

MAINE TURNPIKE AUTHORITY

ADDENDUM NO. 2

CONTRACT
2020.03

PORTLAND AREA WIDENING &
SAFETY IMPROVEMENTS
MILE 43.0 TO MILE 46.4

The bid opening date is Thursday March 19, 2020 at 11:00 am.

The following changes are made to the Proposal, Specifications and Plans.

GENERAL

Intentionally left blank.

PROPOSAL

Proposal P-sheets are deleted in their entirety and replaced. Updates reflect below changes which were noted in Addendum #1 and others noted in responses to below Addendum 2 Questions.

403.213 HMA 12.5mm Nominal Maximum Size (Base and Intermediate Base Course): Quantity reduced to move surface course to Item 403.2081.

403.2081 HMA 12.5mm Nominal Maximum Size (Polymer Modified): Quantity moved from surface course of Item 403.213 to this Item.

639.18 Field Office, Type A: Item is deleted and replaced with Item 639.181 Field Office, Type A-P (See Special Provision for updated text)

652.44 Pace Vehicle – New Item with Quantity of 250 calendar days

652.4501 Truck Mounted Attenuator – 24,000LB: Item is deleted from Contract and Quantity moved to Item 652.45

652.45 Truck Mounted Attenuator: Quantity moved from Item 652.4501 to this Item.

SPECIFICATIONS

- Special Provision 104.4.6 Utility Coordination
 - Special Provision page SP-11, Granite State Gas/Unitil section, is updated to include three plan sheets showing a 50% complete design of the proposed gas line replacement; pages numbered SP-11A, SP-11B, and SP-11C.

- Special Provision 401
 - Special Provision Hot Mix Asphalt Pavements (Asphalt Rich Base Mixture) is deleted in its entirety and replaced. See Attached. Revisions relative to payment and minimum bitumen content.
- Special Provision 403
 - Special Provision 403 Hot Mix Asphalt Pavement Table and Complimentary Note callouts are deleted and replaced. See Attached. Revisions relative to adding changing HMA type for median construction and the use of material transfer vehicle.
- Special Provision 403
 - Special Provision 403 Hot Mix Asphalt Pavement was updated to add Item 403.2081 Hot Mix Asphalt, 12.5mm (Polymer Modified)-RAP.
- Special Provision 639
 - Special Provision 639 and Item 639.181 Field Office, Type A-P (Permanent Field Office), added in Addendum 01, is deleted in its entirety and replaced with Special Provision 639 and Item 639.181 Field Office, Type A-P. This will be a temporary field office.
- Special Provision 650
 - The contractor shall make a “pen and ink” change to Special Provision page SP-153, first paragraph of Section 650.31 Variable Message Sign (VMS); The sentence shall be deleted and replaced with, “The VMS shall be a Daktronics model VF-2020-27x120-66-A.”
- Special Provision 650
 - The contractor shall make a “pen and ink” change to Special Provision page SP-159, first paragraph of Section 650.31 Variable Message Sign (VMS); the sentence shall be deleted and replaced with, “The VMS shall be a Daktronics model VF-2420-27x60-66-A.”

PLANS

- Plan sheets 2 and 3 - Estimated Quantities, are deleted and replaced to reflect changes noted.
- Plan sheet 5 – General Notes, is deleted and replaced to reflect changes noted.
- Plan sheet 6 – Typical Section, is deleted and replaced to reflect changes noted.
- Plan sheet 8 – Typical Section, is deleted and replaced to reflect changes noted.
- Plan sheet 11 – Maintenance of Traffic Typical Sections, is deleted and replaced to reflect changes noted.
- Plan sheets 37 and 38 – Guardrail Details, are deleted and replaced to reflect changes noted.
- Plan sheets 291 and 295 – Guardrail Transition Details, are deleted and replaced to reflect changes noted.
- Plan sheet 302 – Overhead Sign Structure, is deleted and replaced to reflect changes noted.

- Plan sheet 303 – Overhead Sign Structure Foundation; The Contractor shall make a “pen and ink” change to Plan sheet 303, Overhead Sign Structure Foundation I, Note 2; it shall be replaced in it’s entirety with the following: *“Overhead sign structure and foundations, complete and in place according to these plans, shall be paid under item 645.12. Piles shall be paid under related 501 pay items”*
- Plan sheet 309 – Sign Structure and Foundation, is deleted and replaced to reflect changes noted.
- Plan sheets A21 and A22, Exit 44 Guardrail Details, are deleted and replaced to reflect changes noted.

QUESTIONS

The following are additional questions received. Answers to the questions are noted. Bidders shall utilize this information in preparing their bid.

Question 1: Per the Special Provisions, traffic stoppages for blasting will only be allowed prior to 6:30am or after 6:30 PM. The State of Maine DEP Blasting statute states “Blasting may not occur in the period between sundown and sunrise or in the period 7:00PM and 7:00AM, whichever is greater.” Also, the town of Scarborough only allows blasting between the hours of 8:00AM and 6:00PM, the City of Portland restricts blasting to the hours of 9:00AM to 4:00PM. I do not believe South Portland has a time restriction in writing. With these time limits, Blasting in Portland and Scarborough would not be allowed without a waiver from the Town or City. With these additional time restrictions from other agencies, will traffic stoppage time frames be allowed to be adjusted? If not, blasting may not be allowed in certain area’s, or greatly restricted.

Answer: The MTA Supplemental Specifications and 2020.03 Special Provisions for Blasting times shall remain as they are currently stated including that the Contractor shall comply with all applicable laws, rules, and regulations of the State of Maine. MTA is not required to follow local ordinances which will be considered in the Contractor’s Blasting time schedule. Final coordination and details shall be included in the required Blasting Plan.

Question 2: Does this project have a Maine DEP Permit? Does this DEP permit specify a Pre Blast Survey radius for blasting? If so, what is this radius?

Answer: The contract does include a MaineDEP permit, specifically Permit L-27726-TG-A-N (NRPA Wetland Alteration and Water Quality Certification); see Appendix. This is not a DEP Blast Permit. As noted in response to Question 1 of this Addendum, the Contractor shall comply with all applicable laws, rules, and regulations of the State of Maine. Contractor shall also review and comply with Utility requirements relative to pre-blast surveys.

Question 3: Plan Sheet 303 – Foundation Note #2 – states “piles” are incidental to Bid Item #645.12, but there are Bid Items for the H Piles. Please clarify.

Answer: The piles shall be paid under the 501 pile items and not considered incidental to pay item 645.12.

Question 4: Not sure if we can get 78" RCP pipe for the extension. Typically 72" or 84" RCP in that size. Is there an alternative?

Answer: A 78" RCP shall be used. The pipe may be acquired from an out of state fabricator. Pretech Precast Concrete Technologies out of Kansas City and Old Castle Precast provide a 78" RCP.

Question 5: Can #5 epoxy coated ties (at the same spacing as the pitch) be substituted for #5 epoxy coated spirals in the pole foundations 30" & greater.

- a. Answer: #5 epoxy coated ties may be substituted for the spirals if calculations are submitted showing that the size and spacing of the ties have better or equal strength as the spirals. The strength reduction factor (phi factor) is not the same for ties and spirals and any deviation from the tables used in the MeDOT standard details will require PE stamped calculations submitted to the engineer for review and approval.

Question 6: Bid Item 603.28 Concrete Collar calls for 11 required. Is that correct?

Answer: Yes

Question 7: In the revised Rich Bottom specification, the Payment for PGAB is based on the JMF +/- .4% but it then states that test results below the minimum shall not be permitted. 1) The minimum for payment for PGAB shows as 6.0% when the design PGAB minimum is 5.8%, which one is correct? , 2) Does that mean anything below a 6.0% or 5.8% minimum PGAB content will result in a less than 100% payment?

Answer: Special Provision 401 is deleted and replaced to correct as noted.

Question 8: Are the median shoulders meant to be surfaced with the Polymer Modified HMA?

Answer: Special Provision 403 is deleted and replaced to change the median pavement to 403.213 HMA and to remove the requirement of a material transfer vehicle for the median paving.

Question 9: The VMS signs specified in the contract are no longer manufactured by Daktronics. Is there a specific make and model that will be used as a substitute?

Answer: The updated VMS signs are noted for the specific locations:

- Adjacent to the Holmes Road - The VMS shall be a Daktronics model VF-2020-27x120-66-A.
- Adjacent to Crosby Maintenance - The VMS shall be a Daktronics model VF-2420-27x60-66-A.

Question 10: MTA has not allowed the use of bricks to reset catch basin frames in the past. Is this true for this contract?

Answer: Yes. The contractor shall make a “Pen and Ink” change to Section 604.04, add the following sentence, “Bricks may not be used to adjust basin or manhole frames.”

Question 11: For median barrier Type A and Type B, will the MTA allow the bottom of the barrier to be cast with a vertical surface?

Answer: Type A and Type B median barrier shall be single slope barrier as shown in the plans with no change in the slope for a vertical surface. Minor modifications may be considered during the Shop Submittal process.

Question 12: SP-187 states 3M type XI only reflective sheeting. The Turnpike has approved Avery Dennison type XI on other projects. Is this still permitted?

Answer: No, only 3M will be accepted on this project.

ATTACHMENTS

- Addendum No. 2 (6 pages)
- Proposal (17 pages)
- Specifications (14 pages)
- Plans (14 pages)

Notes: The above items shall be considered as part of the bid submittal.

The total number of pages included with this addendum is eleven pages (51).

All bidders are requested to acknowledge the receipt of the Addendum No. 2 by signing below and faxing this sheet to Nathaniel Carll, Purchasing Department, Maine Turnpike Authority at 207-871-7739. Bidders are also required to acknowledge receipt of this Addendum No. 2 on Page P-19 of the bid package.

Business Name

Print Name and Title

Signature

Date

Very truly
yours,

MAINE TURNPIKE AUTHORITY

Nathaniel Carll
Purchasing Department
Maine Turnpike
Authority

**SCHEDULE OF BID PRICES
 CONTRACT NO. 2020.03
 PORTLAND AREA WIDENING &
 SAFETY IMPROVEMENTS
 MM 43.0 TO MM 46.4**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
201.11	Clearing	Acre	6.1				
201.23	Removing Single Tree Top Only	Each	7				
201.24	Removing Stump	Each	7				
202.12	Removing Existing Structural Concrete	Cubic Yard	14				
202.15	Removing Existing Manhole or Catch Basin	Each	51				
202.202	Removing Pavement Surface	Square Yard	9,950				
202.206	Removing Rumble Strips	Linear Foot	8,600				
203.20	Common Excavation	Cubic Yard	148,700				
203.21	Rock Excavation	Cubic Yard	13,370				
203.211	Presplitting Rock	Linear Foot	4,440				
203.25	Granular Borrow	Cubic Yard	37,400				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
203.33	Special Fill	Cubic Yard	54				
203.34	Lightweight Fill	Cubic Yard	290				
203.52	Low Permeability Fill	Cubic Yard	960				
304.10	Aggregate Subbase Course - Gravel	Cubic Yard	29,100				
304.14	Aggregate Base Course - Type A	Cubic Yard	19,950				
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	Ton	18,050				
403.2072	19.0mm Asphalt Rich Base HMA	Ton	19,650				
403.213	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base Course)	Ton	4,080				
403.2081	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Polymer Modified)	Ton	7,900				
409.15	Bituminous Tack Coat RS1 or RS1h - Applied	Gallon	11,850				
419.30	Sawing Bituminous Pavement	Linear Foot	59,925				
470.08	Berm Dropoff Correction - Grindings	Ton	650				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
501.231	Dynamic Loading Test	Each	2				
501.50	Steel H-beam Piles 89 lb/ft, delivered	Linear Foot	1,760				
501.501	Steel H-beam Piles 89 lb/ft, in place	Linear Foot	1,760				
501.90	Pile Tips	Each	16				
501.91	Pile Splices	Each	16				
501.92	Pile Driving Equipment and Mobilization	Lump Sum	1				
509.202	Culvert Sliplining	Lump Sum	1				
511.071	Cofferdam - Red Brook NB	Lump Sum	1				
511.072	Cofferdam - Red Brook SB	Lump Sum	1				
511.073	Cofferdam - Long Creek NB	Lump Sum	1				
511.074	Cofferdam - Long Creek SB	Lump Sum	1				
511.091	Temporary Earth Support System	Lump Sum	1				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
513.09	Slope Protection - Portland Cement Concrete	Square Yard	552				
514.06	Curing Box for Concrete Cylinders	Each	1				
515.201	Pigmented Protective Coating for Concrete Surfaces	Square Yard	20				
515.202	Clear Protective Coating for Concrete Surfaces	Square Yard	110				
518.60	Repair of Vertical Surfaces < 8 inches	Square Foot	150				
526.301	Temporary Concrete Barrier, Type I	Linear Foot	31,600				
526.306	Temporary Concrete Barrier, Type 1 - Supplied by MTA (7,000 LF)	Lump Sum	1				
526.307	Concrete Barrier Type 1 - Stormwater Filter	Linear Foot	120				
526.351	Median Barrier - Type A (11,250 LF)	Lump Sum	1				
526.352	Median Barrier - Type B (3,575 LF)	Lump Sum	1				
526.353	Median Barrier - Type C (280 LF)	Lump Sum	1				
526.354	Median Barrier - Type D (1,550 LF)	Lump Sum	1				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
526.355	Earth Retaining Barrier (882.5 LF)	Lump Sum	1				
526.362	Type C Transition Barrier	Each	2				
526.363	Type D Transition Barrier	Each	12				
526.364	OHSS Foundation Transition Barrier	Each	6				
526.365	Median Guardrail Transition Barrier	Each	1				
526.366	Guardrail Transition Barrier	Each	6				
527.341	Work Zone Crash Cushions - TL-3	Unit	17				
527.3411	Work Zone Crash Cushions - TL-3 - Left In Place	Unit	3				
602.30	Flowable Concrete Fill	Cubic Yard	50				
603.155	12 inch Reinforced Concrete Pipe - Class III	Linear Foot	930				
603.159	12 Inch Culvert Pipe Option III	Linear Foot	460				
603.165	15 inch Reinforced Concrete Pipe - Class III	Linear Foot	175				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
603.175	18 inch Reinforced Concrete Pipe - Class III	Linear Foot	1,744				
603.195	24 inch Reinforced Concrete Pipe - Class III	Linear Foot	440				
603.205	30 inch Reinforced Concrete Pipe - Class III	Linear Foot	210				
603.215	36 inch Reinforced Concrete Pipe - Class III	Linear Foot	75				
603.225	42 inch Reinforced Concrete Pipe - Class III	Linear Foot	56				
603.28	Concrete Collar	Each	11				
603.50	78 inch Reinforced Concrete Pipe - Class IV	Linear Foot	8				
604.09	Catch Basin Type B1	Each	22.375				
604.096	60" Catch Basin Type B1-C	Each	1				
604.18	Adjusting Manhole or Catch Basin to Grade	Each	4				
604.182	Cleaning Existing Catch Basin and Manhole	Each	9				
604.248	Catch Basin Type F6	Each	118				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
604.26	Catch Basin Type B5	Each	42				
604.40	Secure Catch Basin Grate	Each	9				
605.016	6 Inch PVC Underdrain	Linear Foot	3,700				
605.018	8 Inch PVC Underdrain	Linear Foot	550				
605.09	6 Inch Underdrain Type B	Linear Foot	5,800				
605.11	12 Inch Underdrain Type C	Linear Foot	5,300				
605.12	15 Inch Underdrain Type C	Linear Foot	2,900				
605.13	18 Inch Underdrain Type C	Linear Foot	1,537				
605.15	24 Inch Underdrain Type C	Linear Foot	80				
606.1301	31" W Beam Guardrail - Mid-way Splice (7' Steel Post, 8" Offset Blocks, Single Faced)	Linear Foot	2,850				
606.1307	31" W-Beam Guardrail - Mid-way Splice Flared Terminal	Each	8				
606.132	31" W Beam Guardrail - Mid-way Splice (7' Steel Post, 8" Offset Blocks, Double Faced)	Linear Foot	340				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
606.1351	31" W-Beam Guardrail - Midway Splice Terminal End - Anchored End	Each	5				
606.1723	Bridge Transition - Type III	Each	5				
606.1724	Bridge Transition - Type III, Modified	Each	2				
606.353	Reflectorized Flexible Guardrail Marker	Each	16				
606.356	Underdrain Delineator Post	Each	127				
606.3561	Delineator Post-Remove and Reset	Each	202				
606.3605	Guardrail - Remove, Modify and Reset Single Rail	Linear Foot	100				
606.3631	Guardrail - Remove and Dispose	Linear Foot	20,250				
607.17	Chain Link Fence - 6 foot	Linear Foot	820				
610.08	Plain Riprap	Cubic Yard	612				
610.18	Stone Ditch Protection	Cubic Yard	530				
610.181	Temporary Stone Check Dam	Cubic Yard	623				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
613.319	Erosion Control Blanket	Square Yard	46,950				
615.07	Loam	Cubic Yard	11,390				
618.14	Seeding Method Number 2	Unit	928				
618.143	Special Seeding	Unit	25				
619.1201	Mulch - Plan Quantity	Unit	895				
619.1202	Temporary Mulch	Lump Sum	1				
620.56	Drainage Geotextile	Square Yard	3,200				
620.561	Impervious Liner	Square Yard	3,150				
620.58	Erosion Control Geotextile	Square Yard	2,146				
620.60	Separation Geotextile	Square Yard	7,000				
626.122	Quazite Junction Box (18x11)	Each	47				
626.22	Non-metallic Conduit	Linear Foot	6,550				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
626.223	Horizontal Directional Drilled Conduit	Linear Foot	250				
626.31	18 Inch Diameter Foundation	Each	1				
626.32	24 Inch Diameter Foundation	Each	46				
626.33	30 Inch Diameter, 8 Feet or Less Foundation	Each	7				
626.332	30-Inch Diameter, Greater than 8-Feet Long, All 36 Inch and 42 Inch Diameter Foundations	Cubic Yard	24				
626.38	Ground Mounted Cabinet Foundation	Each	2				
626.701	VMS Foundations - Crosby	Lump Sum	1				
627.712	White or Yellow Pavement Marking Line	Linear Foot	256,900				
627.73	Temporary 6 Inch Pavement Marking Tape	Linear Foot	2,000				
627.731	Temporary 6 Inch Black Pavement Marking Tape	Linear Foot	2,000				
627.77	Removing Existing Pavement Marking	Square Foot	43,850				
627.78	Temporary Pavement Marking Line, White or Yellow	Linear Foot	230,500				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
629.05	Hand Labor, Straight Time	Hour	230				
631.10	Air Compressor (Including Operator)	Hour	20				
631.11	Air Tool (Including Operator)	Hour	20				
631.12	All Purpose Excavator (Including Operator)	Hour	230				
631.13	Bulldozer (Including Operator)	Hour	200				
631.14	Grader (Including Operator)	Hour	30				
631.171	Truck - Small (Including Operator)	Hour	30				
631.172	Truck-Large (Including Operator)	Hour	200				
631.22	Front End Loader (Including Operator)	Hour	230				
631.32	Culvert Cleaner (Including Operators)	Hour	180				
631.36	Foreman	Hour	230				
634.175	Replacement LED Fixture	Each	1				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
634.208	Remove and Reset Light Standard	Each	24				
634.2083	Remove and Stack Lighting Standard	Each	6				
634.221	Temporary Highway Light	Each	4				
634.231	Conventional Light Standard With LED Fixture	Each	10				
639.181	Field Office, Type A-P	Each	1				
645.105	Remove and Stack Sign	Each	12				
645.109	Remove and Reset Sign	Each	5				
645.1099	Remove and Dispose Sign	Each	32				
645.12	Overhead Guide Sign: (STA 2133+14)	Lump Sum	1				
645.161	Breakaway Device Single Pole	Each	10				
645.162	Breakaway Device Multi Pole	Each	15				
645.251	Roadside Guide Sign, Type I	Square Foot	1,380				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
645.2511	Sheet Aluminum Overlay, Type I	Square Foot	288				
645.271	Regulatory, Warning, Confirmation and Route Assembly Sign, Type I	Square Foot	500				
645.289	Steel H-Beam Poles	Pound	11,600				
645.501	Remove and Reset Mainline Sign No. 1	Lump Sum	1				
645.502	Remove and Reset Mainline Sign No. 2	Lump Sum	1				
645.503	Remove and Reset Mainline Sign No. 3	Lump Sum	1				
645.504	Remove and Reset Mainline Sign No. 4	Lump Sum	1				
645.505	Remove and Reset Mainline Sign No. 5	Lump Sum	1				
645.506	Remove and Reset Mainline Sign No. 6	Lump Sum	1				
645.507	Remove and Reset Mainline Sign No. 7	Lump Sum	1				
645.508	Remove and Reset Mainline Sign No. 8	Lump Sum	1				
645.509	Remove and Reset Mainline Sign No. 9	Lump Sum	1				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
645.510	Remove and Reset Mainline Sign No. 10	Lump Sum	1				
645.511	Remove and Reset Mainline Sign No. 11	Lump Sum	1				
645.512	Remove and Reset Mainline Sign No. 12	Lump Sum	1				
645.513	Remove and Reset Mainline Sign No. 13	Lump Sum	1				
645.514	Remove and Reset Mainline Sign No. 14	Lump Sum	1				
645.515	Remove and Reset Mainline Sign No. 15	Lump Sum	1				
645.516	Remove and Reset Mainline Sign No. 16	Lump Sum	1				
645.517	Remove and Reset Mainline Sign No. 17	Lump Sum	1				
645.518	Remove and Reset Mainline Sign No. 18	Lump Sum	1				
645.519	Remove and Reset Mainline Sign No. 19	Lump Sum	1				
645.520	Remove and Reset Mainline Sign No. 20	Lump Sum	1				
645.521	Remove and Reset Mainline Sign No. 21	Lump Sum	1				

CARRIED FORWARD:

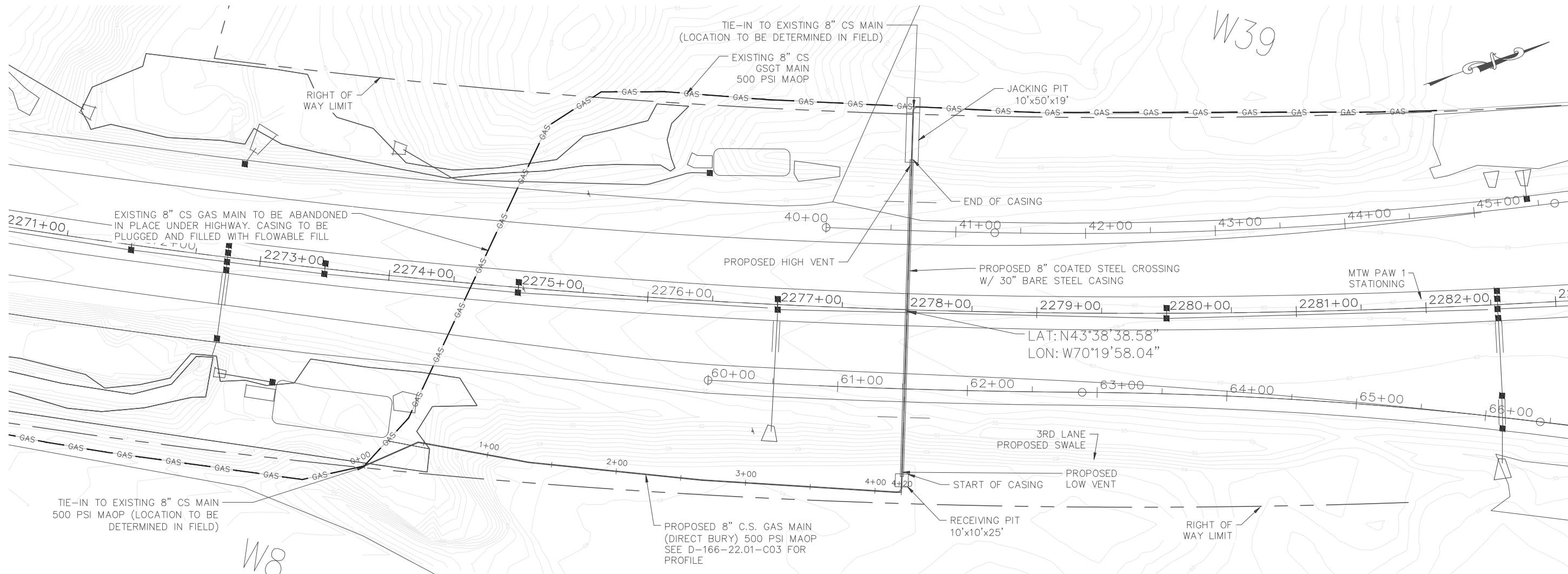
Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
645.522	Remove and Reset Mainline Sign No. 22	Lump Sum	1				
645.523	Remove and Reset Mainline Sign No. 23	Lump Sum	1				
645.524	Remove and Reset Mainline Sign No. 24	Lump Sum	1				
645.525	Remove and Reset Mainline Sign No. 25	Lump Sum	1				
645.526	Remove and Reset Mainline Sign No. 26	Lump Sum	1				
645.527	Remove and Reset Mainline Sign No. 27	Lump Sum	1				
645.528	Remove and Reset Overhead Mainline Sign No. 28	Lump Sum	1				
645.529	Remove and Reset Mainline Sign No. 29	Lump Sum	1				
650.101	Variable Message Sign (VMS) System - Holmes Road	Lump Sum	1				
650.102	Variable Message Sign (VMS) System - Crosby	Lump Sum	1				
650.201	VMS Ground Mounted Control Cabinet - Holmes Road	Each	1				
650.202	VMS Ground Mounted Control Cabinet - Crosby	Each	1				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
650.801	VMS Power System - Holmes	Lump Sum	1				
650.802	VMS Power System - Crosby	Lump Sum	1				
652.30	Flashing Arrow	Each	6				
652.312	Type III Barricades	Each	23				
652.33	Drum	Each	770				
652.332	Drum, Left In Place	Each	50				
652.34	Cone	Each	300				
652.35	Construction Signs	Square Foot	5,400				
652.361	Maintenance of Traffic Control Devices	Lump Sum	1				
652.41	Portable Changeable Message Sign	Each	7				
652.44	Pace Vehicle	Calendar Day	250				
652.45	Truck Mounted Attenuator	Calendar Day	2,730				

