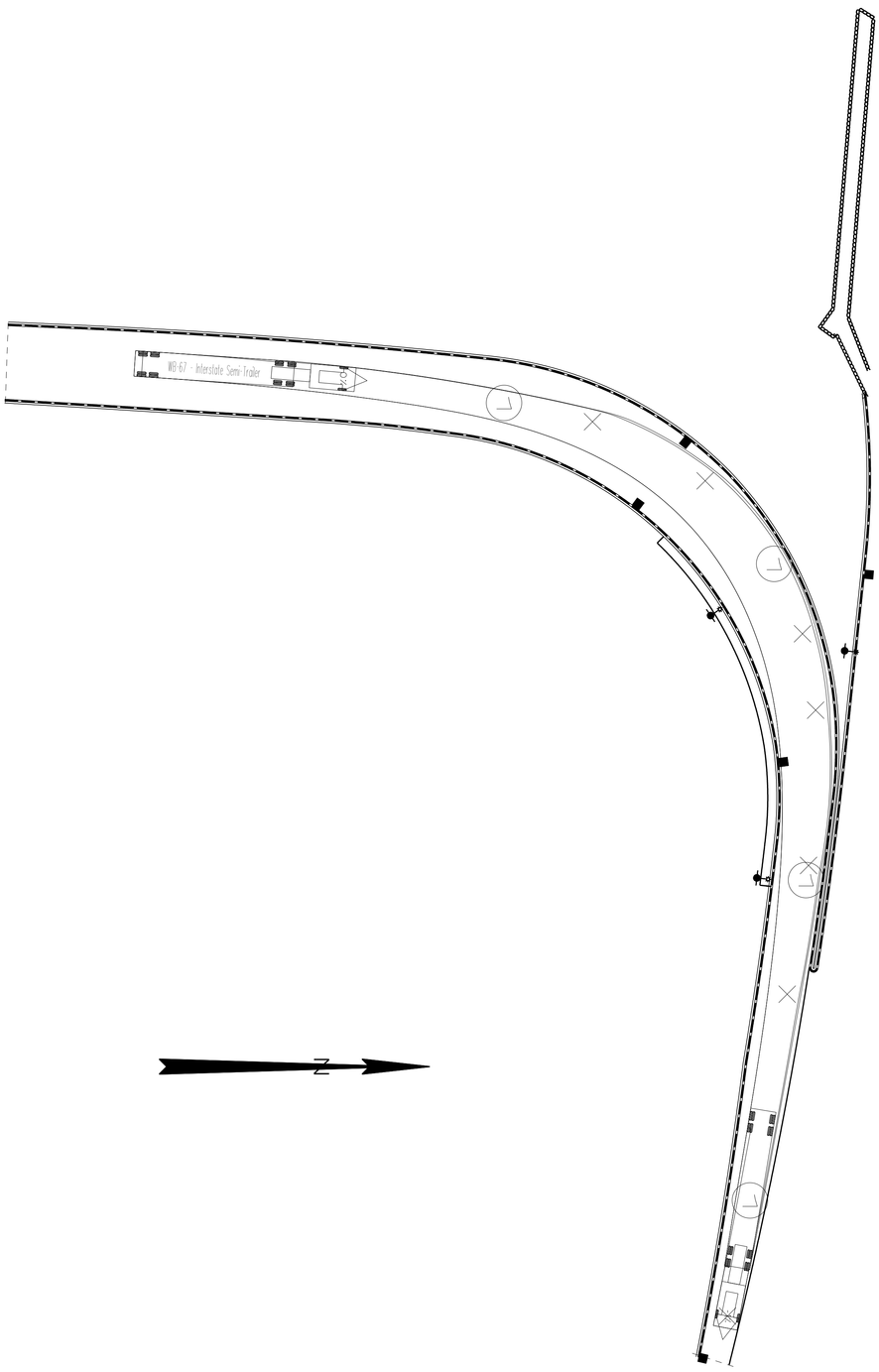
MINIMUM TURNING RADIUS

SHEET NUMBER

18

OF 19

Filename: ...\MSTA\018_TurningRadius_Min.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:3/19/2015



SHEET NUMBER 19 OF 19	AUGUSTA I-95/WESTERN AVENUE TURNING RADIUS	PROJ. MANAGER S SMITH / BY / DATE DESIGN-DETAILED N HARTLEY CHECKED-REVIEWED 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 HSIP-1885(700) WIN 18857.00 HIGHWAY PLANS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

AUGUSTA
KENNEBEC COUNTY
I-95 SOUTHBOUND EXIT 109B
WESTERN AVENUE

STP-2021 (500)
PROJECT LENGTH : 0.057 MILES
INTERSECTION APPROACH IMPROVEMENTS

PLAN LEGEND

Town, County, State
Property Lines
R/W Lines-Existing
R/W Lines-Proposed

Culvert-Existing
Culvert Proposed

Curbing — Existing — Proposed
Type 1
Type 3
Type 5

Outline of Bodies of Water
Ledge
Buildings

Trees — Conifer — Deciduous
Tree Line
Clearing Limit Line — CLL — CLL

Centerline-Existing
Centerline-Proposed — 10+00
Travelway-Existing
Travelway-Proposed
Railroad

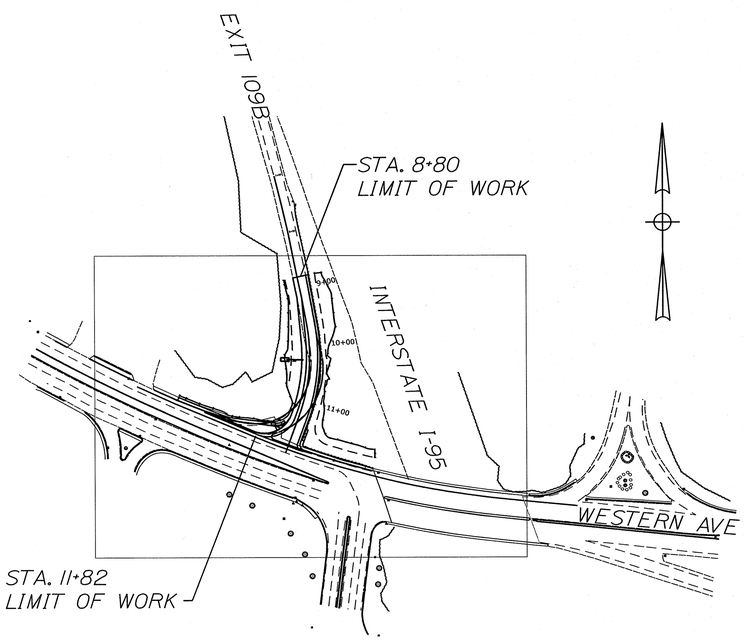
Catch Basins — Existing ■ Proposed
Manholes — Existing ● Proposed
Proposed Underdrain
Proposed Ditch
Existing Ditch

Utility Poles — Existing ♦ Proposed
Fire Hydrants — Existing — Proposed
Existing Water Line — W
Existing San. Sewer
Existing San. Sewer Manhole

Guardrail-Existing
Guardrail-Proposed
Guardrail-Cable, Other

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	1
Typical Sections	2
Estimated Quantities	3
General Notes	4
Construction Notes	5
Plan	6
Profile	7
Geometric Curb Layout	8
Lighting Plan	9
Signing and Pavement Marking	10
Details	11
Cross - Sections	12-18



LAYOUT SCALE

125 0 125 250
Scale in Feet

TRAFFIC DATA

Current (2012) AADT	3760
Future (2035) AADT	4510
DHV - % of AADT	12%
Design Hour Volume	530
% Heavy Trucks (AADT)	8%
% Heavy Trucks (DHV)	6%
Directional Distribution (DHV)	100%
18 kip Equivalent P 2.0	455
18 kip Equivalent P 2.5	433
Design Speed (mph)	30
Functional Class	Interstate
Highway Corridor Priority	1

PROJECT LOCATION:	ROUTE I-95 EXIT 109B RAMP FROM THE INTERSECTION WITH WESTERN AVENUE TO 302' NORTH OF INTERSECTION.
PROGRAM AREA:	MULTIMODAL PROGRAM
SCOPE OF WORK:	INTERSECTION IMPROVEMENT

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED — DATE
COMMISSIONER: 3/23/15
CHIEF ENGINEER: 3-23-15

STATE OF MAINE — BRIAN PAUL MANTON — 12919 — LICENSED PROFESSIONAL ENGINEER

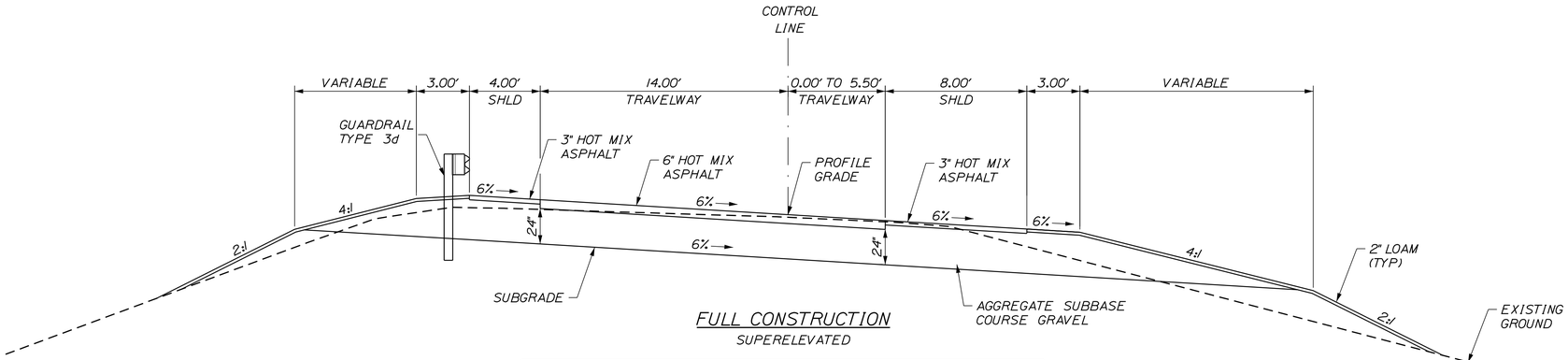
PROJECT INFORMATION			
PROGRAM	MULTI-MODAL	BPM	
PROJECT MANAGER	JOHN RODRIQUE	SIGNATURE	
DESIGNER		12919	
CONSULTANT	H.W. LOCHNER	P.E. NUMBER	
PROJECT RESIDENT		3-9-15	
CONTRACTOR		DATE	
PROJECT COMPLETION DATE			

AUGUSTA
EXIT 109B/WESTERN AVE
TITLE SHEET

WIN STP-2021(500)

SHEET NUMBER
1
OF 18

Filename: ...\Planset\Final\001_Title.dgn Division: HIGHWAY Username: Date:3/9/2015



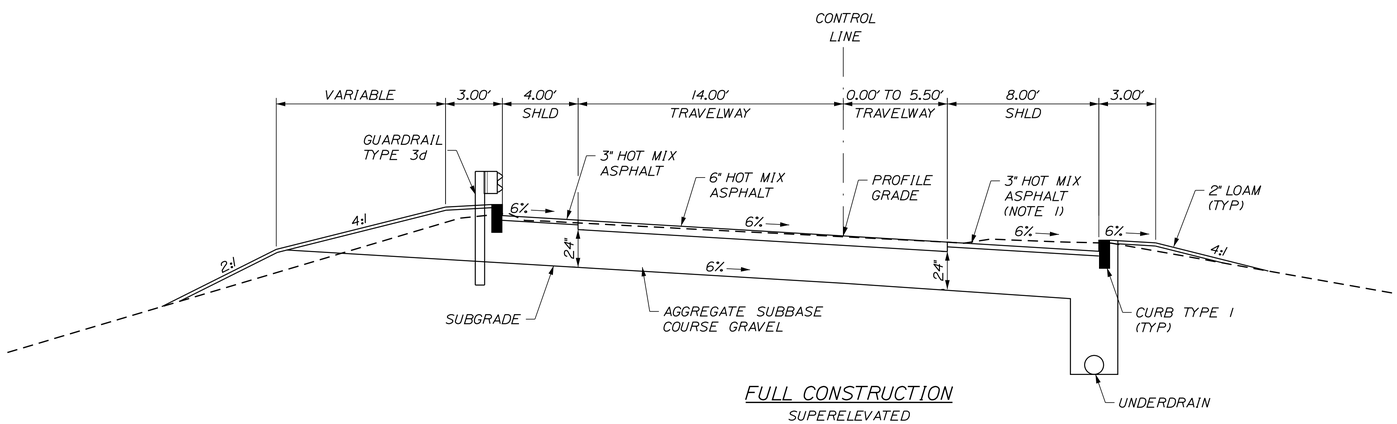
FULL CONSTRUCTION

SUPERELEVATED

NOTE:
SEE SUPERELEVATION TABLE FOR SLOPES.

