STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0016

JOHN ELIAS BALDACCI
GOVERNOR

DAVID A. COLE
COMMISSIONER

May 7, 2010
Subject: **Scarborough, Falmouth, Cumberland, Yarmouth, Freeport, South Portland & Portland**
Federal Project No: IM-1678(700)E, IM-1705(510)E, HPP-1705(520)E, HP-1563(400)E & IM-1779(300)E
State Pin No: 016787.00, 017055.10, 017055.20, 015634.00 & 017793.00
Amendment No. 2

Dear Sir/Ms:

Make the following changes to the bid Documents:

In the Bid Book (pages 4 thru 18), **REMOVE** the "SCHEDULE OF ITEMS", 16 pages dated 100430 (replaced in amendment #1) and **REPLACE** with the attached new "SCHEDULE OF ITEMS", 16 pages dated 100507.

In the Bid Book (page 49), "Construction Notes", on page 5 of 5; **CHANGE** Item 627.781 to read "**627.76**". Make this change in pen and ink.

In the Bid Book, after page 145, **ADD** the attached "SPECIAL PROVISION, SECTION 105, CONTROL OF WORK. (Cooperation Between Contractors)", one page undated.

In the Bid Book (page 148), SPECIAL PROVISION, SECTION 105, GENERAL SCOPE OF WORK, (LIMITATIONS OF OPERATIONS), Note 4 second sentence; **CHANGE** the last words from "… Special Provision Note 6." to read "… Special Provision Note **5**." Make this change in pen and ink.

In the Bid Book, after page 154, **ADD** the attached "SPECIAL PROVISION, SECTION 105, GENERAL SCOPE OF WORK, (LIMITATIONS OF OPERATIONS), Maine Turnpike toll plaza", two pages undated.

In the Bid Book (page 155), SPECIAL PROVISION, SECTION 105, CONTROL OF WORK, (Supplemental Liquidated Damages), **ADD** "**IM-1779(300)E, PIN 17793.00**" to the list in the top right corner of the page in pen and ink.

PRINTED ON RECYCLED PAPER

THE MAINE DEPARTMENT OF TRANSPORTATION IS AN AFFIRMATIVE ACTION - EQUAL OPPORTUNITY EMPLOYER

In the Bid Book (page 156), SPECIAL PROVISION, SECTION 105, CONTROL OF WORK, (Supplemental Liquidated Damages), page 2 of 2, first sentence (bold type); **CHANGE** "Note 9 & 5." to read "**Note 9**." Make this change in pen and ink.

In the Bid Book (page 159), SPECIAL PROVISION, SECTION 107, PROSECUTION AND PROGRESS, (Contract Time), Note 3 **ADD** the following to the end of Note 3 in pen and ink; "**as described in Special Provision 105, General Scope of Work, Limitations of Operations, PIN 16787.00, Note 9.**"

In the Bid Book (pages 303 and 304), **REMOVE** in its entirety, "SPECIAL PROVISION, SECTION 656, Temporary Soil Erosion and Water Pollution Control", for PIN 15634.00, 2 pages dated 03/01/10.

In the Bid Book, after page 247 **ADD** the following two items:

SPECIAL PROVISION, SECTION 606, GUARDRAIL, (Modify Only), 1 page dated May 7, 2010.

NOTES: MODIFIED THRIE BEAM BLOCKOUT, two pages undated.

In the Plans for PIN 15634.00 (I-295 Exit 7), **REPLACE** the following Plan Sheets with the attached new Plan Sheets:

SHEET NUMBER 5 OF 76
SHEET NUMBER 6 OF 76
SHEET NUMBER 8 OF 76
SHEET NUMBER 15 OF 76
SHEET NUMBER 51 OF 76
SHEET NUMBER 57 OF 76

NOTE: Plan Sheets will be FedExed/mailed to plan holders who purchased plans in the size and quantity purchased.

The following questions have been received:

Question: Please provide details for item 606.561, Double Guardrail with Rub Rail.

Response: The median guardrail shall be provided and installed in accordance with the attached AASHTO detail SGM06a-b, the Special Provisions and the following:

Use the composite block option
Use the C6x8.2 channel option
Use 8' posts as noted on the Special Provision drawing.

Please see the attached Detail.

Question: Please advise the type of rub rail to be used on item 606.561. Is it a rolled 10 ga plate rub rail or a structural C6x8.2# channel?

Response: The median guardrail shall be provided and installed in accordance with the attached AASHTO detail SGM06a-b, the Special Provisions and the following:

Use the composite block option
Use the C6x8.2 channel option
Use 8' posts as noted on the Special Provision drawing.

Please see the attached Detail

Question: Can you please provide as-built drawings for each bridge?

Response: The as-built files (in .pdf format) have been uploaded to the FTP site under a folder called /PIN 17793.00 - I295 Bridge Rehab. Please use the following link to get to the site. ftp://ftp.state.me.us/mainedot/PIN%2017793.00%20I295%20Bridge%20Rehab/

Question: This project requires a median terminal system to be installed concurrently with the placement of each section of beam guardrail. Some runs of median guardrail are too long for us to finish in one night and also install a median terminal system. Is there an approved temporary end for the median double guardrail?

Response: An NCHRP 350 or MASH approved temporary crash attenuator device/system must be installed, according to manufacturer's recommendations, at any unfinished guardrail run if the complete run with permanent end terminal cannot be finished by the end of the work shift. The system(s) that the contractor intends to use shall be submitted and approved by the Resident prior to start of work on project. Temporary protection of unfinished guardrail runs shall be considered incidental to the existing guardrail installation items.

Question: For bridges that are not allowed long term closures, does the MaineDOT intend for the Contractor to mill, clean, membrane and pave the bridges all in the same shift?

Response: It is not anticipated that the Contractor will be able to mill, clean, membrane, and pave the bridge decks in a single shift on the bridges that are long term closures not allowed on. The Contractor will be required to schedule and phase the work in such a manner that the roadway can be reopened to traffic during the times required by the Contract. This may require multiple mobilizations including but not limited to joint modification, deck pavement removal, concrete repair, membrane and paving crews for each phase of the work on each structure.

Question: Is barrier wall required for milling and deck rehabilitation operations provided all the rail post and transition barrier are in place?

Response: Barrier wall is required for milling and deck rehabilitation operations at all sites where long term lane closures are proposed.

Question: Special Provision, Section 652, page 4 of 4, “roadside Recovery Area” Section contradicts itself. Please clarify the limits of the areas that will be allowed for short and long term storage for materials, vehicles and equipment.

Response: Materials, vehicles and equipment shall not be stored within 15 feet of the edge of the established travel lanes unless it is within a properly delineated work area. For example when working in the closed lane, material, vehicles and equipment necessary for the work being performed is allowed within the work zone. Material and equipment shall be removed when there is no work being performed.

Material and equipment can be stored for up to 12 hours in the area from 15' to 30' from the edge of the established travel lanes if approved by the Department and marked by drums and cones.

Material and equipment can be stored beyond 30' from the edge of the established travel lanes.

Question: If reinforcing steel is needed for deck repairs, how will it be paid for?

Response: Removal of deteriorated reinforcing steel and installation of new reinforcing steel, if required, will be paid under hand labor. Small tools shall be incidental to the hand labor item. The Contractor shall be reimbursed for new reinforcing steel and tension couplers, if required, at cost plus 15% material markup.

Question: Is a material transfer machine required for ramp paving?

Response: See Special Provision 403, Hot Mix Asphalt Overlay, IM-1678(700)E (Bit Box), Note 19 - The use of a MTV shall be required on the exit 8 on-ramp and the exit 2 off ramp. These are the only ramps where an MTV is required.

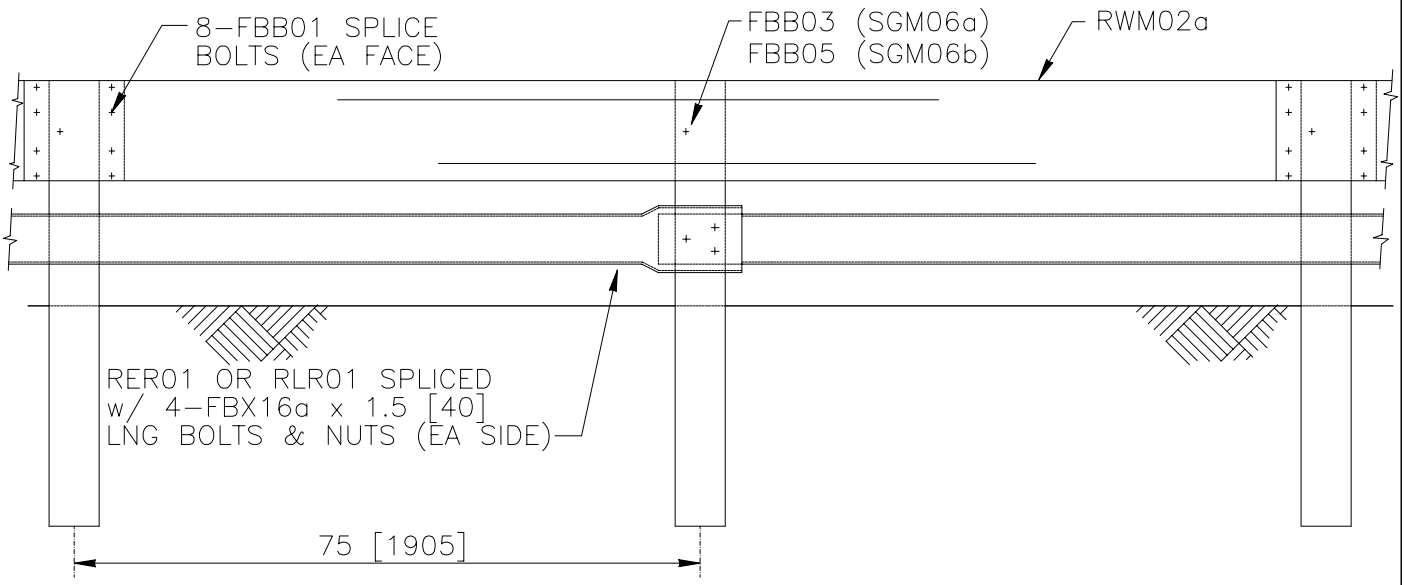
Question: Sheet 3 of the bridge plans, Structural Note 17 – None of the bridges are scheduled to be scarified. Will the MaineDOT allow the use of a mill for pavement removal?