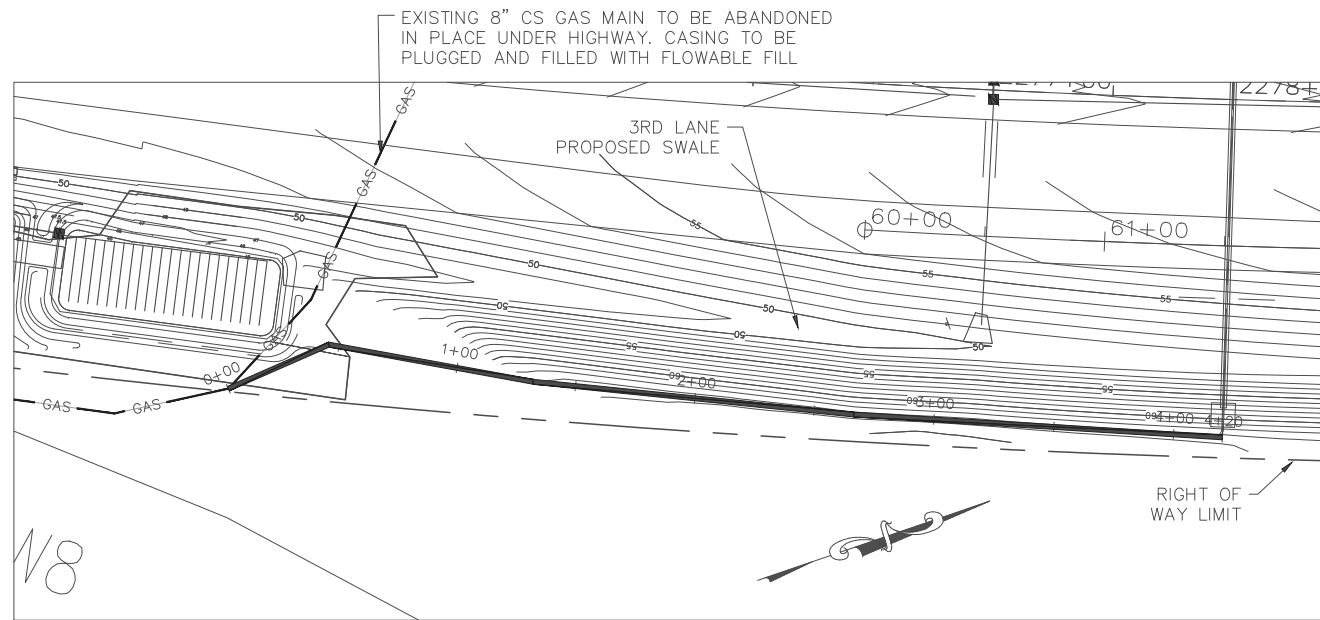
CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
652.47	Sequential Flashing Warning Lights	Each	100				
652.452	Automated Trailer Mounted Speed Limit Sign	Each	7				
656.50	Baled Hay, In Place	Each	30				
656.60	Temporary Berms	Linear Foot	165				
656.62	Temporary Slope Drains	Linear Foot	138				
656.632	30 Inch Temporary Silt Fence	Linear Foot	26,300				
659.10	Mobilization	Lump Sum	1				
673.01	Stormwater Soil Filter Bed	Cubic Yard	1,030				
674.10	Prefabricated Concrete Modular Gravity Wall - Red Brook	Lump Sum	1				
674.10	Prefabricated Concrete Modular Gravity Wall - Long Creek	Lump Sum	1				
801.03	Test Pits	Each	10				
TOTAL:							



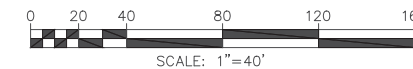
PLAN VIEW OF JACK & BORE OVER EXISTING CONTOURS

SCALE: 1" = 40'



EASTERN TIE-IN PATH OVER PROPOSED CONTOURS

SCALE: 1" = 40'



B	REVISED PER COMMENTS	RJE	3/11/20	BCK
A	ISSUED FOR BID - 30% DESIGN	RJE	1/31/20	BCK
No.	Description	By	Date	Appd
REVISIONS				



TRI-MONT Engineering Co.
Plymouth, MA

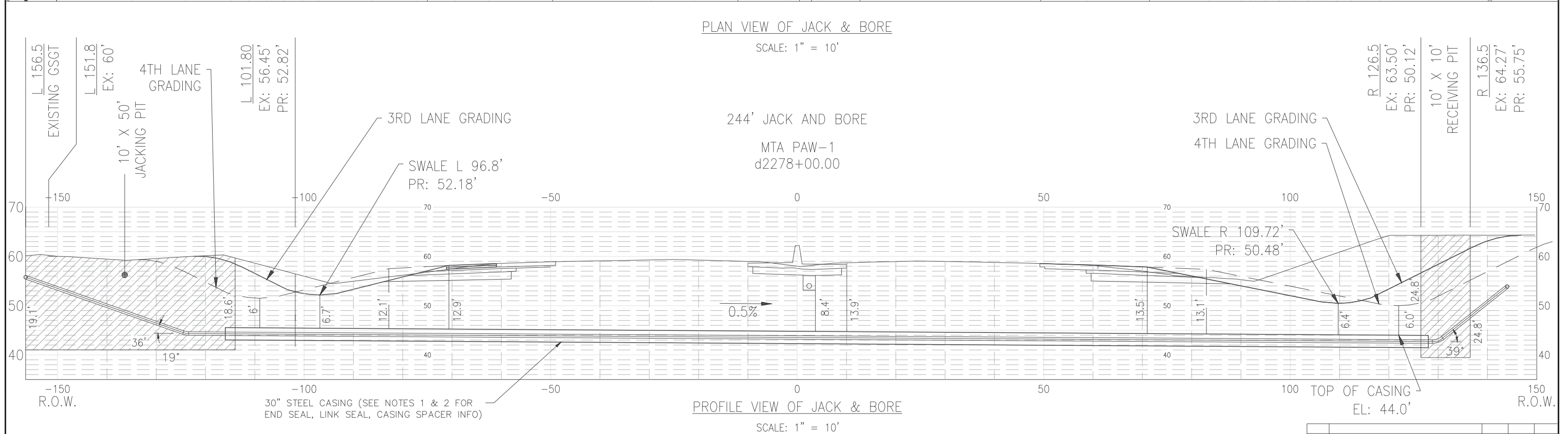
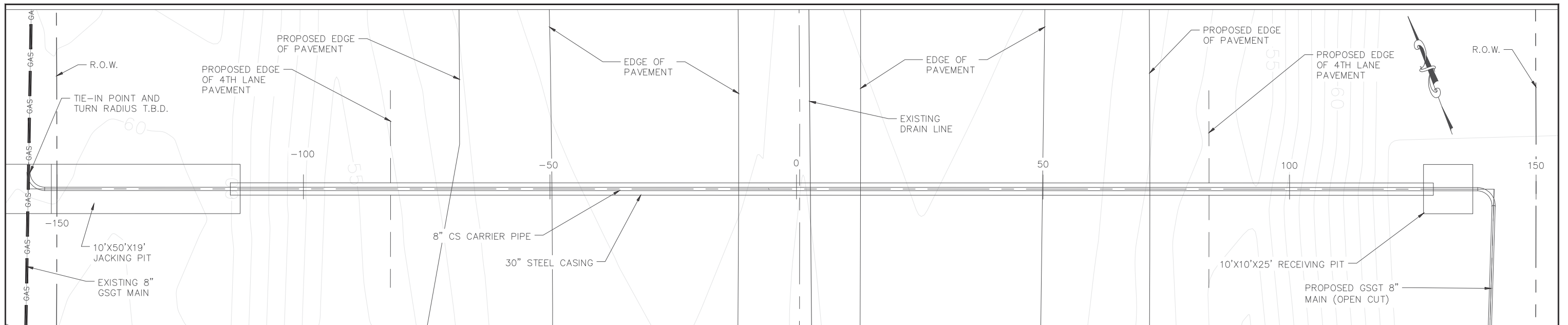
CLIENT: UNITIL
PROJECT: MTA GRANITE STATE HDD
Title: MTA JACK & BORE CROSSING SOUTH PORTLAND, ME
PLAN VIEW - OVERVIEW

TRI-MONT	By	Date	Client	By	Date
Drawn	RJE	1/31/2020	Approved		
Checked	BCK	1/31/2020	Approved		
Approved	BCK	1/31/2020	Approved		

Scale: 1" = 40' Job No. Drawing No. Rev. No.
1" = 40' Addendum 02 Page 24 B

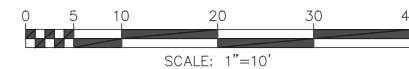
PRELIMINARY

**50% COMPLETE SUBMITTAL
MARCH 11, 2020**



NOTES:

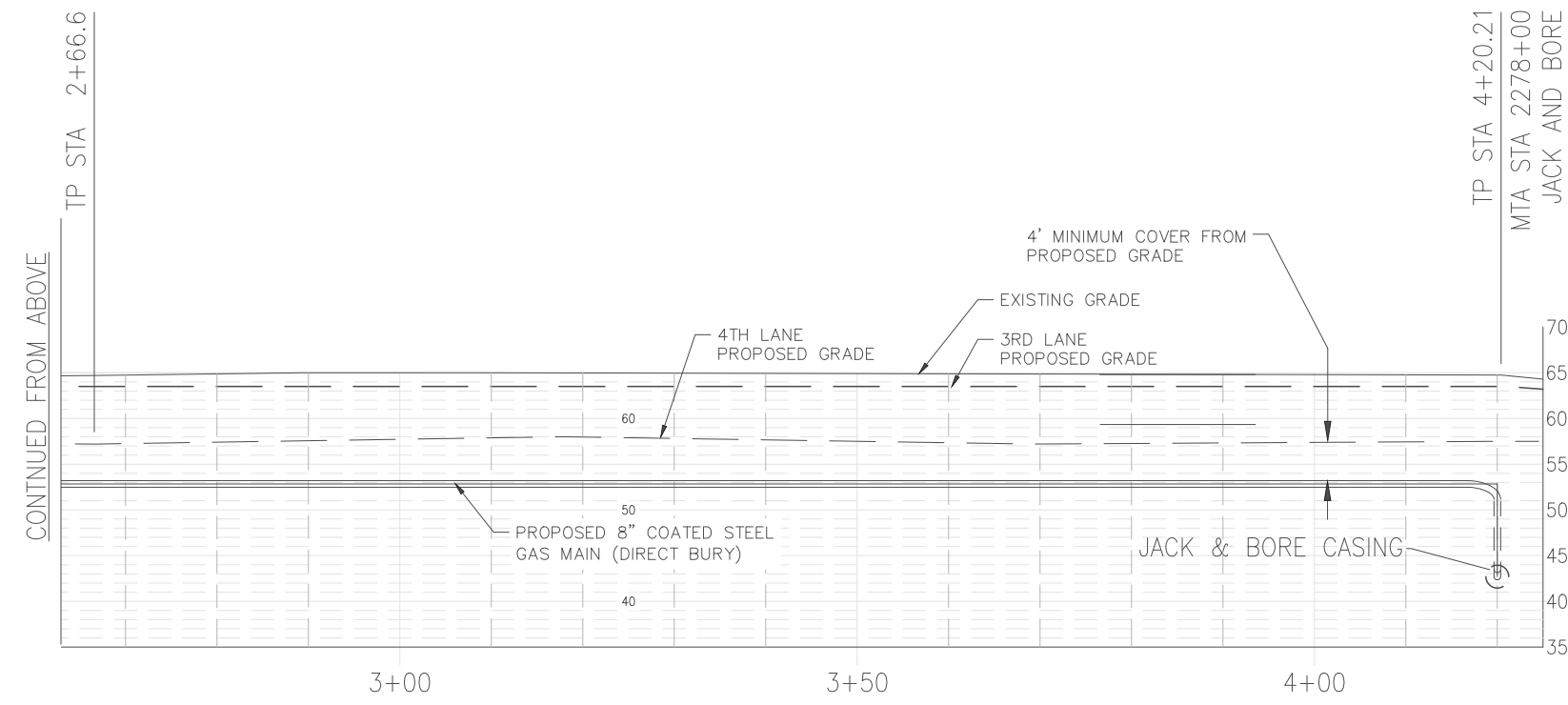
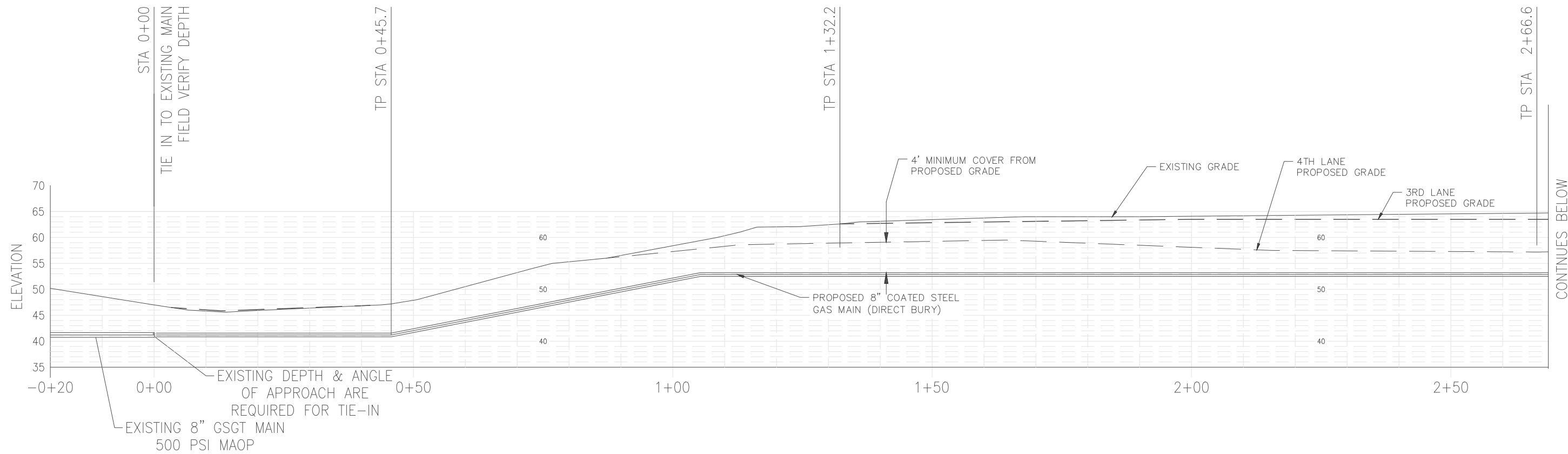
- CASING SHALL BE INSTALLED WITH END SEALS AND LINK SEALS AT BOTH ENDS. MATERIALS WILL BE SPECIFIED AT A LATER DATE AND SHALL BE INSTALLED PER MANUFACTURER INSTRUCTIONS.
- INSULATING SPACERS SHALL BE INSTALLED AND SPACED PER MANUFACTURER INSTRUCTIONS. SPACERS WILL BE SPECIFIED AT A LATER DATE.
- PROPOSED STREET VENTS TO BE INSTALLED BEYOND THE PROPOSED SWALES SHOWN IN THE 2019 "PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS" BY HNTB FOR THE MAINE TURNPIKE AUTHORITY. THE VENT ON THE HIGH SIDE OF CASING SHALL BE INSTALLED ON THE TOP OF THE CASING. THE VENT ON THE LOW SIDE OF THE CASING SHALL BE INSTALLED ON THE BOTTOM OF THE CASING. SEE SHEET D-166-22.01-C04 DETAILS.
- THE FRONT OF THE CASING PIPE SHALL BE PROVIDED WITH MECHANICAL ARRANGEMENTS OR DEVICES THAT WILL POSITIVELY PREVENT THE AUGER FROM LEADING THE PIPE SO THAT NO UNSUPPORTED EXCAVATION IS AHEAD OF THE PIPE.
- PROPOSED 30" STEEL CASING TO BE INSTALLED VIA JACK AND BORE METHOD.
- MAINTAIN A MINIMUM SEPARATION OF 36" BETWEEN PROPOSED GAS MAIN AND ALL UNDERGROUND UTILITIES. FIELD DETERMINE LOCATION.
- EXCAVATION STABILIZATION SHALL BE DESIGNED BY LICENSED PE AND SUBMITTED TO THE OWNER FOR APPROVAL PRIOR TO INSTALLATION.



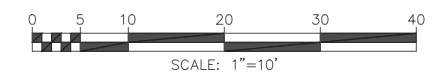
PRELIMINARY

50% COMPLETE SUBMITTAL
MARCH 11, 2020

B	REVISED PER COMMENTS	RJE	3/11/20	BCK	
A	ISSUED FOR BID - 30% DESIGN	RJE	1/31/20	BCK	
No.	Description	By	Date	Appd	
REVISIONS					
TRI-MONT Engineering Co. Plymouth, MA					
CLIENT	UNITIL				
PROJECT	MTA GRANITE STATE HDD				
TITLE	MTA JACK & BORE CROSSING SOUTH PORTLAND, ME JACK & BORE PROFILE VIEW				
TRI-MONT	By	Date	Client	By	Date
Drawn	RJE	1/31/2020	Approved		
Checked	BCK	1/31/2020	Approved		
Approved	BCK	1/31/2020	Approved		
Scale:	NONE	Job No.	Drawing No.	Rev. No.	
		ADDENDUM 02	Page 26	B	



PROFILE VIEW OF MAIN INSTALLATION
SCALE: 1" = 10'



No.	Description	By	Date	Appd
B	REVISED PER COMMENTS	RJE	3/11/20	BCK
A	ISSUED FOR BID - 30% DESIGN	RJE	1/31/20	BCK

TRI-MONT Engineering Co.
Plymouth, MA

CLIENT: UNITIL
PROJECT: MTA GRANITE STATE HDD

Title: MTA JACK & BORE CROSSING SOUTH PORTLAND, ME
OPEN CUT PROFILE VIEW

TRI-MONT	By	Date	Client	By	Date
Drawn	RJE	1/31/2020	Approved		
Checked	BCK	1/31/2020	Approved		
Approved	BCK	1/31/2020	Approved		

Scale: 1" = 10' Job No. Addendum 02 Drawing No. 26 Rev. No. B

PRELIMINARY

50% COMPLETE SUBMITTAL
MARCH 11, 2020

SPECIAL PROVISIONDIVISION 401HOT MIX ASPHALT PAVEMENTS

(Asphalt Rich Base Mixture)

Section 401 of the Maine Turnpike Authority 2016 Supplemental Specification is modified as follows:

401.01 Description

The Contractor shall furnish and place one or more courses of Asphalt Rich Base Hot Mix Asphalt (ARBHMA) on an approved base in accordance with the contract documents and in reasonably close conformity with the lines, grades, thickness, and typical cross sections shown on the plans or established by the Resident. The Department will accept this work under Quality Assurance provisions, in accordance with these specifications and the requirements of Section 106 – Quality, the provisions of AASHTO M 323 except where otherwise noted in sections 401 and 703 of these specifications, and the Maine DOT Policies and Procedures for HMA Sampling and Testing.

401.02 Materials

This section has been modified with the following revision:

The Asphalt Rich Base HMA shall be designed for an Air Void Target of 2.5% at 65 Gyration.

401.03 Composition of Mixtures

This section has been modified with the following revision: The Asphalt Rich Base HMA shall meet the following design criteria.

DESIGN CRITERIA

Gradation	PGAB Minimum
9.5mm mixture	7.0 %
12.5mm mixture	6.5 %
19.0mm mixture	5.8 %

The mixture shall meet the gradation requirements of a current MaineDOT approved 9.5mm, 12.5mm, or 19.0mm 65 Gyration JMF, as required by the contract, and the minimum PGAB content noted above. The Acceptance Limit targets for gradation will be as specified on the JMF.

ACCEPTANCE LIMITS

Property	USL and LSL
Passing 4.75 mm and larger sieves	Target +/-7%
Passing 2.36 mm to 1.18 mm sieves	Target +/-4%
Passing 0.60 mm	Target +/-3%
Passing 0.30 mm to 0.075 mm sieve	Target +/-2%
PGAB Content	Target +/-0.4%
Air Voids	2.5% +/-1.5%
Fines to Effective Binder	0.4 to 1.2
Voids in the Mineral Aggregate	LSL Only from Table 1
Voids Filled with Binder	72 -87.0 *
% TMD (In place density)	96.0% +/- 2.5%

*A production tolerance of 4.0% will apply for the USL.

401.21 Method of Measurement

The following replace the pay tables in section 401.21

<u>CORE DENSITY VS. CORE THEORETICAL MAXIMUM DENSITY COMPACTION 93.5-98.5 PERCENT</u>	
<u>PERCENT COMPACTION</u>	<u>PERCENT PAYMENT</u>
93.5 – 98.5	100
92.5-93.4, 98.6 – 99.0	95
92.4-91.5, 99.1 – 99.5	85
<91.5, > 99.5	75
Note: Percent compaction is the percentage of the field core density as compared to the Theoretical Maximum Density (TMD) of that core.	

<u>AIR VOIDS – 1.0 – 4.0 PERCENT</u>	
<u>VOIDS</u>	<u>PAYMENT PERCENT</u>
1.0 to 4.0	100
0.5-0.9, 4.1-4.5	90
<0.5, >4.5	75
Note: Voids are based on the average of the test specimens fabricated at the plant for each subplot (500 tons).	

Payment for PGAB content shall be based on the JMF aim with an allowable production tolerance of +/-0.4% except that test results which fall below the minimum PGAB content shall not be permitted:

Gradation	PGAB Minimum
9.5mm mixture	7.0 %
12.5mm mixture	6.5 %
19.0mm mixture	5.8 %

9.5 mm Asphalt Rich Base PGAB CONTENT	
% PGAB	% PAYMENT
JMF Aim \pm 0.4	100
JMF Aim + 0.5 , - 0.5 , < 7.0	95
JMF Aim + 0.6 , - 0.6 , < 6.9	90
JMF Aim + 0.7 , - 0.7 , < 6.8	85
<u>Note:</u> PGAB content is based on samples tested at the plant for each 500 Ton subplot	

12.5 mm Asphalt Rich Base PGAB CONTENT	
% PGAB	% PAYMENT
JMF Aim \pm 0.4	100
JMF Aim + 0.5 , - 0.5 , < 6.5	95
JMF Aim + 0.6 , - 0.6 , < 6.4	90
JMF Aim + 0.7 , - 0.7 , < 6.3	85
<u>Note:</u> PGAB content is based on samples tested at the plant for each 500 Ton subplot	

19.0 mm Asphalt Rich Base PGAB CONTENT	
% PGAB	% PAYMENT
JMF Aim \pm 0.4	100
JMF Aim + 0.5 , - 0.5 , < 5.8	95
JMF Aim + 0.6 , - 0.6 , < 5.7	90
JMF Aim + 0.7 , - 0.7 , < 5.6	85
<u>Note:</u> PGAB content is based on samples tested at the plant for each 500 Ton subplot	

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
403.2102	9.5mm Asphalt Rich Base HMA	Ton
403.2132	12.5mm Asphalt Rich Base HMA	Ton
403.2072	19.0mm Asphalt Rich Base HMA	Ton

SPECIAL PROVISIONSECTION 403HOT MIX ASPHALT PAVEMENT

Course	HMA Grading	Item Number	Total Thickness	No. of Layers	Complimentary Notes
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Northbound and Southbound Mainline and Shoulder Construction

Intermediate	12.5mm	403.2081	1.5"	1	A,D,E,I,J,K
Base	19.0mm	403.207	2.5"	1	C,I
Base	19.0 mm	403.2072	4.5"	2	D,I

Northbound and Southbound Median Construction

Intermediate	12.5mm	403.213	1.5"	1	C,I,
Base	19.0mm	403.207	2.5"	1	C,I

Mainline – Ramp Prior to Merge with Mainline at Physical Gore

Intermediate	12.5mm	403.2081		1.5"	1	A,D,E,I,J,K
Intermediate	12.5mm	403.213		1.5"	1	C,I
Base	19.0mm	403.207		2.5"	3	C,I

Mainline – Mill & Overlay

Intermediate	12.5mm	403.2081		1.5"	1	A,D,E,I,J,K
Intermediate	12.5mm	403.213		1.5"	1	C,I

COMPLEMENTARY NOTES

- A. The required PGAB for this mixture shall be **64E-28**.
- B. RAP may not be used.
- C. The Maine DOT will conduct the job mix verification. The aggregate qualities shall meet the design traffic level of 10 to <30 million ESALS for mix placed under this contract. Minimum and Maximum PGAB content limits from 401.21 shall not apply.
- D. The MTA will conduct the job mix verification. The aggregate qualities shall meet the design traffic level of 10 to <30 million ESALS for mix placed under this contract. The design verification, Quality Control, and Acceptance tests for this mix will be performed at **75 gyrations**. (N design)
- E. A material transfer vehicle (MTV) shall be used for the placement of Hot Mix Asphalt wearing surface on all roadways including acceleration and deceleration lanes and all ramps.

- F. Joints shall be constructed as the “notched wedge” type in accordance with Subsection 401.17.
- G. Joint density will be measured in accordance with Subsection 401.165.
- H. PGAB shall conform to the provisions of 403.02 – Polymer Modified PGAB for HMA
- I. The contractor shall furnish a quality control technician equipped with an approved densometer to ensure density requirements are met.
- J. Hydrated Lime shall be incorporated into the mixture.
- K. The antistrip additive Zycotherm manufactured by Zydex Industries shall be incorporated into the PGAB at a rate of 0.1%.

SPECIAL PROVISIONSECTION 403HOT MIX ASPHALT PAVEMENT403.01 Description

This work shall also consist of the construction, maintenance and removal of all temporary bituminous ramps at locations as shown on the Plans or as directed by the Resident.