AGGREGATE SUBBASE COURSE GRAVEL		
LEFT SHOULDER XX CY/100 LF	14 FT TRAVEL LANES XX CY/100 LF	RIGHT SHOULDER XX CY/100 LF
STATION TO STATION	STATION TO STATION	STATION TO STATION
8+80 TO 10+20 LT	8+80 TO 10+20	8+80 TO 10+20 RT

SUPERELEVATION TABLE			
STATION	LT SHLD	TRAVELWAY	RT SHLD
START			
8+80	-1.8	-1.8	-3.6
9+00	-2.2	-2.2	-2.4
9+25	-3.0	-3.0	-2.6
9+50	-4.0	-4.0	-3.6
9+75	-5.0	-5.0	-4.7
10+00	-6.0	-6.0	-6.0
10+25	-6.0	-6.0	-6.0
10+50	-6.0	-6.0	-6.0
10+75	-6.0	-6.0	-6.0
11+00	-6.0	-6.0	-6.0
11+25	-3.4	-3.5	-4.8
11+50	-0.9	-1.0	-4.8
11+75	3.9	1.4	2.4
11+82	2.4	1.7	1.7
END			

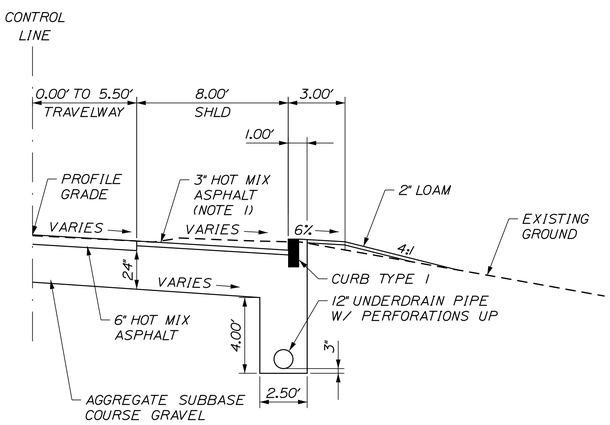


FULL CONSTRUCTION

SUPERELEVATED

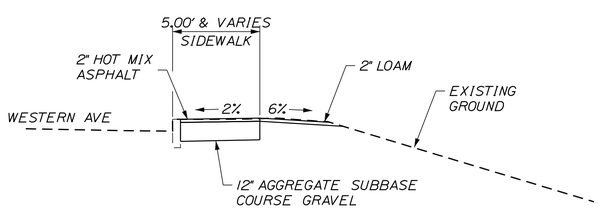
NOTE:
SEE SUPERELEVATION TABLE FOR SLOPES.

AGGREGATE SUBBASE COURSE GRAVEL		
LEFT SHOULDER XX CY/100 LF	14 FT TRAVEL LANES XX CY/100 LF	RIGHT SHOULDER XX CY/100 LF
STATION TO STATION	STATION TO STATION	STATION TO STATION
10+20 TO 11+82 LT	10+20 TO 11+82	10+20 TO 11+82 RT



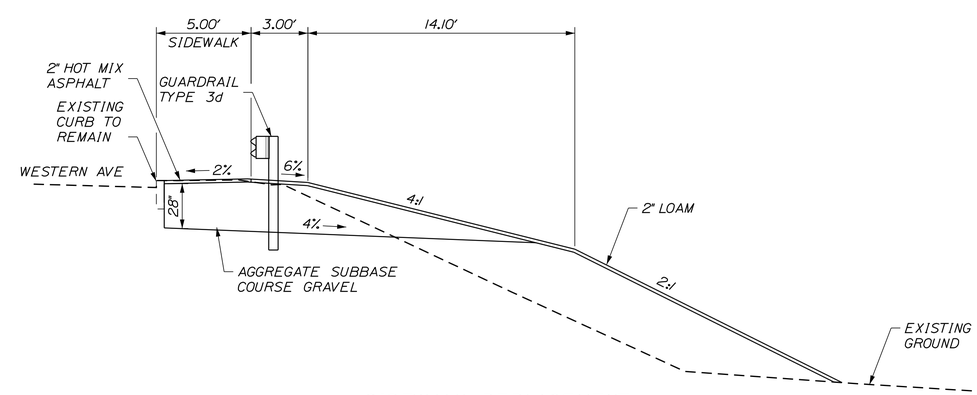
CURB WITH UNDERDRAIN

STA. MR 10+27 TO STA. WA 2+25



SIDEWALK REPLACEMENT

STA. WA 1+74 TO STA. WA 2+25



SIDEWALK REPLACEMENT

STA. WA 4+10 TO STA. WA 5+37

NOTES:

1. FROM STA. 11+00 TO WESTERN AVENUE, SHOULDER SHALL BE 6" HOT MIX ASPHALT.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN STP-2021 (500) HIGHWAY PLANS

20215.00

	BY	DATE
PROJ. MANAGER $PROJMANAGER$		
DESIGN-DETAILED		
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FIELD CHANGES		

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AUGUSTA
EXIT 109B/WESTERN AVENUE

TYPICAL SECTIONS

SHEET NUMBER
2
OF 18

Filename: ...\Final\002_Typicals_01.dgn Division: HIGHWAY Username: Date:3/9/2015

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.11	CLEARING	0.05	AC
202.15	REMOVE EXISTING MANHOLE OR CATCH BASIN	1.00	EA
203.20	COMMON EXCAVATION	1,580.00	CY
203.24	COMMON BORROW	540.0	CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	1,318.00	CY
403.2081	HOT MIX ASPHALT 12.5MM POLYMER MODIFIED	76.00	TON
403.213	HOT MIX ASPHALT 12.5MM BASE	256.00	TON
409.15	BITUMINOUS TACK COAT - APPLIED	113.00	GAL
419.30	SAWCUTTING BITUMINOUS PAVEMENT	211.00	LF
502.342	STRUCTURAL CONCRETE ROADWAY TRUCK APRON	25.00	CY
603.159	12" CULVERT PIPE OPTION III	26.00	LF
604.072	CATCH BASIN TYPE A1-C	1.00	EA
604.161	ALTERING CATCH BASIN	1.00	EA
605.11	12" UNDERDRAIN TYPE C	259.00	LF
606.24	GUARD RAIL TYPE 3D - SINGLE RAIL	392.00	LF
606.1722	BRIDGE TRANSITION - TYPE 2	1.00	EA
606.265	TERMINAL END, SINGLE RAIL - GALVANIZED	2.00	EA
606.363	GUARD RAIL REMOVE AND DISPOSE	385.00	LF
608.08	REINFORCED CONCRETE SW	185.00	SY
608.26	CURB RAMP DETECTABLE WARNING FIELD	20.00	SF
609.11	CURB TYPE 1 VERTICAL	351.00	LF
609.12	VERTICAL CURB TYPE 1, CIRCULAR	47.00	LF
609.234	TERMINAL CURB TYPE 1 - 4 FOOT	2.00	EA
609.237	TERMINAL CURB TYPE 1 - 7 FOOT	3.00	EA
609.2371	TERMINAL CURB TYPE 1 - 7 FOOT CIRCULAR	1.00	EA
609.341	CURB TYPE 5 TRUCK APRON	137.00	LF
610.08	PLAIN RIPRAP	1.00	CY
613.319	EROSION CONTROL BLANKET	50.00	SY
615.07	LOAM	96.00	CY
618.1401	SEEDING METHOD NUMBER 2	16.00	UN
619.1201	MULCH, PLAN QUANTITY	16.00	UN
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	173.00	LF
627.744	6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	534.00	LF
627.75	WHITE OR YELLOW PAVEMENT OR CURB MARKER	165.00	SF
634.160	HIGHWAY LIGHTING	1.00	LS
639.19	FIELD OFFICE TYPE B	0.25	EA
645.106	DEMOUNT REGULATORY, WARNING, CONFIRMATION & ROUTE MARKER ASSEMBLY SIGN	6.00	EA
645.116	REINSTALL REGULATORY, WARNING, CONFIRMATION & ROUTE MARKER ASSEMBLY	1.00	EA
645.271	REGULATORY, WARNING, CONFIRMATION & ROUTE ASSEMBLY SIGN, TYPE I	51.25	SF
652.312	TYPE III BARRICADE	3.00	EA
652.33	DRUM	12.00	EA
652.34	CONE	16.00	EA
652.35	CONSTRUCTION SIGN	194.00	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	35.00	CD
652.38	FLAGGERS	20.00	HR
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1.00	LS
659.10	MOBILIZATION	1.00	LS

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)	1421.0	
EARTH FROM DRIVES, OLD ROAD, ETC.		
GRUBBING IN FILL	65.0	
UNDERCUT		
PEAT EXCAVATION		
TOTAL COMMON EXCAVATION		1486.0

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)	540.0	
FILL FOR DRIVES		
GRUBBING IN FILL	65.0	
UNDERCUT		
PEAT EXCAVATION		
TOTAL FILL		605.0

ROCK EXCAVATION FOR ESTIMATE

ROCK EXCAVATION (FROM CROSS SECTIONS)
TOTAL ROCK EXCAVATION

UNCLASSIFIED EXCAVATION FOR ESTIMATE

TOTAL UNCLASSIFIED EXCAVATION

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

(1) TOTAL COMMON EXCAVATION		1486.0
DEDUCTIONS:		
GRUBBING IN CUT	112.0	
GRUBBING IN FILL	65.0	
UNDERCUT		
PEAT EXCAVATION		
PAVEMENT SALVAGE (CUT & FILL)	179.5	
(2) TOTAL DEDUCTIONS		356.5
TOTAL AVAILABLE COMMON EXCAVATIONS (1) MINUS (2)		1129.5
TOTAL AVAILABLE STRUCT. EXCAVATIONS (USUALLY UNDERDRAIN ONLY)		94.0
TOTAL AVAILABLE NON-ROCK EXCAVATION		1223.5

COMPUTATION OF WASTE STORAGE & WASTE MATERIAL

TOTAL AVAIL. WASTE STORAGE AREA (FROM CROSS SECTIONS)
GRUBBING IN CUT
GRUBBING IN FILL
UNDERCUT
PEAT EXCAVATION
TOTAL WASTE MATERIAL TO BE UTILIZED (LOWER OF TOTAL AVAILABLE WASTE STORAGE AREA OR TOTAL WASTE MATERIAL)

TOTAL WASTE MATERIAL TO BE WASTED (TOTAL WASTE MATERIAL MINUS TOTAL WASTE MATERIAL TO BE UTILIZED)

COMPUTATION OF GRANULAR BORROW FOR ESTIMATE

GRANULAR BORROW TO REPLACE PEAT
GRANULAR BORROW IN LOW WET AREAS
GRANULAR BORROW TO UPGRADE EXCAVATION
GRANULAR BORROW TO MAINTAIN TRAFFIC
GRANULAR BORROW FOR UNDERCUTTING
GRANULAR BORROW =

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3) TOTAL FILL	540.0	
TOTAL AVAIL. NON-ROCK EXCAV.		
TOTAL AVAIL. ROCK EXCAV.		
TOTAL AVAIL. STR. ROCK EXCAV.		
TOTAL WASTE MATERIAL TO BE UTILIZED		
(4) TOTAL AVAILABLE EXCAVATION		
BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION		
GRANULAR BORROW IN LOW WET AREAS		
GRANULAR BORROW TO UPGRADE EXCAVATION		
GRANULAR BORROW TO MAINTAIN TRAFFIC		
TOTAL FILL MINUS REQUIRED GRAN. BORR. WITHIN FILL		
COMMON BORROW		540.0

NOTE:

ALL CALCULATIONS ARE IN CUBIC YARDS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN
STP-2021 (500) HIGHWAY PLANS

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AUGUSTA
EXIT 109B/WESTERN AVENUE

ESTIMATED QUANTITIES

SHEET NUMBER
3
OF 18

Filename: ...\003_Estimate of Quantities_01.dgn Division: HIGHWAY Username: Date:3/19/2015

1. THE UTILITIES INVOLVED IN THIS CONTRACT ARE AS FOLLOWS: SEWER, DRAINAGE, OVERHEAD ELECTRIC, LIGHTING

2. ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS OTHERWISE NOTED.

3. ALL JOINTS BETWEEN EXISTING AND PROPOSED HOT BITUMINOUS PAVEMENT SHALL BE BUTTED. PAYMENT SHALL BE MADE UNDER ITEM 202.203 PAVEMENT BUTT JOINT.

4. GRIND TRANSITION TAPERS AT CATCH BASINS UNDER ITEM 202.203 PAVEMENT BUTT JOINTS, AS DIRECTED BY THE RESIDENT.

5. CLEARING LIMITS SHALL BE 10' BEYOND AND PARALLEL TO THE CONSTRUCTION SLOPE LINES OR AS SHOWN ON THE PLANS UNLESS OTHERWISE AUTHORIZED BY THE RESIDENT.

6. THE CLEARING AND SELECTIVE CLEARING AND THINNING LINES SHOWN ON THE PLANS ARE FOR ESTIMATING PURPOSES ONLY. THE ACTUAL LINES FOR CLEARING AND THINNING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE RESIDENT.

7. WHERE DEEMED NECESSARY BY THE RESIDENT, UNSUITABLE EXCESS MATERIAL SHALL BE REMOVED FROM THE EDGES OF SHOULDERS AND PLACED IN DESIGNATED AREAS OR DISPOSED OF. PAYMENT WILL BE MADE UNDER THE APPROPRIATE CONTRACT ITEMS.

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

9. THE CONTRACTOR SHALL PLAN AND CONDUCT THEIR WORK ACCORDINGLY SO THAT UPON FINAL COMPLETION OF THE PROJECT THERE IS NO DROP-OFF FROM THE EDGE OF SHOULDER PAVEMENT. ALL REMAINING OR DISTURBED MATERIAL ON SLOPES OR IN DITCHES ON THE PROJECT SHALL BE CAPABLE OF ATTAINING A GROWTH OF GRASS THAT IS ACCEPTABLE ACCORDING TO STANDARD SPECIFICATION 618.10. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.

10. ALL WASTE MATERIAL NOT USED ON THE PROJECT SHALL BE DISPOSED OF OFF THE PROJECT IN WASTE AREAS REVIEWED BY THE RESIDENT.

11. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW - UNDERWATER BACKFILL AND WILL PAID FOR AS GRANULAR BORROW.

12. GRANULAR BORROW USED TO BACKFILL MUCK EXCAVATION OR IN LOW WET AREAS TO 1' ABOVE WATER LEVEL OR OLD GROUND SHALL MEET REQUIREMENTS FOR GRANULAR BORROW UNDERWATER BACKFILL.

13. EXISTING INSLOPES STEEPER THAN 2:1 IN PROPOSED FILL AREAS SHALL BE BENCHED AS 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 SHALL BE INCIDENTAL TO THE RELATED PAVING ITEMS.

