

**PROJECT MANUAL
FOR
QUINEBAUG VALLEY RAIL TRAIL
SOUTHBRIDGE, MASSACHUSETTS**

DATE: MAY 2024



**TOWN OF SOUTHBRIDGE
41 ELM STREET
SOUTHBRIDGE, MA 01550**

Funding Sources:

EDA Award Number: 01-79-15218

Prepared by:

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TOWN OF SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL IMPROVEMENTS

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00100
INVITATION FOR BID

Town of Southbridge

Invitation to Bid

Quinebaug Valley Rail Trail Improvements

Sealed bids for Quinebaug Valley Rail Trail Improvements (QVRT) will be received by the Town Manager's Office, 41 Elm Street, Southbridge, MA 01550 until 9 AM EST on June 14, 2024, at which time the bids received will be publicly opened and read in the Town Council Chambers. The bid specifications can be found by going <https://www.ci.southbridge.ma.us/Bids.aspx>. Documents are only available electronically.

Quinebaug Valley Rail Trail Improvements will include construction of a new 5-mile segment of the QVRT multi-use trail including approximately 21,000 linear ft. along an abandoned rail line and approximately 5,250 LF on-road as a separated path with sections of "share the road" bicycle lane accommodations with associated improvements and site furnishings. A pre-bid meeting will be held on Wednesday, May 22 at 2:00 PM EST outside of the old train depot on Larochelle Way in downtown Southbridge. Any potential bidders interested in a pre-bid meeting are welcome to attend. MassDOT prequalification of contractors with the class of work as, Highway Construction, for the project with an estimated value of \$4,170,439.35 will be required.

This project is being funded using federal EDA grant funds, Project Number: 01-79-15218.

The Town reserves the right to reject any and all bids, to negotiate any and all contract terms with the successful proposer, or to cancel this proposal at any time if it is in the Town's best interest to do so. Any contract agreement must be approved by the Southbridge Town Council.

00200
INSTRUCTIONS TO BIDDERS

SECTION 00 200
INSTRUCTIONS TO BIDDERS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. General Instructions to Bidders.
- B. Federal Participation Disclosure – This project will be partially funded with Federal funds from the United States Department of Commerce, Economic Development Administration and therefore is subject to the Federal laws and regulations associated with that program.

1.2 DEFINED TERMS

- A. The Owner shall be TOWN OF SOUTHBRIDGE (hereinafter “The Owner”).
- B. The Engineer means the Owner acting through an authorized representative.
- C. The Site shall mean the location of the work contemplated under the contract, as defined by the limits of the work identified in the Bid Documents.

1.3 COPIES OF BIDDING DOCUMENTS

- A. One copy of the Bidding Documents will be provided to Bidders. Additional copies are the responsibility of Bidders.
- B. Complete sets of Bidding Documents shall be used in preparing Bids; The Owner and Engineer assume no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- C. The Owner and Engineer in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

1.4 QUALIFICATIONS OF BIDDERS

- A. Bidders shall have the necessary equipment and shall possess sufficient capital to properly execute the work within the time allowed. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of such Bidder fails to satisfy The Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

1.5 EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

- A. It is the responsibility of each Bidder before submitting a Bid to:
 - 1. Examine and carefully study the Bid Documents, including any Addenda and the other related data identified in the Bid Documents.

2. Visit the Site, become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 3. Become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, or performance of the Work.
 4. Carefully study all reports of surveys, explorations and tests of existing conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site.
 5. Obtain and carefully study (or assume responsibility for doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions at or contiguous to the Site which may affect cost, progress, or performance of the work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bid Documents, and safety precautions and programs incident thereto.
 6. Agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the work at the price bid and within the times and in accordance with the other terms and conditions of the Bid Documents.
 7. Correlate the information known to Bidder, information and observations obtained from visits to the site, reports and drawings identified in the Bid Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bid Documents.
 8. Promptly give The Owner written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bid Documents and confirm that the written resolution thereof by Contractor is acceptable to Bidder.
 9. Determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- B. As indicated in Article 5 herein, The Owner will provide Bidder access to the Site to conduct such visual examinations as Bidder deems necessary for submission of a Bid.
- C. Underground Facilities
1. Information and data shown or indicated in the Bid Documents with respect to existing underground facilities at or contiguous to the site is based upon information and data furnished to The Owner by others. The location of all Underground Facilities should be considered approximate. The Contractor, as part of his work, is solely responsible for the verification of the location and nature of all subsurface utilities at the project site which are to be terminated or otherwise affected by the work.
- D. The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the bid is premised upon performing and furnishing the work required by the Bidding Documents and

applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given The Owner written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by The Owner are acceptable to Bidder, and that the Bid Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and finishing the work.

1.6 PRE-BID CONFERENCE

- A. **A pre-bid conference will be held at 2:00 p.m. on May 22 outside of the old train depot located on Laroche Way, Southbridge, MA.** Bidders are invited to attend and participate in the conference. The Owner will transmit to all prospective Bidders Addenda as the Owner considers necessary in response to questions arising at the pre-bid conference. Oral statements may not be relied upon and will not be binding or legally effective.

1.7 SITE AND OTHER AREAS

- A. The Site is identified in the Bid Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the work are to be obtained and paid for by Contractor.

1.8 WAGE RATES

- A. Federal Labor Standards - Davis-Bacon and related Acts (as required by section 602 of PWEDA) apply to this project. See Appendix A.
- B. Massachusetts Prevailing Wage Rates as determined by the Commissioner of Department of Labor and Workforce Development under the provision of the Massachusetts General Laws, Chapter 149, Section 26 to 27G, as amended, apply to this project. It is the responsibility of the bidder, before bid opening, to request any additional information on Prevailing Wage Rates for those tradespeople who may be employed for the proposed work under this contract. See Appendix B.
- C. For job categories which appear in both the Federal Labor Standards, and the Massachusetts Prevailing Wage rates, the higher amount shall apply.

1.9 INTERPRETATIONS AND ADDENDA

- A. All questions about the meaning or intent of the Bid Documents shall be submitted via email to the Engineer in writing at the following address:

Jef Fasser
BSC Group
803 Summer Street
Boston, MA
Attention: Jef Fasser, Email: jfasser@bscgroup.com

- B. In order to receive consideration, questions must be received by The Owner at least three days prior to the date fixed for the opening of Bids. Interpretations or clarifications considered necessary by The Owner in response to such questions will be issued by Addenda faxed and mailed to all invited Bidders not later than two days prior to the date fixed for the opening of

Bids. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

- C. Addenda may be issued to clarify, correct or change the Bid Documents. Such Addenda, if any, will be issued in the manner and within the time period stated herein.
- D. The Bidder must acknowledge receipt of each Addendum, if any, in the space provided on the Bid Form.

1.10 BID BOND

- A. Bid Bond is required. Refer to Section 00 510

1.11 CONTRACT TIME

- A. All work shall be 100% Completed within 365 days of bid award.

1.12 LIQUIDATED DAMAGES

- A. Provisions for liquidated damages, if any, are set forth in the Agreement.

1.13 SUBSTITUTE AND "OR EQUAL" ITEMS

- A. The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bid Documents without consideration of possible substitute or "or equal" items. Whenever it is specified or described in the Bid Documents that a substitute or "or equal" item of material or equipment may be furnished or used by Contractor if acceptable to The Owner, application for such acceptance will not be considered by The Owner until after the effective date of the Agreement.

1.14 PREPARATION OF BID

- A. A Bid must be made on the Bid Form included with the Project Manual. The Bid Form shall not be altered in any way. The Bid Form includes a Base Bid, the three Bid Forms for three Deduct Alternates,
- B. Blank spaces in the Base Bid Form and each of the Deduct Alternate Bid Forms must be filled in correctly where indicated, and the Bidder must state, both in words and numerals, the prices for which he proposes to do each and every item of Work. Ditto marks shall not be used.
- C. A Bidder shall execute his Bid as stated below.
 - 1. A Bid by an individual shall show his name and official address.
 - 2. A Bid by a partnership must be executed in the partnership name and signed by a partner accompanied by evidence of authority to sign. His title must appear under this signature and the official address of the partnership shall be shown.
 - 3. A Bid by a corporation must be executed in the corporate name by an officer of the corporation and must be accompanied by a certified copy of a resolution of the board of directors authorizing the person signing the Bid to do so on behalf of the corporation. The corporate seal shall be affixed and attested by the secretary. The state of incorporation and the official corporate address shall be shown.

4. All names must be printed below the signature.
 5. The Bid shall contain an acknowledgment of the receipt of all Addenda in the space provided on the Bid Form.
 6. The address and telephone number to which communications regarding the Bid are to be directed shall be shown.
- D. In order to be considered for selection, the Bidder must submit a complete bid package in accordance with these Bid Documents. Partial Bids will not be accepted.
- E. Any deviations in completion of the Bid Form and accompanying documents from the instructions provided in this Article 12 may be cause for rejection of the Bid.

1.15 BASIS OF BID

- A. Unit Price
1. Bidders shall submit a Bid on a unit price basis for each item of unit price Work listed in the Bid Form.
 2. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
- B. The Total Proposed Contract Price will be a total of the Base Bid Unit Price Items, less and Deduct Alternates accepted by the Town, as indicated on the Bid Form.

1.16 SUBMITTAL OF BID

- A. A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the Invitation to Bid and shall be enclosed in a sealed envelope plainly marked with the Project title, the name and address of Bidder, and shall be accompanied by other required forms and/or documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED". A mailed Bid shall be addressed to:

**TOWN OF SOUTHBRIDGE
41 ELM STREET
SOUTHBRIDGE, MA 01550**

1.17 MODIFICATION OR WITHDRAWAL OF BID

- A. Withdrawal Prior to Bid Opening
1. A Bidder may withdraw his Bid before the time fixed for the opening of Bids by communicating his purpose in writing to The Owner. Upon receipt of such written notice, the unopened Bid will be returned to the Bidder.
- B. Modification Prior to Bid Opening

1. If a Bidder wishes to modify his Bid, he must withdraw his initial Bid in the manner specified in paragraph 15.1.A and submit a new Bid.

1.18 OPENING OF BIDS

- A. Bids will be opened as indicated in the Invitation to Bid by the Owner.
- B. In order to be considered for selection, Bids must arrive at the designated location on or before the date and time specified in the Invitation to Bid. Bidders mailing their Bids should allow for normal mail delivery time to ensure timely receipt of their Bid.

1.19 DISQUALIFICATION OF BIDDERS

- A. More than one Bid for the same work from an individual, or a firm, partnership, corporation or an association under the same or different names will not be considered. Reasonable grounds for believing that any Bidder is interested in more than one Bid for the work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder is interested.

1.20 BIDS TO REMAIN OPEN

- A. All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but The Owner may, in its sole discretion, release any Bid prior to the end of this period.

1.21 AWARD OF CONTRACT

- A. The Owner reserves the right to reject any and all Bids, to waive any and all informalities, and the right to disregard all nonconforming, nonresponsive or conditional Bids.
- B. The Owner reserves the right to reject any Bid not accompanied by specified documentation.
- C. The Owner reserves the right to reject any Bid if it shows any omissions, alterations of form, additions not called for, conditions or qualifications, or irregularities of any kind.
- D. The Owner reserves the right to reject any Bid that, in his sole discretion, is considered to be unbalanced or unreasonable as to the amount bid for any lump sum or unit price item.
- E. In evaluating Bids, discrepancies between words and figures will be resolved in favor of words. Discrepancies in the multiplication of units of work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.
- F. In evaluating Bids, the Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the notice of award.
 1. This Bid includes a Base Bid and three Deduct Alternates. The Town of Southbridge has a certain amount of funding for the construction of the Quinebaug Valley Rail Trail, (QVRT), and may need to accept Deduct Alternates if Base Bids exceed the amount of available funding.

2. The Base Bid includes all construction activities as represented in the Base Bid Unit Price form and as shown on the Plans.
 3. There are three Deduct Alternates. The Bid Form includes the construction items and quantities for Deduct Alternates 1, 2, and 3. The Construction Document Plans show the location of each Deduct Alternate.
 - a. Deduct Alternate 1 includes work associated with the construction of the proposed parking area off of Crane Street.
 - b. Deduct Alternate 2 includes work along the trail from approximately Station 871.00 – 873.50.
 - c. Deduct Alternate 3 includes work along the trail from approximately Station 873.50 to 876.90.
 4. In the event the lowest Base Bid exceeds the Town's available funding, the Town will then deduct the bid value of Deduct Alternate One (1) from each bidders Base Bid amount and then determine if the lowest bid amount (Base Bid minus Deduct Alternate 1) is within Town's available funding to allow award of the Contract to that low bidder.
 5. In the event the lowest Base Bid minus Deduct Alternate One (1) exceeds the Town's available funding, the Town will then deduct the bid value of Deduct Alternate One (1) and Two (2) from each bidders Base Bid amount and then determine if the lowest bid amount (Base Bid minus Deduct Alternate 1 & 2) is within Town's available funding to allow award of the Contract to that low bidder.
 6. In the event the lowest Base Bid minus Deduct Alternate One (1) and Two (2) exceeds the Town's available funding, the Town will then deduct the bid value of Deduct Alternate One (1) and Two (2) from each bidders Base Bid amount and then determine if the lowest bid amount (Base Bid minus Deduct Alternate 1, 2 & 3) is within Town's available funding to allow award of the Contract to that low bidder.
- G. In evaluating Bids, the Owner may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for the work.
- H. The Owner may conduct such investigations as it deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the work in accordance with the Contract Documents.
- I. The Owner reserves the right to award the Contract on the basis which it deems to be most favorable to itself, or to award no Contract.
- J. Contents of the Bid of the Successful Bidder will become part of any Contract awarded.
- 1.22 PERFORMANCE BOND AND PAYMENT BOND
- A. A Performance Bond and Payment Bond are required. Refer to Specification Section 00 610
- 1.23 CONTRACT INSURANCE

- A. The requirements for insurance to be provided by Contractor are indicated in the Bid Documents.

1.24 EXECUTION OF AGREEMENT

- A. When the Owner gives a notice of award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement with the other Contract Documents which are identified in the Agreement. Within ten (10) days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to The Owner. Within ten (10) days thereafter, The Owner will deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification along with a formal notice to proceed.

1.25 SALES TAXES

- A. All materials provided under this Contract are subject to the Sales and Use Taxes of the State of Massachusetts.

END OF SECTION

00300
FORM OF GENERAL BID

SECTION 00 300

BID FORM

PROJECT IDENTIFICATION:

Quinebaug Valley Rail Trail Improvements
Southbridge, MA
EDA Award Number: 01-79-15218

THIS BID IS SUBMITTED TO OWNER:

Town of Southbridge
41 Elm Street
Southbridge, MA 01550

THIS BID IS SUBMITTED BY:

(Company Name)

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner (draft contract provided in Project Manual) to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.
2. Bidder accepts all of the terms and conditions of the Invitation to Bid and Instructions to Bidders, including without limitation, those dealing with the disposition of Bid Security. The Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.
3. In submitting this Bid, Bidder represents that:
 - A. Bidder has examined and carefully studied the Bidding Documents entitled “**QUINEBAUG VALLEY RAIL TRAIL IMPROVEMENTS**” dated **May, 2024** the other related data identified in the Bidding Documents and the following Addenda, receipt of which is hereby acknowledged

(enter data as appropriate)

Addendum No.	Addendum Date
_____	_____
_____	_____
_____	_____
_____	_____

- B. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

- C. Bidder has examined copies of, and familiarized itself with, the nature and extent of the Contract Documents, Work, project site, locality, and all local conditions, laws and regulations, that in any manner may affect cost, progress, performance or furnishing of the Work.
 - D. Bidder is familiar with and is satisfied as to all Federal, State and local Laws and Regulations that may affect cost, progress and performance of the Work.
 - E. Bidder has obtained and carefully studied (or accepts the consequences for not doing so) all reports of explorations, tests, examinations, investigations, studies and data concerning physical conditions at the project site which may affect cost, progress, performance, or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto as Bidder considers necessary for performance of furnishing the Work at the contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents.
 - F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
 - G. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
 - H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- 4. Bidder agrees that the Work will be 100% completed and ready for final payment on or before the dates or within the number of calendar days indicated in the Agreement.
 - 5. Bidder proposes to furnish all labor and materials required for the project in accordance with the accompanying Bidding Documents for the Contract Prices specified below, subject to additions and deductions according to the terms of the Bidding Documents.
 - A. Bidder proposes the following: *All blank spaces must be filled in, in ink and in both words and figures where required. No changes shall be made in the wording or numbering. Written amounts shall govern where the amount stated in writing and the amount stated in figures does not agree.*
 - 6. This Bid includes a Base Bid and three Deduct Alternates. The Town of Southbridge has a certain amount of funding for the construction of the Quinebaug Valley Rail Trail, (QVRT), and may need to accept Deduct Alternates if Base Bids exceed the amount of available funding.
 - A. The Base Bid includes all construction activities as represented in the Base Bid Unit Price form and as shown on the Plans.
 - B. There are three Deduct Alternates. The Bid Form includes the construction items and quantities for Deduct Alternates 1, 2, and 3. The Construction Document Plans show the location of each Deduct Alternate.
 - (1) Deduct Alternate 1 includes work associated with the construction of the proposed parking area off of Crane Street.
 - (2) Deduct Alternate 2 includes work along the trail from approximately Station 871.00 to 873.50.
 - (3) Deduct Alternate 3 includes work along the trail from approximately Station 873.50 to 876.90.

- C. In the event the lowest Base Bid exceeds the Town's available funding, the Town will then deduct the bid value of Deduct Alternate One (1) from each bidders Base Bid amount and then determine if the lowest bid amount (Base Bid minus Deduct Alternate 1) is within Town's available funding to allow award of the Contract to that low bidder.
- D. In the event the lowest Base Bid minus Deduct Alternate One (1) exceeds the Town's available funding, the Town will then deduct the bid value of Deduct Alternate One (1) and Two (2) from each bidders Base Bid amount and then determine if the lowest bid amount (Base Bid minus Deduct Alternate 1 & 2) is within Town's available funding to allow award of the Contract to that low bidder.
- E. In the event the lowest Base Bid minus Deduct Alternate One (1) and Two (2) exceeds the Town's available funding, the Town will then deduct the bid value of Deduct Alternate One (1) and Two (2) from each bidders Base Bid amount and then determine if the lowest bid amount (Base Bid minus Deduct Alternate 1, 2 & 3) is within Town's available funding to allow award of the Contract to that low bidder.

BASE BID

Item No.	Estimated Quantity*	Brief description; Unit or lump sum price bid in both words and figures	Total Figure
102.	2.25 Acre	SELECTIVE CLEARING AND THINNING, per Acre _____dollars and _____cents (\$_____)	\$_____
102.511	20 Each	TREE PROTECTION – ARMORING & PRUNING, per Each _____dollars and _____cents (\$_____)	\$_____
102.521	500 Foot	TREE AND PLANT PROTECTION FENCE, per Foot _____dollars and _____cents (\$_____)	\$_____
120.1	3,478 Cubic Yard	UNCLASSIFIED EXCAVATION, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
129.5	7,000 Foot	TRACK EXCAVATION, per Foot _____dollars and _____cents (\$_____)	\$_____
142.	40 Cubic Yard	CLASS B TRENCH EXCAVATION, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
144.	5 Cubic Yard	CLASS B ROCK EXCAVATION, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____

151.	2,175 Cubic Yard	GRAVEL BORROW, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
151.2	35 Cubic Yard	GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
156.	275 Ton	CRUSHED STONE, per Ton _____dollars and _____cents (\$_____)	\$_____
170.	25,150 Square Yard	FINE GRADING AND COMPACTING - SUBGRADE AREA, per Square Yard _____dollars and _____cents (\$_____)	\$_____
181.11	60 Ton	DISPOSAL OF UNREGULATED SOIL, per Ton _____dollars and _____cents (\$_____)	\$_____
181.12	60 Ton	DISPOSAL OF REGULATED SOIL - IN- STATE FACILITY, per Ton _____dollars and _____cents (\$_____)	\$_____
181.13	60 Ton	DISPOSAL OF REGULATED SOIL - OUT-OF-STATE FACILITY, per Ton _____dollars and _____cents (\$_____)	\$_____

181.14	60 Ton	DISPOSAL OF HAZARDOUS WASTE, per Ton _____dollars and _____cents (\$_____)	\$_____
184.1	350 Ton	DISPOSAL OF TREATED WOOD PRODUCTS, per Ton _____dollars and _____cents (\$_____)	\$_____
204.9	3 Each	TRENCH DRAIN, per Each _____dollars and _____cents (\$_____)	\$_____
238.18	80 Foot	18 INCH DUCTILE IRON PIPE, per Foot _____dollars and _____cents (\$_____)	\$_____
242.18	4 Each	18 INCH REINFORCED CONCRETE PIPE FLARED END, per Each _____dollars and _____cents (\$_____)	\$_____
258.	15 Square Yard	STONE FOR PIPE ENDS, per Square Yard _____dollars and _____cents (\$_____)	\$_____
443.	45 1000 Gallons	WATER FOR ROADWAY DUST CONTROL, per 1000 Gallons _____dollars and _____cents (\$_____)	\$_____

450.23	300 Ton	SUPERPAVE SURFACE COURSE - 12.5 (SSC - 12.5), per Ton _____dollars and _____cents (\$_____)	\$ _____
450.31	300 Ton	SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC -12.5), per Ton _____dollars and _____cents (\$_____)	\$ _____
504.	1,930 Foot	GRANITE CURB TYPE VA4 - STRAIGHT, per Foot _____dollars and _____cents (\$_____)	\$ _____
509.	75 Foot	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - STRAIGHT, per Foot _____dollars and _____cents (\$_____)	\$ _____
655.48	5,290 Foot	48 INCH SAFETY RAIL - WOOD, per Foot _____dollars and _____cents (\$_____)	\$ _____
665.	200 Foot	CHAIN LINK FENCE REMOVED AND STACKED, per Foot _____dollars and _____cents (\$_____)	\$ _____
666.	675 Foot	CHAIN LINK FENCE REMOVED AND RESET, per Foot _____dollars and _____cents (\$_____)	\$ _____

685.	2 Cubic Yard	STONE MASONRY WALL IN CEMENT MORTAR, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
697.1	5 Each	SILT SACK, per Each _____dollars and _____cents (\$_____)	\$_____
698.3	21,000 Square Yard	GEOTEXTILE FABRIC FOR SEPARATION, per Square Yard _____dollars and _____cents (\$_____)	\$_____
701.2	70 Square Yard	CEMENT CONCRETE PEDESTRIAN CURB RAMP, per Square Yard _____dollars and _____cents (\$_____)	\$_____
701.3	140 Square Yard	STAMPED CEMENT CONCRETE SIDEWALK, per Square Yard _____dollars and _____cents (\$_____)	\$_____
702.	25 Ton	HOT MIX ASPHALT SIDEWALK OR DRIVEWAY, per Ton _____dollars and _____cents (\$_____)	\$_____
704.01	20,680 Square Yard	GRANULAR STABILIZED PAVEMENT, per Square Yard _____dollars and _____cents (\$_____)	\$_____

707.1	8 Each	PARK BENCH, per Each _____dollars and _____cents (\$_____)	\$_____
707.12	18 Each	GRANITE SEATING BLOCK, per Each _____dollars and _____cents (\$_____)	\$_____
707.8	3 Each	STEEL BOLLARD, per Each _____dollars and _____cents (\$_____)	\$_____
748.	1 Lump Sum	MOBILIZATION, per Lump Sum _____dollars and _____cents (\$_____)	\$_____
751.	1,465 Cubic Yard	LOAM FOR ROADSIDES, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
751.7	7 Cubic Yard	COMPOST BLANKET, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
765.	12,680 Square Yard	SEEDING, per Square Yard _____dollars and _____cents (\$_____)	\$_____
767.121	12,000 Foot	SEDIMENT CONTROL BARRIER, per Foot _____dollars and _____cents (\$_____)	\$_____

767.6	150 Cubic Yard	AGED PINE BARK MULCH, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
796.3	100 Each	FLAME GRASS - 3-4 FEET, per Each _____dollars and _____cents (\$_____)	\$_____
796.4	100 Each	BURGUNDY BUNNY FOUNTAIN GRASS - 24 INCH, per Each _____dollars and _____cents (\$_____)	\$_____
796.5	100 Each	SAPPHIRE MOUNTAIN BLUE OAT GRASS - 24-30 INCHES, per Each _____dollars and _____cents (\$_____)	\$_____
824.211	1 Lump Sum	RECTANGULAR RAPID-FLASH BEACON (SOLAR POWER), per Lump Sum _____dollars and _____cents (\$_____)	\$_____
832.	215 Square Foot	WARNING-REGULATORY AND ROUTE MARKER - ALUMINUM PANEL (TYPE A), per Square Foot _____dollars and _____cents (\$_____)	\$_____
847.1	32 Each	SIGN SUP (N/GUIDE)+RTE MKR W/1 BRKWAY POST ASSEMBLY - STEEL, per Each _____dollars and _____cents (\$_____)	\$_____
852.	150 Square Foot	SAFETY SIGNING FOR TRAFFIC MANAGEMENT, per Square Foot _____dollars and _____cents (\$_____)	\$_____

Quinebaug Valley Rail Trail Improvements
Southbridge, MA

864.04	2,200 Square Foot	PAVEMENT ARROWS AND LEGENDS REFLECTORIZED WHITE (THERMOPLASTIC), per Square Foot _____dollars and _____cents (\$_____)	\$_____
986.2	45 Cubic Yard	MODIFIED ROCKFILL, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
991.1	1 Lump Sum	CONTROL OF WATER - STRUCTURE NO. 1, per Lump Sum _____dollars and _____cents (\$_____)	\$_____
995.05	1 Lump Sum	STEEL PEDESTRIAN PREFABRICATED BRIDGE, per Lump Sum _____dollars and _____cents (\$_____)	\$_____

*Quantities are approximate

TOTAL BASE BID: \$_____

(Written in Words):

DEDUCT 1 – PARKING AREA ON CRANE STREET

Item No.	Estimated Quantity*	Brief description; Unit or lump sum price bid in both words and figures	Total Figure
120.1	803 Cubic Yard	UNCLASSIFIED EXCAVATION, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
151.	1,400 Cubic Yard	GRAVEL BORROW, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
170.	2,470 Square Yard	FINE GRADING AND COMPACTING - SUBGRADE AREA, per Square Yard _____dollars and _____cents (\$_____)	\$_____
504.	980 Foot	GRANITE CURB TYPE VA4 - STRAIGHT, per Foot _____dollars and _____cents (\$_____)	\$_____
701.3	70 Square Yard	STAMPED CEMENT CONCRETE SIDEWALK, per Square Yard _____dollars and _____cents (\$_____)	\$_____
751.	85 Cubic Yard	LOAM FOR ROADSIDES, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____

767.6	90 Cubic Yard	AGED PINE BARK MULCH, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
796.3	100 Each	FLAME GRASS - 3-4 FEET, per Each _____dollars and _____cents (\$_____)	\$_____
796.4	100 Each	BURGUNDY BUNNY FOUNTAIN GRASS - 24 INCH, per Each _____dollars and _____cents (\$_____)	\$_____
796.5	100 Each	SAPPHIRE MOUNTAIN BLUE OAT GRASS - 24-30 INCHES, per Each _____dollars and _____cents (\$_____)	\$_____

*Quantities are approximate

TOTAL DEDUCT 1 BID: \$_____

(Written in Words):

DEDUCT 2 – STATION 871.00 TO 873.50 (approximately)

Item No.	Estimated Quantity*	Brief description; Unit or lump sum price bid in both words and figures	Total Figure
120.1	32 Cubic Yard	UNCLASSIFIED EXCAVATION, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
170.	300 Square Yard	FINE GRADING AND COMPACTING - SUBGRADE AREA, per Square Yard _____dollars and _____cents (\$_____)	\$_____
655.48	350 Foot	48 INCH SAFETY RAIL - WOOD, per Foot _____dollars and _____cents (\$_____)	\$_____
704.01	300 Square Yard	GRANULAR STABILIZED PAVEMENT, per Square Yard _____dollars and _____cents (\$_____)	\$_____
707.12	3 Each	GRANITE SEATING BLOCK, per Each _____dollars and _____cents (\$_____)	\$_____
751.	35 Cubic Yard	LOAM FOR ROADSIDES, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
765.	300 Square Yard	SEEDING, per Square Yard _____dollars and _____cents (\$_____)	\$_____

*Quantities are approximate

TOTAL DEDUCT 2 BID: \$ _____

(Written in Words):

DEDUCT 3 – STATION 873.50 TO 876.90 (approximately)

Item No.	Estimated Quantity*	Brief description; Unit or lump sum price bid in both words and figures	Total Figure
120.1	42 Cubic Yard	UNCLASSIFIED EXCAVATION, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
170.	380 Square Yard	FINE GRADING AND COMPACTING - SUBGRADE AREA, per Square Yard _____dollars and _____cents (\$_____)	\$_____
655.48	340 Foot	48 INCH SAFETY RAIL - WOOD, per Foot _____dollars and _____cents (\$_____)	\$_____
704.01	380 Square Yard	GRANULAR STABILIZED PAVEMENT, per Square Yard _____dollars and _____cents (\$_____)	\$_____
751.	45 Cubic Yard	LOAM FOR ROADSIDES, per Cubic Yard _____dollars and _____cents (\$_____)	\$_____
765.	380 Square Yard	SEEDING, per Square Yard _____dollars and _____cents (\$_____)	\$_____

*Quantities are approximate

TOTAL DEDUCT 3 BID: \$_____

(Written in Words):

7. In submitting this proposal, Bidder agrees to the following:
 - A. This bid will remain subject to acceptance for **sixty (60) days** after the Bid due date. Bidder will sign and submit the agreement with the Bonds, Insurance Certificate, and other documents required within ten (10) days after the date of Owner's Notice of Award.
 - B. To enter into an Agreement with the Owner which shall constitute a valid and binding Contract, in the form included in the Project Manual, to perform and furnish all work as specified or indicated in the Contract Documents for the Contract Price and within the Contract time indicated in this bid and in accordance with the other terms and conditions of the Contract Documents.
 - C. To accomplish the work in accordance with the Contract Documents.
 - D. To begin and complete the Work in accordance with the dates and/or contract times indicated in the Bidding Document.
8. Bidder hereby certifies that:
 - A. That this Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
 - B. Bidder has not induced or solicited any person, firm or corporation to refrain from bidding. Bidder has not sought by collusion to obtain for itself any advantages over any other Bidder or over Owner.
 - C. Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that Bidder will comply fully with all applicable laws and regulations.
 - D. Bidder is not presently debarred from doing public construction work in the State of Massachusetts under the provisions of or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.
 - E. That Bidder has filed all State tax returns and paid all State taxes required by law.
 - F. That this bid is in all respects bona fide, fair, and made without collusion or fraud with any other person. as used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.
 - G. Bidder will submit written evidence of its authority to do business in the State where the Project is located not later than the date of its execution of the Agreement.
9. Bidder further represents that:
 - A. This bid is genuine and not made in the interest of or on the behalf of any undisclosed individual or entity;
 - B. Bidder has not directly or indirectly induced or solicited any other bidder to submit a false or sham bid;
 - C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
 - D. Bidder has not sought by collusion to obtain for itself any advantage over any other bidder or over owner.
10. Owner reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the Work and to negotiate contract terms with the Successful Bidder, and the right to disregard all non-conforming, non-responsive, unbalanced or conditional Bids. Also, Owner reserves the right to reject the Bid of any Bidder if Owner believes that it would not be in the best

interest of the Project to make and award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner.

This Bid Hereby Submitted:

Date: _____

(Print Name of Firm Submitting Bid)

(Signature of Authorized Representative)

(Print Name and Title of Authorized Representative)

Federal Identification Number:

(Business Address)

(City, State and Zip Code)

Phone No.:

E-mail:

Attachments included with this Bid Form:

- Non-Collusive Affidavit
- W-9 Form
- Bid Bond
- Bidder's Statement of Qualifications

00450
BIDDERS' STATEMENT OF QUALIFICATIONS

SECTION 00 450

BIDDERS' STATEMENT OF QUALIFICATIONS

All questions must be answered, and the data given must be clear and comprehensive. The signature sheet must be notarized. If necessary, questions may be answered on separate sheets. Contractor may submit any additional information he desires.

Attachments:

1. Complete the attached References Form 00 455.

Information Required (type or print clearly in blue or black ink)

1. Name of Contractor.

2. Permanent main office address.

3. When were you organized (month/year): _____

4. How many years have you been engaged in the contracting business under your present firm or trade name?

_____ years

5. If a corporation, indicate the following:

Date of Incorporation: _____ State or Incorporation: _____

President (or other chief executive as applicable): _____

6. If a Partnership, indicate the following:

Date of Organization: _____

Type of Partnership: _____

Names and Addresses of Partners/Officers:

1. _____	2. _____
_____	_____
_____	_____
3. _____	4. _____
_____	_____
_____	_____
5. _____	6. _____
_____	_____
_____	_____

6. General character of work performed by your company.

7. Have you ever failed to complete a project? If yes, identify the project(s) and provide an explanation.

8. Have you ever defaulted on a contract? If yes, identify the project(s) and provide an explanation.

9. Contracts on hand: (Show the contract amount of each contract and the anticipated date of completion; attach additional sheets if necessary.)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

10. List your major equipment available for this Contract.

11. List the work to be performed by subcontractors and summarize the dollar value of each subcontract.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

12. Do you have adequate resources to complete the project within the required schedule and/or by the required completion date? Yes No

13. Complete the attached **References Form 00 455** to list a minimum of five references for projects completed, surety company reference, and bank reference.

14. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the Town? Yes No

The undersigned hereby authorizes and requests any persons, firm, or corporation to furnish any information requested by the Owner in verification of the recitals comprising this Statement of Bidder's Qualifications.

Dated at _____ this _____ day of _____, 20____,

(Name of Bidder)

By: _____

Title: _____

State of _____)

SS:

County of _____)

_____ being duly sworn, deposes and
says that he is _____ of

and that the answers to the foregoing questions and all statements therein are true and correct
and sworn under penalties of perjury.

Subscribed and sworn to before me this _____ day of _____ 20____.

(Notary Seal)

(Notary Signature)

My Commission Expires: _____

00455
REFERENCE FORM

00455

REFERENCE FORM

The Bidder is required to fill out the following form, or supply a document with all required information, to enable the Town to make inquiries and judge as to the Bidder's experience, skill, available financial resources, credit, and business standing.

ITEM 1

List five (5) projects (minimum) of similar nature to the project described herein that the Bidder has completed, with name, address, and telephone number of a reference for each project. Include approximate construction cost:

Project 1: _____

Brief Description: _____

Contract Value: _____ Date Completed: _____

Reference:

Name: _____ Phone No. _____

Address: _____

Project 2: _____

Brief Description: _____

Contract Value: _____ Date Completed: _____

Reference:

Name: _____ Phone No. _____

Address: _____

Project 3: _____

Brief Description: _____

Contract Value: _____ Date Completed: _____

Reference:

Name: _____ Phone No. _____

Address: _____

Project 4: _____

Brief Description: _____

Contract Value: _____ Date Completed: _____

Reference:

Name: _____ Phone No. _____

Address: _____

Project 5: _____

Brief Description: _____

Contract Value: _____ Date Completed: _____

Reference:

Name: _____ Phone No. _____

Address: _____

ITEM 2

List name, address, and telephone number for the following:

Surety 1: _____

Address: _____

Contact Name: _____ Phone No. _____

Surety 2: _____

Address: _____

Contact Name: _____ Phone No. _____

Bank: _____

Address: _____

Contact Name: _____ Phone No. _____

00460
NON-COLLUSION

SECTION 00 460

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____

County of _____

_____, being first duly sworn, deposes and says that:

1. He is _____ of _____, the Bidder who has submitted the attached Bid;
2. He is fully informed respecting the preparation and contents of the attached bid and of all pertinent circumstances respecting such Bid;
3. Such Bid is genuine and is not a collusive or sham Bid;
4. Neither the said Bidder, nor any of its officers, partners, owners, representatives, employees, or parties in interest, including this affiant has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder, firm or person to submit a collusive or sham bid in connection with the contract for which the attached bid has been submitted or refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought agreement or collusion or communication or conference with any other bidder, firm or person to fix the price or prices in the attached bid or of any other bidder, or to fix any overhead, profit, or cost element of the bid price or the bid price of any bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the _____ (Owner), or any other person interested in the contract; and
5. The price or prices quoted in the attached bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Signature

Printed Name

Title

Sworn and subscribed before me on this

_____ day of _____, 20 _____.

**Commissioner of the Superior Court or
Notary Public**

(Notary Seal)

My Commission Expires

EDA 001
REQUIREMENTS FOR AFFIRMATIVE ACTION

**NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246 AND 41 CFR PART 60-4)**

The following Notice shall be included in, and shall be a part of all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of \$10,000.

The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for minority participation for each trade	Goals for female participation for each trade
	%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is:

State of _____

County of _____

City of _____

EDA 002
LOBBYING RESTRICTION FORM

CERTIFICATION REGARDING LOBBYING LOWER TIER COVERED TRANSACTIONS

Applicants should review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, "New Restrictions on Lobbying."

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

NAME OF APPLICANT

AWARD NUMBER AND/OR PROJECT NAME

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

SIGNATURE

DATE

00510
BID BOND

SECTION 00 4313

BID BOND

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Requirements for a Bid Bond that provides security to Owner associated with award of the project and subsequent execution of a Construction Contract.
2. See attached Bid Bond.

1.2 DEFINITIONS

- A. Owner: Town of Southbridge, 41 Elm St., Southbridge, MA 01550.
- B. Principal: The entity submitting the Bid to perform the work of the project.
- C. Project: Quinebaug Valley Rail Trail Improvements, as described in bid documents dated February 2024 and any amendments or supplements thereto.
- D. Surety: The Surety shall mean the party who guarantees the performance of the Principal. Surety shall have the same meaning as “Bonding Company”.

1.3 BOND REQUIREMENTS

- A. Bidder shall submit with their Bid to Owner, a surety company Bond for the Penal Amount as defined herein. The form of the Bond shall be as attached, or as otherwise mutually agreed-to by Owner and Principal.
- B. The Bond shall provide for the Surety to complete the Work of the Contract in accordance with its Terms, or provide sufficient funds up to the penal amount for such completion.

1.4 BOND AMOUNT

- A. Penal Amount: The Penal Amount shall be defined as five percent (5%) of the Contract Sum as dictated by the Principal’s Bid submission.

1.5 SURETY REQUIREMENTS

- A. The surety must be a corporate surety licensed to sign surety bonds in the State of Massachusetts. Rating of the surety shall be at least an “A” as defined by the A.M. Best Company’s “Best’s Key Rating Guide” and shall meet the approval of the Owner.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

00 610
PERFORMANCE BOND

SECTION 00610

100% PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: That we _____
(Name of Contractor)

a _____ hereinafter called "Principal" and
(Corporation, Partnership, Joint Venture or Individual)

_____ of _____, State of _____
(Surety) (City & State)

_____ hereinafter called the "Surety" and licensed by the State
Division of Insurance to do business under the laws of the Commonwealth of Massachusetts, are
held and firmly bound to the City/Town of _____, Massachusetts, hereinafter called
"Owner", in the penal sum of _____ Dollars

(\$ _____) in lawful money of the United States, for the payment of which
sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and
successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered
into a certain contract with the Owner, dated the _____ day of
_____, 2024 (the "Construction Contract"), for the construction described as
follows:

Quinebaug Valley Rail Trail

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all
the undertakings, covenants, terms, conditions, and agreements of the Construction Contract
during the original term thereof, and any extensions thereof which may be granted by the Owner,
with or without notice to the Surety, and if he shall satisfy all claims and demands incurred under
the Construction Contract, and shall fully indemnify and save harmless the Owner from all costs
and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the
Owner all outlay and expense which the Owner may incur in making good any default, then this
obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the Surety's obligation under this Bond shall arise after (1)
the Owner has declared the Principal in default of the Construction Contract or any provision
thereof or (2) has declared that the Principal has failed, or is otherwise unable or unwilling, to
execute the work consistent with, and in conformance to, the Construction Contract (collectively
referred to as a "Contractor Default"). The determination of a Contractor Default shall be made
solely by the Owner. The Owner need not terminate the Construction Contract to declare a
Contractor Default or to invoke its rights under this Bond.

When the Surety's obligation under this Bond arises, the Surety, at its sole expense and at the consent and election of the Owner, shall promptly take one of the following steps: (1) arrange for the Principal to perform and complete the work of the Construction Contract; (2) arrange for a contractor other than the Principal to perform and complete the work of the Construction Contract; (3) reimburse the Owner, in a manner and at such time as the Owner shall decide, for all costs and expenses incurred by the Owner in performing and completing the work of the Construction Contract. Surety will keep Owner reasonably informed of the progress, status and results of any investigation of any claim of the Owner.

If the Surety does not proceed as provided in this Bond with due diligence and all deliberate speed, the Surety shall be deemed to be in default of this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner.

After the Surety's obligation under this Bond arises, the Surety is obligated, to the limit of the amounts of this Bond, for (1) the correction of defective work and completion of the Construction Contract; (2) additional design, professional services, and legal costs, including attorneys' fees, resulting from the Contractor Default or from the default of the Surety under this Bond; (3) any additional work beyond the Construction Contract made necessary by the Contractor Default or default of the Surety under this Bond; (4) indemnification obligation of the Principal, if any, as provided in the Construction Contract; and (5) liquidated damages as provided in the Construction Contract, or if none are so specified, actual and foreseeable consequential damages resulting from the Contractor Default or default of the Surety under this Bond.

Any proceeding, legal or equitable, under this Bond shall be instituted in any court of competent jurisdiction in the Commonwealth of Massachusetts.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Construction Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Construction Contract or to the work or to the specifications.

00811
LIQUID ASPHALT PRICE ADJUSTMENT

DOCUMENT 00811
SPECIAL PROVISIONS
MONTHLY PRICE ADJUSTMENT FOR HOT MIX ASPHALT (HMA) MIXTURES
ENGLISH AND METRIC UNITS
Revised: 07/08/2016

This provision applies to all projects using greater than 100 tons (91 megagrams) of hot mix asphalt (HMA) mixtures containing liquid asphalt cement as stipulated in the Notice to Contractors section of the bid documents.

Price Adjustments will be based on the variance in price, for the liquid asphalt component only, between the Base Price and the Period Price. They shall not include transportation or other charges. Price Adjustments will occur on a monthly basis.

Base Price

The Base Price of liquid asphalt on a project as listed in the Notice to Contractors section of the bid documents is a fixed price determined by the Department at the time of the bid using the same method as the determination of the Period Price detailed below. The Base Price shall be used in all bids.

Period Price

The Period Price is the price of liquid asphalt for each monthly period as determined by the Department using the average selling price per standard ton of PG64-28 paving grade (primary binder classification) asphalt, FOB manufacturer's terminal, as listed under the "East Coast Market - New England, Boston, Massachusetts area" section of the Poten & Partners, Inc. "Asphalt Weekly Monitor". This average selling price is listed in the issue having a publication date of the second Friday of the month and will be posted as the Period Price for that month. The Department will post this Period Price on its website at <http://www.mhd.state.ma.us/> within two (2) business days following its receipt of the relevant issue of the "Asphalt Weekly Monitor". Poten and Partners has granted the Department the right to publish this specific asphalt price information sourced from the Asphalt Weekly Monitor. This method of period price determination was formerly called the New Asphalt Period Price Method. Separate website postings using both the New Asphalt Period Price Method and the Old Asphalt Period Price Method were discontinued after June 2013.

Price Adjustment Determination, Calculation and Payment

The Contract Price of the HMA mixture will be paid under the respective item in the Contract. Price Adjustments, as herein provided, either upwards or downwards, will be made after the work has been performed using the monthly period price for the month during which the work was performed.

Price Adjustments will be paid only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

The Price Adjustment applies only to the actual virgin liquid asphalt content in the mixture placed on the job in accordance with the Standard Specifications for Highways and Bridges, Division III, Section M3.11.03.

Price Adjustments will be separate payment items. The pay item numbers are 999.401 for a positive price adjustment (a payment) and 999.402 for a negative price adjustment (a deduction). Price Adjustments will be calculated using the following equation:

Price Adjustment = Tons of HMA Placed X Liquid Asphalt Content % X RAP Factor X (Period Price - Base Price)

No Price Adjustment will be allowed beyond the Completion Date of this Contract, unless there is a Department-approved extension of time.

***** END OF DOCUMENT *****

00812
DIESEL FUEL & GASOLINE PRICE ADJUSTMENT

DOCUMENT 00812

SPECIAL PROVISIONS
MONTHLY PRICE ADJUSTMENT FOR DIESEL FUEL AND GASOLINE –
ENGLISH UNITS

Revised: 01/26/2009

This monthly fuel price adjustment is inserted in this contract because the national and worldwide energy situation has made the future cost of fuel unpredictable. This adjustment will provide for either additional compensation to the Contractor or repayment to the Commonwealth, depending on an increase or decrease in the average price of diesel fuel or gasoline.

This adjustment will be based on fuel usage factors for various items of work developed by the Highway Research Board in Circular 158, dated July 1974. These factors will be multiplied by the quantities of work done in each item during each monthly period and further multiplied by the variance in price from the Base Price to the Period Price.

The Base Price of Diesel Fuel and Gasoline will be the price as indicated in the Department's web site (www.mhd.state.ma.us) for the month in which the contract was bid, which includes State Tax.

The Period Price will be the average of prices charged to the State, including State Tax for the bulk purchases made during each month.

This adjustment will be effected only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

No adjustment will be paid for work done beyond the extended completion date of any contract.

Any adjustment (increase or decrease) to estimated quantities made to each item at the time of final payment will have the fuel price adjustment figured at the average period price for the entire term of the project for the difference of quantity.

The fuel price adjustment will apply only to the following items of work at the fuel factors shown:

ITEMS COVERED	FUEL FACTORS	
	Diesel	Gasoline
Excavation: and Borrow Work: Items 120, 120.1, 121, 123, 124, 125, 127, 129.3, 140, 140.1, 141, 142, 143, 144., 150, 150.1, 151 and 151.1 (Both Factors used)	0.29 Gallons / CY.	0.15 Gallons / CY
Surfacing Work: All Items containing Hot Mix Asphalt	2.90 Gallons / Ton	Does Not Apply

***** END OF DOCUMENT *****

00814
PORTLAND CEMENT PRICE ADJUSTMENT

DOCUMENT 00814

SPECIAL PROVISIONS
PRICE ADJUSTMENT FOR PORTLAND CEMENT CONCRETE MIXES

January 12, 2009

This provision applies to all projects using greater than 100 Cubic Yards (76 Cubic Meters) of Portland cement concrete containing Portland cement as stipulated in the Notice to Contractors section of the Bid Documents. This Price Adjustment will occur on a monthly basis.

The Price Adjustment will be based on the variance in price for the Portland cement component only from the Base Price to the Period Price. It shall not include transportation or other charges.

The Base Price of Portland cement on a project is a fixed price determined at the time of bid by the Department by using the same method as for the determination of the Period Price (see below) and found in the Notice to Contractors.

The Period Price of Portland cement will be determined by using the latest published price, in dollars per ton (U.S.), for Portland cement (Type I) quoted for Boston, U.S.A. in the **Construction Economics** section of *ENR Engineering News-Record* magazine or at the ENR website <http://www.enr.com> under **Construction Economics**. The Period Price will be posted on the MassHighway website the Wednesday immediately following the publishing of the monthly price in ENR, which is normally the first week of the month.

The Contract Price of the Portland cement concrete mix will be paid under the respective item in the Contract. The price adjustment, as herein provided, upwards or downwards, will be made after the work has been performed, using the monthly period price for the month during which the work was performed.

The price adjustment applies only to the actual Portland cement content in the mix placed on the job in accordance with the Standard Specifications for Highways and Bridges, Division III, Section M4.02.01. No adjustments will be made for any cement replacement materials such as fly ash or ground granulated blast furnace slag.

The Price Adjustment will be a separate payment item. It will be determined by multiplying the number of cubic yards of Portland cement concrete placed during each monthly period times the Portland cement content percentage times the variance in price between the Base Price and Period Price of Portland cement.

This Price Adjustment will be paid only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

No Price Adjustment will be allowed beyond the Completion Date of this Contract, unless there is a Department-approved extension of time.

*

END OF DOCUMENT

00830-A
APPENDIX A: FEDERAL DAVIS BACON WAGE RATES

"General Decision Number: MA20240002 03/22/2024

Superseded General Decision Number: MA20230002

State: Massachusetts

Construction Type: Heavy
HEAVY CONSTRUCTION PROJECTS; AND
MARINE CONSTRUCTION PROJECTS

County: Worcester County in Massachusetts.