403.02 General

The Contractor shall compose the Hot Mix Asphalt Pavement with aggregate, Performance Graded Asphalt Binder (PGAB), and mineral filler if required. The Performance Graded Asphalt Binder (PGAB) shall be polymer modified as detailed in this special provision and shall conform to the requirements of AASHTO M 332 (including Appendix 1). The PG64E-28 Binder shall contain a minimum of 2.25% Styrene-Butadiene-Styrene (SBS) polymer {BWT} in a homogeneous blend with a minimum average percent recovery of 75% as determined by AASHTO T350 @ 3.2 kPA (R3.2) on RTFO residue at 64°C to assure significant polymer load and performance. The stability of the modified binder shall be verified in accordance with ATSM D7173 using the Dynamic Shear Rheometer (DSR). The DSR $G^*/\sin(\delta)$ results from the top and bottom sections of the ATSM D7173 test shall not differ by more than 10%. The results of ASTM D7173 shall be included on the Certified Test Report.

When required PG70E-34 Binder shall be modified with Styrene-Butadiene-Styrene (SBS) polymer {BWT} in a homogeneous blend with a minimum average percent recovery of 75% as determined by AASHTO T350 @ 3.2 kPA (R3.2) on RTFO residue at 70°C to assure significant polymer load and performance. The stability of the modified binder shall be verified in accordance with ATSM D7173 using the Dynamic Shear Rheometer (DSR). The DSR $G^*/\sin(\delta)$ results from the top and bottom sections of the ATSM D7173 test shall not differ by more than 10%. The results of ASTM D7173 shall be included on the Certified Test Report.

403.03 Construction

All areas which have been milled or overlaid shall have a minimum length temporary ramp constructed as determined by the Resident at the milled or overlaid limits prior to opening the roadway to traffic. Temporary ramps shall be constructed using the same material as being placed on that day or as directed by the Resident. All temporary ramps are to be constructed on a sand joint. The Contractor shall be responsible for all repairs and maintenance required for the temporary ramps.

The Contractor shall be responsible for the layout of the longitudinal centerline between the travel lanes.

The sand and loose debris adjacent to the median guardrail shall be removed and disposed of by the Contractor off of Turnpike property.

The forty-five degree pavement safety edge needed between lanes 1 and 2 shall be incidental to the 202 pay items.

A minimum test strip of 100 tons placed at a nominal depth of 1 ½ inches, full lane width, shall be required. It shall be evaluated under testing requirements for mix volumetric and density. The exact location will be identified by the Authority. Prior to placement of the test strip, a leveling course (Item 403.211) shall be placed at the chosen location. A fog coat of Item 409.15, Bituminous Tack Coat, shall be applied to the level course prior to the placement of the HMA surface course, payment to be made under the 409.15 pay item. The test strip will be excluded from the remainder of the projects' QA analysis. The Contractor shall notify the Authority at least 48 hours in advance of placing the test strip. The test strip is intended to allow the Contractor to establish a method of compaction and adjust plant settings prior to mainline plant production.

403.04 Method of Measurement

The construction and removal of temporary ramps on sand joints, and maintaining the ramps will not be measured separately for payment, but shall be incidental to Items 403.

The removal of sand and loose debris will not be measured separately for payment, but shall be incidental to paving items.

Hot Mix Asphalt, 12.5 mm (Polymer Modified pavement with (up to) 15% RAP, placed as a wearing surface will be measured under Item 403.2081 Hot Mix Asphalt, 12.5 mm (Polymer Modified) - RAP.

403.05 Basis of Payment

Hot Mix Asphalt, 12.5 mm (Polymer Modified) pavement with (up to) 15% RAP, placed as a wearing surface will be paid under Item 403.2081 Hot Mix Asphalt, 12.5 mm (Polymer Modified) – RAP.

The following pay items are added:

<u>Pay Item</u>	<u>Pay Unit</u>
403.2081 Hot Mix Asphalt, 12.5 mm (Polymer Modified) – RAP	Ton

SPECIAL PROVISION
SECTION 639
ENGINEERING FACILITIES

Section 639, Engineering Facilities is deleted in its entirety and replaced with the following:

639.01 Description The Work shall consist of providing, erecting, lighting, equipping and maintaining a temporary Class A-P field office (facility) at the Crosby MTA maintenance yard, at mile marker 45.8 south bound for a period of 6(six) months.

639.02 Materials and Submittals Materials for the facility shall be of good quality customarily used in a standard frame house or office trailer construction.

639.03 General The temporary facility of the type called for shall be provided before the start of work, and shall remain for a period of six months. The location shall be approved by the Resident.

A fire extinguisher shall be provided in each facility for electrical and chemical fires and effective on all solvents used in the facility.

Walls, roof, floor, windows, and doors shall be tightly constructed to the required area.

Furnishings shall be supplied as called for. Doors shall be equipped with locks and all keys shall be in the possession of the Resident. Windows shall be equipped with latches so they may be locked on the inside. Window screens and screen doors shall be supplied when necessary. Adequate desk and desk space shall be provided. If a portable table is supplied, it should be adjustable to accommodate the various heights of employees. A proper office chair that is 5-way adjustable is needed.

639.04 Field Office The walls, roof, and floor of the building shall be completely insulated with a minimum insulation value of R-15. The interior walls shall be covered with suitable wall paneling. The entire office trailer shall be for the exclusive use of the Resident. The office trailer shall be winterized and completely enclosed at the bottom, if the trailer will be used in cold weather.

A public work area will be provided in the field office that shall be designed and constructed so that individuals with disabilities can approach, enter, and exit this area.

The minimum clear width of an accessible route shall be 36 inches except at doors.

Ground floor surfaces along accessible routes and in accessible rooms and spaces including floors, walks, ramps, stairs, and curb ramps, shall be stable, firm, and slip-resistant.

The main door to the public work area shall have a minimum clear opening of 32 inches with the door opened 90 degrees, measured between the face of door and the opposite stop.

Minimum maneuvering clearances at doors shall be provided. The floor or ground area within the required clearances shall be level and clear.

The handle and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping. Lever-operated mechanisms push type mechanisms, and U-shaped handles are acceptable designs. Hardware required for accessible door passage shall be mounted no higher than 48 inches above finished floor.

Firm and sturdy steps shall also be provided with 7-inch maximum riser and 11-inch minimum depth, and at least one handrail extending from the top of the steps to a minimum 12 inches beyond the bottom of the steps. Provide a platform at the top of the steps where they meet the exterior door. All components of the steps, railings, and landing shall be pre-engineered and constructed of aluminum.

In addition to the facilities previously specified in this subsection, each field office shall meet the following minimum requirements:

<u>Description</u>	<u>Quantity</u>
	Type A-P
Floor Area (Outside Dimension) - ft ²	450
Inside Wall Height – feet	7
Window Area - ft ²	55
Drafting Table Surface Area - ft ²	15
Drafting Stools - each	2
Office Desks - each	2
Ergonomic Swivel Chairs -ea (5-way adjustable)	3
Folding Chairs - each	6
Lighting Units - each	4
Electric Wall Outlets - each	8
Electrical Surge Protectors - each	2
Wall Closets - each	1
Plan Rack for minimum of 6 sets of plans	1
Plastic Folding Tables (3' by 8')	3
Wastebaskets - each	2

All windows shall be provided with shades or blinds.

The toilet facility shall be for the exclusive use of Authority personnel. Toilet facilities shall be portable, maintained by the contractor, and the Contractor shall retain ownership of them at the end of the project.

The Resident will have the option to reject any furniture or supplies provided to the field office based on general condition.

One hundred ten volt, 60 cycle, continuous electric service shall be supplied for lighting and 15-amp duplex wall outlets. Lighting shall consist of LED light units with rapid start bulbs located over the work areas for a minimum of 50 foot candles overall. There shall be wall-mounted exterior lights at each exterior doorway.

Drafting surfaces shall be 40 inches above the floor and be capable of folding nearly flat up against the wall when not in use. Shelves for plans and rolls shall also be furnished overhead. Drafting stools shall be approximately 28 inches high.

Desks shall be single or double pedestal standard office type, and shall be in addition to “built-in” type desks in the office trailer.

The office shall have three total rooms. Two offices, located one at each end of the facility, each with 80to 100 SF.

Field offices shall be furnished with 2 four-drawer letter size metal filing cabinet.

Each office shall be furnished with a broom, dustpan, sweeping compound, trash bags, and with cleaning material for cleaning glass. The contractor will be responsible for disposing of trash from the field office.

The Contractor shall provide a fully functional desktop copier/scanner, capable of copying field books, for the Resident’s use during the project. All maintenance and supplies, except paper, shall be the responsibility of the Contractor.

The Contractor shall provide a water cooler, with hot and cold dispenser, and shall be responsible for supplying bottled water compatible with the water cooler to maintain a constant potable water supply for the duration of the project. All maintenance and supplies shall be the responsibility of the Contractor. Alternate source of water, such as individual bottled water, may be provided as approved by resident.

The Contractor shall provide new 10 cubic-foot refrigerator with top mounted freezer in the field office that the Authority will retain.

The contractor shall provide a new 1000-watt microwave with a minimum size of 1.0 cubic foot. The Authority will retain the microwave at the end of the project.

Each office shall be furnished with a 10-person general-purpose first aid kit. The first aid kit shall be periodically inspected and refilled as necessary.

639.08 Heat and Air Conditioning Heat and air conditioning shall be an integral HVAC system. Each room shall have venting as required to maintain an acceptable room temperature during occupancy. All vent piping shall be insulated and be mounted behind the walls or ceiling as appropriate. One thermostat shall control all heating and cooling.

639.091 Broadband Connection In addition the contractor will supply one computer broadband connection, modem lease and router. The router shall have wireless access and be 802.11n or 802.11g capable and wireless. The type of connection supplied will be contingent upon the availability of services (i.e. DSL or Cable Broadband). **The selected service will have a minimum downstream connection of 10Mbps, 5 Mbps upstream, and allow for unlimited data.** The contractor shall be responsible for the installation charges and all reinstallation charges following suspended periods. Monthly service and maintenance charges shall be billed by the Internet Service Provider (ISP) directly to the contractor.

639.10 Method of Measurement Field office will be measured by the lump sum for facilities provided, equipped and maintained satisfactorily.

639.11 Basis of Payment The accepted quantity of field office will be paid for lump sum which payment shall be full compensation for furnishing, erecting, equipping, maintaining, furnishing electricity, heating, installing and maintaining toilet facilities, and removing the temporary facility.

Payment for these items will be made in 4 parts; the first payment of ¼ to be made after the Contractor has delivered and connected the temporary office trailer to the Crosby Maintenance facility, and it has been approved. The remaining payments shall be made at intervals as follows:

A second payment of ¼ shall be made when the Authority has approved the submittal for the permanent facility and the remain payments prorated over the 6 month duration.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
639.181 Field Office, Type A-P	Lump Sum

Date: 3/16/2020

Table with 7 columns: ITEM NO, DESCRIPTION, EXIT 44 NORTHBOUND OFF RAMP, NORTHBOUND BARREL, MEDIAN, SOUTHBOUND BARREL, TOTAL QUANTITY, UNIT. Rows include items like 201.11 CLEARING, 201.23 REMOVING SINGLE TREE TOP ONLY, etc.

Table with 7 columns: ITEM NO, DESCRIPTION, EXIT 44 NORTHBOUND OFF RAMP, NORTHBOUND BARREL, MEDIAN, SOUTHBOUND BARREL, TOTAL QUANTITY, UNIT. Rows include items like 604.40 SECURE CATCH BASIN GRATE, 605.016 6 INCH PVC UNDERDRAIN, etc.

Filename: PAW1_EQ_Plan_01.dgn

Scale: NOT TO SCALE. HNTB logo. HNTB CORPORATION, 340 County Road, Suite 6-C Westbrook, ME, 04092. Project Manager: Dale A. Mitchell, P.E. Design/Check/Draw dates and names.

HNTB CORPORATION logo and contact information.

MAINE TURNPIKE logo and THE GOLD STAR MEMORIAL HIGHWAY text.

PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS MM 43.0 TO MM 46.4 ESTIMATED QUANTITIES (1 of 2) CONTRACT: 2020.03 SHEET NUMBER: EQ-01 Addendum 02 Page 38 2 OF 310

Date: 3/16/2020

ESTIMATED QUANTITIES							
ITEM NO	DESCRIPTION	EXIT 44 NORTHBOUND OFF RAMP	NORTHBOUND BARREL	MEDIAN	SOUTHBOUND BARREL	TOTAL QUANTITY	UNIT
645.1099	REMOVE AND DISPOSE SIGN		12		20	32	EA
645.12	OVERHEAD GUIDE SIGN:(STA 2133+14)				1	1	LS
645.161	BREAKAWAY DEVICE SINGLE POLE	2	3		5	10	EA
645.162	BREAKAWAY DEVICE MULTI POLE		11		4	15	EA
645.251	ROADSIDE GUIDE SIGN, TYPE I		950		430	1,380	SF
645.2511	SHEET ALUMINUM OVERLAY, TYPE I	288				288	SF
645.271	REGULATORY, WARNING, CONFIRMATION AND ROUTE ASSEMBLY SIGN, TYPE I		350		150	500	SF
645.289	STEEL H-BEAM POLES		7,650		3,950	11,600	LB
645.501	REMOVE AND RESET MAINLINE SIGN NO.1		1		1	1	LS
645.502	REMOVE AND RESET MAINLINE SIGN NO. 2		1		1	1	LS
645.503	REMOVE AND RESET MAINLINE SIGN NO. 3		1		1	1	LS
645.504	REMOVE AND RESET MAINLINE SIGN NO. 4		1		1	1	LS
645.505	REMOVE AND RESET MAINLINE SIGN NO. 5		1		1	1	LS
645.506	REMOVE AND RESET MAINLINE SIGN NO. 6		1		1	1	LS
645.507	REMOVE AND RESET MAINLINE SIGN NO. 7		1		1	1	LS
645.508	REMOVE AND RESET MAINLINE SIGN NO. 8		1		1	1	LS
645.509	REMOVE AND RESET MAINLINE SIGN NO. 9		1		1	1	LS
645.510	REMOVE AND RESET MAINLINE SIGN NO. 10		1		1	1	LS
645.511	REMOVE AND RESET MAINLINE SIGN NO. 11		1		1	1	LS
645.512	REMOVE AND RESET MAINLINE SIGN NO. 12		1		1	1	LS
645.513	REMOVE AND RESET MAINLINE SIGN NO. 13				1	1	LS
645.514	REMOVE AND RESET MAINLINE SIGN NO. 14				1	1	LS
645.515	REMOVE AND RESET MAINLINE SIGN NO. 15				1	1	LS
645.516	REMOVE AND RESET MAINLINE SIGN NO. 16				1	1	LS
645.517	REMOVE AND RESET MAINLINE SIGN NO. 17				1	1	LS
645.518	REMOVE AND RESET MAINLINE SIGN NO. 18				1	1	LS
645.519	REMOVE AND RESET MAINLINE SIGN NO. 19				1	1	LS
645.520	REMOVE AND RESET MAINLINE SIGN NO. 20				1	1	LS
645.521	REMOVE AND RESET MAINLINE SIGN NO. 21				1	1	LS
645.522	REMOVE AND RESET MAINLINE SIGN NO. 22				1	1	LS
645.523	REMOVE AND RESET MAINLINE SIGN NO. 23				1	1	LS
645.524	REMOVE AND RESET MAINLINE SIGN NO. 24				1	1	LS
645.525	REMOVE AND RESET MAINLINE SIGN NO. 25				1	1	LS
645.526	REMOVE AND RESET MAINLINE SIGN NO. 26				1	1	LS
645.527	REMOVE AND RESET MAINLINE SIGN NO. 27				1	1	LS
645.528	REMOVE AND RESET OVERHEAD MAINLINE SIGN NO. 28	1				1	LS
645.529	REMOVE AND RESET MAINLINE SIGN NO. 29		1			1	LS
650.101	VARIABLE MESSAGE SIGN (VMS) SYSTEM - HOLMES ROAD				1	1	LS
650.102	VARIABLE MESSAGE SIGN (VMS) SYSTEM - CROSBY		1			1	LS
650.201	VMS GROUND MOUNTED CONTROL CABINET - HOLMES ROAD				1	1	EA
650.202	VMS GROUND MOUNTED CONTROL CABINET - CROSBY		1			1	EA
650.801	VMS POWER SYSTEM - HOLMES				1	1	LS
650.802	VMS POWER SYSTEM - CROSBY		1			1	LS
652.30	FLASHING ARROW	2	2		2	6	EA
652.312	TYPE III BARRICADES	5	9		9	23	EA
652.33	DRUM	70	350		350	770	EA
652.332	DRUM, LEFT IN PLACE		50			50	EA
652.34	CONE	100	100		100	300	EA
652.35	CONSTRUCTION SIGNS					5,400	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES					1	LS
652.4	PORTABLE CHANGEABLE MESSAGE SIGN	1	3		3	7	EA
652.44	PACE VEHICLE					250	CD
652.45	TRUCK MOUNTED ATTENUATOR	90	1,320		1,320	2,730	CD
652.452	AUTOMATED TRAILER MOUNTED SPEED LIMIT SIGN	1	3		3	7	EA
652.47	SEQUENTIAL FLASHING WARNING LIGHTS					100	EA
656.50	BALED HAY, IN PLACE	10	10		10	30	EA
656.60	TEMPORARY BERMS	100	65			165	LF
656.62	TEMPORARY SLOPE DRAINS	100	38			138	LF
656.632	30 INCH TEMPORARY SILT FENCE	1,200	11,500		13,600	26,300	LF
659.10	MOBILIZATION					1	LS
673.01	STORMWATER SOIL FILTER BED		410		620	1,030	CY
674.10	PREFABRICATED CONCRETE MODULAR GRAVITY WALL - RED BROOK				1	1	LS
674.10	PREFABRICATED CONCRETE MODULAR GRAVITY WALL - LONG CREEK		1			1	LS
801.03	TEST PITS					10	EA

Filename: PAW1_EQ_Plan_02.dgn

Scale:			
NOT TO SCALE			
No.	Revision	By	Date
1	REVISED QUANTITIES	DAM	3/20

Designed by:					
HNTB					
CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E.					
	By	Date	By	Date	
Designed	CAV	2/20	Checked	TRS	2/20
Drawn	GW	2/20	In Charge of	RAL	2/20

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THE GOLD STAR
MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E., P.T.O.E.

PORTLAND AREA WIDENING &
SAFETY IMPROVEMENTS
MM 43.0 TO MM 46.4

ESTIMATED QUANTITIES (2 of 2)

CONTRACT: 2020.03

SHEET NUMBER: EQ-02
Addendum 02 Page 39

3 OF 310

Date: 3/13/2020

Filename: PAW1_GeneralNotes_Add1.dgn

GENERAL NOTES:

- ALL DETAILS SHALL BE IN CONFORMANCE WITH MAINE DEPARTMENT OF TRANSPORTATION (MAINEDOT) STANDARD DETAILS HIGHWAYS AND BRIDGES LATEST REVISION AND MAINEDOT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL. LATEST REVISION, UNLESS OTHERWISE INCLUDED IN THESE PLANS.
- THE CONTRACTOR SHALL SUBMIT THE PROPOSED STAGING AREA(S) AND FIELD TRAILER LOCATION TO THE RESIDENT FOR APPROVAL PRIOR TO STARTING WORK.
- RIGHT OF WAY AND PROPERTY LINES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
- GEOTECHNICAL INFORMATION EITHER FURNISHED OR REFERENCED IN THIS PLAN SET IS FOR THE BIDDER'S AND CONTRACTOR'S USE. NO ASSURANCE IS GIVEN THAT THE INFORMATION OR THE INTERPRETATIONS WILL BE REPRESENTATIVE OF ACTUAL SUBSURFACE CONDITIONS AT THE TIME OF CONSTRUCTION. THE AUTHORITY SHALL NOT BE RESPONSIBLE FOR THE BIDDER'S AND CONTRACTOR'S INTERPRETATIONS OF, OR CONCLUSIONS DRAWN FROM, THE GEOTECHNICAL INFORMATION.
- THE GEOTECHNICAL DESIGN REPORT, INCLUDING TEST BORING LOGS TITLED PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS, MAINE TURNPIKE, GEOTECHNICAL DESIGN REPORT MAY BE ACCESSED AT THE MAINE TURNPIKE AUTHORITY WEB ADDRESS: WWW.MAINETURNPIKE.COM/PROJECTS/CONSTRUCTION-CONTRACTS.
- TREE CLEARING IS NOT ALLOWED FROM JUNE 1 TO JULY 31.
- CONTRACTOR SHALL PROVIDE MTA WITH AS-CONSTRUCTED PLANS IN PDF AND MICROSTATION FORMATS. THE PLANS SHALL NOTE ALL CHANGES TO, BUT NOT LIMITED TO: PAVEMENT, CONCRETE BARRIER, GUARDRAIL, CULVERTS, MEDIUM DRAINAGE, FOUNDATIONS, WIRING, SIGNS, ETC.

EARTHWORK AND PAVEMENT NOTES:

- THE NORMAL GRUBBING WIDTH IN THE FILLS WHEN SUBGRADE IS LESS THAN 5' ABOVE EXISTING GROUND SHALL BE VARIABLE LEFT OR RIGHT. THE GRUBBING DEPTH HAS BEEN ESTIMATED AS 6' IN FIELD AREAS AND 1' IN WOODED AREAS.
- WASTE MATERIALS SHALL BE DISPOSED OFF THE PROJECT SITE AND IN ACCORDANCE WITH ALL ENVIRONMENTAL REGULATIONS.
- EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH OSHA SUBPART O OF 29 CFR PART 192.6.65D-652 (CONSTRUCTION STANDARDS FOR EXCAVATION).
- REMOVAL OF EXISTING PAVEMENT, WITHIN THE AREAS OF FULL DEPTH PAVEMENT AND FULL DEPTH RECONSTRUCTION, SHALL BE PAID FOR AS COMMON EXCAVATION. EXISTING PAVEMENT THICKNESS HAS BEEN ESTIMATED TO BE 10".
- 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. THE ACTUAL CLEARING LINES SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND SHALL BE APPROVED BY THE RESIDENT PRIOR TO ANY CLEARING TAKING PLACE.
- EXISTING INSLOPES STEEPER THAN 2:1 IN PROPOSED FILL AREAS SHALL BE BENCHED AS SHOWN IN THE DETAILS OR AS DIRECTED BY THE RESIDENT.
- INTERPRETIVE ROCK SURFACES ARE SHOWN IN THE PLANS. ADDITIONAL INFORMATION ON ROCK SURFACES CAN BE FOUND IN THE FINAL GEOTECHNICAL DESIGN REPORT.
- ROCK SHALL BE EXCAVATED 1' BELOW SUBGRADE AND GRADED TO DAYLIGHT TO AVOID PONDING.
- MUCK EXCAVATION DEPTH HAS BEEN ESTIMATED AT 18".

GUARDRAIL NOTES:

- AT THE END OF EACH WORK DAY, THE CONTRACTOR IS REQUIRED TO HAVE AN APPROVED CRASHWORTHY END TREATMENT ON ALL GUARDRAIL ITEMS, UNLESS NOTED OTHERWISE.
- CONNECTIONS FOR PROPOSED GUARDRAIL TO EXISTING GUARDRAIL SHALL BE INCIDENTAL TO THE PROPOSED GUARDRAIL ITEMS, UNLESS OTHERWISE NOTED.
- ALL GUARDRAIL SHALL BE INSTALLED IN A MANNER TO AVOID DRAINAGE STRUCTURES AND ELECTRICAL CONDUITS.
- HOLES CREATED BY GUARDRAIL REMOVAL WILL BE FILLED AND COMPACTED WITH APPROVED MATERIALS AS DIRECTED BY THE RESIDENT. PAYMENT TO BE INCIDENTAL TO THE GUARDRAIL ITEMS.
- ALL EXISTING DELINEATOR AND MILE MARKER POSTS SHALL BE REMOVED AND RESET. PAYMENT WILL BE MADE UNDER ITEM 606.356/ DELINEATOR POST-REMOVE AND RESET.
- W-BEAM GUARDRAIL EXISTS ON THE PROJECT SITE. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING W-BEAM GUARDRAIL.
- ALL END TERMINALS AND ATTENUATORS MANUFACTURED AFTER DECEMBER 31, 2019 SHALL MEET THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
- THE TEMPORARY CONCRETE BARRIER, TYPE 1 TO BE LEFT IN PLACE SHALL UTILIZE BARRIER SUPPLIED BY THE AUTHORITY.
- TOP OF GUARDRAIL HEIGHT SHALL BE 32" ABOVE THIS CONTRACT'S FINAL PAVEMENT SURFACE. THIS WILL RESULT IN A HEIGHT OF 30 1/2" ABOVE A FUTURE 1 1/2" OVERLAY INSTALLED BY OTHERS.

ROCK EXCAVATION NOTES:

- CONTRACTOR SHALL LIMIT PREDRILL HOLES TO 3" DIAMETER.
- MAXIMUM PRESPLIT SPACING SHALL BE 24".
- CONTRACTOR SHALL HOLD A MINIMUM 25 MILLISECOND DELAY BETWEEN PRESPLIT HOLES AND PRODUCTION HOLES.
- BLAST DESIGN SHALL KEEP THE DIRECTION OF SHOT PARALLEL TO THE ROADWAY.
- THE CONTRACTOR SHALL LIMIT VIBRATION FROM BASTING AS REQUIRED BY SPECIFICATION SECTION 105.2.7 AND AS REQUIRED BY UTILITY OWNERS. THE CONTRACTOR SHALL SELECT THEIR MEANS AND METHODS TO MEET THESE VIBRATION REQUIREMENTS.