16. ALL EXISTING PAVED SHOULDERS AND WIDENINGS TO BE RESURFACED AS DIRECTED BY THE RESIDENT.

17. WHEN SUPER ELEVATION EXCEEDS THE SLOPE OF THE LOW SIDE SHOULDER, THE SHOULDER PAVEMENT WILL HAVE SAME SLOPE AS TRAVELED WAY.

18. THE FOLLOWING SHALL BE INCIDENTAL TO THE 603 ITEM(S):
- ANY CUTTING OF EXISTING CULVERTS AND OR CONNECTORS NECESSARY TO INSTALL NEW CULVERT REPLACEMENTS OR EXTENSIONS
- ALL PIPE EXCAVATION INCLUDING ANY CUTTING AND REMOVAL OF PAVEMENT
- ALL DITCHING AT PIPE ENDS
- FURNISHING, PLACING, GRADING, AND COMPACTING OF ANY NEW GRAVEL AND/OR FILL MATERIAL INCLUDING GRANULAR BORROW USED UNDER PIPES AND FOR TEMPORARY DETOURS TO MAINTAIN TRAFFIC DURING PIPE INSTALLATION (EXCAVATION IS ALSO INCIDENTAL).
- GRANULAR BORROW UNDER THE PIPE SHALL MEET THE REQUIREMENTS FOR UNDERWATER BACKFILL
- ALL WORK NECESSARY TO CONNECT TO EXISTING PIPES AND DRAINAGE STRUCTURES
- FLOW LINES MAY BE CHANGED BY 1.5 FT
- ANY NECESSARY CLEARING OF BRUSH AND NON-PAY TREES AT CULVERT ENDS

19. EXISTING CULVERTS AND CATCH BASINS WILL BE CLEANED AS DIRECTED BY THE RESIDENT UNDER THE APPROPRIATE PAY ITEMS.

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

21. INLETS AND OUTLETS OF ALL CULVERTS SHALL BE RIPRAPPED UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.

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

23. 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.

24. 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.

25. AS DIRECTED BY THE RESIDENT, ALL EXISTING UNDERDRAIN OUTLETS SHALL BE LOCATED, CLEANED OUT AND DITCHED AS REQUIRED OR REPLACED AS NECESSARY. PAYMENT WILL BE MADE UNDER APPROPRIATE CONTRACT ITEMS.

26. ALL UNDERDRAIN NOT SHOWN ON THE CROSS SECTIONS WILL HAVE A FLOW LINE OF 5.5 FEET BELOW FINISH GRADE DIRECTLY ABOVE THE UNDERDRAIN AND UNDERDRAIN SAND BACKFILL PLACED TO AN ELEVATION EQUAL TO THE BOTTOM OF THE NEW GRAVEL LAYER. ALL UNDERDRAIN SHOWN ON THE CROSS SECTIONS WILL HAVE THE FLOW LINE SCALED FROM THE CROSS SECTIONS. ALL FLOW LINE ELEVATIONS ARE SUBJECT TO APPROVAL BY THE RESIDENT.

27. ALL CONNECTIONS FOR UNDERDRAIN (U.D.) TO ROADWAY CULVERTS WILL BE INCIDENTAL TO U.D. PIPE ITEMS.

28. A 3 FT. X 3 FT. SQUARE RIPRAP PAD SHALL BE CONSTRUCTED AT U.D. OUTLETS.

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

30. HOLES CREATED BY GUARDRAIL REMOVAL WILL BE FILLED AND COMPACTED WITH APPROVED MATERIALS AS DIRECTED BY THE RESIDENT. PAYMENT TO BE CONSIDERED INCIDENTAL TO THE GUARDRAIL ITEMS.

31. ALL EXISTING GUARDRAIL SHALL BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR. REMOVAL AND DISPOSAL SHALL BE CONSIDERED INCIDENTAL TO THE GUARDRAIL ITEMS.

32. TWO REFLECTORIZED FLEXIBLE G.R. MARKERS (ITEM 606.353) WILL BE INSTALLED AT EACH GUARDRAIL END. A DELINEATOR POST (ITEM 606.356) WILL BE INSTALLED AT EACH UNDERDRAIN OUTLET.

33. A DELINEATOR POST (ITEM 606.356) WILL BE INSTALLED AT THE END OF EACH SECTION OF BITUMINOUS CURB.

34. CONNECTIONS FOR PROPOSED GUARDRAIL TO EXISTING GUARDRAIL WILL BE CONSIDERED INCIDENTAL TO ITEM 606.

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. DIRTY BORROW HAS BEEN ESTIMATED FOR ALL DISTURBED SLOPE AREAS OTHER THAN LAWN AREAS. ACTUAL PLACEMENT OF THE DIRTY BORROW SHALL BE AS NOTED ON THE PLANS OR DESIGNATED BY THE RESIDENT.

37. UNLESS OTHERWISE NOTED SEEDING METHOD NO. 1 SHALL BE UTILIZED ON ALL LAWNS AND DEVELOPED AREAS; SEEDING METHOD NO. 2 SHALL BE UTILIZED ON ALL NON-GUARDRAIL SLOPES. SEEDING METHOD NO. 3 SHALL BE UTILIZED ON ALL GUARDRAIL FILL SLOPES. ON LONG NON-GUARDRAIL BACKSLOPES, SEEDING METHOD NO. 3 MAY BE USED INSTEAD OF METHOD NO. 2 IF NOTED OR DIRECTED BY THE RESIDENT.

38. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 4 INCHES IN LAWN AREAS AND 2 INCHES IN ALL OTHER AREAS UNLESS OTHERWISE NOTED OR DIRECTED.

39. DIRTY BORROW SHALL BE PLACED TO A NOMINAL DEPTH OF 2 INCHES UNLESS OTHERWISE NOTED OR DIRECTED.

40. THE CONTRACTOR IS RESPONSIBLE FOR THE CAREFUL SIDE STAKING OF EXISTING CENTERLINE AS PER STANDARD SPECIFICATION 105.6.2. SIDE STAKES SHALL BE PLACED SAFELY OUTSIDE OF THE CONSTRUCTION LIMITS AND THE EXISTING CENTERLINE GRADES SHALL BE TRANSFERRED TO THESE STAKES. THESE STAKES AND GRADES WILL BE USED TO LAYOUT CENTERLINE AND DETERMINE NEW CONSTRUCTION FINISH GRADES FROM DIFFERENTIAL ELEVATION SHEETS FURNISHED BY MAINEDOT. ALL LAYOUT, STAKES, AND GRADES WILL BE CHECKED AND MUST BE ACCEPTABLE TO THE RESIDENT.

41. 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.

42. AREAS REQUIRING FILL ON THE PROJECT WILL COME FROM SUITABLE EXCAVATION FROM EXCAVATION AREAS.

43. 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.

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

45. STATIONS REFERENCED ARE APPROXIMATE.

46. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION'S BEST MANAGEMENT PRACTICES FOR EROSION CONTROL & SEDIMENT CONTROL, FEBRUARY, 2008.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN STP-2021 (500) HIGHWAY PLANS

20215.00

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AUGUSTA
EXIT 109B/WESTERN AVENUE

GENERAL NOTES

SHEET NUMBER
4
OF 18

Filename: ...\Final\004_Notes_general.dgn Division: HIGHWAY Username: Date:3/19/2015

STATION	CULVERT PIPE											CATCH BASIN					PIPE ARCH				MH	UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	RCP			CMP		OPTION I		OPTION III														TYPE B		TYPE C					
								SMOOTHLINED		CORRUGATED										GAGE OR WALL THICKNESS		TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		DESCRIPTIONS	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1-C	B1-C		E	F	SPAN	RISE	LENGTH			LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
ROADWAY CULVERTS																													
STA. 10+27.0 TO STA. 10+27.0 RT								12"	26'																				
CATCH BASINS AND MANHOLES																													
STA. 10+27.0, 12.4' RT												1																TYPE A1-C	
UNDERDRAIN																													
STA. 10+27.0 RT TO STA. WA 2+25.3 LT																								12"	259'				

CLEARING - ITEM 201.11

STATION TO STATION
WA 4+65.0 - WA 5+49.0 LT
WA 7+55.0 - WA 8+16.5 LT

ALTERING CATCH BASIN - ITEM 604.16

STATION TO STATION	OFFSET	QUANTITY
WA 4+03.9	7.1' LT	1

ADJUSTING MANHOLE OR CATCH BASIN TO GRADE - ITEM 604.18

STATION TO STATION	OFFSET	QUANTITY
11+55.8	5.8' RT	1

BRIDGE TRANSITION - TYPE 11 - ITEM 606.1722

STATION TO STATION	QUANTITY
WA 5+34.5 LT	1

GUARDRAIL TYPE 3d - SINGLE RAIL - ITEM 606.24

STATION TO STATION	LENGTH
8+80.0 - 11+39.4 LT	271'
WA 4+12.5 - WA 5+34.5 LT	121'

TERMINAL END - SINGLE RAIL - GALVANIZED STEEL - ITEM 606.265

STATION TO STATION	QUANTITY
11+42.0 LT	1
WA 4+09.7 LT	1

VERTICAL CURB TYPE 1 - ITEM 609.11

STATION TO STATION	LENGTH
10+24.0 - 11+28.0 RT	99'
WA 2+25.3 LT - WA 3+41.2 LT	118'
10+24.0 - 11+44.0 LT	126'
11+51.0 - 11+57.0 LT	6'
11+64.0 - 11+69.0 LT	5'

VERTICAL CURB TYPE 1 - CIRCULAR - ITEM 609.12

STATION TO STATION	LENGTH
11+28.0 - 11+45.7 RT	18'
11+51.1 - 11+57.1 RT	13'
11+69.0 - WA 4+10.2 LT	16'

TERMINAL CURB TYPE 1 - 4 FOOT - ITEM 609.234

STATION TO STATION	QUANTITY
10+20.0 - 10+24.0 RT	1
10+20.0 - 10+24.0 LT	1

TERMINAL CURB TYPE 1 - 7 FOOT - ITEM 609.237

STATION TO STATION	QUANTITY
11+57.1 RT - WA 3+41.2 LT	1
11+44.0 - 11+51.0 LT	1
11+57.0 - 11+64.0 LT	1

TERMINAL CURB TYPE 1 - 7 FOOT - CIRCULAR - ITEM 609.2371

STATION TO STATION	QUANTITY
11+45.7 - 11+51.1 RT	1

CURB TYPE 5 - ITEM 609.34

STATION TO STATION	LENGTH
WA 3+15.2 - WA 2+51.5 LT	64'

CURB TYPE 5 - CIRCULAR - ITEM 609.35

STATION TO STATION	LENGTH
11+37.5 RT - WA 3+15.2 LT	73'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN STP-2021 (500) HIGHWAY PLANS

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AUGUSTA
EXIT 109B/WESTERN AVENUE

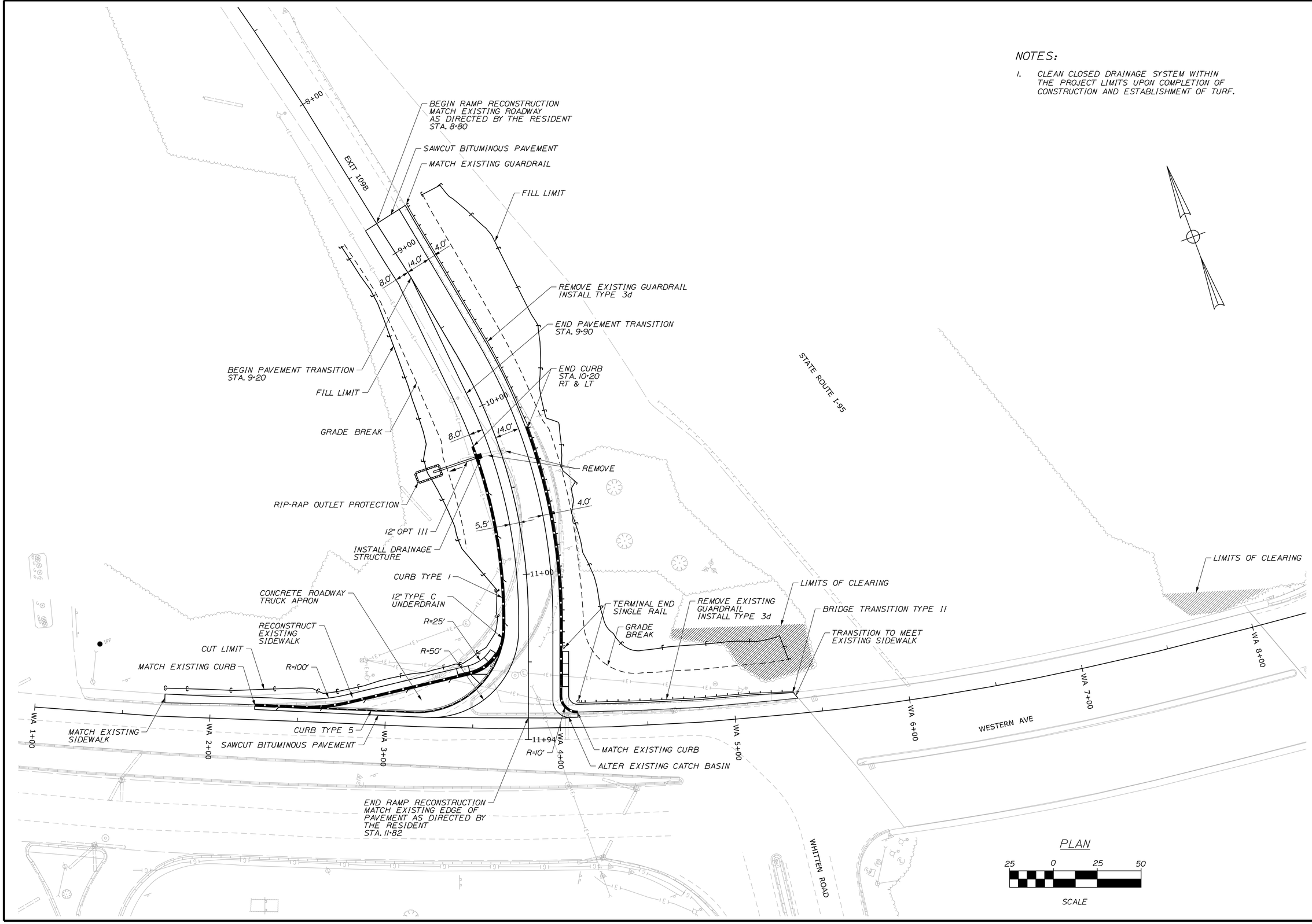
CONSTRUCTION NOTES

SHEET NUMBER
5
OF 18

Filename: ...\005_Notes_Construction.dgn Division: HIGHWAY Username: Date:3/19/2015

