MAINE TURNPIKE AUTHORITY

ADDENDUM NO. 1

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

All questions regarding Contract 2020.03 should be submitted by Noon on Friday March 13, 2020 to be answered in the last addendum to be issued by Tuesday March 17, 2020, if necessary. Questions received after that time may not be answered.

PROPOSAL

Final Proposal P-sheets will be updated to reflect below changes and will be included in Addendum #2 to be issued on or before March 17, 2020. The following Items have been revised based on the below Questions and Answers.

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 (Permanent Field Office to become property of the MTA at the conclusion of the Contract)

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
    - Page SP-11 is deleted and replaced with new page SP-11 (Revised) to add more detail to Granite State Gas's construction schedule for replacing a gas pipeline and construction

requirements relative to the Contractor's work over the existing and new pipelines. See Attached.

- Special Provision 107.4.6 Prosecution of Work
  - Pages SP-17 and SP-18 are deleted and replaced with new pages SP-17 (Revised) and SP-18 (Revised). See Attached.

- Special Provision 107.4.7 Limitations of Operations
  - Pages SP-18, SP-19, and SP-20 are deleted and replaced with new pages SP-18 (Revised), SP-19 (Revised), SP-20 (Revised), SP-20A (Revised), and SP-20B (Revised). See Attached.

- 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 bitumen content.

- Special Provision 403
  - Special Provision 403 Hot Mix Asphalt Pavement Table and Complimentary Note callouts are deleted and replaced. See Attached.

- Special Provision 527
  - Special Provision 527 Work Zone Crash Cushion is updated for payment of damaged barrels. See Attached.

- Special Provision 603
  - Special Provision 603 (Reinforced Concrete Pipe) (Concrete Collar) (Corrugated Polyethylene Pipe) is deleted and replaced with attached. This Special Provision has been amended to add details for temporary pipe connections and temporary pipe extensions to subsections 603.01, 603.11, and 603.12. See attachment.

- Special Provision 639
  - Special Provision 639 Engineering Facilities is deleted in its entirety and replaced. See attached. New Special Provision adds a permanent Field Office to become property of the MTA at the conclusion of the Contract

- Special Provision 652
  - Special Provision 652, Page SP165 is deleted and replaced to clarify the last paragraph. See Attached.

- Special Provision 652
  - Special Provision 652 (Truck Mounted Attenuator), pages SP-174 and SP-175 are deleted and replaced to clarify the use and payment of "Truck Mounted Attenuator – 24,000 LB in Section 652.3.7. See Attached.

- Special Provision 652
  - Special Provision 652 (Pace Vehicle), pages SP 182A and SP 182B are added to the Contract. See attached.

- Special Provision 652
  - Special Provision 652 amending MTA Supplemental Specifications for Maintenance of Traffic Violations is added to the Contract as page SP-182C. See Attached.

PLANS

- Plan sheet 16, Maintenance of Traffic, Mainline Cross Culvert, MOT-08 is revised. See attached.
- Plan sheet 16A, Maintenance of Traffic, Mainline Cross Culvert, MOT-08A is added. See attached.
- Plan sheets 30 and 31 (MOT-22 and MOT-23) shall be revised with the following 'Pen and Ink' change. Change page reference from MOT-06 to MOT-07 in Note 1. "See MOT-07 shoulder closure detail for removal of Temporary Widening."

QUESTIONS

The following are questions asked at the pre-bid meeting held on March 05, 2020 or submitted to the Maine Turnpike Authority in writing. Answers to the questions are noted. Bidders shall utilize this information in preparing their bid.

Question 1: Will setup of the Phase 2 MOT, temporary concrete barrier, and striping be allowed after November 20, 2020.

Answer: Yes, setup of Phase 2 will be allowed after November 20, 2020 as long as the temporary concrete barrier is not set on snow or ice and the striping for Phase 2 is placed in accordance with manufacturer's requirements. Additional compensation will not be considered for snow removal, heating pavement, coring thru frost, or any other construction required to setup Phase 2 MOT. Additionally, Phase 2 work shall not commence until the full MOT is setup on both sides of the median (work zone). Maintaining temporary pavement markings is Contractor's responsibility.

Question 2: Is there a specific MOT layout for removing the temporary widening south of Crosby? Is temporary concrete barrier required? This is a concern because work will be done while Phase 2 MOT setup is in place.

Answer: The standard MTA shoulder closure detail on Plan MOT-07 shall be used to remove the temporary widening in this area. Note 1 on Plan sheets MOT-22 and MOT-23 should be updated in 'pen and ink' to change page reference from MOT-06 to MOT-07. It is likely the contractor will have workers and trucks within 4' and 6' respectively of an active travel lane, and will therefore be required to use temporary concrete barrier.

Question 3: Does all temporary concrete barrier need to be setup at one time? Where is it required?

Answer: No, the contractor will be allowed to set up temporary concrete barrier contiguous to their work zone(s) as they progress. Phase 1B does have a maximum length setup of 4,500 feet or interchange to interchange, in a travel direction at any given time. See 107.4.7 Limitations of Operations.

Question 4: Does proof of meeting the appropriate Test Level-3 need to be submitted for temporary

concrete barrier?

Answer: Yes.

Question 5: Can a bid item be added to cut rumble strips into the mainline pavement?

Answer: Contractor may propose use of cut rumble strips for MTA's consideration after Award of Contract.

Question 6: What additional means can be employed to slow turnpike traffic? Will MTA consider the use of State Police or Pace Cars to slow traffic?

Answer: A Special Provision, and Bid Item 652.44 Pace Vehicle is added to the Contract. See Attachment.

Question 7: Can MTA clarify the intent of Access and Egress paragraph in SP 652; specifically, the time blocks restricting merging with mainline traffic.

Answer: The last paragraph on page SP-165 is deleted and replaced. The first paragraph on page SP-166, which is a continuation from SP-165 is deleted. The update provides required minimum lengths of acceleration and deceleration areas, clarifies time restrictions for access and egress on the Turnpike Ramps, and encourages the use of Ramp Access and Egress to the Work Areas. See Attached.

Question 8: Can the new third lane be opened to traffic if it's completed for a portion; either NB or SB?

Answer: No. The new third lane shall be barreled off once complete to prevent use if temporary concrete barrier is removed, and until such time that it can be opened for the full limits of the project. See Plans and SP 652, page SP-166, fourth paragraph.

Question 9: How early will contractor be allowed to start? April 1st?

Answer: MTA will follow normal procedures to execute a contract with the successful bidder. Construction may begin after Preconstruction materials are submitted and approved.

Question 10: Is hydrated lime required for Item 403.213?

Answer: Yes, this is the surface course until final full widening overlay.

Question 11: The majority of approved HMA mix designs currently in use by MaineDOT are 65 gyration designs with very few approved 75 gyration designs. Will the MTA accept 65 gyration mix designs in place of the current requirement for 75 gyration designs?

Answer: Special Provision 401 is modified to allow a 65 gyration design for some mixes. See attached for details.

Question 12: Current MaineDOT approved Asphalt Rich HMA mix designs are 50 gyration designs. Will MTA accept 50 gyration design in place of the current requirement for 65 gyration design?

Answer: No.

Question 13: For the Asphalt Rich Base, will MTA provide 100% Payment for a test result of 93.5% compaction? The Acceptance Limits Table in Section 401.03 states the In Place Density shall be 96% +/- 2.5% however, Section 401.21 states payment of 100% limited to 94.5% to 98.5%.

Answer: See revised text for Special Provision 401, attached.

Question 14: Is temporary barrier required before implementing Phase 1B? Is there a min/max duration?

Answer: Maintenance of traffic layout, as shown in the plans, for placement of temporary concrete barrier in Phase 1A and Phase 1B is required unless otherwise approved in writing by the MTA. The goal of the MTA is to limit the duration and length traffic is constrained to the 11-foot lanes with narrow shoulders required in Phase 1B. However, the MTA will consider a contractor's proposed alternate phasing (and fully detailed layout) of moving directly to the use of Phase 1B temporary concrete barrier if the contractor can demonstrate such use will limit the use (duration) and length of Phase 1B narrow lanes and shoulders to 45 days per 4,500 foot or interchange to interchange segment; including temporary barrier setup, temporary barrier removal, and striping. See Special Provision 107.4.7 Limitations of Operations for more details.

Question 15: Sta 2139+50 shows a new culvert and new catch basins as well as removing existing culvert and catch basin. How will existing median drainage be handled if the existing pipe is disconnected/removed from the existing catch basin?

Answer: Drainage note 8 in the General Notes states, "The contractor shall maintain existing drainage during construction as needed for temporary use, prior to proposed drainage systems being functional as identified on the plans." This means that a temporary connection must be made between the new culvert and the existing catch basin until Phase 2 construction when the new catch basins can be installed and the old basin removed. There are a number of similar cases throughout the project. Special Provision 603 is updated to make payment clear.

Question 16: Sta 2170+00 shows an existing median catch basin to be removed and the culvert to be filled with flowable fill. How will existing median drainage be handled during Phase 1 construction?

Answer: Drainage note 8 in the General Notes states, "The contractor shall maintain existing drainage during construction as needed for temporary use, prior to proposed drainage systems being functional as identified on the plans." In this case the note means that a temporary culvert extension will be required to maintain median drainage during Phase 1 construction until Phase 2 construction when the new closed drainage is operational at which time the removal and filling can take place. There are a number of similar cases throughout the project. Special Provision 603 is updated to make payment clear.