UTILITY NOTES:

- EXISTING UTILITIES ON THESE PLANS WERE COMPILED FROM FIELD SURVEY AND VARIOUS OTHER SOURCES. LOCATIONS ARE NOT GUARANTEED TO BE ACCURATE NOR IS IT GUARANTEED THAT ALL UTILITIES ARE SHOWN. NO SEPARATE OR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR DUE TO ANY VARIANCE BETWEEN THE DATA SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS ENCOUNTERED. NO WORK SHALL BE STARTED UNTIL THE OWNERS OF THE VARIOUS UTILITIES ARE NOTIFIED BY THE CONTRACTOR OF THE PROPOSED CONSTRUCTION. THE CONTRACTOR IS ALSO REQUIRED TO CALL DIG SAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO THE START OF THE WORK.
- ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS NOTED.
- THE UTILITIES INVOLVED IN THIS CONTRACT ARE:
 BUCKEYE PIPELINE
 CENTRAL MAINE POWER (DISTRIBUTION)
 CENTRAL MAINE POWER (TRANSMISSION)
 CHARTER COMMUNICATIONS
 CONSOLIDATED COMMUNICATIONS (FAIRPOINT)
 CROWN CASTLE FIBER NETWORKS (LIGHT TOWER)
 DEAD RIVER COMPANY (SEWER)
 FAA/PORTLAND JETPORT
 FIRSTLIGHT FIBER
 GRANITE STATE GAS
 MAINE TURNPIKE AUTHORITY - LIGHTING
 MCI WORLD COMMUNICATIONS (VERIZON)
 OCEAN PROPERTIES (SEWER)
 PORTLAND PIPE LINE CORPORATION
 PORTLAND WATER DISTRICT
 SCARBOROUGH FIRE DEPARTMENT
 UNILIT
- THE CONTRACTOR SHALL NOTIFY THE RESIDENT 10 DAYS PRIOR TO CONSTRUCTION SO THE RESIDENT CAN ARRANGE FOR MAINE TURNPIKE UNDERGROUND UTILITY LOCATION. ALL PROPOSED SIGN LOCATIONS AND EXCAVATION LOCATIONS SHALL BE MARKED AT THE NOTIFICATION TIME. EXCAVATION WILL NOT BE PERMITTED UNTIL THE AUTHORITY HAS LOCATED AND MARKED THEIR UNDERGROUND UTILITIES, OR NOTIFIED THE RESIDENT THERE ARE NO UNDERGROUND UTILITIES IN THE MARKED AREAS. THE AUTHORITY HAS PROGRAMMED TWO FIELD VISITS FOR MAINE TURNPIKE UTILITY COORDINATION ON THIS PROJECT. SHOULD THE CONTRACTOR NEED ADDITIONAL SIGN LOCATIONS AND/OR ADDITIONAL EXCAVATION LOCATIONS MARKED, OR SHOULD THE CONTRACTOR FAIL TO MAINTAIN THE AUTHORITY'S PREVIOUSLY ESTABLISHED DIG SAFE MARKS, THE AUTHORITY SHALL DEDUCT ADDED MARKING COSTS FROM THE CONTRACTOR'S PAYMENTS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE UTILITY LOCATIONS.

DRAINAGE NOTES:

- NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT. ABANDONED STRUCTURES TO REMAIN SHALL BE PLUGGED WITH BRICK AND MORTAR (INCIDENTAL TO 604 ITEMS) AND FILLED WITH FLOWABLE FILL (ITEM 602.30).
- INLETS AND OUTLETS OF ALL CULVERTS SHALL BE RIPRAPPED UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.
- IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW - UNDERWATER BACKFILL.
- ANY NECESSARY CUTTING OF EXISTING CATCH BASINS TO TAKE A PROPOSED PIPE WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCIDENTAL TO THE PROPOSED CULVERT ITEMS.
- ANY NECESSARY CUTTING OF EXISTING PIPES TO FIT IN AREAS OF PROPOSED CATCH BASINS WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCIDENTAL TO THE PROPOSED CATCH BASIN ITEMS.
- EXISTING CATCH BASINS TO REMAIN SHALL BE CLEANED AS DIRECTED BY THE RESIDENT. PAYMENT WILL BE MADE UNDER ITEM 604.182 CLEANING EXISTING CATCH BASIN AND MANHOLE. EXISTING CULVERTS TO REMAIN SHALL BE CLEANED AS DIRECTED BY THE RESIDENT UNDER ITEM 631.32 CULVERT CLEANER (INCLUDING OPERATOR). POST CONSTRUCTION, ALL EXISTING DRAINAGE TO REMAIN AND NEW DRAINAGE SHALL BE CLEANED AS DIRECTED BY THE RESIDENT UNDER ITEM 631.32 CULVERT CLEANER (INCLUDING OPERATOR).
- ALL DITCH ELEVATIONS AND OFFSETS SHOWN ON THE CROSS SECTIONS ARE FOR THE FINISHED DITCH FLOW LINE.


- THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE DURING CONSTRUCTION AS NEEDED FOR TEMPORARY USE, PRIOR TO PROPOSED DRAINAGE SYSTEMS BEING FUNCTIONAL AS IDENTIFIED ON PLANS.
- CATCH BASIN GRATES THAT WILL CARRY TRAFFIC DURING MOT OPERATIONS SHALL BE SECURED AS NOTED IN THE SPECIAL PROVISIONS.

EROSION CONTROL NOTES:

- THE ANTICIPATED EROSION CONTROL DEVICES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROPOSE ACTUAL TYPE AND LOCATION OF DEVICES FOR APPROVAL BY THE RESIDENT. ADDITIONAL MEASURES MAY BE PROPOSED BY THE CONTRACTOR DUE TO SITE OR WEATHER CONDITIONS. THE RESIDENT MAY DIRECT THE CONTRACTOR TO IMPLEMENT ADDITIONAL MEASURES. ANY ADDITIONAL MEASURES APPROVED BY THE RESIDENT WILL BE MEASURED FOR PAYMENT UNDER THE APPROPRIATE BID ITEMS.
- 4" LOAM HAS BEEN ESTIMATED FOR 100% OF THE DISTURBED SLOPE AREA UNLESS OTHERWISE SPECIFIED ON THE PLANS. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS DESIGNATED BY THE RESIDENT.
- ALL NON-ROCK SLOPES SHALL BE SEEDED WITH SEEDING METHOD NO. 2.
- MULCH SHALL BE APPLIED IN SEEDED AREAS, EXCEPT WHERE EROSION CONTROL BLANKET IS SPECIFIED.
- ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION BEST MANAGEMENT PRACTICES.
- TEMPORARY BERMS AND TEMPORARY SLOPE DRAINS ARE ANTICIPATED AT ALL STONE DOWNSPOUT LOCATIONS WHILE GROWTH IS BEING ESTABLISHED ON SIDE SLOPES AND PRIOR TO RIPRAP INSTALLATION.
- TEMPORARY EROSION CONTROL BLANKET, ITEM 613.319 SHALL BE INSTALLED IN ALL DITCHES AND 2:1 SLOPES FROM TOP TO TOE OF SLOPE. LOAM AND SEED SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE EROSION CONTROL BLANKET. LIMITS OF THE EROSION CONTROL BLANKET IN DITCHES SHALL BE 6' WIDE OR AS DESIGNATED BY THE RESIDENT.
- PLACE A 2' WIDE STRIP OF TEMPORARY EROSION CONTROL BLANKET ON THE SIDE SLOPES ALONG THE TOP OF THE RIPRAP AND BEHIND THE WINGWALLS.
- TEMPORARY STABILIZATION WITH MULCH OR OTHER NON-ERODABLE COVER IS REQUIRED ON ALL EXPOSED SOILS THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS. AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY SHALL BE STABILIZED WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST. THE CONTRACTOR IS RESPONSIBLE FOR APPLYING TEMPORARY MULCH AS NECESSARY, IN ACCORDANCE WITH THE LATEST EDITION OF THE BMP'S, TO MINIMIZE SOIL EROSION PRIOR TO THE APPLICATION OF THE FINAL SLOPE TREATMENT.
- TEMPORARY SEED SHALL BE APPLIED TO ALL DISTURBED AREAS THAT WILL NOT BE COMPLETED WITHIN 30 DAYS.
- A DOUBLE ROW OF SILT FENCE PROTECTION SHALL BE INSTALLED AT ALL STREAM LOCATIONS AND OPEN WATER WETLANDS AS SHOWN ON THE PLANS.
- TEMPORARY STONE CHECK DAMS SHALL BE PLACED IN THE EXISTING DITCHES AS SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT. TEMPORARY STONE CHECK DAMS SHALL BE INSTALLED IN ACCORDANCE WITH THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION BEST MANAGEMENT PRACTICES.
- STABILIZED CONSTRUCTION ENTRANCES MUST BE USED AND MAINTAINED. NO TRACKING OF SOIL ON THE MAINE TURNPIKE OR LOCAL ROADS WILL BE ALLOWED.

LIGHTING NOTES:

- ALL PERMANENT WIRING SHALL BE COPPER AND WILL BE INCIDENTAL TO THE CONDUIT.
- ALL RESET LIGHT STANDARDS SHALL INCLUDE NEW BREAKAWAY COUPLINGS AND MOUNTING HARDWARE. PAYMENT FOR BREAKAWAY COUPLINGS SHALL BE INCIDENTAL TO REMOVE AND RESET LIGHT STANDARD.
- ALL USABLE EXISTING PRECAST FOUNDATIONS SHALL BE STACKED AT THE CROSBY MAINTENANCE FACILITY. PAYMENT FOR STACKING OF FOUNDATIONS SHALL BE INCIDENTAL TO REMOVE AND RESET LIGHT STANDARD OR REMOVE AND STACK LIGHT STANDARD.
- THE CONTRACTOR SHALL VERIFY LIGHTING CIRCUIT VOLTAGE PRIOR TO ORDERING ANY LIGHTING COMPONENTS.
- ALL NEW OR RESET LIGHT STANDARDS SHALL BE PLACED ON NEW 24" FOUNDATIONS.
- BREAKAWAY COUPLINGS ARE REQUIRED FOR ALL PERMANENT LIGHT POLES.
- EXISTING LIGHTING STANDARDS WILL VARY THROUGHOUT THE PROJECT. ALL LIGHTING STANDARDS WILL BE TEMPLATED TO ENSURE THE CORRECT BOLT PATTERN IS USED FOR EACH PROPOSED FOUNDATION.
- LOCATION OF ELECTRICAL CONDUIT IS SCHEMATIC ONLY.
- THE CONTRACTOR SHALL NOTIFY THE RESIDENT 30 DAYS PRIOR TO EXIT 45 NB ON RAMP LIGHTING WORK SO THAT THE RESIDENT CAN COORDINATE THE POWER SOURCE.

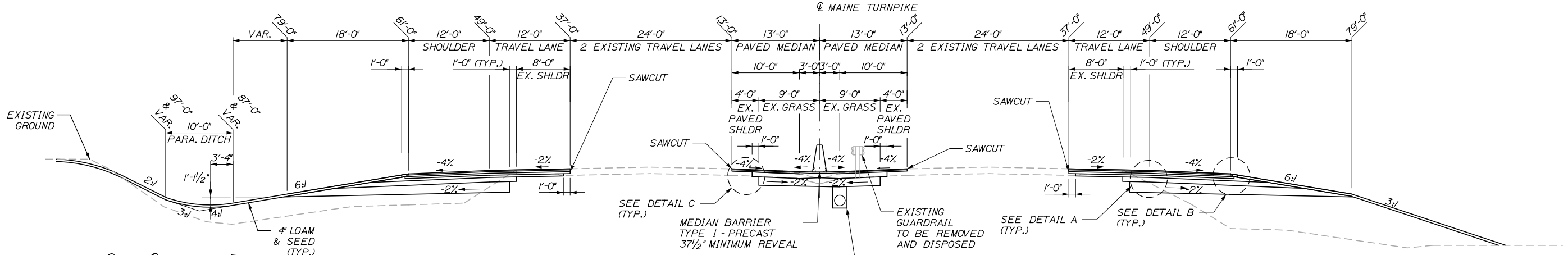
Scale: NOT TO SCALE				Designed by:			
				HNTB CORPORATION 340 County Road, Suite 6-C Westbrook, ME 04092 TEL (207) 774-5155 FAX (207) 228-0909			
No.	Revision	By	Date	By	Date	By	Date
1	Clarify Road Surface and Guardrail Height		3/20	ALZ	2/20	TRS	2/20
				Designed	2/20	Checked	2/20
				Drawn	2/20	In Charge of	2/20

			
THE GOLD STAR MEMORIAL HIGHWAY			
MTA PROJECT MANAGER: RALPH NORWOOD IV, P.E., PTOE			

PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS MM 43.0 TO MM 46.4 GENERAL NOTES	
SHEET NUMBER: GN-01 Addendum 02 Page 40	

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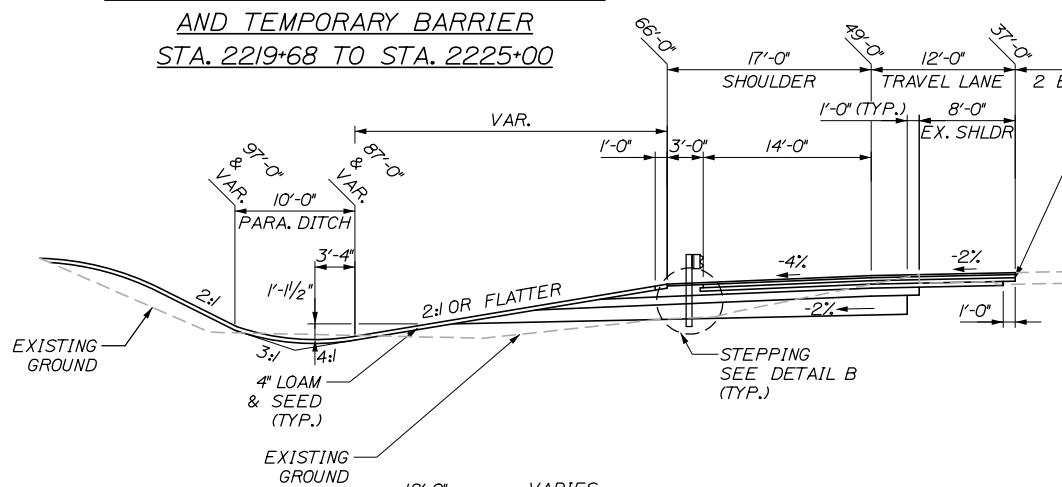
Date: 3/17/2020



3 LANE SECTION WITH 12' SHOULDER AND TEMPORARY BARRIER STA. 2219+68 TO STA. 2225+00

3 LANE SECTION WITH 12' SHOULDER

13. PAVEMENT PLACED AGAINST THE MEDIAN BARRIER SHALL BE PLACED AT THE SAME TIME AS THE SHOULDER SURFACE COURSE.
14. HOT RUBBERIZED ASPHALT SHALL BE APPLIED TO THE MEDIAN BARRIER PRIOR TO PAVING AGAINST BARRIER. PAYMENT SHALL BE INCIDENTAL TO THE PAVEMENT ITEMS.



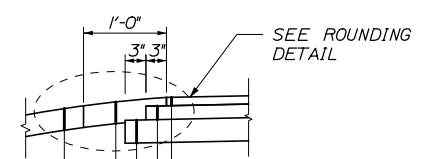
3 LANE SECTION WITH 17' SHOULDER

- NOTES:**
1. THE PAVEMENT BASE DEPTHS AND CROSS SLOPES AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
 2. WHEN SUPERELEVATION OF THE TRAVEL LANES EXCEEDS 4%, LOW SIDE SHOULDER SHALL HAVE THE SAME SLOPE AS THE TRAVEL LANE.
 3. *ROLLOVER* ALGEBRAIC DIFFERENCE IN RATES OF CROSS SLOPE SHALL NOT EXCEED 8%.
 4. CROWNS FOR BOTH SUPERELEVATED AND NORMAL SECTIONS FOR ALL COURSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
 5. A COATING OF HOT RUBBERIZED ASPHALT SHALL BE APPLIED TO SURFACE LAYER OF ALL SAWCUT AND PAVEMENT JOINTS PRIOR TO PAVING. REMAINDER OF SAWCUT TO BE BITUMINOUS TACK COAT. PAYMENT SHALL BE INCIDENTAL TO THE PAVEMENT ITEMS.
 6. BITUMINOUS TACK COAT IS REQUIRED BETWEEN ALL LIFTS OF PAVEMENT, OR AS DIRECTED BY RESIDENT. BITUMINOUS TACK COAT IS REQUIRED ON ALL EXISTING PAVED OR MILLED SURFACES PRIOR TO PLACING PROPOSED PAVEMENT.
 7. CONSTRUCT A 20' TRANSITION FOR AGGREGATE COURSE DEPTHS FROM RAMP ADJACENT TO TURNPIKE TO RAMP PROPER.
 8. UNSUITABLE SUBGRADE CONSISTING OF SOFT COHESIVE SOIL SHALL BE EXCAVATED TO A MINIMUM OF TWO FEET BELOW SUBGRADE AND REPLACED WITH A LAYER OF SEPARATION GEOTEXTILE AND GRANULAR BORROW.
 9. PAVEMENT GRINDINGS OR AGGREGATE BASE COURSE-TYPE A SHALL BE PAID FOR UNDER PAY ITEM 304.14.
 10. THE PAVEMENT PLACED IN THE AREA BETWEEN MEDIAN BARRIER AND MEDIAN GUTTER, IS QUANTIFIED AS, AND WILL BE PAID FOR UNDER, THE PAVEMENT ITEMS NOTED IN DETAIL C.
 11. THE MAXIMUM VERTICAL MEASUREMENT OF DEPTH FOR PAYMENT OF STRUCTURAL ROCK EXCAVATION WILL BE TO A HORIZONTAL PLANE LOCATED 12 INCHES BELOW THE BOTTOM OF THE INVERT OF THE PIPE FOR UNDERDRAIN TYPE "B" AND UNDERDRAIN TYPE "C".
 12. THE INVERT ELEVATION OF UNDERDRAIN TYPE "B" OUTLETS SHALL BE A MINIMUM OF 6 INCHES ABOVE THE FLOW LINE OF A DITCH OF THE ORIGINAL GROUND.

1/2" HOT MIX ASPHALT, 12.5mm NOMINAL MAXIMUM SIZE (POLYMER MODIFIED)

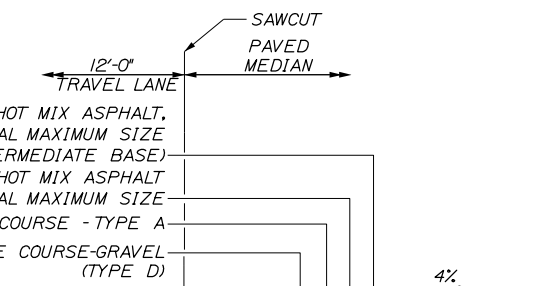
2 1/2" HOT MIX ASPHALT 19.0mm NOMINAL MAXIMUM SIZE
 4 1/2" (2 LIFTS) HOT MIX ASPHALT 19.0mm NOMINAL MAXIMUM SIZE
 4" AGGREGATE BASE COURSE - TYPE A
 8" AGGREGATE SUBBASE COURSE-GRAVEL
 19" GRANULAR BORROW

DETAIL A



DETAIL B

1/2" HOT MIX ASPHALT, 12.5mm NOMINAL MAXIMUM SIZE (POLYMER MODIFIED)
 2 1/2" HOT MIX ASPHALT 19.0mm NOMINAL MAXIMUM SIZE
 4 1/2" (2 LIFTS) HOT MIX ASPHALT 19.0mm NOMINAL MAXIMUM SIZE
 PAVEMENT GRINDINGS OR AGGREGATE BASE COURSE-TYPE A (SEE NOTE 9)
 4" LOAM



DETAIL C

Scale: NOT TO SCALE

No.	Revision	By	Date
1	Surface Pavement Revisions		3/20

Designed by:

HNTB

CONSULTANT PROJECT MANAGER: DALE A. MITCHELL, P.E.

	By	Date	Checked	By	Date
Designed	PJS	2/20		TRS	2/20
Drawn	GW	2/20	In Charge of	RAL	2/20

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

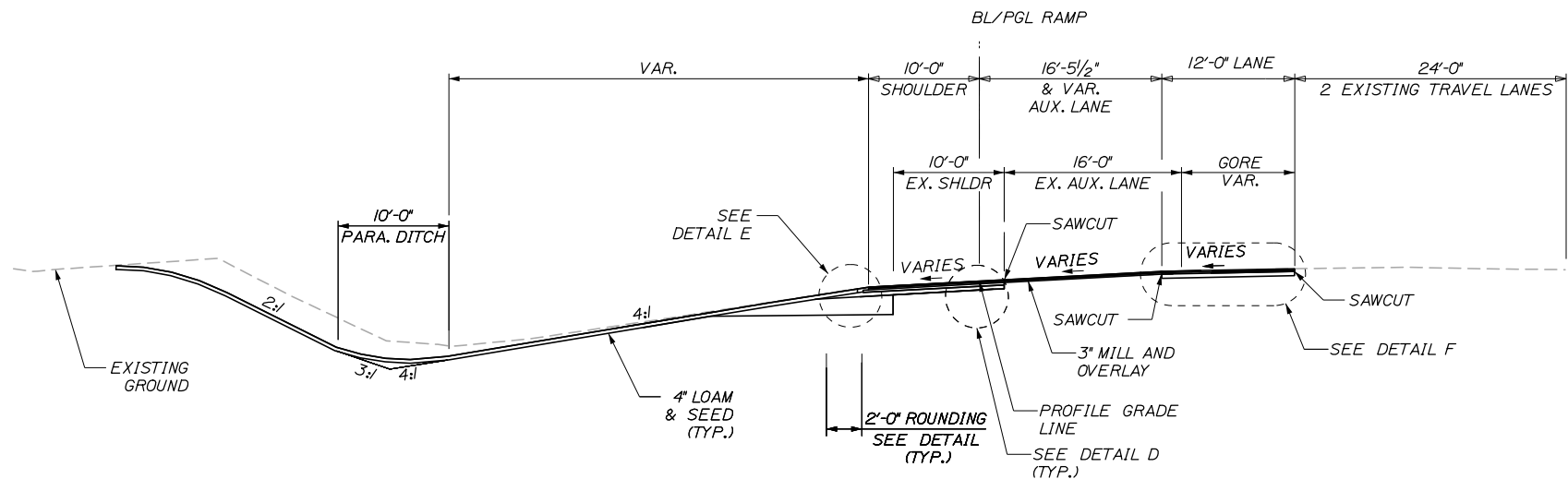
MTA PROJECT MANAGER: RALPH NORWOOD IV, P.E., PTOE

PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS
 MM 43.0 TO MM 46.4
 TYPICAL SECTIONS (1 OF 3)

SHEET NUMBER: TYP-01
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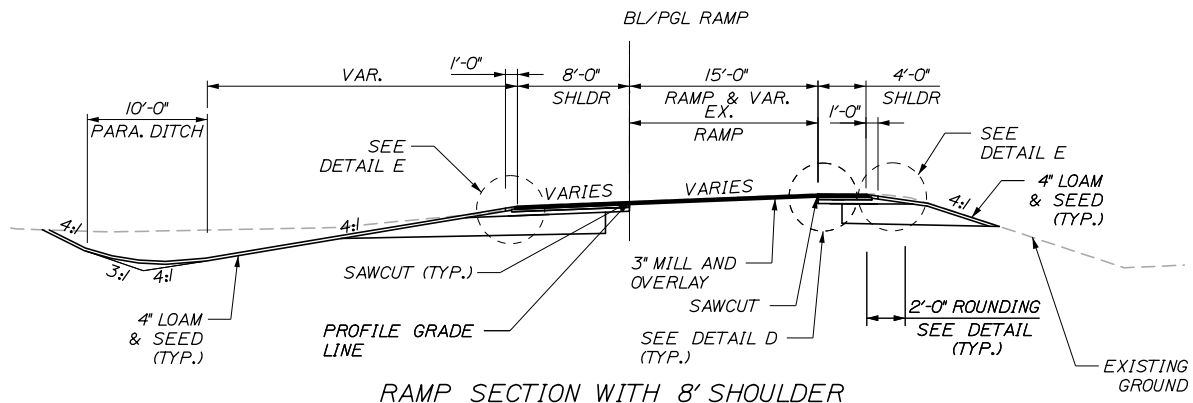
CONTRACT: 2020.03
 6 OF 310

Date: 3/17/2020

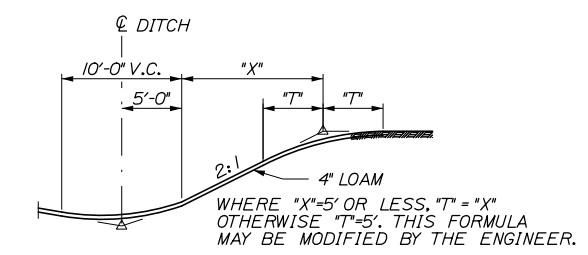


RAMP SECTION WITH PAVED GORE

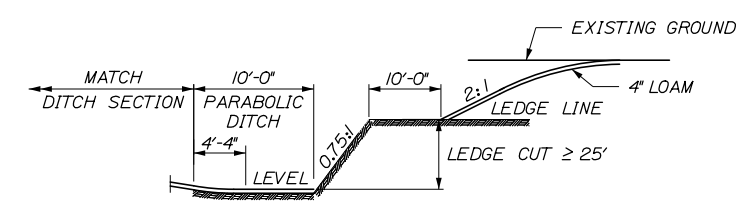
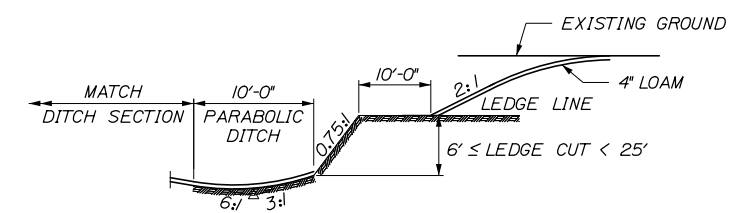
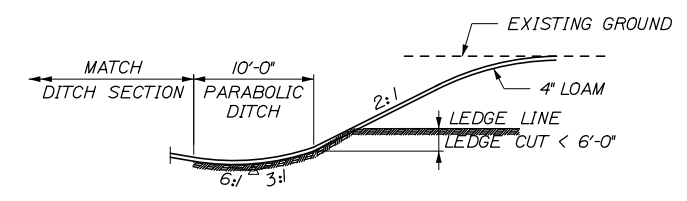
SUPERELEVATION (e)		
LEFT %	STATION	RIGHT %
45NB ON RAMP		
+9.17	34+50	-9.17
+5.20	35+25	-5.20
+5.20	36+00	-5.20
+4.00	36+50	-4.00
45SB ON RAMP		
+4.00	2+75	-4.00
+5.40	3+25	-5.40
+5.40	4+25	-5.40
+6.58	4+50	-6.58
45SB OFF RAMP		
+5.70	19+25	-5.70
+4.60	19+50	-4.60
+4.60	20+50	-4.60
+4.00	21+50	-4.00
46NB OFF RAMP		
+2.00	66+00	-2.00
+3.00	67+60	-3.00
46SB ON RAMP		
+3.00	40+00	-3.00
+3.00	47+60	-3.00