NOTES:

1. CLEAN CLOSED DRAINAGE SYSTEM WITHIN THE PROJECT LIMITS UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF TURF.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN
STP-2021 (500) HIGHWAY PLANS

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DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

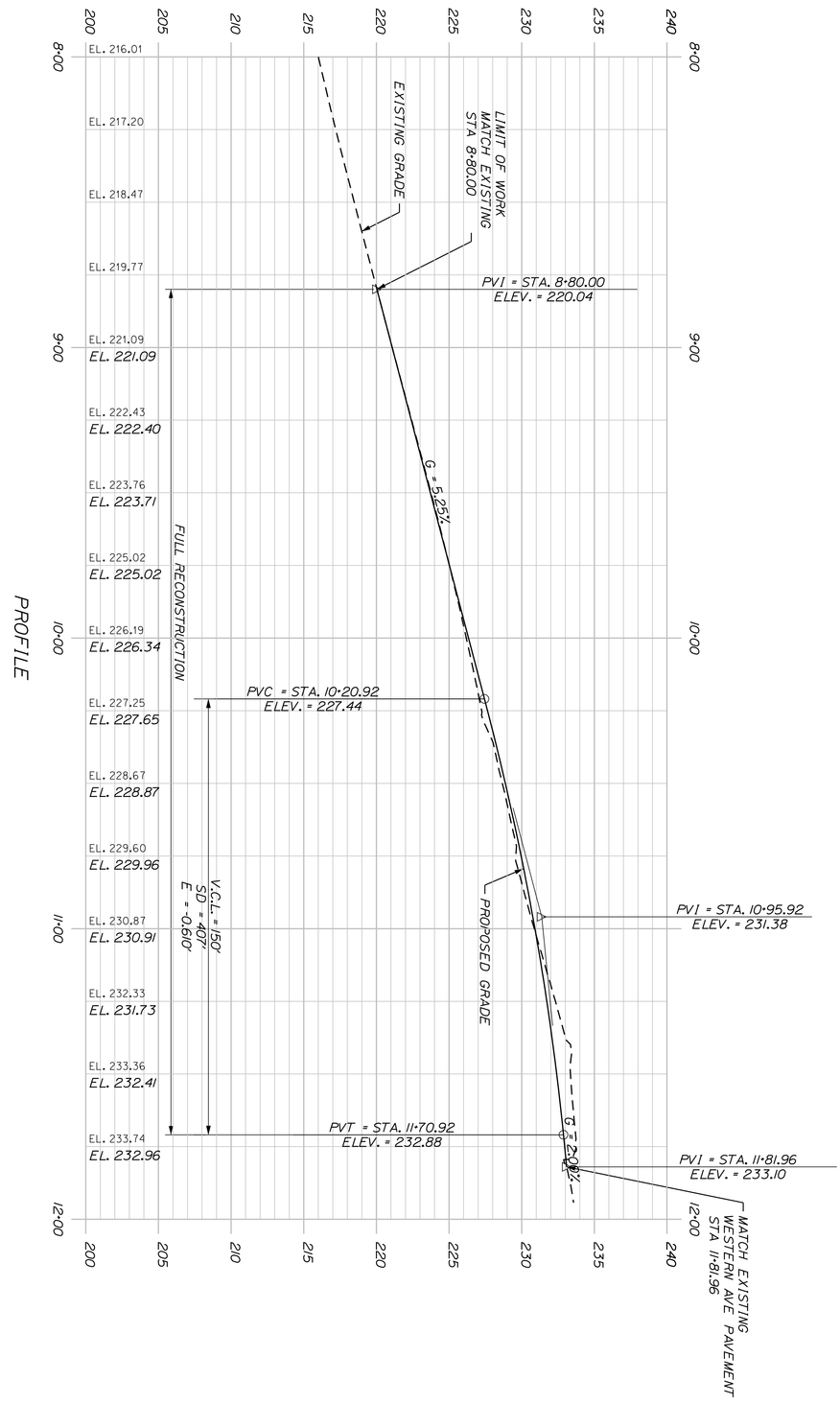
BPM
SIGNATURE
1299
P.E. NUMBER
3-9-15
DATE

AUGUSTA
EXIT 109B/WESTERN AVENUE

PLAN

SHEET NUMBER
6
OF 18

Filename: ...\Planset\Final\006_Plan_01.dgn Division: HIGHWAY Username: Date:3/19/2015



SHEET NUMBER 7 OF 18	AUGUSTA EXIT 109B/WESTERN AVENUE PROFILE	PROJ. MANAGER $PROJMANAGER$	BY	DATE	BPM SIGNATURE 12919 P.E. NUMBER 3-9-15 DATE
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		CHECKED-REVIEWED			
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		REVISIONS 2			
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		REVISIONS 4			
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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN STP-2021 (500) HIGHWAY PLANS

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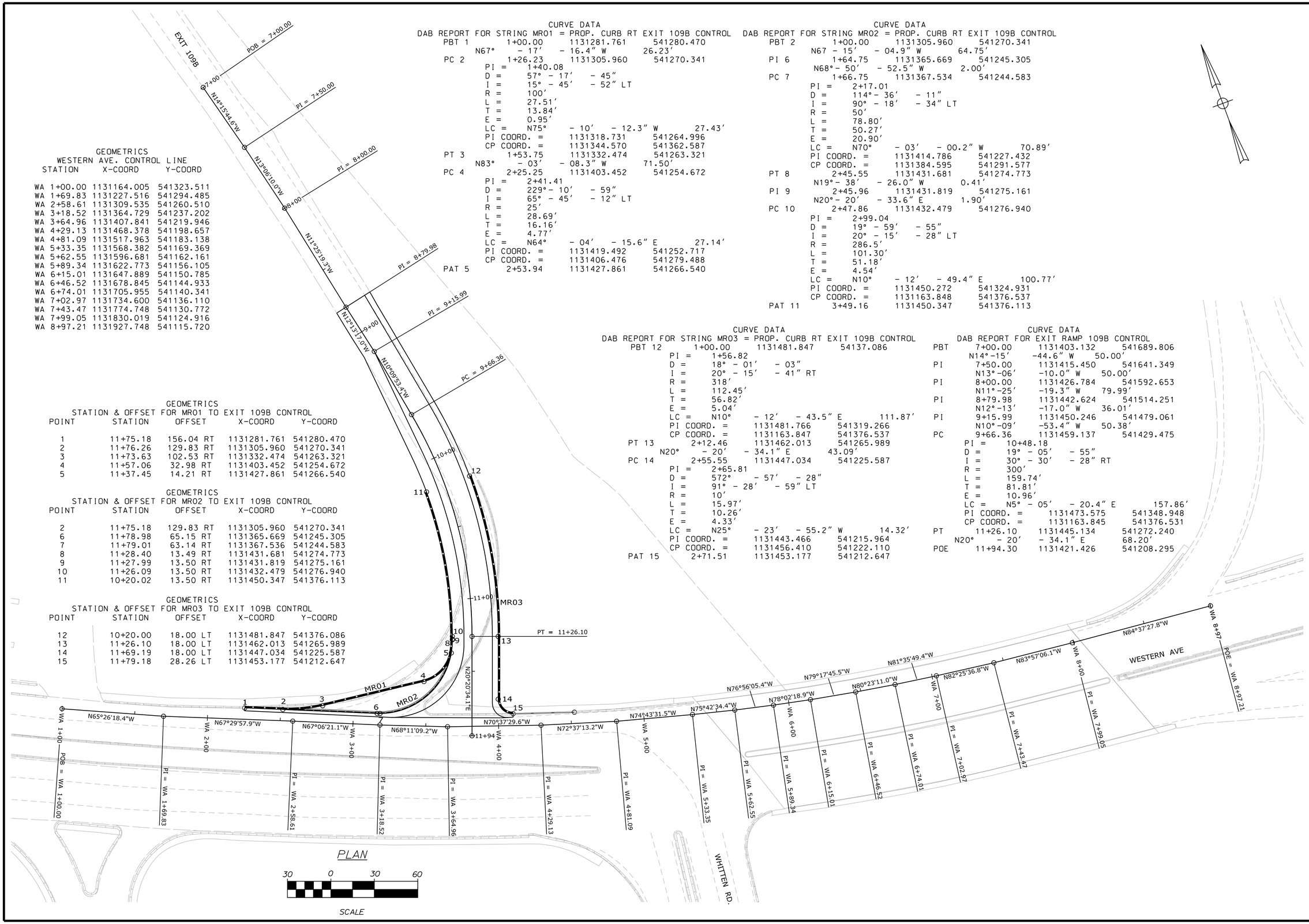

GEOMETRICS
WESTERN AVE. CONTROL LINE

STATION	X-COORD	Y-COORD
WA 1+00.00	1131164.005	541323.511
WA 1+69.83	1131227.516	541294.485
WA 2+58.61	1131309.535	541260.510
WA 3+18.52	1131364.729	541237.202
WA 3+64.96	1131407.841	541219.946
WA 4+29.13	1131468.378	541198.657
WA 4+81.09	1131517.963	541183.138
WA 5+33.35	1131568.382	541169.369
WA 5+62.55	1131596.681	541162.161
WA 5+89.34	1131622.773	541156.105
WA 6+15.01	1131647.889	541150.785
WA 6+46.52	1131678.845	541144.933
WA 6+74.01	1131705.955	541140.341
WA 7+02.97	1131734.600	541136.110
WA 7+43.47	1131774.748	541130.772
WA 7+99.05	1131830.019	541124.916
WA 8+97.21	1131927.748	541115.720

GEOMETRICS
STATION & OFFSET FOR MR01 TO EXIT 109B CONTROL

POINT	STATION	OFFSET	X-COORD	Y-COORD
1	11+75.18	156.04 RT	1131281.761	541280.470
2	11+76.26	129.83 RT	1131305.960	541270.341
3	11+73.63	102.53 RT	1131332.474	541263.321
4	11+57.06	32.98 RT	1131403.452	541254.672
5	11+37.45	14.21 RT	1131427.861	541266.540

GEOMETRICS
STATION & OFFSET FOR MR02 TO EXIT 109B CONTROL

POINT	STATION	OFFSET	X-COORD	Y-COORD
2	11+75.18	129.83 RT	1131305.960	541270.341
6	11+78.98	65.15 RT	1131365.669	541245.305
7	11+79.01	63.14 RT	1131367.536	541244.583
8	11+28.40	13.49 RT	1131431.681	541274.773
9	11+27.99	13.50 RT	1131431.819	541275.161
10	11+26.09	13.50 RT	1131432.479	541276.940
11	10+20.02	13.50 RT	1131450.347	541376.113

GEOMETRICS
STATION & OFFSET FOR MR03 TO EXIT 109B CONTROL

POINT	STATION	OFFSET	X-COORD	Y-COORD
12	10+20.00	18.00 LT	1131481.847	541376.086
13	11+26.10	18.00 LT	1131462.013	541265.989
14	11+69.19	18.00 LT	1131447.034	541225.587
15	11+79.18	28.26 LT	1131453.177	541212.647

CURVE DATA
DAB REPORT FOR STRING MR01 = PROP. CURB RT EXIT 109B CONTROL

PBT 1	1+00.00	1131281.761	541280.470	
	N67° - 17′ - 16.4″ W			26.23′
PC 2	1+26.23	1131305.960	541270.341	
PI =	1+40.08			
D =	57° - 17′ - 45″			
I =	15° - 45′ - 52″ LT			
R =	100′			
L =	27.51′			
T =	13.84′			
E =	0.95′			
LC =	N75° - 10′ - 12.3″ W			27.43′
PI COORD. =		1131318.731	541264.996	
CP COORD. =		1131344.570	541362.587	
PT 3	1+53.75	1131332.474	541263.321	
	N83° - 03′ - 08.3″ W			71.50′
PC 4	2+25.25	1131403.452	541254.672	
PI =	2+41.41			
D =	229° - 10′ - 59″			
I =	65° - 45′ - 12″ LT			
R =	25′			
L =	28.69′			
T =	16.16′			
E =	4.77′			
LC =	N64° - 04′ - 15.6″ E			27.14′
PI COORD. =		1131419.492	541252.717	
CP COORD. =		1131406.476	541279.488	
PAT 5	2+53.94	1131427.861	541266.540	

CURVE DATA
DAB REPORT FOR STRING MR02 = PROP. CURB RT EXIT 109B CONTROL

PBT 2	1+00.00	1131305.960	541270.341	
	N67 - 15′ - 04.9″ W			64.75′
PI 6	1+64.75	1131365.669	541245.305	
	N68° - 50′ - 52.5″ W			2.00′
PC 7	1+66.75	1131367.534	541244.583	
PI =	2+17.01			
D =	114° - 36′ - 11″			
I =	90° - 18′ - 34″ LT			
R =	50′			
L =	78.80′			
T =	50.27′			
E =	20.90′			
LC =	N70° - 03′ - 00.2″ W			70.89′
PI COORD. =		1131414.786	541227.432	
CP COORD. =		1131384.595	541291.577	
PT 8	2+45.55	1131431.681	541274.773	
	N19° - 38′ - 26.0″ W			0.41′
PI 9	2+45.96	1131431.819	541275.161	
	N20° - 20′ - 33.6″ E			1.90′
PC 10	2+47.86	1131432.479	541276.940	
PI =	2+99.04			
D =	19° - 59′ - 55″			
I =	20° - 15′ - 28″ LT			
R =	286.5′			
L =	101.30′			
T =	51.18′			
E =	4.54′			
LC =	N10° - 12′ - 49.4″ E			100.77′
PI COORD. =		1131450.272	541324.931	
CP COORD. =		1131163.848	541376.537	
PAT 11	3+49.16	1131450.347	541376.113	