Question 17: Can the two different sized Truck Mounted Attenuators be used interchangeably?

Answer: The 24,000 LB Truck Mounted Attenuator is specifically required to be used where called for on the Plans or as directed by the Resident. Its use is called for during lane closures associated with open excavation of the mainline to install culverts. Both the standard size TMA and the heavier TMA may be used anywhere else within the project limits. Special Provision 652, Pages SP-174 and SP-175 are deleted and replaced to clarify use and payment of the TMA. See Attached.

Question 18: Is there any additional information on the schedule or details of the gas line replacement project near Exit 46?

Answer: Unitil/Granite State Gas is estimating the construction of the gas line replacement to begin in mid-May and be completed by the end of July (6-8 weeks). Special Provsion 104, page SP-11 is deleted and replaced to add more detail to Granite State Gas's construction schedule for replacing a gas pipeline and construction requirements relative to the Contractor's work over the existing and new pipelines. Contractor shall coordinate directly with the Utility upon Award of Contract for more detailed information. See Attached

Question 19: Would MTA accept an alternate block system to T-Wall due to there is no longer a Maine based producer of T-Wall retaining blocks? The alternate system would be a block system that is dimensioned, engineered, & utilizing same components exactly as T-Wall, but with different name. Engineered stamped calculations would be included.

Answer: See Notes 1 and 2 on Plan sheets 271 and 274. Note #2 on Plan sheets 271 and 274 requires the Contractor to: Select precast units from the MaineDOT Prequalified Products List and submit to Resident for Approval.

ATTACHMENTS

- Addendum No. 1 (7 pages)
- Specifications (27 pages)
- Plans (2 pages)
- Pre-Bid Agenda (7 pages)
- Pre-Bid Sign-In Sheet (1 page)

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 (44).

All bidders are requested to acknowledge the receipt of the Addendum No. 1 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. 1 on Page P-7 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

GRANITE STATE GAS
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Granite State Gas owns an 8-inch steel pipe, wall thickness 0.156-inch wall thickness, in a concrete casing. This pipe crosses the Maine Turnpike at approximately STA. 2274+65, at a skew of approximately 70 degrees from the Maine Turnpike centerline. Granite State Gas will be relocating this facility to approximately 400-feet north of the current facility, with an 8-inch steel pipe, wall thickness of 0.322 inches, inserted inside a 30-inch steel casing, wall thickness of 0.500 inches. The proposed work will be constructed via a jack and bore method underneath the mainline but also includes construction of lines (via open cut trench) parallel to the mainline as well as tie-in connections to the existing main; approximately Station 2273+50 to Station 2278+00. The proposed work is tentatively scheduled to begin in mid-May and be complete by end of July 2020.

The Contractor shall plan their Phase 1 work to allow Unitil/Granite State Gas to construct this new directional drill/jack pipeline underneath the mainline including construction of lines parallel to the mainline, and cut-over connections. Contractor will be allowed to construct the widening embankment including up to and including the 19 inches of granular borrow for contractor access however, gravels and above materials shall not be completed until after the pipeline has been installed and put into operation. The contractor must coordinate with the Utility and comply with their construction requirements for all construction over or effecting the pipeline. The contractor will be responsible for repair, including compaction, of the widening embankment that may have been disturbed during Unitil/Granite State Gas pipeline construction.

MAINE TURNPIKE AUTHORITY (CROSBY WATERLINE)
Maine Turnpike Authority
2360 Congress Street
Portland, ME 04102
ATTN: Shawn Laverdiere
Tel: (207) 829-3767
Email: SLaverdiere@maineturnpike.com

The Maine Turnpike Authority owns a waterline which crosses the Maine Turnpike at approximately STA. 2267+60 and enters the Crosby Maintenance Facility. No work to this facility is anticipated. However, the Contractor shall provide a 10-day notice for all excavations within 25' of this facility including adjacent catch basins, cross pipes, closed drainage and ditching. The Contractor shall perform at least one test pit to horizontally and vertically locate this waterline before starting any work in this area.

- All interchange ramp lighting fully operational
- Temporary traffic control devices and signage from Phase 1 either removed from project or setup for Phase 2 MOT and construction (northbound and southbound)
- Temporary concrete barrier removed from the mainline or setup for Phase 2 construction (northbound and southbound)

- Final Substantial Completion for All work:
  - Exit 44 Northbound Off-Ramp fully open to traffic in the final condition.
  - All culverts, closed drainage systems, and stormwater treatments fully functioning including all associated erosion control measures.
  - All proposed and existing travel lanes, including acceleration and deceleration lanes, shall be open to traffic in the permanent lane configuration; including shoulders, guardrail, pavement, pavement striping, and highway signage.
  - The median concrete barrier and median paving complete including contract final striping and signage.
  - Variable message signs fully functioning,
  - All temporary concrete barrier removed from the project,
  - All temporary traffic control and devices removed from the project,
  - All disturbed slopes loamed, seeded and mulched, and temporary erosion control installed where necessary.
  - Street lighting complete and operational

Supplemental Liquidated damages on a calendar day basis in accordance with Subsection 107.8 shall be assessed for each calendar day that any substantial completion, intermediate or final, is not achieved and as outlined above in this Subsection and below in Subsection 107.4.6 Prosecution of Work.

107.4.6 Prosecution of Work

The following activities must be completed by or within the date(s) specified:

a. All mainline and ramp culverts and culvert extensions shall be complete prior to any of the Phase 1 paving above the culverts. Excavation of the proposed Phase 1 pavement is not allowed to install culverts.
b. The contractor shall plan their Phase 1 work to allow Unitil/Granite State Gas to construct a new directional drill/jack pipeline underneath the mainline including construction of lines parallel to the mainline, and cut-over connections; approximately station 2273+50 to station 2278+00. Contractor shall coordinate directly with the Utility to determine construction access through this area during Utility pipeline construction. All gravels and pavement shall not be constructed until after the pipeline has been installed and put into operation. The contractor must coordinate with the Utility and comply with their construction requirements for all construction over or effecting the pipeline. The contractor will be responsible for repair of and compaction of the widening embankment

that may have been disturbed during Unitil/Granite State Gas pipeline construction. See Utility Special Provisions for their construction timeline. See attached Preliminary Plans from the Utility for more details.

c. All Contract work that requires in-water work in Red Brook shall be conducted between July1 and October 1 of 2020. All Contract work that requires in-water work in Long Creek shall be completed between April 1 and November 1 of 2020.
d. No tree cutting shall occur between June 1 and July 31 of 2020 or 2021.
e. All disturbed riparian areas shall be revegetated such that no exposed or unvegetated soil remains by October 1 of that construction season. All areas newly disturbed after October 1 shall be treated with erosion and sediment control measures that include placement of 6-12 inches of erosion control mulch overlain with jute matting and pinned in place before freezing occurs. This material must be removed to allow the area to revegetate during the following growing season.
f. All Phase 1 widening construction between Sta 2201+00 and 2210+00 shall be coordinated with the MTA Contract 2018.19 – Cummings Road Contractor. Contract 2018.19 currently has a lane shift in place that precludes this contract from placing Phase 1 MOT devices (and therefore construction) in this area until approximately mid-July 2020.
g. If the contractor plans to perform any Phase 2 work in the winter, then the contractor shall install Phase 2 Maintenance of Traffic devices, including temporary barrier and pavement markings, both northbound and southbound, without placing temporary concrete barrier on snow or ice and installing pavement markings per the manufacturer's requirements. There will be no additional compensation for snow removal, heating pavement, or drilling through frozen ground, or any other methods to install the Phase 2 MOT. Maintaining temporary pavement markings is Contractor's responsibility.
h. The narrow shoulders and 11-foot southbound lanes shown in Phase 2 from Sta 2254+50 to 2266+00, including shifting tapers, may not be setup and put into operation until April 1, 2021. Full depth reconstruction of the southbound mainline in this area shall be completed with the typical Phase 2 lanes and shoulders put back in operation by June 30, 2021.

107.4.7 Limitations of Operations

a. Phase 1A work shall be complete through subbase course gravel compaction prior to transitioning into Phase 1B. Maintenance of traffic layout, as shown in the plans, for placement of temporary concrete barrier in Phase 1A and Phase 1B is required unless otherwise approved in writing by the MTA. The goal of the MTA is to limit the duration and length traffic is constrained to the 11-foot lanes with narrow shoulders required in Phase 1B. However, the MTA will consider a contractor's proposed alternate phasing (and fully detailed layout) of moving directly to the use of Phase 1B temporary concrete barrier if the contractor can demonstrate such use will limit the use (duration) of Phase 1B narrow lanes and shoulders to 45 days per segment; including temporary barrier setup, temporary barrier removal, and striping. Any such MTA approved alternate MOT that moves directly to the use of Phase 1B barrier will include the stipulation that Supplemental Liquidated Damages, as described in Supplemental Specification 107.8,

will apply to days in excess of the stated 45 days per segment. The contractor shall consider the maximum length segment for this layout to be 4,500 feet or interchange to interchange and shall include in their proposal a station to station layout and a construction schedule that clearly defines work tasks during the requested period. The contractor shall consider Substantial Completion for this alternate MOT moving to Phase 1B as: work complete, traffic moved back to the Phase 1A lanes and shoulders and the temporary concrete barrier moved back to at least the Phase 1A location or removed from the project limits.