HEAVY CONSTRUCTION PROJECTS; AND MARINE CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

<p>If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:</p>	<ul style="list-style-type: none"> . Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
<p>If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:</p>	<ul style="list-style-type: none"> . Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number Publication Date
0 01/05/2024

- 1 01/19/2024
- 2 02/09/2024
- 3 03/01/2024
- 4 03/22/2024

ASBE0006-005 09/01/2023

	Rates	Fringes
Insulator/asbestos worker Includes the application of all insulating materials, protective coverings, coating, and finishes all types of mechanical systems.....	\$ 48.15	35.16
Includes the application of all insulating materials, protective coverings, coating, and finishes to all types of mechanical systems.....	\$ 37.50	24.35

BOIL0029-001 01/01/2021

	Rates	Fringes
BOILERMAKER.....	\$ 45.87	29.02

BRMA0001-002 08/01/2023

SPRINGFIELD/PITTSFIELD CHAPTER WORCESTER (Warren County)

	Rates	Fringes
Bricklayer, Cement Mason, Plasterer & Stonemason.....	\$ 50.81	32.27

BRMA0001-014 08/01/2023

WORCESTER CHAPTER
 WORCESTER (Auburn Barre, Blackstone, Berlin, Bolton, Boylston,
 the Brookfields, Charlton, Clinton, Douglas, Dudley, Grafton,
 Hardwick, Holden, Leicester, Mendon, Millbury, Milville, New
 Braintree, Northboro, Northbridge, Oakham, Oxford, Paxton,
 Rutland, Shrewbury, Southbridge, Spencer, Sturbridge, Sutton,
 Upton, Uxbridge, Webster, Westboro, West Boylston, Worcester)

	Rates	Fringes
Bricklayer, Cement Mason, Plasterer & Stonemason.....	\$ 60.26	33.71

BRMA0001-015 08/01/2023

LOWELL CHAPTER
WORCESTER (Hopedale, Milford, Southboro)

	Rates	Fringes
Bricklayer, Cement Mason, Plasterer & Stonemason.....	\$ 60.26	33.71

BRMA0001-023 08/01/2023

LOWELL CHAPTER

WORCESTER (Ashburham, Athol, Fitchburg, Gardner, Harvard, Hubbardston, Lancaster, Leominster, Lunenburg, Petersham, Phillipston, Princeton, Royalston, Sterling, Templeton, Westminster, Winchendon)

	Rates	Fringes
Bricklayer, Cement Mason, Plasterer & Stonemason.....	\$ 60.26	33.71

BRMA0003-001 08/01/2023

	Rates	Fringes
Marble & Tile Finisher.....	\$ 47.89	32.43
Marble, Tile & Terrazzo Workers.....	\$ 62.42	34.37
TERRAZZO FINISHER.....	\$ 61.34	34.21

CARP0056-004 08/01/2022

	Rates	Fringes
DIVER TENDER.....	\$ 52.15	34.10
DIVER.....	\$ 68.70	35.57

CARP0056-008 08/01/2022

	Rates	Fringes
PILEDRIVERMAN.....	\$ 45.74	34.10

* CARP0336-002 03/01/2024

WORCESTER (Except Gilbertville, Harwick, Warren, West Brookfield)

	Rates	Fringes
Carpenter/Lather.....	\$ 46.86	30.94

* CARP0336-007 03/01/2024

WORCESTER (Gilbertville, Hardwick, Warren, West Brookfield)

	Rates	Fringes
Carpenter/Lather.....	\$ 46.86	30.94

CARP1121-004 01/01/2024

	Rates	Fringes
MILLWRIGHT.....	\$ 41.20	32.99

ELEC0096-002 09/04/2022

WORCESTER (Warren)

Rates	Fringes
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ELECTRICIAN.....\$ 45.59 30.92

ELEC0104-001 08/29/2022

Rates Fringes

Line Construction:

Cableman.....\$ 53.06 28.49+A
Equipment Operator.....\$ 45.10 25.20+A
Groundman.....\$ 29.18 12.10+A
Lineman.....\$ 53.06 28.49+A

A. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; Christmas Day and Columbus Day, provided the employee has been employed 5 working days prior to any one of the listed holidays.

ELEV0041-002 01/01/2023

Rates Fringes

ELEVATOR MECHANIC.....\$ 61.13 37.335+a+b

FOOTNOTE:

- a. Vacation: 6%/under 5 years based on regular hourly rate for all hours worked. 8%/over 5 years based on regular hourly rate for all hours worked.
- b. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.

ENGI0004-003 12/01/2023

WORCESTER (Except Athol, Barre, Brookfield, East Brookfield, Hardwick, New Braintree, North Brookfield, Oakham, Petersham, Phillipston, Royalston, Strutbridge, Templeton, Warren, West Brookfield, Winchendon)

Rates Fringes

Power equipment operators:

BUILDING, HEAVY & MARINE
GROUP 1.....\$ 48.73 29.25
Group 1.....\$ 55.03 32.45
GROUP 2.....\$ 48.23 29.25
Group 2.....\$ 54.43 32.45
GROUP 3.....\$ 32.47 29.25
Group 3.....\$ 35.62 32.45
GROUP 4.....\$ 39.89 29.25
Group 4.....\$ 44.47 32.45
GROUP 5.....\$ 23.08 29.25
Group 5.....\$ 24.41 32.45
GROUP 6.....\$ 27.64 29.25
Group 6.....\$ 29.86 32.45

FOOTNOTE FOR POWER EQUIPMENT OPERATORS:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Patriot's Day, Columbus Day, Veteran's Day, Thanksgiving Day, Christmas Day

HOURLY PREMIUM FOR BOOM LENGTHS (Including Jib):

Over 150 ft. +2.18
 Over 185 ft. +3.84
 Over 210 ft. +5.39
 Over 250 ft. +8.16
 Over 295 ft. +11.29
 Over 350 ft. +13.14

POWER EQUIPMENT OPERATORS CLASSIFICATIONS BUILDING AND HEAVY CONSTRUCTION

GROUP 1: Power shovel; crane; truck crane; derrick; pile driver; trenching machine; mechanical hoist pavement breaker; cement concrete paver; dragline; hoisting engine; three drum machine; pumpcrete machine; loaders; shovel dozer; front end loader; mucking machine; shaft hoist; steam engine; backhoe; gradall; cable way; fork lift; cherry picker; boring machine; rotary drill; post hole hammer; port hole digger; asphalt plant on job site; concrete batching and/or mixing plant on job site; crusher plant on job site; paving concrete mixer; timber jack

GROUP 2: Sonic or vibratory hammer; grader; scraper; tandem scraper; bulldozer; tractor; mechanic - maintenance; York rake; mulching machine; paving screed machine; stationary steam boiler; paving concrete finishing machine; grout pump; portable steam boiler; portable steam generator; roller; spreader; asphalt paver; locomotives or machines used in place thereof; tamper (self propelled or tractor-draw); cal tracks; ballast regulator; rail anchor machine; switch tamper; tire truck

GROUP 3: Pumps (1-3 grouped); compressor; welding machines (1-3 grouped); generator; sighting plant; heaters (power driven, 1- 5); syphon-pulsometer; concrete mixer; valves controlling permanent plant air steam, conveyor, wellpoint system (operating)

GROUP 4: Assitant engineer (fireman)

GROUP 5: Oiler (other than truck cranes and gradalls)

GROUP 6: Oiler (on truck cranes and gradalls)

POWER EQUIPMENT OPERATORS CLASSIFICATIONS MARINE CONSTRUCTION

GROUP 1: Shovel; crane; truck crane; cherry picker; derrick; pile driver; two or more drum machines; lighters; derrick boats; trenching machines; mechanic hoist pavement breakers; cement concrete pavers; draglines; hoisting engines; pumpcrete machines; elevating graders; shovel dozer; front end loader; backhoe; gradall; cable ways; boring machine; rotary drill; post hole hammer; post hole digger; fork lift; timber jack; asphalt plant (on site); concrete batching and/or mixing plant (on site); crusher plant (on site); paving concrete mixer

GROUP 2: Portable steam boiler; portable steam generator; sonic or vibratory hammer; grader; scraper; tandem scraper; concrete pump; bulldozer; tractor; York rake; mulching machine; roller; spreader; tamper (self-propelled or tractor-drawn); asphalt paver; concrete mixer with side loader; mechanic - maintenance; cal tracks; ballast regulator; switch tamper; rail anchor machine; tire truck

GROUP 3: Pumps (1-3 grouped); compressor; welding machines (1-3 grouped); generator; lighting plant; heaters (power driven 1-5); syphon-pulsometer; concrete mixer; valves controlling permanent plant air or steam; conveyor; well point systems; auger (powered by independent engines and attached to pile drivers); hydraulic saws

GROUP 4: Fireman

GROUP 5: Assistant engineer (other than truck crane and gradall)

GROUP 6: Assistant engineer (on truck crane and gradall)

ENGI0098-005 12/01/2016

	Rates	Fringes
Power equipment operators:		
Group 1.....	\$ 33.68	23.96+A
Group 2.....	\$ 33.37	23.96+A
Group 3.....	\$ 33.15	23.96+A
Group 4.....	\$ 32.54	23.96+A
Group 5.....	\$ 29.92	23.96+A
Group 6.....	\$ 28.80	23.96+A
Group 7.....	\$ 26.86	23.96+A
Group 8.....	\$ 305.95	23.96+A
Group 9.....	\$ 230.69	23.96+A
Group 10.....	\$ 35.17	23.96+A
Group 11.....	\$ 38.18	23.96+A
Group 12.....	\$ 39.68	23.96+A
Group 13.....	\$ 40.68	23.96+A
Group 14.....	\$ 41.68	23.96+A
Group 15.....	\$ 43.18	23.96+A

HAZARDOUS WASTE PREMIUM \$2.00

FOOTNOTE FOR POWER EQUIPMENT OPERATORS:

Group 8 and Group 9 are per day wages.

A. Paid Holidays: New year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day and Christmas Day

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

Group 1: Shovels; crawlers and truck cranes including all tower; self-propelled hydraulic cranes 10 tons and over; draglines; clam shells; cableways; shaft hoists; mucking machines derricks; backhoes; bulldozers; gradalls; elevating graders; pile drivers; concrete pavers; trenching machines; front end loaders- 5 1/2 cu yds and over; dual drum paver; automatic grader-excavator(C.M.I. or equal); scrapers towing pan or wagon; tandem dozers or push cats(2 units in tandem); shotcrete machine; tunnel boring machine; combination backhoe/loader 3/4 cu yd hoe or over; jet engine dryer; tree shredder; post hole digger; post hole hammer; post extractor; truck mounted concrete pump with boom; roto-mill; Grader; Horizontal Drilling Machine; John Henry Rock Drill and similar equipment.

Group 2: Rotary drill with mounted compressor; compressor house (3 to 6 compressors); rock and earth boring machines (excluding McCarthy and similar drills); front end loaders 4 cu yds to 5 1/2 cu yds); forklifts-7 ft lift and over 3 ton capacity; scraper 21 yds and over (struck load); sonic hammer console; reclaimers road planer/milling machine; cal tracks; ballast regulators; rail anchor machines; switch tampers, asphalt pavers; mechanic; welder and transfer machine.

Group 3: Combination backhoe/loader up to 3/4 cu yd; scrapers up to 21 cu yd (struck load, self propelled or tractor drawn); tireman; front end loaders up to 4 yds; well drillers; engineer or fireman on high pressure boiler; self-loading batch plant; well point operators electric pumps used in well point system; pumps, 16 inches and over (total discharge); compressor, one or two 900 cu ft and over; powered grease truck; tunnel locomotives and dingys; grout pumps; hydraulic jacks; boom truck; hydraulic cranes-

up to 10 ton.

Group 4: Asphalt rollers; self-powered rollers and compactors; tractor without blade drawing sheepsfoot roller; rubber tire roller; vibratory roller or other type of compactors including machines for pulverizing and aerating soil; york rake.

Group 5: Hoists; conveyors; power pavement breakers; self-powered concrete pavement finishing machines; two bag mixers with skip; McCarthy and similar drills; batch plants (not self loading); bulk cement plants; self-propelled material spreaders; three or more 10 KW light plants; 30 KW or more generators; power broom.

Group 6: Compressor (one or two) 315 cu ft to 900 cu ft; pumps 4 inches to 16 inches (total discharge).

Group 7: Compressors up to 315 cu ft; small mixers with skip; pumps up to 4 inches; power heaters; oiler; A-frame trucks; forklifts-up to 7 ft. lift and up to 3 ton capacity; hydro broom; stud welder.

Group 8: Truck crane crews

Group 9: Oiler

Group 10: Master Mechanic

Group 11: Boom lengths over 150 feet including jib

Group 12: Boom lengths over 200 feet including jib

Group 13: Boom lengths over 250 feet including jib

Group 14: Boom lengths over 300 feet including jib

Group 15: Boom lengths over 350 feet including jib

IRON0007-012 09/16/2023

	Rates	Fringes
IRONWORKER.....	\$ 53.40	36.21

LAB00022-001 12/01/2023

	Rates	Fringes
Laborers: (HEAVY CONSTRUCTION)		
GROUP 1.....	\$ 37.86	27.59
GROUP 2.....	\$ 38.11	27.59
GROUP 3.....	\$ 38.61	27.59
GROUP 4.....	\$ 38.86	27.59
GROUP 5.....	\$ 25.40	27.59
GROUP 6.....	\$ 39.86	27.59

LABORERS CLASSIFICATIONS

GROUP 1: Laborers; carpenter tenders; cement finisher tenders, plasterer tenders

GROUP 2: Asphalt raker; fence and guard rail erector; laser beam operator; mason tender; pipelayer; pneumatic drill operator; pneumatic tool operator; wagon drill operator, jack hammer operator, pavement breaker, carbide core drilling machine, chain saw operator, barco type jumping tampers, concrete pump, motorized mortar mixer, ride-on-motorized buggy

GROUP 3: Air track operator; block paver; rammer; curb setter, hydraulic and similar self powered drills

GROUP 4: Blaster; powderman

GROUP 5: Flagger

GROUP 6: Asbestos Abatement; Toxic and Hazardous Waste Laborers

LAB0022-003 12/01/2021

	Rates	Fringes
Plasterer tender		
BARNSTABLE, BRISTOL, DUKES, ESSEX, NANTUCKET, MIDDLESEX (with the exception of Arlington, Belmont, Burlington, Cambridge, Everett, Malden, Medford, Melrose, Reading, Somerville, Stoneham, Wakefield, Winchester, Winthrop and Woburn); NORFOLK (with the exception of Brookline Dedham and Milton) COUNTIES.	\$ 35.41	26.59
SUFFOLK COUNTY (Boston, Chelsea, Revere, Winthrop, Deer Island, Nut Island); MIDDLESEX COUNTY (Arlington, Belmont, Burlington, Cambridge, Everett, Malden, Medford, Melrose, Reading, Somerville, Stoneham, Wakefield, Winchester, Winthrop and Woburn only); NORFOLK COUNTY (Brookline, Dedham, and Milton only)....	\$ 41.18	27.52

LAB0022-013 12/01/2021

	Rates	Fringes
Laborers:		
(FREE AIR OPERATION): SHIELD DRIVEN AND LINER PLATE IN FREE AIR)		
GROUP 1.....	\$ 45.48	28.02
GROUP 2.....	\$ 45.48	28.02
(OPEN AIR CASSONS, UNDERPINNING AND TEST BORING INDUSTRIES):		
TEST BORING & WELL DRILLING		
Driller.....	\$ 42.58	27.67
Laborer.....	\$ 41.18	27.67
(OPEN AIR CASSONS, UNDERPINNING AND TEST BORING INDUSTRIES):		
OPEN AIR CASSON, UNDERPINNING WORK & BORING CREW		
Bottom man.....	\$ 42.33	27.67
Laborers; Top man.....	\$ 41.18	27.67
(TUNNELS, CAISSON & CYLINDER WORK IN		

COMPRESSED AIR)

GROUP 1.....	\$ 42.93	28.02
GROUP 2.....	\$ 53.41	28.02
GROUP 3.....	\$ 53.41	28.02
GROUP 4.....	\$ 53.41	28.02
GROUP 5.....	\$ 53.41	28.02
GROUP 6.....	\$ 55.41	28.02

CLEANING CONCRETE AND
CAULKING TUNNEL (Both New
& Existing)

GROUP 1.....	\$ 45.48	28.02
GROUP 2.....	\$ 45.48	28.02

ROCK SHAFT, CONCRETE
LINING OF SAME AND TUNNEL
IN FREE AIR

GROUP 1.....	\$ 42.93	28.02
GROUP 2.....	\$ 45.48	28.02
GROUP 3.....	\$ 45.48	28.02
GROUP 4.....	\$ 45.48	28.02
GROUP 5.....	\$ 47.48	28.02

LABORERS CLASSIFICATIONS for TUNNELS, CAISSON & CYLINDER WORK
IN COMPRESSED AIR

GROUP 1: Powder watchman; Top man on iron bolt; change house attendant

GROUP 2: Brakeman; trackman; groutman; tunnel laborer; outside lock tender; lock tender; guage tender

GROUP 3: Motorman, miner

GROUP 4: Blaster

GROUP 5: Mucking machine operator

GROUP 6: Hazardous Waste work within the ""HOT"" zone. (A premium of two dollars \$2.00 per hour over the basic wage rate.

LABORERS CLASSIFICATIONS for (FREE AIR OPERATION): SHIELD
DRIVEN AND LINER PLATE IN FREE AIR

GROUP 1: Miner; miner welder; conveyor operator; motorman; mucking machine operator; nozzle man; grout man-; pumps, shaft and tunnel steel and rodman; shield and erector arm operators, mole nipper, outside motorman, burner, TBM operator, safety miner; laborer topside; heading motormen; erecting operators; top signal men

GROUP 2: Brakeman; trackman

LABORERS CLASSIFICATIONS FOR CLEANING CONCRETE AND CAULKING
TUNNEL (Both New & Existing)

GROUP 1: Concrete workers; strippers and form movers (wood & steel), cement finisher

GROUP 2: Form erector (wood & steel and all accessories)

LABORERS CLASSIFICATIONS for ROCK SHAFT, CONCRETE LINING OF
SAME AND TUNNE IN FREE AIR

GROUP 1: Change house attendants

GROUP 2: Laborers, topside, bottom men (when heading is 50 ft. from shaft) and all other laborers

GROUP 3: Brakeman; trackman; tunnel laborers; shaft laborers

GROUP 4: Miner; cage tender; bellman

GROUP 5: Hazardous Waste work within the ""HOT"" zone. (A premium of two dollars \$2.00 per hour over the basic wage rate)

FOOTNOTE FOR LABORERS:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday, Patriot's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, and Christmas Day

LAB01421-003 12/01/2021

	Rates	Fringes
Laborers: (WRECKING)		
Group 1.....	\$ 41.33	27.37
Group 2.....	\$ 42.08	27.37
Group 3.....	\$ 42.33	27.37
Group 4.....	\$ 37.33	27.37
Group 5.....	\$ 40.43	27.37
Group 6.....	\$ 41.33	27.37

- Group 1: Adzeman, Wrecking Laborer.
- Group 2: Burners, Jackhammers.
- Group 3: Small Backhoes, Loaders on tracks, Bobcat Type Loaders, Hydraulic ""Brock"" Type Hammer Operators, Concrete Cutting Saws.
- Group 4: Yardman (Salvage Yard Only).
- Group 5: Yardman, Burners, Sawyers.
- Group 6: Asbestos, Lead Paint, Toxic and Hazardous Waste.

PAIN0035-006 07/01/2023

	Rates	Fringes
PAINTER		
NEW CONSTRUCTION:		
Bridge.....	\$ 55.51	35.10
Brush, Taper.....	\$ 45.01	35.10
Spray, Sandblast.....	\$ 46.41	35.10
REPAINT		
Bridge.....	\$ 55.51	35.10
Brush, Taper.....	\$ 43.07	35.10
Spray, Sandblast.....	\$ 44.47	35.10

PAIN0035-021 07/01/2023

Rates	Fringes
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GLAZIER.....	\$ 45.01	35.10
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* PLUM0004-002 03/01/2024

WORCESTER (Except Hopedale and Southboro)

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 53.95	28.42

* PLUM0012-002 03/03/2024

WORCESTER (Hopedale and Southboro)

	Rates	Fringes
PLUMBER.....	\$ 67.74	35.03

ROOF0033-001 02/01/2024

	Rates	Fringes
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Roofers:

All Tear-off and/or
removal of any types of
roofing and all spudding,
sweeping, vacuuming and/or
cleanup of any and all
areas of any type where a
roof is to be relaid.....

\$ 50.03	34.94
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SFMA0669-002 01/01/2024

	Rates	Fringes
SPRINKLER FITTER.....	\$ 47.43	29.16

* SHEE0017-004 02/01/2024

WORCESTER (Harvard, Lancaster)

	Rates	Fringes
Sheet metal worker.....	\$ 57.86	45.82

SHEE0063-002 01/01/2022

WORCESTER (Except Harvard & Lancaster)

	Rates	Fringes
Sheet metal worker.....	\$ 38.01	32.21

TEAM0379-003 06/01/2023

	Rates	Fringes
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Truck drivers:

Group 1.....	\$ 38.78	31.86+a+b
Group 2.....	\$ 38.95	31.86+a+b
Group 3.....	\$ 39.02	31.86+a+b
Group 4.....	\$ 39.14	31.86+a+b
Group 5.....	\$ 39.24	31.86+a+b
Group 6.....	\$ 39.53	31.86+a+b
Group 7.....	\$ 39.82	31.86+a+b

TRUCK DRIVERS CLASSIFICATIONS

Group 1: Station wagons; panel trucks; and pickup trucks

Group 2: Two axle equipment; & forklift operator

Group 3: Three axle equipment and tireman

Group 4: Four and Five Axle equipment

Group 5: Specialized earth moving equipment under 35 tons other than conventional type trucks; low bed; vachual; mechanics, paving restoration equipment

Group 6: Specialized earth moving equipment over 35 tons

Group 7: Trailers for earth moving equipment (double hookup)

POWER TRUCKS \$.25 DIFFERENTIAL BY AXLE TUNNEL WORK (UNDERGROUND ONLY) \$.40 DIFFERENTIAL BY AXLE HAZARDOUS MATERIALS (In Hot Zone Only) \$2.00 premium

FOOTNOTES: A. PAID HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Patriot's Day, Columbus Day, Veteran's Day, Thanksgiving Day, & Christmas Day

B. PAID VACATION: Employees with 4 months to 1 year of service receive 1/2 day's pay per month; 1 week vacation for 1 - 5 years of service; 2 weeks vacation for 5 - 10 years of service; and 3 weeks vacation for more than 10 years of service

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
 Wage and Hour Division
 U.S. Department of Labor
 200 Constitution Avenue, N.W.
 Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
 U.S. Department of Labor
 200 Constitution Avenue, N.W.
 Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
 U.S. Department of Labor
 200 Constitution Avenue, N.W.
 Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

00830-B
APPENDIX B: STATE PREVAILING WAGE RATES



MAURA HEALEY
Governor

KIM DRISCOLL
Lt. Governor

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Prevailing Wage Rates

As determined by the Director under the provisions of the
Massachusetts General Laws, Chapter 149, Sections 26 to 27H

LAUREN JONES
Secretary

MICHAEL FLANAGAN
Director

Awarding Authority: Town of Southbridge
Contract Number: 01-79-15218 **City/Town:** SOUTHBRIDGE
Description of Work: construction of a new 5-mile segment of the QVRT multi-use trail including approximately 21,000 linear ft. along an abandoned rail line and approximately 5,250 LF on-road
Job Location: Book 34530/ Page 0037 plus on-road

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- **The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor.** For multi-year CM AT RISK projects, the awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. The annual update requirement is not applicable to 27F "rental of equipment" contracts. **The updated wage schedule must be provided to all contractors, including general and sub-contractors, working on the construction project.**
- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the "Wage Request Number" on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or a sub-contractor.
- Apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentices must keep their apprentice identification card on their persons during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **Any apprentice not registered with DAS regardless of whether they are registered with another federal, state, local, or private agency must be paid the journeyworker's rate.**
- Every contractor or subcontractor working on the construction project must submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. For a sample payroll reporting form go to <http://www.mass.gov/dols/pw>.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Contractors must obtain the wage schedules from awarding authorities. Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may file a complaint with the Fair Labor Division of the office of the Attorney General at (617) 727-3465.

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$38.95	\$15.07	\$18.67	\$0.00	\$72.69
	06/01/2024	\$39.95	\$15.07	\$18.67	\$0.00	\$73.69
	12/01/2024	\$39.95	\$15.07	\$20.17	\$0.00	\$75.19
	01/01/2025	\$39.95	\$15.57	\$20.17	\$0.00	\$75.69
	06/01/2025	\$40.95	\$15.57	\$20.17	\$0.00	\$76.69
	12/01/2025	\$40.95	\$15.57	\$21.78	\$0.00	\$78.30
	01/01/2026	\$40.95	\$16.17	\$21.78	\$0.00	\$78.90
	06/01/2026	\$41.95	\$16.17	\$21.78	\$0.00	\$79.90
	12/01/2026	\$41.95	\$16.17	\$23.52	\$0.00	\$81.64
	01/01/2027	\$41.95	\$16.77	\$23.52	\$0.00	\$82.24
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$39.02	\$15.07	\$18.67	\$0.00	\$72.76
	06/01/2024	\$40.02	\$15.07	\$18.67	\$0.00	\$73.76
	12/01/2024	\$40.02	\$15.07	\$20.17	\$0.00	\$75.26
	01/01/2025	\$40.02	\$15.57	\$20.17	\$0.00	\$75.76
	06/01/2025	\$41.02	\$15.57	\$20.17	\$0.00	\$76.76
	12/01/2025	\$41.02	\$15.57	\$21.78	\$0.00	\$78.37
	01/01/2026	\$41.02	\$16.17	\$21.78	\$0.00	\$78.97
	06/01/2026	\$42.02	\$16.17	\$21.78	\$0.00	\$79.97
	12/01/2026	\$42.02	\$16.17	\$23.52	\$0.00	\$81.71
	01/01/2027	\$42.02	\$16.77	\$23.52	\$0.00	\$82.31
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$39.14	\$15.07	\$18.67	\$0.00	\$72.88
	06/01/2024	\$40.14	\$15.07	\$18.67	\$0.00	\$73.88
	12/01/2024	\$40.14	\$15.07	\$20.17	\$0.00	\$75.38
	01/01/2025	\$40.14	\$15.57	\$20.17	\$0.00	\$75.88
	06/01/2025	\$41.14	\$15.57	\$20.17	\$0.00	\$76.88
	12/01/2025	\$41.14	\$15.57	\$21.78	\$0.00	\$78.49
	01/01/2026	\$41.14	\$16.17	\$21.78	\$0.00	\$79.09
	06/01/2026	\$42.14	\$16.17	\$21.78	\$0.00	\$80.09
	12/01/2026	\$42.14	\$16.17	\$23.52	\$0.00	\$81.83
	01/01/2027	\$42.14	\$16.77	\$23.52	\$0.00	\$82.43
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
AIR TRACK OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
AIR TRACK OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
	06/01/2024	\$39.94	\$9.65	\$17.14	\$0.00	\$66.73
	12/01/2024	\$41.27	\$9.65	\$17.14	\$0.00	\$68.06
	06/01/2025	\$42.66	\$9.65	\$17.14	\$0.00	\$69.45
	12/01/2025	\$44.04	\$9.65	\$17.14	\$0.00	\$70.83
	06/01/2026	\$45.48	\$9.65	\$17.14	\$0.00	\$72.27
	12/01/2026	\$46.92	\$9.65	\$17.14	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
ASBESTOS WORKER (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (WORCESTER)</i>	12/01/2023	\$40.80	\$14.50	\$11.05	\$0.00	\$66.35
	06/01/2024	\$41.80	\$14.50	\$11.05	\$0.00	\$67.35
	12/01/2024	\$42.80	\$14.50	\$11.05	\$0.00	\$68.35
	06/01/2025	\$43.80	\$14.50	\$11.05	\$0.00	\$69.35
	12/01/2025	\$44.80	\$14.50	\$11.05	\$0.00	\$70.35
ASPHALT RAKER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
ASPHALT RAKER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
	06/01/2024	\$39.44	\$9.65	\$17.14	\$0.00	\$66.23
	12/01/2024	\$40.77	\$9.65	\$17.14	\$0.00	\$67.56
	06/01/2025	\$42.16	\$9.65	\$17.14	\$0.00	\$68.95
	12/01/2025	\$43.54	\$9.65	\$17.14	\$0.00	\$70.33
	06/01/2026	\$44.98	\$9.65	\$17.14	\$0.00	\$71.77
	12/01/2026	\$46.42	\$9.65	\$17.14	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$55.03	\$15.00	\$16.40	\$0.00	\$86.43
	06/01/2024	\$56.33	\$15.00	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.78	\$15.00	\$16.40	\$0.00	\$89.18
	06/01/2025	\$59.08	\$15.00	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.53	\$15.00	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.83	\$15.00	\$16.40	\$0.00	\$93.23
	12/01/2026	\$63.28	\$15.00	\$16.40	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$55.03	\$15.00	\$16.40	\$0.00	\$86.43
	06/01/2024	\$56.33	\$15.00	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.78	\$15.00	\$16.40	\$0.00	\$89.18
	06/01/2025	\$59.08	\$15.00	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.53	\$15.00	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.83	\$15.00	\$16.40	\$0.00	\$93.23
	12/01/2026	\$63.28	\$15.00	\$16.40	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
	06/01/2024	\$39.94	\$9.65	\$17.14	\$0.00	\$66.73
	12/01/2024	\$41.27	\$9.65	\$17.14	\$0.00	\$68.06
	06/01/2025	\$42.66	\$9.65	\$17.14	\$0.00	\$69.45
	12/01/2025	\$44.04	\$9.65	\$17.14	\$0.00	\$70.83
	06/01/2026	\$45.48	\$9.65	\$17.14	\$0.00	\$72.27
	12/01/2026	\$46.92	\$9.65	\$17.14	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
BOILER MAKER <i>BOILERMAKERS LOCAL 29</i>	01/01/2024	\$48.12	\$7.07	\$20.60	\$0.00	\$75.79

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - BOILERMAKER - Local 29

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$31.28	\$7.07	\$13.22	\$0.00	\$51.57
2	65	\$31.28	\$7.07	\$13.22	\$0.00	\$51.57
3	70	\$33.68	\$7.07	\$14.23	\$0.00	\$54.98
4	75	\$36.09	\$7.07	\$15.24	\$0.00	\$58.40
5	80	\$38.50	\$7.07	\$16.25	\$0.00	\$61.82
6	85	\$40.90	\$7.07	\$17.28	\$0.00	\$65.25
7	90	\$43.31	\$7.07	\$18.28	\$0.00	\$68.66
8	95	\$45.71	\$7.07	\$19.32	\$0.00	\$72.10

Notes:

Apprentice to Journeyworker Ratio:1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	02/01/2024	\$60.26	\$11.49	\$22.90	\$0.00	\$94.65
BRICKLAYERS LOCAL 3 (WORCESTER)	08/01/2024	\$62.36	\$11.49	\$22.90	\$0.00	\$96.75
	02/01/2025	\$63.66	\$11.49	\$22.90	\$0.00	\$98.05
	08/01/2025	\$65.81	\$11.49	\$22.90	\$0.00	\$100.20
	02/01/2026	\$67.16	\$11.49	\$22.90	\$0.00	\$101.55
	08/01/2026	\$69.36	\$11.49	\$22.90	\$0.00	\$103.75
	02/01/2027	\$70.76	\$11.49	\$22.90	\$0.00	\$105.15

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Worcester

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$30.13	\$11.49	\$22.90	\$0.00	\$64.52
2	60	\$36.16	\$11.49	\$22.90	\$0.00	\$70.55
3	70	\$42.18	\$11.49	\$22.90	\$0.00	\$76.57
4	80	\$48.21	\$11.49	\$22.90	\$0.00	\$82.60
5	90	\$54.23	\$11.49	\$22.90	\$0.00	\$88.62

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$31.18	\$11.49	\$22.90	\$0.00	\$65.57
2	60	\$37.42	\$11.49	\$22.90	\$0.00	\$71.81
3	70	\$43.65	\$11.49	\$22.90	\$0.00	\$78.04
4	80	\$49.89	\$11.49	\$22.90	\$0.00	\$84.28
5	90	\$56.12	\$11.49	\$22.90	\$0.00	\$90.51

Notes:

Apprentice to Journeyworker Ratio:1:5

BULLDOZER/GRADER/SCRAPER	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
<i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

CAISSON & UNDERPINNING BOTTOM MAN	12/01/2023	\$45.48	\$9.65	\$18.22	\$0.00	\$73.35
<i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2024	\$46.96	\$9.65	\$18.22	\$0.00	\$74.83
	12/01/2024	\$48.43	\$9.65	\$18.22	\$0.00	\$76.30
	06/01/2025	\$49.93	\$9.65	\$18.22	\$0.00	\$77.80
	12/01/2025	\$51.43	\$9.65	\$18.22	\$0.00	\$79.30
	06/01/2026	\$52.98	\$9.65	\$18.22	\$0.00	\$80.85
	12/01/2026	\$54.48	\$9.65	\$18.22	\$0.00	\$82.35

For apprentice rates see "Apprentice- LABORER"

CAISSON & UNDERPINNING LABORER	12/01/2023	\$44.33	\$9.65	\$18.22	\$0.00	\$72.20
<i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2024	\$45.81	\$9.65	\$18.22	\$0.00	\$73.68
	12/01/2024	\$47.28	\$9.65	\$18.22	\$0.00	\$75.15
	06/01/2025	\$48.78	\$9.65	\$18.22	\$0.00	\$76.65
	12/01/2025	\$50.28	\$9.65	\$18.22	\$0.00	\$78.15
	06/01/2026	\$51.83	\$9.65	\$18.22	\$0.00	\$79.70
	12/01/2026	\$53.33	\$9.65	\$18.22	\$0.00	\$81.20

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CAISSON & UNDERPINNING TOP MAN <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2023	\$44.33	\$9.65	\$18.22	\$0.00	\$72.20
	06/01/2024	\$45.81	\$9.65	\$18.22	\$0.00	\$73.68
	12/01/2024	\$47.28	\$9.65	\$18.22	\$0.00	\$75.15
	06/01/2025	\$48.78	\$9.65	\$18.22	\$0.00	\$76.65
	12/01/2025	\$50.28	\$9.65	\$18.22	\$0.00	\$78.15
	06/01/2026	\$51.83	\$9.65	\$18.22	\$0.00	\$79.70
	12/01/2026	\$53.33	\$9.65	\$18.22	\$0.00	\$81.20

For apprentice rates see "Apprentice- LABORER"

CARBIDE CORE DRILL OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
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For apprentice rates see "Apprentice- LABORER"

CARPENTER <i>CARPENTERS -ZONE 2 (Eastern Massachusetts)</i>	03/01/2024	\$47.12	\$9.83	\$19.97	\$0.00	\$76.92
	09/01/2024	\$48.37	\$9.83	\$19.97	\$0.00	\$78.17
	03/01/2025	\$49.62	\$9.83	\$19.97	\$0.00	\$79.42
	09/01/2025	\$50.87	\$9.83	\$19.97	\$0.00	\$80.67
	03/01/2026	\$52.12	\$9.83	\$19.97	\$0.00	\$81.92
	09/01/2026	\$53.37	\$9.83	\$19.97	\$0.00	\$83.17
	03/01/2027	\$54.62	\$9.83	\$19.97	\$0.00	\$84.42

Apprentice - CARPENTER - Zone 2 Eastern MA

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$21.20	\$9.83	\$1.73	\$0.00	\$32.76
2	45	\$21.20	\$9.83	\$1.73	\$0.00	\$32.76
3	55	\$25.92	\$9.83	\$3.40	\$0.00	\$39.15
4	55	\$25.92	\$9.83	\$3.40	\$0.00	\$39.15
5	70	\$32.98	\$9.83	\$16.51	\$0.00	\$59.32
6	70	\$32.98	\$9.83	\$16.51	\$0.00	\$59.32
7	80	\$37.70	\$9.83	\$18.24	\$0.00	\$65.77
8	80	\$37.70	\$9.83	\$18.24	\$0.00	\$65.77

Effective Date - 09/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$21.77	\$9.83	\$1.73	\$0.00	\$33.33
2	45	\$21.77	\$9.83	\$1.73	\$0.00	\$33.33
3	55	\$26.60	\$9.83	\$3.40	\$0.00	\$39.83
4	55	\$26.60	\$9.83	\$3.40	\$0.00	\$39.83
5	70	\$33.86	\$9.83	\$16.51	\$0.00	\$60.20
6	70	\$33.86	\$9.83	\$16.51	\$0.00	\$60.20
7	80	\$38.70	\$9.83	\$18.24	\$0.00	\$66.77
8	80	\$38.70	\$9.83	\$18.24	\$0.00	\$66.77

Notes:

Apprentice to Journeyworker Ratio:1:5

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CARPENTER WOOD FRAME <i>CARPENTERS-ZONE 3 (Wood Frame)</i>	10/01/2023	\$25.55	\$7.02	\$4.80	\$0.00	\$37.37
	10/01/2024	\$26.65	\$7.02	\$4.80	\$0.00	\$38.47
	10/01/2025	\$27.75	\$7.02	\$4.80	\$0.00	\$39.57
	10/01/2026	\$28.85	\$7.02	\$4.80	\$0.00	\$40.67

All Aspects of New Wood Frame Work

Apprentice - CARPENTER (Wood Frame) - Zone 3

Effective Date - 10/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$15.33	\$7.02	\$0.00	\$0.00	\$22.35
2	60	\$15.33	\$7.02	\$0.00	\$0.00	\$22.35
3	65	\$16.61	\$7.02	\$1.00	\$0.00	\$24.63
4	70	\$17.89	\$7.02	\$1.00	\$0.00	\$25.91
5	75	\$19.16	\$7.02	\$4.80	\$0.00	\$30.98
6	80	\$20.44	\$7.02	\$4.80	\$0.00	\$32.26
7	85	\$21.72	\$7.02	\$4.80	\$0.00	\$33.54
8	90	\$23.00	\$7.02	\$4.80	\$0.00	\$34.82

Effective Date - 10/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$15.99	\$7.02	\$0.00	\$0.00	\$23.01
2	60	\$15.99	\$7.02	\$0.00	\$0.00	\$23.01
3	65	\$17.32	\$7.02	\$1.00	\$0.00	\$25.34
4	70	\$18.66	\$7.02	\$1.00	\$0.00	\$26.68
5	75	\$19.99	\$7.02	\$4.80	\$0.00	\$31.81
6	80	\$21.32	\$7.02	\$4.80	\$0.00	\$33.14
7	85	\$22.65	\$7.02	\$4.80	\$0.00	\$34.47
8	90	\$23.99	\$7.02	\$4.80	\$0.00	\$35.81

Notes:

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80
Step 1&2 \$18.52/ 3&4 \$21.07/ 5&6 \$28.70/ 7&8 \$31.26

Apprentice to Journeyworker Ratio:1:5

CEMENT MASONRY/PLASTERING <i>BRICKLAYERS LOCAL 3 (WORCESTER)</i>	01/01/2024	\$49.33	\$13.00	\$23.57	\$1.30	\$87.20
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Apprentice - CEMENT MASONRY/PLASTERING - Worcester

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.67	\$13.00	\$15.93	\$0.00	\$53.60
2	60	\$29.60	\$13.00	\$18.57	\$1.30	\$62.47
3	65	\$32.06	\$13.00	\$19.57	\$1.30	\$65.93
4	70	\$34.53	\$13.00	\$20.57	\$1.30	\$69.40
5	75	\$37.00	\$13.00	\$21.57	\$1.30	\$72.87
6	80	\$39.46	\$13.00	\$22.57	\$1.30	\$76.33
7	90	\$44.40	\$13.00	\$23.57	\$1.30	\$82.27

Notes:
Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.

Apprentice to Journeyworker Ratio:1:3

CHAIN SAW OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
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For apprentice rates see "Apprentice- LABORER"

CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$56.13	\$15.00	\$16.40	\$0.00	\$87.53
	06/01/2024	\$57.45	\$15.00	\$16.40	\$0.00	\$88.85
	12/01/2024	\$58.93	\$15.00	\$16.40	\$0.00	\$90.33
	06/01/2025	\$60.26	\$15.00	\$16.40	\$0.00	\$91.66
	12/01/2025	\$61.73	\$15.00	\$16.40	\$0.00	\$93.13
	06/01/2026	\$63.06	\$15.00	\$16.40	\$0.00	\$94.46
	12/01/2026	\$64.54	\$15.00	\$16.40	\$0.00	\$95.94

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$35.62	\$15.00	\$16.40	\$0.00	\$67.02
	06/01/2024	\$36.47	\$15.00	\$16.40	\$0.00	\$67.87
	12/01/2024	\$37.42	\$15.00	\$16.40	\$0.00	\$68.82
	06/01/2025	\$38.27	\$15.00	\$16.40	\$0.00	\$69.67
	12/01/2025	\$39.22	\$15.00	\$16.40	\$0.00	\$70.62
	06/01/2026	\$40.08	\$15.00	\$16.40	\$0.00	\$71.48
	12/01/2026	\$41.03	\$15.00	\$16.40	\$0.00	\$72.43

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 2</i>	01/01/2024	\$56.06	\$9.95	\$23.95	\$0.00	\$89.96
	07/01/2024	\$57.26	\$9.95	\$23.95	\$0.00	\$91.16
	01/01/2025	\$58.46	\$9.95	\$23.95	\$0.00	\$92.36

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.03	\$9.95	\$0.00	\$0.00	\$37.98
2	55	\$30.83	\$9.95	\$6.66	\$0.00	\$47.44
3	60	\$33.64	\$9.95	\$7.26	\$0.00	\$50.85
4	65	\$36.44	\$9.95	\$7.87	\$0.00	\$54.26
5	70	\$39.24	\$9.95	\$20.32	\$0.00	\$69.51
6	75	\$42.05	\$9.95	\$20.93	\$0.00	\$72.93
7	80	\$44.85	\$9.95	\$21.53	\$0.00	\$76.33
8	90	\$50.45	\$9.95	\$22.74	\$0.00	\$83.14

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.63	\$9.95	\$0.00	\$0.00	\$38.58
2	55	\$31.49	\$9.95	\$6.66	\$0.00	\$48.10
3	60	\$34.36	\$9.95	\$7.26	\$0.00	\$51.57
4	65	\$37.22	\$9.95	\$7.87	\$0.00	\$55.04
5	70	\$40.08	\$9.95	\$20.32	\$0.00	\$70.35
6	75	\$42.95	\$9.95	\$20.93	\$0.00	\$73.83
7	80	\$45.81	\$9.95	\$21.53	\$0.00	\$77.29
8	90	\$51.53	\$9.95	\$22.74	\$0.00	\$84.22

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

DEMO: ADZEMAN LABORERS - ZONE 2	12/01/2023	\$44.48	\$9.65	\$18.07	\$0.00	\$72.20
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For apprentice rates see "Apprentice- LABORER"

DEMO: BACKHOE/LOADER/HAMMER OPERATOR LABORERS - ZONE 2	12/01/2023	\$45.48	\$9.65	\$18.07	\$0.00	\$73.20
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For apprentice rates see "Apprentice- LABORER"

DEMO: BURNERS LABORERS - ZONE 2	12/01/2023	\$45.23	\$9.65	\$18.07	\$0.00	\$72.95
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For apprentice rates see "Apprentice- LABORER"

DEMO: CONCRETE CUTTER/SAWYER LABORERS - ZONE 2	12/01/2023	\$45.48	\$9.65	\$18.07	\$0.00	\$73.20
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For apprentice rates see "Apprentice- LABORER"

DEMO: JACKHAMMER OPERATOR LABORERS - ZONE 2	12/01/2023	\$45.23	\$9.65	\$18.07	\$0.00	\$72.95
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For apprentice rates see "Apprentice- LABORER"

DEMO: WRECKING LABORER LABORERS - ZONE 2	12/01/2023	\$44.48	\$9.65	\$18.07	\$0.00	\$72.20
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For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DIRECTIONAL DRILL MACHINE OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2020	\$68.70	\$9.40	\$23.12	\$0.00	\$101.22
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2020	\$49.07	\$9.40	\$23.12	\$0.00	\$81.59
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2020	\$73.60	\$9.40	\$23.12	\$0.00	\$106.12
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER/SLURRY (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
DRAWBRIDGE OPERATOR (Construction) <i>DRAWBRIDGE - SEIU LOCAL 888</i>	07/01/2020	\$26.77	\$6.67	\$3.93	\$0.16	\$37.53
ELECTRICIAN <i>ELECTRICIANS LOCAL 96</i>	09/03/2023	\$45.99	\$13.00	\$18.84	\$0.00	\$77.83
	09/01/2024	\$47.05	\$13.99	\$19.22	\$0.00	\$80.26
	09/07/2025	\$48.16	\$14.98	\$19.60	\$0.00	\$82.74
	09/06/2026	\$49.38	\$15.96	\$20.00	\$0.00	\$85.34

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - ELECTRICIAN - Local 96

Effective Date - 09/03/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.40	\$13.00	\$0.55	\$0.00	\$31.95
2	45	\$20.70	\$13.00	\$0.62	\$0.00	\$34.32
3	48	\$22.08	\$13.00	\$15.49	\$0.00	\$50.57
4	55	\$25.29	\$13.00	\$15.94	\$0.00	\$54.23
5	65	\$29.89	\$13.00	\$16.59	\$0.00	\$59.48
6	80	\$36.79	\$13.00	\$17.55	\$0.00	\$67.34

Effective Date - 09/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.82	\$13.99	\$0.56	\$0.00	\$33.37
2	45	\$21.17	\$13.99	\$0.64	\$0.00	\$35.80
3	48	\$22.58	\$13.99	\$15.79	\$0.00	\$52.36
4	55	\$25.88	\$13.99	\$16.26	\$0.00	\$56.13
5	65	\$30.58	\$13.99	\$16.91	\$0.00	\$61.48
6	80	\$37.64	\$13.99	\$17.90	\$0.00	\$69.53

Notes:

Steps 1-2 are 1000 hrs; Steps 3-6 are 1500 hrs.