Response: The use of a milling machine to remove bridge deck pavement will be permitted, however as stated in Structural Note 17 on page 3 of the bridge plans, this will be subject to the requirements stated in paragraph 2 in Subsection 202.031 Removing Existing Bituminous Pavement and Concrete Wearing Surface for Bridges and Scarifying the Top of Deck in the Standard Specifications.

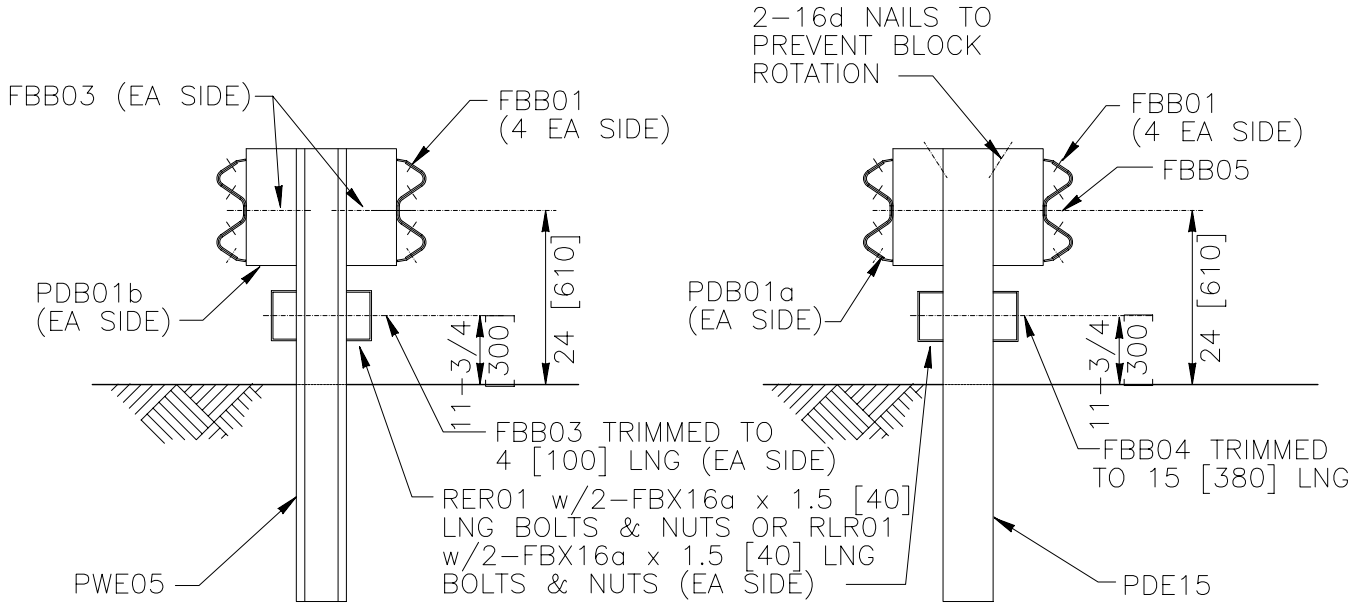
Consider these changes and information prior to submitting your bid on May 12, 2010.

Sincerely,

Scott Bickford
Contracts & Specifications Engineer



ELEVATION



SGM06a

SGM06b

1994

STRONG–POST MEDIAN BARRIER WITH RUB RAIL

SGM06a–b	
SHEET NO.	DATE:
1 of 2	7/25/2005

INTENDED USE

Strong-post W-beam median barriers should be used in locations where a maximum dynamic deflection of 24 inches [600 mm] or less is acceptable. W-beam barriers should be anchored and terminated using a suitable end treatment. Both SGM-06a (steel posts) and SGM-06b (timber posts) with wood or approved plastic blockouts are Test Level 3 barriers.

COMPONENTS

Unit length = 150 inches [3810 mm]

	Designator	Component	System	Number
	FBB01	Splice bolt and nut	a-b	16
	FBB03	Guardrail-post bolt and nut	a	4
	FBB03	Bolt trimmed to 4 in [100 mm]	a	4
	FBB04	Bolt trimmed to 15 in [380 mm]	b	2
	FBB05	Guardrail-post bolt and nut	b	2
	FBX16a	Rub rail splice bolts (1.5 in [40 mm]) and nuts	a-b	8
	PDB01a	Timber post blockout	b	4
	PDB01b	Timber post blockout	a	4
	PDE15	Timber post	b	2
	PWE05	Steel post	a	2
	RER01	Bent-plate rub rail	a-b	2
or	RLR01	Channel rub rail	a-b	2
	RWM02a	W-beam rail	a-b	2

APPROVALS

FHWA Acceptance Letter B-64.

REFERENCES

M.E. Bronstad, J.D. Michie, and J.D. Mayer, Jr., *Performance of Longitudinal Traffic Barriers*, National Cooperative Highway Research Program Report 289, Transportation Research Board, 1987.

J.D. Michie and M.E. Bronstad, *Location, Selection and Maintenance of Highway Traffic Barriers*, National Cooperative Highway Research Program Report 118, Highway Research Board, 1971.

R.N. Field and R.H. Prysok, *Dynamic Full-Scale Impact Tests of Double-Block-out Metal Beam Carriers and Metal Beam Guard Railing*, California Division of Highway, 1965.

CONTACT INFORMATION

Federal Highway Administration
Office of Safety
400 Seventh Street, SW
Washington, DC 20590
202-366-2288