b. If Phase 1A is utilized by the Contractor, then the duration of Phase 1B (narrower lanes and shoulders) shall be kept to an absolute minimum dictated by paving operations but in no case longer than 45 days per segment. The contractor shall consider the maximum length segment for all Phase 1B MOT setups to be 4,500 feet or interchange to interchange. Once the shift to Phase 1B has been setup, the contractor shall have the appropriate staff, equipment, and supplies to complete the paving without delay. Temporary concrete barrier shall be moved, at a minimum, back to Phase 1A to provide wider lanes and shoulders as soon as paving is complete but no later than two weeks after paving. The contractor shall submit a construction plan and MOT schedule for this work 30 days prior to the proposed start of Phase 1B for review and approval. Consideration will be given to completing this work in interchange to interchange segments versus the entire length.

c. Access to the MTA Crosby Maintenance Area entrance at Station 2268+00 shall be maintained at all times, including providing shoulders for deceleration into and acceleration out of the entrance. Contractor shall provide a minimum 300-foot deceleration length and a minimum 300-foot acceleration length, plus 150-foot tapers for each, within a 12-foot minimum width shoulder, at all times. The contractor will be allowed a maximum 3-week duration to complete the widening construction sufficient to provide the required deceleration, acceleration, and taper areas. Reconstruction of the entrance shall between May 1, 2020 and September 18, 2020 and shall occur during the weekend, from 6:00 PM Thursday night to 5:00 AM Monday morning, in order to minimize disruption of MTA maintenance operations. Contractor shall provide a two-week notice of both the accel/decel lane construction and the Crosby entrance reconstruction.

d. The contractor shall complete the entire scope of work associated with Phase 1 (widening and paving), in a travel direction, before transitioning maintenance of traffic control devices, pavement markings, etc. to the Phase 2 (median reconstruction) configuration as shown on the plans.

e. The contractor will be allowed only one temporary barrier shifting taper at a time, in one direction of travel, between the wider Phase 1A lanes and the narrower Phase 1B lanes. The intent is to avoid moving traffic from wider Phase 1A lanes to narrower Phase 1B lanes then back to wider Phase 1A lanes forcing traffic to negotiate multiple shifting tapers. If used, the shift should be located outside of an interchange ramp acceleration or deceleration lane.

f. The contractor shall be responsible for coordinating and scheduling work activities with adjacent contracts in overlapping work zones.

g. Access to both the easterly and westerly towers of the FAA Light Bridge at Station 2285+50 shall be maintained at all times.

h. Contractor shall review and comply with the Special Conditions contained in Aeronautical Study No. 2020-ANE-754-OE and Advisory Circular AC No. 70/7460-IL Change 2, Obstruction Marking and Lighting. These documents are contained in the Appendix. FAA has determined equipment that is 35 feet tall or less (above ground level) may be used on this project with special marking and/or lighting; see documents noted in this paragraph. Any equipment or part of equipment that exceeds 35 feet above ground level will require an additional application process, review and approval of the FAA before the equipment can be used.

i. Contractor shall contact the FAA (Portland International Jetport) at least 3 business days prior to use of construction equipment adjacent to the Jetport Light bridge and the Exit 46 ramps; contact information is in the Utility Special Provision, Sec 104.4.6.

j. Contractor must submit FAA Form 7460-2 Notice of Actual Construction or Alteration to the Resident within 3 days of when construction reaches its greatest height (see FAA Form 7460-2, Part 2). This applies to final pavement and roadway lighting on the ramps, as well as construction equipment removed from the site.

k. The contractor shall maintain normal downstream flow in Red Brook and Long Creek, and at all times and temporary construction impacts must remain within the areas shown on the permit plans unless approved by the MTA and permitting Agencies.

l. The Contractor shall complete the work as shown on the phasing and maintenance of traffic plans and in accordance with Section 652 of the Specifications. Modifications to the phasing or associated maintenance of traffic plans will not be permitted unless approved by the Resident.

m. Care shall be taken when working near catch basins to ensure foreign material and contaminants do not enter. If foreign material and/or contaminants do enter the basin they shall be removed prior to the material exiting the basin into a waterway. Removal shall be completed to the satisfaction of the Resident and payment shall be incidental to the Contract.

n. There shall be no pile driving during non-daylight hours. Pile driving will not be allowed within 10 feet of traffic.

o. Contractor shall not plow or otherwise cause snow or ice from within the work zone to be cast upon active travel lanes, shoulders, or ramps. The contractor should plan for

p. MTA snow plows to push snow from the roadway, over the temporary barrier and into the work zone.

q. Contractor shall maintain all mainline guide signage noting "Right Lane is an Exit Only lane" for the Exit 44 Northbound Off Ramp with the appropriate message(s) for the lane use dictated by construction phase and MOT. This includes, but not limited to covering the sign(s), removing sign(s), deploying temporary signage, and installing/adjusting new signs. At the completion of Intermediate Substantial Completion of the Exit 44 Northbound Off Ramp, signage and lane use shall be the lane use that is in operation at pre-construction.

r. At the completion of the contract and prior to opening the new third lane northbound, the Contractor shall set up all signage for the Exit 44 NB off ramp and all required traffic control devices and signage for the Exit 46 Northbound off ramp, to advise Turnpike traffic that the third lane is an Exit Only lane ending at the Exit 46 northbound offramp and to keep the third lane north of the off ramp barreled off (closed).

s. Existing signs noted to be removed and reset shall be maintained until the new location is ready for the reset. The contractor will be required to provide temporary signing for all signs that are not reset within the same day as removal. Similarly, all new signs that replace existing signs shall be set within the same day as the existing sign is removed or temporary signing shall be provided. The contractor shall submit a plan for all temporary signing, including location and support, for MTA approval.

t. Lane closures, shoulder closures, and stoppages of all kinds are prohibited during the period Noon April 23, 2021 thru Noon April 26, 2021 and from Noon April 30, 2021 thru Noon May 3, 2021; due to an Interstate 295 closure.

u. The length of temporary concrete barrier installed during each Phase of work shall be limited to the Contractor's active work area, unless specifically required. The length of temporary concrete barrier setup at any one time in a direction of travel for Phase 1B shall be limited to 4,500 feet or interchange to interchange. The Contractor shall sequence the work within each Phase in a logical manner that minimizes the length of temporary barrier along one or both sides of the active mainline traffic including temporary alignments. When construction or operation in a work area are complete and new pavement matches the existing surface, the temporary barrier shall be removed or moved away from the active lane providing that a minimum 8-foot paved area can be used as an appropriate shoulder. If the temporary barrier is removed, appropriate traffic control devices shall be installed to delineate the mainline lane lines and edge of shoulder.

v. The contractor shall maintain existing drainage during construction as needed for temporary use, prior to proposed drainage systems being functional as identified on the plans. This includes, but not limited to, making temporary pipe connections between new culverts installed in Phase 1 and existing median catch basins that won't be replaced until Phase 2 construction; and temporary culvert extensions for existing

w. culverts that drain median catch basins that are to be removed in Phase 2 construction. Payment for temporary pipe connection and temporary pipe extensions will be paid for under the appropriate Section 603 Pipe Item; no additional payment will be made for required labor, fittings, seals, etc.

SPECIAL PROVISION

DIVISION 401

HOT 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 Gyrations.

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.Smm 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

CORE DENSITY VS. CORE THEORETICAL MAXIMUM DENSITY COMPACTION 93.5-98.5 PERCENT	
PERCENT COMPACTION	**PERCENT PAYMENT**
93.5 – 98.5	100
93.5 - 94.4, 98.6 – 99.0	95
92.5 - 93.4, 99.1 – 99.5	85
<92.5, > 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.	

AIR VOIDS – 1.0 – 4.0 PERCENT	
VOIDS	**PAYMENT PERCENT**
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 sublot (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.Smm mixture	6.5 %
19.0mm mixture	6.0 %

9.5 mm Asphalt Rich Base PGAB CONTENT	
% PGAB	**% PAYMENT**
JMF Aim ± 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
Note: PGAB content is based on samples tested at the plant for each 500 Ton sublot	

12.5 mm Asphalt Rich Base PGAB CONTENT	
% PGAB	**% PAYMENT**
JMF Aim ± 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
Note: PGAB content is based on samples tested at the plant for each 500 Ton sublot	

19.0 mm Asphalt Rich Base PGAB CONTENT	
% PGAB	**% PAYMENT**
JMF Aim ± 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
Note: PGAB content is based on samples tested at the plant for each 500 Ton sublot	

Payment will be made under:

Pay Item		Pay Unit
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 PROVISION

SECTION 403

HOT MIX ASPHALT PAVEMENT

Course	HMA Grading	Item Number	Total Thickness	No. of Layers	Complimentary Notes

Northbound and Southbound Mainline and Shoulder Construction

Intermediate	**12.5mm**	**403.2081**	**1.5”**	**1**	**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**	**403.2081**	**1.5”**	**1**	**D,E,I,J,K**
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**	**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**	**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), except that Item 403.2072 Asphalt Rich Base mix will be performed at 65 gyrations.
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 PROVISION

SECTION 527

ENERGY ABSORBING UNIT

(Work Zone Crash Cushion)

527.01 Description

The first paragraph is deleted in its entirety and replaced with the following:

The Contractor shall furnish and install work zone crash cushions where shown on the Plans, as specified herein, in Special Provision 652, or as approved by the Resident. Work zone crash cushions are required at each exposed end of temporary concrete barrier or guardrail.

The exposed end of the concrete barrier within 30 feet of the mainline travel lane shall be protected at all times. Barrier shall not be reset until after the work zone crash cushion(s) has been set to protect the exposed end of the barrier.