Apprentice to Journeyworker Ratio:2:3***

ELEVATOR CONSTRUCTOR	01/01/2024	\$61.98	\$16.18	\$20.96	\$0.00	\$99.12
ELEVATOR CONSTRUCTORS LOCAL 41	01/01/2025	\$62.83	\$16.28	\$21.36	\$0.00	\$100.47
	01/01/2026	\$63.68	\$16.38	\$21.76	\$0.00	\$101.82
	01/01/2027	\$64.53	\$16.48	\$22.16	\$0.00	\$103.17

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - ELEVATOR CONSTRUCTOR - Local 41

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$30.99	\$16.18	\$0.00	\$0.00	\$47.17
2	55	\$34.09	\$16.18	\$20.96	\$0.00	\$71.23
3	65	\$40.29	\$16.18	\$20.96	\$0.00	\$77.43
4	70	\$43.39	\$16.18	\$20.96	\$0.00	\$80.53
5	80	\$49.58	\$16.18	\$20.96	\$0.00	\$86.72

Effective Date - 01/01/2025

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$31.42	\$16.28	\$0.00	\$0.00	\$47.70
2	55	\$34.56	\$16.28	\$21.36	\$0.00	\$72.20
3	65	\$40.84	\$16.28	\$21.36	\$0.00	\$78.48
4	70	\$43.98	\$16.28	\$21.36	\$0.00	\$81.62
5	80	\$50.26	\$16.28	\$21.36	\$0.00	\$87.90

Notes:

Steps 1-2 are 6 mos.; Steps 3-5 are 1 year

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER	01/01/2024	\$43.39	\$16.18	\$20.96	\$0.00	\$80.53
<i>ELEVATOR CONSTRUCTORS LOCAL 41</i>	01/01/2025	\$43.98	\$16.28	\$21.36	\$0.00	\$81.62
	01/01/2026	\$44.58	\$16.38	\$21.76	\$0.00	\$82.72
	01/01/2027	\$45.17	\$16.48	\$22.16	\$0.00	\$83.81

For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"

FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
<i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$39.44	\$9.65	\$17.14	\$0.00	\$66.23
	12/01/2024	\$40.77	\$9.65	\$17.14	\$0.00	\$67.56
	06/01/2025	\$42.16	\$9.65	\$17.14	\$0.00	\$68.95
	12/01/2025	\$43.54	\$9.65	\$17.14	\$0.00	\$70.33
	06/01/2026	\$44.98	\$9.65	\$17.14	\$0.00	\$71.77
	12/01/2026	\$46.42	\$9.65	\$17.14	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	05/01/2024	\$51.54	\$14.50	\$16.15	\$0.00	\$82.19
<i>OPERATING ENGINEERS LOCAL 4</i>	11/01/2024	\$52.83	\$14.50	\$16.15	\$0.00	\$83.48
	05/01/2025	\$54.27	\$14.50	\$16.15	\$0.00	\$84.92
	11/01/2025	\$55.56	\$14.50	\$16.15	\$0.00	\$86.21
	05/01/2026	\$57.00	\$14.50	\$16.15	\$0.00	\$87.65
	11/01/2026	\$58.29	\$14.50	\$16.15	\$0.00	\$88.94
	05/01/2027	\$59.72	\$14.50	\$16.15	\$0.00	\$90.37

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2024	\$53.12	\$14.50	\$16.15	\$0.00	\$83.77
	11/01/2024	\$54.42	\$14.50	\$16.15	\$0.00	\$85.07
	05/01/2025	\$55.87	\$14.50	\$16.15	\$0.00	\$86.52
	11/01/2025	\$57.17	\$14.50	\$16.15	\$0.00	\$87.82
	05/01/2026	\$58.62	\$14.50	\$16.15	\$0.00	\$89.27
	11/01/2026	\$59.92	\$14.50	\$16.15	\$0.00	\$90.57
	05/01/2027	\$61.37	\$14.50	\$16.15	\$0.00	\$92.02
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2024	\$25.66	\$14.50	\$16.15	\$0.00	\$56.31
	11/01/2024	\$26.42	\$14.50	\$16.15	\$0.00	\$57.07
	05/01/2025	\$27.27	\$14.50	\$16.15	\$0.00	\$57.92
	11/01/2025	\$28.03	\$14.50	\$16.15	\$0.00	\$58.68
	05/01/2026	\$28.88	\$14.50	\$16.15	\$0.00	\$59.53
	11/01/2026	\$29.64	\$14.50	\$16.15	\$0.00	\$60.29
	05/01/2027	\$30.49	\$14.50	\$16.15	\$0.00	\$61.14
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 96</i>	09/03/2023	\$45.99	\$13.00	\$18.84	\$0.00	\$77.83
	09/01/2024	\$47.05	\$13.99	\$19.22	\$0.00	\$80.26
	09/07/2025	\$48.16	\$14.98	\$19.60	\$0.00	\$82.74
	09/06/2026	\$49.38	\$15.96	\$20.00	\$0.00	\$85.34
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINT/COMMISSIONING <i>ELECTRICIANS LOCAL 96</i>	09/03/2023	\$45.99	\$13.00	\$18.84	\$0.00	\$77.83
	09/01/2024	\$47.05	\$13.99	\$19.22	\$0.00	\$80.26
	09/07/2025	\$48.16	\$14.98	\$19.60	\$0.00	\$82.74
	09/06/2026	\$49.38	\$15.96	\$20.00	\$0.00	\$85.34
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$44.47	\$15.00	\$16.40	\$0.00	\$75.87
	06/01/2024	\$45.53	\$15.00	\$16.40	\$0.00	\$76.93
	12/01/2024	\$46.71	\$15.00	\$16.40	\$0.00	\$78.11
	06/01/2025	\$47.77	\$15.00	\$16.40	\$0.00	\$79.17
	12/01/2025	\$48.94	\$15.00	\$16.40	\$0.00	\$80.34
	06/01/2026	\$50.00	\$15.00	\$16.40	\$0.00	\$81.40
	12/01/2026	\$51.18	\$15.00	\$16.40	\$0.00	\$82.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$25.48	\$9.65	\$17.14	\$0.00	\$52.27
	06/01/2024	\$26.51	\$9.65	\$17.14	\$0.00	\$53.30
	12/01/2024	\$26.51	\$9.65	\$17.14	\$0.00	\$53.30
	06/01/2025	\$27.59	\$9.65	\$17.14	\$0.00	\$54.38
	12/01/2025	\$27.59	\$9.65	\$17.14	\$0.00	\$54.38
	06/01/2026	\$28.71	\$9.65	\$17.14	\$0.00	\$55.50
	12/01/2026	\$28.71	\$9.65	\$17.14	\$0.00	\$55.50
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
FLOORCOVERER <i>FLOORCOVERERS LOCAL 2168 ZONE II</i>	03/01/2024	\$49.47	\$8.83	\$20.27	\$0.00	\$78.57

Apprentice - FLOORCOVERER - Local 2168 Zone II

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.74	\$8.83	\$1.76	\$0.00	\$35.33
2	55	\$27.21	\$8.83	\$1.76	\$0.00	\$37.80
3	60	\$29.68	\$8.83	\$3.52	\$0.00	\$42.03
4	65	\$32.16	\$8.83	\$3.52	\$0.00	\$44.51
5	70	\$34.63	\$8.83	\$16.75	\$0.00	\$60.21
6	75	\$37.10	\$8.83	\$16.75	\$0.00	\$62.68
7	80	\$39.58	\$8.83	\$18.51	\$0.00	\$66.92
8	85	\$42.05	\$8.83	\$18.51	\$0.00	\$69.39

Notes: Steps are 750 hrs.
 % After 10/1/17; 45/45/55/55/70/70/80/80 (1500hr Steps)
 Step 1&2 \$32.63/ 3&4 \$39.28/ 5&6 \$59.86/ 7&8 \$66.52

Apprentice to Journeyworker Ratio:1:1

FORK LIFT/CHERRY PICKER <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$55.03	\$15.00	\$16.40	\$0.00	\$86.43
	06/01/2024	\$56.33	\$15.00	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.78	\$15.00	\$16.40	\$0.00	\$89.18
	06/01/2025	\$59.08	\$15.00	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.53	\$15.00	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.83	\$15.00	\$16.40	\$0.00	\$93.23
	12/01/2026	\$63.28	\$15.00	\$16.40	\$0.00	\$94.68

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$35.62	\$15.00	\$16.40	\$0.00	\$67.02
	06/01/2024	\$36.47	\$15.00	\$16.40	\$0.00	\$67.87
	12/01/2024	\$37.42	\$15.00	\$16.40	\$0.00	\$68.82
	06/01/2025	\$38.27	\$15.00	\$16.40	\$0.00	\$69.67
	12/01/2025	\$39.22	\$15.00	\$16.40	\$0.00	\$70.62
	06/01/2026	\$40.08	\$15.00	\$16.40	\$0.00	\$71.48
	12/01/2026	\$41.03	\$15.00	\$16.40	\$0.00	\$72.43

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) <i>GLAZIERS LOCAL 35 (ZONE 2)</i>	01/01/2024	\$45.56	\$9.95	\$23.95	\$0.00	\$79.46
	07/01/2024	\$46.76	\$9.95	\$23.95	\$0.00	\$80.66
	01/01/2025	\$47.96	\$9.95	\$23.95	\$0.00	\$81.86

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - GLAZIER - Local 35 Zone 2

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.78	\$9.95	\$0.00	\$0.00	\$32.73
2	55	\$25.06	\$9.95	\$6.66	\$0.00	\$41.67
3	60	\$27.34	\$9.95	\$7.26	\$0.00	\$44.55
4	65	\$29.61	\$9.95	\$7.87	\$0.00	\$47.43
5	70	\$31.89	\$9.95	\$20.32	\$0.00	\$62.16
6	75	\$34.17	\$9.95	\$20.93	\$0.00	\$65.05
7	80	\$36.45	\$9.95	\$21.53	\$0.00	\$67.93
8	90	\$41.00	\$9.95	\$22.74	\$0.00	\$73.69

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.38	\$9.95	\$0.00	\$0.00	\$33.33
2	55	\$25.72	\$9.95	\$6.66	\$0.00	\$42.33
3	60	\$28.06	\$9.95	\$7.26	\$0.00	\$45.27
4	65	\$30.39	\$9.95	\$7.87	\$0.00	\$48.21
5	70	\$32.73	\$9.95	\$20.32	\$0.00	\$63.00
6	75	\$35.07	\$9.95	\$20.93	\$0.00	\$65.95
7	80	\$37.41	\$9.95	\$21.53	\$0.00	\$68.89
8	90	\$42.08	\$9.95	\$22.74	\$0.00	\$74.77

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

HOISTING ENGINEER/CRANES/GRADALLS	12/01/2023	\$55.03	\$15.00	\$16.40	\$0.00	\$86.43
OPERATING ENGINEERS LOCAL 4	06/01/2024	\$56.33	\$15.00	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.78	\$15.00	\$16.40	\$0.00	\$89.18
	06/01/2025	\$59.08	\$15.00	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.53	\$15.00	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.83	\$15.00	\$16.40	\$0.00	\$93.23
	12/01/2026	\$63.28	\$15.00	\$16.40	\$0.00	\$94.68

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - OPERATING ENGINEERS - Local 4

Effective Date - 12/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$30.27	\$15.00	\$0.00	\$0.00	\$45.27
2	60	\$33.02	\$15.00	\$16.40	\$0.00	\$64.42
3	65	\$35.77	\$15.00	\$16.40	\$0.00	\$67.17
4	70	\$38.52	\$15.00	\$16.40	\$0.00	\$69.92
5	75	\$41.27	\$15.00	\$16.40	\$0.00	\$72.67
6	80	\$44.02	\$15.00	\$16.40	\$0.00	\$75.42
7	85	\$46.78	\$15.00	\$16.40	\$0.00	\$78.18
8	90	\$49.53	\$15.00	\$16.40	\$0.00	\$80.93

Effective Date - 06/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$30.98	\$15.00	\$0.00	\$0.00	\$45.98
2	60	\$33.80	\$15.00	\$16.40	\$0.00	\$65.20
3	65	\$36.61	\$15.00	\$16.40	\$0.00	\$68.01
4	70	\$39.43	\$15.00	\$16.40	\$0.00	\$70.83
5	75	\$42.25	\$15.00	\$16.40	\$0.00	\$73.65
6	80	\$45.06	\$15.00	\$16.40	\$0.00	\$76.46
7	85	\$47.88	\$15.00	\$16.40	\$0.00	\$79.28
8	90	\$50.70	\$15.00	\$16.40	\$0.00	\$82.10

Notes:

Apprentice to Journeyworker Ratio:1:6

HVAC (DUCTWORK) SHEETMETAL WORKERS LOCAL 63	01/01/2024	\$40.22	\$11.96	\$18.74	\$2.13	\$73.05
	07/01/2024	\$41.47	\$11.96	\$18.74	\$2.13	\$74.30
	01/01/2025	\$42.72	\$11.96	\$18.74	\$2.13	\$75.55

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS) ELECTRICIANS LOCAL 96	09/03/2023	\$45.99	\$13.00	\$18.84	\$0.00	\$77.83
	09/01/2024	\$47.05	\$13.99	\$19.22	\$0.00	\$80.26
	09/07/2025	\$48.16	\$14.98	\$19.60	\$0.00	\$82.74
	09/06/2026	\$49.38	\$15.96	\$20.00	\$0.00	\$85.34

For apprentice rates see "Apprentice- ELECTRICIAN"

HVAC (TESTING AND BALANCING - AIR) SHEETMETAL WORKERS LOCAL 63	01/01/2024	\$40.22	\$11.96	\$18.74	\$2.13	\$73.05
	07/01/2024	\$41.47	\$11.96	\$18.74	\$2.13	\$74.30
	01/01/2025	\$42.72	\$11.96	\$18.74	\$2.13	\$75.55

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (TESTING AND BALANCING -WATER) PLUMBERS LOCAL 4	03/01/2024	\$53.95	\$9.90	\$17.42	\$0.00	\$81.27
	09/01/2024	\$55.35	\$9.90	\$17.42	\$0.00	\$82.67
	03/01/2025	\$56.75	\$9.90	\$17.42	\$0.00	\$84.07
	09/01/2025	\$58.15	\$9.90	\$17.42	\$0.00	\$85.47
	03/01/2026	\$59.55	\$9.90	\$17.42	\$0.00	\$86.87

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC <i>PLUMBERS LOCAL 4</i>	03/01/2024	\$53.95	\$9.90	\$17.42	\$0.00	\$81.27
	09/01/2024	\$55.35	\$9.90	\$17.42	\$0.00	\$82.67
	03/01/2025	\$56.75	\$9.90	\$17.42	\$0.00	\$84.07
	09/01/2025	\$58.15	\$9.90	\$17.42	\$0.00	\$85.47
	03/01/2026	\$59.55	\$9.90	\$17.42	\$0.00	\$86.87
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
HYDRAULIC DRILLS (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
	06/01/2024	\$39.94	\$9.65	\$17.14	\$0.00	\$66.73
	12/01/2024	\$41.27	\$9.65	\$17.14	\$0.00	\$68.06
	06/01/2025	\$42.66	\$9.65	\$17.14	\$0.00	\$69.45
	12/01/2025	\$44.04	\$9.65	\$17.14	\$0.00	\$70.83
	06/01/2026	\$45.48	\$9.65	\$17.14	\$0.00	\$72.27
	12/01/2026	\$46.92	\$9.65	\$17.14	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
INSULATOR (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (WORCESTER)</i>	09/01/2023	\$48.15	\$14.75	\$19.61	\$0.00	\$82.51
	09/01/2024	\$51.23	\$14.75	\$19.61	\$0.00	\$85.59
	09/01/2025	\$54.31	\$14.75	\$19.61	\$0.00	\$88.67
	09/01/2026	\$57.38	\$14.75	\$19.61	\$0.00	\$91.74

Apprentice - ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Worcester

Effective Date - 09/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.08	\$14.75	\$14.32	\$0.00	\$53.15
2	60	\$28.89	\$14.75	\$15.37	\$0.00	\$59.01
3	70	\$33.71	\$14.75	\$16.43	\$0.00	\$64.89
4	80	\$38.52	\$14.75	\$17.49	\$0.00	\$70.76

Effective Date - 09/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.62	\$14.75	\$14.32	\$0.00	\$54.69
2	60	\$30.74	\$14.75	\$15.37	\$0.00	\$60.86
3	70	\$35.86	\$14.75	\$16.43	\$0.00	\$67.04
4	80	\$40.98	\$14.75	\$17.49	\$0.00	\$73.22

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

IRONWORKER/WELDER <i>IRONWORKERS LOCAL 7 (WORCESTER AREA)</i>	03/16/2024	\$53.67	\$8.35	\$26.70	\$0.00	\$88.72
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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - IRONWORKER - Local 7 Worcester

Effective Date - 03/16/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$32.20	\$8.35	\$26.70	\$0.00	\$67.25
2	70	\$37.57	\$8.35	\$26.70	\$0.00	\$72.62
3	75	\$40.25	\$8.35	\$26.70	\$0.00	\$75.30
4	80	\$42.94	\$8.35	\$26.70	\$0.00	\$77.99
5	85	\$45.62	\$8.35	\$26.70	\$0.00	\$80.67
6	90	\$48.30	\$8.35	\$26.70	\$0.00	\$83.35

Notes:

Apprentice to Journeyworker Ratio:1:4

JACKHAMMER & PAVING BREAKER OPERATOR LABORERS - ZONE 2	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
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For apprentice rates see "Apprentice- LABORER"

LABORER LABORERS - ZONE 2	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
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Apprentice - LABORER - Zone 2

Effective Date - 12/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$22.72	\$9.65	\$16.89	\$0.00	\$49.26
2	70	\$26.50	\$9.65	\$16.89	\$0.00	\$53.04
3	80	\$30.29	\$9.65	\$16.89	\$0.00	\$56.83
4	90	\$34.07	\$9.65	\$16.89	\$0.00	\$60.61

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER (HEAVY & HIGHWAY) LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
	06/01/2024	\$39.19	\$9.65	\$17.14	\$0.00	\$65.98
	12/01/2024	\$40.52	\$9.65	\$17.14	\$0.00	\$67.31
	06/01/2025	\$41.91	\$9.65	\$17.14	\$0.00	\$68.70
	12/01/2025	\$43.29	\$9.65	\$17.14	\$0.00	\$70.08
	06/01/2026	\$44.73	\$9.65	\$17.14	\$0.00	\$71.52
	12/01/2026	\$46.17	\$9.65	\$17.14	\$0.00	\$72.96

Apprentice - LABORER (Heavy & Highway) - Zone 2

Effective Date - 12/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$22.72	\$9.65	\$17.14	\$0.00	\$49.51
2	70	\$26.50	\$9.65	\$17.14	\$0.00	\$53.29
3	80	\$30.29	\$9.65	\$17.14	\$0.00	\$57.08
4	90	\$34.07	\$9.65	\$17.14	\$0.00	\$60.86

Effective Date - 06/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$23.51	\$9.00	\$16.89	\$0.00	\$49.40
2	70	\$27.43	\$9.00	\$16.89	\$0.00	\$53.32
3	80	\$31.35	\$9.00	\$16.89	\$0.00	\$57.24
4	90	\$35.27	\$9.00	\$16.89	\$0.00	\$61.16

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER: CARPENTER TENDER <i>LABORERS - ZONE 2</i>	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
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For apprentice rates see "Apprentice- LABORER"

LABORER: CEMENT FINISHER TENDER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.36	\$9.40	\$16.89	\$0.00	\$64.65
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For apprentice rates see "Apprentice- LABORER"

LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER <i>LABORERS - ZONE 2</i>	12/01/2023	\$37.95	\$9.65	\$17.20	\$0.00	\$64.80
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For apprentice rates see "Apprentice- LABORER"

LABORER: MASON TENDER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
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For apprentice rates see "Apprentice- LABORER"

LABORER: MASON TENDER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
	06/01/2024	\$39.44	\$9.65	\$17.14	\$0.00	\$66.23
	12/01/2024	\$40.77	\$9.65	\$17.14	\$0.00	\$67.56
	06/01/2025	\$42.16	\$9.65	\$17.14	\$0.00	\$68.95
	12/01/2025	\$43.54	\$9.65	\$17.14	\$0.00	\$70.33
	06/01/2026	\$44.98	\$9.65	\$17.14	\$0.00	\$71.77
	12/01/2026	\$46.42	\$9.65	\$17.14	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

LABORER: MULTI-TRADE TENDER <i>LABORERS - ZONE 2</i>	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
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For apprentice rates see "Apprentice- LABORER"

LABORER: TREE REMOVER <i>LABORERS - ZONE 2</i>	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
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This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"

LASER BEAM OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR (HEAVY & HIGHWAY) LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
	06/01/2024	\$39.44	\$9.65	\$17.14	\$0.00	\$66.23
	12/01/2024	\$40.77	\$9.65	\$17.14	\$0.00	\$67.56
	06/01/2025	\$42.16	\$9.65	\$17.14	\$0.00	\$68.95
	12/01/2025	\$43.54	\$9.65	\$17.14	\$0.00	\$70.33
	06/01/2026	\$44.98	\$9.65	\$17.14	\$0.00	\$71.77
	12/01/2026	\$46.42	\$9.65	\$17.14	\$0.00	\$73.21

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
MARBLE & TILE FINISHERS BRICKLAYERS LOCAL 3 - MARBLE & TILE	02/01/2024	\$47.89	\$11.49	\$21.37	\$0.00	\$80.75
	08/01/2024	\$49.57	\$11.49	\$21.37	\$0.00	\$82.43
	02/01/2025	\$50.61	\$11.49	\$21.37	\$0.00	\$83.47
	08/01/2025	\$52.33	\$11.49	\$21.37	\$0.00	\$85.19
	02/01/2026	\$53.41	\$11.49	\$21.37	\$0.00	\$86.27
	08/01/2026	\$55.17	\$11.49	\$21.37	\$0.00	\$88.03
	02/01/2027	\$56.29	\$11.49	\$21.37	\$0.00	\$89.15

Apprentice - MARBLE & TILE FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.95	\$11.49	\$21.37	\$0.00	\$56.81
2	60	\$28.73	\$11.49	\$21.37	\$0.00	\$61.59
3	70	\$33.52	\$11.49	\$21.37	\$0.00	\$66.38
4	80	\$38.31	\$11.49	\$21.37	\$0.00	\$71.17
5	90	\$43.10	\$11.49	\$21.37	\$0.00	\$75.96

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.79	\$11.49	\$21.37	\$0.00	\$57.65
2	60	\$29.74	\$11.49	\$21.37	\$0.00	\$62.60
3	70	\$34.70	\$11.49	\$21.37	\$0.00	\$67.56
4	80	\$39.66	\$11.49	\$21.37	\$0.00	\$72.52
5	90	\$44.61	\$11.49	\$21.37	\$0.00	\$77.47

Notes:

Apprentice to Journeyworker Ratio:1:3

MARBLE MASONS, TILELAYERS & TERRAZZO MECH BRICKLAYERS LOCAL 3 - MARBLE & TILE	02/01/2024	\$62.42	\$11.49	\$23.56	\$0.00	\$97.47
	08/01/2024	\$64.52	\$11.49	\$23.56	\$0.00	\$99.57
	02/01/2025	\$65.82	\$11.49	\$23.56	\$0.00	\$100.87
	08/01/2025	\$67.97	\$11.49	\$23.56	\$0.00	\$103.02
	02/01/2026	\$69.32	\$11.49	\$23.56	\$0.00	\$104.37
	08/01/2026	\$71.52	\$11.49	\$23.56	\$0.00	\$106.57
	02/01/2027	\$72.92	\$11.49	\$23.56	\$0.00	\$107.97

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - MARBLE-TILE-TERRAZZO MECHANIC - Local 3 Marble & Tile

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$31.21	\$11.49	\$23.56	\$0.00	\$66.26
2	60	\$37.45	\$11.49	\$23.56	\$0.00	\$72.50
3	70	\$43.69	\$11.49	\$23.56	\$0.00	\$78.74
4	80	\$49.94	\$11.49	\$23.56	\$0.00	\$84.99
5	90	\$56.18	\$11.49	\$23.56	\$0.00	\$91.23

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$32.26	\$11.49	\$23.56	\$0.00	\$67.31
2	60	\$38.71	\$11.49	\$23.56	\$0.00	\$73.76
3	70	\$45.16	\$11.49	\$23.56	\$0.00	\$80.21
4	80	\$51.62	\$11.49	\$23.56	\$0.00	\$86.67
5	90	\$58.07	\$11.49	\$23.56	\$0.00	\$93.12

Notes:

Apprentice to Journeyworker Ratio:1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MECHANICS MAINTENANCE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MILLWRIGHT (Zone 3) <i>MILLWRIGHTS LOCAL 1121 - Zone 3</i>	01/01/2024	\$41.20	\$10.08	\$21.22	\$0.00	\$72.50
	01/06/2025	\$43.48	\$10.08	\$21.22	\$0.00	\$74.78
	01/05/2026	\$45.76	\$10.08	\$21.22	\$0.00	\$77.06

Apprentice - MILLWRIGHT - Local 1121 Zone 3

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$22.66	\$10.08	\$5.36	\$0.00	\$38.10
2	65	\$26.78	\$10.08	\$6.34	\$0.00	\$43.20
3	75	\$30.90	\$10.08	\$18.78	\$0.00	\$59.76
4	85	\$35.02	\$10.08	\$19.76	\$0.00	\$64.86

Effective Date - 01/06/2025

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$23.91	\$10.08	\$5.36	\$0.00	\$39.35
2	65	\$28.26	\$10.08	\$6.34	\$0.00	\$44.68
3	75	\$32.61	\$10.08	\$18.78	\$0.00	\$61.47
4	85	\$36.96	\$10.08	\$19.76	\$0.00	\$66.80

Notes: Step 1&2 Appr. indentured after 1/6/2020 receive no pension, but do receive annuity. (Step 1 \$5.72, Step 2 \$6.66)
Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:4

MORTAR MIXER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
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For apprentice rates see "Apprentice- LABORER"

OILER (OTHER THAN TRUCK CRANES,GRADALLS) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$24.41	\$15.00	\$16.40	\$0.00	\$55.81
	06/01/2024	\$25.01	\$15.00	\$16.40	\$0.00	\$56.41
	12/01/2024	\$25.67	\$15.00	\$16.40	\$0.00	\$57.07
	06/01/2025	\$26.27	\$15.00	\$16.40	\$0.00	\$57.67
	12/01/2025	\$26.93	\$15.00	\$16.40	\$0.00	\$58.33
	06/01/2026	\$27.52	\$15.00	\$16.40	\$0.00	\$58.92
	12/01/2026	\$28.19	\$15.00	\$16.40	\$0.00	\$59.59

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OILER (TRUCK CRANES, GRADALLS) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$29.86	\$15.00	\$16.40	\$0.00	\$61.26
	06/01/2024	\$30.58	\$15.00	\$16.40	\$0.00	\$61.98
	12/01/2024	\$31.38	\$15.00	\$16.40	\$0.00	\$62.78
	06/01/2025	\$32.10	\$15.00	\$16.40	\$0.00	\$63.50
	12/01/2025	\$32.90	\$15.00	\$16.40	\$0.00	\$64.30
	06/01/2026	\$33.62	\$15.00	\$16.40	\$0.00	\$65.02
	12/01/2026	\$34.42	\$15.00	\$16.40	\$0.00	\$65.82

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OTHER POWER DRIVEN EQUIPMENT - CLASS II <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PAINTER (BRIDGES/TANKS) <i>PAINTERS LOCAL 35 - ZONE 2</i>	01/01/2024	\$56.06	\$9.95	\$23.95	\$0.00	\$89.96
	07/01/2024	\$57.26	\$9.95	\$23.95	\$0.00	\$91.16
	01/01/2025	\$58.46	\$9.95	\$23.95	\$0.00	\$92.36

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.03	\$9.95	\$0.00	\$0.00	\$37.98
2	55	\$30.83	\$9.95	\$6.66	\$0.00	\$47.44
3	60	\$33.64	\$9.95	\$7.26	\$0.00	\$50.85
4	65	\$36.44	\$9.95	\$7.87	\$0.00	\$54.26
5	70	\$39.24	\$9.95	\$20.32	\$0.00	\$69.51
6	75	\$42.05	\$9.95	\$20.93	\$0.00	\$72.93
7	80	\$44.85	\$9.95	\$21.53	\$0.00	\$76.33
8	90	\$50.45	\$9.95	\$22.74	\$0.00	\$83.14

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.63	\$9.95	\$0.00	\$0.00	\$38.58
2	55	\$31.49	\$9.95	\$6.66	\$0.00	\$48.10
3	60	\$34.36	\$9.95	\$7.26	\$0.00	\$51.57
4	65	\$37.22	\$9.95	\$7.87	\$0.00	\$55.04
5	70	\$40.08	\$9.95	\$20.32	\$0.00	\$70.35
6	75	\$42.95	\$9.95	\$20.93	\$0.00	\$73.83
7	80	\$45.81	\$9.95	\$21.53	\$0.00	\$77.29
8	90	\$51.53	\$9.95	\$22.74	\$0.00	\$84.22

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	01/01/2024	\$46.96	\$9.95	\$23.95	\$0.00	\$80.86
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2024	\$48.16	\$9.95	\$23.95	\$0.00	\$82.06
	01/01/2025	\$49.36	\$9.95	\$23.95	\$0.00	\$83.26

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - New

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.48	\$9.95	\$0.00	\$0.00	\$33.43
2	55	\$25.83	\$9.95	\$6.66	\$0.00	\$42.44
3	60	\$28.18	\$9.95	\$7.26	\$0.00	\$45.39
4	65	\$30.52	\$9.95	\$7.87	\$0.00	\$48.34
5	70	\$32.87	\$9.95	\$20.32	\$0.00	\$63.14
6	75	\$35.22	\$9.95	\$20.93	\$0.00	\$66.10
7	80	\$37.57	\$9.95	\$21.53	\$0.00	\$69.05
8	90	\$42.26	\$9.95	\$22.74	\$0.00	\$74.95

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.08	\$9.95	\$0.00	\$0.00	\$34.03
2	55	\$26.49	\$9.95	\$6.66	\$0.00	\$43.10
3	60	\$28.90	\$9.95	\$7.26	\$0.00	\$46.11
4	65	\$31.30	\$9.95	\$7.87	\$0.00	\$49.12
5	70	\$33.71	\$9.95	\$20.32	\$0.00	\$63.98
6	75	\$36.12	\$9.95	\$20.93	\$0.00	\$67.00
7	80	\$38.53	\$9.95	\$21.53	\$0.00	\$70.01
8	90	\$43.34	\$9.95	\$22.74	\$0.00	\$76.03

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT)	01/01/2024	\$45.02	\$9.95	\$23.95	\$0.00	\$78.92
PAINTERS LOCAL 35 - ZONE 2	07/01/2024	\$46.22	\$9.95	\$23.95	\$0.00	\$80.12
	01/01/2025	\$47.42	\$9.95	\$23.95	\$0.00	\$81.32

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - Repaint

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.51	\$9.95	\$0.00	\$0.00	\$32.46
2	55	\$24.76	\$9.95	\$6.66	\$0.00	\$41.37
3	60	\$27.01	\$9.95	\$7.26	\$0.00	\$44.22
4	65	\$29.26	\$9.95	\$7.87	\$0.00	\$47.08
5	70	\$31.51	\$9.95	\$20.32	\$0.00	\$61.78
6	75	\$33.77	\$9.95	\$20.93	\$0.00	\$64.65
7	80	\$36.02	\$9.95	\$21.53	\$0.00	\$67.50
8	90	\$40.52	\$9.95	\$22.74	\$0.00	\$73.21

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.11	\$9.95	\$0.00	\$0.00	\$33.06
2	55	\$25.42	\$9.95	\$6.66	\$0.00	\$42.03
3	60	\$27.73	\$9.95	\$7.26	\$0.00	\$44.94
4	65	\$30.04	\$9.95	\$7.87	\$0.00	\$47.86
5	70	\$32.35	\$9.95	\$20.32	\$0.00	\$62.62
6	75	\$34.67	\$9.95	\$20.93	\$0.00	\$65.55
7	80	\$36.98	\$9.95	\$21.53	\$0.00	\$68.46
8	90	\$41.60	\$9.95	\$22.74	\$0.00	\$74.29

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, NEW) *	01/01/2024	\$45.56	\$9.95	\$23.95	\$0.00	\$79.46
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2024	\$46.76	\$9.95	\$23.95	\$0.00	\$80.66
	01/01/2025	\$47.96	\$9.95	\$23.95	\$0.00	\$81.86

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER - Local 35 Zone 2 - BRUSH NEW

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.78	\$9.95	\$0.00	\$0.00	\$32.73
2	55	\$25.06	\$9.95	\$6.66	\$0.00	\$41.67
3	60	\$27.34	\$9.95	\$7.26	\$0.00	\$44.55
4	65	\$29.61	\$9.95	\$7.87	\$0.00	\$47.43
5	70	\$31.89	\$9.95	\$20.32	\$0.00	\$62.16
6	75	\$34.17	\$9.95	\$20.93	\$0.00	\$65.05
7	80	\$36.45	\$9.95	\$21.53	\$0.00	\$67.93
8	90	\$41.00	\$9.95	\$22.74	\$0.00	\$73.69

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.38	\$9.95	\$0.00	\$0.00	\$33.33
2	55	\$25.72	\$9.95	\$6.66	\$0.00	\$42.33
3	60	\$28.06	\$9.95	\$7.26	\$0.00	\$45.27
4	65	\$30.39	\$9.95	\$7.87	\$0.00	\$48.21
5	70	\$32.73	\$9.95	\$20.32	\$0.00	\$63.00
6	75	\$35.07	\$9.95	\$20.93	\$0.00	\$65.95
7	80	\$37.41	\$9.95	\$21.53	\$0.00	\$68.89
8	90	\$42.08	\$9.95	\$22.74	\$0.00	\$74.77

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, REPAINT)	01/01/2024	\$43.62	\$9.95	\$23.95	\$0.00	\$77.52
PAINTERS LOCAL 35 - ZONE 2	07/01/2024	\$44.82	\$9.95	\$23.95	\$0.00	\$78.72
	01/01/2025	\$46.02	\$9.95	\$23.95	\$0.00	\$79.92

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - BRUSH REPAINT

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.81	\$9.95	\$0.00	\$0.00	\$31.76
2	55	\$23.99	\$9.95	\$6.66	\$0.00	\$40.60
3	60	\$26.17	\$9.95	\$7.26	\$0.00	\$43.38
4	65	\$28.35	\$9.95	\$7.87	\$0.00	\$46.17
5	70	\$30.53	\$9.95	\$20.32	\$0.00	\$60.80
6	75	\$32.72	\$9.95	\$20.93	\$0.00	\$63.60
7	80	\$34.90	\$9.95	\$21.53	\$0.00	\$66.38
8	90	\$39.26	\$9.95	\$22.74	\$0.00	\$71.95

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.41	\$9.95	\$0.00	\$0.00	\$32.36
2	55	\$24.65	\$9.95	\$6.66	\$0.00	\$41.26
3	60	\$26.89	\$9.95	\$7.26	\$0.00	\$44.10
4	65	\$29.13	\$9.95	\$7.87	\$0.00	\$46.95
5	70	\$31.37	\$9.95	\$20.32	\$0.00	\$61.64
6	75	\$33.62	\$9.95	\$20.93	\$0.00	\$64.50
7	80	\$35.86	\$9.95	\$21.53	\$0.00	\$67.34
8	90	\$40.34	\$9.95	\$22.74	\$0.00	\$73.03

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	06/01/2024	\$39.19	\$9.65	\$17.14	\$0.00	\$65.98
	12/01/2024	\$40.52	\$9.65	\$17.14	\$0.00	\$67.31
	06/01/2025	\$41.91	\$9.65	\$17.14	\$0.00	\$68.70
	12/01/2025	\$43.29	\$9.65	\$17.14	\$0.00	\$70.08
	06/01/2026	\$44.73	\$9.65	\$17.14	\$0.00	\$71.52
	12/01/2026	\$46.17	\$9.65	\$17.14	\$0.00	\$72.96

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)

PANEL & PICKUP TRUCKS DRIVER	01/01/2024	\$38.78	\$15.07	\$18.67	\$0.00	\$72.52
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	06/01/2024	\$39.78	\$15.07	\$18.67	\$0.00	\$73.52
	12/01/2024	\$39.78	\$15.07	\$20.17	\$0.00	\$75.02
	01/01/2025	\$39.78	\$15.57	\$20.17	\$0.00	\$75.52
	06/01/2025	\$40.78	\$15.57	\$20.17	\$0.00	\$76.52
	12/01/2025	\$40.78	\$15.57	\$21.78	\$0.00	\$78.13
	01/01/2026	\$40.78	\$16.17	\$21.78	\$0.00	\$78.73
	06/01/2026	\$41.78	\$16.17	\$21.78	\$0.00	\$79.73
	12/01/2026	\$41.78	\$16.17	\$23.52	\$0.00	\$81.47
	01/01/2027	\$41.78	\$16.77	\$23.52	\$0.00	\$82.07

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) <i>PILE DRIVER LOCAL 56 (ZONE 2)</i> For apprentice rates see "Apprentice- PILE DRIVER"	08/01/2020	\$46.11	\$9.40	\$23.12	\$0.00	\$78.63
PILE DRIVER <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2020	\$46.11	\$9.40	\$23.12	\$0.00	\$78.63

Apprentice - PILE DRIVER - Local 56 Zone 2

Effective Date - 08/01/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Notes: Apprentice wages shall be no less than the following Steps;

(Same as set in Zone 1)

1\$57.06/2\$61.96/3\$66.87/4\$69.32/5\$71.78/6\$71.78/7\$76.68/8\$76.68

Apprentice to Journeyworker Ratio:1:5

PIPELAYER <i>LABORERS - ZONE 2</i> For apprentice rates see "Apprentice- LABORER"	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
PIPELAYER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
	06/01/2024	\$39.44	\$9.65	\$17.14	\$0.00	\$66.23
	12/01/2024	\$40.77	\$9.65	\$17.14	\$0.00	\$67.56
	06/01/2025	\$42.16	\$9.65	\$17.14	\$0.00	\$68.95
	12/01/2025	\$43.54	\$9.65	\$17.14	\$0.00	\$70.33
	06/01/2026	\$44.98	\$9.65	\$17.14	\$0.00	\$71.77
	12/01/2026	\$46.42	\$9.65	\$17.14	\$0.00	\$73.21
	For apprentice rates see "Apprentice- LABORER (Heavy and Highway)					
PLUMBER & PIPEFITTER <i>PLUMBERS LOCAL 4</i>	03/01/2024	\$53.95	\$9.90	\$17.42	\$0.00	\$81.27
	09/01/2024	\$55.35	\$9.90	\$17.42	\$0.00	\$82.67
	03/01/2025	\$56.75	\$9.90	\$17.42	\$0.00	\$84.07
	09/01/2025	\$58.15	\$9.90	\$17.42	\$0.00	\$85.47
	03/01/2026	\$59.55	\$9.90	\$17.42	\$0.00	\$86.87

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PLUMBER/PIPEFITTER - Local 4

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$21.58	\$9.90	\$0.00	\$0.00	\$31.48
2	50	\$26.98	\$9.90	\$0.00	\$0.00	\$36.88
3	60	\$32.37	\$9.90	\$0.00	\$0.00	\$42.27
4	70	\$37.77	\$9.90	\$7.71	\$0.00	\$55.38
5	80	\$43.16	\$9.90	\$7.71	\$0.00	\$60.77

Effective Date - 09/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$22.14	\$9.90	\$0.00	\$0.00	\$32.04
2	50	\$27.68	\$9.90	\$0.00	\$0.00	\$37.58
3	60	\$33.21	\$9.90	\$0.00	\$0.00	\$43.11
4	70	\$38.75	\$9.90	\$7.71	\$0.00	\$56.36
5	80	\$44.28	\$9.90	\$7.71	\$0.00	\$61.89

Notes:

Steps - 2000 hrs; Step 4 w/lic 75%, Step 5 w/lic 85%
 Step 4 w/lic \$52.59, Step 5 w/lic \$57.44

Apprentice to Journeyworker Ratio:1:3

PNEUMATIC CONTROLS (TEMP.) <i>PLUMBERS LOCAL 4</i>	03/01/2024	\$53.95	\$9.90	\$17.42	\$0.00	\$81.27
	09/01/2024	\$55.35	\$9.90	\$17.42	\$0.00	\$82.67
	03/01/2025	\$56.75	\$9.90	\$17.42	\$0.00	\$84.07
	09/01/2025	\$58.15	\$9.90	\$17.42	\$0.00	\$85.47
	03/01/2026	\$59.55	\$9.90	\$17.42	\$0.00	\$86.87

For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

PNEUMATIC DRILL/TOOL OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
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For apprentice rates see "Apprentice- LABORER"

PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
	06/01/2024	\$39.44	\$9.65	\$17.14	\$0.00	\$66.23
	12/01/2024	\$40.77	\$9.65	\$17.14	\$0.00	\$67.56
	06/01/2025	\$42.16	\$9.65	\$17.14	\$0.00	\$68.95
	12/01/2025	\$43.54	\$9.65	\$17.14	\$0.00	\$70.33
	06/01/2026	\$44.98	\$9.65	\$17.14	\$0.00	\$71.77
	12/01/2026	\$46.42	\$9.65	\$17.14	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

POWDERMAN & BLASTER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.86	\$9.65	\$17.14	\$0.00	\$65.65
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For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
POWDERMAN & BLASTER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$39.36	\$9.40	\$16.89	\$0.00	\$65.65
	06/01/2024	\$40.69	\$9.40	\$16.89	\$0.00	\$66.98
	12/01/2024	\$42.02	\$9.40	\$16.89	\$0.00	\$68.31
	06/01/2025	\$43.41	\$9.40	\$16.89	\$0.00	\$69.70
	12/01/2025	\$44.79	\$9.40	\$16.89	\$0.00	\$71.08
	06/01/2026	\$46.23	\$9.40	\$16.89	\$0.00	\$72.52
	12/01/2026	\$47.67	\$9.40	\$16.89	\$0.00	\$73.96
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
POWER SHOVEL/DERRICK/TRENCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$55.03	\$15.00	\$16.40	\$0.00	\$86.43
	06/01/2024	\$56.33	\$15.00	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.78	\$15.00	\$16.40	\$0.00	\$89.18
	06/01/2025	\$59.08	\$15.00	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.53	\$15.00	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.83	\$15.00	\$16.40	\$0.00	\$93.23
	12/01/2026	\$63.28	\$15.00	\$16.40	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$35.62	\$15.00	\$16.40	\$0.00	\$67.02
	06/01/2024	\$36.47	\$15.00	\$16.40	\$0.00	\$67.87
	12/01/2024	\$37.42	\$15.00	\$16.40	\$0.00	\$68.82
	06/01/2025	\$38.27	\$15.00	\$16.40	\$0.00	\$69.67
	12/01/2025	\$39.22	\$15.00	\$16.40	\$0.00	\$70.62
	06/01/2026	\$40.08	\$15.00	\$16.40	\$0.00	\$71.48
	12/01/2026	\$41.03	\$15.00	\$16.40	\$0.00	\$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY-MIX CONCRETE DRIVER <i>TEAMSTERS 170 - Dauphinais (Bellingham)</i>	01/01/2024	\$27.00	\$10.76	\$5.45	\$0.00	\$43.21
	12/01/2024	\$27.60	\$11.26	\$6.15	\$0.00	\$45.01
	01/01/2025	\$27.60	\$11.26	\$6.15	\$0.00	\$45.01
RECLAIMERS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RIDE-ON MOTORIZED BUGGY OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
ROLLER/SPREADER/MULCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

ROOFER (Inc.Roofing &Roofing Damproofg) <i>ROOFERS LOCAL 33</i>	02/01/2024	\$50.03	\$12.78	\$21.45	\$0.00	\$84.26
	08/01/2024	\$51.53	\$12.78	\$21.45	\$0.00	\$85.76
	02/01/2025	\$52.78	\$12.78	\$21.45	\$0.00	\$87.01
	08/01/2025	\$54.28	\$12.78	\$21.45	\$0.00	\$88.51
	02/01/2026	\$55.53	\$12.78	\$21.45	\$0.00	\$89.76

Apprentice - ROOFER - Local 33

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.02	\$12.78	\$6.21	\$0.00	\$44.01
2	60	\$30.02	\$12.78	\$21.45	\$0.00	\$64.25
3	65	\$32.52	\$12.78	\$21.45	\$0.00	\$66.75
4	75	\$37.52	\$12.78	\$21.45	\$0.00	\$71.75
5	85	\$42.53	\$12.78	\$21.45	\$0.00	\$76.76

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.77	\$12.78	\$6.21	\$0.00	\$44.76
2	60	\$30.92	\$12.78	\$21.45	\$0.00	\$65.15
3	65	\$33.49	\$12.78	\$21.45	\$0.00	\$67.72
4	75	\$38.65	\$12.78	\$21.45	\$0.00	\$72.88
5	85	\$43.80	\$12.78	\$21.45	\$0.00	\$78.03

Notes: ** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1
 Step 1 is 2000 hrs.; Steps 2-5 are 1000 hrs.
 (Hot Pitch Mechanics' receive \$1.00 hr. above ROOFER)

Apprentice to Journeyworker Ratio:**

ROOFER SLATE / TILE / PRECAST CONCRETE <i>ROOFERS LOCAL 33</i>	02/01/2024	\$50.28	\$12.78	\$21.45	\$0.00	\$84.51
	08/01/2024	\$51.78	\$12.78	\$21.45	\$0.00	\$86.01
	02/01/2025	\$53.03	\$12.78	\$21.45	\$0.00	\$87.26
	08/01/2025	\$54.53	\$12.78	\$21.45	\$0.00	\$88.76
	02/01/2026	\$55.78	\$12.78	\$21.45	\$0.00	\$90.01

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER <i>SHEETMETAL WORKERS LOCAL 63</i>	01/01/2024	\$40.22	\$11.96	\$18.74	\$2.13	\$73.05
	07/01/2024	\$41.47	\$11.96	\$18.74	\$2.13	\$74.30
	01/01/2025	\$42.72	\$11.96	\$18.74	\$2.13	\$75.55

Apprentice - SHEET METAL WORKER - Local 63

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$18.10	\$5.38	\$4.86	\$0.85	\$29.19
2	50	\$20.11	\$5.98	\$5.40	\$0.94	\$32.43
3	55	\$22.12	\$6.58	\$9.71	\$1.15	\$39.56
4	60	\$24.13	\$7.18	\$9.71	\$1.23	\$42.25
5	65	\$26.14	\$7.77	\$9.71	\$1.31	\$44.93
6	70	\$28.15	\$8.37	\$9.71	\$1.39	\$47.62
7	75	\$30.17	\$8.97	\$9.71	\$1.47	\$50.32
8	80	\$32.18	\$9.57	\$17.66	\$1.78	\$61.19
9	85	\$34.19	\$10.17	\$17.66	\$1.86	\$63.88
10	90	\$36.20	\$10.76	\$17.66	\$1.94	\$66.56

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$18.66	\$5.38	\$4.86	\$0.85	\$29.75
2	50	\$20.74	\$5.98	\$5.40	\$0.94	\$33.06
3	55	\$22.81	\$6.58	\$9.71	\$1.15	\$40.25
4	60	\$24.88	\$7.18	\$9.71	\$1.23	\$43.00
5	65	\$26.96	\$7.77	\$9.71	\$1.31	\$45.75
6	70	\$29.03	\$8.37	\$9.71	\$1.39	\$48.50
7	75	\$31.10	\$8.97	\$9.71	\$1.47	\$51.25
8	80	\$33.18	\$9.57	\$17.66	\$1.78	\$62.19
9	85	\$35.25	\$10.17	\$17.66	\$1.86	\$64.94
10	90	\$37.32	\$10.76	\$17.66	\$1.94	\$67.68

Notes:

Apprentice to Journeyworker Ratio:1:3

SPECIALIZED EARTH MOVING EQUIP < 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	01/01/2024	\$39.24	\$15.07	\$18.67	\$0.00	\$72.98
	06/01/2024	\$40.24	\$15.07	\$18.67	\$0.00	\$73.98
	12/01/2024	\$40.24	\$15.07	\$20.17	\$0.00	\$75.48
	01/01/2025	\$40.24	\$15.57	\$20.17	\$0.00	\$75.98
	06/01/2025	\$41.24	\$15.57	\$20.17	\$0.00	\$76.98
	12/01/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$78.59
	01/01/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$79.19
	06/01/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$80.19
	12/01/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$81.93
	01/01/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$82.53

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SPECIALIZED EARTH MOVING EQUIP > 35 TONS <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$39.53	\$15.07	\$18.67	\$0.00	\$73.27
	06/01/2024	\$40.53	\$15.07	\$18.67	\$0.00	\$74.27
	12/01/2024	\$40.53	\$15.07	\$20.17	\$0.00	\$75.77
	01/01/2025	\$40.53	\$15.57	\$20.17	\$0.00	\$76.27
	06/01/2025	\$41.53	\$15.57	\$20.17	\$0.00	\$77.27
	12/01/2025	\$41.53	\$15.57	\$21.78	\$0.00	\$78.88
	01/01/2026	\$41.53	\$16.17	\$21.78	\$0.00	\$79.48
	06/01/2026	\$42.53	\$16.17	\$21.78	\$0.00	\$80.48
	12/01/2026	\$42.53	\$16.17	\$23.52	\$0.00	\$82.22
	01/01/2027	\$42.53	\$16.77	\$23.52	\$0.00	\$82.82
SPRINKLER FITTER <i>SPRINKLER FITTERS LOCAL 669</i>	04/01/2023	\$47.43	\$11.45	\$16.61	\$0.00	\$75.49

Apprentice - SPRINKLER FITTER - Local 669

Effective Date - 04/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$21.34	\$8.22	\$0.00	\$0.00	\$29.56
2	50	\$23.72	\$8.22	\$0.00	\$0.00	\$31.94
3	55	\$26.09	\$11.45	\$7.20	\$0.00	\$44.74
4	60	\$28.46	\$11.45	\$8.35	\$0.00	\$48.26
5	65	\$30.83	\$11.45	\$8.35	\$0.00	\$50.63
6	70	\$33.20	\$11.45	\$8.60	\$0.00	\$53.25
7	75	\$35.57	\$11.45	\$8.60	\$0.00	\$55.62
8	80	\$37.94	\$11.45	\$8.60	\$0.00	\$57.99
9	85	\$40.32	\$11.45	\$8.60	\$0.00	\$60.37
10	90	\$42.69	\$11.45	\$8.60	\$0.00	\$62.74

Notes:

Apprentice to Journeyworker Ratio:1:1

STEAM BOILER OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TERRAZZO FINISHERS BRICKLAYERS LOCAL 3 - MARBLE & TILE	02/01/2024	\$61.34	\$11.49	\$23.59	\$0.00	\$96.42
	08/01/2024	\$63.44	\$11.49	\$23.59	\$0.00	\$98.52
	02/01/2025	\$64.74	\$11.49	\$23.59	\$0.00	\$99.82
	08/01/2025	\$66.89	\$11.49	\$23.59	\$0.00	\$101.97
	02/01/2026	\$68.24	\$11.49	\$23.59	\$0.00	\$103.32
	08/01/2026	\$70.44	\$11.49	\$23.59	\$0.00	\$105.52
	02/01/2027	\$71.84	\$11.49	\$23.59	\$0.00	\$106.92

Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$30.67	\$11.49	\$23.59	\$0.00	\$65.75
2	60	\$36.80	\$11.49	\$23.59	\$0.00	\$71.88
3	70	\$42.94	\$11.49	\$23.59	\$0.00	\$78.02
4	80	\$49.07	\$11.49	\$23.59	\$0.00	\$84.15
5	90	\$55.21	\$11.49	\$23.59	\$0.00	\$90.29

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$31.72	\$11.49	\$23.59	\$0.00	\$66.80
2	60	\$38.06	\$11.49	\$23.59	\$0.00	\$73.14
3	70	\$44.41	\$11.49	\$23.59	\$0.00	\$79.49
4	80	\$50.75	\$11.49	\$23.59	\$0.00	\$85.83
5	90	\$57.10	\$11.49	\$23.59	\$0.00	\$92.18

Notes:

Apprentice to Journeyworker Ratio:1:3

TEST BORING DRILLER LABORERS - FOUNDATION AND MARINE	12/01/2023	\$48.33	\$9.65	\$18.22	\$0.00	\$76.20
	06/01/2024	\$49.81	\$9.65	\$18.22	\$0.00	\$77.68
	12/01/2024	\$51.28	\$9.65	\$18.22	\$0.00	\$79.15
	06/01/2025	\$52.78	\$9.65	\$18.22	\$0.00	\$80.65
	12/01/2025	\$54.28	\$9.65	\$18.22	\$0.00	\$82.15
	06/01/2026	\$55.83	\$9.65	\$18.22	\$0.00	\$83.70
	12/01/2026	\$57.33	\$9.65	\$18.22	\$0.00	\$85.20

For apprentice rates see "Apprentice- LABORER"

TEST BORING DRILLER HELPER LABORERS - FOUNDATION AND MARINE	12/01/2023	\$44.45	\$9.65	\$18.22	\$0.00	\$72.32
	06/01/2024	\$45.93	\$9.65	\$18.22	\$0.00	\$73.80
	12/01/2024	\$47.40	\$9.65	\$18.22	\$0.00	\$75.27
	06/01/2025	\$48.90	\$9.65	\$18.22	\$0.00	\$76.77
	12/01/2025	\$50.40	\$9.65	\$18.22	\$0.00	\$78.27
	06/01/2026	\$51.95	\$9.65	\$18.22	\$0.00	\$79.82
	12/01/2026	\$53.45	\$9.65	\$18.22	\$0.00	\$81.32

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TEST BORING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2023	\$44.33	\$9.65	\$18.22	\$0.00	\$72.20
	06/01/2024	\$45.81	\$9.65	\$18.22	\$0.00	\$73.68
	12/01/2024	\$47.28	\$9.65	\$18.22	\$0.00	\$75.15
	06/01/2025	\$48.78	\$9.65	\$18.22	\$0.00	\$76.65
	12/01/2025	\$50.28	\$9.65	\$18.22	\$0.00	\$78.15
	06/01/2026	\$51.83	\$9.65	\$18.22	\$0.00	\$79.70
	12/01/2026	\$53.33	\$9.65	\$18.22	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"						
TRACTORS/PORTABLE STEAM GENERATORS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$39.82	\$15.07	\$18.67	\$0.00	\$73.56
	06/01/2024	\$40.82	\$15.07	\$18.67	\$0.00	\$74.56
	12/01/2024	\$40.82	\$15.07	\$20.17	\$0.00	\$76.06
	01/01/2025	\$40.82	\$15.57	\$20.17	\$0.00	\$76.56
	06/01/2025	\$41.82	\$15.57	\$20.17	\$0.00	\$77.56
	12/01/2025	\$41.82	\$15.57	\$21.78	\$0.00	\$79.17
	01/01/2026	\$41.82	\$16.17	\$21.78	\$0.00	\$79.77
	06/01/2026	\$42.82	\$16.17	\$21.78	\$0.00	\$80.77
	12/01/2026	\$42.82	\$16.17	\$23.52	\$0.00	\$82.51
	01/01/2027	\$42.82	\$16.77	\$23.52	\$0.00	\$83.11
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	12/01/2023	\$56.56	\$9.65	\$18.67	\$0.00	\$84.88
	06/01/2024	\$58.04	\$9.65	\$18.67	\$0.00	\$86.36
	12/01/2024	\$59.51	\$9.65	\$18.67	\$0.00	\$87.83
	06/01/2025	\$61.01	\$9.65	\$18.67	\$0.00	\$89.33
	12/01/2025	\$62.51	\$9.65	\$18.67	\$0.00	\$90.83
	06/01/2026	\$64.06	\$9.65	\$18.67	\$0.00	\$92.38
	12/01/2026	\$65.56	\$9.65	\$18.67	\$0.00	\$93.88
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	12/01/2023	\$58.56	\$9.65	\$18.67	\$0.00	\$86.88
	06/01/2024	\$60.04	\$9.65	\$18.67	\$0.00	\$88.36
	12/01/2024	\$61.51	\$9.65	\$18.67	\$0.00	\$89.83
	06/01/2025	\$63.01	\$9.65	\$18.67	\$0.00	\$91.33
	12/01/2025	\$64.51	\$9.65	\$18.67	\$0.00	\$92.83
	06/01/2026	\$66.06	\$9.65	\$18.67	\$0.00	\$94.38
	12/01/2026	\$67.56	\$9.65	\$18.67	\$0.00	\$95.88
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	12/01/2023	\$48.63	\$9.65	\$18.67	\$0.00	\$76.95
	06/01/2024	\$50.11	\$9.65	\$18.67	\$0.00	\$78.43
	12/01/2024	\$51.58	\$9.65	\$18.67	\$0.00	\$79.90
	06/01/2025	\$53.08	\$9.65	\$18.67	\$0.00	\$81.40
	12/01/2025	\$54.58	\$9.65	\$18.67	\$0.00	\$82.90
	06/01/2026	\$56.13	\$9.65	\$18.67	\$0.00	\$84.45
	12/01/2026	\$57.63	\$9.65	\$18.67	\$0.00	\$85.95
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	12/01/2023	\$50.63	\$9.65	\$18.67	\$0.00	\$78.95
	06/01/2024	\$52.11	\$9.65	\$18.67	\$0.00	\$80.43
	12/01/2024	\$53.58	\$9.65	\$18.67	\$0.00	\$81.90
	06/01/2025	\$55.08	\$9.65	\$18.67	\$0.00	\$83.40
	12/01/2025	\$56.58	\$9.65	\$18.67	\$0.00	\$84.90
	06/01/2026	\$58.13	\$9.65	\$18.67	\$0.00	\$86.45
	12/01/2026	\$59.63	\$9.65	\$18.67	\$0.00	\$87.95
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$39.24	\$15.07	\$18.67	\$0.00	\$72.98
	06/01/2024	\$40.24	\$15.07	\$18.67	\$0.00	\$73.98
	12/01/2024	\$40.24	\$15.07	\$20.17	\$0.00	\$75.48
	01/01/2025	\$40.24	\$15.57	\$20.17	\$0.00	\$75.98
	06/01/2025	\$41.24	\$15.57	\$20.17	\$0.00	\$76.98
	12/01/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$78.59
	01/01/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$79.19
	06/01/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$80.19
	12/01/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$81.93
01/01/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$82.53	
VOICE-DATA-VIDEO TECHNICIAN <i>ELECTRICIANS LOCAL 96</i>	09/03/2023	\$34.49	\$13.00	\$17.22	\$0.00	\$64.71
	09/01/2024	\$35.29	\$13.99	\$17.57	\$0.00	\$66.85
	09/07/2025	\$36.12	\$14.98	\$17.91	\$0.00	\$69.01
	09/06/2026	\$37.04	\$15.96	\$18.27	\$0.00	\$71.27

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - VOICE-DATA-VIDEO TECHNICIAN - Local 96

Effective Date - 09/03/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.25	\$13.00	\$4.31	\$0.00	\$34.56
2	55	\$18.97	\$13.00	\$4.36	\$0.00	\$36.33
3	60	\$20.69	\$13.00	\$16.81	\$0.00	\$50.50
4	65	\$22.42	\$13.00	\$16.86	\$0.00	\$52.28
5	70	\$24.14	\$13.00	\$16.91	\$0.00	\$54.05
6	75	\$25.87	\$13.00	\$16.97	\$0.00	\$55.84
7	80	\$27.59	\$13.00	\$17.02	\$0.00	\$57.61
8	85	\$29.32	\$13.00	\$17.07	\$0.00	\$59.39

Effective Date - 09/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.65	\$13.99	\$4.41	\$0.00	\$36.05
2	55	\$19.41	\$13.99	\$4.46	\$0.00	\$37.86
3	60	\$21.17	\$13.99	\$17.15	\$0.00	\$52.31
4	65	\$22.94	\$13.99	\$17.20	\$0.00	\$54.13
5	70	\$24.70	\$13.99	\$17.25	\$0.00	\$55.94
6	75	\$26.47	\$13.99	\$17.30	\$0.00	\$57.76
7	80	\$28.23	\$13.99	\$17.36	\$0.00	\$59.58
8	85	\$30.00	\$13.99	\$17.41	\$0.00	\$61.40

Notes:

Apprentice to Journeyworker Ratio:1:1

WAGON DRILL OPERATOR LABORERS - ZONE 2	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
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For apprentice rates see "Apprentice- LABORER"

WAGON DRILL OPERATOR (HEAVY & HIGHWAY) LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
	06/01/2024	\$39.44	\$9.65	\$17.14	\$0.00	\$66.23
	12/01/2024	\$40.77	\$9.65	\$17.14	\$0.00	\$67.56
	06/01/2025	\$42.16	\$9.65	\$17.14	\$0.00	\$68.95
	12/01/2025	\$43.54	\$9.65	\$17.14	\$0.00	\$70.33
	06/01/2026	\$44.98	\$9.65	\$17.14	\$0.00	\$71.77
	12/01/2026	\$46.42	\$9.65	\$17.14	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

WASTE WATER PUMP OPERATOR OPERATING ENGINEERS LOCAL 4	12/01/2023	\$55.03	\$15.00	\$16.40	\$0.00	\$86.43
	06/01/2024	\$56.33	\$15.00	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.78	\$15.00	\$16.40	\$0.00	\$89.18
	06/01/2025	\$59.08	\$15.00	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.53	\$15.00	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.83	\$15.00	\$16.40	\$0.00	\$93.23
	12/01/2026	\$63.28	\$15.00	\$16.40	\$0.00	\$94.68

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER <i>PLUMBERS LOCAL 4</i>	03/01/2024	\$53.95	\$9.90	\$17.42	\$0.00	\$81.27
	09/01/2024	\$55.35	\$9.90	\$17.42	\$0.00	\$82.67
	03/01/2025	\$56.75	\$9.90	\$17.42	\$0.00	\$84.07
	09/01/2025	\$58.15	\$9.90	\$17.42	\$0.00	\$85.47
	03/01/2026	\$59.55	\$9.90	\$17.42	\$0.00	\$86.87
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)

Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

** Multiple ratios are listed in the comment field.

*** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

**** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

00850
EXCERPTS FROM APPLICABLE STATE LAW

SECTION 00850

INCORPORATION OF APPLICABLE PROVISIONS OF THE
MASSACHUSETTS GENERAL LAWS

Certain provisions of the Massachusetts General Laws are applicable to Construction contracts including, but not limited to, those contained in Chapter 30 and Chapter 149. All applicable provisions of the Massachusetts General Laws are incorporated into the Contract as if fully set forth herein and shall prevail over any conflicting provisions of the General or Supplemental Conditions.

EDA 003
EDA CONTRACTING PROVISIONS

U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION



EDA CONTRACTING PROVISIONS FOR CONSTRUCTION PROJECTS

These EDA Contracting Provisions for Construction Projects (EDA Contracting Provisions) are intended for use by recipients receiving federal assistance from the U. S. Department of Commerce - Economic Development Administration (EDA). They contain provisions specific to EDA and other federal provisions not normally found in non-federal contract documents. The requirements contained herein must be incorporated into all construction contracts and subcontracts funded wholly or in part with federal assistance from EDA.

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1. **DEFINITIONS**

Agreement – The written instrument that is evidence of the agreement between the Owner and the Contractor overseeing the Work.

Architect/Engineer - The person or other entity engaged by the Recipient to perform architectural, engineering, design, and other services related to the work as provided for in the contract.

Contract – The entire and integrated written agreement between the Owner and the Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

Contract Documents – Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents.

Contractor – The individual or entity with whom the Owner has entered into the Agreement.

Drawings or Plans – That part of the Contract Documents prepared or approved by the Architect/Engineer that graphically shows the scope, extent, and character of the Work to be performed by the Contractor.

EDA - The United States of America acting through the Economic Development Administration of the U.S. Department of Commerce or any other person designated to act on its behalf. EDA has agreed to provide financial assistance to the Owner, which includes assistance in financing the Work to be performed under this Contract. Notwithstanding EDA's role, nothing in this Contract shall be construed to create any contractual relationship between the Contractor and EDA.

Owner – The individual or entity with whom the Contractor has entered into the Agreement and for whom the Work is to be performed.

Project – The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

Recipient – A non-Federal entity receiving a Federal financial assistance award directly from EDA to carry out an activity under an EDA program, including any EDA-approved successor to the entity.

Specifications – That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

Subcontractor – An individual or entity having direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

Work – The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

2. **APPLICABILITY**

The Project to which the construction work covered by this Contract pertains is being assisted by the United States of America through federal assistance provided by the U.S. Department of Commerce - Economic Development Administration (EDA). Neither EDA, nor any of its departments, entities, or employees is a party to this Contract. The following EDA Contracting Provisions are included in this Contract and all subcontracts or related instruments pursuant to the provisions applicable to such federal assistance from EDA.

3. **FEDERALLY REQUIRED CONTRACT PROVISIONS**

(a) All contracts in excess of the simplified acquisition threshold - currently fixed at \$150,000 (*see* 41 U.S.C. §§ 134 and 1908) must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate.

(b) All contracts in excess of \$10,000 must address termination for cause and for convenience by the Recipient including the manner by which it will be effected and the basis for settlement.

(c) All construction contracts awarded in excess of \$10,000 by recipients of federal assistance and their contractors or subcontractors shall contain a provision requiring compliance with Executive Order 11246 of September 24, 1965, *Equal Employment Opportunity*, as amended by Executive Order 11375 of October 13, 1967, and Department of Labor implementing regulations at 41 C.F.R. part 60.

(d) All prime construction contracts in excess of \$2,000 awarded by Recipients must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3148) as supplemented by Department of Labor regulations at 29 C.F.R. part 5. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. § 874 and 40 U.S.C. § 3145) as supplemented by Department of Labor regulations at 29 C.F.R. part 3.

(e) All contracts awarded by the Recipient in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704 (the Contract Work Hours and Safety Standards Act) as supplemented by Department of Labor regulations at 29 C.F.R. part 5.

(f) All contracts must include EDA requirements and regulations that involve a requirement on the contractor or sub-contractor to report information to EDA, the Recipient or any other federal agency.

- (g) All contracts must include EDA requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.
- (h) All contracts must include EDA requirements and regulations pertaining to copyrights and rights in data.
- (i) All contracts and subgrants in excess of \$150,000 must contain a provision that requires compliance with all applicable standards, orders, or requirements issued under the Clean Air Act (42 U.S.C. § 7401 *et seq.*) and the Federal Water Pollution Control Act (Clean Water Act) (33 U.S.C. § 1251 *et seq.*), and Executive Order 11738, *Providing for Administration of the Clean Air Act and the Federal Water Pollution Control Act With Respect to Federal Contracts, Grants, or Loans*.
- (j) Contracts must contain mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6201).
- (k) Contracts must contain a provision ensuring that contracts are not to be made to parties on the government wide Excluded Parties List System in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. part 180.
- (l) Contracts must contain a provision ensure compliance with the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1352) under which contractors that apply or bid for an award of \$100,000 or more must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. § 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.
- (m) If the Recipient is a state agency or agency of a political subdivision of a state, any contract awarded must contain a provision ensuring compliance with section 6002 of the Solid Waste Disposal Act (42 U.S.C. § 6962), as amended by the Resource Conservation and Recovery Act related to the procurement of recovered materials.

4. **REQUIRED PROVISIONS DEEMED INSERTED**

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion of correction.

5. **INSPECTION BY EDA REPRESENTATIVES**

The authorized representatives and agents of EDA shall be permitted to inspect all work, materials, payrolls, personnel records, invoices of materials, and other relevant data and records.

6. **EXAMINATION AND RETENTION OF CONTRACTOR'S RECORDS**

(a) The Owner, EDA, or the Comptroller General of the United States, or any of their duly authorized representatives shall, generally until three years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract for the purpose of making audit, examination, excerpts, and transcriptions.

(b) The Contractor agrees to include in first-tier subcontracts under this contract a clause substantially the same as paragraph (a) above. "Subcontract," as used in this clause, excludes purchase orders that do not exceed \$10,000.

(c) The periods of access and examination in paragraphs (a) and (b) above for records relating to (1) appeals under the disputes clause of this contract, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the Owner, EDA, or Comptroller General or any of their duly authorized representatives has taken exception shall continue until disposition of such appeals, litigation, claims, or exceptions.

7. **CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES**

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in a form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due to the Contractor in accordance with the progress schedule. The Contractor also shall furnish the Owner (a) a detailed estimate giving a complete breakdown of the contract price and (b) periodic itemized estimates of work done for the purpose of making partial payments thereon. The costs employed in making up any of these schedules will be used only to determine the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

8. **CONTRACTOR'S TITLE TO MATERIAL**

No materials, supplies, or equipment for the work shall be purchased by the Contractor or by any subcontractor that is subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants and guarantees that he/she has good title to all work, materials, and equipment used by him/her in the Work, free and clear of all liens, claims, or encumbrances.

9. **INSPECTION AND TESTING OF MATERIALS**

All materials and equipment used in the completion of the Work shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. Materials of construction, particularly those upon which the strength and durability of any structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for intended uses.

10. **"OR EQUAL" CLAUSE**

Whenever a material, article, or piece of equipment is identified in the Contract Documents by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard. Any material, article, or equipment of other manufacturers and vendors that will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed is, in the opinion of the Architect/Engineer, of equal substance and function. However, such substitution material, article, or equipment shall not be purchased or installed by the Contractor without the Architect/Engineer's written approval.

11. **PATENT FEES AND ROYALTIES**

(a) Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device that is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Architect/Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by the Owner in the Contract Documents.

(b) To the fullest extent permitted by Laws and Regulations, the Contractor shall indemnify and hold harmless the Owner and the Architect/Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

12. **CLAIMS FOR EXTRA COSTS**

No claims for extra work or cost shall be allowed unless the same was done in pursuance of a written order from the Architect/Engineer approved by the Owner.

13. **CONTRACTORS AND SUBCONTRACTORS INSURANCE**

(a) The Contractor shall not commence work under this Contract until the Contractor has obtained all insurance reasonably required by the Owner, nor shall the Contractor allow any subcontractor to commence work on his/her subcontract until the insurance required of the subcontractor has been so obtained and approved.

(b) Types of insurance normally required are:

- (1) Workers' Compensation
- (2) Contractor's Public Liability and Property Damage
- (3) Contractor's Vehicle Liability
- (4) Subcontractors' Public Liability, Property Damage and Vehicle Liability
- (5) Builder's Risk (Fire and Extended Coverage)

(c) **Scope of Insurance and Special Hazards:** The insurance obtained, which is described above, shall provide adequate protection for the Contractor and his/her subcontractors, respectively, against damage claims that may arise from operations under this contract, whether such operations be by the insured or by anyone directly or indirectly employed by him/her and also against any of the special hazards that may be encountered in the performance of this Contract.

(d) **Proof of Carriage of Insurance:** The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates, and dates of expiration of applicable insurance policies.

14. **CONTRACT SECURITY BONDS**

(a) If the amount of this Contract exceeds \$150,000, the Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the Contract price as security for the faithful performance of this Contract and also a payment bond in an amount equal to one hundred percent (100%) of the Contract price or in a penal sum not less than that prescribed by State, Territorial, or local law, as security for the payment of all persons performing labor on the Work under this Contract and furnishing materials in connection with this Contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law. Before final acceptance, each bond must be approved by EDA. If the amount of this Contract does not exceed \$150,000, the Owner shall specify the amount of the payment and performance bonds.

(b) All bonds shall be in the form prescribed by the Contract Documents except as otherwise provided in applicable laws or regulations, and shall be executed by such sureties as are named in the current list of *Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies* as published in Treasury Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's

authority to act. Surety companies executing the bonds must also be authorized to transact business in the state where the Work is located.

15. **LABOR STANDARDS - DAVIS-BACON AND RELATED ACTS**
(as required by section 602 of PWEDA)

(a) **Minimum Wages**

(1) All laborers and mechanics employed or working upon the site of the Work in the construction or development of the Project will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act at 29 C.F.R. part 3, the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at the time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor, which is attached hereto and made a part hereof, regardless of any contractual relationship that may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 C.F.R. § 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 C.F.R. § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates determined under 29 C.F.R. § 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(2) (i) Any class of laborers or mechanics to be employed under the Contract, but not listed in the wage determination, shall be classified in conformance with the wage determination. EDA shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(A) The work to be performed by the classification requested is not performed by a classification in the wage determination;

(B) The classification is utilized in the area by the construction industry; and

(C) The proposed wage rate, including any bona fide fringe benefits, bears a

reasonable relationship to the wage rates contained in the wage determination.

(ii) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and EDA or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by EDA or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210.

(iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and EDA or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), EDA or its designee shall refer the questions, including the views of all interested parties and the recommendation of EDA or its designee, to the Administrator for determination.

(iv) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(2)(ii) or (iii) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(3) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(4) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(b) **Withholding**

EDA or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this Contract or any other federal contract with the same prime Contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper employed or working on the site of the Work in the construction or development of the Project, all or part of the wages required by the Contract, EDA or its designee may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations

have ceased. EDA or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

(c) **Payrolls and basic records**

(1) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the Work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the Work in the construction or development of the Project. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 C.F.R. § 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, the plan or program is financially responsible, and the plan or program has been communicated in writing to the laborers or mechanics affected, and provide records that show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(2) (i) For each week in which Contract work is performed, the Contractor shall submit a copy of all payrolls to the Owner for transmission to EDA or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 C.F.R. part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose. It may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402; or downloaded from the U.S. Department of Labor's website at <https://www.dol.gov/whd/forms/wh347.pdf>. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors

(ii) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:

(A) That the payroll for the payroll period contains the information required to be maintained under 29 C.F.R. § 5.5(a)(3)(i) and that such information is correct and complete;

(B) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 C.F.R. part 3; and

(C) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the Contract.

(iii) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 15(c)(2)(ii) of this section.

(iv) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under section 1001 of Title 18 and section 3729 of Title 31 of the U.S. Code.

(3) The Contractor or subcontractor shall make the records required under paragraph 15(c)(1) of this section available for inspection, copying, or transcription by authorized representatives of EDA or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, EDA or its designee may, after written notice to the Contractor or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 C.F.R. § 5.12.

(d) **Apprentices and Trainees.**

(1) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training (Bureau), or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any

apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a Project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) **Trainees.** Except as provided in 29 C.F.R. § 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program that has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman's hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(3) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity

requirements of Executive Order 11246, *Equal Employment Opportunity*, as amended, and 29 C.F.R. part 30.

(e) **Compliance with Copeland Anti-Kickback Act Requirements.** The Contractor shall comply with the Copeland Anti-Kickback Act (18 U.S.C. § 874 and 40 U.S.C. § 3145) as supplemented by Department of Labor regulations (29 C.F.R. part 3, “Contractors and Subcontractors on Public Buildings or Public Works Financed in Whole or in Part by Loans or Grants of the United States”). The Act provides that the Contractor and any subcontractors shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which they are otherwise entitled. The Owner shall report all suspected or reported violations to EDA.

(f) **Subcontracts.** The Contractor and any subcontractors will insert in any subcontracts the clauses contained in 29 C.F.R. §§ 5.5(a)(1) through (10) and such other clauses as EDA or its designee may require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 C.F.R. § 5.5.

(g) **Contract termination; debarment.** The breach of the contract clauses in 29 C.F.R. § 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a subcontractor as provided in 29 C.F.R. § 5.12.

(h) **Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 C.F.R. parts 1, 3, and 5 are herein incorporated by reference in this contract.

(i) **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 C.F.R. parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and EDA or its designee, the U.S. Department of Labor, or the employees or their representatives.

(j) **Certification of Eligibility.**

(1) By entering into this Contract, the Contractor certifies that neither it nor any person or firm that has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 C.F.R. § 5.12(a)(1).

(2) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 C.F.R. § 5.12(a)(1).

(3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. § 1001.

16. **LABOR STANDARDS - CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

As used in this paragraph, the terms “laborers” and “mechanics” include watchmen and guards.

(a) **Overtime requirements.** No Contractor or subcontractor contracting for any part of the Contract work, which may require or involve the employment of laborers or mechanics, shall require or permit any such laborer or mechanic in any workweek in which that person is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(b) **Violation; liability for unpaid wages, liquidated damages.** In the event of any violation of the clause set forth in paragraph (a) of this section, the Contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a) of this section.

(c) **Withholding for unpaid wages and liquidated damages.** EDA or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or subcontractor under any such Contract or any other federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b) of this section.

(d) **Subcontracts.** The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (a) through (c) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a) through (c) of this section.

17. **EQUAL EMPLOYMENT OPPORTUNITY**

(a) The Recipient hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 C.F.R. chapter 60, which is paid for in whole or in part with funds obtained from EDA, the following equal opportunity clause:

During the performance of this contract, the Contractor agrees as follows:

Economic Development Administration
Contracting Provisions for Construction Projects

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers representatives of the Contractor's commitments hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965 and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by EDA and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of

this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally-assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.

(8) The Contractor will include the portion of the sentence immediately preceding paragraph 17(a)(1) and the provisions of paragraphs 17(a)(1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as EDA or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the Contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by EDA or the Secretary of Labor, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

(9) The Recipient further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally-assisted construction work. Provided, however, that if the Recipient so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality, or subdivision of such government that does not participate in work on or under the Contract.

(10) The Recipient agrees that it will assist and cooperate actively with EDA and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish EDA and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist EDA in the discharge of the EDA's primary responsibility for securing compliance.

(11) The Recipient further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a Contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by EDA or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the Recipient agrees that if it fails or refuses to comply with these undertakings, EDA may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this EDA financial assistance; refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case

to the Department of Justice for appropriate legal proceedings.

(b) Exemptions to Above Equal Opportunity Clause (41 C.F.R. chapter 60):

(1) Contracts and subcontracts not exceeding \$10,000 (other than Government bills of lading, and other than contracts and subcontracts with depositories of Federal funds in any amount and with financial institutions which are issuing and paying agents for U.S. savings bonds and savings notes) are exempt. The amount of the Contract, rather than the amount of the federal financial assistance, shall govern in determining the applicability of this exemption.

(2) Except in the case of subcontractors for the performance of construction work at the site of construction, the clause shall not be required to be inserted in subcontracts below the second tier.

(3) Contracts and subcontracts not exceeding \$10,000 for standard commercial supplies or raw materials are exempt.

18. **CONTRACTING WITH SMALL, MINORITY AND WOMEN'S BUSINESSES**

(a) If the Contractor intends to let any subcontracts for a portion of the work, the Contractor shall take affirmative steps to assure that small, minority and women's businesses are used when possible as sources of supplies, equipment, construction, and services.

(b) Affirmative steps shall consist of:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;

(4) Establishing delivery schedules, where the requirements of the contract permit, which encourage participation by small and minority businesses and women's business enterprises;

(5) Using the services and assistance of the U.S. Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, and State and local governmental small business agencies;

(6) Requiring each party to a subcontract to take the affirmative steps of this section; and

(7) The Contractor is encouraged to procure goods and services from labor surplus area firms.

19. **HEALTH, SAFETY, AND ACCIDENT PREVENTION**

(a) In performing this contract, the Contractor shall:

- (1) Ensure that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to their health and/or safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation;
- (2) Protect the lives, health, and safety of other persons;
- (3) Prevent damage to property, materials, supplies, and equipment; and
- (4) Avoid work interruptions.

(b) For these purposes, the Contractor shall:

- (1) Comply with regulations and standards issued by the Secretary of Labor at 29 C.F.R. part 1926. Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 3701 – 3708); and
- (2) Include the terms of this clause in every subcontract so that such terms will be binding on each subcontractor.

(c) The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this Contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by 29 C.F.R. part 1904.

(d) The Owner shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the Work, shall be deemed sufficient notice of the noncompliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to take corrective action promptly, the Owner may issue an order stopping all or part of the Work until satisfactory corrective action has been taken. The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under these circumstances.

(e) The Contractor shall be responsible for its subcontractors' compliance with the provisions of this clause. The Contractor shall take such action with respect to any subcontract as EDA, or the Secretary of Labor shall direct as a means of enforcing such provisions.

20. **CONFLICT OF INTEREST AND OTHER PROHIBITED INTERESTS**

- (a) No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept, or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part hereof.
- (b) No officer, employee, architect, attorney, engineer, or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the Project.
- (c) The Contractor may not knowingly contract with a supplier or manufacturer if the individual or entity who prepared the Contract Documents has a corporate or financial affiliation with the supplier or manufacturer.
- (d) The Owner's officers, employees, or agents shall not engage in the award or administration of this Contract if a conflict of interest, real or apparent, may be involved. Such a conflict may arise when: (i) the employee, officer or agent; (ii) any member of their immediate family; (iii) their partner or (iv) an organization that employs, or is about to employ, any of the above, has a financial interest in the Contractor. The Owner's officers, employees, or agents shall neither solicit nor accept gratuities, favors, or anything of monetary value from the Contractor or subcontractors.
- (e) If the Owner finds after a notice and hearing that the Contractor, or any of the Contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of the Owner or EDA in an attempt to secure this Contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this Contract, the Owner may, by written notice to the Contractor, terminate this Contract. The Owner may also pursue other rights and remedies that the law or this Contract provides. However, the existence of the facts on which the Owner bases such findings shall be an issue and may be reviewed in proceedings under the dispute resolution provisions of this Contract.
- (f) In the event this Contract is terminated as provided in paragraph (e) of this section, the Owner may pursue the same remedies against the Contractor as it could pursue in the event of a breach of this Contract by the Contractor. As a penalty, in addition to any other damages to which it may be entitled by law, the Owner may pursue exemplary damages in an amount (as determined by the Owner) which shall not be less than three nor more than ten times the costs the Contractor incurs in providing any such gratuities to any such officer or employee.

21. **RESTRICTIONS ON LOBBYING**

(a) This Contract, or subcontract is subject to 31 U.S.C. § 1352, regarding lobbying restrictions. The section is explained in the common rule, 15 C.F.R. part 28 (55 FR 6736-6748, February 26, 1990). Each bidder under this Contract or subcontract is generally prohibited from using federal funds for lobbying the Executive or Legislative Branches of the Federal Government in connection with this EDA Award.

(b) **Contract Clause Threshold:** This Contract Clause regarding lobbying must be included in each bid for a contract or subcontract exceeding \$100,000 of federal funds at any tier under the EDA Award.

(c) **Certification and Disclosure:** Each bidder of a contract or subcontract exceeding \$100,000 of federal funds at any tier under the federal Award must file Form CD-512, *Certification Regarding Lobbying – Lower Tier Covered Transactions*, and, if applicable, Standard Form-LLL, *Disclosure of Lobbying Activities*, regarding the use of any nonfederal funds for lobbying. Certifications shall be retained by the Contractor or subcontractor at the next higher tier. All disclosure forms, however, shall be forwarded from tier to tier until received by the Recipient of the EDA Award, who shall forward all disclosure forms to EDA.

(d) **Continuing Disclosure Requirement:** Each Contractor or subcontractor that is subject to the Certification and Disclosure provision of this Contract Clause is required to file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by such person. Disclosure forms shall be forwarded from tier to tier until received by the Recipient of the EDA Award, who shall forward all disclosure forms to EDA.

(e) **Indian Tribes, Tribal Organizations, or Other Indian Organizations:** Indian tribes, tribal organizations, or any other Indian organizations, including Alaskan Native organizations, are excluded from the above lobbying restrictions and reporting requirements, but only with respect to expenditures that are by such tribes or organizations for lobbying activities permitted by other federal law. An Indian tribe or organization that is seeking an exclusion from Certification and Disclosure requirements must provide EDA with the citation of the provision or provisions of federal law upon which it relies to conduct lobbying activities that would otherwise be subject to the prohibitions in and to the Certification and Disclosure requirements of 31 U.S.C. § 1352, preferably through an attorney's opinion. Note, also, that a non-Indian subrecipient, contractor, or subcontractor under an award to an Indian tribe, for example, is subject to the restrictions and reporting requirements.

22. **HISTORICAL AND ARCHAEOLOGICAL DATA PRESERVATION**

The Contractor agrees to facilitate the preservation and enhancement of structures and objects of historical, architectural or archaeological significance and when such items are found and/or unearthed during the course of project construction. Any excavation by the Contractor that uncovers an historical or archaeological artifact shall be immediately reported to the Owner and a representative of EDA. Construction shall be temporarily halted pending the notification process and further directions issued by EDA after consultation with the State Historic

Preservation Officer (SHPO) for recovery of the items. *See* the National Historic Preservation Act of 1966 (54 U.S.C. § 300101 *et seq.*, formerly at 16 U.S.C. § 470 *et seq.*) and Executive Order No. 11593 of May 31, 1971.

23. **CLEAN AIR AND WATER**

Applicable to Contracts in Excess of \$150,000

(a) **Definition.** “Facility” means any building, plant, installation, structure, mine, vessel, or other floating craft, location, or site of operations, owned, leased, or supervised by the Contractor or any subcontractor, used in the performance of the Contract or any subcontract. When a location or site of operations includes more than one building, plant, installation, or structure, the entire location or site shall be deemed a facility except when the Administrator, or a designee, of the United States Environmental Protection Agency (EPA) determines that independent facilities are collocated in one geographical area.

(b) In compliance with regulations issued by the EPA, 2 C.F.R. part 1532, pursuant to the Clean Air Act, as amended (42 U.S.C. § 7401 *et seq.*); the Federal Water Pollution Control Act, as amended (33 U.S.C. § 1251 *et seq.*); and Executive Order 11738, the Contractor agrees to:

(1) Not utilize any facility in the performance of this contract or any subcontract which is listed on the Excluded Parties List System, part of the System for Award Management (SAM), pursuant to 2 C.F.R. part 1532 for the duration of time that the facility remains on the list;

(2) Promptly notify the Owner if a facility the Contractor intends to use in the performance of this contract is on the Excluded Parties List System or the Contractor knows that it has been recommended to be placed on the List;

(3) Comply with all requirements of the Clean Air Act and the Federal Water Pollution Control Act, including the requirements of section 114 of the Clean Air Act and section 308 of the Federal Water Pollution Control Act, and all applicable clean air and clean water standards; and

(4) Include or cause to be included the provisions of this clause in every subcontract and take such action as EDA may direct as a means of enforcing such provisions.

24. **USE OF LEAD-BASED PAINTS ON RESIDENTIAL STRUCTURES**

(a) If the work under this Contract involves construction or rehabilitation of residential structures over \$5,000, the Contractor shall comply with the Lead-based Paint Poisoning Prevention Act (42 U.S.C. § 4831). The Contractor shall assure that paint or other surface coatings used in a residential property does not contain lead equal to or in excess of 1.0 milligram per square centimeter or 0.5 percent by weight or 5,000 parts per million (ppm) by weight. For purposes of this section, “residential property” means a dwelling unit, common areas, building exterior surfaces, and any surrounding land, including outbuildings, fences and play equipment affixed to the land, belonging to an owner and available for use by residents, but not

including land used for agricultural, commercial, industrial or other non-residential purposes, and not including paint on the pavement of parking lots, garages, or roadways.

- (b) As a condition to receiving assistance under PWEDA, recipients shall assure that the restriction against the use of lead-based paint is included in all contracts and subcontracts involving the use of federal funds.

25. **ENERGY EFFICIENCY**

The Contractor shall comply with all standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6201) for the State in which the Work under the Contract is performed.

26. **ENVIRONMENTAL REQUIREMENTS**

When constructing a Project involving trenching and/or other related earth excavations, the Contractor shall comply with the following environmental constraints:

- (1) **Wetlands.** When disposing of excess, spoil, or other construction materials on public or private property, the Contractor shall not fill in or otherwise convert wetlands.
- (2) **Floodplains.** When disposing of excess, spoil, or other construction materials on public or private property, the Contractor shall not fill in or otherwise convert 100 year floodplain areas delineated on the latest Federal Emergency Management Agency (FEMA) Floodplain Maps, or other appropriate maps, i.e., alluvial soils on Natural Resource Conservation Service (NRCS) Soil Survey Maps.
- (3) **Endangered Species.** The Contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species and critical habitat. Should any evidence of the presence of endangered and/or threatened species or their critical habitat be brought to the attention of the Contractor, the Contractor will immediately report this evidence to the Owner and a representative of EDA. Construction shall be temporarily halted pending the notification process and further directions issued by EDA after consultation with the U.S. Fish and Wildlife Service.

27. **DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSIONS**

As required by Executive Orders 12549 and 12689, *Debarment and Suspension*, 2 C.F.R. Part 180 and implemented by the Department of Commerce at 2 C.F.R. part 1326, for prospective participants in lower tier covered transactions (except subcontracts for goods or services under the \$25,000 small purchase threshold unless the subrecipient will have a critical influence on or substantive control over the award), the Contractor agrees that:

- (1) By entering into this Contract, the Contractor and subcontractors certify, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared Economic Development Administration Contracting Provisions for Construction Projects

ineligible, or voluntarily excluded from participation in this Contract by any federal department or agency.

(2) Where the Contractor or subcontractors are unable to certify to any of the statements in this certification, the Contractor or subcontractors shall attach an explanation to this bid.

See also 2 C.F.R. part 180 and 2 C.F.R. § 200.342.

28. **EDA PROJECT SIGN**

The Contractor shall supply, erect, and maintain in good condition two Project Signs according to the specifications provided by EDA. To the extent practical, the sign should be a free standing sign. Project signs shall not be located on public highway rights-of-way. Location and height of signs will be coordinated with the local agency responsible for highway or street safety in the Project area, if any possibility exists for obstructing vehicular traffic line of sight. Whenever the EDA site sign specifications conflict with State law or local ordinances, the EDA Regional Director will permit such conflicting specifications to be modified so as to comply with State law or local ordinance.

29. **BUY AMERICA**

To the greatest extent practicable, contractors are encouraged to purchase American-made equipment and products with funding provided under EDA financial assistance awards.

00900
SPECIAL PROVISIONS TO 2023 MASSDOT STD. SPECIFICATIONS

SECTION 00 900
SPECIAL PROVISIONS TO 2023 MASSDOT STANDARD SPECIFICATIONS
QUINEBAUG VALLEY RAIL TRAIL PROJECT
SOUTHBRIDGE, MA

SCOPE OF WORK

All work under this Contract shall be done in conformance with the *2023 Standard Specifications for Highways and Bridges*, the *2017 Construction Standard Details*, the *Traffic Management Plans and Detail Drawings*, *MassDOT Work Zone Safety Temporary Traffic Control*, the *1990 Standard Drawings for Signs and Supports*; the *2009 Manual on Uniform Traffic Control Devices (MUTCD)* with Massachusetts Amendments; the Plans and these Special Provisions.

This project utilizes the *2023 Massachusetts Standard Specifications for Highways and Bridges*, as modified for these special provisions, as though they were printed in these special provisions in their entirety. Where there is a difference between these special provisions and the Standard Specifications, these special provisions shall apply.

The work under this contract consists of furnishing all necessary labor, materials, equipment and services to implement specific upgrades related to the conversion of an existing abandoned railbed to a multi-use path from the Dudley Town Line to West Street in the Town of Southbridge, MA.

The work includes installation of new hot mix asphalt and stabilized walk, granite curb, new steel pedestrian bridge over Morse Street, pedestrian operated beacon, new ADA pedestrian ramps, new safety railing, drainage, signage, pavement markings, benches, and other incidental work as shown on the plans and as described herein.

The Town reserves the right to adjust quantities due to unforeseen conditions, and to adhere to project funding amounts.

DEFINITIONS

“Town” shall mean the Town of Southbridge, where the Contract work is to be performed.

“Engineer” shall mean the Town of Southbridge, Director of Public Works, Town Engineer or their designated representative.

“MassDOT” shall mean the Massachusetts Department of Transportation – Highway Division.

“Design Engineer” shall mean BSC Group, Inc., (BSC)

PROJECT CONTACTS

DESIGNER

Kellan Lewis, P.E.
Sr. Project Manager
BSC Group, Inc.
803 Summer Street
Boston, MA 02127
617.896.4448

TOWN OF SOUTHBRIDGE

Peg (Margaret) Dean, MPA
CDBG/Economic Development Coordinator
Town of Southbridge
41 Elm Street
Southbridge, MA 01550
508.764.5402

WORK SCHEDULE

Work on this project is restricted to an eight-hour day, five-day week, between the hours of 7:00 AM to 4:00 PM, with the Prime Contractor and all Subcontractors working on the same shift.

No work shall be performed on this Contract on Saturdays, Sundays, or Holidays, or the day before or the day after a long Holiday weekend, without prior approval of the Engineer.

No work that will disrupt travel on the existing roadways (lane closures, lane shifts, trenching, etc.) shall be done before 9:00 AM, or after 3:00 PM, without prior approval of the Town.

Prior to the start of work, the Contractor shall prepare and submit to the Engineer a Schedule of Operations outlining their hours of operation and activities to be performed. This schedule shall be updated once a month, or with the submission of each request for payment, whichever is more frequent, for the duration of the contract. All costs associated with preparing and updating the Contractor's Schedule of Operations shall be considered incidental to this Contract.

PROVISIONS FOR TRAVEL AND PROSECUTION OF THE WORK

(Supplementing Subsection 8.03)

Before starting any work under this Contract, the Contractor shall prepare, and submit to the Engineer for approval, a plan (based on the Contract traffic management plans) that indicates the traffic routing proposed by the Contractor during the various stages and time periods of the work and the temporary barricades, signs, drums and other traffic control devices to be employed during each stage and time period of the work to maintain traffic and access to abutting properties.

Particular care shall be taken to establish and maintain methods and procedures that will not create unnecessary or unusual hazards to public safety. Traffic control devices required only during working hour operations shall be removed at the end of each working day.

Signs having messages that are irrelevant to normal traffic conditions shall be removed or properly covered at the end of each work period. Signs shall be kept clean at all times and legends shall be distinctive and unmarred.

RESTRICTIONS AND MINIMUM REQUIREMENTS

The following lane access and egress control and restrictions within the project area shall serve as a strict guide for the Contractor to follow in order to assure normal vehicular and pedestrian operations during the construction process:

1. The Contractor shall provide safe and reasonable access and egress to all adjacent properties.
2. After construction hours, all traffic lanes shall be open to traffic unless otherwise authorized by the Town of Southbridge.

The Contractor shall conduct his operations such that the interruption to rush hour traffic is kept to a minimum. The Contractor shall schedule his work such that the length of time during which any section of roadway is not paved will be kept to a minimum.

PUBLIC SAFETY AND CONVENIENCE

The Contractor shall furnish, install, maintain and adjust all warning devices, barricades, signs, bridging materials, special apparatus, and other safety measures deemed necessary by the Engineer for the protection of motorists, pedestrians and the Contractor's own personnel.

PROTECTION AND RESTORATION OF PROPERTY

The Contractor, in constructing or installing facilities alongside or near sanitary sewers, storm drains, water or gas pipes, electric or telephone conduits, poles, sidewalks, walls or other structures, shall, at their expense, sustain them securely in place, cooperating with the officers and agents of the various utility companies and municipal departments which control them, so that the services of these structures shall be maintained. The Contractor shall also be responsible for the repair or replacement, at their own expense, of any damage to such structures caused by their acts or neglect and shall leave them in the same condition as existed prior to the commencement of work. In case of damage to utilities, the Contractor shall promptly notify the Owner and shall, if requested by the Engineer, furnish laborers to work temporarily under the Owner's direction in providing access to the utility. Pipes or other structures damaged by the operation of the Contractor may be repaired by the utility company that suffers the loss. The cost of such repairs shall be borne by the Contractor, without compensation, therefore.

If, as the work progresses, it is found that any of the utility structures are so placed as to render it impracticable in the judgment of the Engineer, to do the work called for under this Contract, the Contractor shall protect and maintain the services in such utilities and structures and the Town will, as soon thereafter as it reasonably can, cause the position of the utilities to be changed or take such other action as it deems suitable and proper.

If live service connections are to be interrupted by excavation of any kind, the Contractor shall not break the service until new services are provided. Abandoned services shall also be plugged off or otherwise made secure by the utility company involved.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in protecting or repairing property as specified in this Section shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed.

CONSTRUCTION SIGNS

Upon commencement of work, the following funding signs must be erected at a downtown project location as soon as possible after construction begins. The required signs are to be considered incidental to the scope of work, and maintained in good conditions for the duration of the project. Required signs include an EDA-approved sign, a MassDOT-approved sign, and a MassTrails approved sign.

Signs are to be erected at a location in downtown to be approved by the Town. Multiple signs may be mounted on the same supports if approved by the Town.

NOTIFICATION TO ABUTTERS

Following sending notification to the Town, the Contractor shall hand deliver notices to abutting properties at least 48 hours before the start of construction that is proposed to impact access to their property. The notice will indicate the timing of the construction and any access restrictions or other inconveniences that may result.

The Contractor will notify and coordinate with the Town's waste disposal contractor when construction activities will correspond with waste pickup. The Contractor shall notify and coordinate with school bus and transit companies when construction operations will be in operation.

TEMPORARY ACCESS TO AREA ABUTTERS

Access to all abutting properties must be maintained at all times. The Contractor shall provide a safe and reasonable ready means to enter and exit all private buildings, professional offices and any other businesses or residences in the project area, both day and night, for the duration of the project. The Contractor may be required to install temporary measures (i.e. wood planking) across excavated areas of sidewalk to allow safe access to buildings and/or storefronts. Such measures will require approval from the Town of Southbridge prior to installation.

The Contractor shall prepare and submit to the Engineer a Maintenance of Pedestrian Access Plan outlining procedures and measures taken in maintaining safe pedestrian access through the work zone, safe means of access and egress to adjacent buildings and businesses in conformance to ADA/AAB regulations.

CONSTRUCTION STAKING

The selected Contractor will be furnished information and ties for the project survey and construction baselines and benchmarks including AutoCad drawings and field notes if needed. The Contractor shall perform all survey and construction staking required for the work. All costs associated with Construction Staking shall be considered incidental to this Contract.

EXISTING BOUNDS AND MONUMENTS

The Contractor shall exercise due care when working around all property bounds and markers identified to be retained. Should any damage to a property bound or marker result from the actions of the Contractor, it shall be replaced and/or realigned by the Contractor at no cost to the project.

MATERIALS REMOVED OR REMOVED & DISCARDED

All materials scheduled to be removed or removed and discarded shall become the property of the Contractor who will be responsible for the safe and legal disposal of said materials outside and away from the limits of the project, without additional compensation.

DISPOSAL OF SURPLUS MATERIALS

All existing and other materials not required or needed for use on the project, and not required to be removed or removed and discarded, shall become the property of the Contractor and shall be removed from the site during the construction period and legally disposed of. No separate payment will be made for this work, but all costs in connection therewith shall be included in the prices bid for various Contract items.

DRAINAGE

The Contractor shall maintain the existing drainage system in the project area to provide continuous drainage of the roadway and construction area.

All drainage castings in new pavement areas shall be installed at base or binder course grade, as required by the Engineer, and reset to proposed finish surface grade prior to placement of the pavement surface course. All pipes and structures installed as part of this Contract shall be left in a clean and operable condition at the completion of the work.

All existing pipes to be abandoned shall be plugged with brick masonry not less than 8 inches in thickness in conformance with the Standard Specifications, Section 201.62.

No separate payment will be made for the maintenance or cleaning of the existing drainage pipes or for plugging or unplugging of pipes, but all costs in connection therewith shall be included in the unit prices bid for the various Contract items. Cleaning of existing drainage structures shall be paid under Item 227.3 Removal of Drainage Structure Sediment.

ARCHITECTURAL ACCESS BOARD TOLERANCES

The Contractor is hereby notified that they are ultimately responsible for constructing all project elements in strict compliance with the current AAB/ADA rules, regulations and standards. All construction elements in this project associated with sidewalks, walkways, wheelchair ramps and curb cuts are controlled by 521CMR - Rules and Regulations of the Architectural Access Board (AAB).

The AAB Rules and Regulations specify maximum slopes and minimum dimensions required for construction acceptance. There is no tolerance allowed for slopes greater than the maximum slope nor for dimensions less than the minimum dimensions.

The Contractor shall establish grade elevations at all wheel chair ramp locations, and shall set transition lengths according to the appropriate table in the Construction Standards (or to the details shown on the plans). All wheelchair ramp joints and transition sections which define grade changes shall be formed, staked and checked prior to placing cement concrete. All grade changes are to be made at joints.

All detectable warning panels shall be color 'yellow' or as approved by the Town. All standard pedestrian ramps will incorporate detectable warning panels as shown on the plans or as required by the Engineer.

WORK PERFORMED BY OTHERS

The respective utility companies will accomplish any relocation and/or resetting to new grades of all private utilities, including gas gates, electric services/meters, manholes, and telephone manholes, made necessary by the construction of this project. The Contractor must prosecute the work efficiently and with the least possible delay. Immediately after award of the Contract, the Contractor shall confer with the owners of all utilities to assure that relocations of facilities and services may be made at times consistent with operations under this Contract.