CURVE DATA
DAB REPORT FOR STRING MR03 = PROP. CURB RT EXIT 109B CONTROL

PBT 12	1+00.00	1131481.847	54137.086	
PI =	1+56.82			
D =	18° - 01′ - 03″			
I =	20° - 15′ - 41″ RT			
R =	318′			
L =	112.45′			
T =	56.82′			
E =	5.04′			
LC =	N10° - 12′ - 43.5″ E			111.87′
PI COORD. =		1131481.766	541319.266	
CP COORD. =		1131163.847	541376.537	
PT 13	2+12.46	1131462.013	541265.989	
	N20° - 20′ - 34.1″ E			43.09′
PC 14	2+55.55	1131447.034	541225.587	
PI =	2+65.81			
D =	572° - 57′ - 28″			
I =	91° - 28′ - 59″ LT			
R =	10′			
L =	15.97′			
T =	10.26′			
E =	4.33′			
LC =	N25° - 23′ - 55.2″ W			14.32′
PI COORD. =		1131443.466	541215.964	
CP COORD. =		1131456.410	541222.110	
PAT 15	2+71.51	1131453.177	541212.647	

CURVE DATA
DAB REPORT FOR EXIT RAMP 109B CONTROL

PBT	7+00.00	1131403.132	541689.806	
	N14° -15′ -44.6″ W			50.00′
PI	7+50.00	1131415.450	541641.349	
	N13° -06′ -10.0″ W			50.00′
PI	8+00.00	1131426.784	541592.653	
	N11° -25′ -19.3″ W			79.99′
PI	8+79.98	1131442.624	541514.251	
	N12° -13′ -17.0″ W			36.01′
PI	9+15.99	1131450.246	541479.061	
	N10° -09′ -53.4″ W			50.38′
PC	9+66.36	1131459.137	541429.475	
PI =	10+48.18			
D =	19° - 05′ - 55″			
I =	30° - 30′ - 28″ RT			
R =	300′			
L =	159.74′			
T =	81.81′			
E =	10.96′			
LC =	N5° - 05′ - 20.4″ E			157.86′
PI COORD. =		1131473.575	541348.948	
CP COORD. =		1131163.845	541376.531	
PT	11+26.10	1131445.134	541272.240	
	N20° - 20′ - 34.1″ E			68.20′
POE	11+94.30	1131421.426	541208.295	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN
STP-2021 (500)

HIGHWAY PLANS

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DESIGN3-DETAILED3			
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REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

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SIGNATURE
1299
P.E. NUMBER
3-9-15
DATE

AUGUSTA
EXIT 109B/WESTERN AVENUE

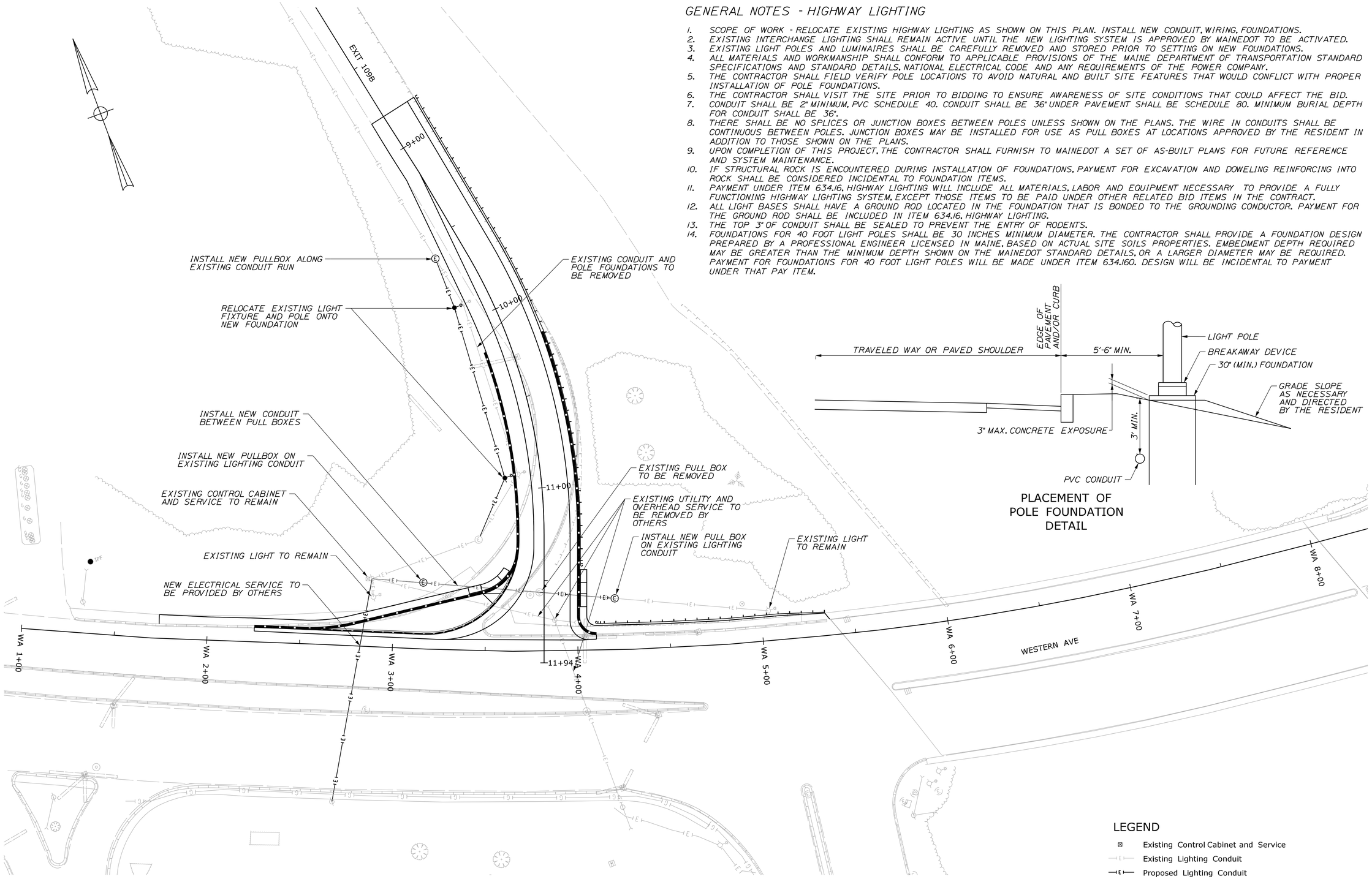
GEOMETRY PLANS

SHEET NUMBER
8
OF 18

Filename: ...\Final\008_Plan_Curbing_01.dgn Division: HIGHWAY Username: Date:3/9/2015

GENERAL NOTES - HIGHWAY LIGHTING

1. SCOPE OF WORK - RELOCATE EXISTING HIGHWAY LIGHTING AS SHOWN ON THIS PLAN. INSTALL NEW CONDUIT, WIRING, FOUNDATIONS.
2. EXISTING INTERCHANGE LIGHTING SHALL REMAIN ACTIVE UNTIL THE NEW LIGHTING SYSTEM IS APPROVED BY MAINEDOT TO BE ACTIVATED.
3. EXISTING LIGHT POLES AND LUMINAIRES SHALL BE CAREFULLY REMOVED AND STORED PRIOR TO SETTING ON NEW FOUNDATIONS.
4. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO APPLICABLE PROVISIONS OF THE MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND STANDARD DETAILS, NATIONAL ELECTRICAL CODE AND ANY REQUIREMENTS OF THE POWER COMPANY.
5. THE CONTRACTOR SHALL FIELD VERIFY POLE LOCATIONS TO AVOID NATURAL AND BUILT SITE FEATURES THAT WOULD CONFLICT WITH PROPER INSTALLATION OF POLE FOUNDATIONS.
6. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO ENSURE AWARENESS OF SITE CONDITIONS THAT COULD AFFECT THE BID.
7. CONDUIT SHALL BE 2" MINIMUM. PVC SCHEDULE 40. CONDUIT SHALL BE 36" UNDER PAVEMENT SHALL BE SCHEDULE 80. MINIMUM BURIAL DEPTH FOR CONDUIT SHALL BE 36".
8. THERE SHALL BE NO SPLICES OR JUNCTION BOXES BETWEEN POLES UNLESS SHOWN ON THE PLANS. THE WIRE IN CONDUITS SHALL BE CONTINUOUS BETWEEN POLES. JUNCTION BOXES MAY BE INSTALLED FOR USE AS PULL BOXES AT LOCATIONS APPROVED BY THE RESIDENT IN ADDITION TO THOSE SHOWN ON THE PLANS.
9. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL FURNISH TO MAINEDOT A SET OF AS-BUILT PLANS FOR FUTURE REFERENCE AND SYSTEM MAINTENANCE.
10. IF STRUCTURAL ROCK IS ENCOUNTERED DURING INSTALLATION OF FOUNDATIONS, PAYMENT FOR EXCAVATION AND DOWELING REINFORCING INTO ROCK SHALL BE CONSIDERED INCIDENTAL TO FOUNDATION ITEMS.
11. PAYMENT UNDER ITEM 634.16, HIGHWAY LIGHTING WILL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PROVIDE A FULLY FUNCTIONING HIGHWAY LIGHTING SYSTEM, EXCEPT THOSE ITEMS TO BE PAID UNDER OTHER RELATED BID ITEMS IN THE CONTRACT.
12. ALL LIGHT BASES SHALL HAVE A GROUND ROD LOCATED IN THE FOUNDATION THAT IS BONDED TO THE GROUNDING CONDUCTOR. PAYMENT FOR THE GROUND ROD SHALL BE INCLUDED IN ITEM 634.16, HIGHWAY LIGHTING.
13. THE TOP 3" OF CONDUIT SHALL BE SEALED TO PREVENT THE ENTRY OF RODENTS.
14. FOUNDATIONS FOR 40 FOOT LIGHT POLES SHALL BE 30 INCHES MINIMUM DIAMETER. THE CONTRACTOR SHALL PROVIDE A FOUNDATION DESIGN PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN MAINE, BASED ON ACTUAL SITE SOILS PROPERTIES. EMBEDMENT DEPTH REQUIRED MAY BE GREATER THAN THE MINIMUM DEPTH SHOWN ON THE MAINEDOT STANDARD DETAILS, OR A LARGER DIAMETER MAY BE REQUIRED. PAYMENT FOR FOUNDATIONS FOR 40 FOOT LIGHT POLES WILL BE MADE UNDER ITEM 634.160. DESIGN WILL BE INCIDENTAL TO PAYMENT UNDER THAT PAY ITEM.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN STP-2021 (500) HIGHWAY PLANS

20215.00

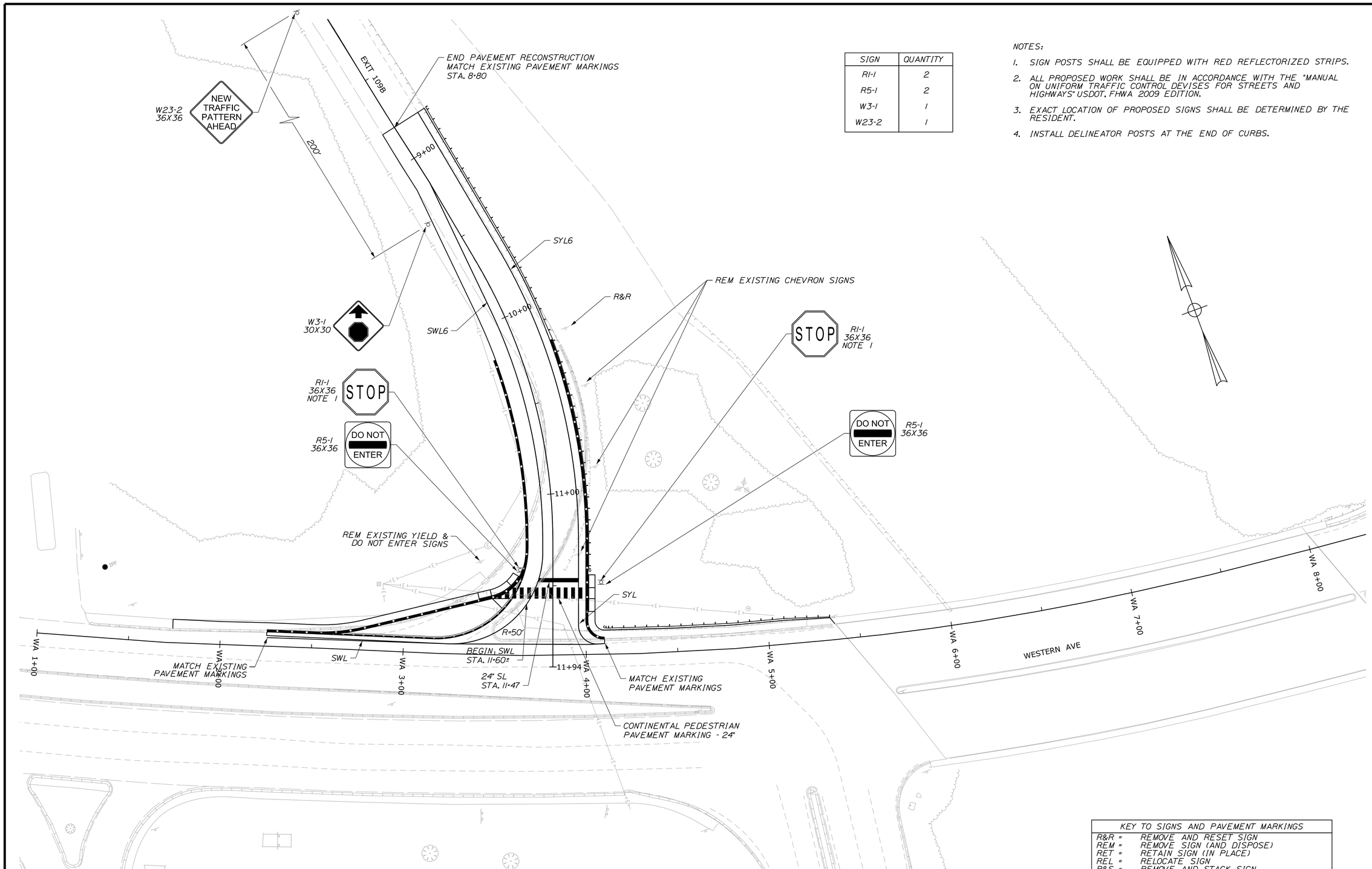
PROJ. MANAGER	BPM		
DESIGN-DETAILED	SIGNATURE		
CHECKED-REVIEWED	1299		
DESIGN2-DETAILED2	P.E. NUMBER		
DESIGN3-DETAILED3	3-9-15		
REVISIONS 1	DATE	BY	DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

AUGUSTA
EXIT 109B/WESTERN AVENUE

LIGHTING PLAN

SHEET NUMBER
9
OF 18

Filename: ...\Final\009_Plan_Lighting_01.dgn Division: HIGHWAY Username: Date:3/19/2015



SIGN	QUANTITY
R1-1	2
R5-1	2
W3-1	1
W23-2	1

NOTES:

1. SIGN POSTS SHALL BE EQUIPPED WITH RED REFLECTORIZED STRIPS.
2. ALL PROPOSED WORK SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVISES FOR STREETS AND HIGHWAYS" USDOT, FHWA 2009 EDITION.
3. EXACT LOCATION OF PROPOSED SIGNS SHALL BE DETERMINED BY THE RESIDENT.
4. INSTALL DELINEATOR POSTS AT THE END OF CURBS.