RAMP SECTION WITH 8' SHOULDER

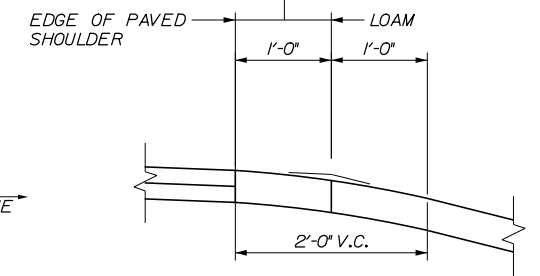


BACKSLOPE ROUNDING DETAIL



LEDGE ROCK CUT

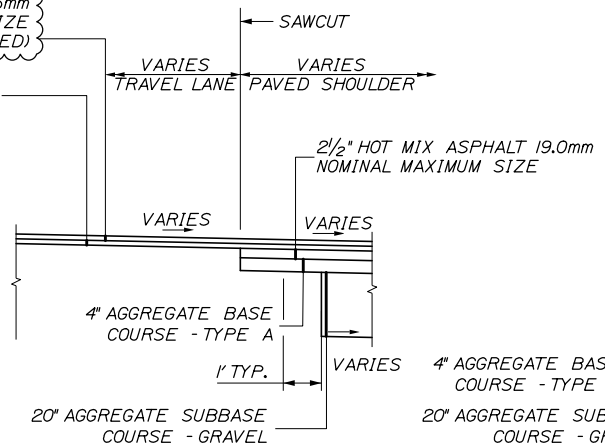
PAVEMENT GRINDINGS OR AGGREGATE BASE COURSE-TYPE A (SEE NOTE 9)



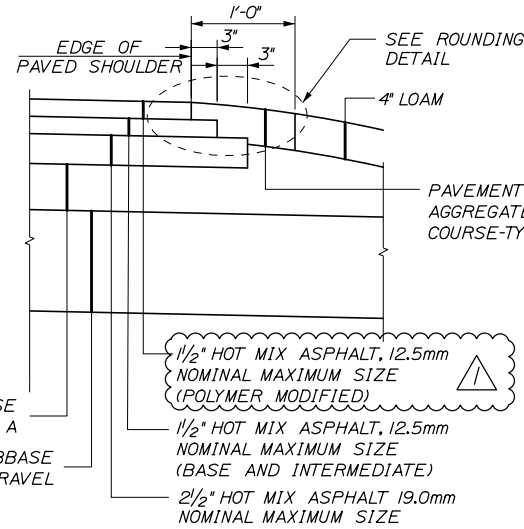
ROUNDING DETAIL

1/2" HOT MIX ASPHALT, 12.5mm NOMINAL MAXIMUM SIZE (POLYMER MODIFIED)

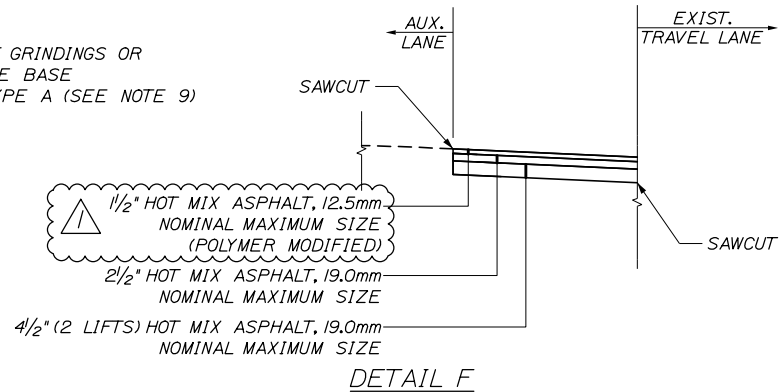
1/2" HOT MIX ASPHALT, 12.5mm NOMINAL MAXIMUM SIZE (BASE AND INTERMEDIATE)



DETAIL D



DETAIL E



DETAIL F

Scale: NOT TO SCALE

No.	Revision	By	Date
1	Surface Pavement Revision		3/20

Designed by:

HNTB

CONSULTANT PROJECT MANAGER: DALE A. MITCHELL, P.E.

	By	Date	Checked	By	Date
Designed	PJS	2/20	Checked	TRS	2/20
Drawn	GW	2/20	In Charge of	RAL	2/20

HNTB CORPORATION
 340 County Road, Suite 6-C
 Westbrook, ME 04092
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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH NORWOOD IV, P.E., PTOE

PORTLAND AREA
 MAINLINE IMPROVEMENTS
 MM 43.7 TO MM 46.4
 TYPICAL SECTION (3 OF 3)

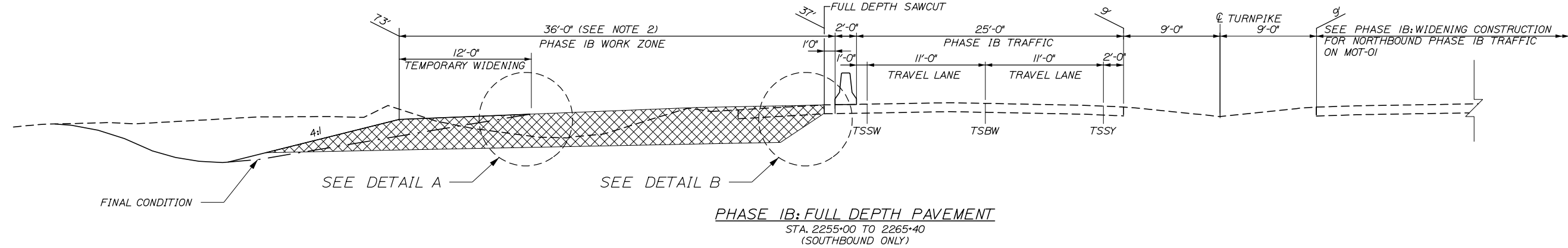
CONTRACT: 2020.03

SHEET NUMBER: TYP-03
 Addendum 02 Page 42
 8 OF 310

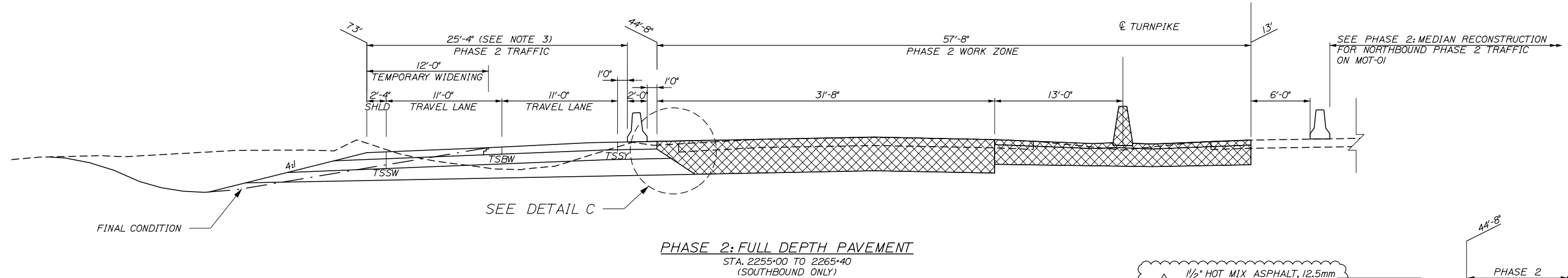
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Date: 3/17/2020

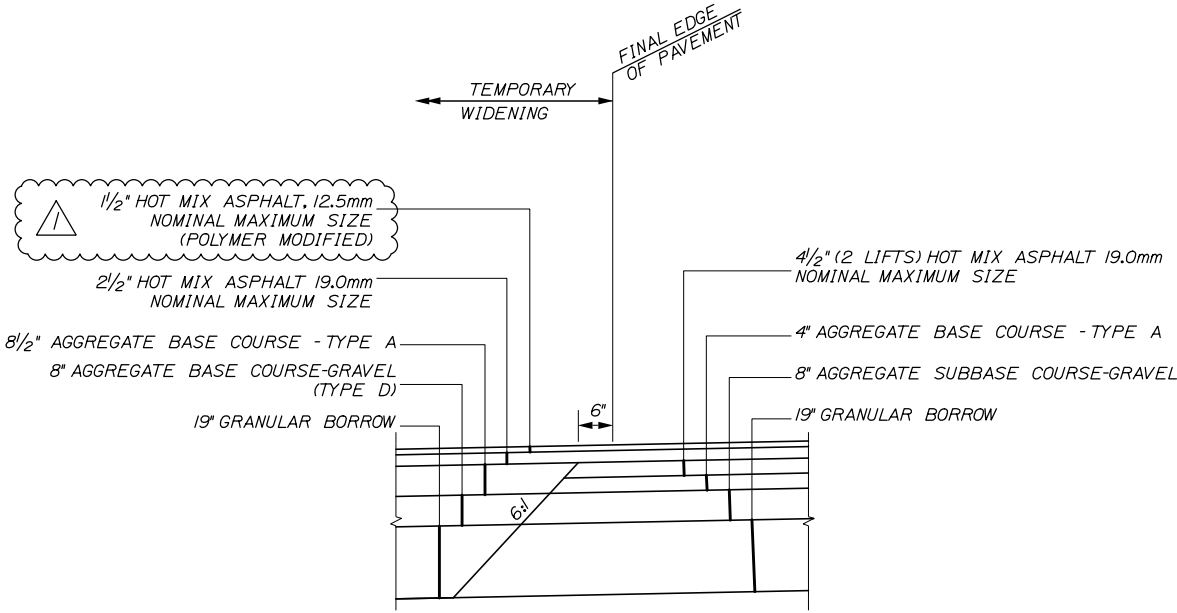
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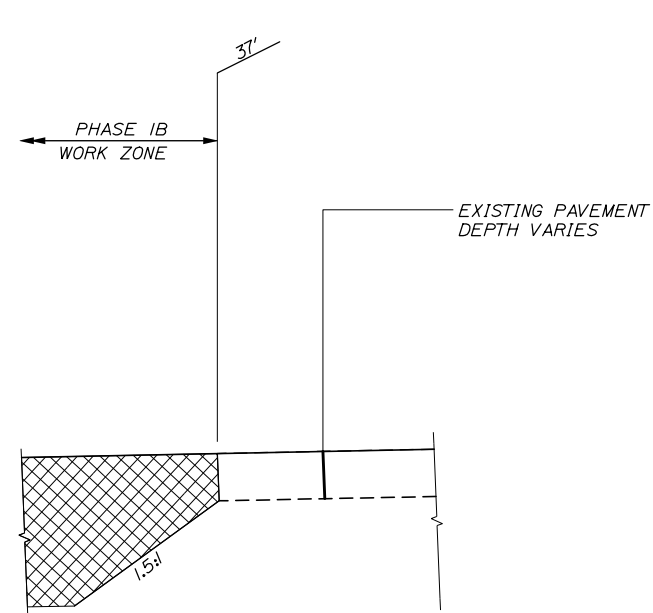
PHASE 1B: FULL DEPTH PAVEMENT
STA. 2255+00 TO 2265+40
(SOUTHBOUND ONLY)



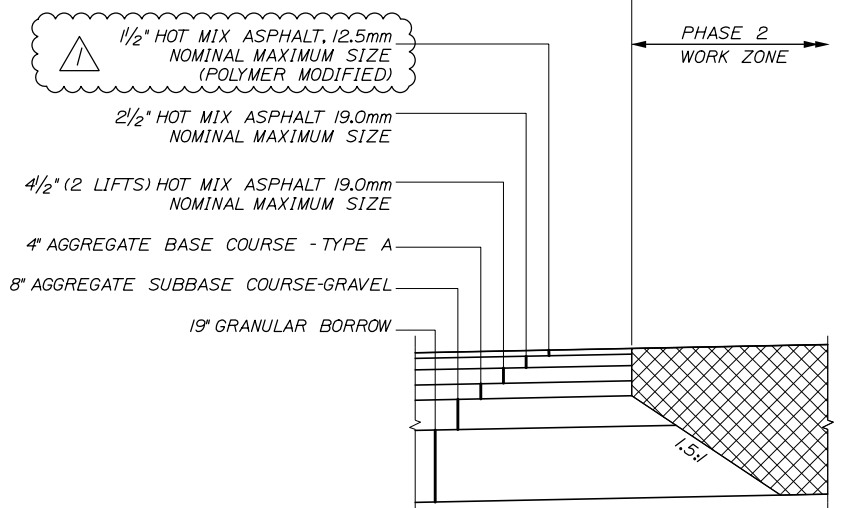
PHASE 2: FULL DEPTH PAVEMENT
STA. 2255+00 TO 2265+40
(SOUTHBOUND ONLY)



DETAIL A



DETAIL B



DETAIL C

- NOTE:**
- FOR PLAN LAYOUT, REFER TO PLAN SHEETS MOT-22 TO MOT-23
 - FROM STA. 2264+50 TO STA. 2267+50 WIDTH IS 42'-8". FROM STA. 2268+75 TO STA. 2270+50 WIDTH IS 45'-2". EXTRA WIDTH IS ADDED TO THE OUTSIDE SHOULDER.
 - FROM STA. 2264+50 TO STA. 2267+50 WIDTH IS 32'-0". FROM STA. 2268+75 TO STA. 2270+50 WIDTH IS 34'-6". EXTRA WIDTH IS ADDED TO THE OUTSIDE SHOULDER.

Scale: **NOT TO SCALE**

No.	Revision	By	Date
1	Surface Pavement Revision		3/20

Designed by:

HNTB

CONSULTANT PROJECT MANAGER: DALE A. MITCHELL, P.E.

	By	Date	Checked	By	Date
Designed	LAD	2/20	Checked	TRS	2/20
Drawn	GW	2/20	In Charge of	RAL	2/20

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

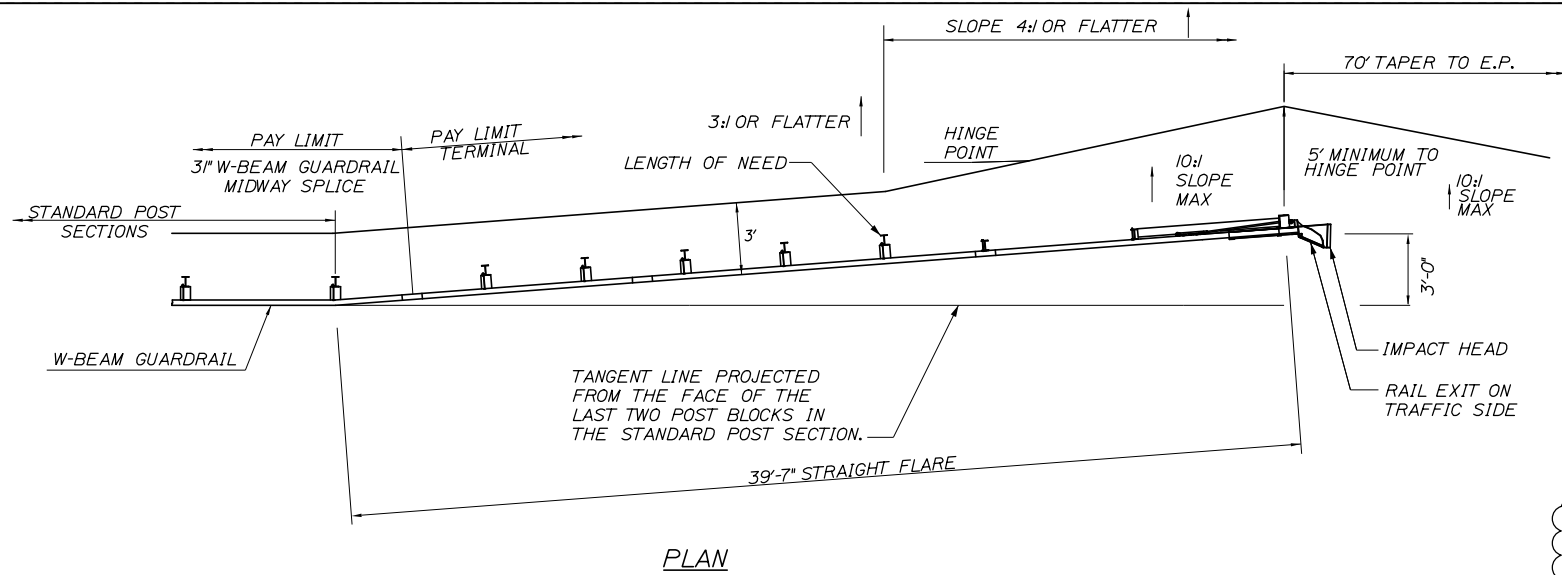
MTA PROJECT MANAGER: RALPH NORWOOD IV, P.E., PTOE

PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS
MM 43.0 TO MM 46.4
MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS

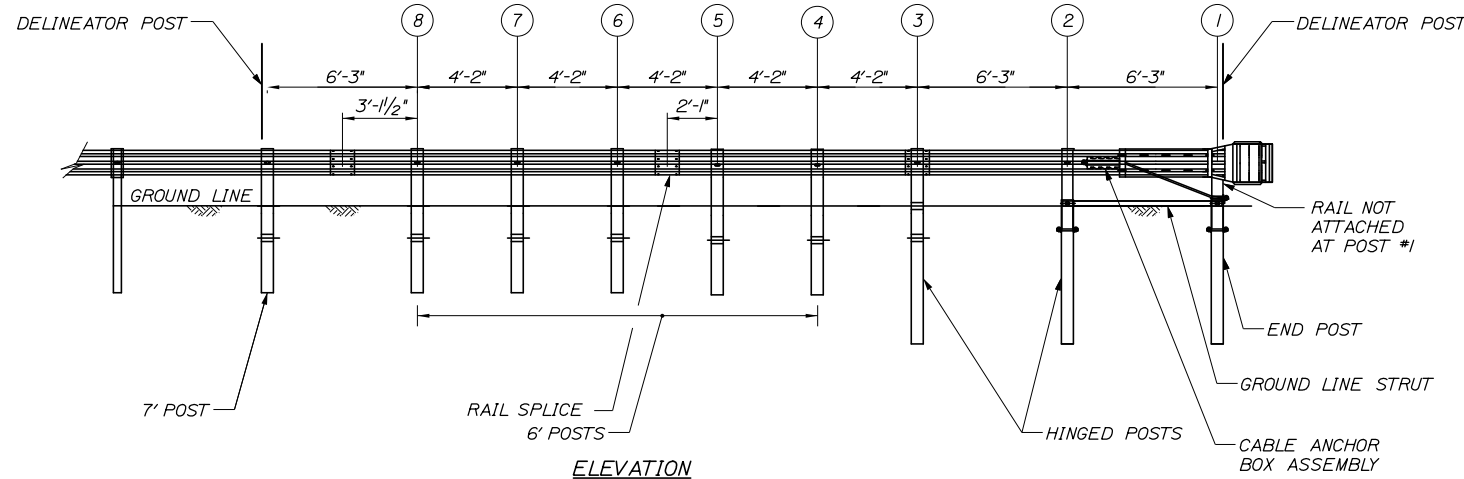
CONTRACT: 2020.03

SHEET NUMBER: MOT-03
Addendum 02 Page 43
11 OF 310

Date: 3/16/2020

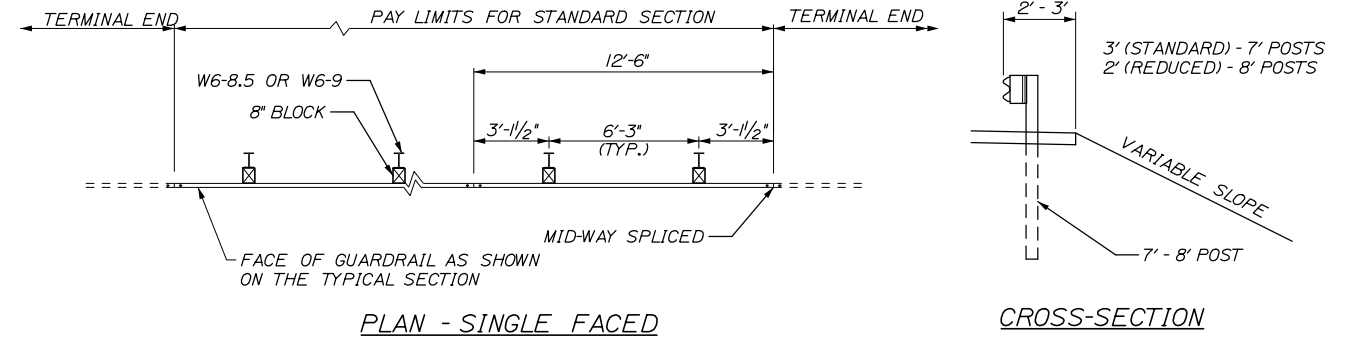


PLAN



ELEVATION

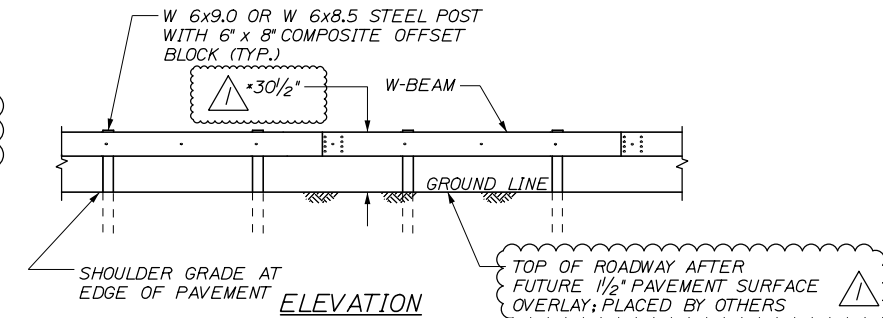
31 W-BEAM GUARDRAIL - MID-WAY SPLICE FLARED TERMINAL
NOT TO SCALE



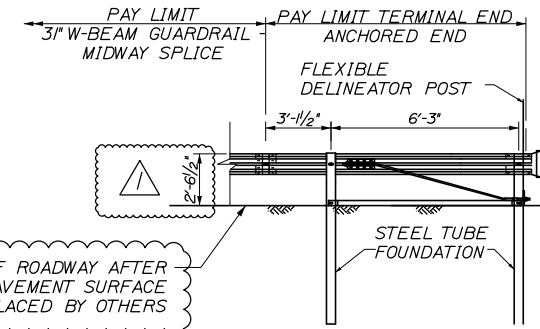
PLAN - SINGLE FACED

CROSS-SECTION

*MEASURED FROM FUTURE 1/2" PAVEMENT SURFACE OVERLAY; PLACED BY OTHERS



31 W-BEAM GUARDRAIL - MID-WAY SPLICE (8" OFFSET BLOCKS)
NOT TO SCALE

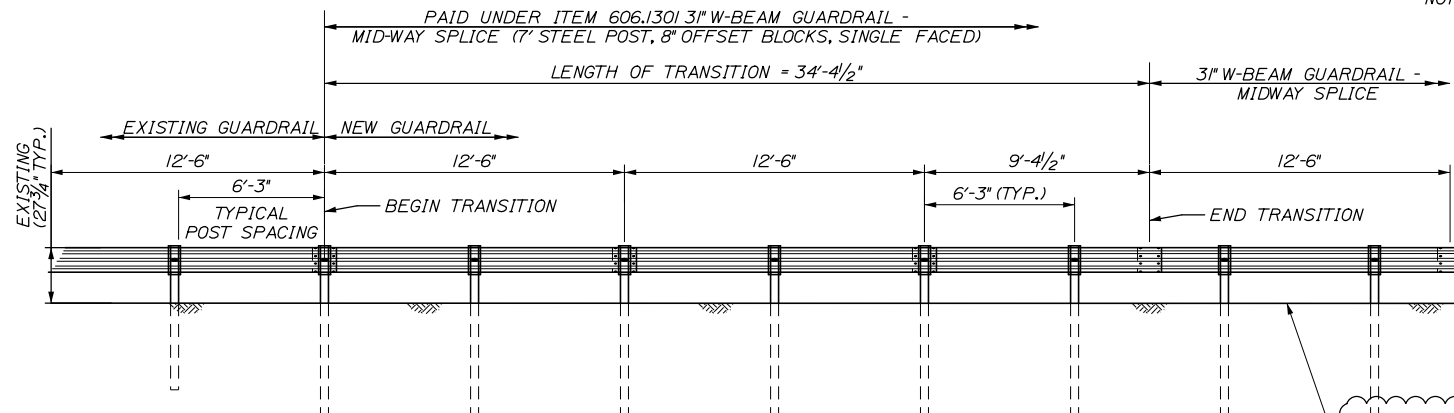


TERMINAL END - ANCHORED END - 31 W-BEAM GUARDRAIL
NOT TO SCALE

NOTES:
1. THIS DETAIL MODIFIES THE SEW31 DRAWING SUCH THAT W-BEAM DOES NOT EXTEND BEYOND THE LAST GUARDRAIL POST. THE RWMI4a W-BEAM PANEL SHALL HAVE A LENGTH OF 9'-4 1/2" MEASURED FROM THE CENTER OF THE MIDWAY SPLICE TO THE CENTER OF THE LAST GUARDRAIL POST.