STRONG-POST MEDIAN BARRIER WITH RUB RAIL

SGM06a-b

SHEET NO.	DATE
2 of 2	7/25/05

CONTRACT ID: 015634.00 PROJECT(S): HP-1563(400)E
IM-1678(700)E
017055.10
OTHERS

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 PROJECT ITEMS					
0010	201.11 CLEARING	0.500 AC				
0020	202.202 REMOVING PAVEMENT SURFACE	311190.000 SY				
0030	202.205 RUMBLE STRIPS - SHOULDER	34000.000 LF				
0040	202.30 REMOVING EXISTING CONCRETE WEARING SURFACE	LUMP	LUMP			
0050	203.20 COMMON EXCAVATION	7800.000 CY				
0060	203.24 COMMON BORROW	100.000 CY				
0070	203.25 GRANULAR BORROW	100.000 CY				
0080	205.512 WIDENING OF EXISTING SHOULDER	850.000 SY				
0090	206.061 STRUCTURAL EARTH EXCAVATION - DRAINAGE AND MINOR STRUCTURES, BELOW GRADE	50.000 CY				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0100	304.09 AGGREGATE BASE COURSE - CRUSHED	950.000 CY				
0110	304.10 AGGREGATE SUBBASE COURSE - GRAVEL	6745.000 CY				
0120	403.208 HOT MIX ASPHALT 12.5 MM HMA SURFACE	5200.000 T				
0130	403.2081 12.5 MM POLYMER MODIFIED HOT MIX ASPHALT	21075.000 T				
0140	403.209 HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS)	30.000 T				
0150	403.210 HOT MIX ASPHALT 9.5 MM	150.000 T				
0160	403.2101 9.5 MM POLYMER MODIFIED HMA	650.000 T				
0170	403.211 HOT MIX ASPHALT (SHIMMING)	2100.000 T				
0180	403.213 HOT MIX ASPHALT 12.5 MM BASE	1650.000 T				
0190	403.2131 12.5 MM POLYMER MODIFIED HMA BASE	1445.000 T				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS		UNIT PRICE DOLLARS	CTS	BID AMOUNT DOLLARS	CTS
0200	409.15 BITUMINOUS TACK COAT - APPLIED	15600.000	G				
0210	411.10 UNTREATED AGGREGATE SURFACE COURSE (TRUCK MEASURE)	220.000	CY				
0220	424.3331 ASPHALT LOW MODULUS CRACK SEALER, APPLIED	5000.000	LB				
0230	424.3333 LOW MODULUS JOINT SEALER, APPLIED	68000.000	LF				
0240	429.34 GRID/ FABRIC FABRIC COMPOSITE PAVEMENT INTERLAYER	1000.000	SF				
0250	502.29 STRUCTURAL CONCRETE WEARING SURFACE ON BRIDGES	LUMP		LUMP			
0260	502.70 BRIDGE DRAINS TYPE A	12.000	EA				
0270	502.70 BRIDGE DRAINS TYPE C	20.000	EA				
0280	502.701 BRIDGE DRAIN GRATE MODIFICATION	52.000	EA				
0290	504.07 CONCRETE PIPE TIES	24.000	GP				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0300	507.0926 FURNISH ALUMINUM BRIDGE RAIL COMPONENTS	LUMP	LUMP			
0310	507.0927 ALUMINUM BRIDGE RAIL, 2 BAR POST REPLACEMENT	8.000 EA				
0320	507.0928 ALUMINUM BRIDGE RAIL, RAIL SECTION REPLACEMENT	720.000 LF				
0330	507.30 ALUMINUM RAIL BAR SPLICE RETROFIT	24.000 EA				
0340	508.14 HIGH PERFORMANCE WATERPROOFING MEMBRANE	LUMP	LUMP			
0350	515.21 PROTECTIVE COATING FOR CONCRETE SURFACES	LUMP	LUMP			
0360	518.39 REPAIRING GRANITE CURB BEDDING MORTAR	930.000 LF				
0370	518.50 REPAIR OF UPWARD FACING SURFACES - TO REINFORCING STEEL < 7.9 IN.	8070.000 SF				
0380	518.51 REPAIR OF UPWARD FACING SURFACES - BELOW REINFORCING STEEL < 7.9 IN.	2180.000 SF				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0390	518.52 REPAIR OF UPWARD FACING SURFACES > 7.9 IN.	21.000 CY				
0400	518.60 REPAIR OF VERTICAL SURFACES < 7.9 IN.	180.000 SF				
0410	518.61 REPAIR OF VERTICAL SURFACES > 7.9 IN.	18.000 CY				
0420	520.241 BRIDGE JOINT MODIFICATION TYPE 1	1.000 EA				
0430	520.242 BRIDGE JOINT MODIFICATION TYPE 2	17.000 EA				
0440	520.243 BRIDGE JOINT MODIFICATION TYPE 3	1.000 EA				
0450	520.244 BRIDGE JOINT MODIFICATION TYPE 4	2.000 EA				
0460	520.245 BRIDGE JOINT MODIFICATION TYPE 5	3.000 EA				
0470	520.246 BRIDGE JOINT MODIFICATION TYPE 6	1.000 EA				
0480	520.247 BRIDGE JOINT MODIFICATION TYPE 7	7.000 EA				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0490	523.5304 STEEL BEARINGS, EXPANSION, ROCKER	10.000 EA				
0500	524.301 TEMPORARY STRUCTURAL SUPPORT	LUMP	LUMP			
0510	526.301 TEMPORARY CONCRETE BARRIER TYPE I	LUMP	LUMP			
0520	526.34 PERMANENT CONCRETE TRANSITION BARRIER	48.000 EA				
0530	527.301 ENERGY ABSORBING SYSTEM (C-A-T)	16.000 EA				
0540	527.34 WORK ZONE CRASH CUSHIONS	14.000 UN				
0550	603.159 12 INCH CULVERT PIPE OPTION III	32.000 LF				
0560	603.165 15 INCH REINFORCED CONCRETE PIPE CLASS III	72.000 LF				
0570	603.179 18 INCH CULVERT PIPE OPTION III	35.000 LF				
0580	603.195 24 INCH REINFORCED CONCRETE PIPE CLASS III	144.000 LF				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0590	603.7424 REMOVE & RELAY 24 INCH CONCRETE PIPE	16.000 LF				
0600	604.072 CATCH BASIN TYPE A1-C	3.250 EA				
0610	604.092 CATCH BASIN TYPE B1-C	8.000 EA				
0620	604.16 ALTERING CATCH BASIN TO MANHOLES	2.000 EA				
0630	604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	6.000 EA				
0640	604.182 CLEAN EXISTING CATCH BASIN AND MANHOLE	130.000 EA				
0650	604.244 CATCH BASIN TYPE F4	1.000 EA				
0660	605.09 6 INCH UNDERDRAIN TYPE B	1210.000 LF				
0670	605.11 12 INCH UNDERDRAIN TYPE C	750.000 LF				
0680	606.1721 BRIDGE TRANSITION - TYPE 1	56.000 EA				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0690	606.178 GUARDRAIL BEAM	500.000 LF				
0700	606.24 GUARDRAIL TYPE 3D - SINGLE RAIL	862.500 LF				
0710	606.265 TERMINAL END - SINGLE RAIL - GALVANIZED STEEL	11.000 EA				
0720	606.352 REFLECTORIZED BEAM GUARDRAIL DELINEATORS	1500.000 EA				
0730	606.353 REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	127.000 EA				
0740	606.356 UNDERDRAIN DELINEATOR POST	35.000 EA				
0750	606.363 GUARDRAIL REMOVE AND DISPOSE	4480.000 LF				
0760	606.3651 GUARDRAIL-REMOVE, MODIFY, AND RESET EXISTING TO 3D	1400.000 LF				
0770	606.367 REPLACE UNUSABLE EXISTING GUARDRAIL POSTS	40.000 EA				
0780	606.48 SINGLE GALVANIZED STEEL POST	40.000 EA				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0790	606.561 GUARDRAIL TYPE 3 - DOUBLE RAIL WITH RUB RAIL BACK TO BACK RAIL IN MEDIAN	22700.000 LF				
0800	606.651 MODIFIED GUARDRAIL THRIE BEAM - SINGLE RAIL	2565.000 LF				
0810	606.66 TERMINAL END THRIE BEAM	1.000 EA				
0820	606.70 TRANSITION SECTION THRIE BEAM	1.000 EA				
0830	606.79 GUARDRAIL 350 FLARED TERMINAL	20.000 EA				
0840	609.31 CURB TYPE 3	1200.000 LF				
0850	609.34 CURB TYPE 5	374.000 LF				
0860	609.38 RESET CURB TYPE 1	550.000 LF				
0870	609.40 RESET CURB TYPE 5	800.000 LF				
0880	610.08 PLAIN RIPRAP	100.000 CY				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0890	610.18 STONE DITCH PROTECTION	20.000 CY				
0900	613.319 EROSION CONTROL BLANKET	2650.000 SY				
0910	615.07 LOAM	500.000 CY				
0920	618.1401 SEEDING METHOD NUMBER 2 - PLAN QUANTITY	250.000 UN				
0930	619.1201 MULCH - PLAN QUANTITY	250.000 UN				
0940	619.1401 EROSION CONTROL MIX	250.000 CY				
0950	620.58 EROSION CONTROL GEOTEXTILE	1350.000 SY				
0960	621.01 EVERGREEN TREES (8 INCH - 12 INCH)	50.000 EA				
0970	621.014 EVERGREEN TREES (18 INCH - 24 INCH) GROUP A	50.000 EA				
0980	621.025 EVERGREEN TREES (3 FOOT - 4 FOOT) GROUP A	60.000 EA				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0990	621.026 EVERGREEN TREES (3 FOOT - 4 FOOT) GROUP B	50.000 EA				
1000	621.541 DECIDUOUS SHRUBS (18 INCH - 24 INCH) GROUP B	240.000 EA				
1010	626.11 PRECAST CONCRETE JUNCTION BOX	10.000 EA				
1020	626.22 NON-METALLIC CONDUIT	1850.000 LF				
1030	626.32 24 INCH FOUNDATION	2.000 EA				
1040	626.331 36 INCH FOUNDATION	1.000 EA				
1050	627.18 12 " SOLID WHITE PAVEMENT MARKING	10066.000 LF				
1060	627.744 6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	240000.000 LF				
1070	627.75 WHITE OR YELLOW PAVEMENT & CURB MARKING	2500.000 SF				
1080	627.76 TEMPORARY PVMT. MARK LINE, W OR YELLOW	LUMP	LUMP			

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1090	627.77 REMOVING PAVEMENT MARKINGS	17600.000 SF				
1100	627.781 TEMPORARY 6 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	460000.000 LF				
1110	629.05 HAND LABOR, STRAIGHT TIME	290.000 HR				
1120	631.10 AIR COMPRESSOR (INCLUDING OPERATOR)	154.000 HR				
1130	631.11 AIR TOOL (INCLUDING OPERATOR)	154.000 HR				
1140	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	75.000 HR				
1150	631.122 MINI ALL-PURPOSE EXCAVATOR (INCLUDING OPERATOR)	40.000 HR				
1160	631.133 SKID STEER (INCLUDING OPERATOR)	50.000 HR				
1170	631.14 GRADER (INCLUDING OPERATOR)	30.000 HR				
1180	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	110.000 HR				

CONTRACT ID: 015634.00 PROJECT(S): HP-1563(400)E
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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1190	631.18 CHAIN SAW RENTAL (INCLUDING OPERATOR)	30.000 HR				
1200	631.22 FRONT END LOADER (INCLUDING OPERATOR)	10.000 HR				
1210	631.32 CULVERT CLEANER (INCLUDING OPERATOR)	40.000 HR				
1220	639.18 FIELD OFFICE TYPE A	1.000 EA				
1230	643.71 TRAFFIC SIGNAL MODIFICATION	LUMP	LUMP			
1240	643.83 VIDEO DETECTION SYSTEM NORTHBOUND	LUMP	LUMP			
1250	643.83 VIDEO DETECTION SYSTEM SOUTHBOUND	LUMP	LUMP			
1260	643.86 TRAFFIC SIGNAL LOOP DETECTORS	4.000 EA				
1270	643.92 PEDESTAL POLE	2.000 EA				
1280	645.103 DEMOUNT GUIDE SIGN	5.000 EA				

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1290	645.106 DEMOUNT REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN	1.000 EA				
1300	645.12 OVERHEAD GUIDE SIGN: LOCATION 1: I-295 AT EXIT 7	LUMP	LUMP			
1310	645.12 OVERHEAD GUIDE SIGN: LOCATION 2: I-295 AT EXIT 7	LUMP	LUMP			
1320	645.271 REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGNS, TYPE I	20.000 SF				
1330	645.306 FLEXIBLE REFLECTORIZED DELINEATOR BOLTED	290.000 EA				
1340	645.306 FLEXIBLE REFLECTORIZED DELINEATOR DRIVEN	310.000 EA				
1350	652.30 FLASHING ARROW BOARD	7.000 EA				
1360	652.31 TYPE I BARRICADE	25.000 EA				
1370	652.311 TYPE II BARRICADE	25.000 EA				
1380	652.312 TYPE III BARRICADE	80.000 EA				

CONTRACT ID: 015634.00 PROJECT(S): HP-1563(400)E
IM-1678(700)E
017055.10
OTHERS

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1390	652.32 BATTERY OPERATED LIGHT	15.000 EA				
1400	652.33 DRUM	800.000 EA				
1410	652.34 CONE	1000.000 EA				
1420	652.35 CONSTRUCTION SIGNS	6600.000 SF				
1430	652.36 MAINTENANCE OF TRAFFIC CONTROL DEVICES	186.000 CD				
1440	652.38 FLAGGER	5125.000 HR				
1450	652.381 TRAFFIC OFFICER	225.000 HR				
1460	652.41 PORTABLE CHANGEABLE MESSAGE SIGN	12.000 EA				
1470	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP	LUMP			
1480	658.20 ACRYLIC LATEX COLOR FINISH, GREEN	150.000 SY				

CONTRACT ID: 015634.00 PROJECT(S): HP-1563(400)E
IM-1678(700)E
017055.10
OTHERS

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1490	659.10 MOBILIZATION	LUMP	LUMP			
	SECTION 0001 TOTAL					
	TOTAL BID					

HP-1563(400)E, PIN 15634.00
IM-1678(700)E, PIN 16787.00
IM-1705(510)E, PIN 17055.10
HPP-1705(520)E, PIN 17055.20
IM-1779(300E), PIN 17793.00
Portland/Scarborough-Falmouth
Portland-Yarmouth/ South Portland-Portland
South Portland - Falmouth
I-295 Southbound

SPECIAL PROVISION
SECTION 105
CONTROL OF WORK
(Cooperation Between Contractors)

It is hereby brought to the Contractor's attention that the Department intends to award a contracts within the corridor and adjacent to the limits of this contract, which may be in progress simultaneously.