527.02 Materials

The following paragraph is added:

Only work zone crash cushions meeting the MASH TL-3 crash test requirements may be used on the turnpike and local roadways with posted speeds of 45 MPH or greater. Work zone crash cushions meeting the MASH TL-2 crash test requirements may be used on local roadways with posted speeds of 40 MPH or less. The Contractor shall provide the Resident with documentation of the proposed work zone crash cushion's MASH Crash Test Results prior to installation at the jobsite.

527.03 Construction Requirements

The following is added to the end of the first paragraph:

The design speeds for work zone crash cushions shall be 45 mph for local road and 70 mph for turnpike roadways unless otherwise noted on the Plans.

527.04 Method of Measurement

Work Zone Crash Cushions used to protect exposed ends of guardrail for steel girder erection will not be measured separately for payment, but shall be included under the Maintenance of Traffic for Steel Girder Erection item.

Replacement barrels, after collisions, will be paid for as a percentage of the individual barrels damaged to the total barrels in the complete system. The removal of impacted barrels and debris will be considered incidental to the replacement barrels. Barrels on hand, but unused will not be paid for directly.

SPECIAL PROVISION

SECTION 603

PIPE CULVERTS AND STORM DRAINS

(Reinforced Concrete Pipe)
(Concrete Collar)
(Corrugated Polyethylene Pipe)

603.01 Description

The following paragraphs are added:

This work shall also consist of furnishing and installing Class III, IV or Class V reinforced concrete pipe at the locations as shown on the Plans or as approved by the Resident.

This work also consists of furnishing and installing a concrete collar to join existing concrete pipe to the proposed concrete or Corrugated High Density Polyethylene (HDPE) pipe in accordance with the details as shown on the Plans. The Contractor shall note that the concrete pipe ends may be of different sizes and may not fit snugly together.

This work shall also consist of furnishing and installing various sizes of corrugated HDPE pipe, including a dual wall adaptor fitting by Hancor or an approved equal as shown on the plans. No other pipe types within the Option III alternatives will be accepted.

This work shall also consist of furnishing and installing various sizes of Class III RCP or corrugated HDPE pipe for temporary pipe connections and temporary pipe extensions to temporarily maintain existing drainage.

603.02 Materials

All Corrugated High Density Polyethylene (HDPE) pipe for storm water and drainage systems shall meet the requirements of Subsection 706.06.

603.11 Method of Measurement

The following paragraph is added:

The Concrete Collar shall be measured by each unit installed, complete in place and accepted. This shall be full compensation for furnishing labor and materials to construct a Concrete Collar to connect the existing and proposed pipe ends in a working like manner.

Dual Wall Adapter Fitting shall be included for payment as three additional linear feet of the largest pipe involved.

Temporary pipe connections and temporary pipe extensions will be measured by the linear foot of the type specified, installed and accepted.

603.12 Basis of Payment

Concrete Collars will be paid for at the Contract unit price each regardless of the size of the existing and proposed pipes.

Corrugated HDPE pipe will be paid for under the appropriate sized Culvert Pipe Option III pay items

Temporary pipe connections and temporary pipe extensions will be paid for at the contract unit price per linear foot in place, and shall be full compensation for furnishing all labor, equipment and materials necessary to complete the work consisting of, but not necessarily limited to, the installation, temporary connections, excavation and backfill, disassembly, and all other items necessary to maintain and disassemble temporary drainage or as approved by the Resident.

Payment will be made under:

Pay Item		Pay Unit
603.155	12 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.165	15 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.1653	15 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.175	18 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.1753	18 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.195	24 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.1953	24 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.205	30 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.2053	30 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.215	36 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.2153	36 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.225	42 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.2253	42 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.235	48 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.2353	48 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.245	54 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.2453	54 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.255	60 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.2553	60 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.265	66 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.2653	66 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.275	72 inch Reinforced Concrete Pipe - Class III	Linear Foot
603.2753	72 inch Reinforced Concrete Pipe - Class V	Linear Foot
603.28	Concrete Collar	Each
603.50	78 inch Reinforced Concrete Pipe – Class IV	Linear Foot

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 Class A-P (permanent) field office (facility) at the Crosby MTA maintenance yard, at mile marker 45.8 south bound. If the contractor cannot provide an A-P facility prior to the start of Work, the Contractor shall provide a traditional Type A field office as a temporary facility until the Type A-P can be provided. The contractor shall have 120 Calendar Days once they mobilize to provide the permanent field office. Upon completion of the work, the facility shall become the property of the Authority. The contractor will not be responsible for removing the field office at the end of the project.

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. The facility shall have trailer brakes and a title that the Authority shall receive at the completion of the project. All portions of the permanent facility shall be submitted to the Resident Engineer for review and approval prior to purchasing the permanent facility. The submittals shall include, but not limited to, insulation, electrical, roofing, trailer chassis and frame components, windows, HVAC system, and interior finishes.

639.03 General

The temporary facility of the type called for shall be provided before the start of work, and shall remain until the permanent facility has been installed and accepted, unless earlier removal is authorized. 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. Furnishings for the Type A-P facility shall be new and will become the property of the MTA. 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.

The field office shall be designed to be towed using a pintle hitch system. The axles shall have electric brakes. The trailer wiring shall use a standard commercial truck plug and all lights shall be LED and meet DOT requirements. Width of the structure shall be 10’. Maximum height when being towed shall be 13’-6”.

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 permanent office trailer facility shall be new. 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:

Description	Quantity	
	Type A-P	Type A
Floor Area (Outside Dimension) - ft^2	450	312
Inside Wall Height – feet	7	7
Window Area - ft^2	55	55
Drafting Table Surface Area - ft^2	15	15
Drafting Stools - each	2	2
Office Desks - each	2	2
Ergonomic Swivel Chairs -ea (5-way adjustable)	3	3
Folding Chairs - each	6	3

Lighting Units - each	4	2
Electric Wall Outlets - each	8	4
Electrical Surge Protectors - each	2	2
Wall Closets - each	1	1
Plan Rack for minimum of 6 sets of plans	1	1
Plastic Folding Tables (3' by 8')	3	2
Wastebaskets - each	2	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.

Wall closets shall be 21 inches wide, 15 inches deep, and at least 4 feet high.

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.

A third ¼ shall be made once the contractor has delivered and installed the permanent field office.

The final payment of the remaining ¼ shall be made upon completion of the work.

Payment will be made under:

Pay Item		Pay Unit
639.18	Field Office, Type A-P	Lump Sum

reopening lanes. Refer to the plans for additional guidance and layout in support of the mainline cross culvert installations. Construction of mainline cross culverts shall occur during Phase 1A.

Maine Turnpike Traffic Control Requirements

This Section outlines the minimum requirements that shall be maintained for work on, over, or adjacent to the Maine Turnpike roadway. Operations are allowed as outlined below:

Maintenance of traffic plans have been developed for the work on the mainline and ramps. Minimum main line width for a single travel lane shall be 14 ft and minimum ramp widths of 16 ft (12 ft lane and two 2 ft shoulders) must be maintained at all times, unless otherwise noted. Shoulder closures, lane closures, and lane shifts meeting the MUTCD guidelines, other than those shown in the plans, must be submitted for approval from the MTA prior to use in the construction operations. Requests for all closures shall be submitted to the MTA for approval before proceeding.

Where space is available pavement striping for all tapers shall create a minimum buffer of 250 feet to the point where the temporary concrete barrier taper ends and becomes parallel to the travelway. Temporary concrete barrier shall be tapered at a minimum 8:1 unless space is available and then it should be tapered at 15:1 or 100 feet whichever is longest.

Milling and paving of interchange ramps, and temporary closing of interchange ramps for placing traffic control devices for mainline widening construction, shall be done between 9:00 p.m. and 5:00 AM, unless otherwise shown on the Maintenance of Traffic Phasing Plans or as directed by the MTA. Only a single ramp at an interchange may be closed at once. Ramp closures will not be permitted the day before or after holidays, on holidays, or on Saturdays or Sundays. The Contractor shall request approval from the Resident/Authority two weeks prior for all closures. Portable changeable message signs shall be used to provide advance notice and warning of the ramp closure. PCMS's shall be operational a minimum of 1 week prior to ramp closure to notify Patrons. The contractor shall coordinate PCMS locations with the Resident and the MTA.

Construction vehicles will not be allowed to cross active ramps. Equipment moves across ramps will require a short-term ramp closure (i.e. 5-minute maximum timeframe) utilizing State Police and must be approved by the Authority in advance. Ramp closures for equipment moves will not be permitted between 6:00 a.m. and 10:00 a.m. and between 3:00 p.m. and 7:00 p.m. All State Police shall be coordinated through the Maine Turnpike Authority. The Authority will make payment for the State Police officers and vehicles directly to the State Police.

Lane and/or ramp closure setup may not begin until the beginning time specified. Closures that are setup early or that remain in place outside of the approved time period shall be subject to a lane rental fee of $1,000 per five minutes for every five minutes outside of the approved time. The installation of the construction signs will be considered setting up the lane closure. Removal of the last construction sign will be considered removal of the closure. Construction signs shall be installed immediately prior to the start of the closure and shall be promptly removed when no longer required. The installation and removal of a closure, including signs, channelizing devices, and arrow boards shall be a continuous operation. The Authority reserves the right to order the removal of an approved closure.