PLAN

25 0 25 50

SCALE

KEY TO SIGNS AND PAVEMENT MARKINGS	
R&R =	REMOVE AND RESET SIGN
REM =	REMOVE SIGN (AND DISPOSE)
RET =	RETAIN SIGN (IN PLACE)
REL =	RELOCATE SIGN
R&S =	REMOVE AND STACK SIGN
SL =	SINGLE SOLID LINE (STOP LINE) - 24"
SWL =	SOLID WHITE LINE - 4"
SWL6=	SOLID WHITE LINE - 6"
SYL =	SOLID YELLOW LINE - 4"
SYL6 =	SOLID YELLOW LINE - 6"
BWL =	BROKEN WHITE LINE - 4"
DYL =	DOUBLE WHITE LINE - 4"
DYL(T)=	DOUBLE WHITE LINE - 4" INLAY/THERMOPLASTIC

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN STP-2021 (500) HIGHWAY PLANS

20215.00

BPM
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12919
P.E. NUMBER
3-9-15
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REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

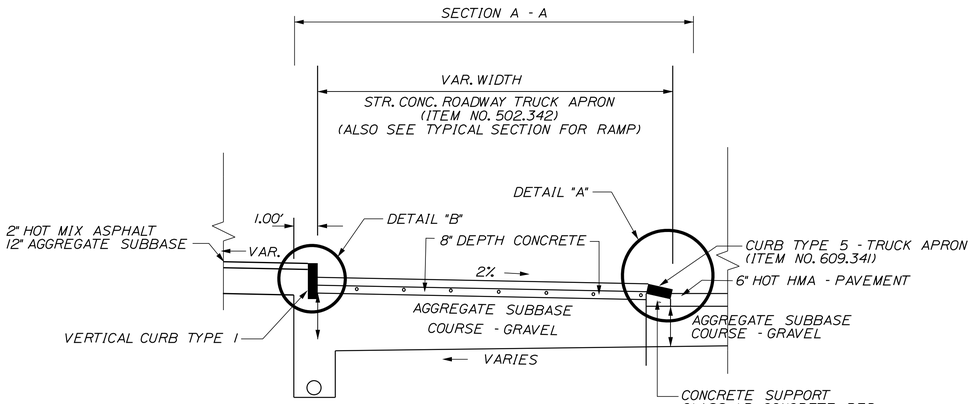
AUGUSTA
EXIT 109B/WESTERN AVENUE

SIGNING & MARKINGS

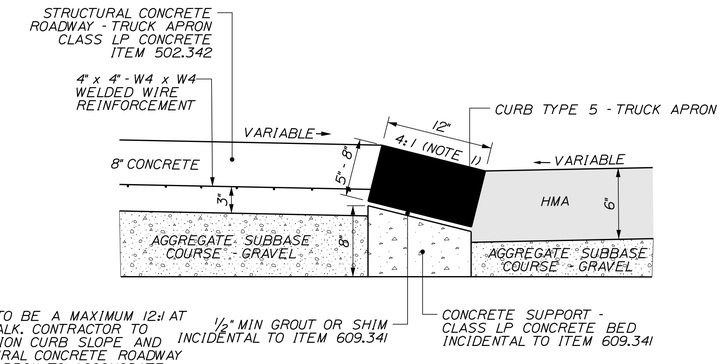
SHEET NUMBER
10
OF 18

Filename: ...\010_Plan_Signing_PavtMarking_01.dgn Division: HIGHWAY Username: Date:3/19/2015

STRUCTURAL CONCRETE ROADWAY TRUCK APRON & CURB TYPE 5 - TRUCK APRON DETAILS



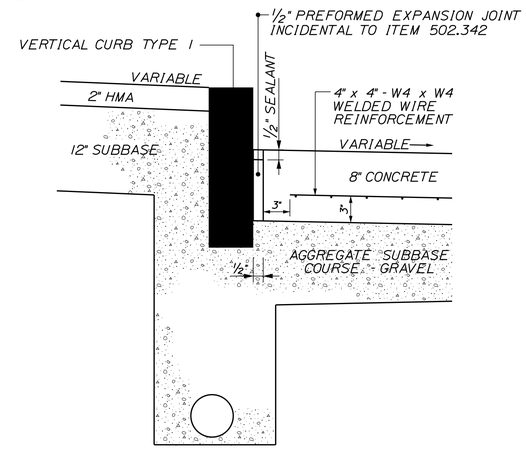
NOTE: ** =
THE PROPOSED SUBGRADE CROSS - SLOPE SHALL BE
PARALLEL TO THE SURFACE CROSS - SLOPE



DETAIL A

NOTES:

1. SLOPE TO BE A MAXIMUM 12:1 AT CROSSWALK. CONTRACTOR TO TRANSITION CURB SLOPE AND STRUCTURAL CONCRETE ROADWAY TRUCK APRON TO ACCOMODATE CROSSWALK AND COMPLIANCE TO AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.

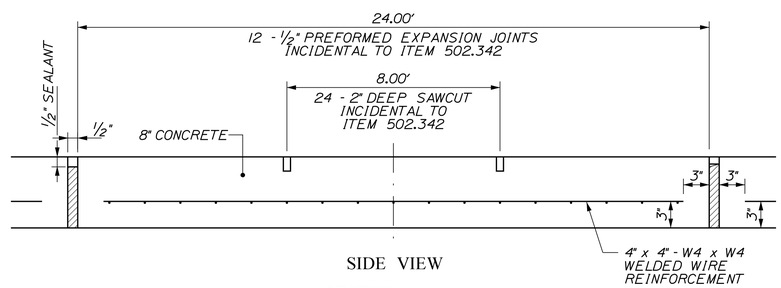


DETAIL B

STRUCTURAL CONCRETE ROADWAY TRUCK APRON & CURB TYPE 5 - TRUCK APRON DETAILS

NOTES:

1. THE 4"X4" W4XW4 WELDED WIRE REINFORCEMENT SHALL BE SUPPORTED ON CHAIRS. THE WELDED WIRE REINFORCEMENT & CHAIRS SHALL BE INCIDENTAL TO ITEM 502.342.
2. A 3" CURB REVEAL SHALL BE PROVIDED FOR THE CURB TYPE 5 - TRUCK APRON. UPON COMPLETION.
3. TWO (2) - CONCRETE SUPPORTS SHALL BE PLACED PER CURB SECTION TO SUPPORT THE CURBING DURING CONCRETE PLACEMENT. GROUT OR SHIM EACH SECTION OF CURB TO GRADE PRIOR TO PLACING CONCRETE. FULL GROUT BED MUST BE USED WHERE SHIMS ARE LESS THAN 2" HIGH. THIS SHALL BE INCIDENTAL TO ITEM 609.341 TYPE 5 CURB - TRUCK APRON. THE SHIMS ARE TO MADE OF MATERIAL THAT IS ACCEPT - ABLE TO THE RESIDENT.
4. THE CLASS LP CONCRETE BED FOR THE GRANITE CURB TYPE 5 WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCIDENTAL TO ITEM 609.341 TYPE 5 CURB - TRUCK APRON.
5. THE CONTRACTOR SHALL PLACE THE CONCRETE WITH CARE ASSURING THAT THE SUPPORTED CURB IS NOT DISTURBED DURING PLACEMENT.
6. THE CONCRETE SHALL BE PLACED AND CONSOLIDATED IN SUCH A MANNER THAT NO VOIDS WILL BE PRESENT WHEN COMPLETE.
7. THE CONTRACTOR SHALL PLACE CURB JOINTS TO COINCIDE WITH TRUCK APRON EXPANSION & CONTROL JOINTS.



SIDE VIEW

SECTION A - A

STRUCTURAL CONCRETE ROADWAY TRUCK APRON EXPANSION & CONTROL JOINT LAYOUT

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN
STP-2021 (500) HIGHWAY PLANS

20215.00

		BY	DATE
PROJ. MANAGER #PROJMANAGER#		BPM	
DESIGN-DETAILED			
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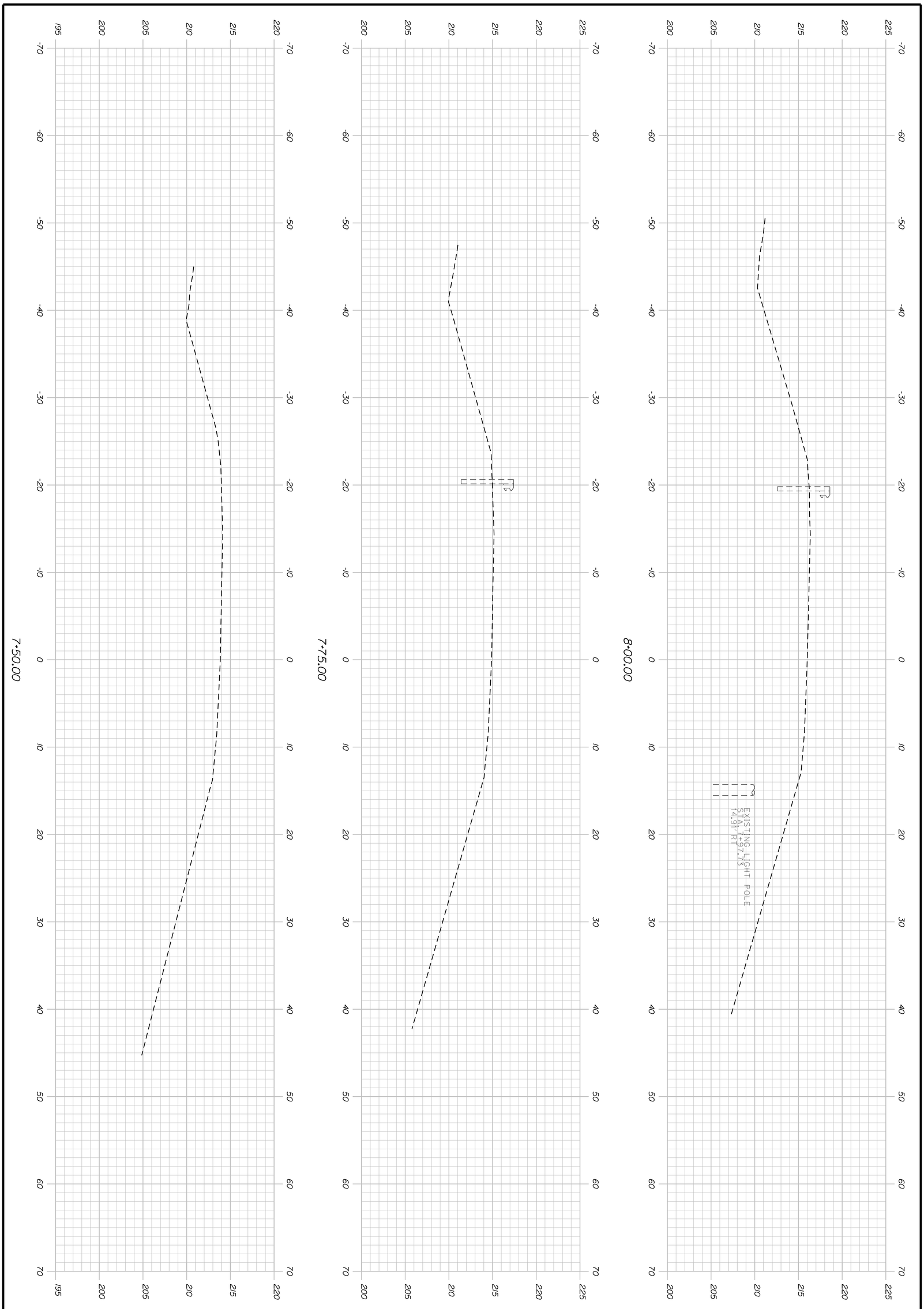
DESIGN2-DETAILED2		1299	
DESIGN3-DETAILED3		P.E. NUMBER	
REVISIONS 1			
REVISIONS 2			
REVISIONS 3		3-9-15	
REVISIONS 4		DATE	
FIELD CHANGES			