The Contractor shall cooperate with other Contractors at all times and provide project access as necessary and as directed by the Resident.

HP-1563(400)E, PIN 15634.00
IM-1678(700)E, PIN 16787.00
IM-1705(510)E, PIN 17055.10
HPP-1705(520)E, PIN 17055.20
IM-1779(300E), PIN 17793.00
Portland/Scarborough-Falmouth
Portland-Yarmouth/ South Portland-Portland
South Portland - Falmouth
I-295 Southbound

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(LIMITATIONS OF OPERATIONS)

Maine Turnpike toll plaza

Contractor vehicles used to install, maintain, and remove traffic control devices on the Maine Turnpike are granted free use of the Turnpike at the Interchange 42 (Scarborough) and Interchange 44 (Portland/ I-295) toll plaza while completing the traffic control operation. All other vehicles shall pay the required toll. The placement of traffic control devices on the Maine Turnpike shall be coordinated in advance with the Maine Turnpike Authority. The Contractor shall submit plans illustrating construction details and proposed locations. Signs shall be located behind guardrail or outside of the roadside recovery area or shall be installed on break away supports.

The contractor shall provide the Maine Turnpike with a copy of their certificate of insurance for a minimum of $1 million and have the Maine Turnpike named additionally insured.

The Contractor will not be allowed to use the median openings or the toll plaza on the Maine Turnpike to reverse direction unless the opening is located within a passing lane closures on both roadways.

The Contractor will not be allowed to change direction within the Toll Plaza area. The limits of this area extend from the terminals of the median guardrail north and south of the toll plaza.

The Contractor will be assessed a traffic control violation every time any employee of the Contractor, Subcontractor or Supplier is observed using a median opening or toll plaza area to change direction on the Maine Turnpike. The fine will be deducted from monies owed to the Contractor.

All work within 1500’ of the toll plaza shall be coordinated with the Maine Turnpike Authority. Deputy Director of Engineering & Building Maintenance, Bill Franklin, at 871-7771 x129 is the Maine Turnpike contact for Dig Safe and coordination.

The Contractor will be required to keep a minimum of two lanes in each direction open to traffic at the toll plaza during night hours. All toll lanes will be required to be open during day-light hours. The Contractor will not be allowed to close any lane(s) at the toll plaza without prior notification to the Maine Turnpike of at least two business days. The Authority requests advance notification of all planned lane closure/contractor activity within 1500 feet of plaza the week prior (every Thursday).

Traffic Control devices shall have a minimum spacing of 40’ within 300’ of the plaza.

SPECIAL PROVISION
SECTION 606
GUARDRAIL
(Modify Only)

Description. This work shall consist of modifying guardrail thrie beam rail at locations shown on the plans or as directed by the Resident.

Modifications include:

1. 14" deep steel block-out with triangular notch cut from the web.

2. Rectangular post bolt washers are eliminated.

3. Top of rail height is increased to 34".

4. Steel posts shall be 7' and set 6" further back then standard thrie

Materials. All new materials shall conform to the Standard Specifications and Special Details included with this Special Provision.

Method of Measurement. Modified Guardrail Thrie Beam – Single Rail will be measured by the linear foot from center to center of end posts along the slope of the rail, except where end connections are made to concrete structures, in which case, measurement will be made to the face of the structure.

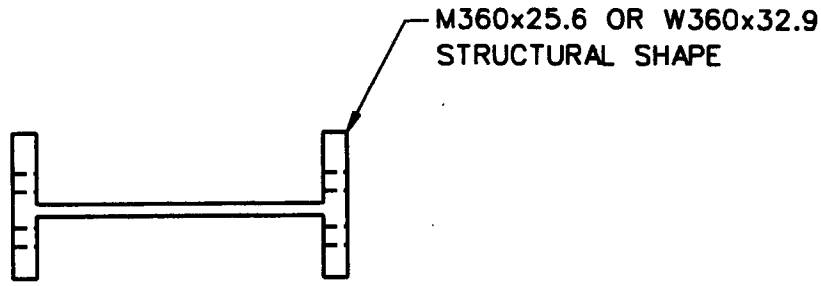
Basis of Payment. The accepted quantity of Modified Guardrail Thrie Beam – Single Rail will be paid for at the contract unit price per linear foot. Such payment will be full compensation for furnishing and installing beam, offset brackets, backup plates, all modifications as shown and all incidentals necessary to complete the guardrail installation.

Payment will be made under:

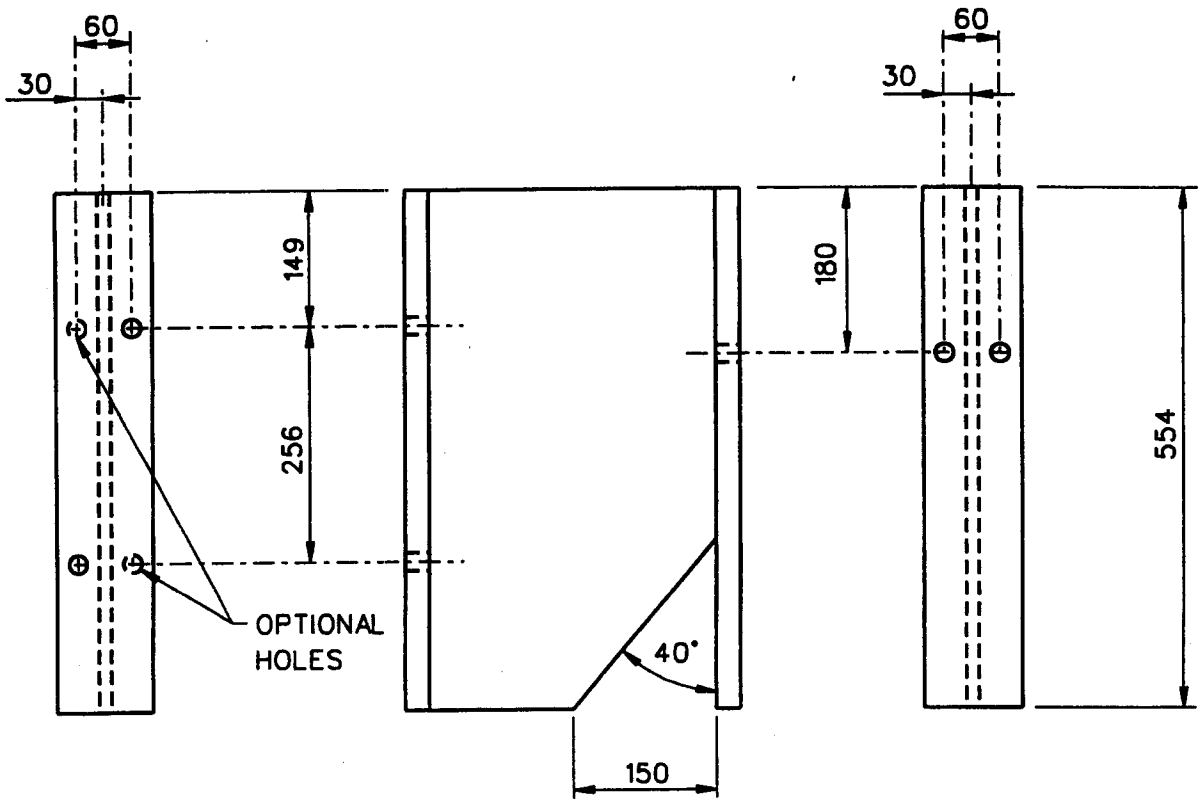
Pay Item		Pay Unit
606.651	Modified Guardrail Thrie Beam- Single Rail	Linear Foot

NOTES:

1. ALL HOLES ARE 20 D.



TOP



POST FACE SIDE TRAFFIC FACE

1994

MODIFIED THRIE BEAM BLOCKOUT

PWB03	
SHEET NO.	REF. NO.
1 of 2	

SPECIFICATIONS

The modified thrie-beam guardrail blockouts shall be manufactured using AASHTO M270M (ASTM A709M) Grade 250 steel unless corrosion resistant steel is required in which case the blockout shall be manufactured from AASHTO M270M (ASTM A709M) Grade 50W steel. The dimensions of the cross-section shall conform to either the W360x32.9 or the M360x25.6 sections as defined in AASHTO M160M (ASTM A6M).

After the section is cut and all holes are drilled or punched the component should be zinc-coated according to AASHTO M111 (ASTM A123) unless corrosion resistant steel is used in which case it should not be zinc-coated, painted or otherwise treated.

Dimensional tolerances not shown or implied are intended to be those consistent with the proper functioning of the part, including its appearance and accepted manufacturing practices.