NOTICE TO OWNERS OF UTILITIES (Supplementing Subsection 7.13)

The following are the names of owners and representatives of the principal utilities affected. The accuracy of this list is not guaranteed by the Owner:

UTILITY CONTACTS

Electric

National Grid Electric
548 Haydenville Road
Leeds, MA 01053

Sandra Annis
413.582.7424
sandra.annis@nationalgrid.com

Gas

Eversource Gas
40 Sylvan Road
Waltham, MA 02451

Melissa Owens
781.907.2845
Melissa.Owens@nationalgrid.com

Tennessee Gas Pipeline Company
8 Anngina Drive
Enfield, MA 06082
KMEncroachmentsNorth@kindermorgan.com

David Wood
860.763.6005

Telephone

Verizon
385 Myles Standish Blvd.
Taunton, MA 02780

Karen Mealey
774.409.3160
karen.m.mealey@verizon.com

Cable

Charter Communications
301 Barber Avenue
Worcester, MA 01606

John Yurkevicius
774.243.9786
john.yurkevicius@charter.com

The Contractor shall make their own investigations to confirm that no damage to existing structures, drainage lines, water lines, gas lines, existing utility poles or overhead wires or other utilities will occur as a result of their operations.

The Contractor shall notify "Mass. DIG SAFE" and procure a DIG SAFE number of each location prior to disturbing ground in any way. "DIG-SAFE" Call Center: Telephone 1- (888) 344-7233

ELECTRICAL PERMIT & INSPECTIONS

If this project requires installation of new electrical conduit, wire and traffic signal equipment. The Contractor will be required to obtain a permit from the Town of Southbridge Inspectional Department prior to beginning any electrical-related work and comply with latest electrical code and Town requirements. Refer to the Town website for more information: <https://www.ci.southbridge.ma.us/316/Electrical-Permits>

UNIFORMED POLICE OFFICERS

The cost for police details for this project will be paid directly by the Town. The Contractor shall coordinate with the Town Police Department to determine the need for and to request and schedule police details to provide for public safety and to maintain a smooth flow of traffic through the construction zone. The Contractor shall provide the Police Department Dispatch with a minimum 24-hour notice indicating the time of day, street location and confirm the number of officers required. The Contractor will notify the Police Department Dispatch a minimum of 2 hours of any police detail cancellation prior to the scheduled start of said detail. The Contractor will be responsible for any police detail invoices, at no cost to the project, should details not be needed or if the Contractor fails to cancel the detail as described herein.

SAW CUTTING EXISTING ASPHALT OR CEMENT CONCRETE PAVEMENT

The cost to sawcut existing asphalt or cement concrete pavement shall be incidental to the specific item the cutting is required (i.e. curb, sidewalk, pedestrian curb ramps, drainage, conduit, etc.). The cost to sawcut at the limit of work will be incidental to the project. Sawcutting existing reinforced concrete will be paid under Item 127.1 Reinforced Concrete Excavation.

CONTRACT PRICE ADJUSTMENT

Due to the uncertainty of liquid asphalt, Portland cement, diesel fuel, gasoline, structural steel, and reinforcing steel prices, and in accordance with the requirements of M.G.L. c.30, sec. 38A, MassDOT Highway Division uses special provisions on selected projects to make contract adjustments to account for the prices in effect at the time the work is performed.

Municipalities are required to include price adjustments clauses for diesel fuel, gasoline, liquid asphalt, Portland cement concrete, structural steel and reinforcing steel in the bid documents of all construction contracts funded by the Chapter 90 Program. For more information, please refer to the Price Adjustment Requirements for Cities and Towns.

Price Adjustment for Bituminous Concrete Mixtures

The price adjustment clause is inserted into this bid due to the shortage of oil products in relation to worldwide energy situation has made future costs of asphalt cement unpredictable. Bituminous concrete mixtures listed on the bid sheets are therefore subject to price adjustment. The price adjustment will be based on the variance in price for only the asphalt cement component referenced herein from the base price to the period price. It shall not include transportation or other charges.

The fluctuation of the base price of asphalt cement is documented online and up-to-date at the following link:

<https://www.mass.gov/service-details/massdot-current-contract-price-adjustments>

MassDOT guidelines will be generally followed. The asphalt content, for the purposes of this adjustment will be 5.5 percent (0.55) for each ton of bituminous concrete mixture regardless of percentages established in the State's Job Mix Formula (M3.11.03) of the Standards. Contractors must request an adjustment on their invoicing if current price of base asphalt. The Town reserves the right to apply cost reductions should the base asphalt price drop between the bid date and purchase date. Price adjustment shall only be considered for total hot mix asphalt project of 1000 tons or greater.

Price Adjustment for Heavy Equipment Fuel

The price adjustment clause is inserted into this bid because the shortage of oil products in relation to worldwide energy situation has made future cost of fuel for construction equipment unpredictable. A contractor may request an adjustment or change order for an increase in fuel cost. Such a request must include detailed fuel consumption records and all submittals must be acceptable to the Town. Fuel price variations can be analyzed by any acceptable method including review of the COMMBUYS ENEFY (YEAR) contract for statewide bid of gasoline, diesel fuel, and heating oil.

Price Adjustment will be paid under separate items including Item 999.401 for a positive price adjustment (a payment) and Item 999.402 for a negative price adjustment (a deduction). Refer to MassDOT Special Provision 00811, 00812 and 00814 (Attached) respectively. These items are

not part of the Invitation for Bid but will be part of the contract between the respective Contractor(s) and the Town.

SEDIMENTATION EROSION CONTROLS

The Contractor is responsible for installation and maintenance of erosion control during construction.

Silt sacks will be paid under Item 697.1 Silt Sack, sediment barriers will be paid under Item 767.121 Sediment Control Barrier, and include installation, maintenance and removal once the project has been completed and released by the Town. The Contractor will not simply replace a silt sack or sediment control barrier at their discretion. The Contractor will coordinate with the Engineer prior to replacing any silt sacks or sediment control barrier. If it becomes necessary to remove the silt sack or sediment control barrier as a temporary measure to facilitate drainage during a heavy storm, the cost of removing and reinstalling the silt sack or sediment control barrier will be incidental to Item 697.1 and 767.121 respectively.

Any other erosion control devices that may be required to maintain disturbed areas and prevent potential washouts during normal operation and/or heavy rainstorms will be the responsibility of the Contractor and incidental to the project. If a storm is anticipated to occur outside of normal construction hours, the Contractor will make the necessary precautions to ensure any or all erosion control devices they have installed are properly secured and be prepared to return to the site as required to reestablish and/or repair said devices as required at no expense to the project.

ENVIRONMENTAL PERMIT

This project has obtained approval from the Southbridge Conservation Commission that is currently being reviewed. The Order of Conditions is provided in the Bid Documents.

ITEM 102.51**TREE PROTECTION – ARMORING & PRUNING****EACH**

The work under this item shall conform to the relevant provisions of Section 101, 644 and 771 of the 2023 Standard Specifications and the following:

DESCRIPTION

The work under this Item shall consist of protecting individual trees from damage to branches, trunks and root systems of existing individual trees, shrubs and other quality vegetation to remain and to ensure their survival, in addition to pruning said trees as shown on the Plans or as required by the Engineer.

MATERIALS**Materials**

Fencing for individual plants shall be polyethylene fencing or chain link fence (new or used).

Staking for individual tree protection fencing shall be steel posts or 2"x4" lumber as required by the Engineer.

Wood chips shall conform to provisions of Wood Chip Mulch under Materials Section M6.04.3.

Trunk protection shall be 2"x4" cladding, at least 8 feet in length, clad together with wire. Alternative materials as required by the Engineer. Alternative materials shall provide adequate protection from anticipated construction activities and shall not injure or scar the trunk. Trunk protection shall include burlap to separate trunk cladding from bark.

Incidental to this item, the Contractor shall provide water for maintaining plants in the construction area that will have exposed root systems for any period during construction.

Submittals

Incidental to this item, the Contractor shall provide to the Engineer one (1) copy American National Standards Institute (ANSI) Standard Z-133.1 and A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance, Part 1: Pruning. These references shall be kept by the Engineer at his office for the length of the Contract.

Prior to start of work, the Contractor shall submit to the Engineer the name and certification number of the Massachusetts Certified Arborist referenced herein. Cost for Certified Arborist for all activities pertaining to this Item shall be incidental to this item.

CONSTRUCTION METHODS

To the extent possible, to avoid soil compaction within the root zone, construction activities including, but not limited to, vehicle movement, excavation, embankment, staging and storage of materials or equipment shall not occur underneath the canopy (drip line) of trees to remain. Where these activities will occur within 10 feet of the canopy of trees or where required, the Contractor shall take the appropriate protective measures specified herein.

This item shall be used when construction activities are likely to occur within the canopy of individual trees or where there may be any risk of damage to trees.

The Contractor shall be solely responsible for judging the full extent of the work requirements, including, but not necessarily limited to any equipment and materials necessary for providing tree protection.

Incidental to the cost of this item, the Contractor shall retain the services of a certified arborist, who shall make recommendations as to the specific appropriate treatment of trees within or near the work zone.

Prior to any construction activities, the Contractor and Arborist shall walk the site with the Engineer and Town Tree Warden to identify which trees will require protection and to determine approved measures. The Arborist shall make recommendations as to appropriate methods to protect trees. The Engineer will have final decision as to trees and methods.

The Contractor is responsible for the protection of all existing trees and plants within and immediately adjacent to the construction area that are not designated to be removed for the length of the construction period.

For individual tree protection, the Contractor shall set posts and fencing at the limits of the tree canopy. Where construction activities closer to the trees is unavoidable, the contractor shall tie branches out of the way and place wood chips to a depth of 6 inches on the ground to protect the root systems. The Contractor shall wrap the area of the trunk of the tree with burlap prior to armoring with 2"x4" cladding. Cladding for tree trunks shall extend from the base of the tree to at least 8 feet from the base.

Where excavation within canopy is unavoidable, the Contractor shall use equipment and methods that shall minimize damage to the tree roots, per recommendations of the Certified Arborist. Such methods may require root pruning prior to, as well as during, any excavation activities.

All fencing, trunk protection, branch protection, and woodchips shall be maintained throughout the duration of the contract. Protective fencing shall be repaired and woodchip mulch replaced as necessary during the duration of the contract at no additional cost.

Cutting and Pruning

Some pruning of roots and branches may be a necessary part of construction. Pruning will be performed on the same side of the tree that roots have been severed.

The Contractor shall retain the services of a Massachusetts State Certified Arborist to perform any cutting of limbs, trunk or roots of existing trees. All cuts shall be clean and executed with an approved tool. Under no circumstances shall excavation in the tree protection area be made with mechanical equipment that might damage the existing root systems.

Any tree root area exposed by construction shall be covered and watered immediately. Exposed tree roots shall be protected by dampened burlap at all times until they can be covered with soil.

Watering

Water each tree within the construction area where work is in progress twice per week until the surrounding soil of each tree is saturated for the duration of construction activities.

Removal of Protection

After all other construction activities are complete, but prior to final seeding, wood chips, fencing, branch protection, and trunk protection materials shall be removed and disposed off site by the Contractor at no additional cost.

Tree Damage

The Contractor shall be responsible for the health and survival of the existing trees in the immediate vicinity of the construction area. Damage that, in the Engineer's opinion, can be remedied by corrective measures shall be repaired immediately. Broken limbs shall be pruned according to industry standards. Wounds shall not be painted. Trees up to 4" caliper or shrubs that are damaged irreparably shall be replaced in-kind. Trees with caliper larger than 4" that are damaged irreparably shall be replaced with the same type at a ratio of 3 to 1. Cost of replacement trees shall be borne by the Contractor.

COMPENSATION**Method of Measurement and Basis of Payment**

Where the plans show specific, individual trees to remain and where grading or other disturbance is shown within the drip line of these trees or where the Engineer determines that an individual tree must be protected, these trees shall be protected and paid for under Item 102.511 Tree Protection – Armoring & Pruning per each tree protected.

Payment under this item shall be scheduled throughout the length of contract: 30 percent of value shall be paid upon installation, 30 percent approximately halfway through the contract, and the remainder to be paid at the end of the contract after completion of construction operations that would disturb plants and after the protection materials have been removed and properly disposed of off-site by the Contractor.

Item 102.511 Tree Protection – Armoring & Pruning will be measured and paid for at the Contract unit price, per Each which price shall include full compensation for the services of a Certified Arborist, water and fertilizer, the subsequent removal and satisfactory disposal of the protective materials upon completion of the contract; as well as for all labor, tools, materials, equipment and incidentals necessary for the satisfactory completion of the work.

Cost of wood chips, as required, shall be incidental to this item.

ITEM 102.521**TREE AND PLANT PROTECTION FENCE****FOOT**

The work under this item shall conform to the relevant provisions of Sections 101, 644 and 771 of the 2023 Standard Specifications and the following:

The purpose of this item is to prevent damage to branches, stems and root systems of existing trees and shrubs and other quality vegetation to remain, and to ensure their survival. To the extent possible, to avoid soil compaction within the root zone, construction activities including, but not limited to, vehicle movement, excavation, embankment, staging and storage of materials or equipment shall not occur underneath the canopy (drip line) of trees to remain. Where these activities will occur within 10 feet of the canopy of trees or where directed, the Contractor shall take the appropriate protective measures specified herein.

Tree and Plant Protection Fence, Item 102.521 shall be used to protect areas of existing trees or other areas of quality vegetation that is to remain.

The Contractor shall be solely responsible for judging the full extent of the work requirements, including, but not necessarily limited to any equipment and materials necessary for providing tree protection.

Incidental to the cost of these items, the Contractor shall retain the services of a certified arborist with demonstrated experience in construction protection, who shall make recommendations as to the specific appropriate treatment of trees within or near the work zone.

Prior to any construction activities, the Contractor and Arborist shall walk the site with the Engineer and City Tree Warden to identify which trees will require protection and to determine approved measures. The Arborist shall make recommendations as to appropriate methods to trees. The Engineer will have final decision as to trees and methods.

The Contractor is responsible for the protection of all existing trees and plants within and immediately adjacent to the construction area that are not designated to be removed for the length of the construction period.

Submittals

Incidental to this item, the Contractor shall provide to the Engineer one (1) copy American National Standards Institute (ANSI) Standard Z-133.1 and A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance, Part 1: Pruning. These references shall be kept by the Engineer at his office for the length of the Contract.

Prior to start of work, the Contractor shall submit to the Engineer the name, certification number and resume of the Massachusetts Certified Arborist referenced herein. Cost for Certified Arborist for all activities pertaining to these Items shall be incidental to these items.

Submit arborists report documenting site walk and summarizing trees protected (species and quantities) as well as recommendations for protection.

MATERIALS

Fence and temporary fence posts shall be subject to the approval of the Engineer.

Wood chips shall conform to provisions of Wood Chip Mulch under Materials Section M6.04.3.

Trunk protection shall be 2x4 cladding, at least 8 feet in length, clad together with wire. Alternative materials shall be at the approval of the Engineer. Alternative materials shall provide adequate protection from anticipated construction activities and shall not injure or scar trunk. Trunk protection shall include burlap to separate trunk cladding from bark.

Tree and Plant Protection Fence shall be brightly colored polypropylene barricade or wooden snow fencing for tree protection or safety fencing as shown on the Contract drawings or as required by the Engineer. Fencing shall be a minimum of 4 feet high and supported by steel or hardwood stakes spaced at a maximum of 8 feet on center or by other means acceptable to the Engineer. Fencing shall be materials and fastenings sufficient to provide sturdy and highly visible separation of the construction activities from the trees and existing plantings to be preserved

Incidental to these items, the Contractor shall provide water for maintaining plants in the construction area that will have exposed root systems for any period during construction.

CONSTRUCTION METHODS

To the extent possible, to avoid soil compaction within the root zone, construction activities including, but not limited to, vehicle movement, excavation, embankment, staging and storage of materials or equipment shall not occur underneath the canopy (drip line) of trees to remain. Where these activities will occur within 10 feet of the canopy of trees, the Contractor shall provide Individual Tree Protection as specified herein.

For individual tree protection, the Contractor shall set posts and fencing at the limits of the tree canopy. Where construction activities closer to the trees is unavoidable, the Contractor shall tie branches out of the way and place wood chips to a depth of 6 inches on the ground to protect the root systems. The Contractor shall wrap the area of the trunk of the tree with burlap prior to armoring with 2x4 cladding. Cladding for tree trunks shall extend from the base of the tree to at least 8 feet from the base.

To the extent possible, temporary landscaped fencing shall be installed at the limit of tree canopy and shall be staked and maintained vertical for the length of the Contract.

Where excavation within canopy is unavoidable, the Contractor shall use equipment and methods that shall minimize damage to the tree roots, per recommendations of the Certified Arborist. Such methods may require root pruning prior to, as well as during, any excavation activities.

All fencing, trunk protection, branch protection, and woodchips shall be maintained throughout the duration of the contract. Protective fencing shall be repaired and woodchip mulch replaced as necessary during the duration of the contract at no additional cost.

Cutting and Pruning

Some pruning of roots and branches may be a necessary part of construction. Pruning will be performed on the same side of the tree that roots have been severed.

The Contractor shall retain the services of a Massachusetts State Certified Arborist to oversee any cutting of limbs, stem or roots of existing trees. All cuts shall be clean and executed with an approved tool. Under no circumstances shall excavation in the tree protection area be made with mechanical equipment that might damage the existing root systems.

Any tree root area exposed by construction shall be covered and watered immediately. Exposed tree roots shall be protected by dampened burlap at all times until they can be covered with soil.

Watering

Water each tree within the construction area where work is in progress twice per week until the surrounding soil of each tree is saturated for the duration of construction activities.

Removal of Protection

After all other construction activities are complete, but prior to final seeding, wood chips, temporary fencing, branch protection, and trunk protection materials shall be removed and disposed off-site by the Contractor at no additional cost.

Tree Damage

The Contractor shall be held responsible for the health and survival of the existing trees in the immediate vicinity of the of the construction area. Damage that, in the Engineer's opinion, can be remedied by corrective measures shall be repaired immediately. Broken limbs shall be pruned according to industry standards. Wounds shall not be painted. Trees or shrubs that are damaged irreparably shall, at the Engineer's discretion, be replaced per the requirements of Division I of these Special Provisions. Cost of replacement trees shall be borne by the Contractor.

COMPENSATION

Method of Measurement

Item 102.521 Tree and Plant Protection Fence will be measured for payment by the foot of fence installed, complete in place.

Basis of Payment

Item 201.521 Tree and Plant Protection Fence will be paid for at the Contract unit price per foot. This item shall include full compensation for all labor, equipment, materials, and incidentals for the satisfactory completion of the work, including the services of a certified arborist, water and fertilizer, and the subsequent removal and satisfactory disposal of the protective materials upon completion of the Contract.

Cost of wood chips, as required, shall be incidental to this item.

ITEM 129.5**TRACK EXCAVATION****FOOT**

The work under this item shall conform to the relevant provisions of Sections 120 and 140 of the 2023 Standard Specifications and the following:

DESCRIPTION

The work shall include the dismantling and removal of the existing railroad track steel rails, switch components, joint bars, plates, bolts, anchors, spikes, relay equipment, and wood ties as shown on the plans or required by the Engineer. The track steel rails, switch components, joint bars, plates, bolts, anchors, spikes, relay equipment, and wood ties shall be fully removed from the project area and become property of the contractor.

CONSTRUCTION METHODS

All steel rails, switch components, joint bars, plates, bolts, anchors, and spikes, (hereinafter referred to as "OTM" – Other Track Material) shall become the property of the contractor and shall be removed from the track in the following manner:

Rails to be removed must be disconnected from adjacent rail segments at the joint bars and removed as whole (33') segments. Care shall be taken not to damage the rails and no cutting of the solid rail is allowed. Switch components are to be kept together and each switch shipped as a unit. Bolts at the joints shall be carefully torch cut and the joint bars knocked off with a sledge hammer. Extreme care shall be taken not to damage the joint bars. All anchors shall be knocked off and all spikes shall be pulled. All scrap OTM such as bolt scraps, anchors and spikes shall be accounted for, picked up and placed in a scrap bin for transport. The individual rails shall be lifted from the ties, sorted by size, and prepared for transport. All joint bars and tie plates shall be accounted for, picked up and palletized. 25 pairs of joint bars to a pallet and 160 tie plates to a pallet and each pallet clearly marked and shrink wrapped. Any damaged joint bars and tie plates will be placed in the scrap bin. Care shall be taken not to damage the rails.

The disposal of creosote wood ties shall be in accordance with and paid under Item 184.1 Disposal of Treated Wood Products.

The removal and disposal of all other materials related to the railroad facilities shall be in accordance with and paid for under Item 120.1 Unclassified Excavation.

Submittals

The Contractor shall submit for review and approval the methods and equipment proposed for removal of the track steel rails and switch components.

COMPENSATION

Item 129.5 Track Excavation will be measured for payment by the foot along the centerline of the track bed and shall include both rails and all associated hardware.

Item 129.7 Track Excavation will be paid for at the Contract unit price per foot, which price shall include all labor, materials, equipment and incidental costs required to complete the work.

ITEM 141.1**TEST PIT FOR EXPLORATION****CUBIC YARD**

The work under this item shall conform to the relevant provisions of Section 140 of the 2023 Standard Specifications and the following:

Within 30 days of notice to proceed, the Contractor will positively locate and identify subsurface utility conflicts or other obstructions. This information will then be forwarded to the Engineer and the affected utilities and the design consultant if applicable. Before any utility relocations are considered it shall be determined if light pole foundations or tree plantings can be relocated to alternate locations within close proximity to the proposed location.

Test pits shall only be performed to the size and location as required by the Engineer and shall be performed by hand excavation or hydro-excavation to minimize impacts on the sidewalk surface, roadway and vehicular and pedestrian traffic flow. No material from the excavations will be stockpiled on the sidewalks or the roadway for an extended period of time or overnight. The excavation material from any hydro-excavation shall be disposed of by the Contractor. Reuse of this material for backfill, after it has been stockpiled and dried, shall be approved by the Engineer.

COMPENSATION

Item 141.1 Test Pit for Exploration will be measured per cubic yard of material in place.

Item 141.1 Test Pit for Exploration will be paid for at the contract unit price per cubic yard which price shall include all labor, material, equipment and incidental costs required to complete the work. No separate payment will be made for excavation, backfill, traffic control. Temporary surface restoration within sidewalk surface areas or temporary pedestrian paths shall be paid for under Item 472.

<u>ITEM 181.11</u>	<u>DISPOSAL OF UNREGULATED SOIL</u>	<u>TON</u>
<u>ITEM 181.12</u>	<u>DISPOSAL OF REGULATED SOIL IN-STATE FACILITY</u>	<u>TON</u>
<u>ITEM 181.13</u>	<u>DISPOSAL OF REGULATED SOIL OUT-OF-STATE FACILITY</u>	<u>TON</u>
<u>ITEM 181.14</u>	<u>DISPOSAL OF HAZARDOUS WASTE</u>	<u>TON</u>

The work under this item shall conform to the relevant provisions of Section 180 of the 2023 Standard Specifications and the following:

DESCRIPTION

The work under these items shall include the transportation and disposal of contaminated material excavated, or excavated and stockpiled. It shall also include the cost of any additional laboratory analysis required by a particular disposal facility beyond the standard disposal test set.

Excavation of existing subsurface materials may include the excavation of contaminated soils. The Contractor shall be responsible for the proper coordination of characterization, transport and disposal, recycling or reuse of contaminated soils. Disposal, recycling or reuse will be referred to as “disposal” for the purposes of this specification. However, regardless of the use of the term herein, there will be no compensation under these items for reuse within the project limits. The Contractor will be responsible for coordinating the activities necessary for characterization, transport and disposal of contaminated soils. Such coordination will include the Engineer and their designee overseeing management of contaminated materials. Contaminated soils must be disposed of in a manner appropriate for the soil classification as described herein and in accordance with the applicable laws of local, state and federal authorities. The Contractor shall be responsible for identifying disposal facility (ies) licensed to accept the class of contaminated soils to be managed and assure that the facility can accept the anticipated volume of soil contemplated by the project. The Contractor shall be responsible for hiring a Licensed Site Professional (LSP) and all ancillary professional services including laboratories as required for this work. The Contractor will be responsible for obtaining all permits, approvals, manifests, waste profiles, Bills of Lading, etc. subject to the approval of the Engineer prior to the removal of the contaminated soil from the site. The Contractor and LSP shall prepare and submit to the Engineer for approval all documents required under the Massachusetts Contingency Plan (MCP) and related laws and environmental regulations to conduct characterization, transport, and disposal of contaminated materials.

Classes of Contaminated Soils

The Contractor and its LSP shall determine if soil excavated or soil to be excavated is unregulated soil or contaminated soil as defined herein. Such materials shall be given a designation for purposes of reuse or disposal based on the criteria of the MCP. Soils and sediments which are not suitable for reuse will be given a designation for purposes of off-site disposal based on the characterization data and disposal facility license requirements. The Classes of Contaminated Soils are defined as follows:

Unregulated Soil consists of soil, fill and dredged material with measured levels of oil and hazardous material (OHM) contamination at concentrations below the applicable Reportable Concentration (RC’s) presented in the MCP. Unregulated soil consists of material which may be reused (or otherwise disposed) as fill within the Commonwealth of Massachusetts subject to the non-degradation criteria of the MCP (310 CMR 40.0032(3)), in a restricted manner, such that they

are sent to a location with equal or higher concentration of similar contaminants. Disposal areas include licensed disposal facilities, approved industrial settings in areas which will be capped or covered with pavement or loamed and seeded, and for purposes of this project should be reused as fill within the project site construction corridor whenever possible. The material cannot be placed in residential and/or environmentally sensitive (e.g. wetlands) areas. Under no circumstances shall contaminated soils be placed in an uncontaminated or less contaminated area (including the area above the groundwater table if this area shows no sign of contamination).

The Contractor shall submit to the Town of Southbridge the proposed disposal location for unregulated soils for approval. If such a disposal location is not a licensed disposal facility, the Contractor shall submit to the Engineer analytical data to characterize the disposal area sufficiently to verify that the unregulated material generated within the Town of Southbridge construction project limits is equal to or less than the contaminant levels at the disposal site and meets the non-degradation requirements of the MCP. In addition, the Contractor shall provide written confirmation from the owner of the proposed disposal location that they have provided with the analytical data for both the materials to be disposed as well as the disposal site characterization and that they agree to accept this material. A Material Shipping Record or Bill of Lading, as appropriate, shall be used to track the off-site disposal of unregulated soil and a copy, signed by the disposal facility or property owner, shall be provided to the Engineer to document legal disposal of the unregulated material.

The cost of on-site disposal of unregulated soil within the project area will be considered incidental to the item of work to which it pertains.

Regulated Soil consists of materials containing measurable levels of OHM that are equal to or exceed the applicable Reportable Concentrations for the site as defined by the MCP, 310 CMR 40.000. Regulated soil which meets the MCP reuse criteria of the applicable soil/groundwater category for this project area may be reused on site provided that it meets the appropriate geotechnical criteria established by the Engineer. Regulated Soil may be reused (as daily or intermediate cover or pre-cap contouring material) or disposed (as buried waste) at lined landfills within the Commonwealth of Massachusetts or at an unlined landfill that is approved by the Massachusetts Department of Environmental Protection (DEP) for accepting such material, in accordance with DEP Policy #COMM-97-001, or at a similar out-of-state facility. It should be noted that soils which exceed the levels and criteria for disposal at in-state landfills, as outlined in COMM-97-001, may be shipped to an in-state landfill, but require approval from the DEP Division of Solid Waste Management and receiving facility. An additional management alternative for this material is recycling possessing a Class A recycling permit subject to acceptance by the facility and compliance with DEP Policy #BWSC-94-400. Regulated Soil removed from the site for disposal or treatment must be removed via an LSP approved Bill of Lading, Manifest or applicable material tracking form. This type of facility shall be approved/permitted by the State in which it operates to accept the class of contaminated soil in accordance with all applicable local, state and federal regulations.

Hazardous Waste consists of materials which must be disposed of at a facility permitted and operated in full compliance with Federal Regulation 40 CFR 260-265, Massachusetts Regulation 310 CMR 30.000, Toxic Substances Control Act (TSCA) regulations, or the equivalent regulations of other states, and all other applicable local, state, and federal regulations. All excavated materials classified as hazardous waste shall be disposed of at an out-of-state permitted facility. This facility shall be a RCRA hazardous waste or TSCA facility, or RCRA hazardous waste incinerator. This

type of facility shall be approved/permitted by the State in which it operates to accept hazardous waste in accordance with all applicable local, state and federal regulations and shall be permitted to accept all contamination which may be present in the soil excavate. The Contractor shall ensure that, when required, the facility can accept TSCA waste materials (e.g. polychlorinated biphenyls (PCB's)). Hazardous waste must be removed from the site disposal or treatment via an LSP approved Manifest.

Monitoring/Sampling/Testing Requirements

The Contractor shall be responsible for monitoring, sampling and testing during and following excavation of contaminated soils to determine the specific class of contaminated material. Monitoring, sampling and testing frequency and techniques should be performed in accordance with and at the direction of an LSP. Additional sampling and analysis may be required to meet the requirements of the disposal facility license. The cost of such additional sampling and analysis shall be included in the bid cost for the applicable disposal item(s). The Contractor shall obtain sufficient information to demonstrate that the contaminated soil meets the disposal criteria set by the receiving facility that will accept the material.

No excavated material will be permanently placed on-site or removed for off-site disposal until the results of chemical analysis have been received and the materials have been properly classified. The Contractor shall submit to the Engineer results of field and laboratory chemical analysis tests within seven days after their completion, accompanied by the classification of the material determined by the Contractor, and the intended disposition of the material. The Contractor shall submit to the Engineer for review all plans and documents relevant to LSP services, including but not limited to, all documents that must be submitted to the DEP.

Waste Tracking

Copies of the fully executed Weight Slips/Bills of Lading/Manifests/Material Shipping Records or other material tracking form received by the Contractor from each disposal facility and for each load disposed of at that facility, shall be submitted to the Engineer and the Contractor's LSP within three days of receipt by the Contractor. The Contractor is responsible for preparing and submitting such documents for review and signature by the LSP or other appropriate person with signatory authority, three days in advance of transporting soil off-site. The Contractor shall furnish a form attached to each manifest or other material tracking form for all material removed off-site, certifying that the material was delivered to the site approved for the class of material. If the proposed disposition of the material is for reuse within the project construction corridor, the Contractor shall cooperate with the Town of Southbridge to obtain a suitable representative sample(s) of the material to establish its structural characteristics to meet the applicable structural requirements as fill for the project.

All material transported off-site shall be loaded by the Contractor into properly licensed and permitted vehicles and transported directly to the selected disposal or recycling facility and be accompanied by the applicable shipping paper. At a minimum, truck bodies must be structurally sound with sealed tail gates, and trucks shall be lined, and loads covered with a liner, which shall be placed to form a continuous waterproof tarpaulin to protect the load from wind and rain.

Decontamination of Equipment

Tools and equipment which are to be taken from and reused off-site shall be decontaminated in accordance with applicable local, state and federal regulations. This requirement shall include, but not be limited to, all tools, heavy machinery and excavating and hauling equipment used during excavation, stockpiling and handling of contaminated material. Decontamination of equipment is considered incidental to the applicable excavation item(s).

Regulatory Requirements

The Contractor shall be responsible for adhering to regulations, specifications and recognized standard practices related to contaminated material handling during excavation and disposal activities. The Town of Southbridge shall not be responsible at any time for the Contractor's violation of pertinent State or Federal regulations or endangerment of laborers and others within the project area. The Contractor shall comply with all rules, regulations, laws, permits and ordinances of all authorities having jurisdiction including, but not limited to, Massachusetts DEP, the U.S. Environmental Protection Agency (EPA), Federal Department of Transportation (DOT), Massachusetts Water Resource Authority (MWRA), the Commonwealth of Massachusetts and other applicable local, state and federal agencies governing the disposal of contaminated soils.

All labor, materials, equipment and services necessary to make the work comply with such regulations shall be provided by the Contractor without additional cost to the Town of Southbridge. Whenever there is a conflict or overlap within the regulations, the most stringent provisions shall apply. The Contractor shall reimburse the Town of Southbridge for all costs it incurs, including penalties and/or for fines, as a result of the Contractor's failure to adhere to the regulations, specifications, recognized standard practices, etc., that relate to contaminated material handling, transportation and disposal.

Submittals

I. Summary of Sampling Results, Classification of Material and Proposed Disposal Option

The following information, presented in tabular format, must be submitted to the Engineer for review and approval prior to any reuse on-site or disposal off-site. This requirement is on-going throughout the project duration. At least two weeks prior to the start of any excavation activity, the Contractor shall submit a tracking template to be used to present the information as stipulated herein. Excavation will not begin until the format is acceptable to the Town of Southbridge.

Characterization Reports will be submitted for all soil, sediment, debris and groundwater characterized through the sampling and analysis program. Each report will include a site plan which identifies the sampling locations represented in the Report. The Construction Plan sheets may be used as an existing conditions plan to record this information.

The Sampling Results will be presented in tabular format. Each sample will be identified by appropriate identification matching the sample identification shown on the Chain of Custody Record. The sample must also be identified by location (e.g. grid number or stockpile number). For each sample, the following information must be listed: the classification (unregulated,

regulated, etc.), proposed disposal option for the stockpile or unit of material represented, and, all analytical results.

Each Characterization Report will include the laboratory analytical report and Chain of Custody Record for the samples included in the Report.

II. Stockpiling, Transport, and Disposal

At least two weeks prior to the start of any excavation activity, the Contractor shall submit, in writing, the following for review and shall not begin excavation activity until the entire submittal is acceptable to the Town of Southbridge.

Excavation and Stockpiling Protocol:

Provide a written description of the management protocols for performing excavation and stockpiling and/or direct loading for transport, referencing the locations and methods of excavating and stockpiling excavated material.

Disposal and Recycling Facilities:

1. Provide the name, address, applicable licenses and approved waste profile for disposal and/or recycling location(s) where contaminated soil will be disposed. Present information substantiating the suitability of proposed sites to receive classifications of materials intended to be disposed there, including the ability of the facility to accept anticipated volumes of material.
2. Provide a summary of the history of compliance actions for each disposal/recycling facility proposed to be used by the Contractor. The compliance history shall include a comprehensive list of any state or federal citations, notices of non-compliance, consent decrees or violations relative to the management of waste (including remediation waste) at the facility. Material should not be sent to facilities which are actively considered by the DEP, USEPA or other responsible agency to be in violation of federal, state or local hazardous waste or hazardous material regulations. The Town of Southbridge reserves the right to reject any facility on the basis of poor compliance history.

Transportation:

The name, address, applicable license and insurance certificates of the licensed hauler(s) and equipment and handling methods to be used in excavation, segregation, transport, disposal or recycling.

III. Material Tracking and Analytical Documentation for Reuse/Disposal

The following documents are required for all excavation, reuse and disposal operations and shall be in the format described. At least two weeks prior to the start of any excavation or demolition activity, the Contractor shall submit the tracking templates required to present the information as stipulated herein. Excavation or demolition will not begin until the format is acceptable to the Town of Southbridge.

All soils, sediments and demolition debris must be tracked from the point of excavation to stockpiling to on-site treatment/processing operations to off-site disposal or on-site reuse as applicable.

Demolition Debris:

Demolition debris must be tracked if the debris is stockpiled at a location other than the point of origin or if treatment or material processing is conducted. Identification of locations will be based on the station-offset of the location. The tracking table will identify data and point of generation, any field screening such as PID or dust monitoring, visual observations/comments, quantity, and stockpile ID/processing operation location. For each unit of material tracked, the table will also track reuse of the material on-site, providing reuse date, location of reuse as defined by start and end station, width of reuse location by offset, the fill elevation range, quantity, and finish grade for said location. For demolition debris which is not reused on site, the table will also track disposal of the material as defined by disposal date, quantity and disposal facility. The table must provide a reference to any analytical data generated for the material.

COMPENSATION

Method of Measurement and Basis of Payment

Disposal of contaminated soil shall be measured for payment by the Ton of actual and verified weight of contaminated materials removed and disposed of. The quantities will be determined only by weight slips issued by and signed by the disposal facility. The most cost-effective, legal disposal method shall be used. The work of the LSP for disposal under all of these items shall be incidental to the work with no additional compensation.

Item 181.11 Measurement for Disposal of Unregulated Soil shall be under the Contract Unit Price by the weight, in tons, of contaminated materials removed from the site and transported to and disposed of at an approved location or licensed facility, and includes any and all costs for approvals, permits, fees and taxes, additional testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

Item 181.12 Measurement for Disposal of Regulated Soil – In-State Facility shall be under the Contract Unit Price by the weight in tons of contaminated materials removed from the site and transported to and disposed of at an approved in-state facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

Item 181.13 Measurement for Disposal of Regulated Soil – Out-of-State Facility shall be under the Contract Unit Price by the weight in tons of contaminated materials removed from the site and transported to and disposed of at an approved out-of-state facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

Item 181.14 Measurement for Disposal of Hazardous Waste shall be under the Contract Unit Price by the weight in tons of hazardous waste removed from the site and transported to and disposed of at the licensed hazardous waste facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization required by the facility beyond the standard disposal test set, decontamination procedures, transportation and disposal.

ITEM 184.1

DISPOSAL OF TREATED WOOD PRODUCTS

TON

The work under this item shall conform to the relevant provisions of Sections 120 and 140 of the 2023 Standard Specifications and the following:

The work under this Item shall consist of the removal and disposal of all treated existing wood products, in accordance with the relevant provisions of Section 120, as shown on the Plans, as directed by the Engineer, and the following:

The timber components of the existing structure are suspected to be treated with creosote, pentachlorophenol and/or CCA. This item shall include all costs for sampling, laboratory testing, loading, transportation and disposal of the treated wood subsequently accepted at a licensed facility. The Contractor is required to submit disposal manifests to the Engineer prior to the completion of the project. All aspects of this Item are to be completed in accordance with state and federal regulations.

Method of Measurement and Basis of Payment

Item 184.1 – Disposal of Treated Wood Products shall be measured and paid for by the Contract unit price, per Ton, of treated timber removed from the project. This price shall be full compensation for all labor, tools, equipment, materials, testing, loading, transportation, approvals, and permits necessary for the completion of the work.

ITEM 222.3 **FRAME AND GRATE (OR COVER) MUNICIPAL STANDARD** **EACH**

The work under this item shall conform to the relevant provisions of Section 220 of the 2023 Standard Specifications and the following:

DESCRIPTION

The work shall include the installation of new frame and grate (or covers) to finish grade as shown on the plans or as required by the Engineer.

New frame and grates or covers shall be manufactured by East Jordan Iron Works EJIW), 301 Spring Street, P.O. Box 439, East Jordan, MI 49727 (Phone 231-536-2261) or approved equal.

MATERIALS

All frames for grates shall be cast iron, 8 inches deep and 3 flange. Grates shall have 2-inch by 2-inch slot opening. All frames for covers shall be cast iron and 8 1/8 inches deep.

New grates shall have the words ‘DUMP NO WASTE’ and ‘DRAINS TO WATERWAYS’ in 3/8-inch, flat face gothic letters, cast into the exposed surface and along the edge of the grate along all four sides.

CONSTRUCTION METHODS

Existing and new castings shall be set, as required by the Engineer, so that final grade of the cover or grate is flush with the final course of hot mix asphalt pavement. Material around the structure shall be compacted and high early strength concrete collars shall be placed around the castings. High early strength concrete shall be 4000 PSI, 1.5 In., 565 Cement Concrete.

COMPENSATION

Method of Measurement

Item 222.3 Frame and Grate (Or Cover) Municipal Standard will be measured per each as shown on the plans or as required by the Engineer.

Method of Payment

Item 222.3 Frame and Grate (Or Cover) Municipal Standard will be paid for at the Contract unit price per each, which price shall include all labor, materials including concrete, equipment and incidental costs required to complete the work including setting the new frame and grate to final grade.

<u>ITEM 504.</u>	<u>GRANITE CURB TYPE VA4 - STRAIGHT</u>	<u>FOOT</u>
<u>ITEM 509.</u>	<u>GRAN. TRANS. CURB FOR PED. CURB RAMPS – STRAIGHT</u>	<u>FOOT</u>

The work under these items shall conform to the relevant provisions of Section 501 of the 2023 Standard Specifications and the following:

DESCRIPTION

The work consists of installing new granite curb as shown on the plans or as required by the Engineer.

CONSTRUCTION METHODS

All new or reset granite curb shall be set in 4000 psi concrete placed on either side of the curb from the bottom of the curb to the bottom of the proposed walk surface and within 1.5 inches from the finished roadway surface.

COMPENSATION

Item 504. Granite Curb Type VA4 – Straight, Item 504.1 and Item 509. Granite Transition Curb for Pedestrian Curb Ramps will be measured and paid at the Contract unit price per linear foot, which price shall include all labor, materials, equipment and incidental costs required to complete the work as shown on the plans or as required by the Engineer including cement concrete.

Any existing curb that is removed shall become the property of the Contractor. The cost of removing any existing curb shall be incidental to the project.

The work to be done under this item shall conform to the relevant provisions of Subsection 850 of the 2023 Standard Specifications, and the following:

DESCRIPTION

The work under this item shall consist of supplying, fabricating and installation of wood rail fence as shown on the plans and required by the Engineer.

MATERIALS

Materials shall meet the requirements specified in the following Subsections of Division III, Materials or as otherwise noted:

Gravel Borrow	M1.03.0 – Type b
Wooden Rails and Posts	M9.05.1
Timber Preservatives	M9.05.5

Galvanized connections, bolts, washers and nuts shall conform to AASHTO M 232.

CONSTRUCTION METHODS

Timber Rail Fence Fabrication and Erection

All posts for timber rail fence shall be machine driven provided that posts are not damaged in the process. If a post cannot be machine driven or the Contractor opts to set manually, it shall be set plumb in mechanically excavated or cored holes and secured in gravel borrow (or ready-mix concrete) footings according to the plans. Posts shall be spaced as shown on the plans. In setting the posts, precautions shall be taken to ensure proper offset, alignment and leveling to prevent bending or twisting of the rail.

If ready-mix concrete is used in lieu of gravel borrow, the mix shall be dry and free of cured clumps. The dry mix shall be placed into the post hole so that it is evenly distributed around the post and a maximum of 3 inches below finished grade. The mix shall be soaked with water to activate the concrete mix and be allowed to cure for at least 24 hours before installation of rails.

Butt joints shall be used for all rail splices. Two (2) bolts shall be used per each rail/post connection at butted joints and two (2) bolts per rail/post at non-butt joints if longer boards are used. All connections, screws, bolts, nuts and washers shall be galvanized.

All posts and rails shall be ACQ treated. Posts shall have a preservative retention level of 0.60 and rails shall have a minimum preservative retention level of 0.40.

COMPENSATION

Item 655.48 48 Inch Safety Rail – Wood will be measured and paid for at the contract unit price per foot of fence installed, complete in place, which price shall include all labor, materials, equipment, and all incidental costs required to complete the work as described herein.

No separate payment will be made for gravel borrow, wood rail and posts, preservative and all required hardware but all costs in connection therewith shall be included in the Contract unit price bid.

ITEM 657.

TEMPORARY FENCE

FOOT

The work under this item shall conform to Section 644 of the 2023 Standard Specifications and the following:

The work under this Item consists of furnishing, installing, removing and resetting, and, subsequently, removing a temporary chain link fence to close off a construction work area from the general public, to be located and secured as shown on the plans or as required by the Engineer.

All posts, including end, corner and intermediate brace posts and all gates and gate posts shall be included in the linear foot cost. The fencing height shall be 72 inches minimum. Material need not be new but shall not be deteriorated nor in any way jeopardize the security purposes intended. All fencing shall meet the approval of the Engineer.

The Contractor shall be responsible for maintenance of the temporary fence; be responsible and cognizant that it remains secure, and that the area is sealed off to the general public at all times. It may necessary to move sections of temporary fence at times during construction. Fence fabric shall be placed on the face of the post away from the work area. The top edge of the fabric shall be finished with a "Knuckled" selvage. The fence shall remain the property of and removed by the Contractor at the end of the project.

COMPENSATION

Item 657. Temporary Fence shall be measured and paid for at the Contract unit price per foot which price shall be full compensation for all labor, tools, materials, equipment, and incidental costs required to install, maintain during construction including adjustment, repair or relocation as required, and removal when no longer required at the end of the project.

ITEM 697.1

SILT SACK

EACH

The work under this item shall conform to the relevant provisions of Section 670 of the Supplemental Specifications and the following:

DESCRIPTION

Contractor shall provide and maintain silt sack at all existing catch basins within the project limits and as required by the Engineer.

MATERIALS

The silt sack shall be manufactured from a woven polypropylene fabric with an oil-absorbent pillow insert or made completely from an oil-absorbent fabric with a woven pillow insert that meets or exceeds the following specifications.

PROPERTIES	TEST METHOD	UNITS
Grab Tensile Strength	ASTM D-4632	265 LBS
Grab Tensile Elongation	ASTM D-4632	20%
Puncture	ASTM D-4833	135 LBS

Mullen Burst	ASTM D-3786	420 PS
Trapezoid Tear	ASTM D-4533	45 LBS
UV Resistance	ASTM D-4355	90%
Apparent Opening Size	ASTM D-4751	20 US SIEVE
Flow Rate	ASTM D-4491	200GAL/MIN/SQ FT
Permittivity	ASTM D-4491	1.5 SEC-1

CONSTRUCTION METHODS

The work under this item shall include the periodic maintenance of the sacks that have become clogged with debris. The Contractor shall keep silt sacks clear during construction and shall not remove them until pavement is in place and the seeded areas have taken root. The cost of replacing the silk sack shall be incidental to this item. No separate payment shall be for additional silt sacks used at a single location.

The Contractor shall be responsible for field measuring all existing and new drainage structures to ensure that the proper size sediment collection sack is provided for each structure.

Disposal of Accumulated Material

All material removed from the silt sacks shall be properly handled and disposed of by the Contractor in accordance with all Massachusetts Department of Environmental Protection (DEP) regulations, policies and guidelines.

Material removed shall be transported immediately to the place of disposal in machines or trucks that will not spill the material along the roadway. Any material falling on the roadway shall be removed at the Contractor's own expense.

NOTE: The Contractor should be aware that many landfills may require testing and analysis of the material prior to accepting it for disposal at the facility. The Contractor shall be aware that in the event that the test results indicate a hazardous waste that cannot be land filled, the Contractor shall be responsible for all costs associated with adhering to special regulations regarding disposal of waste materials removed from silt sacks.

COMPENSATION

Item 697.1, Silt Sack will be measured for payment by the each, complete in place.

Item 697.1, Silt Sack will be paid for at the Contract unit price per each, which price shall include all labor, materials, equipment and incidental costs required to provide, install, maintain and remove silt sacks in locations required by the Engineer for the duration of the project.

ITEM 698.3 GEOTEXTILE FABRIC FOR SEPARATION SQUARE YARD

The work under this item shall conform to the relevant provisions of the 2023 Standard Specifications and the following:

DESCRIPTION

The work consists of furnishing and placing a geotextile fabric at locations where stone for pipe ends is to be installed as shown on the plans or required by the Engineer.

MATERIALS

Materials shall meet the requirements specified in the following Subsections of Division III, Materials or as otherwise noted:

Stone for Pipe Ends	M2.02.3
Geotextile Fabrics	M9.50.0

The fabric shall have the following properties:

<u>Property</u>	<u>Minimum Value*</u>	<u>Test Method</u>
Grab Strength (lbs.)	200	ASTM D-4632
Elongation (%)	15	ASTM D-4632
Sewn Seam Strength** (lbs.)	180	ASTM D-4632
Puncture Strength (lbs.)	80	ASTM D-3787
Burst Strength (lbs.)	320	ASTM D-3786
Trapezoid Tear (lbs.)	50	ASTM D-4533
Apparent Opening Size (U.S. Standard Sieve)	Hole Size Equal to or Smaller than a U.S. Standard No. 40	Corps of Eng. Stan- dards CW-02215
Permeability (cm/sec)	0.010	AASHTO M-288
Flow Rate	40	AASHTO M-288

*Minimum. Use value in weaker principal direction. All numerical values represent minimum average roll value (i.e., test results from any sampled roll in a lot shall meet or exceed the minimum values in the Table). Stated values are for non-critical, non-severe applications.

**Values apply to both filed and manufactured seams.

CONSTRUCTION METHODS

Geotextile fabric shall be installed according to the manufacturer's instructions or as required by the Engineer.

COMPENSATION

Item 698.3 Geotextile Fabric for Separation will be measured for payment by the square yard, complete in place.

Item 698.3 Geotextile Fabric for Separation will be paid for at the Contract unit price per square yard, which price shall include all labor, materials, equipment to complete the work as shown on the plans or required by the Engineer.

ITEM 698.4

**GEOTEXTILE FABRIC FOR
PERMANENT EROSION CONTROL**

SQUARE YARD

The work under this item shall conform to the relevant provisions of the 2023 Standard Specifications and the following:

DESCRIPTION

The work consists of furnishing and placing a geotextile fabric for slope protection as shown on the plans or required by the Engineer.

MATERIALS

Materials shall meet the requirements specified in the following Subsections of Division III, Materials or as otherwise noted:

Geotextile Fabric M9.50.0 and AASHTO M 288

The fabric shall be used as Permanent Erosion Control. Woven Monofilament Geotextiles shall be Class 2 and all others shall be Class 1.

CONSTRUCTION METHODS

Geotextile fabric shall be installed according to the manufacturer's instructions or as required by the Engineer. Atmospheric exposure of the geotextile fabric to the elements following lay down shall be a maximum of 14 days. If laid under water, the covering crushed stone shall be placed on the same day as the geotextile.