AUGUSTA
EXIT 109B/WESTERN AVENUE

DETAILS

SHEET NUMBER
11
OF 18

Filename: ...\Final\011_Typical_ConcRdwy.dgn Division: HIGHWAY Username: Date:3/19/2015



SHEET NUMBER 12 OF 18	AUGUSTA EXIT 109B/WESTERN AVENUE 7+50.00 CROSS SECTIONS 8+00.00	PROJ. MANAGER $PROJMANAGER$	BY	DATE
		DESIGN-DETAILED		
		CHECKED-REVIEWED		
		DESIGN2-DETAILED2		
		DESIGN3-DETAILED3		
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STATE OF MAINE
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WIN STP-2021 (500)

WIN
STP-2021 (500) HIGHWAY PLANS

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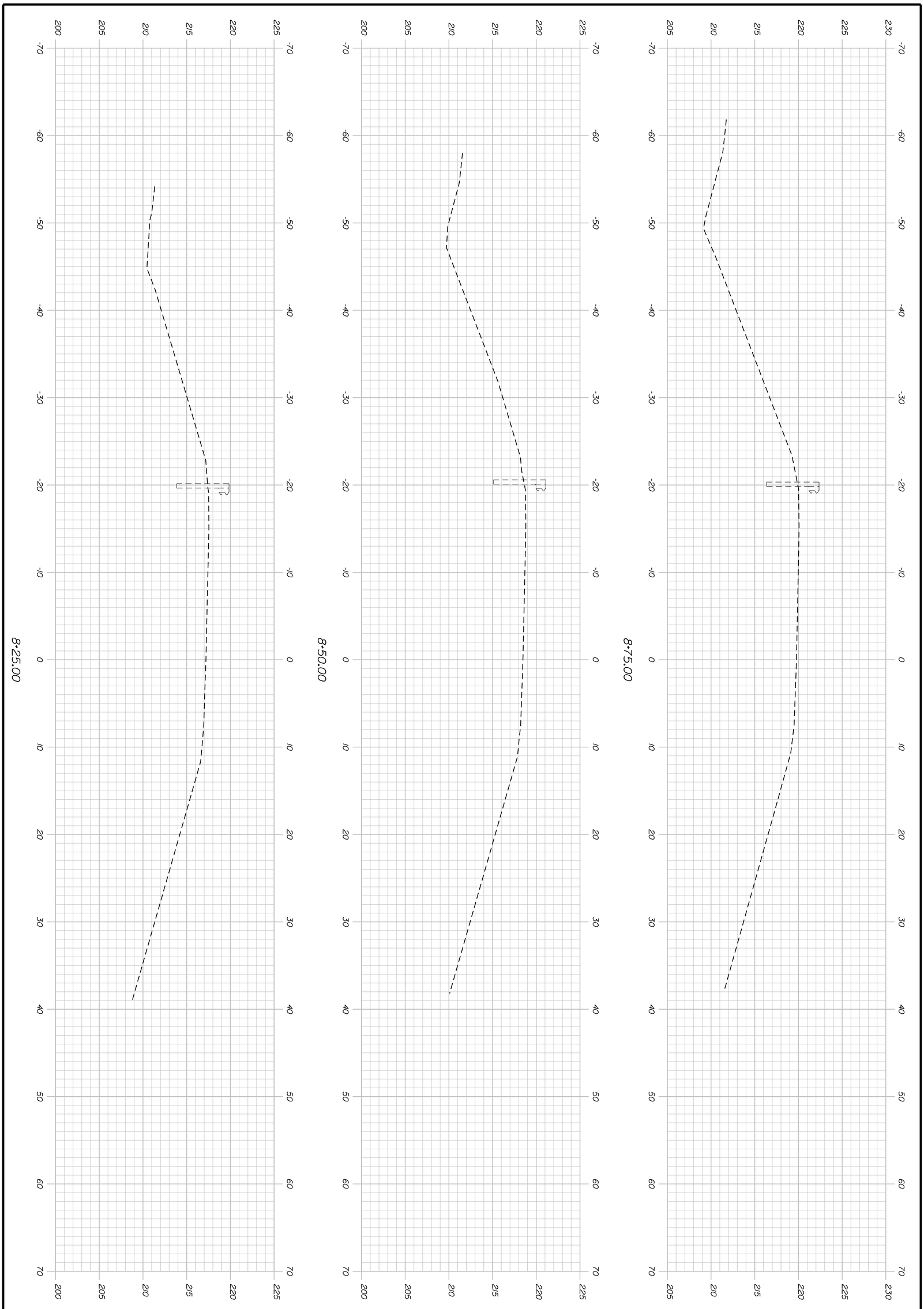

SHEET NUMBER 13 OF 18

AUGUSTA
EXIT 109B/WESTERN AVENUE

8+25.00 CROSS SECTIONS 8+75.00

PROJ. MANAGER $PROJMANAGER$	BY	DATE
DESIGN-DETAILED		
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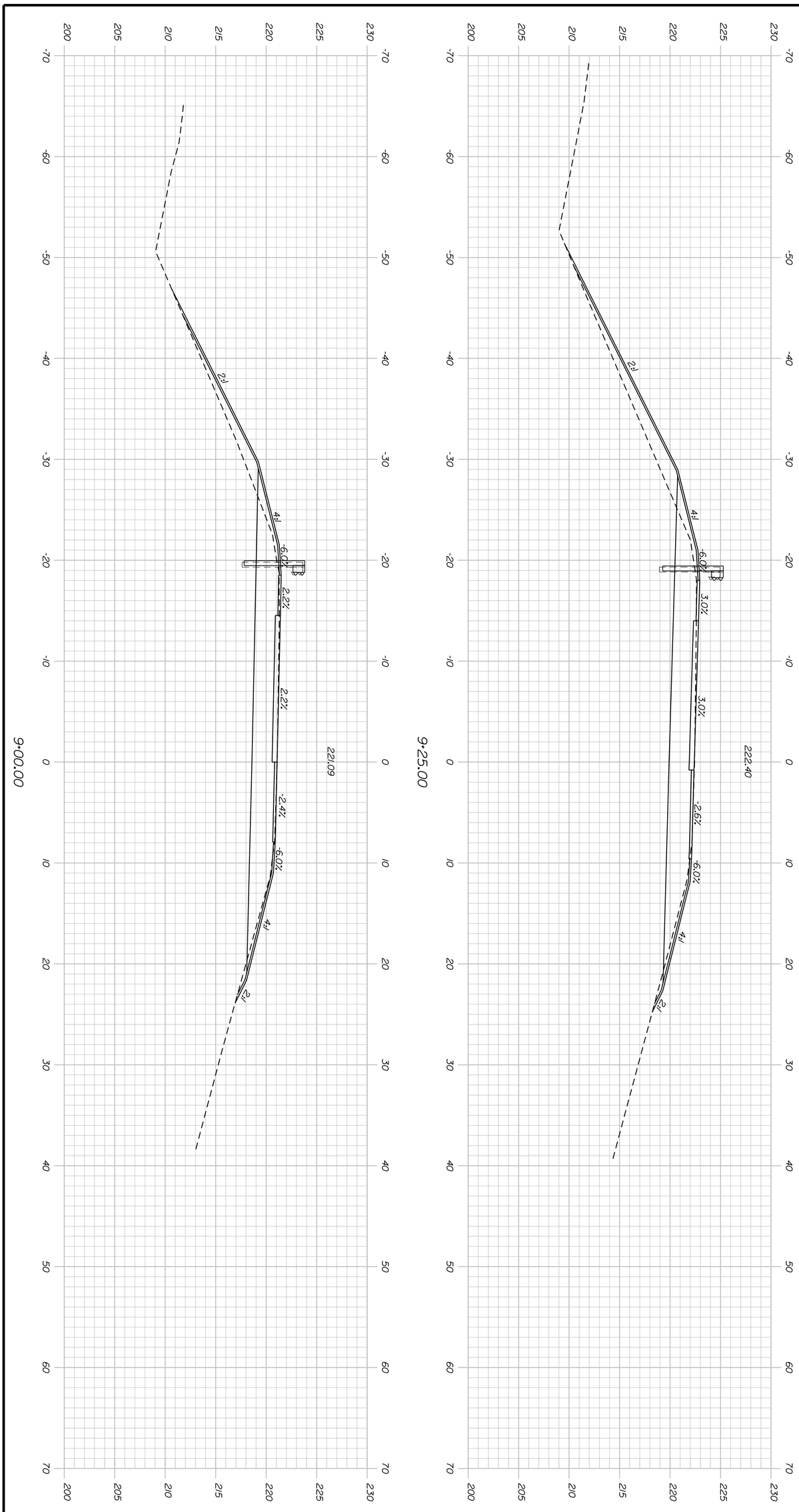
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN
STP-2021 (500) HIGHWAY PLANS

20215.00



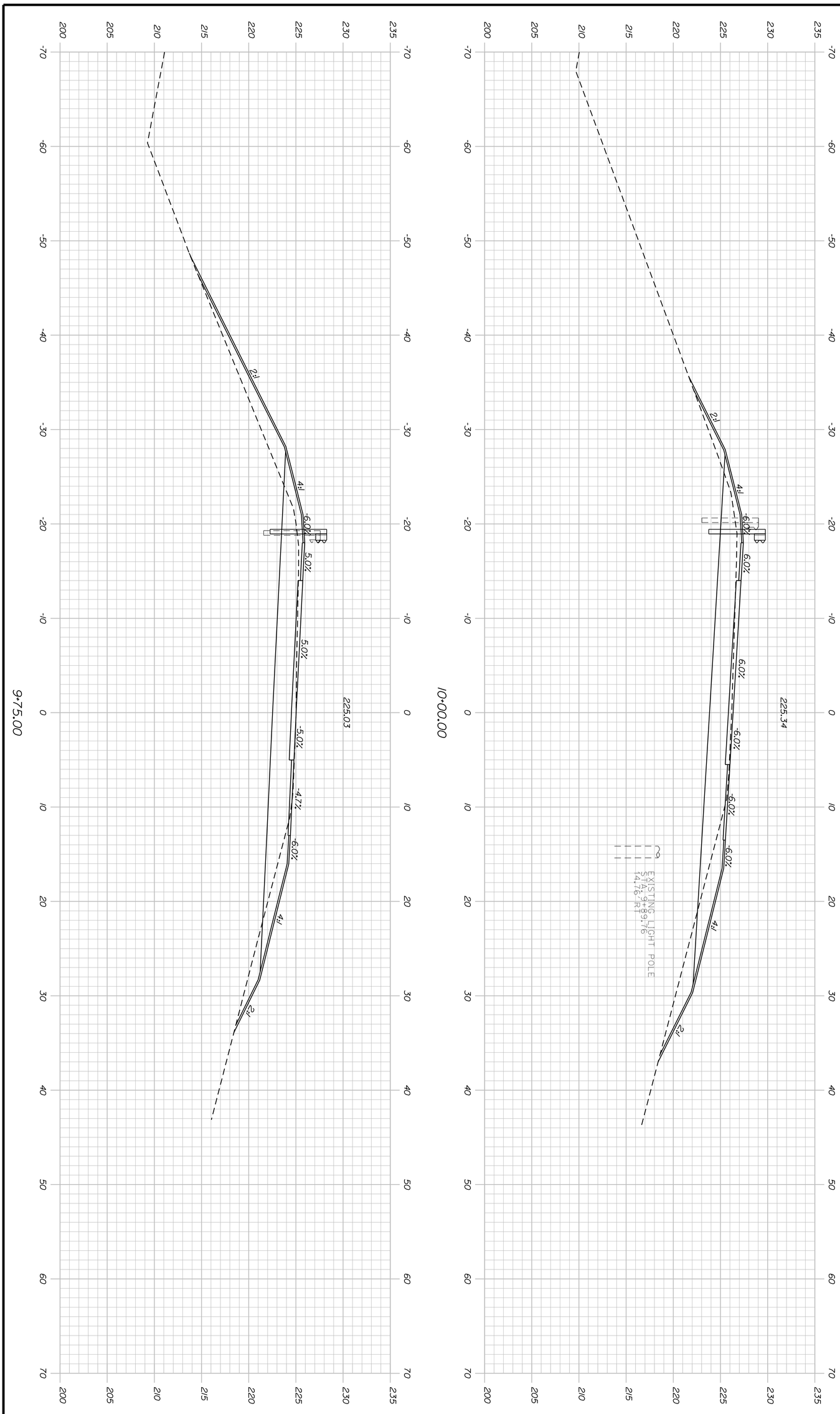
SHEET NUMBER 14 OF 18	AUGUSTA EXIT 109B/WESTERN AVENUE 9+00.00 CROSS SECTIONS 9+25.00	PROJ. MANAGER $PROJMANAGER$	BY	DATE	BPM SIGNATURE 12919 P.E. NUMBER 3-9-15 DATE
		DESIGN-DETAILED			
		CHECKED-REVIEWED			
		DESIGN2-DETAILED2			
		DESIGN3-DETAILED3			
		REVISIONS 1			
		REVISIONS 2			
		REVISIONS 3			
		REVISIONS 4			
		FIELD CHANGES			

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN
STP-2021 (500) HIGHWAY PLANS