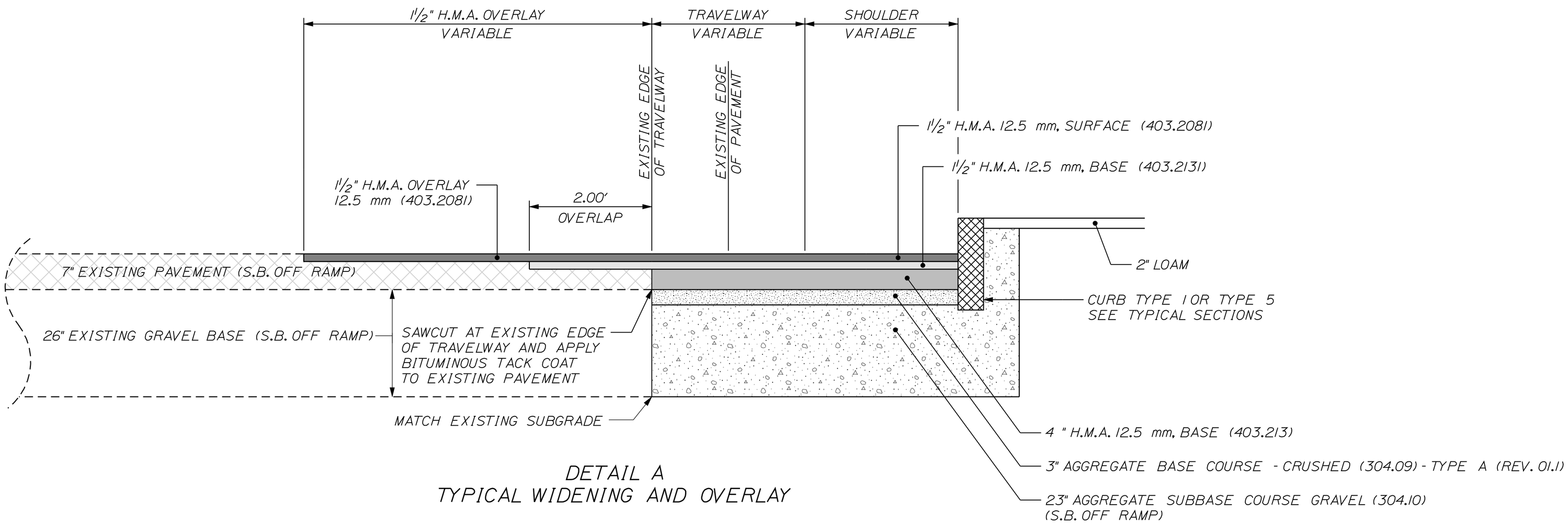
INTENDED USE

This blockout is a component of the SGR09b modified thrie beam guardrail and the SGM09b modified thrie beam median barrier. It is attached to post PWE04 using at least 2 zinc-coated 40-mm FBX16a bolts and nuts. The RWM02a rail elements are attached to the blockout using only one FBB02 bolt and nut.

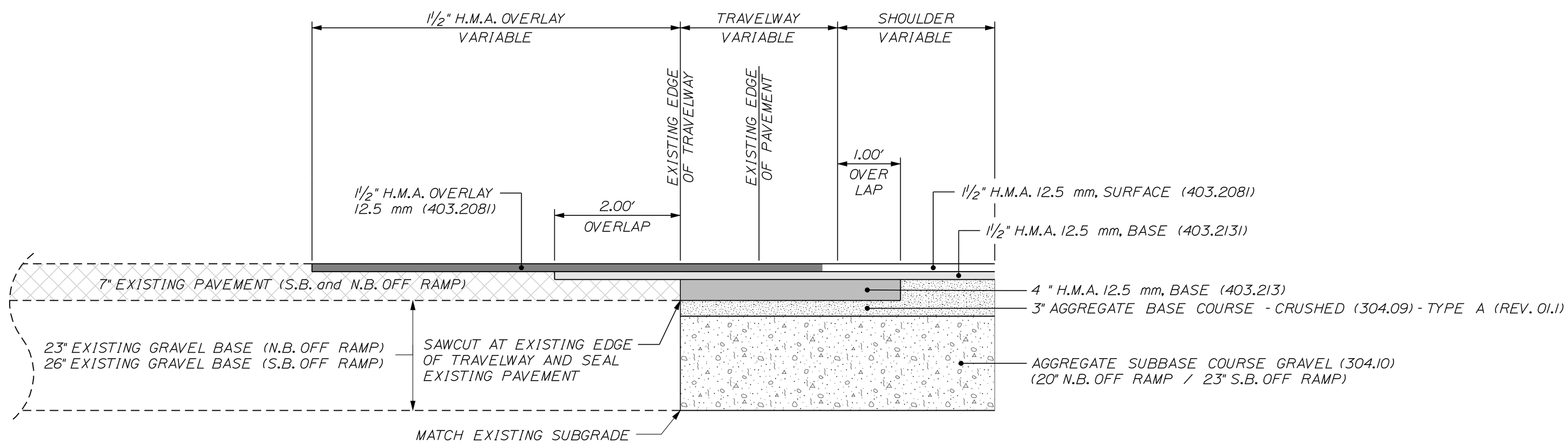
MODIFIED THRIE BEAM BLOCKOUT

PWB03	
SHEET NO.	DATE
2 of 2	04-01-95

PAVEMENT AND GRAVEL DETAILS



DETAIL A
TYPICAL WIDENING AND OVERLAY



DETAIL B
TYPICAL WIDENING AND OVERLAY

REV. 01.1 - TYPE A ADDED TO 3" AGGREGATE BASE COURSE - CRUSHED (304.09)

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HP-1563(400)E

PIN 15634.00

HIGHWAY PLANS

PROJ. MANAGER	ERNEST MARTIN	BY	DATE
DESIGN-DETAILED	M. MORIN	MRP	MAR 2010
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			5-05-2010
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
I - 295 EXIT 7

TYPICAL SECTIONS

SHEET NUMBER

5

OF 76

Filename: ...\highway\msto\005_Typical_4.dgn Division: HIGHWAY Username: mike.morin Date:5/7/2010

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.11	CLEARING	.5	AC
202.202	REMOVING PAVEMENT SURFACE	1100	SY
203.20	COMMON EXCAVATION	7800	CY
203.25	GRANULAR BORROW	100	CY
206.061	STR EARTH BELOW GRADE STR	50	CY
304.09	AGGR BASE CRS - CRUSHED - TYPE A (REV. 01.1)	950	CY
304.10	AGGR SUBB COURSE - GRAVEL	6745	CY
403.2081	HOT MIX ASPHALT 12.5 MM - SURFACE (POLYMER MODIFIED)	1075	T
403.209	HOT MIX ASPHALT 9.5 MM (INCID.)	30	T
403.211	HOT MIX ASPHALT (SHIM)	300	T
403.213	HOT MIX ASPHALT 12.5 MM - BASE	1650	T
403.2131	HOT MIX ASPHALT 12.5 MM - BASE (POLYMER MODIFIED)	1075	T
409.15	BITUMINOUS TACK COAT APPLIED	600	G
603.159	12" CULV PIPE OPTION III	32	LF
603.179	18" CULV PIPE OPTION III	35	LF
604.072	CATCH BASIN TYPE A1-C	3.25	EA
604.092	CATCH BASIN TYPE B1-C (REV. 01.3)	8	EA
604.16	ALTER CATCH BASIN TO MANHOLE	2	EA
604.18	ADJUST MANHOLE OR CB TO GRADE	1	EA
604.244	CATCH BASIN TYPE F4 (REV. 01.3)	1	EA
605.09	6" UNDERDRAIN TYPE B	1210	LF
605.11	12" UNDERDRAIN TYPE C	750	LF
606.24	GR TY 3D - SINGLE RAIL	262.5	LF
606.265	TERM END- SGL RAIL- GALV STEEL	1	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	2	EA
606.363	GUARDRAIL REMOVE AND DISPOSE (REV. 01.2)	1355	EA
606.48	SINGLE GALVANIZED STEEL POST	40	EA
606.65	GR - THRIE BEAM - SGL RAIL	2565	LF
606.66	TERMINAL END THRIE BEAM	1	EA
606.70	TRANSITION SECTION THRIE BEAM	1	EA
609.31	CURB TYPE 3	1200	LF
609.34	CURB TYPE 5	374	LF
609.38	RESET CURB TYPE 1	550	LF
609.40	RESET CURB TYPE 5	800	LF
610.18	STONE DITCH PROTECTION	20	CY
613.319	EROSION CONTROL BLANKET	650	SY
615.07	LOAM	300	CY
618.1401	SEEDING METHOD NUMBER 2 - PLAN QUANTITY	50	UN
619.1201	MULCH - PLAN QUANTITY	50	UN
620.58	EROSION CONTROL GEOTEXTILE	1000	SY
621.01	EVERGREEN TR (8"-12")	50	EA
621.014	EVERGREEN TR (18"-24") GP A	50	EA
621.025	EVERGREEN TR (3'-4') GP A	60	EA
621.026	EVERGREEN TR (3'-4') GP B	50	EA
621.541	DECID SHRUBS (18"-24") GP B	240	EA
626.11	PRECAST CONCRETE JUNCTION BOX	10	EA
626.22	NON-METALLIC CONDUIT	1850	LF
626.32	24 INCH FOUNDATION	2	EA
626.331	36 INCH FOUNDATION	1	EA
627.18	12 INCH SOLID WHITE PAVEMENT MARKING	66	LF
627.744	6 INCH WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	18000	LF
627.75	WHITE OR YELLOW PVMT AND CURB MARK	600	SF
627.76	TEMPORARY PVMT. MARK LINE, W OR YELLOW	1	LS
629.05	HAND LABOR, STRAIGHT TIME	40	HR
631.12	ALL-PURPOSE EXC (INC OPERATOR)	10	HR
631.172	TRUCK-LARGE (INC OPERATOR)	10	HR
631.22	FRONT END LOADER (INC OPER)	10	HR
639.18	FIELD OFFICE TYPE A	0.2	EA
643.71	TRAFFIC SIGNAL MODIFICATION	1	LS
643.83	VIDEO DETECTION SYSTEM (NORTHBOUND AND SOUTHBOUND)	2	LS
643.86	TRAFFIC SIGNAL LOOP DETECTORS	2	EA
643.92	PEDESTAL POLE	2	EA
652.31	TYPE I BARRICADE	25	EA
652.311	TYPE II BARRICADE	25	EA
652.33	DRUM	100	EA
652.34	CONE	200	EA
652.35	CONSTRUCTION SIGNS	2000	SF
652.36	MAINT OF TRAFFIC CONTR DEVICES	150	CD
652.38	FLAGGER	5000	HR
656.75	TEMP. SOIL EROS. AND WATER POLL. CONTROL	1	LS
658.20	ACRYLIC LATEX COLOR FINISH GREEN	150	SY
659.10	MOBILIZATION	1	LS

EARTHWORK SUMMARY

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)	6,462		
TOTAL COMMON EXCAVATION			6,462

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)	220		
TOTAL FILL			220

COMPUTATION OF GRANULAR BORROW FOR ESTIMATE

GRANULAR BORROW =	87	x 1.15=	100

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3)TOTAL FILL				220
TOTAL AVAIL. NON-ROCK EXCAV.	6,462	x 0.85 =	5,493	
(4)TOTAL AVAILABLE EXCAVATION			=	5,493
BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION				-5,273

SURPLUS MATERIAL = 5,273 m3

CONSTRUCTION NOTES

ITEM NO. 201.11- CLEARING

STATION	TO	STATION	OFFSET
18+89.38		19+15.07	LT.
20+60.07		21+15.26	LT.
21+59.84		22+31.86	LT.
22+95.05		23+79.62	LT.
23+50.12		27+93.79	RT.
24+41.94		24+79.48	LT.
25+15.84		27+16.29	LT.
28+40.01		28+96.10	LT.
31+91.64		34+67.17	LT.
35+20.60		35+59.03	LT.
36+51.26		37+79.01	LT.
38+06.30		38+37.46	LT.
38+45.78		42+25.46	LT.
43+71.55		45+86.74	LT.