GENERAL GUARDRAIL INSTALLATION NOTES:

1. THE CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR THE INSTALLATION OF ALL GUARDRAIL COMPONENTS TO BE INSTALLED. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER OF ANY CONFLICTS OR IRREGULARITIES BETWEEN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THE CONTRACT DOCUMENTS.
2. THE CONTRACTOR IS REQUIRED TO HAVE AN APPROVED CRASH END TREATMENT ON ALL GUARDRAIL ENDS PRIOR TO THE REMOVAL OF ANY MOT FEATURES.
3. GUARDRAIL HEIGHT SHALL BE MEASURED FROM GROUND ELEVATION ADJACENT TO EACH POST.
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CUT BOLTS, DISCARD PARTS, TRASH, PAVEMENT DEBRIS, ETC., AFTER COMPLETING THE GUARDRAIL INSTALLATION.
5. CONNECTION FOR PROPOSED RAIL TO EXISTING RAIL SHALL BE INCIDENTAL TO THE PROPOSED GUARDRAIL ITEMS.
6. TERMINAL UNIT SHALL BE MFEAT AND MASH CERTIFIED AS MANUFACTURED BY ROAD SYSTEMS INC.
7. SEE SPECIFICATIONS FOR REFLECTIVE SHEETING REQUIREMENTS.
8. TOP OF GUARDRAIL HEIGHT SHALL BE 32" ABOVE THIS CONTRACT'S FINAL PAVEMENT SURFACE. THIS WILL RESULT IN A HEIGHT OF 30 1/2" ABOVE A FUTURE 1/2" OVERLAY; INSTALLED BY OTHERS.



TRANSITION FROM EXISTING GUARDRAIL TO 31 MID-WAY SPLICED GUARDRAIL
NOT TO SCALE

- TRANSITION FROM EXISTING GUARDRAIL NOTES:**
1. MAINTAIN STANDARD 1" CLEARANCE OF POST ABOVE PANEL THROUGHOUT THE ENTIRE LENGTH OF TRANSITION.
 2. A MINIMUM OF ONE (1) 12'-6" PANEL SHALL BE PLACED BETWEEN THIS TRANSITION AND THE START OF ANY END TREATMENT OR ANCHORAGE.
 3. ALL NEW POSTS SHALL BE 84" IN LENGTH UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.

TOP OF ROADWAY AFTER FUTURE 1/2" PAVEMENT SURFACE OVERLAY; PLACED BY OTHERS

Filename: PAW1_Guardrail_Details_IV_Add1.dgn

Scale: NOT TO SCALE			
No.	Revision	By	Date
1	Clarify Road Surface and Guardrail Height		3/20

Designed by:

HNTB

CONSULTANT PROJECT MANAGER: DALE A. MITCHELL, P.E.

Designed	PJS	2/20	Checked	TRS	2/20
Drawn	GW	2/20	In Charge of	RAL	2/20

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FAX (207) 228-0909

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH NORWOOD IV, P.E., PTOE

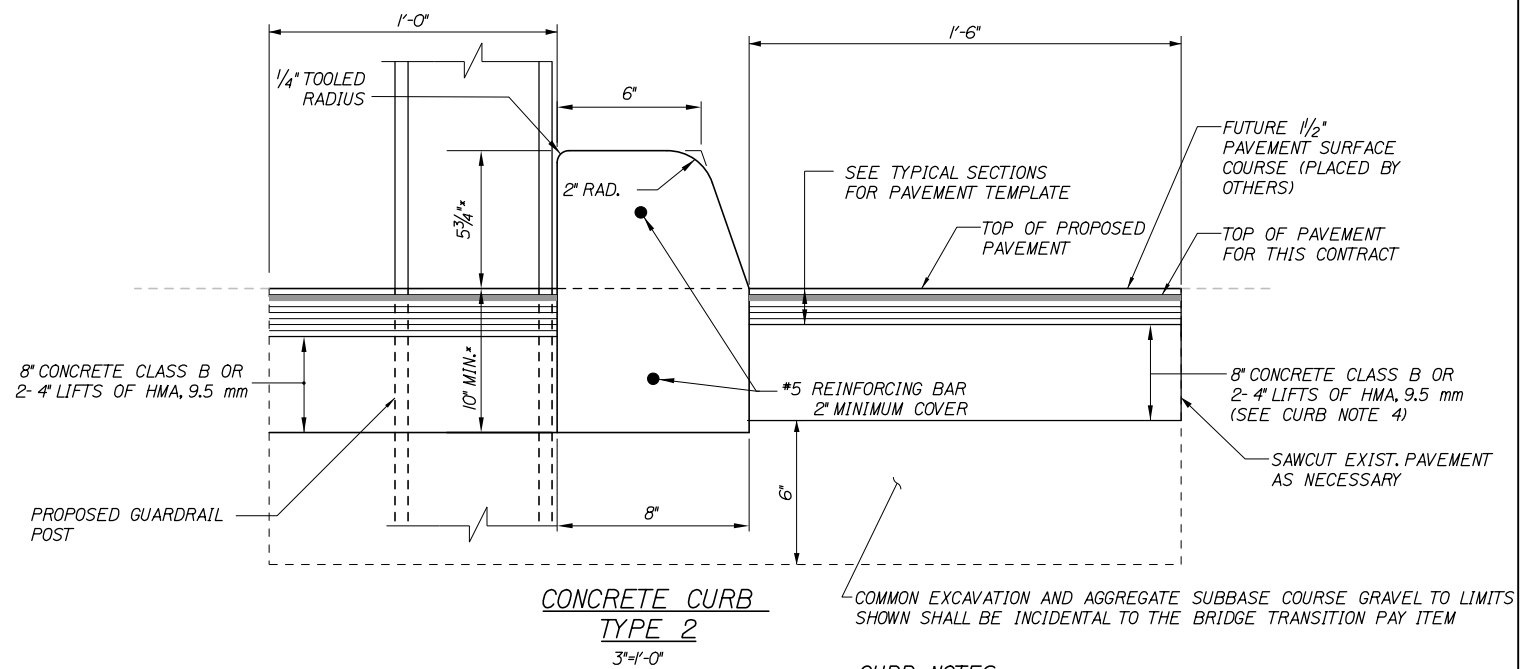
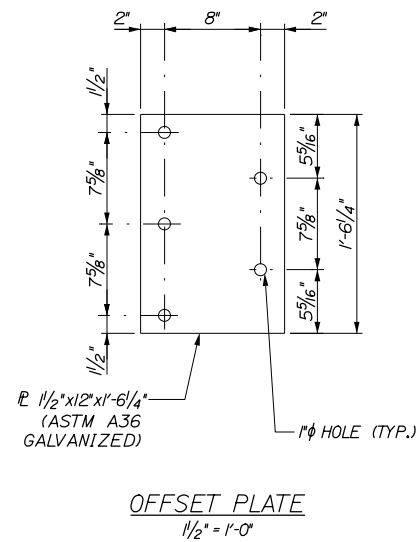
PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS
MM 43.0 TO MM 46.4
GUARDRAIL DETAILS
MIDWAY SPLICE

CONTRACT: 2020.03

SHEET NUMBER: CD-01
Addendum 02 Page 44

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Date: 3/13/2020



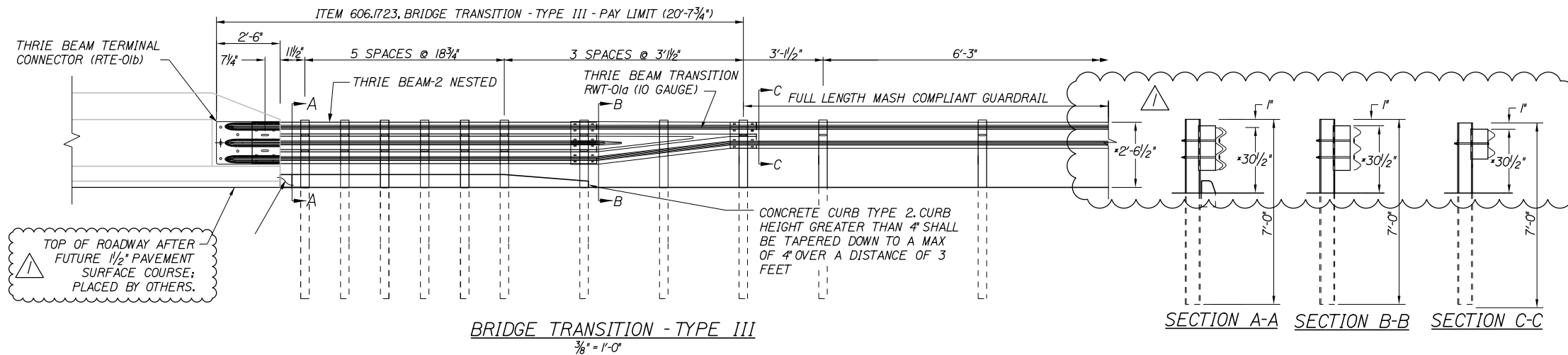
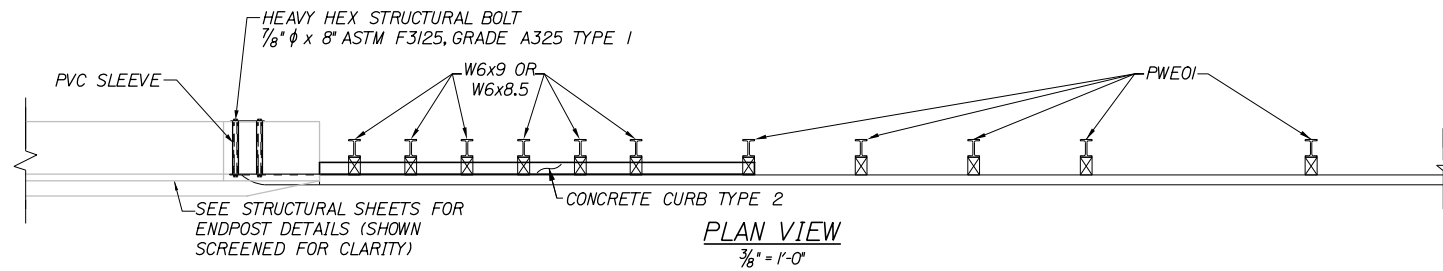
*MEASURED FROM FUTURE 1/2" PAVEMENT SURFACE COURSE, PLACED BY OTHERS.

CURB NOTES:

- CURB SHALL BE EITHER PRECAST CONCRETE, CAST-IN-PLACE CONCRETE OR GRANITE TO MEET DIMENSIONS SHOWN ON THE PLANS.
- CONCRETE CURBS USED IN CONJUNCTION WITH THRIE-BEAM BRIDGE TRANSITION SHALL BE TYPE 2. SEE DETAILS THIS SHEET. CONCRETE CURBS SHALL BE SET TO FORM A CONTINUOUS GUTTERLINE WITHOUT ANY DRAINAGE OPENINGS.
- CURB TRANSITION SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCIDENTAL TO THE BRIDGE TRANSITION PAY ITEM.
- SAWCUTTING EXISTING PAVEMENT, CONCRETE FILL AND PAVEMENT TO LIMITS SHOWN SHALL BE INCIDENTAL TO THE BRIDGE TRANSITION PAY ITEM.

GUARDRAIL NOTES:

- ADDITIONAL HOLES MAY BE MADE IN THE THRIE-BEAM PANELS BY DRILLING, PUNCHING, OR OTHER MEANS THAT PRODUCE A NEAT, CLEAN HOLE. BURNING HOLES WILL NOT BE ALLOWED.
- THRIE BEAM SHALL BE PLACED WITH THE COMPOSITE BLOCKOUT FACE IN FRONT OF OR DIRECTLY ABOVE THE CURB FACE.
- RAIL ELEMENT SHALL MEET ALL REQUIREMENTS OF AASHTO M-180 EXCEPT AS MODIFIED ON THE PLANS. THE THRIE BEAM TRANSITION TO W-BEAM SHALL BE OF THE SAME MATERIAL, BUT SHALL NOT BE LESS THAN 10 GAUGE.
- AFTER INSTALLATION IS COMPLETE, UPSET THE THREAD ON THE ANCHOR BOLTS IN THREE PLACES AROUND EACH BOLT, AT THE JUNCTION OF THE NUT AND THE EXPOSED THREAD, WITH A CENTER PUNCH OR SIMILAR TOOL.
- STANDARD BARRIER HARDWARE HAS BEEN USED TO DEVELOP THESE GUARDRAIL ATTACHMENTS. DESIGNATIONS PROVIDED IN PARENTESIS RELATE TO STANDARD ELEMENTS DETAILED IN "A GUIDE TO STANDARDIZED BARRIER RAIL HARDWARE," 1995, AASHTO-AGC-ARTBA JOINT COOPERATE COMMITTEE, 2013 UPDATE.
- 1" HOLE IN CONCRETE SHALL BE FORMED BY A 1" I.D. PVC SLEEVE AS APPROVED BY THE ENGINEER.
- GUARDRAIL HEIGHT SHALL BE ADJUSTED UNIFORMLY BETWEEN SECTION CALLOUTS.
- TOP OF GUARDRAIL HEIGHT SHALL BE 32" ABOVE THIS CONTRACT'S FINAL PAVEMENT SURFACE. THIS WILL RESULT IN A HEIGHT OF 30 1/2" ABOVE A FUTURE 1/2" OVERLAY, INSTALLED BY OTHERS.




SECTION A-A SECTION B-B SECTION C-C

Filename: PAW1_GuardrailDetails_IL_Add1.dgn

Scale:			
AS NOTED			
No.	Revision	By	Date
1	Clarify Road Surface and Guardrail Height		3/20

Designed by:			
HNTB			
CONSULTANT PROJECT MANAGER: DALE A. MITCHELL, P.E.			
Designed	PJS	2/20	Checked
Drawn	GW	2/20	In Charge of

HNTB CORPORATION
340 County Road, Suite 6-C
Westbrook, ME 04092
TEL (207) 774-5155
FAX (207) 228-0909



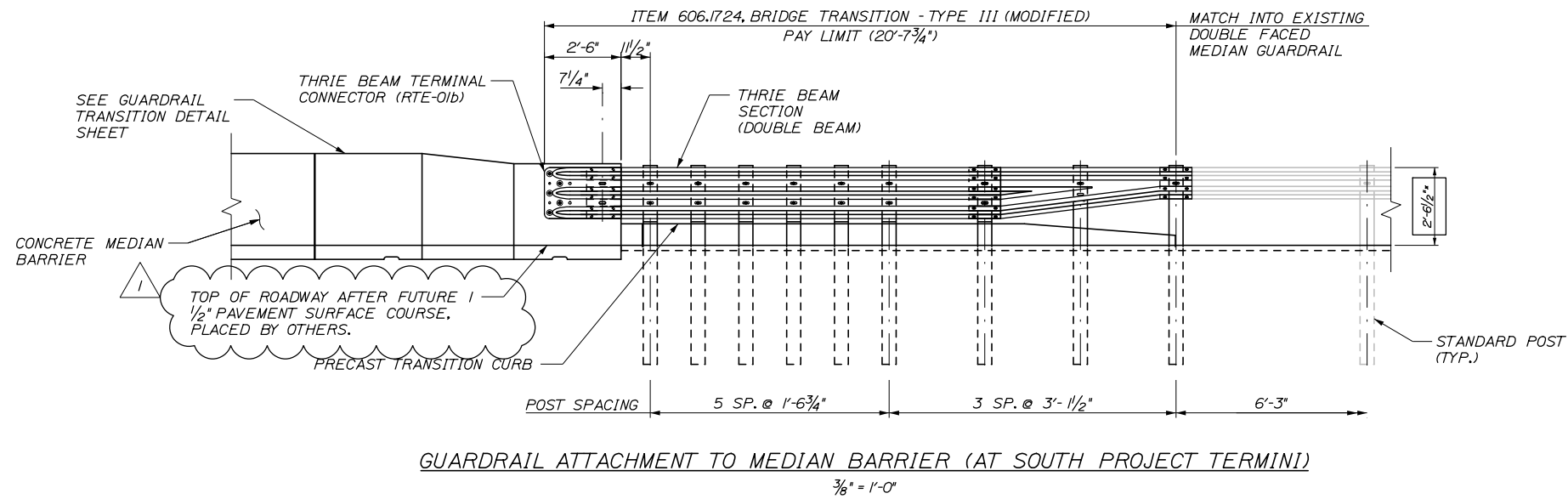
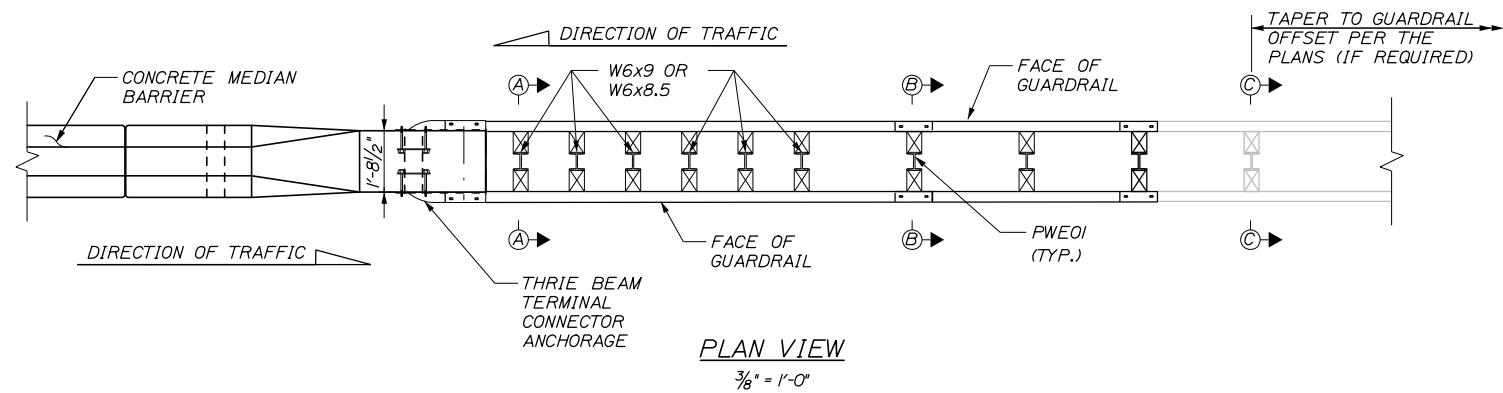
THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH NORWOOD IV, P.E., PTOE

PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS
MM 43.0 TO MM 46.4
GUARDRAIL DETAILS
BRIDGE TRANSITION

SHEET NUMBER: CD-02
Addendum 02 Page 45
CONTRACT: 2020.03
98 OF 310

Date: 3/16/2020

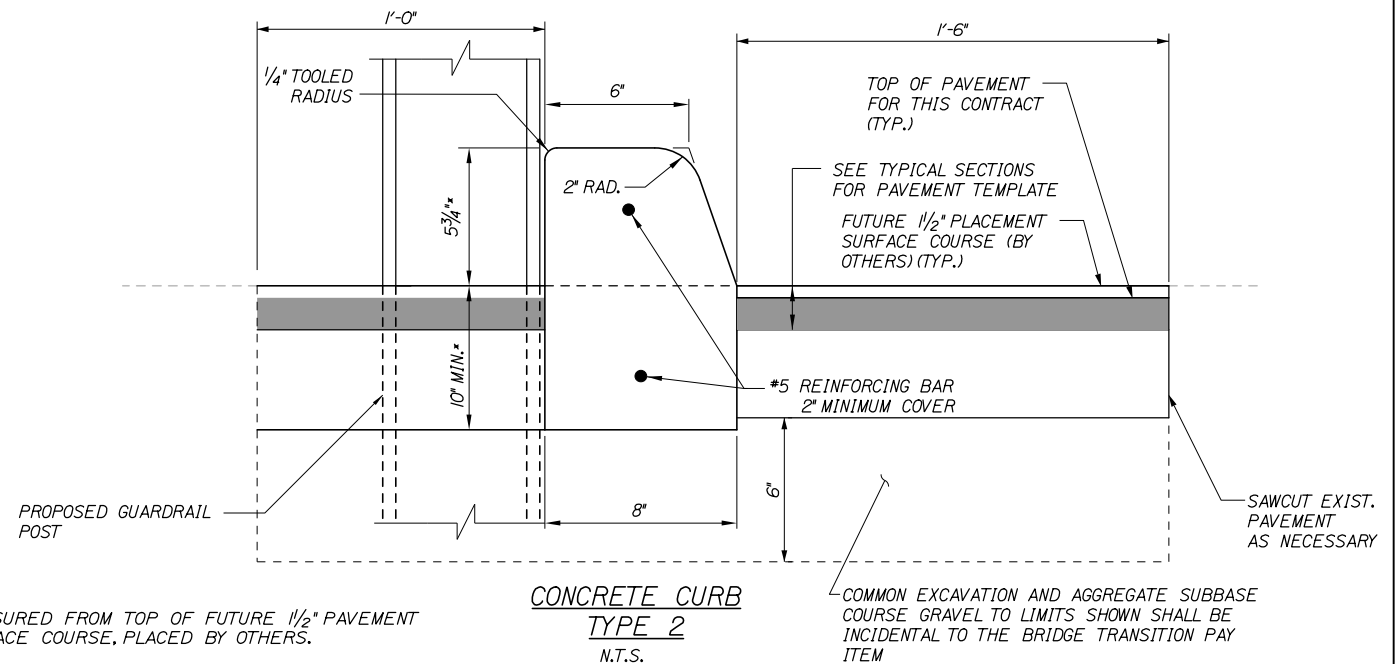
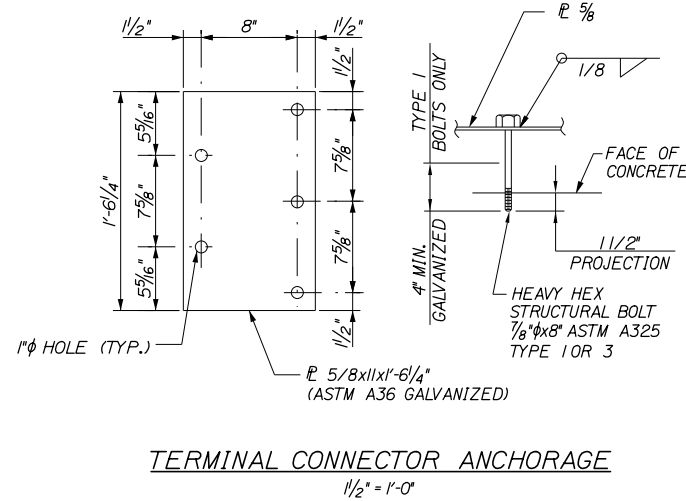
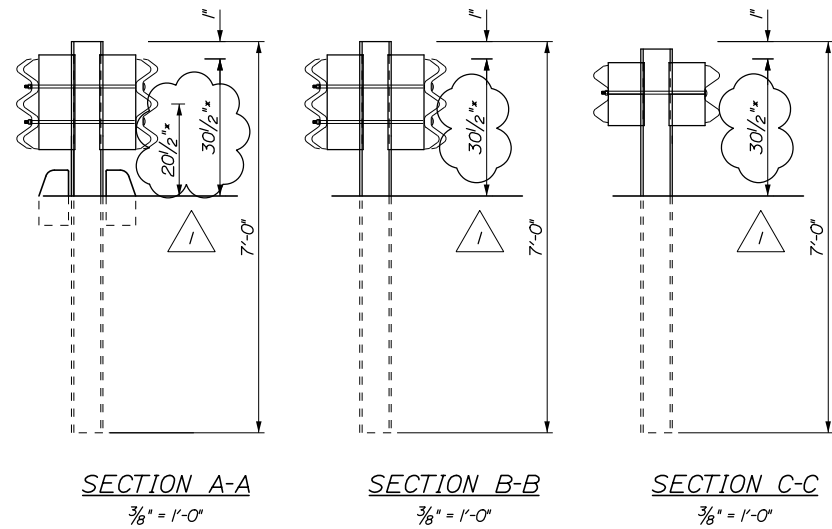


CURB NOTES:

1. CURBING SHALL BE EITHER PRECAST CONCRETE, CAST-IN-PLACE CONCRETE OR GRANITE TO MEET DIMENSIONS SHOWN ON THE PLANS.
2. CONCRETE CURBS USED IN CONJUNCTION WITH THRIE-BEAM BRIDGE TRANSITION SHALL BE TYPE 2. SEE DETAILS THIS SHEET. CONCRETE CURBS SHALL BE SET TO FORM A CONTINUOUS GUTTERLINE WITHOUT ANY DRAINAGE OPENINGS.
3. CURB TRANSITION SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCIDENTAL TO THE BRIDGE TRANSITION PAY ITEM.
4. SAWCUTTING EXISTING PAVEMENT, CONCRETE FILL, AND PAVEMENT TO LIMITS SHOWN SHALL BE INCIDENTAL TO THE BRIDGE TRANSITION PAY ITEM.

NOTES:

1. ADDITIONAL HOLES MAY BE MADE IN THE THRIE-BEAM PANELS BY DRILLING, PUNCHING, OR OTHER MEANS THAT PRODUCE A NEAT, CLEAN HOLE. BURNING HOLES WILL NOT BE ALLOWED.
2. THRIE BEAM SHALL BE PLACED WITH THE COMPOSITE BLOCKOUT FACE IN FRONT OF OR DIRECTLY ABOVE THE CURB FACE.
3. STANDARD BARRIER HARDWARE HAS BEEN USED TO DEVELOP THESE GUARDRAIL ATTACHMENTS. DESIGNATIONS PROVIDED IN PARENTHESIS RELATE TO STANDARD ELEMENTS DETAILED IN "A GUIDE TO STANDARDIZED BARRIER RAIL HARDWARE," 1995. AASHTO-AGC-ARTBA JOINT COOPERATE COMMITTEE, 2013 UPDATE.
4. RAIL ELEMENT SHALL MEET ALL THE REQUIREMENTS OF AASHTO M-180 EXCEPT AS MODIFIED ON THE PLANS. THE THRIE-BEAM TRANSITIONS TO W-BEAM SHALL BE OF THE SAME MATERIAL, BUT SHALL NOT BE LESS THAN 10 GAUGE.
5. AFTER INSTALLATION IS COMPLETE, UPSET THE THREAD ON THE ANCHOR BOLTS IN THREE PLACES AROUND EACH BOLT, AT THE CENTER OF THE JUNCTION OF THE NUT AND THE EXPOSED THREAD, WITH A CENTER PUNCH OR SIMILAR TOOL.
6. 1" HOLE IN CONCRETE SHALL BE FORMED BY A METHOD APPROVED BY THE ENGINEER.
7. GUARDRAIL HEIGHT SHALL BE ADJUSTED UNIFORMLY BETWEEN SECTION CALLOUTS.
8. TOP OF GUARDRAIL HEIGHT SHALL BE 32" ABOVE THIS CONTRACT'S PAVEMENT SURFACE. THIS WILL RESULT IN A HEIGHT OF 30 1/2" ABOVE A FUTURE 1/2" OVERLAY, INSTALLED BY OTHERS.