For seams, which are sewn in the field, the Contractor shall provide at least a 6 feet length of sewn seam for sampling by the Engineer before the geotextile is installed. The seams sewn for sampling shall be sewn using the same equipment and procedures as will be used for the production seams. If seams are sewn in both the machine and cross machine direction, samples of seams from both directions shall be provided. The seam assembly description shall be submitted by the Contractor along with the sample of the seam. This description shall include the seam type, stitch type, sewing thread, and stitch density.

The geotextile shall be placed in intimate contact with the soils without wrinkles or folds, and it shall be anchored on a smooth graded surface approved by the Engineer. The geotextile shall be placed in such a manner that placement of the overlaying materials will not excessively stretch so as to tear the geotextile.

The geotextile shall be placed so that the machine direction is horizontal and runs along the slope. Adjacent geotextile sheets shall be joined by either sewing or overlapping. Overlapped seams at roll ends shall be a minimum of 12 inches except if placed under water. In such instances the overlap shall be a minimum of 3 feet. Overlaps of adjacent rolls shall be a minimum of 12 inches in all instances. Overlaps are to be anchored with securing pins (as recommended by the

manufacturer) inserted through both strips of fabric along a line through the midpoint of the overlap and to the extent necessary to prevent displacement of the fabric.

Place the fabric so that the upstream (upper) strip of fabric overlaps the downstream (lower) strip. Stagger vertical laps a minimum of 5 feet. Use full rolls of fabric whenever possible to reduce the number of vertical laps.

Care shall be taken during installation so as to avoid damage to the geotextile as a result of the installation process. Should the geotextile be damaged during installation, a geotextile patch shall be placed over the damaged area extending 3 feet beyond the limits of the damage.

The armoring system placement shall begin at the toe of the slope and proceed up the slope. Placement shall take place so as to avoid stretching and subsequent tearing of the geotextile. No stone material shall be dropped from a height exceeding 3 feet.

Field monitoring shall be performed to verify that the armoring system placement does not damage the geotextile. Any geotextile damaged during this placement shall be replaced as required by the Engineer at the Contractor's expense.

COMPENSATION

Item 698.4 Geotextile Fabric for Permanent Erosion Control will be measured for payment by the square yard, complete in place.

Item 698.4 Geotextile Fabric for Permanent Erosion Control will be paid for at the Contract unit price per square yard, which price shall include all labor, materials, equipment to complete the work as shown on the plans or required by the Engineer.

<u>ITEM 701.</u>	<u>CEMENT CONCRETE SIDEWALK</u>	<u>SQUARE YARD</u>
<u>ITEM 701.2</u>	<u>CEMENT CONCRETE PEDESTRIAN CURB RAMP</u>	<u>SQUARE YARD</u>
<u>ITEM 701.3</u>	<u>STAMPED CEMENT CONCRETE</u>	<u>SQUARE YARD</u>

Work under these items shall conform to the applicable provisions of Section 701 of the 2023 Standard Specifications and the following:

DESCRIPTION

Stamped cement concrete shall consist of integrally colored (i.e. incorporated through-out the mix) and dry shake colored stamped cement concrete complete in place as shown on the plans or as required by the Engineer.

MATERIALS

Prior to ordering materials, the Contractor shall submit pattern samples and color samples of each cement concrete type to the Engineer and Town of Southbridge for approval. Samples of other materials to be used and samples for testing shall be submitted as requested by the Engineer.

A 4 foot by 4 foot (4'x4') cured "mock up" of each type of colored concrete pavement shall be constructed for review and approval by the Engineer and the Town of Southbridge. Pattern shall be 'Ashlar Cut Stone 3 Piece Textured Mat' system, product number 32-840 by Bonway Concrete Products (www.bontool.com) or approved equal.

Concrete mix design shall meet the requirements of Section 701.

Do not add calcium chloride to the mix as it causes mottling and surface discoloration.

Supplemental admixtures shall not be used unless approved by the manufacturer of color admixture.

Add air-entraining agent to concrete work in amounts of 4-7 percent of total concrete volume, or as otherwise recommended by testing lab.

Add coloring admixture in quantities recommended by admixture manufacturer to achieve selected color. Add colored admixture to the mix according to manufacturer's written instructions in premeasured bags, not by weight of cement content.

Coloring agents for the colored and stamped concrete shall all be supplied by the same manufacturer as part of an integrated system.

Color Admixtures for integrally colored concrete shall be a colored, water-reducing, admixture containing no calcium chloride with coloring agents that are lime proof and UV resistant. Colored admixture shall conform to the requirements of ACI 303.1, ASTM C979, ASTM C494, and AASHTO M194.

Color Hardeners shall be a heavy-duty grade, UV-stable, dry-shake material for intensely coloring and hardening concrete flatwork. Color hardener shall be a blend of mineral oxide pigments, cement,

graded silica aggregates and aluminum oxide, with conditioning agents to improve workability. Color shall be 'Dover Blue', product number 32-201, by Bonway Concrete Products (www.bontool.com) or approved equal.

Release Agent shall be a dry blend of chemical powders and color pigments designed as part of the coloring and pattering system to provide the clean release of the texturing tools from the concrete surface.

Curing Compounds for Colored Concrete: Curing and sealing compound shall be a ready to use water-based membrane curing compound and sealer designed to increase impact strength of the colored concrete and to repel stains. Curing compound shall comply with ASTM C309, and the slip-resistance requirements of ASTM D-2047, be suitable for exterior use and of same manufacturer as colored admixture, for use with integrally colored concrete. Sealer shall be matte finish.

CONSTRUCTION METHODS

Existing sidewalk to be removed shall be sawcut at existing joints.

Gravel borrow shall be used to replace unsuitable material, or to supplement existing sub-base material.

Detectible warning panels shall be installed as shown on the Plans and as detailed in MassDOT's Construction Standards. The warning panel shall conform to Americans with Disabilities Act (ADA) requirements and be standard color YELLOW to match what is used in Southbridge.

Furnishing and installing detectable warning panels to meet ADA requirements, shall be incidental to Item 701.2.

COMPENSATION

Item 701. Cement Concrete Sidewalk and Item 701.2 Cement Concrete Pedestrian Curb Ramp shall be measured and paid for at the Contract unit price per Square Yard, complete in place, which price shall include all labor, materials, equipment, detectable warning panels, and incidental costs required to complete the work including sealer.

No separate payment will be made for expansion joints, joint caulk, score joints, edging, test panels, light broom finish, or other incidental materials and work, but all costs in connection therewith shall be included in the unit price bid for the respective items.

ITEM 704.01 GRANULAR STABILIZED PAVEMENT

SQUARE YARD

Work under this item shall conform to the applicable provisions of Section 701 of the 2023 Standard Specifications and the following:

DESCRIPTION

The work shall consist of constructing and repairing accessible Granular Stabilized Pavement (also referred to as Stabilized Stonedust Paving) on a prepared sub-base as shown on the plans or as required by the Engineer.

Submittals

The Contractor shall submit the following:

1. Sieve analysis of proposed stonedust material to ensure it meets grading requirements
2. Specifications of the stabilizer binder products proposed to be used
3. Sample of the stonedust one 5-lb bag of specified mix with stabilizer product for approval to ensure color will be compatible with project site
4. Provide certification that the ratio of binder to stonedust is acceptable to both the stabilizer/binder manufacturer.
5. Provide certification that the stabilizer/binder manufacturer approves the stonedust particle size as compatible with the stabilizer product.
6. Mock-up: Prepare a sample finished trail section using all specified materials and edging. Sample section shall be full width of trail, and length equal to 2 times width.
 - a. Sample will demonstrate all construction and hydration methods
 - b. A representative from the manufacturer shall be on-site during mockup and installation activities.
 - c. Sample trail section shall be approved in writing by the Engineer before the project trail is constructed.

Weather Restrictions

Do not install or work with material during inclement conditions or if material is wet or frozen. Do not install stabilized stonedust during rainy conditions or below 40 degrees Fahrenheit and falling.

Acceptance

Finished surface of pathway shall be smooth, uniform and solid. The surface should be crowned or cross-sloped to promote sheet-flow drainage of stormwater off the trail. There shall be no evidence of chipping or cracking. Dried, cured, compacted pathway shall be firm throughout the profile with no spongy areas. Any significant irregularities in path surface shall be repaired to the uniformity of entire installation.

Demonstration and Training

Provide demonstration and training to the Owner in the method for repairing the stabilized stonedust surface.

Warranty and Maintenance

The Contractor shall provide, for a period of sixty days following substantial completion, unconditional maintenance and repairs of the stabilized surfacing as required.

Submit a written warranty executed by the installer agreeing to repair or replace components of stabilized surfacing that fail in materials or workmanship within the specified warranty period. Failures include, but are not limited to, the following:

1. Premature wear and tear, provided the material is maintained in accordance with manufacturer's written maintenance instructions.
2. Improper drainage or grading that allows for water damage and scouring of the trail surface
3. Failure of system to meet performance requirements

MATERIALS

Compacted sub-base material shall conform to Item 151 Gravel Borrow. Aggregate stone for stonedust shall conform to the following:

- a. Clean, hard, durable particles or fragments of select crushed granite stone. Fines shall be evenly mixed throughout the aggregate. When produced from gravel, 50 percent, by weight, of the material retained on a No. 4 sieve shall have one fractured face.
- b. Color shall be approved by the Engineer.
- c. The portion retained on the No. 4 sieve shall have a maximum percentage of wear of 50 at 500 revolutions as determined by AASHTO T96-77.
- d. The portion passing a No. 50 sieve shall have a maximum liquid limit of 25 and a maximum plasticity index of 7, as determined by AASHTO T89-81 and AASHTO T90-81, respectively.
- e. The crushed aggregate screenings shall be free from clay lumps, vegetable matter and deleterious material.
- f. Size shall be 3/8" to No. 200 crushed granite screenings conforming to the following crushed stone sieve analysis for percentage of weight passing a square mesh sieve, ASTM C 136 – Method for Sieve Analysis for Fine and Course:

<u>Sieve Designation</u>	<u>Range of % Passing</u>
No. 3/8"	100%
No. 4	95 – 100%
No. 8	75 – 80%
No. 16	55 – 65%
No. 30	40 – 50%
No. 50	25 – 35%
No. 100	15 – 20%
No. 200	10 – 15%

Stabilizer binder for stonedust paving shall be mixed at the aggregate suppliers and conform to the following:

1. Patented powdered organic binder designed to be blended with crushed aggregate
2. Made from 100% naturally occurring materials

3. Provide Organic-Lock by Envirobond Products Corp, Tel: 866-636-8476, www.envirobond.com or approved equal. Stabilizer shall be provided factory mixed with the aggregate stone.
4. Mix Ratio: The estimated ratio for crushed granite pavement shall be approximately 30 lbs of binder per ton of Stonedust.
5. Mix ratio is approximate. The final mix ratio shall be determined by the stabilizer/binder supplier by testing the specific granite approved for use on this project.

CONSTRUCTION METHODS

The Contractor shall examine previous work, related work, and conditions under which this work is to be performed and notify the Contracting Officer in writing of all deficiencies and conditions detrimental to the proper completion of this work. Beginning work means Contractor accepts substrates, subgrades, previous work, and conditions.

Coordination: Ensure bench footings, bike rack footings, and other site furnishing footings (when present) are in place and have been accepted prior to beginning work on the decomposed granite path.

Compacted Sub-base: Compact sub-base to 95% Standard Procter density, minimum. Provide pitch to gravel base course that is parallel to finish grade pitch of stabilized stonedust.

Formwork: Install plywood formwork at the outer edges of the installation. Top of formwork shall conform to proposed finish grade.
Set elevation of formwork by instrumentation.

Stabilized stonedust Pavement:

Stabilized stonedust shall not be installed during, prior to, or immediately following rainfall or when the temperature is 40 degrees Fahrenheit and falling. Inclement weather and cold to freezing temperatures will cause an unsatisfactory installation.

Pre-hydration of stabilized stonedust is the preferred installation method: Stabilized stonedust will be pre-mixed and blended with water in compliance with the manufacturer's instructions at the quarry or blending facility prior to delivery. Placing of dry stabilized stonedust and then adding water at the jobsite should only be done when pre-hydration is not an option; for example, when the product is being shipped a great distance for installation at a later date.

Place the stabilized stonedust on prepared aggregate base and rake smooth using a steel tine rake to desired grade and cross section. Stabilized stonedust compacts an average of 15 to 20% so, for example, 3.6" depth loose will compact to 3". Multiple the "target" depth by at least 1.15 to determine the loose installation depth required.

Stonedust with Organic-Lock binder can be installed in one lift up to 6" deep using a heavy (eg 2.5 ton) roller. A 1 ton roller is adequate for a 3" compacted profile.

Do not compact until moisture content of installed material is approved by the Manufacturer's Representative.

After completion do not allow any traffic of any kind on the finished surface course until it is completely dried through. Curing period is dependent on weather conditions. The Contractor shall expect a period up to two weeks. The stabilized stonedust paving must completely dry out one time before it can be put into service.

Repairs:

Excavate damaged area to the depth of the stabilized stonedust and square off sidewalls. If area is dry, moisten damaged portion lightly. Pre-blend the dry required amount of stabilizer binder with the proper amount of aggregate in a concrete mixer. Moisten to the point where the stonedust can just barely hold together in a ball. Compact with an 8" to 10" hand tamp or 250 to 300 pound roller. Keep traffic off areas for 12 to 48 hours after repair has been completed.

Any significant irregularities shall be smoothed out prior to final acceptance of work. Smoothing shall be accomplished by rewetting rough areas thoroughly, and then rolling the paving again with a heavy roller (2000 lbs, minimum) powered walk-behind or small rider. Wackers and plate compactors are not recommended.

Maintenance:

Remove debris, such as paper, grass clippings, leaves or other organic material by mechanically blowing or hand raking the surface as needed. Any plowing program required during winter months shall involve the use of a rubber baffle on the plow blade or wheels on the plow that lifts the blade 1/4" off the paving surface.

1. If cracking occurs, simply sweep fines into the cracks, water thoroughly and hand tamp with an 8" – 10" hand tamp plate.
2. The Contractor shall monitor the site during the maintenance period and redistribute loose material, water thoroughly to a depth of 1" and re-compact with a power roller of no less than 1000 lbs.

COMPENSATION

Method of Measurement

Item 704.01 Granular Stabilized Pavement will be measured for payment per square yard of installed granular stabilized pavement path.

Method of Payment

Item 704.01 Granular Stabilized Pavement will be paid for at the Contract unit price per square yard, which price shall include all labor, materials, equipment and incidental cost to complete the work including aggregate, binder, testing, amending, placing, spreading, and compacting of aggregate material. Gravel Borrow shall be paid under Item 151, and fine grading and compacting shall be paid under Item 170.

ITEM 707.1**PARK BENCH****EACH**

The work under this item shall conform to the applicable requirements of Section 701 of the 2023 Standard Specifications and the following:

DESCRIPTION

The work under this item shall consist of supplying and installing materials for Park Benches as shown on the plans or as required by the Engineer.

Submittals

The Contractor shall submit manufacturers' product data, and samples in accordance with Division I. The Contractor shall submit a sample of the product finish and color for approval by the Engineer.

Certificate of Compliance: The Contractor shall submit a manufacturer's certification of compliance that each Park Bench has been manufactured to conform to the equivalent requirements of these Special Provisions.

Quality Assurance and Warranty

Contractor shall provide to the Engineer the written maintenance and operational instructions, all warranties, and guarantees provided by the Manufacturers for the specific improvements and finishes, and a manufacturer's limited warranty against defects in materials and workmanship for a minimum of five years after installation. If Manufacturer does not provide warranty for materials installed, Contractor shall assume all cost for replacement of specified material, if product fails during warranty period.

Contractor shall provide a guarantee of minimum of one year after acceptance of Workmanship and against defect as determined by the Engineer, and shall completely replace or repair site improvements at their own expense within two months after item is identified in the field.

Delivery, Handling and Storage

Deliver units to the site in manufacturer's original, unopened containers and packaging. Upon delivery examine packages immediately to ensure all products are complete and undamaged. Remove and replace damaged items.

Store units in covered, dry locations, protected from weather, stored off the ground, and secured on-site. Avoid use of protective materials that trap heat and moisture. Protect product's finish from damage during handling and installation. Secure all items from damage for any reason, including vandalism, and theft.

Product

Benches shall be 6' in length with a 2" square steel frame with metal slat back, IPE wood slat seat, arm rests with wooden tops and shall meet the visual illustration shown on the Drawings provided by the following:

LLivingston Bench

(6' Long, Black Powdercoated E-Steele with IPE wood seat slats and arm rests with vertical metal slat back

Thomas Steele

1080 Uniek Drive

Waunakee, WI 53597

Toll Free: 800-448-7931

sales@thomas-steele.com

or

Streetscapes Country 400 Bench

6' long, armrests at ends only, wood slat seat and armrests with vertical metal slat back

Streetscapes, Inc.

1400 Sixteenth St., Suite 400

Denver, Colorado 80202

303-398-7040 voice

info@Streetscapes.Biz

or

Maglin – 400 series bench with back

6' long, armrests at ends only, wood slat seat and armrests with vertical metal slat back

Maglin Corporation

999 18th Street, Suite 3000

Denver, CO 80202

Voice 1 800 716 5506

Fax 1 877 260 9393

Email sales@maglin.com

Or approved equal.

All structural shapes shall then be hot dip galvanized conforming to ASTM-A-123 and A-153.

All structural shapes shall receive black power coating, baked on polyester and shall be in ground mounted.

All anchor devices shall be 5/8" expansion bolts drilled into pavements and footings to a minimum total depth of 8" below finished grades.

After all fabrication operations are complete, each support weldment will have all burrs and sharp edges removed by grinding that results in a smooth surface. All welds will be chipped, thus removing all slag and spatter, and sanded or ground smooth. Each unit will then be completely washed with an approved solvent to remove any grease or foreign matter.

CONSTRUCTION METHODS

All footings shall be excavated in accordance with other sections of the specifications. The cement concrete for foundations shall conform to 4000 psi Cement Concrete, per Materials Section M4 of the standard specifications. All footings shall be to the depths stated, or as directed by the Engineer to fit pavement requirements.

Installation

Install Park Bench in accordance with manufacturer's instructions. Refer to the specific site elements and the Drawings for horizontal and vertical alignment. Anchor Park Bench securely and according to manufacturer's instructions and the Drawings, to concrete pads with stainless steel anchor bolts and fasteners with lock-tight washers.

Protection

Protect all stored and installed Park Benches from damage, use, theft or vandalism until acceptance. Contractor shall adjust, repair, or replace damaged, missing, or unacceptable items at their own expense. Site items shall be clean, and finishes as specified as condition of acceptance. Clean with non-abrasive means, careful not to damage finishes.

COMPENSATION

Method of Measurement

Item 707.1 Park Bench will be measured for payment per each, complete in place.

Method of Payment

Item 707.1 Park Bench will be paid for at the Contract unit price per each, which price shall include all labor, materials, equipment and incidental costs required to complete the work.

ITEM 707.8

STEEL BOLLARD

EACH

The work under this item shall conform to the relevant provisions of Section 700 of the 2023 Standard Specifications, and the following:

DESCRIPTION

The work shall include the installation of 24" diameter concrete foundations and 6 ½" O.D. /6" I.D., schedule 40 steel bollards filled with cement concrete as shown on the plans or as required by the Engineer.

MATERIALS

Materials shall meet the requirements specified in the following Subsections of Division III, Materials or as otherwise noted:

Gravel Borrow	M1.03.0
Cement Concrete	M4.02.00
Paint	M7.00.0
Steel Reinforcement (Epoxy)	M8.01.7
Steel Casing	M8.05.6

CONSTRUCTION OPERATIONS

Rock fill, as specified in subsection M2.02.4 shall be placed on the prepared area in a manner which will produce a reasonably well graded mass with a minimum practical percentage of voids and a minimum thickness of 24 inches. The stone will be placed to its full thickness in one operation and in such a manner as to avoid displacing the underlying material.

COMPENSATION

Method of Measurement and Basis of Payment

Item 707.8 Steel Bollard shall be measured and paid for at the Contract bid price per each steel bollard installed, complete in place, which price shall include all labor, materials, equipment and incidental required to complete the work, including concrete, gravel borrow and steel reinforcement.

<u>ITEM 707.12</u>	<u>GRANITE SEATING BLOCK</u>	<u>EACH</u>
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The work under this item shall conform to the relevant provisions of Section 917 of the 2023 Standard Specifications, Supplemental Specifications, and the following:

DESCRIPTION

The work to be done under this item shall include fabrication and placement of granite blocks as shown on the plans and required by the Engineer.

MATERIAL

Granite Block for seating shall be rock faced/split dimensional Granite Blocks as shown on the plans and details minimum 18"-24" width 36"x48" length. Chelmsford grey or regionally similar granite. Sharp corners and edges shall be cleft to less than 90 degree angle over 1"

The Following Manufacturers provide an example of the type of material proposed.

Old New England Granite Wakefield MA (781) 334-4805

Granite reclaimed granitereclaimed.com

Swenson Granite <https://swensongranite.com>

Fletcher Granite <https://fletchergranite.com/>

CONSTRUCTION METHODS

Granite Blocks supplied by the Contractor. The contractor will coordinate with the fabricator for

approval by the Engineer prior to delivery. Finished blocks are to be packaged and delivered to the site by the fabricator or as directed by the Contractor. Granite Blocks shall be installed by Contractor as shown on the plans and details.

COMPENSATION

Item 707.12 Granite Seating Block will be measured for payment per each, complete in place.

Item 707.12 Granite Seating Block will be paid for at the Contract unit price per each, which price shall include full compensation for all labor, materials, equipment and incidental costs required to complete the work to the satisfaction of the Engineer.

ITEM 748.

MOBILIZATION

LUMP SUM

The work under this item shall conform to the applicable requirements of Section 748 of the 2023 Standard Specifications and the following:

DESCRIPTION

The work consists of preparatory work, project funding signage, and operations including but not limited to those necessary for the movement of personnel, equipment, supplies and other incidental items to the project site or for costs which must be incurred prior to beginning the work. This item does not include cost of securing, bonding, insurance, or any other administrative-related costs for this project that are incidental to the project.

COMPENSATION

Item 748 Mobilization will be paid as follows:

The maximum payment for this item will not exceed 3% of the total value of the contract.

The first payment of one half of the lump sum price for Mobilization will be made after a Notice to Proceed has been issued by the Town and required shop drawings submitted, schedule submitted, and all project abutters have been notified by the Contractor.

The second and remaining payment for Mobilization will be made upon 100% completion of the work.

ITEM 751.7
ITEM 767.78

COMPOST BLANKET
COMPOSTED MULCH FOR MODIFIED
ROCKFILL AND/OR RIPRAP

CUBIC YARD
CUBIC YARD

The work under this item shall conform to the relevant provisions of Subsection 751 and M1.06.1 Organic Soil Additives of the 2023 Standard Specifications and the following:

DESCRIPTION

The work shall include the furnishing and pneumatically applying compost as a thin mulch blanket (1/2-1 inch depth) over prepared soil to provide temporary soil stabilization and organic matter for plant growth. The work shall also include the furnishing and application of composted mulch over modified rockfill and/or riprap as shown on the plans or as required by the Engineer.

Submittals and Materials

No materials shall be delivered until the required submittals have been approved by the Engineer. Delivered materials shall match the approved samples. Approval of test results does not constitute final acceptance.

The Contractor shall submit to the Engineer samples and certified test results no sooner than 60

days prior to application of compost. Vendor certification that material delivered meets the test results shall be submitted if requested.

Compost may be a blended product of compost and fine wood chips. No kiln-dried wood, construction debris or ground palette will be allowed. Material shall meet the following criteria:

- Organic matter content shall be minimum 30 percent (dry weight basis)
- Moisture content shall be 30-60 percent (wet weight basis)
- Bulk Density <1000 lb/cy
- pH shall be 5.5-7.5
- Conductivity shall be a maximum of 4 mmhos
- Stability test shall produce a maximum of 8mg CO₂-C/gram of organic material per day
- Particle size shall not exceed ¾ inch
- Compost may be a blended product of compost and fine wood chips

Compost testing shall be by a laboratory by the US Compost Council using the Testing Method for the Examination of Compost and Composting (TMECC) protocols.

The Engineer shall approve the Contractor's equipment for application.

CONSTRUCTION METHODS

Application of compost material shall not begin until the Engineer has approved the site and soil conditions. Soil preparation shall be as specified under the applicable item for soil placement or for seeding. The Contractor shall notify the Engineer when areas are ready for inspection and application of compost.

Compost blanket or composted mulch shall be pneumatically applied (blown on) to a minimum depth of one half to one inch. Where shown on the plans or when required by the Engineer depth may be increased to provide berms for sediment control or to otherwise prevent slope erosion.

When compost blanket is proposed for areas with planting, compost (and seed if applicable) shall be applied after planting. If compost and seed occur prior to planting, areas shall be regraded and compost and seed reapplied to the satisfaction of the Engineer and at no additional cost to the project.

COMPENSATION

Item 751.7 Compost Blanket and Item 767.78 Composted Mulch for Modified Rockfill and/or Riprap will be measured and paid for at the contract unit price per cubic yard which price shall include all labor, materials, equipment, and all incidental costs required to complete the work of pneumatically applying compost including surface preparation.

Seeding will be compensated for under Item 765. Seeding.

The work under this item shall conform to Section 751 and 767 of the 2023 Standard Specifications, Section 670 of the Standard Supplemental Specifications and the following:

DESCRIPTION

The work shall include the furnishing and placement of a sediment control barrier. Sediment Control Barrier shall be installed prior to disturbing upslope soil.

The purpose of the sediment control barrier is to slow runoff velocity and filter suspended sediments from storm water flow. Sediment barrier may be used to contain stockpile sediments, to break slope length, and to slow or prevent upgradient water or water off road surfaces from flowing into a work zone. Contractor shall be responsible for ensuring that barriers fulfill the intent of adequately controlling siltation and runoff.

Twelve-inch diameter (after installation) compost filter tubes are intended to be the primary sedimentation control barrier.

For small areas of disturbance with minimal slope and slope length, the Engineer may approve the following sediment control methods;

- Straw tubes/wattles which shall be trenched
- Straw bales which shall be trenched

Additional barriers (adding depth or height) shall be used at specific locations of concentrated flow such as at gully points, steep slopes, or identified failure points in the sediment capture line.

Where specified or required by permits, silt fence shall be used in addition to compost filter tubes or straw bales and shall be incidental to the item.

MATERIALS AND CONSTRUCTION

Prior to initial placement of barriers, the Contractor and the Engineer shall review locations specified on the plans to ensure that the placement will provide maximum effectiveness.

Barriers shall be staked, trenched and/or wedged as specified herein and shall be securely in contact with existing soil such that there is no flow beneath the barrier.

Compost Filter Tube

Compost material inside the filter tube shall meet M1.06.0, except for the following: no manure or bio-solids shall be used; no kiln-dried wood or construction debris shall be allowed; material shall pass through a 2-inch sieve; and the C:N ratio shall be disregarded.

Outer tube fabric shall be a knitted mesh with 1/8 - 3/8" openings and made of 100% biodegradable materials (i.e., cotton, hemp or jute).

Compost filter tubes shall be a minimum of 12 inches in diameter installed. Tubes shall be placed, filled, and staked in place as required to ensure stability against water flows. All tubes shall be tamped, but not trenched, to ensure good contact with soil.

Submit Catalogue cut for Engineers approval prior to use.

Where reinforcement is necessary, additional tubes shall be installed as shown on the plans.

Straw Bales

Straw bales shall conform to the requirements of Section M6.04.2 of the Standard Specifications and the following:

Bales should be a minimum size of 12 x 16 x 36 inches and shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another.

The bales shall be trenched and backfilled. The trench shall be excavated the width of the bale and the length of the proposed barrier to a depth of 4 inches. After the bales are staked the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built up to 4 inches against the uphill side of the barrier.

Straw Wattle

Straw wattle shall be a minimum of 12 inches in diameter. Straw filling shall conform to the requirements of Section M6.04.2, shall be encased in durable netting, and shall have a density of 3 lb/foot. Straw wattle shall be trenched in 3 inches deep and staked according to the plans. The wattles shall be sufficiently secure on the upstream side to prevent water flowing underneath the wattle.

Silt Fence

Materials and Installation shall be per Section 670.40 of the Standard Supplemental Specifications and the following:

Silt fence shall be used when specified by Orders of Condition or other permitting.

When used with compost filter tubes, the tube shall be placed on a minimum of 8 inches of folded fabric on the upslope side of the fence. Fabric does not need to be trenched.

When used with straw bales, an 8-inch deep and 4-inch wide trench or V-trench shall be dug on the upslope side of the fence line. One foot of fabric shall be placed in the bottom of the trench followed by backfilling with compacted earth or gravel. Stakes shall be driven 16 inches into the ground on the down slope side of the trench and shall be spaced such that the fence remains vertical and effective.

Width of fabric shall be sufficient to provide a 36-inch high barrier after fabric is folded or trenched. Sagging fabric will require additional staking or other anchoring.

Stakes

Stakes for anchoring Compost Filter Tubes, Straw Wattles, and Straw Bales shall be as shown on the plans and shall be a minimum of 1x1 inch diameter x 4 feet hardwood stakes.

When used with Silt Fence, stakes for Compost Filter Tubes shall be driven 12 inches into the ground, Stakes for Straw Bales shall be driven 16 inches into the ground.

Stakes of other material of equivalent strength may be used if approved by the Engineer.

MAINTENANCE

Maintenance of Sediment Control Barriers shall be per Section 670.40 of the Standard Supplemental Specifications or per the Stormwater Pollution Prevention Plan (SWPPP).

The contractor shall inspect the sediment barrier after each rain event and as specified in relevant permits to ensure that they are working effectively and as intended. Contractor shall be responsible for ensuring that an effective barrier is in place for all phases of the contract.

Barriers that decompose naturally due to weatherization over time such that they no longer provide the function required shall be repaired or replaced as directed. If the resulting berm of compost within the fabric tube is sufficiently intact and continues to provide water and sediment control, barrier does not necessarily require replacement.

DISMANTLING & REMOVING

Barriers shall be dismantled and/or removed when construction work is complete and when site conditions are sufficiently stable to prevent surface erosion and after receiving permission to do so from the Engineer.

For all instances, all nonbiodegradable material, including photo-biodegradable fabric, plastic netting, nylon twine, and silt fence, shall be removed and disposed off-site by the Contractor regardless of site context.

For naturalized areas, biodegradable, natural fabric and material may be left in place to decompose on-site. Compost filter tubes may be left as they are with stakes removed. Straw bales shall be broken down and spread evenly. All nylon or nonbiodegradable twine shall be removed along with silt fence. Wooden stakes may be left on site, placed neatly and discretely.

In urban, residential, and other locations where aesthetics is a concern, the following shall apply:

- Filter tube fabric shall be cut and removed, and compost shall be raked to blend evenly (similar to a soil amendment or mulch). Not more than a 2-inch depth shall be left on soil substrate.
- Straw bales shall be removed and disposed off-site by the Contractor. Areas of trenching shall be raked smooth and disturbed soils stabilized with a seed mix matching adjacent grasses (i.e., lawn or native grass mix).
- Silt fence, stakes, and other debris shall be removed and disposed off-site. Site shall look neat and clean upon completion.

COMPENSATION

Item 767.121 will be measured and paid for at the contract unit price per foot of sediment control barrier which price shall include all labor, equipment, materials, maintenance, dismantling, removal, restoration of soil, and all incidental costs required to complete the work.

Silt fence, when used in conjunction with compost filter tubes or straw bales, will be incidental to this item.

Additional barrier, such as double or triple stacking of compost filter tubes, shall be paid for per foot of tube installed.

Barriers that have been driven over or otherwise damaged by construction activities shall be repaired or replaced as required by the Engineer at the Contractor's expense.

<u>ITEM 824.211</u>	<u>RECTANGULAR RAPID-FLASH BEACON (SOLAR POWER)</u>	<u>LUMP SUM</u>
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The work under this item shall conform to the relevant provisions of Section 800 and 900 of 2023 Standard Specifications and the following:

DESCRIPTION

The work shall include the installation of a new solar powered pedestrian actuated flashing beacon system (pair – 1 unit each direction) complete and ready for operation, as shown on the plans or as required by the Engineer.

MATERIALS

The work shall include the furnishing and installation of the solar powered pedestrian actuated flashing beacon with backup battery. Each unit of the solar powered pedestrian activated flashing beacon system shall include the following:

- Concrete foundation (poured in place or precast).
- Signal base and post, painted powder coated black.
- Radio communication between beacons via FCC approved spread spectrum radio frequency. Each beacon shall be coded as not to interfere with the operation of adjacent beacons.
- One 12 inch flashing yellow LED beacon.
- APS pedestrian push button with sign meeting latest MUTCD.
- Warning signs installed according to latest MUTCD.
- Providing all incidental materials necessary for operating and controlling the flashing beacon as shown on the plans or as directed by the Engineer.

CONSTRUCTION METHODS

The beacon shall be solar powered and wireless. No electrical service connection or trenching of the roadway will be permitted to install the solar powered pedestrian activated flashing beacon system. The duration of the flashing yellow mode shall be determined and approved by the Town.

Within 30 days following execution of the Contract, the Contractor shall submit shop drawings for signal supports, a list of equipment, and manufacturer's equipment specifications to the Engineer in accordance with the relevant provisions of Section 815.20.

No work shall be commenced by the Contractor until approval of the shop drawings and manufacturer's data has been received in writing from the Engineer.

The Contractor shall deliver to the Town a certificate of compliance from the manufacturer for the solar powered pedestrian activated flashing beacon system.

Guarantee after Final Acceptance

The Contractor shall diagnose (trouble-shoot) and replace any part of the solar powered pedestrian activated flashing beacon system that is found to be defective in workmanship, material or manner of functioning within six months from date of final acceptance by the Town. This requirement does not affect the one-year warranty period on equipment specified in Subsection 815.20 of the Standard Specifications.

Upon the date of acceptance of the project by the Town, the Contractor shall turn over all guarantees and warranties to the Town, where applicable.

COMPENSATION

Item 824.211 Rectangular Rapid-Flash Beacon (Solar Power) shall be paid for at the contract unit price per lump sum which price shall include all labor, materials, equipment and incidental costs required to provide a pair (two) of fully operational units including foundation and warning signs as shown on the plans or as required by the Engineer.

<u>ITEM 865.1</u>	<u>THERMOPLASTIC PAVEMENT OVERLAY</u>	<u>SQUARE FOOT</u>
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The work to be done under this item shall conform to the relevant provisions of Section 860 of the 2023 Standard Specifications, and the following:

DESCRIPTION

The work includes placement of preformed thermoplastic overlay for stamped asphalt or concrete at locations shown on the on the plans and as required by the Engineer.

MATERIALS

Must be composed of an ester-modified rosin impervious to degradation by motor fuels, lubricants, etc. in conjunction with aggregates, pigments, binders, and anti-skid/anti-slip elements. Pigments and

anti-skid/anti-slip elements must be uniformly distributed throughout the material. The thermoplastic material conforms to AASHTO designation M249, with the exception of the relevant differences due to the material being supplied in a preformed state, being non-reflective, and potentially being of a color different from white or yellow.

Pigments

- a. White: The material shall be manufactured with sufficient titanium dioxide pigment to meet FHWA Docket No. FHWA-99-6190 Table 5 and Table 6 as revised and corrected.
- b. Red, Blue, and Yellow: The material shall be manufactured with sufficient pigment to meet FHWA Docket No. FHWA-99-6190 Table 5 and Table 6 as revised and corrected. The pigment system must not contain heavy metals nor any carcinogen, as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant Federal Regulations.
- c. Other Colors: The pigment system must not contain heavy metals nor any carcinogens, as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant Federal Regulations.

Heating Indicators:

The top surface of the material shall have regularly spaced indents. The closing of these indents during application shall act as a visual cue that the material has reached a molten state, allowing for satisfactory adhesion and proper embedment of the anti-skid/anti-slip elements, and a post-application visual cue that proper application procedures have been followed.

Skid Resistance:

The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 8 (Mohs scale). Upon application the material shall provide a minimum skid resistance value of 60 BPN when tested according to ASTM E 303.

Skid Resistance:

The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 8 (Mohs scale). Upon application the material shall provide a minimum static friction of coefficient of 0.6 when tested according to ASTM C 1028 (wet and dry), and a minimum static coefficient of friction of 0.6 when tested according to ASTM D 2047.

Thickness:

The material must be supplied at a minimum thickness of 90 mil (2.29 mm).

Environmental Resistance:

The material must be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to oil and gasoline.

CONSTRUCTION METHODS

Application (Hot Mix Asphalt or Portland Cement Concrete):

The material shall be applied using the propane torch method or an infrared or blue flame heater recommended by the manufacturer. The material must be able to be applied at ambient and road temperatures down to 45 degrees Fahrenheit without any preheating of the pavement to a specific

temperature. A sealer specified by the manufacturer must be applied to the substrate prior to material application to ensure proper adhesion. A thermometer shall not be required during the application process. The pavement shall be clean, dry and free of debris. Supplier must enclose application instructions with each box/package.

COMPENSATION

Method of Measurement and Basis of Payment

Item 865.1 Thermoplastic Pavement Overlay shall be measured and paid for at the Contract bid price per square foot, complete in place, and shall include all labor, materials and equipment to complete the work as described herein.

ITEM 983.12 RIPRAP WITH GRAVEL PACKED VOIDS TON

The work to be done under this item shall conform to the relevant provisions of Section 983 of the 2023 Standard Specifications, and the following:

DESCRIPTION

The work includes excavation, grading, and placing riprap with gravel packed voids (void-filled riprap) at locations shown on the on the plans and as required by the Engineer.

MATERIALS

Riprap Gradation

Riprap Gradation	% Smaller Than Given Size By Weight	Intermediate Rock Dimension (Inches)	D ₅₀ * (Inches)
Type VL	70 – 100	12	6**
	50 – 70	9	
	35 – 50	6	
	2 - 10	2	
Type L	70 – 100	15	9**
	50 – 70	12	
	35 – 50	9	
	2 - 10	3	

*d₅₀ = Mean Particle Size

**Mix VL and L riprap with 35% topsoil (by volume) and bury it with 4 to 6 inches of topsoil, all vibration compacted, and revegetate

Gradation:

- a. Each load of riprap shall be reasonably well graded from the smallest to the largest size specified.
- b. Stones smaller than the two to ten percent (2 to 10%) size will not be permitted in an amount exceeding ten percent (10%) by weight of each load.

- c. Control of gradation shall be by visual inspection. However, in the event the Engineer determines the riprap to be unacceptable, the Engineer shall select two (2) random truckloads to be dumped and checked for gradation. Mechanical equipment and labor required to assist in checking gradation shall be provided by the Contractor at no additional cost.

Color:

- a. The color of the riprap shall be gray with gray/blue hues or other acceptable colors approved by the Engineer prior to delivery to the project site.
- b. Color shall be consistent on the entire project and shall match the color of rock to be used for all other portions of the work.

Samples of riprap and void-fill materials shall be submitted for the review and approval of the Engineer prior to construction.

Where “Void-Filled Riprap” is designated on the plans or as required by the Engineer, riprap shall be mixed with the materials and associated proportions listed herein to fill the voids of the riprap.

If specified, an alternate void-filled riprap mix that includes river cobble shall be used as described herein.

Mix proportions and material gradations listed herein are approximate and are subject to adjustment by the Engineer. No adjustment in unit price for void-filled riprap will be allowed based on modifications to the mix proportions.

Mix Requirements for Type VL and L Void-Filled Riprap without River Cobble

Approximate Proportions (Loader Buckets)	Material Type	Material Description
6	Riprap	Type VL or L
1	Void-Fill Material	VTC (Vehicle Tracking Control) rock (crushed rock with 100% passing 4-inch sieve, 50-70% passing 3-inch sieve, 0-10% passing 2-inch sieve)
1	Void-Fill Material	4-inch minus pit run surge (round river rock and sand, well graded, 90-100% passing 4-inch sieve, 70-80% passing 1.5-inch sieve, 40-60% passing 3/8-inch sieve, 10-30% passing #16 sieve)
1	Void-Fill Material	Type II bedding
½ to 1	Void-Fill Material	Native topsoil

Note: Mix proportions and material gradations are approximate and are subject to adjustment by the Engineer.

Mix Requirements for Void-Filled Riprap w River Cobble

Approximate Proportions (Loader Buckets)	Material Type	Material Description
6	Riprap	Type VL or L

1	Void-Fill Material	2 to 4-inch cobble (round washed river rock that is well-graded, 100% passing 6-inch sieve, 35-50% passing 3-inch sieve, 5-20% passing 2-inch sieve)
1	Void-Fill Material	4-inch minus pit run surge (round river rock and sand, well graded, 90-100% passing 4-inch sieve, 70-80% passing 1.5-inch sieve, 40-60% passing 3/8-inch sieve, 10-30% passing #16 sieve)
1	Void-Fill Material	Type II bedding
½ to 1	Void-Fill Material	Native topsoil
Top Layer	Top Dressing	Additional 4 to 12-inch cobbles (round washed river rock that is well-graded, 80-100% passing 12-inch sieve, 35-50% passing 6-inch sieve, 5-20% passing 4-inch sieve) shall be mixed in on the surface of exposed section of void-filled riprap (covering approximately) 15% of the surface) prior to compaction of the void-filled riprap. Cobbles shall be fully embedded into the mass of the void-filled riprap.

Note: Mix proportions and material gradations are approximate and are subject to adjustment by the Engineer.

CONSTRUCTION METHODS

Preparation

Channel slope, bottom, or other areas that are to be protected with void-filled riprap shall be free of brush, trees, stumps, and other objectionable material and be graded to a smooth compacted surface as shown on the plans or required by the Engineer.

The Contractor shall excavate area to receive void-filled riprap to the specified depth (bedding material not required).

Placement

1. The Engineer and/or their designee shall observe mixing and placement of the material.
2. Approved individual component materials of void-filled riprap mix shall be delivered to the site in separate marked stockpiles. Mixing shall be accomplished using a front end loader or other approved means to add the specified number of "loader buckets" of each material to a mixing stockpile. Ensure that each loader bucket comprises an approximately equal volume. If the loader operator is only able to fill the bucket partially full with large riprap (due to the force required to push the bucket into the pile), but uses full buckets of finer material, the mix proportions will not be correct. Avoid picking up excessive amounts of native soil from the subgrade under the stockpiled materials during the loader bucket mixing operations. The Engineer may reduce or eliminate the volume of topsoil added to the mixture based on the amount of native soil was incorporated during the bucket mixing operation.
3. Once all of the materials have been added to the mixing stockpile in the specified proportions, thoroughly mix the pile using a loader, large track-hoe excavator, or other

approved means to fill the voids of the riprap without displacing the riprap or crating pockets of finer material absent of riprap.

4. Segregation of materials shall be minimized when hauling from the stockpile to the installation location. Remixing shall occur as necessary to correct for any segregation as the material is placed.
5. The loose material shall be placed in a single lift of sufficient height such that final grade will be achieved upon compaction. Additional mixing with a track excavator shall be required after initial placement to ensure that the void-filled riprap is thoroughly mixed and no segregation or excessive amount of smaller void-fill material is present on the surface. The mixing and placement process shall result in a larger riprap (D50 size or larger) flush to the top surface with faces and shapes arranged to minimize voids, and smaller material between and below larger materials.
6. If the top of the compacted material is below final grade, placement of only the smaller void-fill materials to achieve final grade will not be permitted. Additional void-filled riprap shall be added and the entire section mixed with a track excavator to eliminate the presence of smaller void-fill material on the surface.
7. Avoid segregation of materials and remix any section where the combined material consists primarily of the void-fill materials. The density and interlocking nature of riprap in the mixed material shall essentially be the same as if the riprap was placed without filling the voids. This required care and persistence on the part of the Contractor to install the work and on the part of the Engineer to ensure that the work is installed correctly.
8. At the direction of the Engineer, a 50-50 mixture of pit run and Type II bedding shall be sprinkled on the surface of the void-filled riprap and washed-in with water using a high pressure hose to fill-in small voids. This shall be done just prior to compaction of the void-filling riprap.
9. If specified as part of the cobble mix, the top dressing of cobbles shall also be mixed in on the surface of exposed sections of void-filled riprap material prior to compaction of the riprap material.
10. Compaction of the void-filled riprap shall be performed by running over the void-filled riprap with a large, heavy duty track excavator or dozer. The moisture content of the mixture shall be at optimum conditions prior to compaction and water shall be added, as necessary, at the direction of the Engineer. Compaction of void-filled riprap shall be reviewed and approved by the Engineer.
11. Where shown on the plans, a surface layer of 4 to 6 inches moist topsoil shall be placed over the void-filled riprap. The topsoil surface layer shall be compacted to approximately 85% of maximum density and within two percentage points of optimum moisture in accordance with ASTM D 698. Topsoil shall be added to any areas that settle.
12. The Contractor shall install a test section of at least 100 square feet of void-filled riprap for the review and approval of the Engineer prior to installation of the remaining void-filled riprap.
13. Elevation tolerance for the void-filled riprap shall be 0.10 feet. Thickness of void-filled riprap shall be no less than thickness shown and no more than 2-inches greater than the thickness shown.

Rejection of Work and Materials

The Engineer will reject placed void-filled riprap that do not conform to the requirements of herein. The Contractor shall immediately remove and re-lay the void-filled riprap to conform to these specifications.

Void-filled riprap that does not conform to this section shall be rejected, whether delivered to the job site or placed.

COMPENSATION

Method of Measurement and Basis of Payment

Item 983.12 Riprap With Gravel Packed Voids shall be measured and paid for at the Contract bid price per ton, complete in place, and shall include all labor, materials and equipment to complete the work as described herein.

ITEM 986.2

MODIFIED ROCK FILL

CUBIC YARD

The work to be done under this item shall conform to the relevant provisions of Section 983 of the 2023 Standard Specifications, and the following:

DESCRIPTION

Item 983.51 shall be used for locations of modified rock fill slopes steeper than 2H:1V as shown on the plans.

MATERIALS

An underlying Geotextile Fabric, meeting the requirements for Type I Fabric, as specified in Subsection M9.50.0 of the Standard Specifications, shall be placed under the proposed rock fill at locations where ledge is not encountered. The geotextiles shall be protected from exposure to sunlight during transport and storage. After placement, the geotextile shall not be left uncovered for more than two (2) weeks.

CONSTRUCTION OPERATIONS

Rock fill, as specified in subsection M2.02.4 shall be placed on the prepared area in a manner which will produce a reasonably well graded mass with a minimum practical percentage of voids and a minimum thickness of 24 inches. The stone will be placed to its full thickness in one operation and in such a manner as to avoid displacing the underlying material.

The larger stones shall be placed closely together and the intervening spaces filled with smaller stones in such a manner that the entire surface will form a reasonably compact mass. Hand placing or rearranging of individual stones by mechanical equipment may be required to the extent necessary to secure the results specified.

Traffic or construction equipment will not be permitted directly on the geotextile. Geotextiles may be joined by either sewing or overlapping. Sewn seams shall be lapped minimum of 4 inches and double sewn. The thread used to sew the seam shall be nylon or polypropylene. Overlapped seams shall have a minimum overlap of 18 inches, except where placed under water where the overlap shall be a minimum of 36 inches. All seams shall be subject to the approval of the Engineer. Geotextile which becomes torn or damaged shall be replaced or patched. The patch shall extend 36 inches beyond the perimeter of the tear or damage.

Stone filling (heavy) or stone filling (medium) shall not be dropped onto the geotextile from a height greater than 12 inches. Slope protection and smaller sizes of stone filling shall not be dropped onto the geotextile from a height exceeding 36 inches.

The surface upon which the geotextile is to be placed shall be within reasonable conforming to the proposed grade. The geotextile shall be laid loosely, so that placement of the overlying material will not stretch or tear the geotextile.

COMPENSATION

Method of Measurement and Basis of Payment

Item 986.2 Modified Rock Fill shall be measured and paid for at the Contract bid price per cubic yard of rock fill, complete in place, and shall include all labor, materials and equipment to complete the work as described herein. No additional payment will be made for the Geotextile Fabric, and all materials and labor required for its placement on the slope shall be considered incidental.

ITEM 995.05 STEEL PEDESTRIAN PREFABRICATED BRIDGE LUMP SUM

The work under this item shall conform to the relevant provisions of Section 900 of the 2023 Standard Specifications and the following:

DESCRIPTION

The work includes a fully engineered clear-span bridge of steel fabrication and shall be regarded as minimum standards for design and fabrication.

Quality Assurance

Fabricators must have at least 5 years of experience fabricating this type of structure and be on the currently certified bridge fabricator–intermediate (IBR) list provided by MassDOT.

Fabrication: Fabricators must be currently certified by the American Institute of Steel Construction to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for the category “Major Steel Bridges” as set forth in the AISC Certification Program. Quality control shall be in accordance with procedures outlined for AISC certification.

Welding:

1. Welding and weld procedure qualification tests shall conform to the latest provisions of ANSI/AWS D1.1 “Structural Welding Code”.