ITEM NO. 606.24- GUARDRAIL TYPE 3D- SINGLE RAIL

STATION	TO	STATION	OFFSET	LENGTH (FT)
0+00.00		2+62.50	Rt.	262.5

ITEM NO. 606.265- TERMINAL END- SINGLE RAIL GALVANIZED STEEL

STATION	OFFSET	QUANTITY
2+62.50	Rt.	1

ITEM NO. 606.353- REFLECTORIZED FLEXIBLE GUARDRAIL MARKER

STATION	OFFSET	QUANTITY
2+62.50	Rt.	1
19+00.00	Lt.	1

ITEM NO. 606.48- SINGLE GALVANIZED STEEL POST

STATION	TO	STATION	OFFSET	QUANTITY
19+00.00		21+50.00	Lt.	40

ITEM NO. 606.65- MODIFIED THRIE BEAM- SINGLE RAIL

STATION	TO	STATION	OFFSET	LENGTH (FT)
19+00.00		44+50.00	Lt.	2,565

ITEM NO. 606.66- TERMINAL END THRIE BEAM

STATION	OFFSET	QUANTITY
19+00.00	Lt.	1

ITEM NO. 606.70- TRANSITION SECTION THRIE BEAM

STATION	OFFSET	QUANTITY
44+50.00	Lt.	1

ITEM NO. 609.31- CURB TYPE 3 MOLD 2

STATION	TO	STATION	OFFSET	LENGTH (FT)
24+25.00		27+25.00	20 Lt.	328
29+75.00		34+25.00	20 Lt.	436
39+25.00		43+50.00	22 Lt.	425

ITEM NO. 609.34- CURB TYPE 5

STATION	TO	STATION	OFFSET	LENGTH (FT)
22+43.00		26+50.00	Rt.	374

ITEM NO. 609.38- RESET CURB TYPE 1

STATION	TO	STATION	OFFSET	LENGTH (FT)
11+00.00		17+00.00	Rt.-Lt.	185.00
18+42.50		22+00.00	Lt.	358.00

ITEM NO. 609.40- RESET CURB TYPE 5

STATION	TO	STATION	OFFSET	LENGTH (FT)
9+00.00		11+00.00	Rt.	200.00
22+00.00		22+50.00	Lt.	50.00
17+00.00		22+43.00	Rt.	543.00

ITEM NO. 610.18- STONE DITCH PROTECTION

STATION	TO	STATION	OFFSET	QUANTITY (CY)
34+25.00		35+25.00	Lt.	20

ITEM NO. 631.319- TEMPORARY EROSION CONTROL BLANKET

STATION	TO	STATION	OFFSET	LENGTH (FT)
23+50.00		24+00.00	Lt.	50.00
27+25.00		29+50.00	Lt.	225.00
35+25.00		39+00.00	Lt.	375.00

ITEM NO. 607.17 - 6 FT. CHAIN LINK FENCE

STA. 19+25, 15.5' TO 25.2' LT. 9.7 LF
STA. 20+75, 15.5' TO 23.7' LT. 8.2 LF

REV. 01.1 - ADDED TYPE A
REV. 01.2 - ADDED ITEM NO. 606.363
REV. 01.3 - REVISED TYPE F TO TYPE B1-C

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HP-1563(400)E

PIN 15634.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	ERNEST MARTIN	MAR 2010
DESIGN-DETAILED	M. MORIN	MRP
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		5-05-2010
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
I - 295 EXIT 7

ESTIMATED QUANTITIES & EARTHWORK SUMMARY
& CONSTRUCTION NOTES

SHEET NUMBER

6

OF 76

Filename: ...\highway\msta\006_Estimate.dgn Division: HIGHWAY Username: mike.morin Date:5/7/2010

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	F4	E	SPAN	RISE	LENGTH			LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
CATCH BASIN																												
CBI - 18+55.00, 13.00' LT.												1																
CB2 - 20+25.00, 13.30' LT.												1																
CB3 - 21+93.80, 18.65' LT.												1 1/4																
CB4 - 22+.00.00, 15.41' RT.													1															
CB5 - 23+37.5.00, 18.87' RT. (REV. 01)													1															
CB6 - 25+00.00, 18.87' RT.													1															
CB8 - 30+40.00, 19.02' LT.													1															
CB9 - 32+11.00, 19.02' LT.													1															
CB10 - 33+52.29, 19.02' LT.													1															TIE INTO EXISTING 12" R.C.P.
CB12 - 42+93.03, 21.02' LT.													1															
CB7 - 29+47.64, 33.80' LT. (REV. 01.3)													1															TIE INTO EXISTING 18" R.C.P.
CB11 - 37+76.76, 32.32' LT.														1														TIE INTO EXISTING CULVERT PIPE
EXIST CB 18+55.00, 5.00' LT.																												ALTER EXIST CB TO MANHOLE
EXIST CB 22+00.00, 9.50' LT.																												ALTER EXIST CB TO MANHOLE
EXIST CB 17+28.50, 11.50' LT.																												ADJUST EXIST CB TO GRADE
CULVERT PIPES																												
18+55.00, 7.10' LT. TO 18+55.00, 10.50' LT.								12"	4'																			TIE INTO EXISTING CATCH BASIN
42+92.89, 23.00' LT. TO 42+91.66, 51.00' LT.								12"	28'																			
21+90.50, 22.65' LT. TO 21+92.80, 19.60' LT.								18"	4'																			TIE INTO EXISTING CULVERT PIPE
21+95.10', 16.30' TO 21+99.20, 11.06' LT.								18"	6.7'																			TIE INTO EXISTING CATCH BASIN
22+00.50, 7.50' LT. TO 22+10.30, 13.00' RT.								18"	20.5'																			TIE INTO EXISTING CATCH BASIN
UNDERDRAIN																												
9+00.00, 20.00' RT. TO 17+30.50, 11.50' LT.																					355'							
20+27.00 LT. TO 21+90.00 LT.																					163'							
25+02.20 RT. TO 26+50.00 RT.																					135'							
42+95.00 LT. TO 48+50.00 LT.																					555'							
18+57.00 LT. TO 20+23.00 LT.																							12"	166'				
22+02.00 RT. TO 23+48.00 RT.																							12"	140'				
23+52.40 RT. TO 24+97.80 RT.																							12"	132'				
30+42.00 LT. TO 32+09.00 LT.																							12"	167'				
32+13.00 LT. TO 33+50.29 LT.																							12"	137.3'				

NOTE:
IF NO COMPARABLE CORRUGATED CULVERT SIZE IS LISTED, THEN THE SMOOTHLINED PIPE SIZE AS SHOWN ON THE DRAINAGE TABULATION IS ALSO ADEQUATE FOR THE CORRUGATED CULVERT OPTION.

REV. 01 - CATCH BASIN MOVED FROM STA. 23+50 TO STA. 23+37.5
REV. 01.3 - CATCH BASIN REVISED FROM TYPE F TO TYPE B1-C

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HP-1563(400)E

PIN 15634.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER ERNEST MARTIN		
DESIGN-DETAILED M. MORIN	MRP	MAR 2010
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER 5-05-2010