20215.00



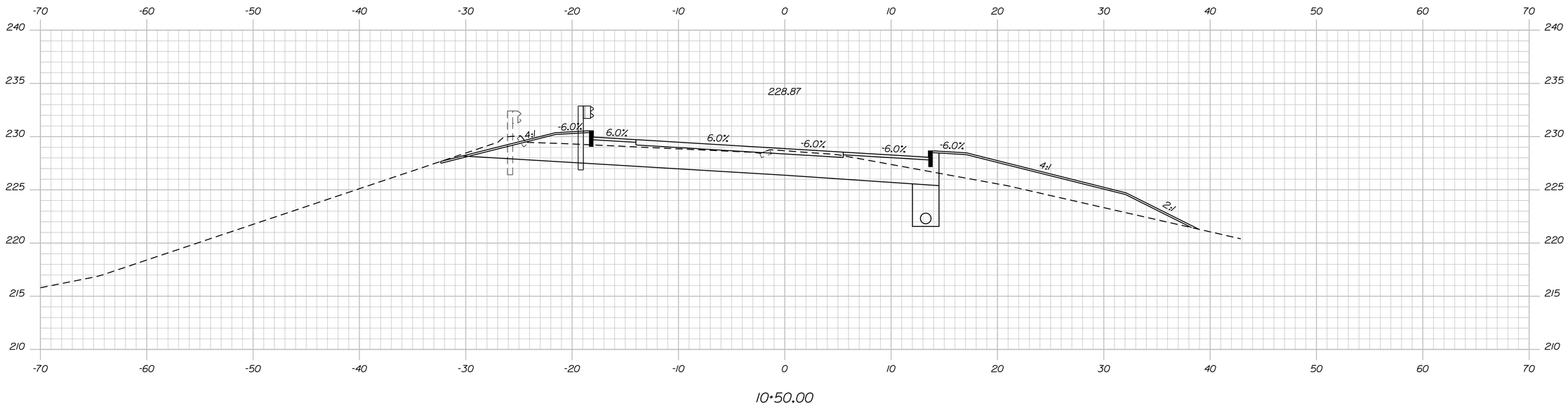
SHEET NUMBER 15 OF 18	AUGUSTA EXIT 109B/WESTERN AVENUE 9+75.00 CROSS SECTIONS 10+00.00	PROJ. MANAGER $PROJMANAGER$ / BY / DATE DESIGN-DETAILED CHECKED-REVIEWED DESIGN2-DETAILED2 DESIGN3-DETAILED3 REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	BPM SIGNATURE 12919 P.E. NUMBER 3-9-15 DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

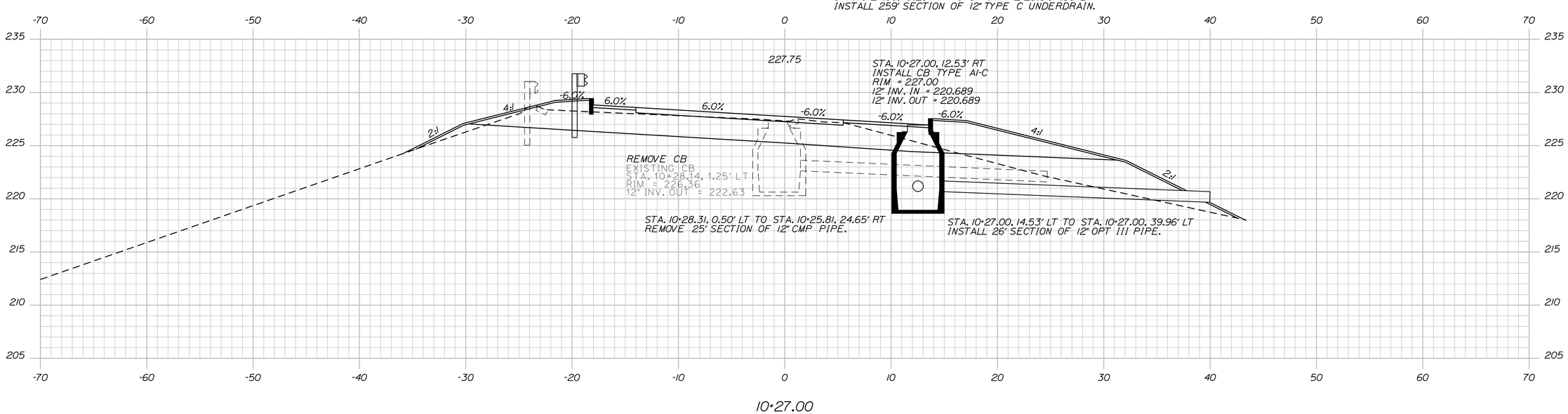
WIN STP-2021 (500) HIGHWAY PLANS

20215.00



10+50.00

STA. 10+27.00, 13.26' RT TO STA. WA 2+25.31, 7.56' LT
INSTALL 259' SECTION OF 12" TYPE C UNDERDRAIN.



10+27.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN
STP-2021 (500) HIGHWAY PLANS

20215.00

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

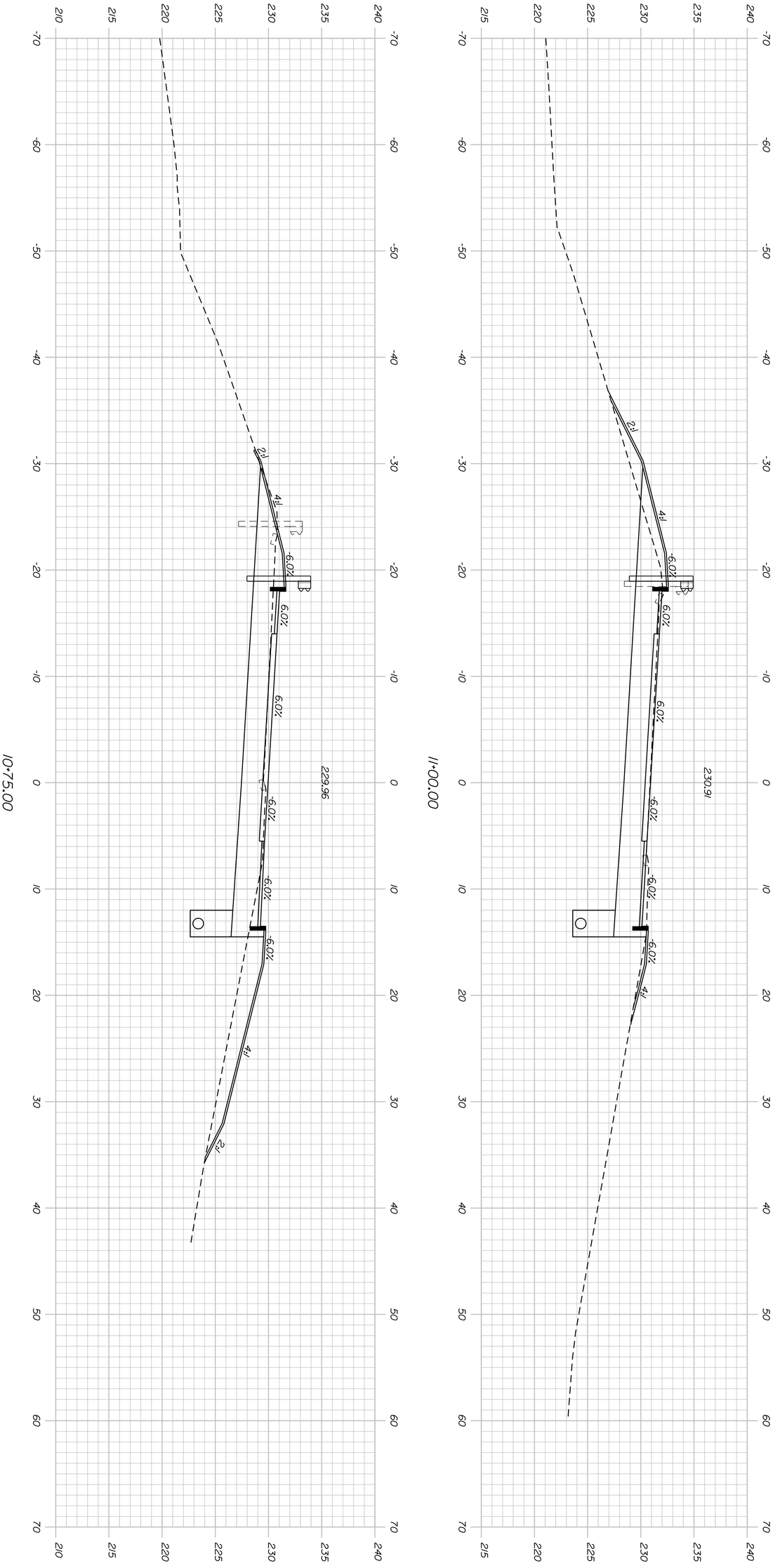
BPM
SIGNATURE
12919
P.E. NUMBER
3-9-15
DATE

AUGUSTA
EXIT 109B/WESTERN AVENUE

10+27.00 CROSS SECTIONS 10+50.00

SHEET NUMBER
16
OF 18

Filename: ...\Planset\Final\012_xsc_01.dgn Division: HIGHWAY Username: Date:3/9/2015



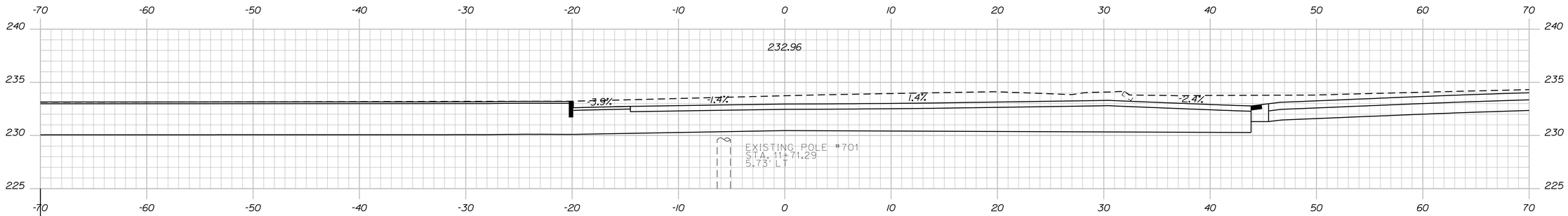
SHEET NUMBER 17 OF 18	AUGUSTA EXIT 109B/WESTERN AVENUE 10+75.00 CROSS SECTIONS 11+00.00	PROJ. MANAGER $PROJMANAGER$ / BY / DATE DESIGN-DETAILED CHECKED-REVIEWED DESIGN2-DETAILED2 DESIGN3-DETAILED3 REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	BPM SIGNATURE 12919 P.E. NUMBER 3-9-15 DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

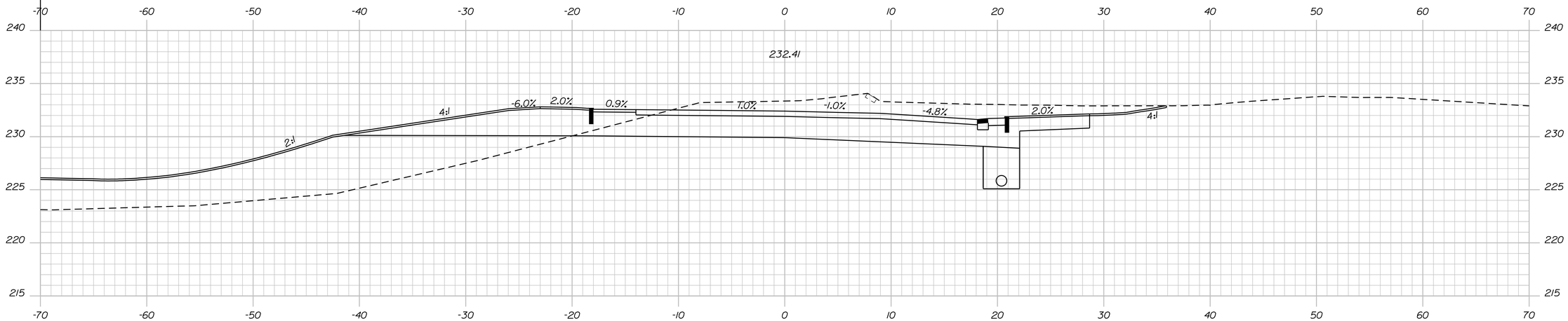
WIN STP-2021 (500)

WIN
STP-2021 (500) HIGHWAY PLANS

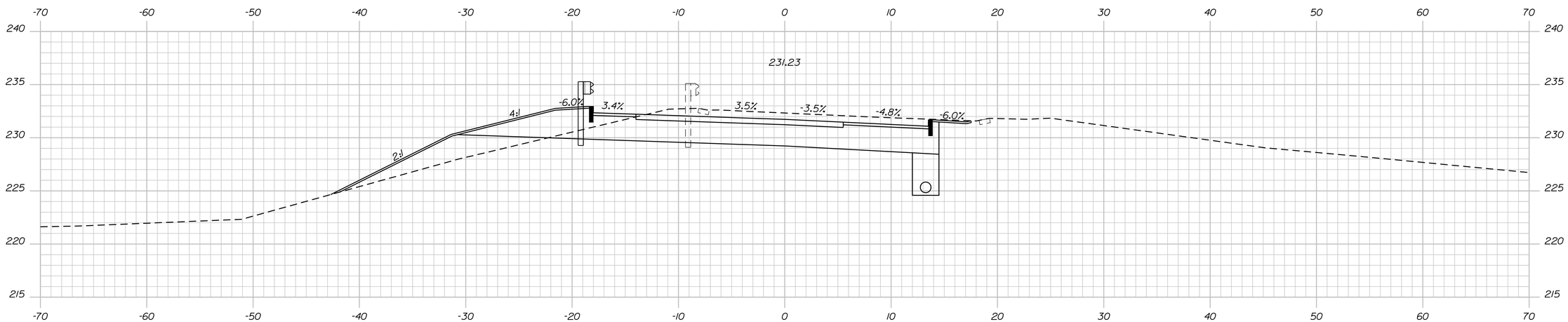
20215.00



11+75.00



11+50.00



11+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN STP-2021 (500)

WIN
STP-2021 (500) HIGHWAY PLANS

20215.00

PROJ. MANAGER $PROJMANAGER$	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BPM
SIGNATURE
12919
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3-9-15
DATE

AUGUSTA
EXIT 109B/WESTERN AVENUE

11+25.00 CROSS SECTIONS 11+50.00

SHEET NUMBER
18
OF 18

Filename: ...\Planset\Final\012_xsc_01.dgn Division: HIGHWAY Username: Date:3/9/2015