Filename: PAW1_Median Barrier - Median Guardrail Transition Detail

Scale: AS NOTED

No.	Revision	By	Date
1	REVISED GUARDRAIL HEIGHT	BRG	03/20

Designed by:

HNTB

CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E.

	By	Date	By	Date
Designed	JDW	02\20	Checked	BRG 02\20
Drawn	PEB	02\20	In Charge of	RAL 02\20

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E., P.T.O.E.

PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS

MEDIAN BARRIER

MEDIAN GUARDRAIL TRANSITION DETAIL

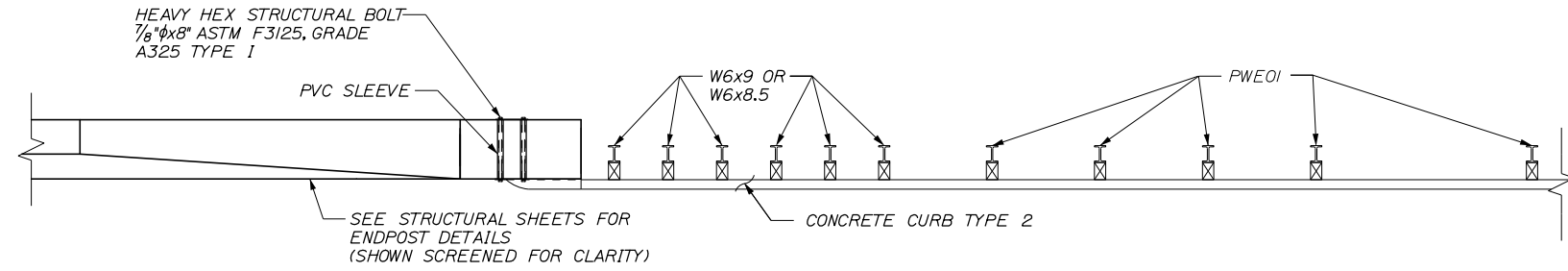
CONTRACT: 2020.03

SHEET NUMBER: BD-16

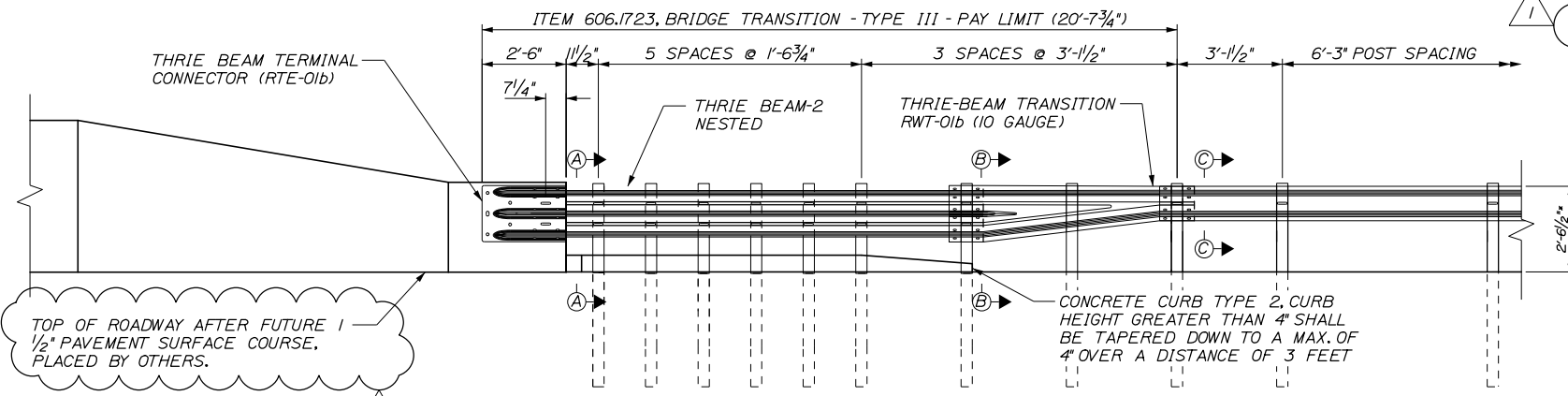
291 OF 310

Date: 3/16/2020

Filename: PAW1_Earth Retaining Barrier - Guardrail Transition Details

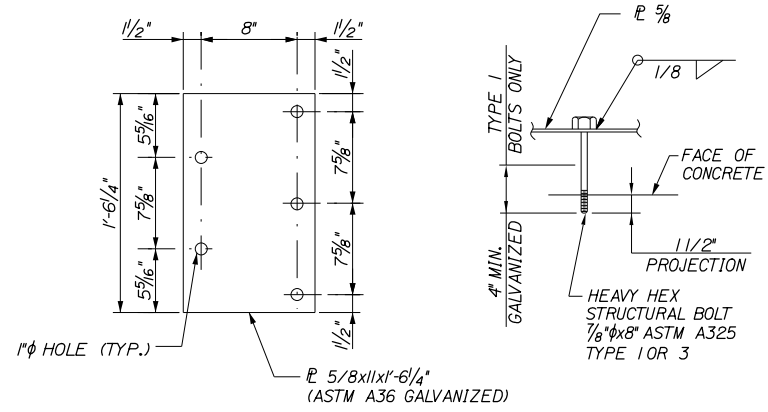


PLAN VIEW
3/8" = 1'-0"



BRIDGE TRANSITION - TYPE III
3/8" = 1'-0"

TOP OF ROADWAY AFTER FUTURE 1/2" PAVEMENT SURFACE COURSE, PLACED BY OTHERS.



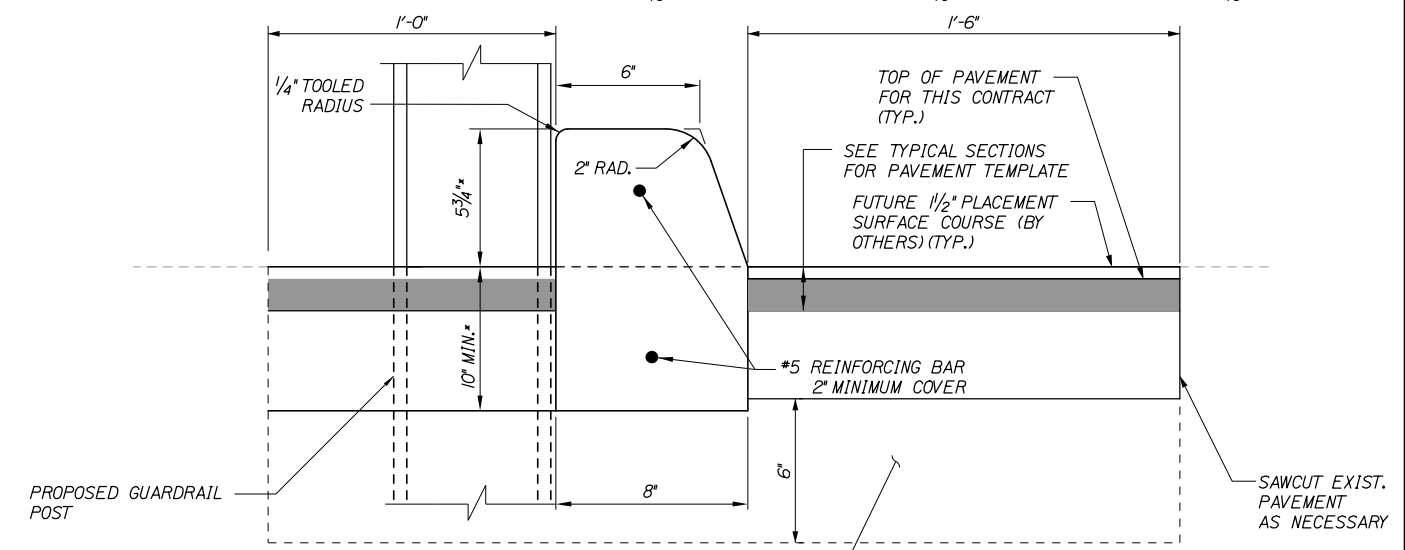
TERMINAL CONNECTOR ANCHORAGE
1/2" = 1'-0"

CURB NOTES:

- CURBING SHALL BE EITHER PRECAST CONCRETE, CAST-IN-PLACE CONCRETE OR GRANITE TO MEET DIMENSIONS SHOWN ON THE PLANS. CONCRETE CURBS USED IN CONJUNCTION WITH THRIE-BEAM BRIDGE TRANSITION SHALL BE TYPE 2. SEE DETAILS THIS SHEET. CONCRETE CURBS SHALL BE SET TO FORM A CONTINUOUS GUTTERLINE WITHOUT ANY DRAINAGE OPENINGS.
 - CURB TRANSITION SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCIDENTAL TO THE BRIDGE TRANSITION PAY ITEM.
 - SAWCUTTING EXISTING PAVEMENT, CONCRETE FILL, AND PAVEMENT TO LIMITS SHOWN SHALL BE INCIDENTAL TO THE BRIDGE TRANSITION PAY ITEM.
- NOTES:**
- ADDITIONAL HOLES MAY BE MADE IN THE THRIE-BEAM PANELS BY DRILLING, PUNCHING, OR OTHER MEANS THAT PRODUCE A NEAT, CLEAN HOLE. BURNING HOLES WILL NOT BE ALLOWED.
 - THRIE BEAM SHALL BE PLACED WITH THE COMPOSITE BLOCKOUT FACE IN FRONT OF OR DIRECTLY ABOVE THE CURB FACE.
 - STANDARD BARRIER HARDWARE HAS BEEN USED TO DEVELOP THESE GUARDRAIL ATTACHMENTS. DESIGNATIONS PROVIDED IN PARENTHESIS RELATE TO STANDARD ELEMENTS DETAILED IN "A GUIDE TO STANDARDIZED BARRIER RAIL HARDWARE," 1979, AASHTO-AGC-ARTBA JOINT COOPERATE COMMITTEE.
 - RAIL ELEMENT SHALL MEET ALL THE REQUIREMENTS OF AASHTO M-180 EXCEPT AS MODIFIED ON THE PLANS. THE THRIE-BEAM TRANSITIONS TO W-BEAM SHALL BE OF THE SAME MATERIAL, BUT SHALL NOT BE LESS THAN 10 GAUGE.
 - AFTER INSTALLATION IS COMPLETE, UPSET THE THREAD ON THE ANCHOR BOLTS IN THREE PLACES AROUND EACH BOLT, AT THE CENTER OF THE JUNCTION OF THE NUT AND THE EXPOSED THREAD, WITH A CENTER PUNCH OR SIMILAR TOOL.
 - 1" HOLE IN CONCRETE SHALL BE FORMED BY A METHOD APPROVED BY THE ENGINEER.
 - GUARDRAIL HEIGHT SHALL BE ADJUSTED UNIFORMLY BETWEEN SECTION CALLOUTS.
 - TOP OF GUARDRAIL HEIGHT SHALL BE 32" ABOVE THIS CONTRACT'S PAVEMENT SURFACE. THIS WILL RESULT IN A HEIGHT OF 30 1/2" ABOVE A FUTURE 1/2" OVERLAY, INSTALLED BY OTHERS.



SECTION A-A 3/8" = 1'-0"
SECTION B-B 3/8" = 1'-0"
SECTION C-C 3/8" = 1'-0"



CONCRETE CURB TYPE 2
N.T.S.

* MEASURED FROM TOP OF FUTURE 1/2" PAVEMENT SURFACE COURSE, PLACED BY OTHERS.

COMMON EXCAVATION AND AGGREGATE SUBBASE COURSE GRAVEL TO LIMITS SHOWN SHALL BE INCIDENTAL TO THE BRIDGE TRANSITION PAY ITEM

Scale: AS NOTED

No.	Revision	By	Date
1	REVISED GUARDRAIL HEIGHT	BRG	03/20

Designed by:

HNTB

CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E.

	By	Date	By	Date
Designed	JDW	02\20	Checked	BRG 02\20
Drawn	PEB	02\20	In Charge of	RAL 02\20

HNTB CORPORATION
340 County Road, Suite 6-C
Westbrook, ME 04092
TEL (207) 774-5155
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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E., P.T.O.E.

PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS

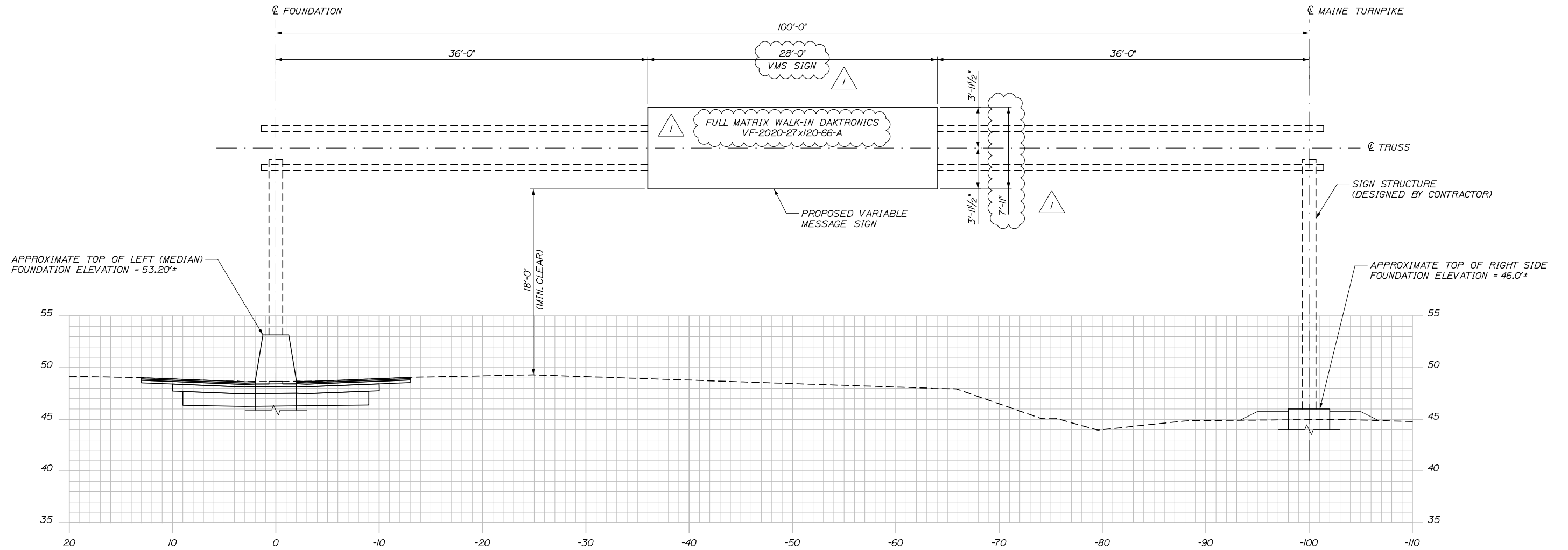
EARTH RETAINING BARRIER GUARDRAIL TRANSITION DETAILS

CONTRACT: 2020.03

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Date: 3/16/2020



NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEYING THE EXISTING ROADWAY, MEDIAN AND FOUNDATION LOCATIONS TO VERIFY ELEVATIONS BEFORE DEVELOPING STRUCTURAL SHOP DRAWINGS FOR FABRICATION AND CONSTRUCTING THE FOOTING. IF THE ACTUAL GROUND ELEVATIONS DIFFER MORE THAN 1'-0", THE ENGINEER SHALL BE CONTACTED TO VERIFY THE ADEQUACY OF THE FOOTING DESIGN.
- THE OVERHEAD SIGN STRUCTURE SHALL BE DESIGNED FOR A SIGN AREA EQUAL TO 1.5 TIMES THE ACTUAL SIGN AREA AS SPECIFIED IN THE MAINE DOT STANDARD SPECIFICATIONS 645.023.
- SEE DETAIL SHEETS FOR ADDITIONAL INFORMATION ON THE MEDIAN PAVING TYPICAL SECTION.

STA. 2133+14.00
OHSS I-95 MM 43.18 SB

(LOOKING DOWNSTATION)
SCALE = 1" = 5'-0"

Filename: PAW1_Overhead Sign Structures

Scale: AS NOTED			
No.	Revision	By	Date
1	VMS MODEL	BRG	03/20

Designed by:					
HNTB					
CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E.					
	By	Date	By	Date	
Designed	BRG	02\20	Checked	JDW	02\20
Drawn	PEB	02\20	In Charge of	RAL	02\20

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**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E., P.T.O.E.

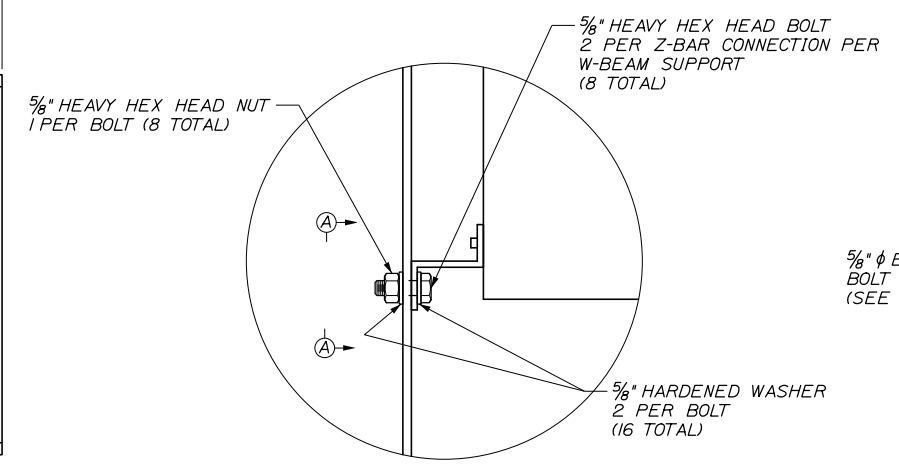
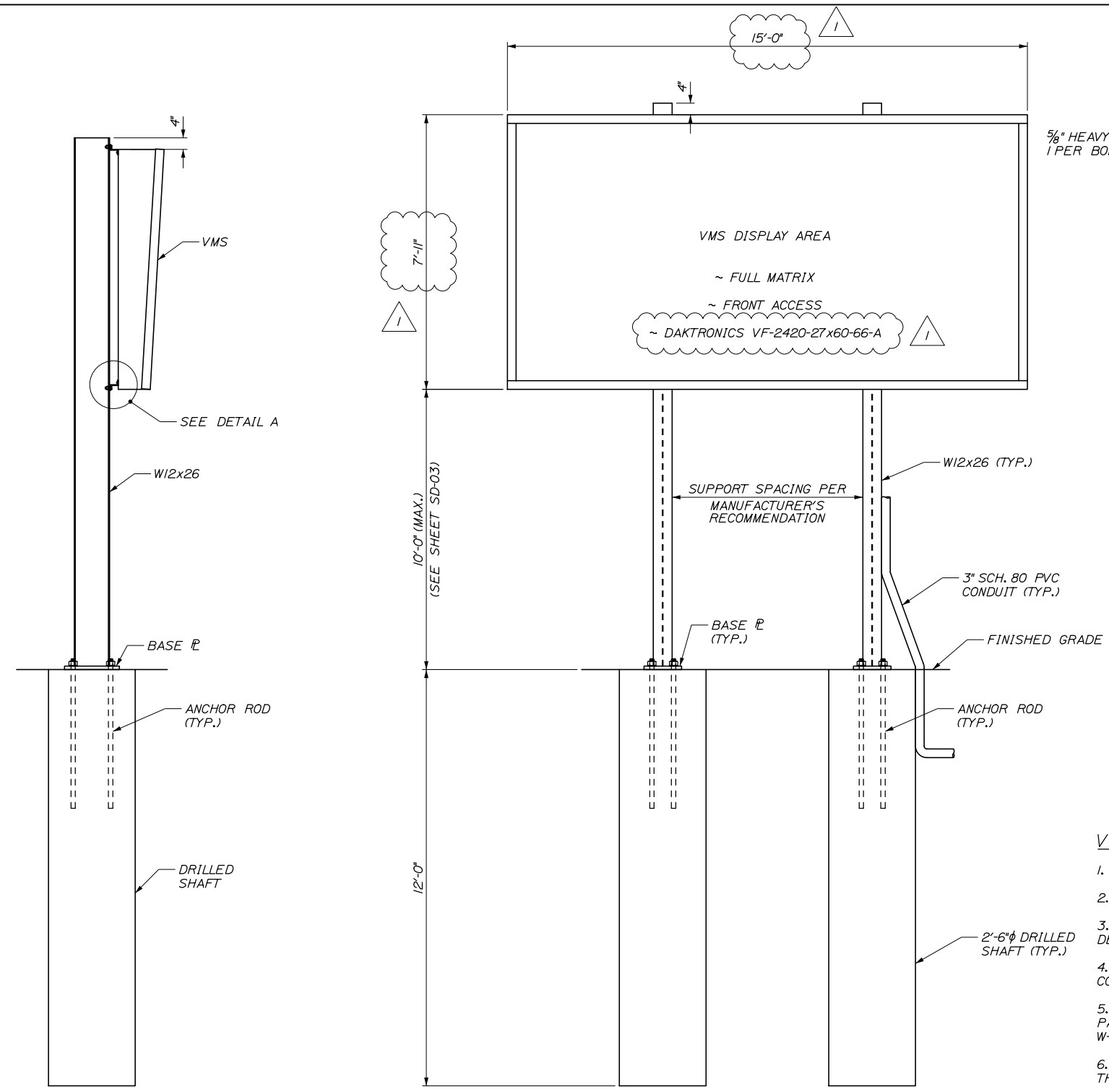
PORTLAND AREA WIDENING &
SAFETY IMPROVEMENTS

OVERHEAD SIGN STRUCTURE
STA. 2133+14.00 SOUTHBOUND

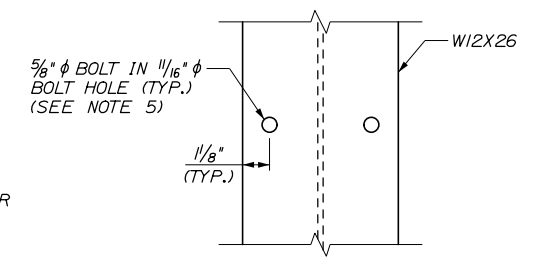
CONTRACT: 2020.03

SHEET NUMBER: SS-03
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Date: 3/16/2020



DETAIL A
N.T.S.



SECTION A-A
3" = 1'-0"

VARIABLE MESSAGE SIGN (VMS) NOTES:

1. PAYMENT FOR VMS AND VMS SIGN STRUCTURE, INCLUDING POSTS, BASE PLATES AND ANCHOR RODS SHALL BE UNDER ITEM 650.101.
2. PAYMENT FOR VMS SUPPORT FOUNDATION SHALL BE UNDER ITEM 626.701.
3. ALL DETAILS NOT SHOWN FOR THE W-BEAM POSTS, BASE PLATES AND ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH STANDARD DETAIL 645(06) CORRESPONDING TO THE POST SIZE PROVIDED HEREIN.
4. ALL DETAILS NOT SHOWN FOR THE DRILLED SHAFT FOUNDATIONS SHALL BE IN ACCORDANCE WITH STANDARD DETAIL 626(03) FOR CORRESPONDING SIZE OF FOUNDATION PROVIDED HEREIN.
5. Z-BAR ANGLES SHALL BE FURNISHED AND INSTALLED WITH THE VMS TO MOUNT THE SIGN TO THE W-BEAM SIGN SUPPORTS. PAYMENT SHALL BE CONSIDERED INCIDENTAL TO ITEM 650.101. HOLES FOR THE THROUGH BOLTS MAY BE PRE-DRILLED BY THE W-BEAM FABRICATOR OR MAY BE FIELD DRILLED ON SITE. FIELD DRILLED HOLES SHALL BE SPRAY GALVANIZED AFTER DRILLING.
6. VMS CABLES SHALL BE INSTALLED IN FLEXIBLE PVC OR RIGID GALVANIZED STEEL CONDUIT FROM THE CONTROLLER CABINET TO THE VMS. CONDUITS SHALL ENTER THE VMS AT THE LOCATION INDICATED BY THE MANUFACTURER.
7. CONDUIT FOR THE VMS CABLES SHALL BE 3" MINIMUM. CONDUITS SHALL BE FIRMLY ATTACHED TO THE SIGN SUPPORTS AT 5 FT INTERVALS, MAXIMUM, WITH NO SEGMENT OF UNSUPPORTED CONDUIT, INCLUDING FLEXIBLE CONDUIT, GREATER THAN 5 FT.
8. CONTRACTOR SHALL SUBMIT REINFORCING STEEL SCHEDULE FOR APPROVAL. ALL REINFORCING STEEL SHALL BE INCIDENTAL TO ITEM 626.701.
9. ALL EXCAVATION, INCLUDING ROCK EXCAVATION AND STRUCTURAL EXCAVATION AND BACKFILL SHALL BE INCIDENTAL.

SIDE ELEVATION

FRONT ELEVATION

GROUND MOUNTED VARIABLE MESSAGE SIGN (VMS) - STA. 2266+50

1/2" = 1'-0"

Filename: PAW1_Variable Signs_Foundation

Scale: NO SCALE			
No.	Revision	By	Date
1	VMS MODEL	BRG	03/20

Designed by:					
HNTB					
CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E.					
	By	Date	By	Date	
Designed	BRG	02\20	Checked	JDW	02\20
Drawn	ERB	02\20	In Charge of	RAL	02\20

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**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E., P.T.O.E.