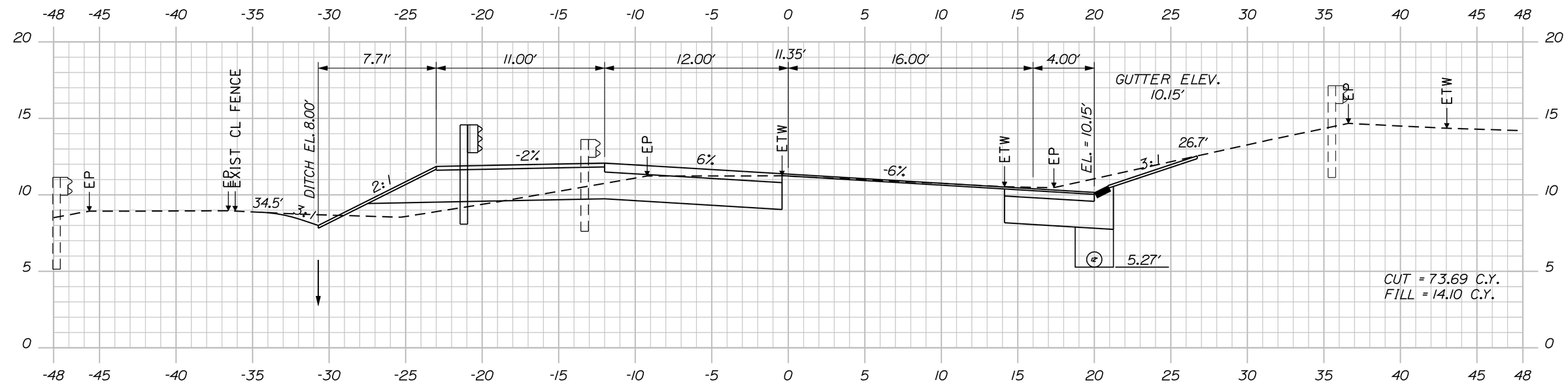
DATE

PORTLAND
I - 295 EXIT 7

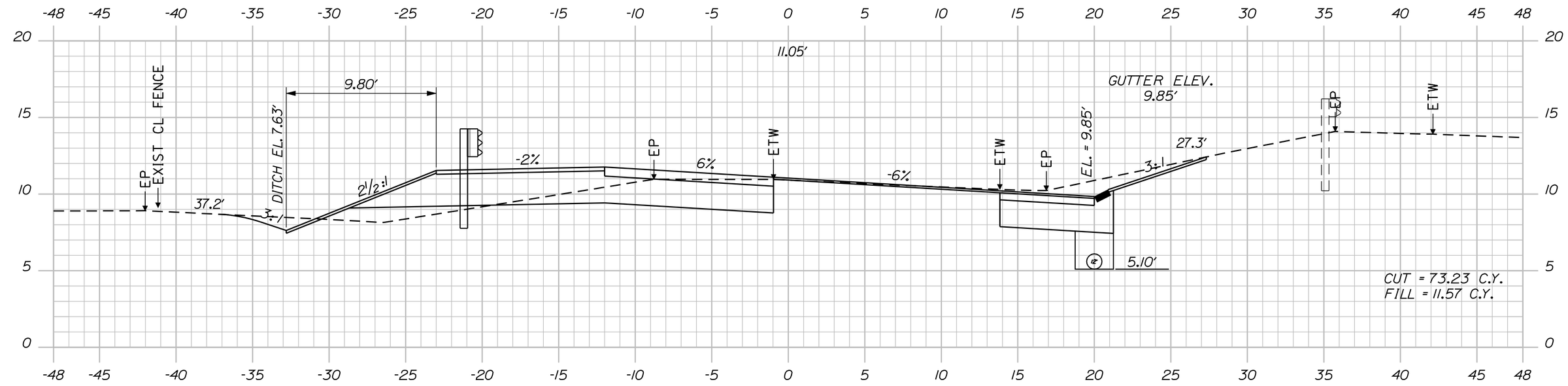
DRAINAGE SHEET

SHEET NUMBER
8
OF 76

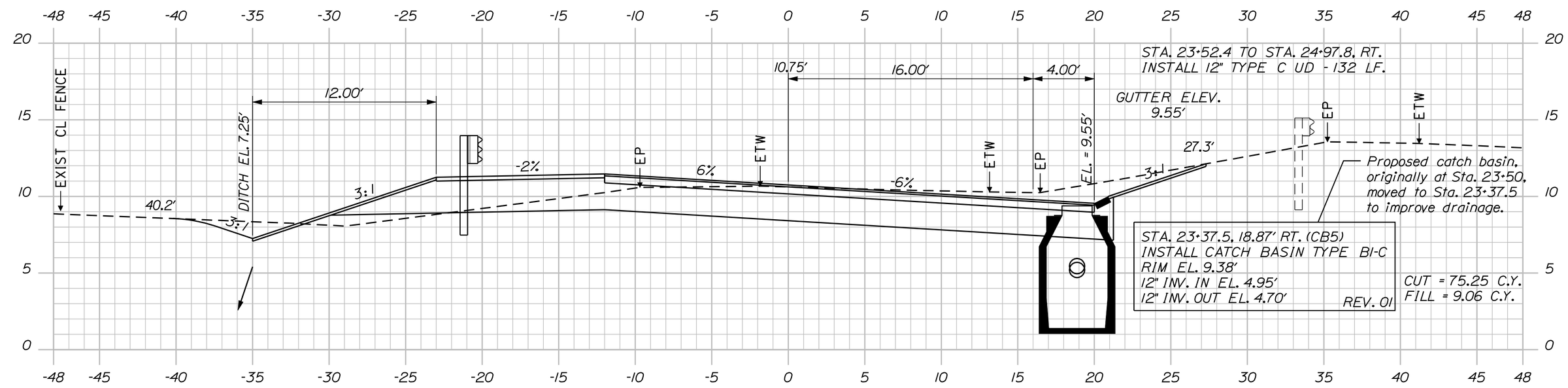
Filename: ...\highway\msta\008_Drainage.dgn Division: HIGHWAY Username: mike.morin Date:5/7/2010



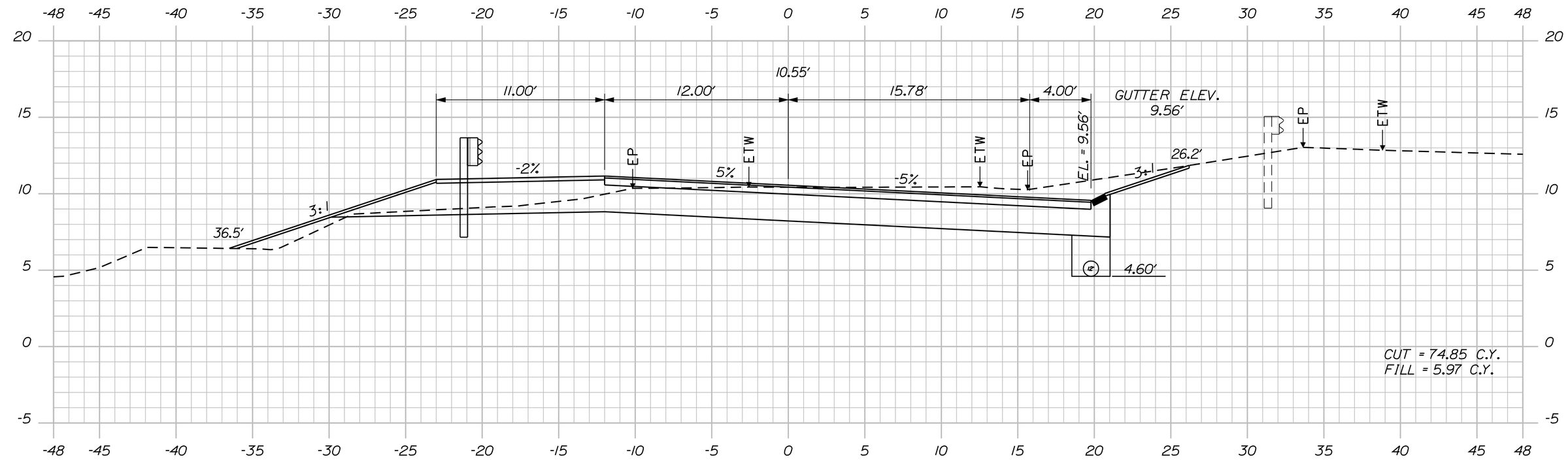
24+00.00



23+75.00



23+50.00



23+25.00

Sta. 23+25.00 to Sta. 24+00.00

SHEET NUMBER 51 OF 76

PORTLAND
I - 295 EXIT 7

SB CROSS SECTIONS

PROJ. MANAGER ERNEST MARTIN		BY	DATE
DESIGN-DETAILED	M. MORIN	MRP	MAR 2010
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			5-05-2010
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

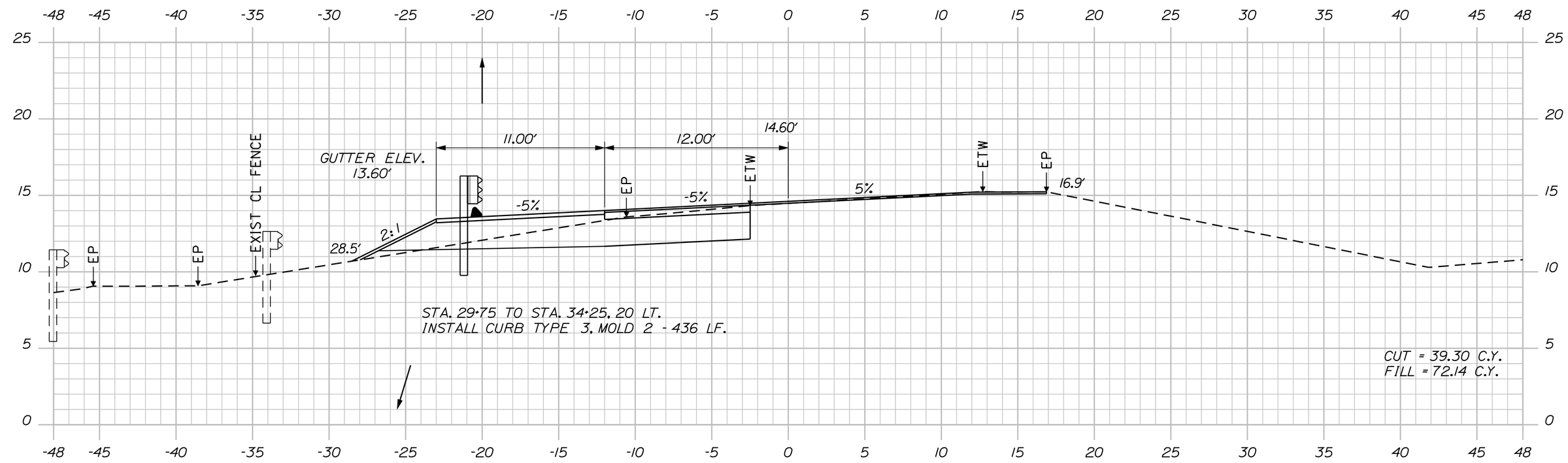
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HP-1563(400)E