Access to, and egress from, the construction area shall be with the direction of travel without crossing traffic. Construction vehicles are prohibited from merging with mainline traffic between 7:00 a.m. and 8:30 a.m. and between 4:00 p.m. and 5:30 p.m unless approved in writing from the MTA. The contractor shall develop work zone access/egress with acceleration and deceleration areas having a minimum length of 500 feet for the mainline. The contractor should utilize interchange ramp areas whenever feasible for access and egress. Interchange ramp access and egress points do not have time restrictions and require 150-foot acceleration and deceleration areas.

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

(Truck Mounted Attenuator)

Section 652 of the Maine Turnpike Authority 2016 Supplemental Specifications is modified as follows:

652.1 Description

The following paragraph is added:

When a pay item for a Truck Mounted Attenuator (TMA) is included in the contract at least one TMA will be required on the project and its use will be required. The truck mounted attenuator should be utilized in lane closures and other construction operations where workers are exposed to traffic and not protected by other positive means. The Contractor shall manage the utilization and operation of the TMA and if at least one is not used as described above then it will be considered a Traffic Control Plan violation and result in a reduction of payment as outlined in Section 652.

652.2.1 Truck Mounted Attenuator

This section is deleted in its entirety and replaced with the following:

The truck mounted attenuator system shall conform to the following requirements:

- Truck and attached attenuator shall conform to the NCHRP Report 350, Test Level 3 criteria or MASH if manufactured after 2019.
- A mounted revolving amber light or amber strobe light with 360-degree visibility.
- An arrow light bar fixed to the vehicle.
- The attenuator shall be mounted to a vehicle with a minimum weight of 10,000 lbs.
- The attenuator shall be mounted to a vehicle with a minimum weight of 24,000 lbs. when specifically called for on the Plans.

652.3.7 Operations

This section is deleted in its entirety and replaced with the following:

The Contractor shall manage the operation of the truck mounted attenuator. The truck mounted attenuator should be utilized in lane closures and other construction operations where workers are exposed to traffic and not protected by positive means. The operation of the vehicle shall be in accordance with the Manual of Uniform Traffic Control Devices and the manufacturer's

recommendation. Truck mounted attenuator – 24,000 LB shall be used as called for in the plans or as approved by the Resident.

Installation: The chart below identifies the distance from the work zone or hazard where the TMA shall be deployed. If the work zone is within a marked lane closure, the barrier truck distances shall apply and if the work is mobile, then shadow truck distances shall apply. The TMA shall not be located in the buffer zone. When used as a barrier, the barrier truck shall be parked in low gear with brakes applied and the front wheels turned away from the work zone and the adjacent traffic lane. For placement details, reference the Manual of Uniform Traffic Control Devices (MUTCD).

Weight of Truck	Barrier Truck Distance from Work Zone of Hazard	Shadow Truck Distance from Work Vehicle or Work Zone
10,000 lbs	250 ft	300 ft
15,000 lbs	200 ft	250 ft
>24,000 lbs	150 ft	200 ft

652.7 Method of Measurement

The last paragraph is deleted and replaced with:

Truck mounted attenuator shall be measured for payment by the calendar day for each calendar day that a unit is used on a travel lane or shoulder on the project, as approved by the resident.

652.8.2 Basis of Payment

The last two paragraphs are deleted and replaced with:

The Truck Mounted Attenuator(s) will be paid for at the Contract unit price per calendar day for each TMA used. This price shall include all costs associated with the use of the vehicle. Payment shall include operator, fuel, truck, maintenance, flashing lights, arrow board and all other incidentals necessary to operate the vehicle. No additional payment, above the Unit Bid Price for Item 652.45, will be made for use of the heavier Truck Mounted Attenuator – 24,000 LB.

Payment will be made under:

Pay Item		Pay Unit
652.45	Truck Mounted Attenuator	Calendar Day

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

(Pace Vehicle)

652.1 Description

The Contractor shall provide pace vehicles and licensed competent drivers to operate the vehicles in the work area at the legal speed.

652.2.1 Pace Vehicle

The pace vehicles shall conform to the following:

- Full size pickup truck (Ford F150, GM 1500 or equivalent) or larger, in good mechanical condition, clean and presentable at all times.
- A 54" minimum amber LED light bar shall be mounted at the top of the truck with the rear light bars lights in use while the pace vehicle is in use. Light bar lighting shall have sufficient intensity to be visible at 500 feet in normal daylight and a flash rate between 1Hz and 4Hz.
- Each pace vehicle shall have cellular telephone integrated with bluetooth into the vehicles radio system to allow for hands free operation. The pace vehicles shall have fixed cell phone number for the duration of the project.
- A 3' by 5' sign with black text on a fluorescent orange prismatic grade sheeting in accordance with Supplemental Specification 652.2, mounted on the rear of the vehicles. Sign text shall be as follows:

652.3.7 Pace Vehicles

The pace vehicles shall operate at the legal speed through the work area. Two pace vehicles shall operate staggered to allow vehicles to pass, unless a lane closure is in place and all traffic is operating in a single lane. The operation of a single pace vehicle is not allowed when multiple lanes are open to traffic. The pace vehicles shall comply with all rules and regulations pertaining to the operation of a motor vehicle on a traveled way. The vehicle is not allowed to use the median crossovers or to turn around within the interchange areas. The pace vehicles shall not be used to stop traffic.

The Contractor shall submit a plan for the areas of the roadway to be covered by the Pace Vehicles. The Authority may request that the Pace Vehicles travel adjacent sections of the turnpike outside of the work limits of this contract. The contractor shall be responsible for managing the operation of the pace vehicles. The pace vehicles are not intended to be used continuously during the Contract. The number of days, time periods and locations shall be agreed upon between the Authority and the Contractor.

The Contractor shall note on the weekly updated schedule (submitted by noon on Thursday) the proposed days of operation of the pace vehicles for the following week. The Resident will transmit this notification to the Maine Turnpike Communication Center. The Contractor shall notify the Resident in writing if the proposed schedule has been revised prior to the scheduled time of operation. The Maine Turnpike Authority may direct the Contractor to cease operation of the pace vehicle so that emergency vehicles can operate through the work area. The Authority or State Police may also direct the Contractor to remove or limit the use of the pace vehicles at any time.

The Maine Turnpike Authority requires a minimum two (2) week notification prior to the initial operation of the pace vehicle in order for the Authority to inform the public of the proposed operation.

The pace vehicle will not be measured for payment if it is not operated in accordance with these Specifications.

652.7 Method of Measurement

The following paragraphs are added:

Each Pace Vehicle shall be measured for payment by the day for each day that the vehicle is driving through the work zone. A day is defined as 10-hours of operation. Each driver shall be allowed two 15-minute breaks and one 30-minute break during the day as well as the required breaks to refuel the vehicle.

The Contractor shall submit a weekly invoice to the Resident certifying the days the Pace Vehicle was operating in the work zone. Time spent moving the vehicle to and from the site and servicing and maintaining the vehicle, will not be measured separately for payment. Pace Vehicles ordered removed by the Authority due to congestion will be measured for payment for the day.

652.8.2 Basis of Payment

The following paragraphs are added:

The accepted quantity of Pace Vehicle will be paid for at the Contract unit price per day for each vehicle operated. Payment shall include operator, truck, fuel, equipment, maintenance, cellular phone and service, flashing lights, sign, and all other incidentals necessary to operate the equipment.

Payment will be made under:

Pay Item		Pay Unit
652.44	Pace Vehicle	Day

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

Section 652 of the Maine Turnpike Authority 2016 Supplemental Specification is modified as follows:

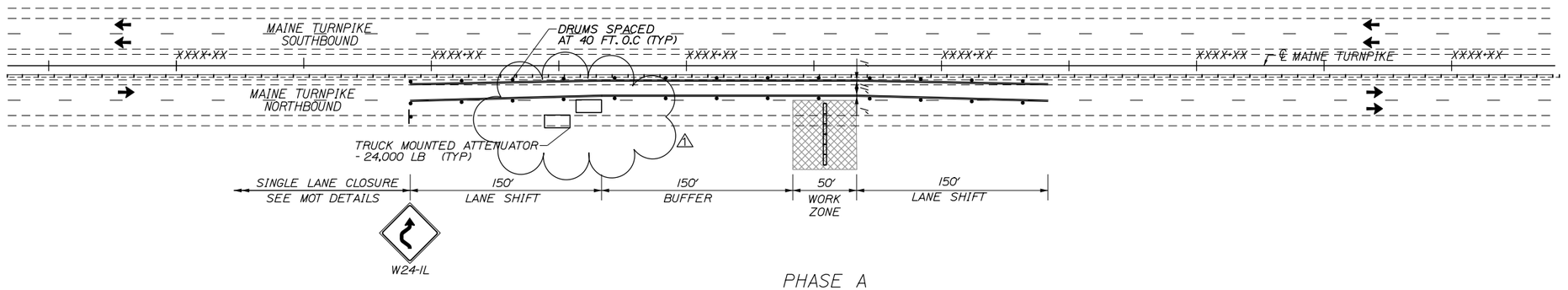
652.8 Basis of Payment

The third and fourth paragraphs are deleted and replaced with:

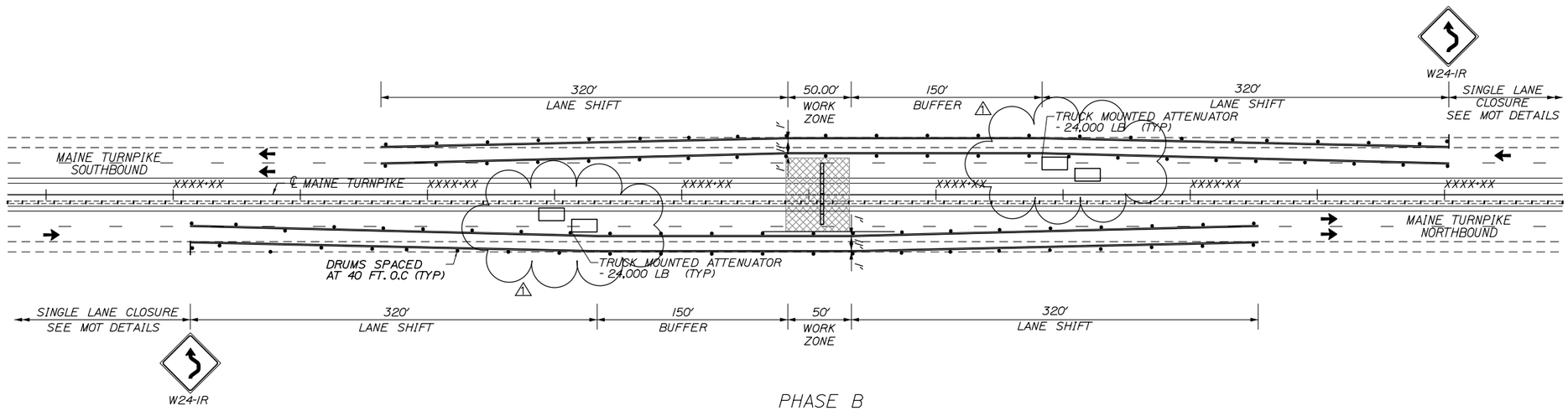
Failure by the contractor to reinstall cones, barrels, signs, covered/uncovered signs and similar traffic control devices within an hour of them being displaced, moved, knocked over, un-covered and etc. will result in a $150 fine per traffic control device if the issues is not resolved within 1 hour of notification by the resident. An additional $150 will be assessed for each additional hour that the device has not been corrected. If the traffic control device is critical to the maintenance of traffic creating an actual or potential safety issue with traffic and is not corrected immediately then it will result in a violation letter as described below.

Failure by the contractor to follow the Contracts 652 Supplemental Specifications, Special Provisions and Standard Specification and/or the Manual on Uniform Traffic Control Devices (MUTCD) and/or the Contractors own Traffic Control Plan, or failure to correct a violation, will result in a violation letter and result in a reduction in payment as shown in the schedule below. The Resident or any other representative of the Authority reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Authority shall not be held responsible for any delay in the work due to any suspension under this item. Any reduction in payment under this Special Provision will be in addition to forfeiting payment of maintenance of traffic control devices for that day.

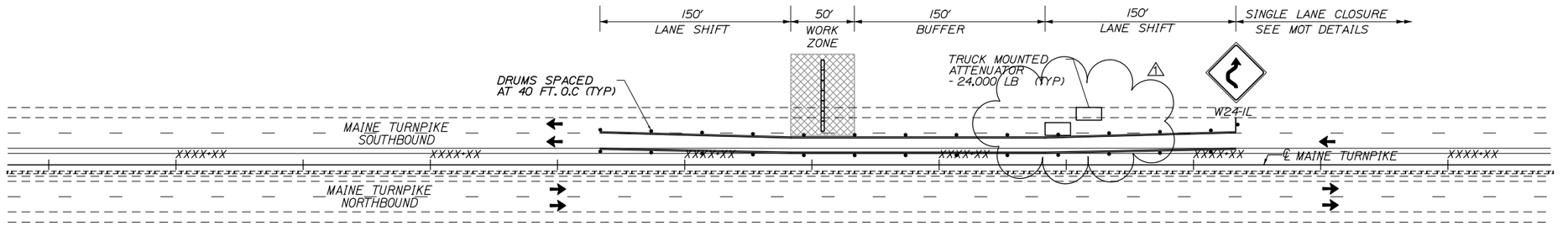
Amount of Penalty Damages per Violation		
1st	2nd	3rd & Subsequent
$500	$1,000	$2,500



PHASE A



PHASE B



PHASE C

NOTES:

1. LANE CLOSURES SHALL BE SIGNED FOR 45 MPH AND MAY ONLY OCCUR AT NIGHT AND LANES MUST BE REOPENED FOR THE NEXT DAY. SEE SPECIAL PROVISION 652.
2. CROSS CULVERT INSTALLATION WILL TAKE MORE THAN ONE NIGHT. DURING THE FIRST NIGHT THE CULVERT SHALL BE INSTALLED AND TRENCH BACKFILLED AND PAVED WITH 4" OF HMA AS SHOWN ON THE TYPICAL SECTIONS. FINAL PAVING SHALL BE COMPLETED WITHIN 14 DAYS OF COMPLETION OF CULVERT INSTALLATION.
3. FOR NIGHT LANE CLOSURES TEMPORARY STRIPING IS NOT REQUIRED.
4. CROSS CULVERT INSTALLATION WORK NEEDS TO BE COMPLETED PRIOR TO THE WIDENING PAVING WORK OF PHASE IA.
5. THE LENGTH OF PIPE INSTALLATION PER PHASE SHALL BE ENOUGH SO THAT THE SUBSEQUENT PHASE WILL NOT NEED TO DISRUPT THE ADJACENT TRAFFIC.
6. SHOULDER AND LANE WIDTHS INDICATED ON THIS SHEET ARE MINIMUM REQUIRED DIMENSIONS.
7. DURING PHASE 2 THE EXISTING MEDIAN GUARDRAIL WILL NEED TO BE REMOVED AND REINSTALLED PRIOR TO ADVANCING TO PHASE 3. SHOULD PHASE 2 TAKE MORE THAN ONE NIGHT. TEMPORARY BARRIER WILL NEED TO BE PLACED OR THE EXISTING GUARDRAIL REINSTALLED.

Date:3/6/2020

Filename: PAW1_DETAILS_MOT-08

Scale: NOT TO SCALE

No.	Revision	By	Date
1	UPDATED TMA LOCATIONS	PEK	03/20

Designed by: HNTB

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

	By	Date		By	Date
Designed	LAD	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
TEL (207) 774-5155
FAX (207) 228-0909

MAINE TURNPIKE

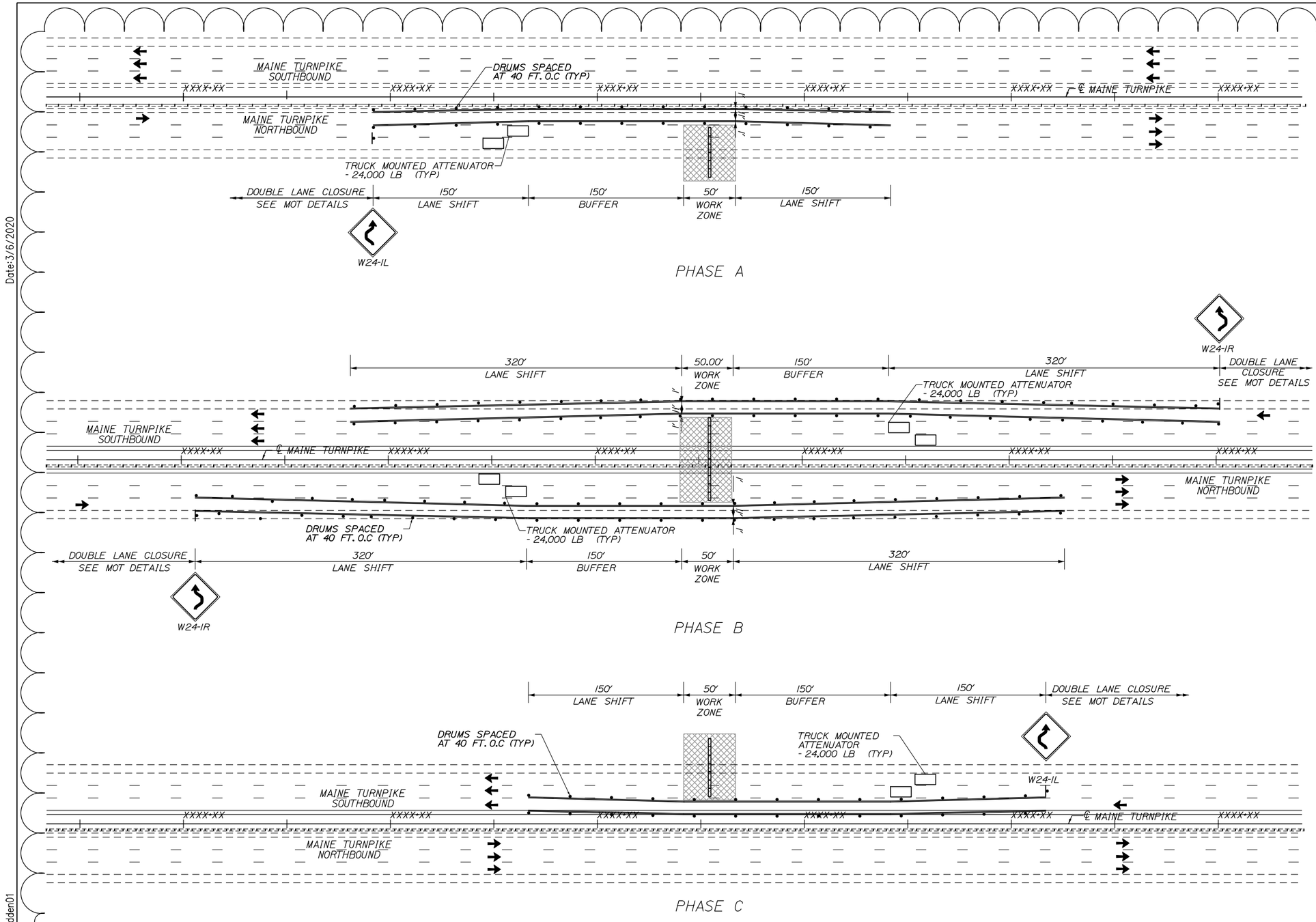
THE GOLD STAR MEMORIAL HIGHWAY

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

PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS
MM 43.0 TO MM 46.4
MAINTENANCE OF TRAFFIC
MAINLINE CROSS CULVERT

SHEET NUMBER: MOT-08

CONTRACT: 2020.03



NOTES:

1. LANE CLOSURES SHALL BE SIGNED FOR 45 MPH AND MAY ONLY OCCUR AT NIGHT AND LANES MUST BE REOPENED FOR THE NEXT DAY. SEE SPECIAL PROVISION 652.
2. CROSS CULVERT INSTALLATION WILL TAKE MORE THAN ONE NIGHT. DURING THE FIRST NIGHT THE CULVERT SHALL BE INSTALLED AND TRENCH BACKFILLED AND PAVED WITH 4" OF HMA AS SHOWN ON THE TYPICAL SECTIONS. FINAL PAVING SHALL BE COMPLETED WITHIN 14 DAYS OF COMPLETION OF CULVERT INSTALLATION.
3. FOR NIGHT LANE CLOSURES TEMPORARY STRIPING IS NOT REQUIRED.
4. CROSS CULVERT INSTALLATION WORK NEEDS TO BE COMPLETED PRIOR TO THE WIDENING PAVING WORK OF PHASE 1A.
5. THE LENGTH OF PIPE INSTALLATION PER PHASE SHALL BE ENOUGH SO THAT THE SUBSEQUENT PHASE WILL NOT NEED TO DISRUPT THE ADJACENT TRAFFIC.
6. SHOULDER AND LANE WIDTHS INDICATED ON THIS SHEET ARE MINIMUM REQUIRED DIMENSIONS.
7. DURING PHASE 2 THE EXISTING MEDIAN GUARDRAIL WILL NEED TO BE REMOVED AND REINSTALLED PRIOR TO ADVANCING TO PHASE 3. SHOULD PHASE 2 TAKE MORE THAN ONE NIGHT. TEMPORARY BARRIER WILL NEED TO BE PLACED OR THE EXISTING GUARDRAIL REINSTALLED.
8. MAINTAIN A MINIMUM OF 1 THROUGH LANE AT ALL TIMES.

Scale: NOT TO SCALE

Designed by: HNTB

No.	Revision	By	Date
1	NEW SHEET	PEK	03/20

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

	By	Date		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 C. Norwood, IV, P.E., P.T.O.E.

PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS MM 43.0 TO MM 46.4

MAINTENANCE OF TRAFFIC MAINLINE CROSS CULVERT

CONTRACT: 2020.03

SHEET NUMBER: MOT-08A

16A OF 310

Date:3/6/2020

Filename: PAWI_DETAILS_MOT-08a_Adden01

MAINE TURNPIKE AUTHORITY

Pre-Bid Conference

CONTRACT 2020.03

PORTLAND AREA WIDENING & SAFETY IMPROVEMENTS
MILE 43.0 TO MILE 46.4

MARCH 05, 2020 10:00 A.M.

1) Location:

The general limits of work are as shown on the Contract Plans from Mile 43.0 to Mile 46.4.

2) General Description:

The work consists of constructing a third travel lane northbound, a third lane southbound, and reconstructing the grassed median to a paved median on the Maine Turnpike in the Towns of Scarborough, South Portland, and Portland, Maine. Additional roadway work consists of improving the northbound off ramp at Exit 44 for which the plans are located in Appendix of the plan set.

3) Bid:

a) Opening: March 19, 2020 at 11:00 A.M. at MTA Headquarters 2360 Congress Street, Portland.

b) All bid and contractual questions shall be directed to Nate Carll. Phone No.: (207) 482-8115. E-Mail: ncarll@maineturnpike.com.

c) All questions on plans and specifications shall be in writing and shall be directed to Nate Carll, Purchasing Manager, of the Maine Turnpike Authority. Fax No. (207) 871-7739.Email ncarll@maineturnpike.com

4) Notification:

a) Contractor shall notify and obtain approval from the Authority prior to visiting the Project sites for field inspection. The contact person is Steve Tartre at startre@maineturnpike.com

5) Contract Specifications

a) The Specifications are divided into three parts: Part I, Supplemental Specifications, Part II, Special Provisions, and Part III Appendices.

b) The Maine Turnpike Supplemental Specifications are additions and alterations to the 2014 Maine Department of Transportation Standard Specifications and are available on MTA's website.

6) Maine Department of Labor – Fair Hourly Wages (Special Provision 104.3.8)

a) Contract includes "Highway & Earth" and "Heavy & Bridge" wage rates.

7) Utility Coordination (Special Provision 104.4.6)

a) Eight aerial utility facilities were identified within the project limits.

b) Nine utilities have been identified as having underground facilities within the project limits.

8) Cooperation With Other Contractors (Special Provision 104.4.7):

Adjacent contracts currently scheduled for the 2020 & 2021 construction season are listed in the contact book.

9) Permit Requirements (Special Provision 105.8.2)

a) The Project is being constructed under the Maine Department of Environmental Protection (DEP) Natural Resources Protection Act Permit and Water Quality Certification L-27726-TG-A-N.. A copy of the Permit is attached in **Appendix A**.

b) No tree cutting shall occur between June 1 and July 31.

c) All disturbed areas within 100 feet of a stream must be revegetated such that no exposed or unvegetated soil remains by October 1.

d) The Project is being permitted under Section 404 of the Clean Water Act, through the US Army Corps of Engineers Individual Permit NAE-2019-00701. The Project is subject to the General Conditions and Special Conditions contained in the Permit. A copy of the Permit is attached in **Appendix B**.

e) Maine Pollutant Discharge Elimination System (MPDES) General Permit for Stormwater Discharge from Construction Activity shall be followed.

f) The project is within an MS4 Area and the Contractor will be required to follow and sign the MS4 Awareness and adoption plans provided in Appendix A of the special provisions.

10) Construction Schedule/Substantial Completion:

a) March 26, 2020 – Scheduled Contract Award Date

b) June 26, 2020 – Exit 44 Northbound Off Ramp complete.

c) November 20, 2020 – Phase 1 widening, paving, striping, and MOT removal complete.

d) November 05, 2021 – All work shall be substantially complete.

e) November 12, 2021 – Contract Completion Date.

11) Prosecution of Work (107.4.6)

a) All mainline and ramp culverts and culvert extensions shall be complete prior to any of the Phase 1 paving above the culverts. Excavation of the proposed Phase 1 pavement is not allowed to install culverts.

b) The contractor shall plan their Phase 1 work to allow Unitil/Granite State Gas to construct a new directional drill/jack pipeline underneath the mainline including construction of lines parallel to the mainline, and cut-over connections; approximately station 2273+50 to station 2278+00. Contractor will be allowed to construct the widening embankment including up to and including the

19 inches of granular borrow for contractor access however gravels and above materials shall not be constructed until after the pipeline has been installed and put into operation. The contractor will be responsible for repair of and compaction of the widening embankment that may have been disturbed during Unitil/Granite State Gas pipeline construction. See Utility Special Provisions for their construction timeline.

c) All Contract work that requires in-water work in Red Brook shall be conducted between July1 and October 1 of 2020 or 2021. All Contract work that requires in-water work in Long Creek shall be completed between April 1 and November 1 of 2020 or April 1 and November 1 of 2021.

d) All disturbed riparian areas shall be revegetated such that no exposed or unvegetated soil remains by October 1 of that construction season. All areas newly disturbed after October 1 shall be treated with erosion and sediment control measures that include placement of 6-12 inches of erosion control mulch overlain with jute matting and pinned in place before freezing occurs. This material must be removed to allow the area to revegetate during the following growing season.

e) All Phase 1 widening construction between Sta 2201+00 and 2210+00 shall be coordinated with the MTA Contract 2018.19 – Cummings Road Contractor. Contract 2018.19 currently has a lane shift in place that precludes this contract from placing Phase 1 MOT devices (and therefore construction) in this area until approximately mid-July 2020.

f) If the contractor plans to perform any Phase 2 work in the winter, then the contractor shall have all Phase 2 Maintenance of Traffic devices in place, including temporary barrier and pavement markings, both northbound and southbound, by November 20, 2020. Temporary concrete barrier may not be placed on snow or ice.

g) The narrow shoulders and 11-foot southbound lanes shown in Phase 2 from Sta 2254+50 to 2266+00, including shifting tapers, may not be setup and put into operation until April 1, 2021. Full depth reconstruction of the southbound mainline in this area shall be completed with the typical Phase 2 lanes and shoulders put back in operation by June 30, 2021.