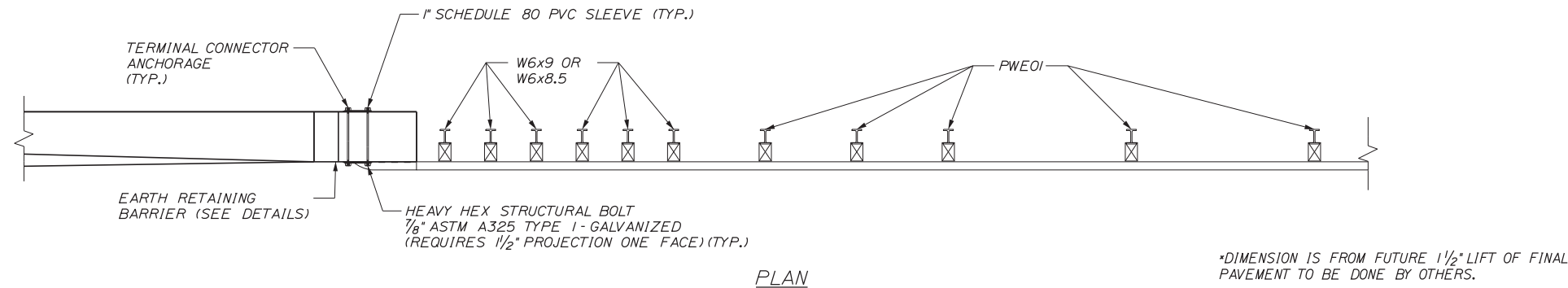
PORTLAND AREA WIDENING &
SAFETY IMPROVEMENTS

STA. 2266+50 VMS
SIGN STRUCTURE AND FOUNDATION

SHEET NUMBER: SS-10
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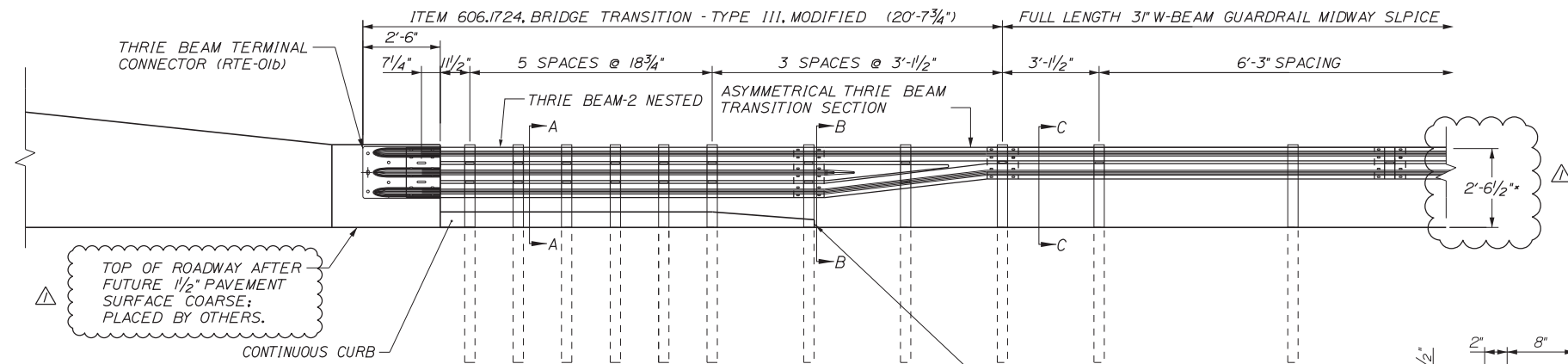
CONTRACT: 2020.03
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Date: 3/13/2020



PLAN

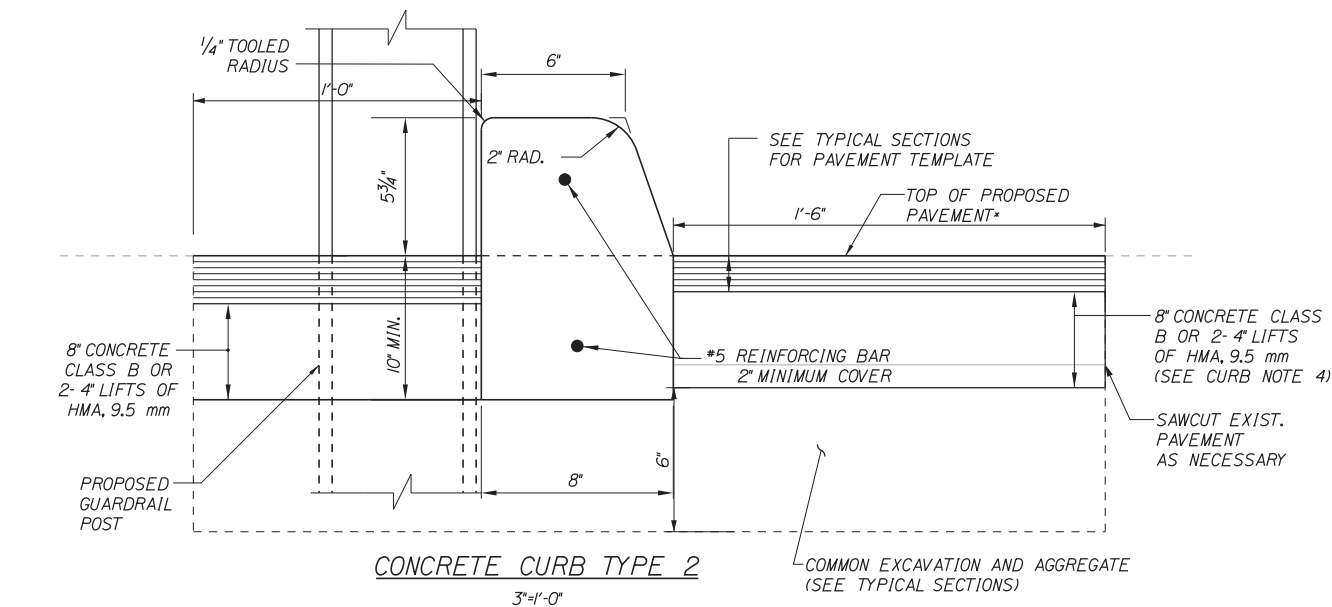
*DIMENSION IS FROM FUTURE 1/2" LIFT OF FINAL PAVEMENT TO BE DONE BY OTHERS.



ELEVATION

BRIDGE TRANSITION - TYPE III (ITEM 606.1724)

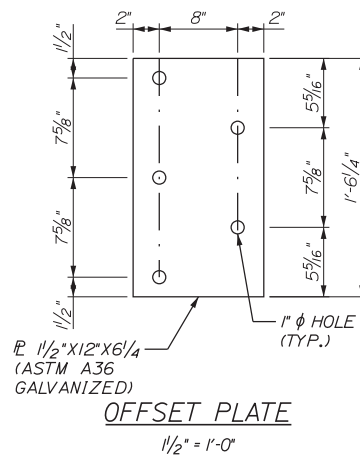
3/8" = 1'-0"



CONCRETE CURB TYPE 2

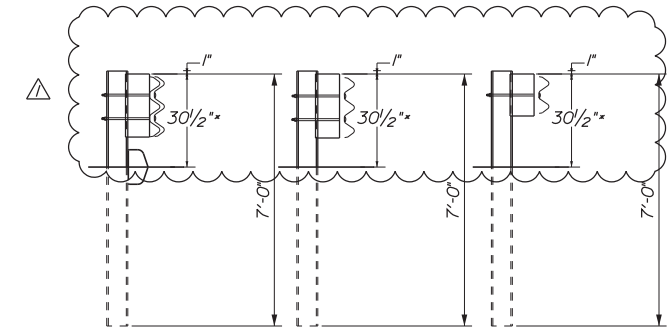
3" = 1'-0"

COMMON EXCAVATION AND AGGREGATE (SEE TYPICAL SECTIONS)



OFFSET PLATE

1/2" = 1'-0"



SECTION A-A SECTION B-B SECTION C-C

GENERAL NOTES:

- ADDITIONAL HOLES MAY BE MADE IN THE THRIE-BEAM PANELS BY DRILLING, PUNCHING, OR OTHER MEANS THAT PRODUCE A NEAT, CLEAN HOLE. BURNING HOLES WILL NOT BE ALLOWED.
- THRIE BEAM SHALL BE PLACED WITH THE COMPOSITE BLOCKOUT FACE IN FRONT OF OR DIRECTLY ABOVE THE CURB FACE.
- RAIL ELEMENT SHALL MEET ALL REQUIREMENTS OF AASHTO M-180 EXCEPT AS MODIFIED ON THE PLANS. THE THRIE BEAM TRANSITION TO W-BEAM SHALL BE OF THE SAME MATERIAL, BUT SHALL NOT BE LESS THAN 10 GAUGE.
- AFTER INSTALLATION IS COMPLETE, UPSET THE THREAD ON THE ANCHOR BOLTS IN THREE PLACES AROUND EACH BOLT, AT THE JUNCTION OF THE NUT AND THE EXPOSED THREAD, WITH A CENTER PUNCH OR SIMILAR TOOL.
- STANDARD BARRIER HARDWARE HAS BEEN USED TO DEVELOP THESE GUARDRAIL ATTACHMENTS. DESIGNATIONS PROVIDED IN PARENTHESIS RELATE TO STANDARD ELEMENTS DETAILED IN "A GUIDE TO STANDARDIZED BARRIER RAIL HARDWARE," 1979, AASHTO-AGC-ARTBA JOINT COOPERATE COMMITTEE.
- 1" HOLE IN CONCRETE SHALL BE FORMED BY A METHOD APPROVED BY THE ENGINEER.
- GUARDRAIL HEIGHT SHALL BE ADJUSTED UNIFORMLY BETWEEN SECTION CALLOUTS.
- TOP OF GUARDRAIL HEIGHT SHALL BE 32 INCHES ABOVE THIS CONTRACT'S FINAL PAVEMENT SURFACE. THIS WILL RESULT IN A HEIGHT OF 30 1/2" ABOVE A FUTURE 1/2" OVERLAY; INSTALLED BY OTHERS.

CURB NOTES:

- CURBING SHALL BE EITHER PRECAST CONCRETE, CAST-IN-PLACE CONCRETE OR GRANITE TO MEET DIMENSIONS SHOWN ON THE PLANS.
- CONCRETE CURBS USED IN CONJUNCTION WITH THRIE-BEAM BRIDGE ATTACHMENT SHALL BE TYPE 2. SEE DETAILS THIS SHEET. CONCRETE CURBS SHALL BE SET TO FORM A CONTINUOUS GUTTERLINE WITHOUT ANY DRAINAGE OPENINGS.
- CURB TRANSITION SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCIDENTAL TO THE BRIDGE TRANSITION PAY ITEM.
- SAWCUTTING EXISTING PAVEMENT, CONCRETE FILL, AND PAVEMENT TO LIMITS SHOWN SHALL BE INCIDENTAL TO THE BRIDGE TRANSITION PAY ITEM.

NOTE: THIS SHEET ONLY APPLIES TO APPENDIX A EXIT 44 NORTHBOUND OFF RAMP IMPROVEMENTS

Filename: ... \Detail-Guardrail-01_Add1.dgn

Scale:		Designed by:	
No.	Revision	By	Date
△	CLARIFY ROAD SURFACE AND GUARDRAIL HEIGHT	EJB	3/20

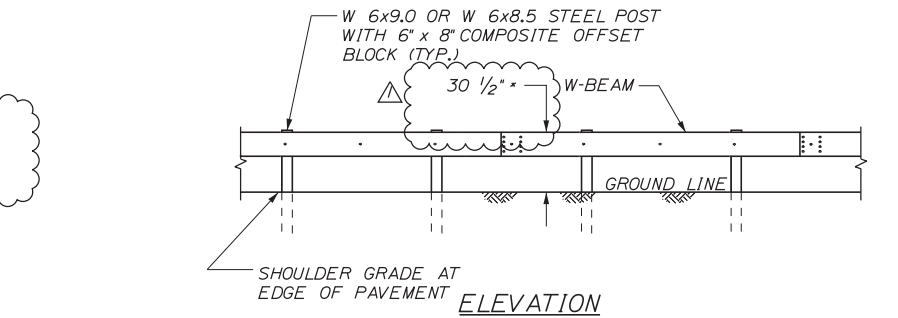
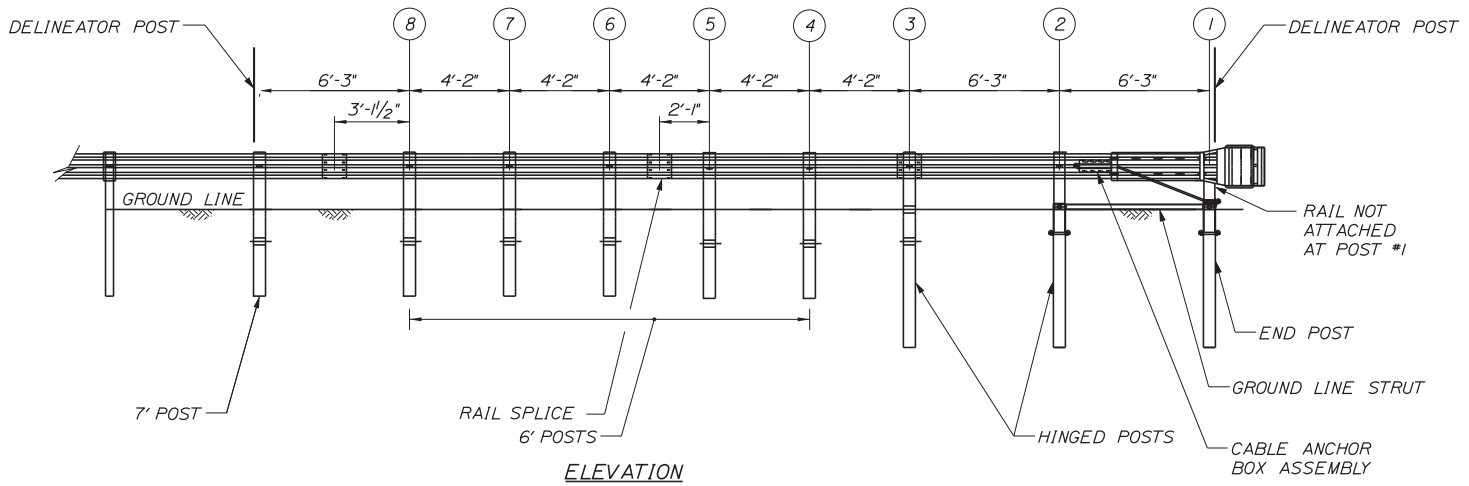
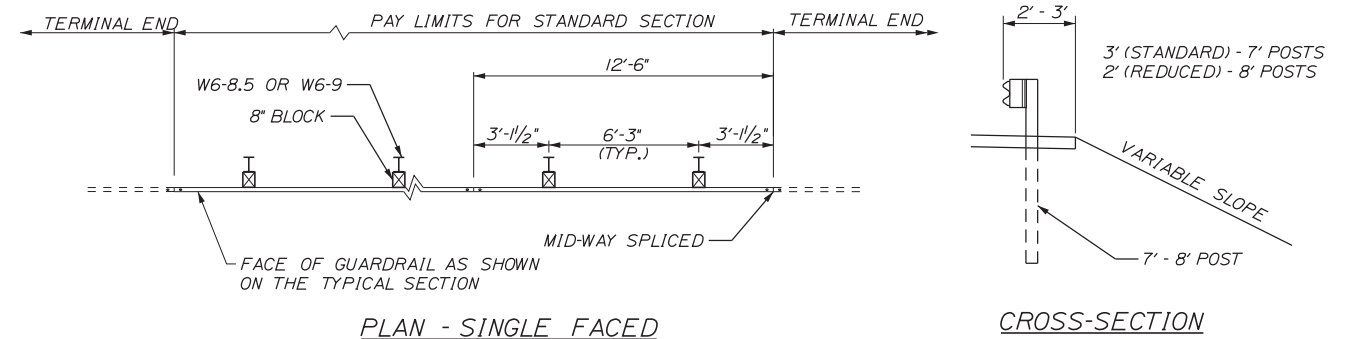
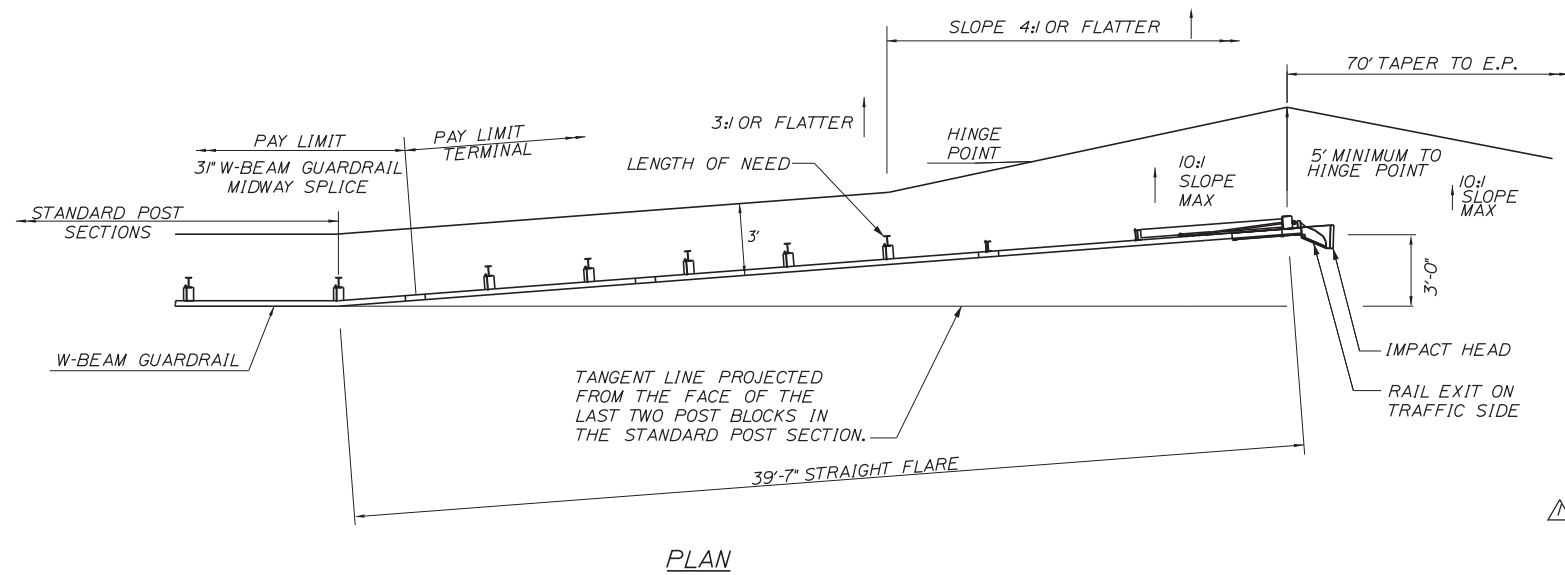
STANTEC CONSULTING SERVICES INC. 482 PAYNE ROAD SCARBOROUGH, ME 04074 TEL (207) 887-3448 FAX (207) 883-3376			
CONSULTANT PROJECT MANAGER: LAUREN MEEK, PE			
Designed	JMB	02\20	Checked
Drawn	EJB	02\20	In Charge of
			LEM
			GAE

THE GOLD STAR MEMORIAL HIGHWAY	
MTA PROJECT MANAGER: RALPH NORWOOD, IV, PE, PTOE	

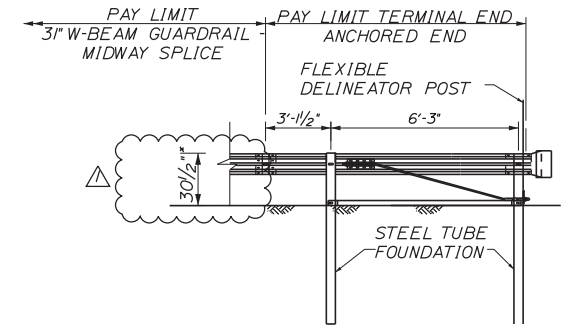
EXIT 44 NORTHBOUND OFF RAMP IMPROVEMENTS GUARDRAIL DETAILS 1	
SHEET NUMBER: GD-1 Addendum 02 Page 50	

CONTRACT: 2020.03	Addendum 02 Page 50	A 21 OF A76
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Date: 3/13/2020



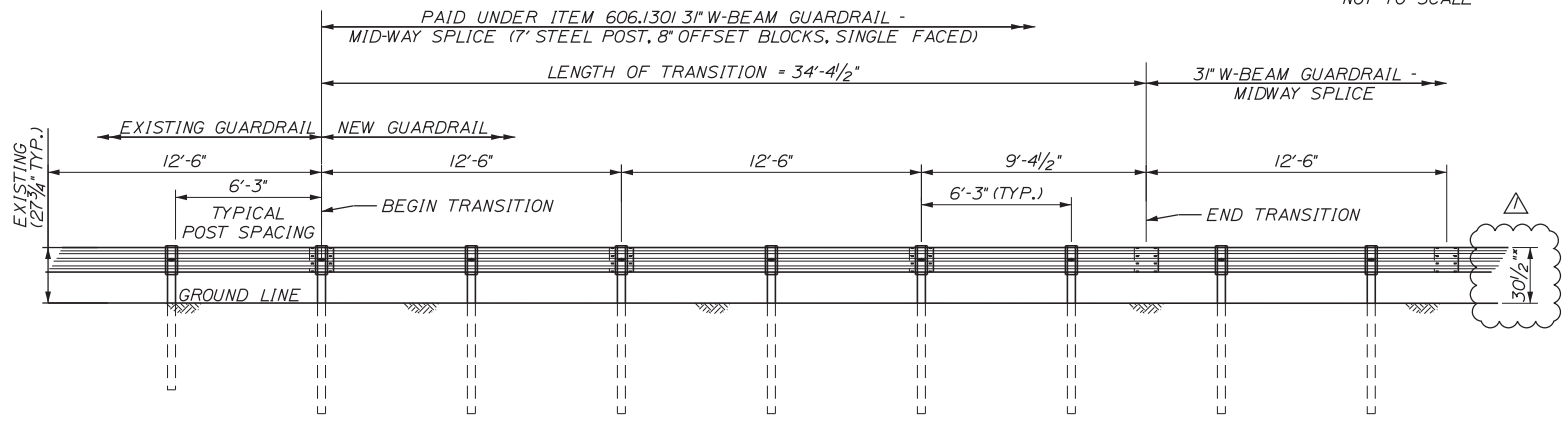
3" W-BEAM GUARDRAIL - MID-WAY SPLICE (8" OFFSET BLOCKS)
NOT TO SCALE



TERMINAL END - ANCHORED END - 3" W-BEAM GUARDRAIL
NOT TO SCALE

NOTES:
1. THIS DETAIL MODIFIES THE SEW31 DRAWING SUCH THAT W-BEAM DOES NOT EXTEND BEYOND THE LAST GUARDRAIL POST. THE RWM14a W-BEAM PANEL SHALL HAVE A LENGTH OF 9'-4 1/2" MEASURED FROM THE CENTER OF THE MIDWAY SPLICE TO THE CENTER OF THE LAST GUARDRAIL POST.

- GENERAL GUARDRAIL INSTALLATION NOTES:**
1. THE CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR THE INSTALLATION OF ALL GUARDRAIL COMPONENTS TO BE INSTALLED. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER OF ANY CONFLICTS OR IRREGULARITIES BETWEEN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THE CONTRACT DOCUMENTS.
 2. THE CONTRACTOR IS REQUIRED TO HAVE AN APPROVED CRASH END TREATMENT ON ALL GUARDRAIL ENDS PRIOR TO THE REMOVAL OF ANY MOT FEATURES.
 3. GUARDRAIL HEIGHT SHALL BE 3". GUARDRAIL HEIGHT SHALL BE MEASURED FROM GROUND ELEVATION ADJACENT TO EACH POST.
 4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CUT BOLTS, DISCARD PARTS, TRASH, PAVEMENT DEBRIS, ETC., AFTER COMPLETING THE GUARDRAIL INSTALLATION.
 5. CONNECTION FOR PROPOSED RAIL TO EXISTING RAIL SHALL BE INCIDENTAL TO THE PROPOSED GUARDRAIL ITEMS.
 6. TERMINAL UNIT SHALL BE MFLEAT AND MASH CERTIFIED AS MANUFACTURED BY ROAD SYSTEMS INC.
 7. SEE SPECIFICATIONS FOR REFLECTIVE SHEETING REQUIREMENTS.
 8. TOP OF GUARDRAIL HEIGHT SHALL BE 32 INCHES ABOVE THIS CONTRACT'S FINAL PAVEMENT SURFACE. THIS WILL RESULT IN A HEIGHT OF 30 1/2 INCHES ABOVE A FUTURE 1/2 INCH OVERLAY, INSTALLED BY OTHERS.



TRANSITION FROM EXISTING GUARDRAIL TO 3" MID-WAY SPLICED GUARDRAIL
NOT TO SCALE

- TRANSITION FROM EXISTING GUARDRAIL NOTES:**
1. MAINTAIN STANDARD 1" CLEARANCE OF POST ABOVE PANEL THROUGHOUT THE ENTIRE LENGTH OF TRANSITION.
 2. A MINIMUM OF ONE (1) 12'-6" PANEL SHALL BE PLACED BETWEEN THIS TRANSITION AND THE START OF ANY END TREATMENT OR ANCHORAGE.
 3. ALL NEW POSTS SHALL BE 84" IN LENGTH UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.

NOTE: THIS SHEET ONLY APPLIES TO APPENDIX A EXIT 44 NORTHBOUND OFF RAMP IMPROVEMENTS

No.	Revision	By	Date
1	CLARIFY ROAD SURFACE AND GUARDRAIL HEIGHT	EJB	3/20

Designed by:

Stantec

CONSULTANT PROJECT MANAGER: LAUREN MEEK, PE

By	Date	By	Date
Designed	JMB 02\20	Checked	LEM 02\20
Drawn	EJB 02\20	In Charge of	GAE 02\20

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH NORWOOD, IV, PE, PTOE

EXIT 44
NORTHBOUND OFF RAMP IMPROVEMENTS
GUARDRAIL DETAILS 2

SHEET NUMBER: GD-2
Addendum 02 Page 51

CONTRACT: 2020.03
A22 OF A76