PIN 15634.00

HIGHWAY PLANS



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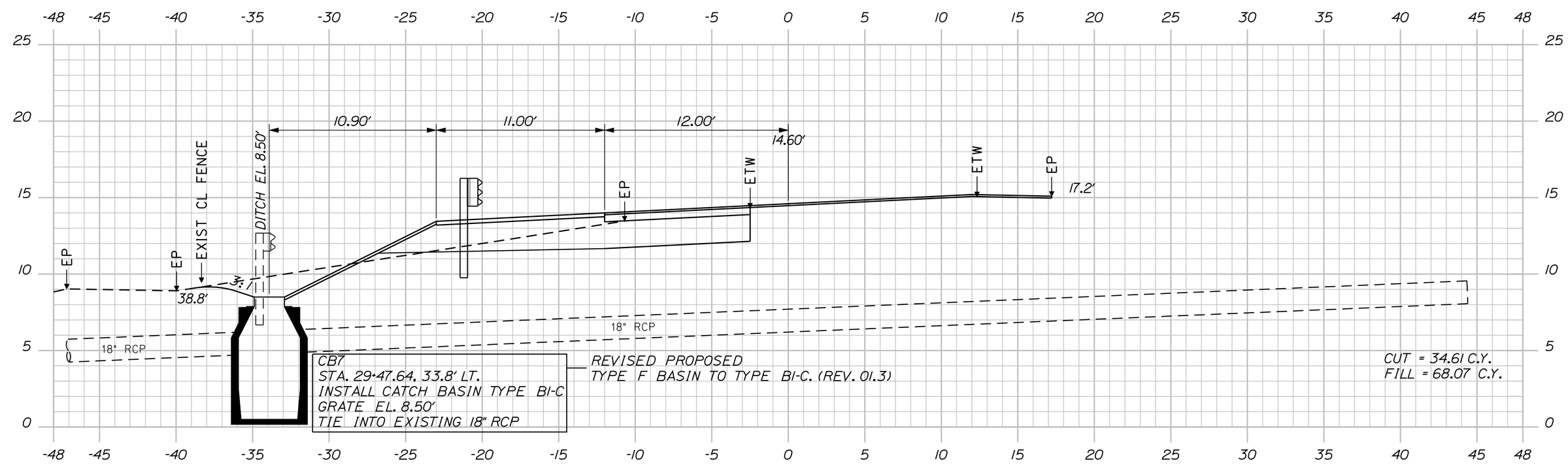

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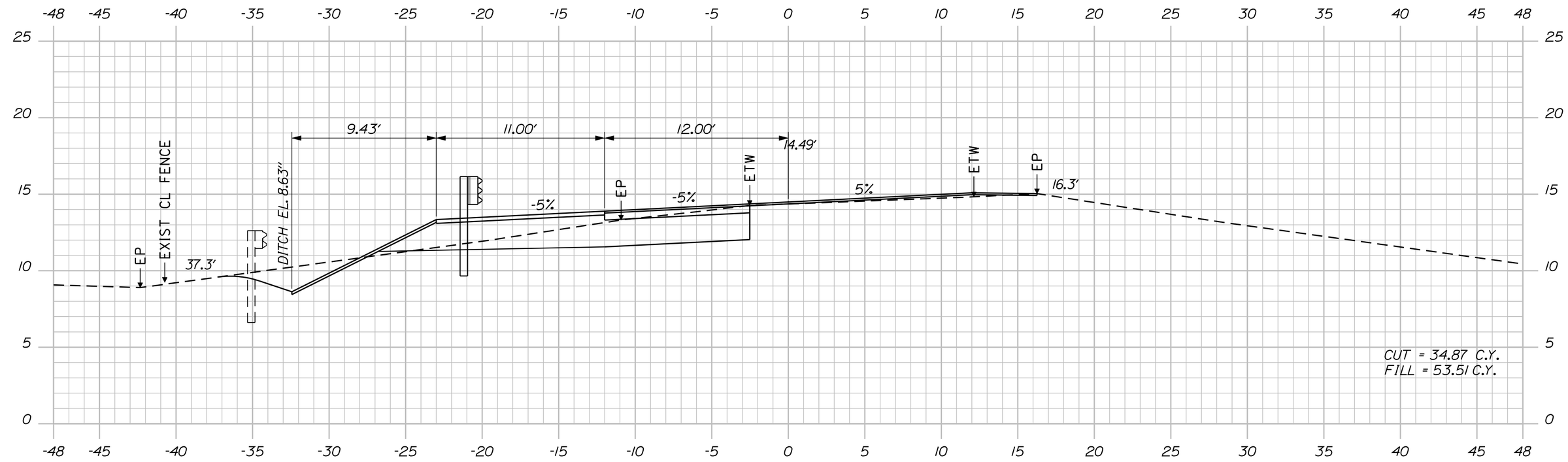

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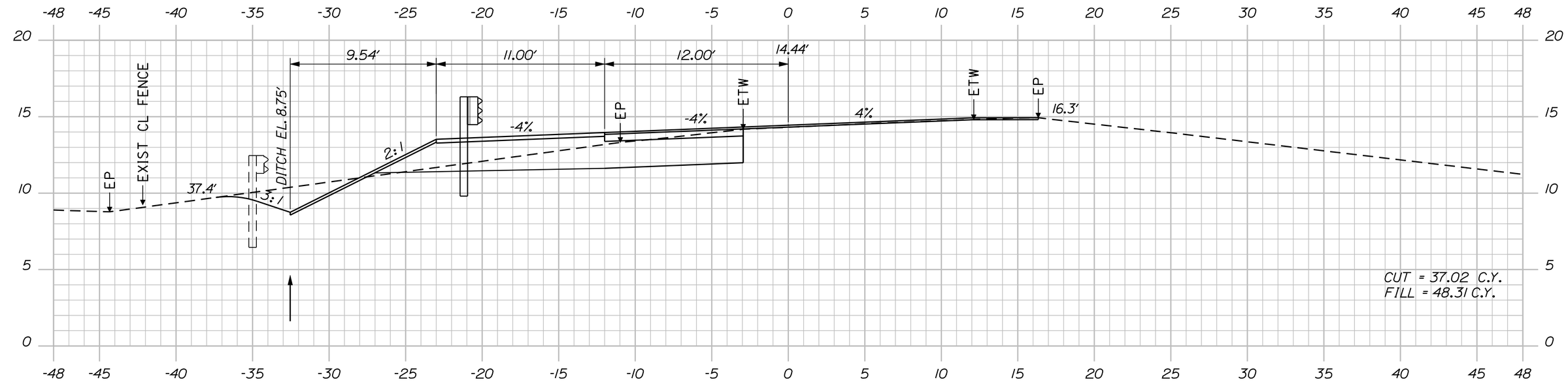


29+00.00

Sta. 29+00.00 to Sta. 29+75.00

SHEET NUMBER 57 OF 76

PORTLAND
I - 295 EXIT 7

SB CROSS SECTIONS

PROJ. MANAGER	ERNEST MARTIN	BY	DATE
DESIGN-DETAILED	M. MORIN	MRP	MAR 2010
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			5-05-2010
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

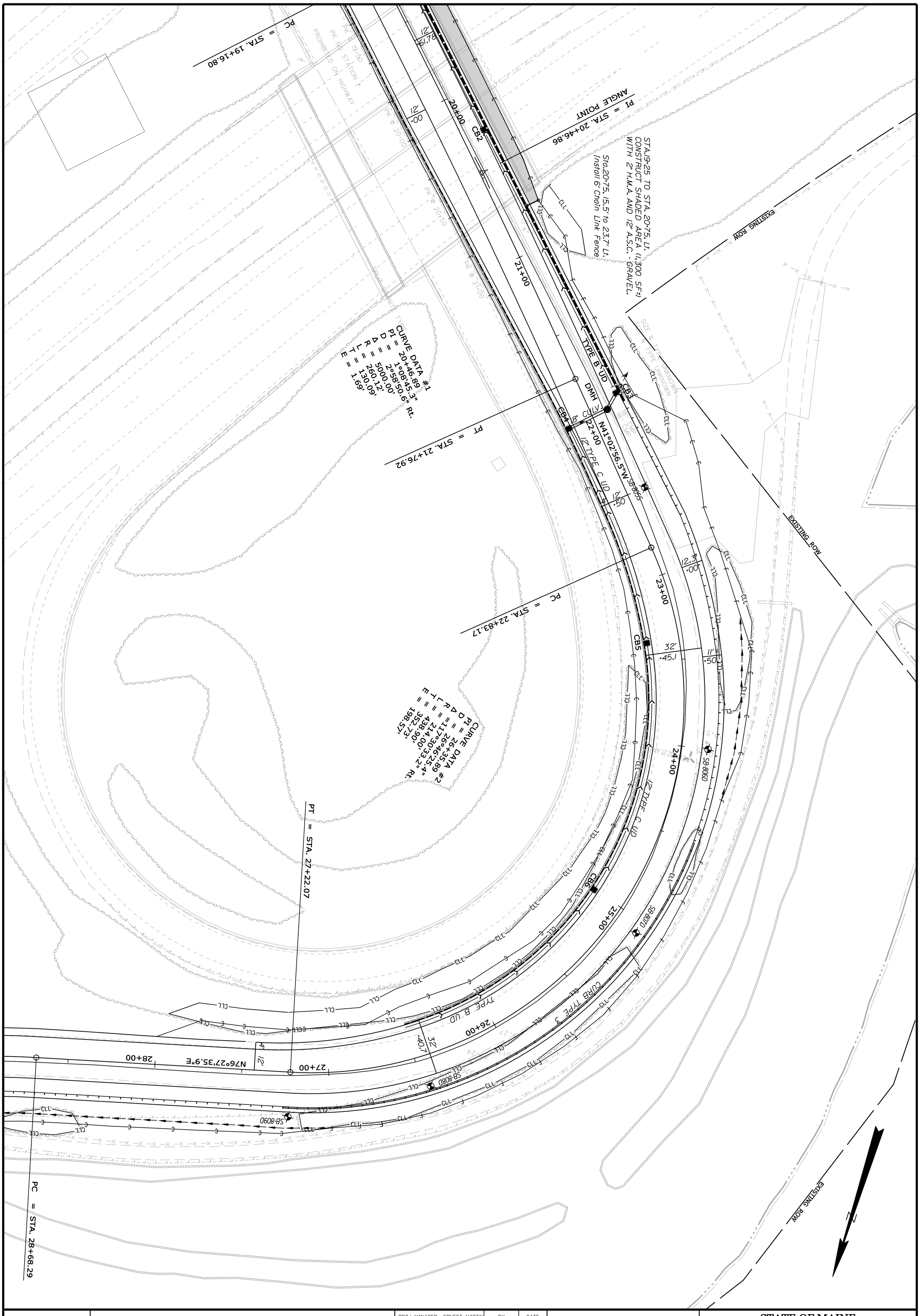
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HP-1563(400)E

PIN 15634.00

HIGHWAY PLANS



SHEET NUMBER 15 OF 76

PORTLAND
I - 295 EXIT 7

PLANS

PROJ. MANAGER	ERNEST MARTIN	BY	DATE
DESIGN-DETAILED	M. MORIN	MRP	MAR 2010
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

HP-1563(400)E

PIN 15634.00

HIGHWAY PLANS