2. Filler metal shall be in accordance with the applicable AWS Filler Metal Specification (i.e. AWS A 5.28 for the GMAW Process).
3. Welders shall be properly accredited operators, each of whom shall submit certification of satisfactorily passing AWS standard qualification tests for all positions with unlimited thickness of base metal, have a minimum of 6 months experience in welding tubular structures, and have demonstrated the ability to make uniform sound welds of the type required.

Delivery, Storage and Handling

The new bridge shall either be unloaded at the time of arrival, or the trailer can be left on site until such time it can be off-loaded. The fabricator will provide detailed, written instructions on the proper lifting procedures and splicing procedures (if required). Protect all manufactured items (plates, connections, hardware, etc.) from weather, moisture, and damage, and theft during storage and delivery to the site. These items can either be left on the bridge itself or with the Southbridge DPW.

MATERIALS

Bridge

The specific type of bridge required will be a “Crossbow” style bridge as manufactured by Pioneer Bridges, 119 40th Street NE, Fort Payne, AL, website: <https://pioneerbridges.com> or an approved equal.

Diagonal members shall be welded to the chords and/or verticals as determined by the bridge manufacturer. The top of the safety system or guardrail elements shall not be less than 54 inches above the deck, measured from the high point of the deck. The safety system shall extend the full length of the bridge.

Length: Center to center of bearing of bridge shall be 50 feet.

Width: Inside clear width of bridge shall be 10 feet.

Camber: The bridge shall be cambered to offset dead load and appear flat.

Member Components: All members of the vertical trusses (top and bottom chords, verticals, and diagonals) shall be fabricated from square and/or rectangular structural steel tubing. Other structural members and bracing shall be fabricated from structural steel shapes or square and rectangular structural steel.

Safety Rails: Horizontal safety rails with 4-inch maximum openings. Rails shall be placed on the structure up to a minimum height of 54” above the deck surface for bicycle use. All railings shall have a smooth inside surface with no protrusions or depressions. All ends of angles and tubes shall be closed and ground smooth. The safety rail system shall be designed according to AASHTO LRFD Guide Specifications for the design of Pedestrian Bridges, November 2009 with 2015 Interim Revisions.

Decking:

1. The deck shall be completely formed by the bridge manufacturer with a minimum of 22-gauge galvanized floor deck. The floor deck shall be manufactured by a member of the Steel Deck Institute or have their deck properties certified by the Steel Deck Institute.
2. The reinforced concrete deck shall carry a 200-pound-per-square-foot superimposed live load. The concrete shall be 4000 psi lightweight concrete (no additives allowed) and the furnishing of the reinforcement shall be the responsibility of the contractor. After the concrete has cured, an appropriate sealer should be applied by the contractor.

Toe Plate: The bridge shall be supplied with a steel toe plate mounted to the inside face of both trusses. The toe plate shall be a minimum of 4 inches high. Toe plating will be welded to the truss members at a height adequate to provide a 2-inch gap between the bottom of the plate and the top of the deck or the top of the bottom chord, whichever is higher. The span of unstiffened flat toe plating (from center to center of supports) shall not exceed 5'-8".

Rub Rail: The bridge shall be supplied with a pressure treated wood rub rails. A rub rail shall be attached flush to the inside face of the bridge truss verticals and fastened with two carriage bolts at each support location and along both sides of the bridge. The span of the rub rail from centerline to centerline of support shall not exceed 6'-6". The top of the rub rail shall be 42 inches above the top of the deck (measured at the outside edge of the deck).

Elevation Difference: The bridge abutments shall be constructed at the same elevation on both ends of the bridge.

Steel Finish: Unpainted weathering steel – Fabricated from high strength, low alloy, atmospheric corrosion resistant ASTM A847 cold formed welded square and rectangular tubing and/or ASTM A588, or ASTM A242, ASTM A606 plate and structural steel shapes (Fy = 50,000 psi). The minimum corrosion index of atmospheric corrosion resistant steel, as determined in accordance with ASTM G101, shall be 6.0.

All boldly exposed surfaces of weathering steel bridges shall be sand blasted in accordance with the Steel Structures Painting Council (SSPC) Surface Preparation Specification No.7 "Brush Blast Cleaning".

Minimum Thickness of Metal: The minimum thickness of all structural steel members shall be 3/16" nominal and be in accordance with the AISC Manual of Steel Construction's "Standard Mill Practice Guidelines". For ASTM A500 and ASTM A847 tubing, the section properties used for design shall be per the Steel Tube Institute of North America's Hollow Structural Sections "Dimensions and Section Properties".

Welding materials: Welding materials shall be in strict accordance with the American Welding Society (AWS). Structural welding code, D1.1 Filler metal shall be used for the particular welding process required. Welders shall be certified in accordance with AWS D1.1.

Field Splices: If required, weathering steel bridges shall use type 3 bolts.

Engineering

Structural design of the bridge structure shall be performed by or under the direct supervision of a licensed Professional Structural Engineer and done in accordance with recognized engineering practices and principles. The Professional Structural Engineer shall be licensed to practice in the Commonwealth of Massachusetts.

Uniform Live Load: Pedestrian bridges shall be designed for an evenly distributed live load of 90 pounds per square foot in accordance with the LRFD Guide Specifications for the Design of Pedestrian Bridges, with 2015 Interim Revisions.

Secondary Members: LRFD Guide Specifications for the Design of Pedestrian Bridges, with 2015 Interim Revisions.

Vehicle Loads: The bridge will also be designed to withstand a moving vehicle load which weighs up to 10,000 pounds in accordance with the LRFD Guide Specifications for the Design of Pedestrian Bridges, with 2015 Interim Revisions.

Wind Load: The bridge shall be designed for a minimum wind load of 35 pounds per square foot (approximately 120 mph). The wind is calculated on the entire vertical surface of the bridge as if fully enclosed.

Seismic Load: The bridge shall be designed for seismic loads of the intensity required by local codes and the LRFD Guide Specifications for the Design of Pedestrian Bridges, with 2015 Interim Revisions.

Temperature: The bridge shall be designed to accommodate a temperature differential of 120 degrees Fahrenheit. Slip pads of UHMW polyethylene shall be placed between the smooth surface of this setting place and the smooth veering plate of the bridge. At least 1" clearance shall be provided between the bridge and concrete abutments.

Load Combinations: Load combinations shall be in accordance with LRFD Guide Specifications for the Design of Pedestrian Bridges, with 2015 Interim Revisions.

Design Limitations:

1. Deflection Limits: The vertical deflection of the bridge shall not exceed 1/800 of the span length. The horizontal deflection due to the wind shall not exceed 1/500 of the span length.
2. Vibration Limits: Shall be in accordance with LRFD Guide Specifications for the Design of Pedestrian Bridges, with 2015 Interim Revisions.

Governing Design Codes / References:

Structural members shall be designed in accordance with recognized engineering practices and principles as follows:

1. Shall be in accordance with LRFD Guide Specifications for the Design of Pedestrian Bridges, with 2015 Interim Revisions.

2. **Welded Tubular Connections:** All welded tubular connections shall be checked, when within applicable limits, for the limiting failure modes outlined in the ANSI/AWS D1.1 Structural Welding Code or in accordance with the "Design Guide for Hollow Structural Section Connections" as published by the Canadian Institute of Steel Construction (CISC). When outside the "validity range" defined in these design guidelines, all applicable limit states or failure modes must be checked.
3. **Top Chord Stability:** The top chord of a half-through truss shall be considered as a column with elastic lateral supports at the panel points. The critical buckling force of the column, so determined, shall exceed the maximum force from dead load and live load (uniform or vehicular) in any panel of the top chord by not less than 50 percent for parallel chord truss bridges or 100 percent for tied arch bridges. The design approach to prevent top chord buckling shall be as outlined by E.C. Holt's research work in conjunction with the Column Research Council on the stability of the top chord of a half-through truss.
4. In addition, for the dead load plus vehicle load combination, the spring constant "C" furnished by the transverse "U-Frames" shall not be less than "C" required as defined by:

$$C \text{ required} = \frac{1.46 P_c}{L}$$

where P_c is the maximum top chord compression due to dead load plus the vehicle load times the appropriate safety factor (1.5 for parallel chord truss bridges or 2.0 for tied arch truss bridges) and L is the length in inches of one truss panel or bay.

5. For uniformly loaded bridges, the vertical truss members, the floor beams and their connections (transverse frames) in half-through truss spans shall be proportioned to resist a lateral force of not less than 1/100k times the top chord compressive load, but not less than .004 times that top chord load, applied at the top chord panel points of each truss.
6. For bridges with vehicle loads, the lateral force applied at the top chord elevation for design of the transverse frames shall not be less than 1% of the top chord compression due to dead load plus any vehicle loading.
7. The bending forces in the transverse frames, as determined above, act in conjunction with all forces produced by the actual bridge loads as determined by an appropriate analysis which assumes that the floor beams are "fixed" to the trusses at each end.

NOTE: The effects of three-dimensional loading (including "U-frame" requirements) shall be considered in the design of the structure. The "U-frame" forces in half-through spans shall be added to the forces derived from a three-dimensional analysis of the bridge.

CONSTRUCTION METHODS

Fabrication and Quality Control

Bridge fabricator shall be certified by the American Institute of Steel Construction to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for Major Steel Bridge Structures with Fracture Critical and Sophisticated Paint Endorsements as set forth in the AISC Certification Program.

Workmanship, fabrication, and shop connections shall be in accordance with American Association of State Highway and Transportation Officials Specifications (AASHTO).

Welding operators shall be properly accredited experienced operators, each of whom shall submit satisfactory evidence of experience and skill in welding structural steel with the kind of welding to be used in the work, and who have demonstrated the ability to make uniform good welds meeting the size and type of weld required.

All welding shall utilize E70 or E80 series electrodes. The weld process used shall be Flux Core Arc Welding (FCAW) or Gas Metal Arch Welding (GMAW).

The connection of bridge end post to top chord should be a mitered joint with the exposed welds ground smooth. The connection of the floor beam in a pony truss system shall not be solely into the side of a tubular bottom chord without the use of additional stiffeners to prevent chord ovalization.

All structural elements used in the bridge shall be identified by heat number of the steel member used. Specific mill test reports and individual welder certificates shall be tracked and kept on file to be provided at the request of the owner or engineer.

To ensure quality control during bridge fabrication, the bridge supplier shall be the designer and fabricator of the bridge and shall not assign, sublet, or subcontract any part of the bridge fabrication including painting.

The bridge design Professional Engineer shall inspect the bridge structure after fabrication and furnish a signed and sealed Conformance Report and Affidavit verifying that the bridge has been inspected by the Engineer and fabricated in accordance with the Engineer's design calculations and approved shop drawings. This inspection and report shall not be delegated to any other engineer or person. For weathering steel bridges, the report shall include a summary of computations of the corrosion index (per ASTM G101) for every heat number of structural steel used in the bridge to verify that the steel is of a weathering grade.

Each bridge shall be inspected by a Certified Welding Inspector that is qualified under the AWS QC-1 program. This inspection shall include as a minimum requirement the following: review of shop drawings, weld procedures, welder qualifications, and weld testing reports, visual inspection of welds and verification of overall dimensions and geometry of the bridge. A report shall be produced indicating the above items were reviewed and shall be signed and sealed by the CWI signifying compliance with AWS D1.1 codes.

Bearing Devices

1. Bridge bearings shall consist of a steel setting or slide plate placed on the abutment or grout pad. The bridge bearing plate, which is welded to the bridge structure, shall bear on this setting plate.
2. The bridge bearings shall sit in a recessed pocket on the concrete abutment. The bearing seat shall be a minimum of 16" wide. The step height (from bottom of bearing to top-of-deck) shall be determined by the bridge manufacturer.
3. The design of the anchor bolts will be the responsibility of the Contractor.

Delivery

The Bridge shall be delivered to the site by a truck to a location nearest to the site accessible by roads. Hauling permits and freight charges are the responsibility of the manufacturer.

The manufacturer will notify the customer in advance of the expected arrival. Information regarding delays after the trucks depart the plant such as weather, delays in permits, re-routing by public agencies or other circumstances will be passed on to the customer as soon as possible but the expense of such unavoidable delays will not be accepted by the manufacturer.

The manufacturer will advise the customer of the actual lifting weights, attachment points and all necessary information to install the bridge. Unloading, splicing, bolting, and proper lifting equipment is the responsibility of others.

Soil boring information has been provided as part of the bid documents. The design, layout and construction of the bridge abutments and footings is the responsibility of the Contractor.

The contractor shall install the anchor bolts in accordance with the manufacturer's anchor bolt spacing and embedment dimensions.

Warranty

The bridge manufacturer shall provide written inspection documentation and maintenance procedures to the Town.

The bridge supplier shall warrant their steel structure to be free of design, material and workmanship defects for a period of ten years from the date of delivery. This warranty does not include decking, railing attachments on any other items not part of the steel truss structure. This warranty shall not cover defects in the bridge caused by abuse, misuse, overloading, accident, improper maintenance, alteration or any other cause not the result of defective materials or workmanship. This warranty shall be void unless owner's records can be supplied which shall indicate compliance with the minimum guidelines specified in the inspection and maintenance procedures. Repair or replacements shall be the exclusive remedy for defects under this warranty.

The bridge supplier shall not be liable for any consequential or incidental damages for breach of any express or implied warranty on their structure.

COMPENSATION

Item 995.05 Steel Pedestrian Bridge will be measured per lump sum, including bearings and anchor bolts which price shall include all labor, materials, equipment and incidental costs required to design, fabricate and deliver a new steel pedestrian bridge as described herein to the project site.

This cost includes coordination and arranging a means of off-loading the bridge at the site.

END OF SECTION

ATTACHMENT A: SAMPLE CONTRACT

PLEASE REFER TO ATTACHMENT A

**CONTRACT FOR COMPLETION OF
PUBLIC WORKS IMPROVEMENTS
IN THE TOWN OF SOUTHBRIDGE**

An Agreement made this _____ day of _____, 2024, by and between the **Town of Southbridge**, a duly organized Massachusetts municipal corporation with a principal address of Town Hall, 41 Elm Street, Southbridge, MA 01550 (the “Town”, or the “Awarding Authority”) and _____ with a business address of _____ (the “Contractor”).

WHEREAS, in accordance with MGL c. 30, §39M, the Town publicly solicited for bids for the completion of “_____” (the “Project”);

WHEREAS, the Contractor submitted a bid to complete the Project that was acceptable to the Town; and

WHEREAS, by entering this Agreement, the Contractor represents to the Town that it has the skill, experience, equipment and manpower necessary to complete the Project in accordance with the terms and requirements set forth herein.

WHEREAS, this construction project is being partially funded by a grant from EDA, the attached EDA CONTRACTING PROVISIONS FOR CONSTRUCTION PROJECTS are also incorporated into this Contract.

NOW THEREFORE, in consideration of the mutual exchange of promises set forth below and for other good and valuable consideration, the Town and the Contractor hereby agree as follows:

1. Scope of Work: The Contractor shall provide all labor, materials and equipment and perform all work required by the plans and specifications entitled: **“QUINEBAUG VALLEY RAIL TRAIL IMPROVEMENTS”** dated _____, 2024 and attached hereto as Exhibit A, being funded by an EDA Grant – Project Number 01-79-15218.
2. Commencement and Completion of the Project: The Contractor shall commence work under this Contract within five days from the date of execution of this Agreement (the date of Commencement). **The Contractor shall complete all work within 420 calendar days of contract award**
3. Contract Sum: The Town shall pay the Contractor, in current funds, for the performance of the work, subject to Additions and Deductions by approved Change Order(s) (if any), the Contract Sum of:

_____ Dollars
(words)

(\$_____).

[NOTE: If the Contract Sum is more than \$150,000 a Payment Bond and Performance Bond in the amounts of 100% of the Contract Sum are required in the form attached.]

4. Payments and Retainage (MGL c. 30, §39F and §39G). The Contractor shall submit written invoices, in a format suitable to the Town, on a *monthly* basis and every invoice shall indicate the work completed and the percentage of work outstanding. The Contractor shall supply any additional information as may reasonably be required by the Owner to clarify, substantiate, or otherwise explain the work completed or the amount payable. The Town shall make periodic payments to the Contractor in accordance with the provisions of MGL c. 30, §39G. **Periodic payments shall be subject to retainage of 5% of the approved amount of any periodic payment and any other deductions permitted or required by law.**
5. The Contract Documents: The following, together with this Agreement, form the Contract and all are as fully a part of the Contract as if attached to this Agreement or herein repeated: the Advertisement of the Invitation for Bids, the Bidding Documents, including the Contractor's completed Bid Form, the Contract Forms, **the Statutory Provisions for Public Construction in Massachusetts (attached hereto as Exhibit B)** and the Work/Project Specifications.
6. Prevailing Wages: This Contract is subject to both the Massachusetts Prevailing Wage Statute, MGL c. 149, §§26-27, as well as the U.S. Department of Labor Davis-Bacon and Related Acts and Reorganization Plan No. 14 of 1950 – as updated. The Contractor shall pay applicable wages as set forth in the schedule of wages included in the Bid Documents. In the event the Massachusetts Prevailing Wages and the Davis-Bacon Wages differ, the higher pay rate shall be used.
7. Substantial Completion and Project Closeout. Upon substantial completion of the work required by this Agreement, the Contractor shall present in writing to the Town its certification that the work has been substantially completed. Within 21 days thereafter, the Town will present to the Contractor either a written declaration that the work has been substantially completed or an itemized list of incomplete or unsatisfactory work items, in accordance with the provisions of MGL c. 30, §39G. The term “substantial completion” shall mean either that the work required by this contract has been completed except for work having a contract price of less than one per cent of the then adjusted total contract price, or substantially all of the work has been completed and opened to public use except for minor incomplete or unsatisfactory work items that do not materially impair the usefulness of the work required by the contract. The Project Closeout shall be in accordance with the provisions of MGL c. 30, §39G.
8. Insurance: Prior to commencing any work, the Contractor shall deliver to the Town/Owner evidence of insurance coverage in the amounts set forth in the Bidding Documents or, if not so specified, as follows:
 - a. General Liability with minimum limits of \$1,000,000 per occurrence/\$2,000,000 aggregate written on an occurrence basis.
 - b. Auto Liability (including owned, hired and non-owned autos): \$1,000,000 combined single limit (each accident).
 - c. Excess Liability: \$3,000,000 minimum limits in excess of underlying limits.

The umbrella shall be no more restrictive than underlying coverage.

- d. Worker's Compensation and Employer's Liability per Commonwealth of Massachusetts statutory limit.

The Contractor shall provide the Town with suitable evidence of the required insurance coverage prior to commencement of any work. This insurance shall be written by a company licensed to do business in the state of Massachusetts with a minimum A.M. Best rating of A- VII. Each policy shall provide for written notification to the Town at least thirty (30) days prior to termination, material change or restrictive amendments. The coverage's and limits are to be considered minimum requirements under this contract and in no way limit the liability of the Contractor.

9. Standard of Performance: The work performed under this Agreement shall be rendered in conformity with the standards of the trade and shall be professional and of the highest fabrication and installation quality in all respects. Substandard fabrication and installation quality shall be deemed a breach of this Agreement.
10. Guarantees:
 - (a) The Contractor guarantees the work under this Contract and the materials furnished by it for use in connection therewith to be free from defects or flaws for one year after the completion of the Contract. It is expressly understood, however, that this guarantee provision shall not absolve the Contractor from any liability to the Town arising out of a failure to substantially comply with the terms of the Contract.
 - (b) If at any time within said guaranty period, any part of the work constructed under the terms of this Contract shall in the opinion of the Town require repair due to defective work or materials furnished by the Contractor, the Town may notify the Contractor in writing to make the required repairs. If the Contractor shall neglect to start such repairs within ten days of the date of giving him notice thereof and to complete the same to the satisfaction of the Town with reasonable dispatch, then the latter may employ other persons to make such repairs. The Town shall charge the expense thereof to the Contractor and may use any moneys still retained to pay for the same, and if such sum is insufficient, the Contractor shall be obligated to pay the balance thereof
11. Massachusetts Law: This Agreement shall be construed in accordance with and shall be governed by the laws of the Commonwealth of Massachusetts. Any provision of this Agreement or the Contract Documents deemed to be inconsistent with state law shall be given no force or effect. In the event that a provision is deemed to be unlawful, it shall be severed from the Agreement, and at the option of the Awarding Authority, the balance of the provision and/or the Agreement shall continue in full force and effect.
12. Independent Contractor: The Town and the Contractor intend that the relationship established between them pursuant to this Contract shall be that of client and independent contractor. No agent, employee, or servant of the Contractor shall be or shall be deemed to be an employee, agent or servant of the Town.

13. Notices: All notices under this Contract shall be in writing and shall be deemed received (i) upon delivery in hand, (ii) one business day after being sent by reputable overnight delivery or courier service providing for receipted delivery, or (iii) two business days after being sent by certified or registered mail, return receipt requested, postage prepaid, or (iv) the same business day after being sent by facsimile during business hours of the Southbridge Town Hall; and addressed as follows:

To the Town:

Town of Southbridge
Town Manager
Attention:
41 Elm St
Southbridge, MA 01550

To the Contractor:

14. Indemnification: Notwithstanding the availability and policy limits of any insurance, the Contractor hereby agrees to defend, indemnify and hold harmless the Town, its officers and employees ("Indemnified Parties") against any claims made or legal actions brought against an Indemnified Party(ies) by any person or entity as a result of or arising from injuries, damages, expenses and losses actually or allegedly incurred by such a person or entity ("Liabilities") arising out of or relating to the Contractor's performance or failure to perform pursuant to this Contract, except where the Liabilities are the result of the Indemnified Party's own direct and sole negligence. This obligation shall survive the termination, completion or expiration of this Contract. The Contractor shall promptly notify the Town of any claim or action brought in connection with this Contract and thereupon shall promptly take over and defend any such claim or action.
15. Amendments: This Contract may be amended by a written amendment duly executed by the parties hereto. No modifications, waiver or alternation of the Contract or any term herein shall be enforceable unless it is in writing and duly executed by both the Town and the Contractor.
16. REAP Certification: Pursuant to Chapter 62(c), Section 49(a) of the general laws, the individual signing this Contract on behalf of the Contractor certifies, under the penalties of perjury, that, to the best of his/her knowledge and belief, the Contractor has complied with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support.
17. Entire Agreement: This Contract constitutes the entire agreement between the parties with respect to the matters addressed herein.

IN WITNESS WHEREOF, the Parties hereto intending to be legally bound have caused their duly authorized representatives to set hands and seals on the dates set forth below.

CONTACTOR:

By: _____

Date: _____

Name: _____

Title: _____

[Attach evidence of Corporate Authority]

AWARDING AUTHORITY:

Town of Southbridge

By: _____
(name) (title)

Date: _____

Certification Pursuant to MGL Ch. 44, Sec. 31C:

Funds for this Agreement are available
in Account No. _____

By: _____

EXHIBITS/ATTACHMENTS

EXHIBIT A - CONTRACTOR'S PAYMENT BOND

[If the Contract Sum is more than \$25,000, the attached form of Payment Bond must be completed and in an amount no less than 100% of the total Contract Sum.]

EXHIBIT B - STATUTORY PROVISIONS FOR PUBLIC CONSTRUCTION CONTRACTS IN MASSACHUSETTS

EXHIBIT C – EDA CONTRACTING PROVISIONS FOR CONSTRUCTION PROJECTS

EXHIBIT D - FEDERAL PREVAILING WAGES

EXHIBIT E – STATE PREVAILING WAGES

EXHIBIT F – SPECIAL PROVISIONS

EXHIBIT G - QUINEBAUG VALLEY RAIL TRAIL CONSTRUCTION PLANS

EXHIBIT A

CONTRACTOR'S PAYMENT BOND

PROJECT: _____

PROJECT LOCATION: _____, MASSACHUSETTS

AWARDING AUTHORITY: TOWN OF SOUTHBRIDGE, MASSACHUSETTS

KNOW ALL PERSONS BY THESE PRESENTS:

That we, _____

as Principal, and _____

Surety, are held and firmly bound unto the Awarding Authority,

as Obligee, in the sum of

_____ Dollars,

(words)

\$ _____

(figures)

to be paid to the Obligee, for which payments, well and truly to be made, we bind ourselves, our respective heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

Whereas, the said Principal has made a Contract with the Obligee, bearing the date of _____, 20____, for the completion of the Project.

The conditions of this obligation are such that, if the Principal and all Subcontractors under said Contract shall pay for all labor performed or furnished and for all materials used or employed in said Contract and in all duly authorized modifications, alterations, extensions of time, changes, or additions to said Contract that may be made, notice to the Surety of such modifications, alterations, extensions of time, changes, or additions being hereby waived, the foregoing to include any other purposes or items set out in, and to be subject to, provisions of M.G.L. c.30, §39A, and M.G.L. c.149, §29, as amended, then this obligation shall become void; otherwise, it shall remain in full force and virtue.

In witness whereof, the Principal and Surety have set their hands and seals this

_____ day of _____, 20__.

PRINCIPAL

SURETY

(Name and Seal)

(Attorney-in-Fact – Seal)

(Title)

Attest: _____

Attest: _____

END OF DOCUMENT

EXHIBIT B

STATUTORY PROVISIONS FOR PUBLIC CONSTRUCTION CONTRACTS IN MASSACHUSETTS

The following provisions are required by or are intended to be consistent with requirements of Massachusetts statutes governing public construction contracts in the Commonwealth of Massachusetts (hereinafter referred to as the "Commonwealth"). Any other provisions required by statute to be included herein shall be deemed to be so included. In addition, the parties recognize that other rights, duties, and obligations with respect to public construction contracts are provided for by statute, notwithstanding the fact that they are not provided for in the Contract.

In case of conflict between the provisions of these Statutory Provisions and other provisions in the Contract, with the exception of the requirement of the Davis-Bacon Wage Act, the provisions of these Statutory Provisions shall govern. In case of conflict between the provisions of these Statutory Provisions and the provisions of any applicable statute, the statutory provisions shall govern.

Where the terms "Awarding Authority" or "Contracting Authority" appear in the following paragraphs, it shall be taken as meaning the Town. Where the term "General Contractor" appears in the following paragraphs, it shall be taken as meaning the Contractor.

ARTICLE I - PAYMENT, CONTRACT ADMINISTRATION, etc.

- 1.1 Specifications – "or equal" (Statutory reference: c. 30, §39M). Where products or materials are prescribed by manufacturer name, trade name, or catalog reference, the word "or approved equal" shall be understood to follow. An item shall be considered equal to the item so named or described if, in the opinion of the Architect:
- a. it is at least equal in quality, durability, appearance, strength and design;
 - b. it performs at least equally the function imposed in the general design for the Work; and
 - c. it conforms substantially, even with deviations, to the detailed requirements for the items as indicated by the specifications.

Any structural or mechanical changes made necessary to accommodate substituted equipment under this paragraph shall be at the expense of the Contractor or Subcontractor responsible for the Work item. See other paragraphs of General and Supplement to General Conditions for procedures to be used in determining compliance with the standards of this paragraph.

- 1.2 Delays. (Statutory reference: c.30, §39O). This Paragraph 1.2 applies to every contract subject to M.G.L. c.30, §39M and to every contract subject to c.149, §§44A through 44H.

Except as otherwise provided by law and by this Paragraph 1.2, the Contractor shall not be entitled to damages on account of any hindrances or delays, avoidable or unavoidable; but if such delay be occasioned by the Awarding Authority, the Contractor may be entitled to an extension of time only, in which to complete the Work, to be determined by the Architect. In the event a suspension, delay, interruption or failure to act of the Awarding Authority increases the cost of performance to any Subcontractor, that Subcontractor shall have the same rights against the Contractor for payment for an increase in the cost of his performance as provisions (a) and (b) give the Contractor against the Awarding Authority, but nothing in provisions (a) and (b) shall in any way change, modify or alter any other rights which the Contractor or the Subcontractor may have against each other.

- (a) The Awarding Authority may order the Contractor in writing to suspend, delay, or interrupt all or any part of the Work for such period of time as it may determine to be appropriate for the convenience of the Awarding Authority; provided, however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the Awarding Authority to act within the time specified in this Contract, the Awarding Authority shall make an adjustment in the contract price for any increase in the cost of performance of this contract but shall not include any profit to the Contractor on such increase; and provided further, that the Awarding Authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions.
- (b) The Contractor must submit the amount of a claim under provision (a) to the Awarding Authority in writing as soon as practicable after the end of the suspension, delay, interruption or failure to act and, in any event, not later than the date of Final Payment under this Contract, and except for costs due to a suspension order, the Awarding Authority shall not approve any costs in the claim incurred more than twenty days before the Contractor notified the Awarding Authority in writing of the actor failure to act involved in the claim.

- 1.3 Deviations. (Statutory reference: M.G.L. c.30, §39I). This Paragraph 1.3 applies to every contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public building or public works for the Commonwealth or any political subdivision thereof.

The Contractor shall perform all the Work required by this contract in conformity with the plans and specifications contained herein. No willful and substantial deviation from said plans and specifications shall be made unless authorized in writing by the Awarding Authority or by the engineer or architect in charge of the Work who is duly authorized by

the Awarding Authority to approve such deviations. In order to avoid delays in the prosecution of the Work required by such contract such deviation from the plans or specifications may be authorized by a written order of the Awarding Authority or such engineer or architect so authorized to approve such deviation. Within thirty days thereafter, such written order shall be confirmed by a certificate of the Awarding Authority stating: (1) If such deviation involves any substitution or elimination of materials, fixtures or equipment, the reasons why such materials, fixtures or equipment were included in the first instance and the reasons for substitution or elimination, and, if the deviation is of any other nature, the reasons for such deviation, giving justification therefor; (2) that the specified deviation does not materially injure the project as a whole; (3) that either the Work substituted for the Work specified is of the same cost and quality, or that an equitable adjustment has been agreed upon between the Awarding Authority and the Contractor and the amount in dollars of said adjustment; and (4) that the deviation is in the best interest of the Awarding Authority. Such certificate shall be signed under the penalties of perjury and shall be a permanent part of the file record of the Work contracted for.

Whoever violates any provision of this section willfully and with intent to defraud shall be punished by a fine of not more than five thousand dollars or by imprisonment for not more than six months, or both.

- 1.4 Finality of Decisions by Awarding Authority or Architect (Statutory reference: M.G.L. c.30, §39J). This Paragraph 1.4 applies to every contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public works by the Commonwealth or by any county, city, district, board, commission, or other public body, when the amount of the contract exceeds the amount stated in M.G.L. c.30, §39J.

Notwithstanding any contrary provision of this contract, no decision by the Awarding Authority or by the Architect on a dispute, whether of fact or of law, arising under said contract shall be final or conclusive if such decision is made in bad faith, fraudulently, capriciously, or arbitrarily, is unsupported by substantial evidence, or is based upon error of law.

- 1.5 Differing Site Conditions (Statutory reference: M.G.L. c.30, §39N). This Paragraph 1.5 applies to every contract subject to M.G.L. c.30, §39M and to every contract subject to M.G.L. c.149, §§44A through 44H.

If, during the progress of the Work, the Contractor or the Awarding Authority discovers that the actual subsurface or latent physical conditions encountered at the site differ substantially or materially from those shown on the plans or indicated in the Contract Documents, either the Contractor or the Awarding Authority may request an equitable adjustment in the contract price of the contract applying to Work affected by the differing site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from a Contractor, or upon its

own initiative, the Awarding Authority shall make an investigation of such physical conditions, and, if they differ substantially or materially from those shown on the plans or indicated in the Contract Documents or from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the plans and Contract Documents and are of such a nature as to cause an increase or decrease in the cost of performance of the Work or a change in the construction methods required for the performance of the Work which results in an increase or decrease in the cost of the Work, the Awarding Authority shall make an equitable adjustment in the contract price and the contract shall be modified in writing accordingly.

- 1.6 Timely Decision by Awarding Authority (Statutory reference: M.G.L. c.30, §39P). This Paragraph 1.6 applies to every contract subject to M.G.L. c.30, §39M and to every contract subject to M. G. L. c.149, §§44A through 44H.

In every case in which this contract requires the Awarding Authority, any official, its architect or engineer to make a decision on interpretation of the specifications, approval of equipment, material or any other approval, or progress of the Work, the decision shall be made promptly and, in any event, no later than thirty days after the written submission for decision; but if such decision requires extended investigation and study, the Awarding Authority, the official, architect or engineer shall, within thirty days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty-day period and the date by which the decision will be made.

- 1.7 Certificate of Appropriation (Statutory reference: M.G.L. c.44, §31C). This Paragraph 1.7 applies to contracts for construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public Work by any city or town costing more than the amount set forth in M.G.L. c.44, §31C.

This contract shall not be deemed to have been made until the auditor or accountant or other official of the city or town having similar duties has certified thereon that an appropriation in the amount of this contract is available therefor. No order to the Contractor for a change in or addition to the Work, whether in the form of a drawing, plan, detail or any other written instruction, unless it is an order which the Contractor is willing to perform without any increase in the contract price, shall be deemed to be given until the auditor or accountant, or other officer of the Awarding Authority having similar duties, has certified thereon that an appropriation in the amount of such order is available therefor, but such certificate shall not be taken as an admission by the Awarding Authority of its liability to pay for such Work. The certificate of the auditor or accountant or other officer of the Awarding Authority having similar duties, that an appropriation in the amount of such order is available shall bar any defense by the Awarding Authority on the ground of insufficient appropriation.

- 1.8 Method of Payment – Building Projects (Statutory reference: M.G.L. c.30, §39K). This Paragraph 1.8 applies to every contract for the construction, reconstruction, alteration,

remodeling, repair or demolition of any public building by the Commonwealth, or by any county, city, town, district, board, commission or other public body.

- 1.8.1 Within fifteen days (thirty days in the case of the Commonwealth) after receipt from the Contractor, at the place designated by the Awarding Authority if such a place is so designated, of a periodic estimate requesting payment of the amount due for the preceding month, the Awarding Authority will make a periodic payment to the Contractor for the Work performed during the preceding month and for the materials not incorporated in the Work but delivered and suitably stored at the site (or at some location agreed upon in writing) to which the Contractor has title or to which a Subcontractor has title and has authorized the Contractor to transfer title to the Awarding Authority, upon certification by the Contractor that he is the lawful owner and the materials are free from encumbrances, but less (1) a retention based on its estimate of the fair value of its claims against the Contractor and less (2) a retention for direct payments to subcontractors based on demands for same in accordance with the provisions of Paragraph 1.9 of these Statutory Conditions, and less (3) a retention not exceeding five percent of the approved amount of the periodic payment. After the receipt of a periodic estimate requesting final payment and within sixty-five days after (a) the Contractor fully completes the Work or substantially completes the Work so that the value of the Work remaining to be done is, in the estimate of the Awarding Authority, less than one percent of the original contract price, or (b) the Contractor substantially completes the Work and the Awarding Authority takes possession for occupancy, whichever occurs first, the Awarding Authority shall pay the contractor the entire balance due on the contract less (1) a retention based on its estimate of the fair value of its claims against the Contractor and of the cost of completing the incomplete and unsatisfactory items of Work and less (2) a retention for direct payments to Subcontractors based on demands for same in accordance with the provisions of Paragraph 1.9 of these Statutory Conditions, or based on the record of payments by the Contractor to the Subcontractors under this contract if such record of payment indicates that the Contractor has not paid Subcontractors as provided in Paragraph 1.9. If the Awarding Authority fails to make payment as herein provided, there shall be added to each such payment daily interest at the rate of three percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston commencing on the first day after said payment is due and continuing until the payment is delivered or mailed to the contractor; provided, that no interest shall be due, in any event, on the amount due on a periodic estimate for final payment until fifteen days after receipt of such periodic estimate from the Contractor, at the place designated by the Awarding Authority if such a place is so designated. The Contractor agrees to pay to each Subcontractor a portion of any such interest paid in accordance with the amount due each Subcontractor.
- 1.8.2 The Awarding Authority may make changes in any periodic estimate submitted by the Contractor, and the payment due on said periodic estimate shall be computed in accordance with the change so made, but such changes or any requirement for a corrected periodic estimate shall not affect the due date for the periodic payment or the date for the commencement of interest charges on the amount of the periodic payment computed in accordance with the changes made, as provided herein; provided, that the Awarding

Authority may, within seven days after receipt, return to the Contractor for correction, any periodic estimate which is not in the required form or which contains computations not arithmetically correct and, in that event, the date of receipt of such periodic estimate shall be the date of receipt of the corrected periodic estimate in proper form and with arithmetically correct computations. The date of receipt of a periodic estimate received on a Saturday shall be the first Monday thereafter.

- 1.8.3. All periodic estimates shall be submitted to the Awarding Authority, or to its designee as set forth in writing to the Contractor, and the date of receipt by the Awarding Authority or its designee shall be marked on the estimate. All periodic estimates shall contain a separate item for each filed subtrade and each sub-subtrade listed in the sub-bid form as required by the Specifications, and a column listing the amount paid to each Subcontractor and sub-subcontractor as of the date the periodic estimate is filed. The person making payment for the Awarding Authority shall add the daily interest provided for herein to each payment for each day beyond the due date based on the date of receipt marked on the estimate.
- 1.8.4 A certificate of the architect to the effect that the Contractor has fully or substantially completed the Work shall, subject to the provisions of Paragraph 1.4 of these Supplementary General Conditions, be conclusive for the purposes of this Paragraph 1.8.
- 1.8.5 Notwithstanding the provisions of this section, at any time after the value of the work remaining to be done is, in the estimation of the Awarding Authority, less than 1 per cent of the adjusted contract price, or the Awarding Authority has determined that the contractor has substantially completed the work and the Awarding Authority has taken possession for occupancy, the Awarding Authority may send to the Contractor by certified mail, return receipt requested, a complete and final list of all incomplete and unsatisfactory work items, including, for each item on the list, a good faith estimate of the fair and reasonable cost of completing such item. The Contractor shall then complete all such work items within 30 days of receipt of such list or before the contract completion date, whichever is later. If the Contractor fails to complete all incomplete and unsatisfactory work items within 45 days after receipt of such items furnished by the Awarding Authority or before the contract completion date, whichever is later, subsequent to an additional 14 days' written notice to the Contractor by certified mail, return receipt requested, the Awarding Authority may terminate the contract and complete the incomplete and unsatisfactory work items and charge the cost of same to the Contractor and such termination shall be without prejudice to any other rights or remedies the Awarding Authority may have under the contract. The Awarding Authority shall note any such termination in the evaluation form to be filed by the Awarding Authority pursuant to the provisions of section 44D of chapter 149.
- 1.9 Direct Payment (Statutory reference: M.G.L. c.30, §39F). This Paragraph 1.9 applies to every contract awarded pursuant to M.G.L. c.149, §§44A through 44H, and (with the exception of Subparagraph 1.9.9) to every contract awarded pursuant to M.G.L. c.30, §39M.

- 1.9.1 Forthwith after the Contractor receives payment on account of a periodic estimate, the Contractor shall pay to each Subcontractor the amount paid for the labor performed and the materials furnished by that Subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the Subcontractor by the Contractor.
- 1.9.2 Not later than the sixty-fifth day after each Subcontractor substantially completes his Work in accordance with the plans and specifications, the entire balance due under the subcontract, less amounts retained by the Awarding Authority as the estimated cost of completing the incomplete and unsatisfactory items of Work, shall be due the Subcontractor; and the Awarding Authority shall pay that amount to the Contractor. The Contractor shall forthwith pay to the Subcontractor the full amount received from the Awarding Authority less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the Subcontractor by the Contractor.
- 1.9.3 Each payment made by the Awarding Authority to the Contractor pursuant to Subparagraphs 1.9.1 and 1.9.2 of this Paragraph 1.9 for the labor performed and the materials furnished by a Subcontractor shall be made to the Contractor for the account of that Subcontractor; and the Awarding Authority shall take reasonable steps to compel the Contractor to make each such payment to each such Subcontractor. If the Awarding Authority has received a demand for direct payment from a Subcontractor for any amount which has already been included in a payment to the Contractor or which is to be included in a payment to the Contractor for payment to the Subcontractor as provided in subparagraphs 1.9.1 and 1.9.2, the Awarding Authority shall act upon the demand as provided in this Paragraph 1.9.
- 1.9.4 If, within seventy days after the Subcontractor has substantially completed the subcontract Work, the Subcontractor has not received from the Contractor the balance due under the subcontract including any amount due for extra labor and materials furnished to the Contractor, less any amount retained by the Awarding Authority as the estimated cost of completing the incomplete and unsatisfactory items of Work, the Subcontractor may demand direct payment of that balance from the Awarding Authority. The demand shall be by a sworn statement delivered to or sent by certified mail to the Awarding Authority, and a copy shall be delivered to or sent by certified mail to the Contractor at the same time. The demand shall contain a detailed breakdown of the balance, due under the subcontract and also a statement of the status of completion of the subcontract Work. Any demand made after substantial completion of the subcontract Work shall be valid even if delivered or mailed prior to the seventieth day after the Subcontractor has substantially completed the subcontract work. Within ten days after the Subcontractor has delivered or so mailed the demand to the Awarding Authority and delivered or so mailed a copy to the Contractor, the Contractor may reply to the demand. The reply shall be a sworn statement delivered to or sent by certified mail to the Awarding Authority, and a copy shall be delivered to or sent by certified mail to the Subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract, including any amount due for extra labor and

materials furnished to the Contractor and of the amount due for each claim made by the Contractor against the Subcontractor.

- 1.9.5 Within fifteen days after receipt of the demand by the Awarding Authority, but in no event prior to the seventieth day after substantial completion of the subcontract work, the Awarding Authority shall make direct payment to the Subcontractor of the balance due under the subcontract, including any amount due for extra labor and materials furnished to the Contractor, less any amount (i) retained by the Awarding Authority as the estimated cost of completing the incomplete or unsatisfactory items of work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the Contractor in the sworn reply; provided that the Awarding Authority shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by Subparagraph 1.9.4. The Awarding Authority shall make further direct payments to the Subcontractor forthwith after the removal of the basis for deduction from direct payments made as provided in parts (i) and (ii) of this subparagraph.
- 1.9.6 The Awarding Authority shall forthwith deposit the amounts deducted from a direct payment as provided in part (iii) of Subparagraph 1.9.5 in an interest-bearing joint account in the names of the Contractor and the Subcontractor in bank in Massachusetts selected by the Awarding Authority or agreed upon by the Contractor and the Subcontractor and shall notify the Contractor and the Subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the Contractor and the Subcontractor or as determined by decree of a court of competent jurisdiction.
- 1.9.7 All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to Subparagraph 1.9.6 shall be made out of amounts payable to the Contractor at the time of receipt of a demand for direct payment from a Subcontractor and out of amounts which later become payable to the Contractor and in the order of receipt of such demands from subcontractors. All direct payments shall discharge the obligation of the Awarding Authority to the Contractor to the extent of such payment.
- 1.9.8 The Awarding Authority shall deduct from payments to a Contractor amounts which, together with the deposits in interest-bearing accounts pursuant to subparagraph 1.9.6, are sufficient to satisfy all unpaid balances of demands for direct payment received from Subcontractors. All such amounts shall be earmarked for such direct payments, and the Subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the Contractor.
- 1.9.9. If the Subcontractor does not receive payment as provided in Subparagraph 1.9.1 or if the Contractor does not submit a periodic estimate for the value of the labor or materials performed or furnished by the Subcontractor and the Subcontractor does not receive payment for same when due less the deductions provided for in Subparagraph 1.9.1, the Subcontractor may demand direct payment by following the procedure in subparagraph

1.9.4 and the Contractor may file a sworn reply as provided in that same Subparagraph. A demand made after the first day of the month following that for which the Subcontractor performed or furnished the labor and materials for which the Subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the Contractor. Thereafter the Awarding Authority shall proceed as provided in Subparagraphs 1.9.5, 1.9.6, 1.9.7 and 1.9.8.

- 1.9.10 Any assignment by a Subcontractor of the rights under this section to a surety company furnishing a bond under the provisions of M.G.L. c.149, §29 shall be invalid. The assignment and subrogation rights of the surety to amounts included in a demand for direct payment which are in the possession of the Awarding Authority or which are on deposit pursuant to Subparagraph 1.9.6 shall be subordinate to the rights of all Subcontractors who are entitled to be paid under this section and who have not been paid in full.
- 1.9.11 "Subcontractor" as used in this Paragraph 1.9, (i) for contracts awarded as provided in M.G.L. C.149, §§44A-44H, inclusive, shall mean a person who files a sub-bid and receives a subcontract as a result of that filed sub-bid or who is approved by the Awarding Authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the Contractor, (ii) for contracts awarded as provided in M.G.L. c.30, §39M, paragraph (a) shall mean a person approved by the Awarding Authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the Contractor, and (iii) for contracts with the Commonwealth not awarded as provided in M.G.L. c.149, §§44A-44H. inclusive, shall also mean a person contracting with the Contractor to supply materials used or employed in a public works project for a price in excess of five thousand dollars (\$5,000.00).
- 1.9.12 A Contractor or a Subcontractor shall enforce a claim to any portion of the amount of a demand for direct payment deposited as provided in subparagraph 1.9.6 by a petition in equity in the superior court against the other and the bank shall not be a necessary party. A Subcontractor shall enforce a claim for direct payment or a right to require a deposit as provided in subparagraph 1.9.6 by a petition in equity in the superior court against the awarding authority and the Contractor shall not be a necessary party. Upon motion of any party the court shall advance for speedy trial any petition filed as provided in this paragraph. M.G.L. c.231, §§59 and 59B shall apply to such petitions. The court shall enter an interlocutory decree upon which execution shall issue for any part of a claim found due pursuant to §§59 and 59B and, upon motion of any party, shall advance for speedy trial the petition to collect the remainder of the claim. Any party aggrieved by such interlocutory decree shall have the right to appeal therefrom as from a final decree. The court shall not consolidate for trial the petition of any Subcontractor with the petition of one or more Subcontractors or the same general contract unless the court finds that a substantial portion of the evidence of the same events during the course of construction (other than the fact that the claims sought to be consolidated arise under the same general contract) is applicable to the petitions sought to be consolidated and that such consolidation will prevent unnecessary duplication of evidence. A decree in any such

proceeding shall not include interest on the disputed amount deposited in excess of the interest earned for the period of any such deposit. No person except a Subcontractor filing a demand for direct payment for which no funds due the Contractor are available for direct payment shall have a right to file a petition in a court of equity against the awarding authority claiming a demand for direct payment is premature, and such Subcontractor must file the petition before the awarding authority has made a direct payment to the Subcontractor and has made a deposit of the disputed portion as provided in part (iii) of Subparagraph 1.9.5 and in Subparagraph 1.9.6.

- 1.9.13 In any petition to collect any claim for which a Subcontractor has filed a demand for direct payment the court shall, upon motion of the Contractor, reduce by the amount of any deposit of a disputed amount by the awarding authority as provided in part (iii) of Subparagraph 1.9.5 and in Subparagraph 1.9.6 any amount held under a trustee writ or pursuant to a restraining order or injunction.

Payments – Public Works Projects (Statutory Reference: MGL c.30, §39G).

- 1.9.14 Upon substantial completion of the work required by a contract with the commonwealth, or any agency or political subdivision thereof, for the construction, reconstruction, alteration, remodeling, repair or improvement of public ways, including bridges and other highway structures, sewers and, water mains, airports and other public works, the contractor shall present in writing to the awarding authority its certification that the work has been substantially completed. Within twenty-one days thereafter, the awarding authority shall present to the contractor either a written declaration that the work has been substantially completed or an itemized list of incomplete or unsatisfactory work items required by the contract sufficient to demonstrate that the work has not been substantially completed. The awarding authority may include with such list a notice setting forth a reasonable time, which shall not in any event be prior to the contract completion date, within which the contractor must achieve substantial completion of the work. In the event that the awarding authority fails to respond, by presentation of a written declaration or itemized list as aforesaid, to the contractor's certification within the twenty-one day period, the contractor's certification shall take effect as the awarding authority's declaration that the work has been substantially completed.
- 1.9.15 Within sixty-five days after the effective date of a declaration of a substantial completion, the awarding authority shall prepare and forthwith send to the contractor for acceptance a substantial completion estimate for the quantity and price of the work done and all but one per cent retainage on that work, including the quantity, price and all but one per cent retainage for the undisputed part of each work item and extra work item in dispute but excluding the disputed part thereof, less the estimated cost of completing all incomplete and unsatisfactory work items and less the total periodic payments made to date for the work. The awarding authority also shall deduct from the substantial completion estimate an amount equal to the sum of all demands for direct payment filed by subcontractors and not yet paid to subcontractors or deposited in joint accounts pursuant to section thirty-nine F, but no contract subject to said section thirty-nine F shall contain any other

provision authorizing the awarding authority to deduct any amount by virtue of claims asserted against the contract by subcontractors, material suppliers or others.