12) <u>Limits of Operations (Special Provision 107.4.7)</u>

a) Phase 1A work shall be complete through subbase course gravel compaction prior to transitioning into Phase 1B.

b) The duration of Phase 1B (narrower lanes and shoulders) shall be kept to an absolute minimum dictated by paving operations. Once the shift to Phase 1B has been setup, the contractor shall have the appropriate staff, equipment, and supplies to complete the paving without delay. Temporary concrete barrier shall be moved, at a minimum, back to Phase 1A to provide wider lanes and shoulders as soon as paving is complete but no later than two weeks after paving. The contractor shall submit a construction plan and MOT schedule for this work 30 days prior to the proposed start of Phase 1B for review and approval. Consideration will be given to completing this work in interchange to interchange segments versus the entire length.

c) Access to the MTA Crosby Maintenance Area entrance at Station 2268+00 shall be maintained at all times, including shoulders for proper deceleration into and acceleration out of the entrance. Reconstruction of the entrance shall between May 1, 2020 and September 18, 2020 and shall occur during the weekend, from 6:00 PM Thursday night to 5:00 AM Monday morning, in order to minimize disruption of MTA maintenance operations.

d) The contractor shall complete the entire scope of work associated with Phase 1 (widening and paving), in a travel direction, before transitioning maintenance of traffic control devices, pavement markings, etc. to the Phase 2 (median reconstruction) configuration as shown on the plans.

e) The contractor will be allowed only one temporary barrier shifting taper at a time, in one direction of travel, between the wider Phase 1A lanes and the narrower Phase 1B lanes. The intent is to avoid moving traffic from wider Phase 1A lanes to narrower Phase 1B lanes then back to wider Phase 1A lanes forcing traffic to negotiate multiple shifting tapers. If used, the shift should be located outside of an interchange ramp acceleration or deceleration lane.

f) The contractor shall be responsible for coordinating and scheduling work activities with adjacent contracts in overlapping work zones.

g) Access to both the easterly and westerly towers of the FAA Light Bridge at Station 2285+50 shall be maintained at all times.

h) Contractor shall review and comply with the Special Conditions contained in Aeronautical Study No. 2020-ANE-754-OE and Advisory Circular AC No. 70/7460-IL Change 2, Obstruction Marking and Lighting. These documents are contained in the Appendix. FAA has determined equipment that is 35 feet tall or less (above ground level) may be used on this project with special marking and/or lighting; see documents noted in this paragraph. Any equipment or part of equipment that exceeds 35 feet above ground level will require an additional application process, review and approval of the FAA before the equipment can be used.

i) Contractor shall contact the FAA (Portland International Jetport) at least 3 business days prior to use of construction equipment adjacent to the Jetport Light bridge and the Exit 46 ramps; contact information is in the Utility Special Provision, Sec 104.4.6.

j) Contractor must submit FAA Form 7460-2 Notice of Actual Construction or Alteration to the Resident within 3 days of when construction reaches its greatest height (see FAA Form 7460-2, Part 2). This applies to final pavement and roadway lighting on the ramps, as well as construction equipment removed from the site.

k) The contractor shall maintain normal downstream flow in Red Brook and Long Creek, and at all times and temporary construction impacts must remain within the areas shown on the permit plans unless approved by the MTA and permitting Agencies.

l) The Contractor shall complete the work as shown on the phasing and maintenance of traffic plans and in accordance with Section 652 of the Specifications. Modifications to the phasing or associated maintenance of traffic plans will not be permitted unless approved by the Resident.

m) There shall be no pile driving during non-daylight hours. Pile driving will not be allowed within 10 feet of traffic.

n) Existing signs noted to be removed and reset shall be maintained until the new location is ready for the reset. The contractor will be required to provide temporary signing for all signs that are not reset within the same day as removal. Similarly, all new signs that replace existing signs shall be set within the same day as the existing sign is removed or temporary signing shall be provided.

The contractor shall submit a plan for all temporary signing, including location and support, for MTA approval.

o) The length of temporary barrier installed during each Phase of work shall be limited to the Contractor's active work area, unless specifically required. The Contractor shall sequence the work within each Phase in a logical manner that minimizes the length of temporary barrier along one or both sides of the active mainline traffic including temporary alignments. When construction or operation in a work area are complete and new pavement matches the existing surface, the temporary barrier shall be removed or moved away from the active lane providing that a minimum 8-foot paved area can be used as an appropriate shoulder. If the temporary barrier is removed, appropriate traffic control devices shall be installed to delineate the mainline lane lines and edge of shoulder.

13) Specific Contract Items

a) Section 202 – Removing Pavement Surface

i) 500 CY of pavement grindings shall be delivered to Crosby Maintenance, Mile 45.8 SB.

b) Section 203 – Excavation and Embankment

i) Special Fill is required for construction of the Red Brook and Long Creek streambeds.

ii) Lightweight Fill is required for Red Brook embankment construction.

iii) Low Permeability Fill is required for underdrained soil filter construction.

c) Section 401 – Hot Mix Asphalt Pavements

i) An Asphalt Rich Base Mixture item in included in the Contract

d) Section 509 – Sliplining

i) This work shall consist of designing, furnishing, and inserting a liner pipe of polymer coated corrugated metal pipe into, or constructing an aluminum alloy tunnel liner plate inside of, an existing culvert; constructing seals at the ends of the existing culvert; filling the annular space between the new and existing pipe with grout; and constructing a headwall in accordance with the plans and specifications.

ii) The work also includes removing existing streambed materials, stockpiling for reuse, and placement of the same material in the newly sliplined pipe.

e) Section 526 – Temporary Concrete Barrier

i) The project requires a substantial amount of temporary concrete barrier, including 7,000 linear feet to be Supplied By Authority.

ii) All temporary traffic barrier and corresponding connections supplied by the Contractor shall meet Test Level 3 (TL-3) criteria as defined in NCHRP Report 350 or the AASHTO Manual for Assessing Safety Hardware (MASH) based on date of manufacture; all temporary concrete barrier manufactured after 12/31/19 shall meet MASH requirements.

f) Section 526 – Concrete Barrier

i) This work shall consist of field measurement and survey for working drawing preparation and barrier layout, furnishing, constructing, erecting, and setting permanent concrete barrier, barrier transitions, preformed joint filler, reflective delineators and associated elements, installing crushed stone between barriers at pier locations as shown on the plans, all in accordance with these Specifications and the lines and grades shown on the Plans or established by the Resident.

ii) The work shall also consist of collecting all necessary field data, including ground survey and field measurements, needed for the development of working drawings.

g) Section 603 – Pipe Culverts and Storm Drains

i) This contract includes the installation of culvert that cross beneath one or both barrels of the Turnpike mainline and will require open cut construction. Specific Maintenance of Traffic control details for this construction are included in the Plans.

ii) The cross culverts, in some cases, terminate in the median at a catch basin, some of which requiring phased construction. That is, culvert installation is in Phase 1 Widening, and culvert connection to catch basins in Phase 2 Median Construction. Existing drainage shall be maintained until final drainage is operational.

h) Section 650 – Variable Message Sign

i) This contract includes the installation of a Variable Message Sign, overhead sign structure, and foundation southbound near Holmes Road.

ii) This contract includes the installation of a Variable Message Sign, sign support structure, and foundation northbound near Crosby Maintenance.

i) Section 652 – Maintenance of Traffic

i) All maintenance of traffic control devices shall meet current MUTCD guidelines and NCHRP 350guidelines, and MASH guidelines if date of manufacture was after 2019.

ii) Where space is available pavement striping for all tapers shall create a minimum buffer of 250 feet to the point where the temporary concrete barrier taper ends and becomes parallel to the travelway. Temporary concrete barrier shall be tapered at a minimum 8:1 unless space is available and then it should be tapered at 15:1 or 100 feet whichever is longest.

iii) Access to, and egress from, the construction area shall be with the direction of travel without crossing traffic. Construction vehicles are prohibited from merging with mainline traffic between 6:00 a.m. and 10:00 a.m. and between 3:00 p.m. and 7:00 p.m unless approved in writing from the MTA. The contractor shall develop work zone access/egress with acceleration and deacceleration areas and should utilize interchange ramp areas whenever feasible

iv) At the completion of the contract and prior to opening the new third lane northbound, the Contractor shall set up all required traffic control devices and signage to advise Turnpike traffic that the third lane is an Exit Only lane ending at Exit 46 Northbound offramp and shall keep the third lane north of the Exit 46 northbound offramp barreled off (closed). Barrels and signage required shall be provided by the Contractor, in new unmarked condition, and shall

become the property of the MTA. The Contractor shall be responsible for Maintenance of these traffic control devices until Substantial Completion has been reached. Contractor shall provide 10-days notice to the Resident of their terminating Maintenance responsibility and that MTA will be responsible for all further maintenance

v) Blasting of Ledge Stoppages for blasting will be allowed Monday through Thursday before 6:30 AM and after 6:30 PM, and on Fridays before 6:30 AM; except during Holiday periods where Blasting will not be allowed. The maximum time for which traffic may be stopped at any single time shall be six (6) minutes.

j) Section 801 – Miscellaneous Incidentals

i) This work shall consist of excavating and back filling test holes to locate existing utilities at locations shown on the plans or as directed by the Resident.

14) Questions

Maine Turnpike Authority
Contract 2020.03
Portland Area Widening & Safety Improvements

HNTB

Addendum 1 Page 44

SIGN-IN SHEET
Please Print

PRE-BID MEETING

March 5, 2020

Name	Company and/or Address	Phone	E-Mail
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Larry Grondin	R.J. Grondin & Sons	854-1147	estimators@GrondinConstruction.com
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