- 1.9.16 If the awarding authority fails to prepare and send to the contractor any substantial completion estimate required by this section on or before the date herein above set forth, the awarding authority shall pay to the contractor interest on the amount which would have been due to the contractor pursuant to such substantial completion estimate at the rate of three percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston from such date to the date on which the awarding authority sends that substantial completion estimate to the contractor for acceptance or to the date of payment therefor, whichever occurs first. The awarding authority shall include the amount of such interest in the substantial completion estimate.
- 1.9.17 Within fifteen days after the effective date of the declaration of substantial completion, the awarding authority shall send to the contractor by certified mail, return receipt requested, a complete list of all incomplete or unsatisfactory work items, and, unless delayed by causes beyond his control, the contractor shall complete all such work items within forty-five days after the receipt of such list or before the then contract completion date, whichever is later. If the contractor fails to complete such work within such time, the awarding authority may, subsequent to seven days' written notice to the contractor by certified mail, return receipt requested, terminate the contract and complete the incomplete or unsatisfactory work items and charge the cost of same to the contractor.
- 1.9.18 Within thirty days after receipt by the awarding authority of a notice from the contractor stating that all of the work required by the contract has been completed, the awarding authority shall prepare and forthwith send to the contractor for acceptance a final estimate for the quantity and price of the work done and all retainage on that work less all payments made to date, unless the awarding authority's inspection shows that work items required by the contract remain incomplete or unsatisfactory, or that documentation required by the contract has not been completed. If the awarding authority fails to prepare and send to the contractor the final estimate within thirty days after receipt of notice of completion, the awarding authority shall pay to the contractor interest on the amount which would have been due to the contractor pursuant to such final estimate at the rate hereinabove provided from the thirtieth day after such completion until the date on which the awarding authority sends the final estimate to the contractor for acceptance or the date of payment therefor, whichever occurs first, provided that the awarding authority's inspection shows that no work items required by the contract remain incomplete or unsatisfactory. Interest shall not be paid hereunder on amounts for which interest is required to be paid in connection with the substantial completion estimate as hereinabove provided. The awarding authority shall include the amount of the interest required to be paid hereunder in the final estimate.
- 1.9.19 The awarding authority shall pay the amount due pursuant to any substantial completion or final estimate within thirty-five days after receipt of written acceptance for such estimate from the contractor and shall pay interest on the amount due pursuant to such estimate at the rate hereinabove provided from that thirty-fifth day to the date of

payment. Within 15 days, 30 days in the case of the commonwealth, after receipt from the contractor, at the place designated by the awarding authority, if such place is so designated, of a periodic estimate requesting payment of the amount due for the preceding periodic estimate period, the awarding authority shall make a periodic payment to the contractor for the work performed during the preceding periodic estimate period and for the materials not incorporated in the work but delivered and suitably stored at the site, or at some location agreed upon in writing, to which the contractor has title or to which a subcontractor has title and has authorized the contractor to transfer title to the awarding authority, upon certification by the contractor that he is the lawful owner and that the materials are free from all encumbrances. The awarding authority shall include with each such payment interest on the amount due pursuant to such periodic estimate at the rate herein above provided from the due date. In the case of periodic payments, the contracting authority may deduct from its payment a retention based on its estimate of the fair value of its claims against the contractor, a retention for direct payments to subcontractors based on demands for same in accordance with the provisions of section thirty-nine F, and a retention to secure satisfactory performance of the contractual work not exceeding five per cent of the approved amount of any periodic payment, and the same right to retention shall apply to bonded subcontractors entitled to direct payment under section thirty-nine F of chapter thirty; provided, that a five per cent value of all items that are planted in the ground shall be deducted from the periodic payments until final acceptance.

1.9.20 No periodic, substantial completion or final estimate or acceptance or payment thereof shall bar a contractor from reserving all rights to dispute the quantity and amount of, or the failure of the awarding authority to approve a quantity and amount of, all or part of any work item or extra work item.

1.9.21 Substantial completion, for the purposes of this section, shall mean either that the work required by the contract has been completed except for work having a contract price of less than one per cent of the then adjusted total contract price, or substantially all of the work has been completed and opened to public use except for minor incomplete or unsatisfactory work items that do not materially impair the usefulness of the work required by the contract.

ARTICLE 2 - WAGES AND EMPLOYMENT PRACTICES

2.1 Preference To Veterans and Citizens In Public World Rate of Wages. (Statutory reference: M.G.L. c.149, §26). This Paragraph applies to every contract or subcontract for the construction of public works by the Commonwealth or by a county, town or district, or by persons contracting or subcontracting for such works.

2.1.1 In the employment of mechanics and apprentices, teamsters, chauffeurs and laborers, in the construction of public works by the Commonwealth or by a county, town, authority or district, or by persons contracting or subcontracting such work, preference shall first be given to citizens of the Commonwealth who have been residents of the Commonwealth for at least six months at the commencement of their employment, who are male veterans

as defined in M.G.L. c.4, §7, clause 43, and who are qualified to perform the work to which the employment relates; and secondly, to citizens of the Commonwealth generally who have been residents of the Commonwealth for at least six months at the commencement of their employment, and if they cannot be obtained in sufficient numbers, then to citizens of the United States, and every contract for such work shall contain a provision to this effect. Each county, town, authority or district in the construction of public works, or persons contracting or subcontracting for such works, shall give preference to veterans and citizens who are residents of such county, town or district.

2.1.2 The rate per hour of the wages paid to said mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works shall not be less than the rate or rates of wages to be determined by the Commissioner of Labor and Industries as hereinafter provided; provided, that the wages paid to laborers employed on said works shall not be less than those paid to laborers in the municipal service of the town or towns where said works are being constructed; provided, further, that where the same public work is to be constructed in two or more towns, the wages paid to laborers shall not be less than those paid to laborers in the municipal service of the town paying the highest rate; provided further, that if, in any of the towns where the works are to be constructed, a wage rate or wage rates have been established in certain trades and occupations by collective agreements or understandings between organized labor and employers, the rate or rates to be paid on said works shall not be less than the rates so established; provided, further, that in towns where no such rate or rates have been so established, the wages paid to mechanics, teamsters, chauffeurs and laborers on public works, shall not be less than the wages paid to the employees in the same trades and occupations by private employers engaged in the construction industry. This section shall also apply to regular employees of the Commonwealth or of a county, town, authority or district, when such employees are employed in the construction, addition to or alteration of public buildings for which special appropriations of more than one thousand dollars are provided. Payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans under collective bargaining agreements or understandings between organized labor and employers shall be included for the purpose of establishing minimum wage rates as herein provided.

2.2 List of Jobs; Classifications; Determination of Rate of Wages; Schedule. (Statutory reference: M.G.L. c.149, §27). This Paragraph applies to every contract or subcontract for the construction of public works by the Commonwealth, or by a county, town or district.

The Commissioner of Labor and Industries shall prepare, for the use of such public officials or public bodies whose duty it shall be to cause public works to be constructed, a list of the several jobs usually performed on various types of public works upon which mechanics and apprentices, teamsters, chauffeurs and laborers are employed, including the transportation of gravel or fill to the site of said public works, or the removal of surplus gravel or fill from such site. The Commissioner shall classify said jobs, and he may revise such classifications from time to time, as he may deem advisable. Prior to

awarding a contract for the construction of public works, said public official or public body shall submit to the Commissioner a list of the jobs upon which mechanics and apprentices, teamsters, chauffeurs, and laborers are to be employed, and shall request the Commissioner to determine the rate of wages to be paid on each job. Said rates shall apply to all persons engaged in transporting gravel or fill to the site of said public works or removing gravel or fill from such site, regardless of whether such persons are employed by a contractor or subcontractor, or are independent contractors or owner-operators. The Commissioner, subject to the provisions of Paragraph 2.1 of these Statutory Conditions, shall proceed forthwith to determine the same, and shall furnish said official or public body with a schedule of such rate or rates of wages as soon as said determination shall have been made. In advertising or calling for bids for said works, the awarding official or public body shall incorporate said schedule in the advertisement or call for bids by an appropriate reference thereto, and shall furnish a copy of said schedule without cost, to any person requesting the same. Said schedule shall be made a part of the contract for said works and shall continue to the minimum rate or rates of wages for said employees during the life of the contract. Any person engaged in the construction of said works shall cause a legible copy of said schedule to be kept posted in a conspicuous place at the site of said works during the life of the contract. The aforesaid rates of wages in the schedule of wage rates shall include payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans as provided in the previous section, and such payments shall be considered as payments to persons under this section performing Work as herein provided. Any employer engaged in the construction of such works who does not make payments to a health and welfare plan, a pension plan and a supplementary unemployment benefit plan, where such payments are included in said rates of wages, shall pay the amount of said payments directly to each employee engaged in said construction. Whoever shall pay less than said rates of wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, on said works, to any person performing the Work within classifications as determined by the Commissioner of Labor and Industries, and whoever, for himself, or as representative, agent or officer of another, shall take or receive for his own use or the use of another person, as a refund, rebate or gratuity, or in any other guise, any part or portion of the wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, paid to any such person for Work done or service rendered on said public works, shall be punished or shall be subject to a civil citation or order as provided in M.G.L. c. 149, §27C. The president or treasurer of a corporation and any officers or agents having the management of such corporation shall also be deemed to be employers of the employees of any corporation within the meanings of M.G.L. c. 149, §27B, inclusive.

When an investigation by the attorney general's office reveals that a Contractor or Subcontractor has violated this section by failing to pay said rates of wages, including payments to health and welfare funds and pensions funds, or the equivalent payment in wages, on said works to any person performing work within classifications as determined by the Commissioner of Labor and Industries, or that a Contractor or Subcontractor has, for himself, or as a representative, agent or officer of another, taken or received for his own use or the use of any other person, as a rebate, refund or gratuity, or in any other

guise, any portion of the wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, paid to any such person for work done or service rendered on said public works, the attorney general may, upon written notice to the Contractor or Subcontractor, and after a hearing thereon, order work halted on the part of the contract on which such wage violations occurred, until the defaulting Contractor or Subcontractor has filed with the attorney general's office a bond in the amount of such penal sum as the attorney general shall determine, conditioned upon payment of said rate or rates of wages, including payments to health and welfare funds and pension funds, or the equivalent in wages, on said works to any person performing work within classifications as determined by the Commissioner of Labor and Industries.

Any employee claiming to be aggrieved by a violation of this section may, at the expiration of ninety days after the filing of a complaint with the attorney general, or sooner if the attorney general assents in writing, and within three years of such violation, institute and prosecute in his own name and on his own behalf, or for himself and for others similarly situated, a civil action for injunctive relief and any damages incurred, including treble damages for any loss of wages and other benefits. Any employee so aggrieved and who prevails in such an action shall be entitled to an award of the costs of the litigation and reasonable attorneys' fees.

2.3 Employment Records To Be Kept By Contractor, Subcontractors; Statement Of Compliance. (Statutory reference: M.G.L. c.149, §27B). This Paragraph applies to every contract or subcontract for the construction of public works by the Commonwealth, or by a county, town or district.

Every contractor, subcontractor or public body engaged in said public works to which Paragraph 2.2 of these Statutory Conditions applies shall keep a true and accurate record of all mechanics and apprentices, teamsters, chauffeurs and laborers employed thereon, showing the name, address and occupational classification of each such employee on said works, and the hours worked by, and the wages paid to, each such employee, and shall furnish to the Commissioner of Labor and Industries, upon his request, a copy of said record, signed by the employer or his authorized agent under the penalties of perjury. Such records shall be open to inspection by any authorized representative of the Department of Labor and Industries at any reasonable time, and as often as may be necessary. Every contractor and subcontractor required to keep such a record shall submit a copy of said record to the Awarding Authority on a weekly basis.

Each such Contractor, Subcontractor or public body shall preserve its payroll records for a period of three years from the date of completion of the contract.

Each such Contractor, Subcontractor or public body shall furnish to the Commissioner of Labor and Industries within fifteen days after completion of its portion of the work a statement, executed by the Contractor, Subcontractor or public body or by any authorized officer or employee of the Contractor, Subcontractor or public body who supervises the payment of wages, in the following form:

_____, 2024

(Date)

STATEMENT OF COMPLIANCE

I, _____
(Name of signatory party) (Title)

do hereby state;

That I pay or supervise the payment of the persons employed by

(Contractor, subcontractor or public body)

on the _____
(building or project)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages, at a minimum, determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty-nine of the General Laws.

Signature _____

Title _____

The above mentioned copies of payroll records and statements of compliance shall be available for inspection by any interested party filing a written request to the Contractor for such inspections.

2.4 Wages of Operators of Rented Equipment; Agreements; Penalty. (Statutory reference: M.G.L. c.149, §27F). This Paragraph applies to every contract for the construction of public works by the Commonwealth, or by a county, city, town or district.

No agreement of lease, rental or other arrangement, and no order or requisition under which a truck or any automotive or other vehicle or equipment is to be engaged in public works by the commonwealth or by a county, city, town or district, shall be entered into or given by any public official or public body unless said agreement, order, or requisition contains a stipulation requiring rates of wages, as determined by the commissioner, to be paid to the operator of said trucks, vehicles, or equipment. Any such agreement, order, or requisition which does not contain said stipulation shall be invalid, and no payment shall be made thereunder. Said rates of wages shall be requested of said commissioner by said public official or public body, and shall be furnished by the commissioner in a schedule containing classifications of jobs, and the rate of wages to be paid for each job. Said

rates of wages shall include payments to health and welfare plans, or, if no such plan is in effect between employers and employees, the amount of such payments shall be paid directly to said operators.

Whoever shall pay less than said rates of wages, including payments to health and welfare funds, or the equivalent payment in wages, on said works, and whoever accepts for his own use, or for the use of any other person, as a rebate, gratuity, or in any other guise, any part or portion of said wages or health and welfare funds, shall have violated this section and shall be punished or shall be subject to a civil citation or order as provided in M.G.L. c. 149, §27C.

- 2.5 Reserve Police Officers. (Statutory reference: M.G.L. c.149, §34B). This Paragraph 2.5 applies to every contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public works for the Commonwealth or any political subdivision thereof.

The Contractor shall pay to any reserve police officer employed by him in any city or town the prevailing rate of wages paid to regular police officers in such city or town.

- 2.6 Eight-Hour Day, etc. (Statutory reference: M.G.L. c.149, §§30, 34). This Paragraph 2.6 applies only to contracts which are subject to the provisions of the aforesaid Sections of the Massachusetts General Laws.

No laborer, worker, mechanic, foreman or inspector working within this Commonwealth in the employ of the Contractor, Subcontractor or other person doing or contracting to do the whole or part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in cases of extraordinary emergency.

- 2.7 Lodging, etc. (Statutory reference: M.G.L. c.149, §25) This Paragraph applies to every contract for the doing of public Work with the Commonwealth, a county, city, or town, or with a department, board, commission, or officer acting therefor.

Every employee under this contract shall lodge, board and trade where and with whom he elects, and neither the Contractor nor his agents or employees shall, either directly or indirectly, require as a condition of the employment of any person that the employee shall lodge, board or trade at a particular place or with a particular person.

- 2.8 Access to Contractor's Records. (Executive Order No. 195). This paragraph applies to every contract for the purchase of services or materials by any agency, bureau, board, commission, institution, or department of the Commonwealth.

The Governor or his designee, the secretary of administration and finance, and the state auditor or his designee shall have the right at reasonable times and upon reasonable

notice to examine the books, records and other compilations of data of the Contractor which pertain to the performance and requirements of this contract.

- 2.9 Worker's Compensation Insurance. (Statutory reference: M.G.L. c.149, §34A). This Paragraph 2.9 applies to every contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public building or other public works for the Commonwealth or any political subdivision thereof.

The Contractor shall, before commencing performance of the contract, provide by insurance for the payment of compensation and the furnishing of other benefits under M.G.L. c.152 to all persons to be employed under the contract, and the Contractor shall continue such insurance in full force and effect during the term of the contract. Sufficient proof of compliance with this Paragraph 2.9 must be furnished at the time of execution of this contract. Failure to provide and continue in force such insurance as aforesaid shall be deemed a material breach of the contract and shall operate as an immediate termination thereof. No cancellation of such insurance, whether by the insurer or by the insured, shall be valid unless written notice thereof is given by the party proposing cancellation to the other party and to the Awarding Authority at least fifteen days prior to the intended effective date thereof, which date shall be expressed in said notice. Notice of cancellation sent by the party proposing cancellation by registered mail, postage prepaid, with a return receipt of the addressee requested, shall be a sufficient notice. An affidavit of any officer, agent or employee of the insurer or of the insured, as the case may be, duly authorized for the purpose, that he has so sent such notice addressed as aforesaid shall be prima facie evidence of the sending thereof as aforesaid. This section shall apply to the legal representative, trustee in bankruptcy, receiver, assignee, trustee and the successor in interest of any such contractor. The superior court shall have jurisdiction in equity to enforce this section.

Whoever violates any provision of this section shall be punished by a fine of not more than one hundred dollars or by imprisonment for six months, or both; and, in addition, any contractor who violates any provision of this section shall be prohibited from contracting, directly or indirectly, with the commonwealth or any political subdivision thereof, for the construction, alteration, demolition, maintenance or repair of, or addition to, any public works or public building for a period of two years from the date of conviction of said violation.

- 3.0 OSHA Training. (Statutory reference: MGL c. 30, §39S).

(a) As used in this section the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. Any person submitting a bid for, or signing a contract to work on, the construction, reconstruction, alteration, remodeling or repair of any public work by the commonwealth, or political subdivision thereof, or by any county, city, town, district, or housing authority, and estimated by the awarding authority to cost more than \$10,000, and any person submitting a bid for, or signing a contract to work on, the construction, reconstruction, installation, demolition,

maintenance or repair of any building by a public agency, estimated to cost more than \$10,000, shall certify on the bid, or contract, under penalties of perjury, as follows:

(1) that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work;

(2) that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and

(3) that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration.

(b) Any employee found on a worksite subject to this section without documentation of successful completion of a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration shall be subject to immediate removal.

(c) The attorney general, or his designee, shall have the power to enforce this section including the power to institute and prosecute proceedings in the superior court to restrain the award of contracts and the performance of contracts in all cases where, after investigation of the facts, he has made a finding that the award or performance has resulted in violation, directly or indirectly, of subsection (b), and he shall not be required to pay to the clerk of the court an entry fee in connection with the institution of the proceeding.

ARTICLE 3 - EQUAL EMPLOYMENT OPPORTUNITY AND AFFIRMATIVE ACTION

(Statutory reference: M.G.L. c.151 B; Executive Orders No. 74, No. 116, and No. 246)

3.1 **Definitions.** For purposes of this contract, "minority" refers to Asian-Americans, Blacks, Spanish Surnamed Americans, North American Indians, and Cape Verdeans. "Commission" refers to the Massachusetts Commission Against Discrimination.

3.2 **Non-Discrimination and Affirmative Action Requirements.** During the performance of his contract, the Contractor and all of (his) Subcontractors (hereinafter collectively referred to as the Contractor), for himself, his assignees, and successors in interest, agree as follows:

3.2.1 In connection with the performance of Work under this contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color,

religious creed, national origin, age or sex. The aforesaid provision shall include, but not be limited to, the following: employment upgrading, demotion, or transfer; recruitment advertising; recruitment layoff, termination; rates of pay or other forms of compensation; conditions or privileges of employment; and selection for apprenticeship. The Contractor shall post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Commission setting forth the provisions of the Fair Employment Practices Law of the Commonwealth.

- 3.2.2 In connection with the performance of Work under this contract, the Contractor shall undertake in good faith affirmative action measures designed to eliminate any discriminatory barriers in the terms and conditions of employment on the grounds of race, color, religious creed, national origin, age or sex, and to eliminate and remedy any effects of such discrimination in the past. Such affirmative action shall entail positive and aggressive measures to ensure equal opportunity in the areas of hiring, upgrading, demotion or transfer, recruitment, layoff or termination, rate of compensation, and in-service or apprenticeship training programs. This affirmative action shall include all action required to guarantee equal employment opportunity for all persons, regardless of race, color, religious creed, national origin, age, or sex. A purpose of this provision is to ensure to the fullest extent possible an adequate supply of skilled tradesmen for this and future Commonwealth public construction projects.
- 3.3. Non-Discrimination. The Contractor, in the performance of all Work after award, and prior to completion of the contract Work, will not discriminate on grounds of race, color, religious creed, national origin, age or sex in employment practices, in the selection or retention of Subcontractors, or in the procurement of materials and rentals of equipment.
- 4.0 Records. The Contractor shall maintain records for the Project in accordance with the requirements of MGL c. 30 § 39R:

Section 39R. (a) The words defined herein shall have the meaning stated below whenever they appear in this section:

(1) "Contractor" means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to sections thirty-eight A 1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A to forty-four H, inclusive, of chapter one hundred and forty-nine, which is for an amount or estimated amount greater than one hundred thousand dollars.

(2) "Contract" means any contract awarded or executed pursuant to sections thirty-eight A 1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A through forty-four H, inclusive, of chapter one hundred and forty-nine, which is for amount or estimated amount greater than one hundred thousand dollars.

(3) "Records" means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.

(4) "Independent Certified Public Accountant" means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his residence or principal office and who is in fact independent. In determining whether an accountant is independent with respect to a particular person, appropriate consideration should be given to all relationships between the accountant and that person or any affiliate thereof. Determination of an accountant's independence shall not be confined to the relationships existing in connection with the filing of reports with the awarding authority.

(5) "Audit", when used in regard to financial statements, means an examination of records by an independent certified public accountant in accordance with generally accepted accounting principles and auditing standards for the purpose of expressing a *certified* opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons.

(6) "Accountant's Report", when used in regard to financial statements, means a document in which an independent certified public accountant indicates the scope of the audit which he has made and sets forth his opinion regarding the financial statements taken as a whole with a listing of noted exceptions and qualifications, or an assertion to the effect that an overall opinion cannot be expressed. When an overall opinion cannot be expressed the reason therefor shall be stated. An accountant's report shall include as a part thereof a signed statement by the responsible corporate officer attesting that management has fully disclosed all material facts to the independent certified public accountant, and that the audited financial statement is a true and complete statement of the financial condition of the contractor.

(7) "Management", when used herein, means the chief executive officers, partners, principals or other person or persons primarily responsible for the financial and operational policies and practices of the contractor.

(8) Accounting terms, unless otherwise defined herein, shall have a meaning in accordance with generally accepted accounting principles and auditing standards.

(b) Subsection (a)(2) hereof notwithstanding, every agreement or contract awarded or executed pursuant to sections thirty-eight A 1/2 to thirty-eight O, inclusive, of chapter seven, or eleven C of chapter twenty-five A, and pursuant to section thirty-nine M of chapter thirty or to section forty-four A through H, inclusive, of chapter one hundred and forty-nine, shall provide that:

(1) The contractor shall make, and keep for at least six years after final payment, books, records, and accounts which in reasonable detail accurately and fairly reflect the transactions and dispositions of the contractor, and

(2) until the expiration of six years after final payment, the office of inspector general, and the commissioner of capital asset management and maintenance shall have the right to examine any

books, documents, papers or records of the contractor or of his subcontractors that directly pertain to, and involve transactions relating to, the contractor or his subcontractors, and

(3) if the agreement is a contract as defined herein, the contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the awarding authority, including in his description the date of the change and reasons therefor, and shall accompany said description with a letter from the contractor's independent certified public accountant approving or otherwise commenting on the changes, and

(4) if the agreement is a contract as defined herein, the contractor has filed a statement of management on internal accounting controls as set forth in paragraph (c) below prior to the execution of the contract, and

(5) if the agreement is a contract as defined herein, the contractor has filed prior to the execution of the contracts and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in paragraph (d) below.

(c) Every contractor awarded a contract shall file with the awarding authority a statement of management as to whether the system of internal accounting controls of the contractor and its subsidiaries reasonably assures that:

(1) transactions are executed in accordance with management's general and specific authorization;

(2) transactions are recorded as necessary

i. to permit preparation of financial statements in conformity with generally accepted accounting principles, and

ii. to maintain accountability for assets;

(3) access to assets is permitted only in accordance with management's general or specific authorization; and

(4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

Every contractor awarded a contract shall also file with the awarding authority a statement prepared and signed by an independent certified public accountant, stating that he has examined the statement of management on internal accounting controls, and expressing an opinion as to

(1) whether the representations of management in response to this paragraph and paragraph (b) above are consistent with the result of management's evaluation of the system of internal accounting controls; and

(2) whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statements.

(d) Every contractor awarded a contract by the commonwealth or by any political subdivision thereof shall annually file with the commissioner of capital asset management and maintenance during the term of the contract a financial statement prepared by an independent certified public accountant on the basis of an audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report. Such statements shall be made available to the awarding authority upon request.

(e) The office of inspector general, the commissioner of capital asset management and maintenance and any other awarding authority shall enforce the provisions of this section. The commissioner of capital asset management and maintenance may after providing an opportunity for the inspector general and other interested parties to comment, promulgate pursuant to the provisions of chapter thirty A such rules, regulations and guidelines as are necessary to effectuate the purposes of this section. Such rules, regulations and guidelines may be applicable to all awarding authorities. A contractor's failure to satisfy any of the requirements of this section may be grounds for debarment pursuant to section forty-four C of chapter one hundred and forty-nine.

(f) Records and statements required to be made, kept or filed under the provisions of this section shall not be public records as defined in section seven of chapter four and shall not be open to public inspection; provided, however, that such records and statements shall be made available pursuant to the provisions of clause (2) of paragraph (b).

ATTACHMENT B: ORDER OF CONDITIONS

PLEASE REFER TO ATTACHMENT B



Southbridge Conservation Commission

Town Hall ~ 41 Elm Street
Southbridge, Massachusetts 01550-2638
Tel: 508-764-5402 ~ Fax: 508-764-5425

July 17, 2023

Peg Dean
Town of Southbridge – CDBG/ Ec/ Dev
Re: Order of Conditions - DEP # 291-0526

Dear Ms. Dean:

Attached please find the completed, signed Order of Conditions for the above referenced project. This Order ***must immediately be filed*** with the Worcester Registry of Deeds, ***before work begins***. ***No work will be allowed until the Conservation Commission has received a receipt from the Registry of Deeds (from the applicant), or the stamped original sent from the Registry.*** The filing fee is usually about \$105.00 per Order. The telephone number for the Registry of Deeds is (508) 798-7717. When work has been completed, a letter requesting a final inspection and Certificate of Compliance must be sent to the Commission. Please note that no work can take place until ten days after the date the Order of Conditions is issued.

The enclosed Applicant and Contractor Certification must be completed and returned to the Southbridge Conservation Commission, 41 Elm Street, Southbridge, before beginning work. You must place a copy of the Contractor Certification in a waterproof bag and attach it to the DEP sign required to be placed on site. You are also encouraged to contact Eric Rumsey, Conservation Agent, at 508-764-5402 with any questions you have concerning your project. You must call Eric Rumsey when work is scheduled to begin.

Very truly yours,

Karen A. Loin
Administrative Assistant
Southbridge Conservation Commission

Applicant and Contractor: Please read the Order of Conditions and sign the below certifications – return this sheet **BEFORE BEGINNING WORK** to:

Southbridge Conservation Commission
41 Elm Street
Southbridge, MA 01550

A waterproofed copy must also be attached to the required DEP sign.

Contractor Certification

I hereby certify that I have read all applicable Orders of Conditions issued to the Town of Southbridge for property located on the Quinebaug Valley Rail Trail, Southbridge, MA (DEP 291-0526). I also hereby certify that I understand the requirements listed and that I will abide by the Order.

Name

Address

Telephone

Evening Telephone

Name – Project Supervisor

Address

Telephone

Evening Telephone

I hereby certify that I have read all applicable Orders of Conditions issued to the Town of Southbridge for property located on the Quinebaug Valley Rail Trail, Southbridge, MA (DEP 291-0526). I also hereby certify that I understand the requirements listed and that I will abide by the Order.

Applicant Certification

Name

Address

Telephone

Evening Telephone



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 291-0526
 MassDEP File #

eDEP Transaction #
 Southbridge
 City/Town

A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):
 Worcester
 a. County
 N/A
 c. Book
 b. Certificate Number (if registered land)
 N/A
 d. Page
7. Dates: June 2023 July 6, 2023
 a. Date Notice of Intent Filed b. Date Public Hearing Closed c. Date of Issuance
8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):
 Site Plans - Southbridge Quinebaug Valley Rail Trail
 a. Plan Title
 BSC Group, Inc. BSC Group, Inc.
 b. Prepared By c. Signed and Stamped by
 May 2023
 d. Final Revision Date e. Scale
 Environmental Resources Map - Southbridge Quinebaug Valley May 2023
 Rail Trail g. Date

B. Findings

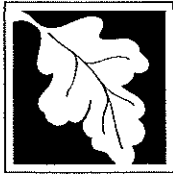
1. Findings pursuant to the Massachusetts Wetlands Protection Act:
 Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

- a. Public Water Supply b. Land Containing Shellfish c. Prevention of Pollution
 d. Private Water Supply e. Fisheries f. Protection of Wildlife Habitat
 g. Groundwater Supply h. Storm Damage Prevention i. Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

- a. the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 291-0526
 MassDEP File # _____

eDEP Transaction # _____
 Southbridge
 City/Town

B. Findings (cont.)

Denied because:

- b. the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**
- c. the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**
3. Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) _____ a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	_____ a. linear feet	_____ b. linear feet	_____ c. linear feet	_____ d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
6. <input type="checkbox"/> Land Under Waterbodies and Waterways	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
	_____ e. c/y dredged	_____ f. c/y dredged		
7. <input checked="" type="checkbox"/> Bordering Land Subject to Flooding	48,681 _____ a. square feet	48,681 _____ b. square feet	48,681 _____ c. square feet	48,681 _____ d. square feet
Cubic Feet Flood Storage	_____ e. cubic feet	_____ f. cubic feet	_____ g. cubic feet	_____ h. cubic feet
8. <input type="checkbox"/> Isolated Land Subject to Flooding	_____ a. square feet	_____ b. square feet		
Cubic Feet Flood Storage	_____ c. cubic feet	_____ d. cubic feet	_____ e. cubic feet	_____ f. cubic feet
9. <input checked="" type="checkbox"/> Riverfront Area	207,100 _____ a. total sq. feet	207,100 _____ b. total sq. feet		
Sq ft within 100 ft	145,000 _____ c. square feet	145,000 _____ d. square feet	_____ e. square feet	_____ f. square feet
Sq ft between 100-200 ft	62,100 _____ g. square feet	62,100 _____ h. square feet	_____ i. square feet	_____ j. square feet



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

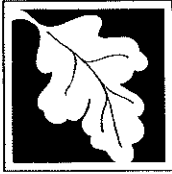
Provided by MassDEP:
 291-0526
 MassDEP File # _____

eDEP Transaction # _____
 Southbridge
 City/Town

B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. <input type="checkbox"/> Land Under the Ocean	a. <u>square feet</u>	b. <u>square feet</u>		
	c. <u>c/y dredged</u>	d. <u>c/y dredged</u>		
12. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input type="checkbox"/> Coastal Beaches	a. <u>square feet</u>	b. <u>square feet</u>	c. <u>cu yd nourishment</u>	d. <u>cu yd nourishment</u>
14. <input type="checkbox"/> Coastal Dunes	a. <u>square feet</u>	b. <u>square feet</u>	c. <u>cu yd nourishment</u>	d. <u>cu yd nourishment</u>
15. <input type="checkbox"/> Coastal Banks	a. <u>linear feet</u>	b. <u>linear feet</u>		
16. <input type="checkbox"/> Rocky Intertidal Shores	a. <u>square feet</u>	b. <u>square feet</u>		
17. <input type="checkbox"/> Salt Marshes	a. <u>square feet</u>	b. <u>square feet</u>	c. <u>square feet</u>	d. <u>square feet</u>
18. <input type="checkbox"/> Land Under Salt Ponds	a. <u>square feet</u>	b. <u>square feet</u>		
	c. <u>c/y dredged</u>	d. <u>c/y dredged</u>		
19. <input type="checkbox"/> Land Containing Shellfish	a. <u>square feet</u>	b. <u>square feet</u>	c. <u>square feet</u>	d. <u>square feet</u>
20. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	a. <u>c/y dredged</u>	b. <u>c/y dredged</u>		
21. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	a. <u>square feet</u>	b. <u>square feet</u>		



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B. Findings (cont.)

* #22. If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c (BVW) or B.17.c (Salt Marsh) above, please enter the additional amount here.

22. Restoration/Enhancement *:
- | | |
|-----------------------|------------------------------|
| a. square feet of BVW | b. square feet of salt marsh |
|-----------------------|------------------------------|
23. Stream Crossing(s):
- | | |
|-----------------------------------|---|
| 0 | |
| a. number of new stream crossings | b. number of replacement stream crossings |

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. the work is a maintenance dredging project as provided for in the Act; or
 - b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on _____ unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.



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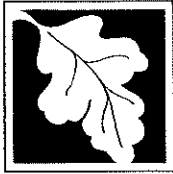
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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
10. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]
"File Number 291-0526 "
11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.
17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

NOTICE OF STORMWATER CONTROL AND MAINTENANCE REQUIREMENTS

19. The work associated with this Order (the "Project") is (1) is not (2) subject to the Massachusetts Stormwater Standards. If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:
- a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.
- b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:
- i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
 - ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
 - iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;
 - iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;
 - v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.



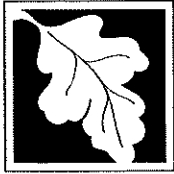
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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following: *i.*) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and *ii.*) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.
- d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.
- e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.
- f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- g) The responsible party shall:
 1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
 2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
 3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

- h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.
- i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.
- j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.
- k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.
- l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.



Special Conditions (if you need more space for additional conditions, please attach a text document):

SEE ATTACHED FOR ADDITIONAL CONDITIONS

9a, 9b, 9c follow

**Applicant and Contractor are Responsible
For Knowing and Enforcing these Orders.
See Attached Certification**

Additional Conditions

18. All work must conform to the plan or plans referenced on page 1.
19. Any changes required by the Boards of Authority may require a new filing of a Notice of Intent with this Conservation Commission as per the MA Wetlands Protection Act, M.G.L. Chap. 131, Sec. 40, as amended.
20. Any modification or revisions to the plan or plans referenced on page 1 or Notice of Intent or any new plans must be submitted to the Southbridge Conservation Commission for review and a determination as to whether a new Notice of Intent is required. If this procedure is not followed, the Order may be rescinded. The Southbridge Conservation Commission reserves the right to require the Applicant to file a new Notice of Intent for any appropriate plan changes or submittals.
21. This Order of Conditions must be recorded at the Registry of Deeds and the original returned to the Southbridge Conservation Commission.
22. This Order shall apply to all successors in interest and successors in control.
23. This Order shall be included in all construction contracts and subcontracts dealing with the work proposed and shall supersede other contract requirements.
24. A copy of this Order of Conditions shall be kept at the project site. The project supervisor is responsible for informing workers of their responsibility in complying with these orders.
25. The Southbridge Conservation Commission reserves the right to make periodic site inspections.
26. The excavation contractor shall read and sign a copy of this Order of Conditions and must return said copy to the Southbridge Conservation Commission before any work is started.
27. No construction shall proceed except as required for the installation of erosion and sedimentation control, and no further construction shall proceed until such controls have been inspected and approved by the Southbridge Conservation Commission.
28. The Contractor shall immediately notify the Southbridge Conservation Commission when work begins.
29. As soon as possible, during construction, all disturbed areas shall be brought to final finished grade and either (a) loamed and seeded in accordance with USDA soil conservation service guidelines for permanent stabilization or (b) stabilized in another approved way by the Southbridge Conservation Commission. Bare ground that cannot be permanently stabilized within 30 days shall be stabilized by temporary measures acceptable to the Southbridge Conservation Commission.
30. The proposed limit of work shall be clearly marked with stakes and flags and shall be confirmed by the Southbridge Conservation Commission. Such markers must be maintained until all construction of the site's perimeter is complete. Workers shall be informed that no construction activity is to occur beyond this line at any time.

31. Site grading and construction shall be scheduled to avoid high water. Once begun, grading and construction shall move uninterrupted to completion to avoid erosion and siltration of the wetlands.
32. Any additional erosion and sedimentation control measures deemed necessary by the Southbridge Conservation Commission shall be instituted by the Applicant.
33. No additional new construction or disturbance of the wetlands, as defined by vegetation, not covered by the plan referenced on page 1, shall be permitted on this site until a determination has been made by the Commission.
34. No effluent shall be discharged into wetlands during construction.
35. The entire project shall contain no construction bury holes located within 100 feet of wetlands.
36. No spoils of construction, construction material or equipment shall be stored in the wetland area.
37. During and after work on this project, there shall be no discharge or spillage of fuel, oil, or other pollutants onto any part of the site. The Applicant shall take all reasonable precautions to prevent the release of pollutants by ignorance, accident or vandalism.
38. No dumpsters shall be located within 100 feet of the wetlands.
39. No fill shall be stored within 100 feet of the wetlands without adequate erosion control measures and shall be inspected by the Southbridge Conservation Commission.
40. The Applicant shall inform the Southbridge Conservation Commission in writing of the names, addresses, business and home phone numbers of both the project supervisor who will be responsible for ensuring on-site compliance with this Order of Conditions and his or her alternate.
41. At any time when the parcel or any portion thereof is transferred while subject to this Order of Conditions, the present owner shall notify the Southbridge Conservation Commission, in writing, of the name, address and telephone number of the new owner at the time the deed is recorded with the Registry of Deeds.
42. The Applicant shall submit "as built" plans to the Southbridge Conservation Commission upon completion of this project. The plan shall be signed by the professional engineer of record who shall certify that the work has been done in accordance with the approved plans and this Order of Conditions. This plan must be submitted prior to the issuance of a Certificate of Compliance by the Southbridge Conservation Commission.
43. All erosion and sedimentation control measures shall be removed upon completion of the project prior to the issuance of a Certificate of Compliance.
44. Prior to implementation of any change in the plan presented to the Commission, such change must be submitted to the Conservation Commission for review and determination.
45. A Stormwater Pollution Prevention Plan must be submitted to the Conservation Commission and approved prior to the start of construction, if applicable.
46. If this Order of Conditions is issued to the Town of Southbridge regarding a lot upon which easement work must be performed by the Town, the Town shall notify the property owner by certified mail, return receipt requested.

Site Specific Conditions

47. When construction begins, if turtle eggs or baby turtles are discovered, the Turtle Rescue League or the Commission must be contacted immediately as they cannot simply be let into the water at that time of year.

48. Any drainage or water crossing must be fully secured against debris falling into those water bodies.



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D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? Yes No
2. The _____ hereby finds (check one that applies):
 Conservation Commission
- a. that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

1. Municipal Ordinance or Bylaw _____ 2. Citation _____

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

- b. that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

1. Municipal Ordinance or Bylaw _____ 2. Citation _____

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):



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Southbridge, MA
 City/Town 01550

E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

7/17/23
 1. Date of Issuance

Please indicate the number of members who will sign this form.

This Order must be signed by a majority of the Conservation Commission.

2
 2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signatures:

Maureen Zeffe

Natasha Novick

by hand delivery on
 Date July 17/2023

by certified mail, return receipt requested, on

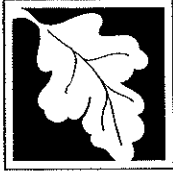
Date

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request of Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.



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G. Recording Information

Prior to commencement of work, this Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Conservation Commission

Please be advised that the Order of Conditions for the Project at:

Project Location

MassDEP File Number

Has been recorded at the Registry of Deeds of:

County

Book

Page

for: Property Owner

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant

ATTACHMENT C: CONSTRUCTION PLANS

PLEASE REFER TO ATTACHMENT C

QUINEBAUG VALLEY RAIL TRAIL

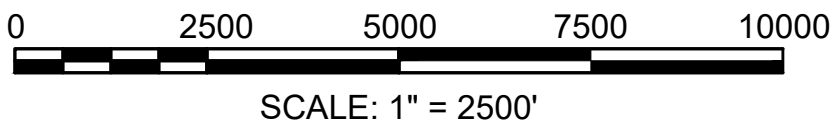
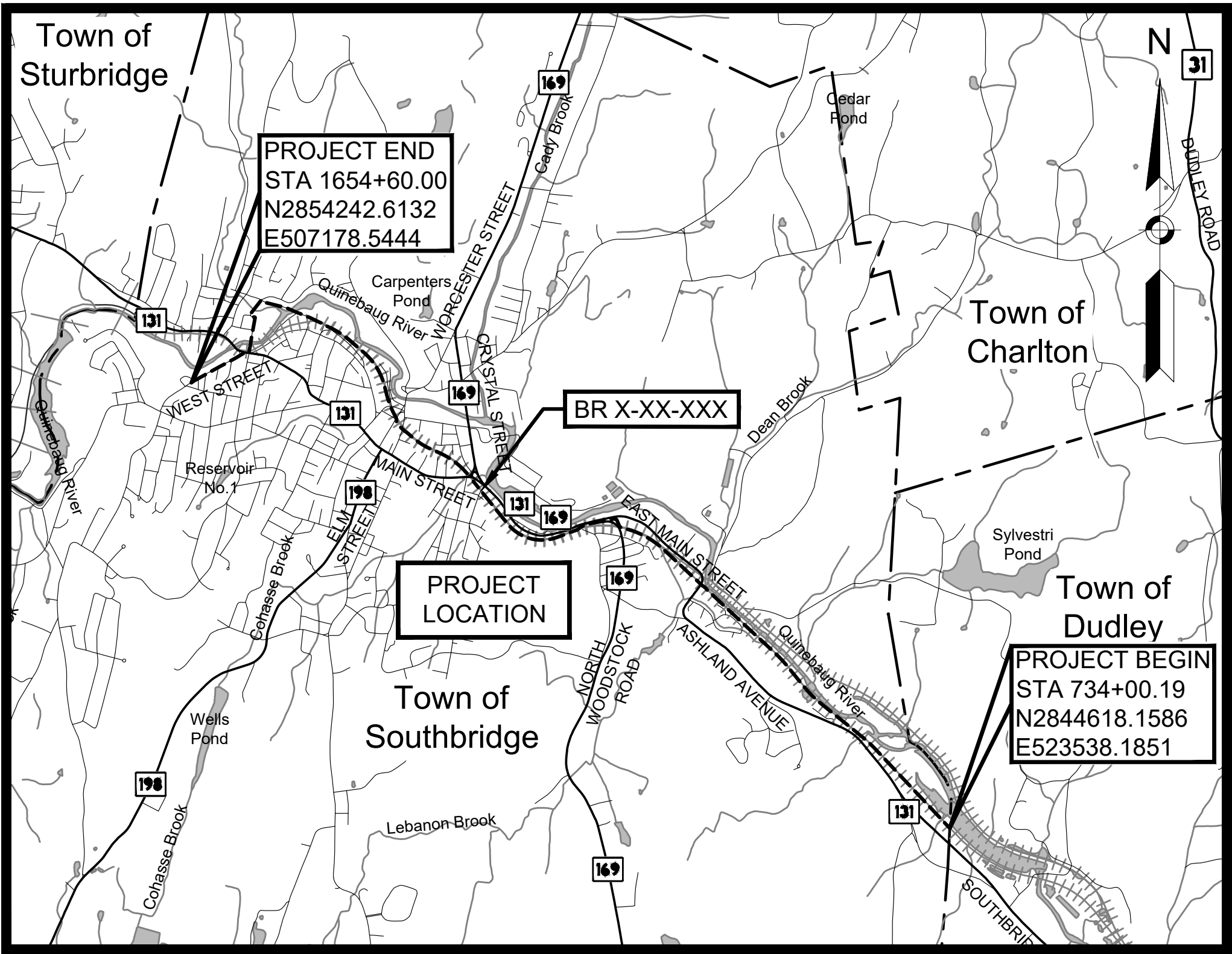
PLAN OF
 QUINEBAUG VALLEY RAIL TRAIL
 (BRIDGE NO. X-XX-XXX)
 IN THE TOWN OF
 SOUTHBRIDGE
 WORCESTER COUNTY COUNTY

SOUTHBRIDGE QUINEBAUG VALLEY RAIL TRAIL			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	1	29
PROJECT FILE NO.		89443.00	
TITLE SHEET & INDEX			

THESE PLANS ARE SUPPLEMENTED BY THE 2023 MASSDOT STANDARD SPECIFICATIONS, THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

EDA AWARD NO: 01-79-15218

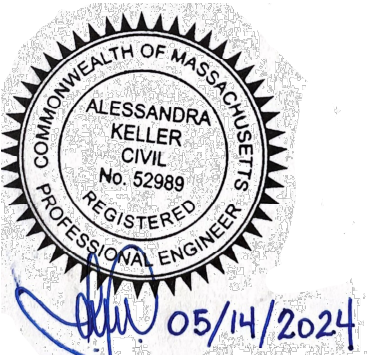
INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	LEGEND & ABBREVIATIONS
3	KEY PLAN
4-5	TYPICAL SECTION
6-17	CONSTRUCTION PLAN
18-19	GRADING PLAN
20-21	BRIDGE PLAN
22-23	LANDSCAPE DETAILS
24-27	CONSTRUCTION DETAILS
28	SIGN SUMMARY
29	BORING LOGS



LENGTH OF PROJECT = 22,642.12 FEET = 4.288 MILES



SHEETS 1-19,22-29



SHEETS 20-21

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		JERSEY BARRIER
		CATCH BASIN
		CATCH BASIN CURB INLET
		FLAG POLE
		GAS PUMP
		MAIL BOX
		POST SQUARE
		POST CIRCULAR
		WELL
		ELECTRIC HANDHOLE
		FENCE GATE POST
		GAS GATE
		BORING HOLE
		MONITORING WELL
		TEST PIT
		HYDRANT
		LIGHT POLE
		COUNTY BOUND
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		MASSACHUSETTS HIGHWAY BOUND
		MONUMENT
		STONE BOUND
		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
		TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W / 1 LIGHT
		UTILITY POLE
		BUSH
		TREE
		STUMP
		SWAMP / MARSH
		WATER GATE
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		HAY BALES/SILT FENCE
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT
		SEDIMENT CONTROL BARRIER

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
		EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
		RAILROAD SIGNAL
		SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
		MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
		MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
		LEGEND "ONLY" - WHITE
		STOP LINE
		CROSSWALK
		SOLID WHITE LINE
		SOLID YELLOW LINE
		BROKEN WHITE LINE
		BROKEN YELLOW LINE
		DOTTED WHITE LINE
		DOTTED YELLOW LINE
		DOTTED WHITE LINE EXTENSION
		DOTTED YELLOW LINE EXTENSION
		DOUBLE WHITE LINE
		DOUBLE YELLOW LINE

ABBREVIATIONS

GENERAL	DESCRIPTION
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NIC	NOT IN CONTRACT
NO.	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY

SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	2	29

PROJECT FILE NO. 89443.00

LEGEND & ABBREVIATIONS

ABBREVIATIONS (cont.)

GENERAL	DESCRIPTION
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

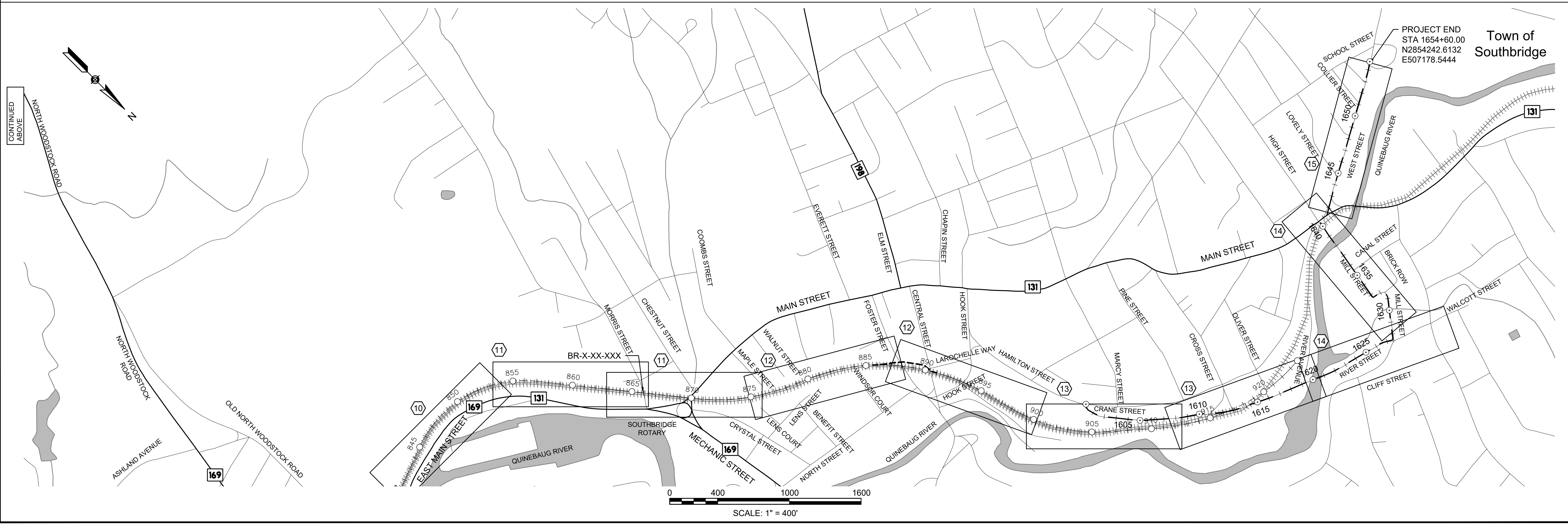
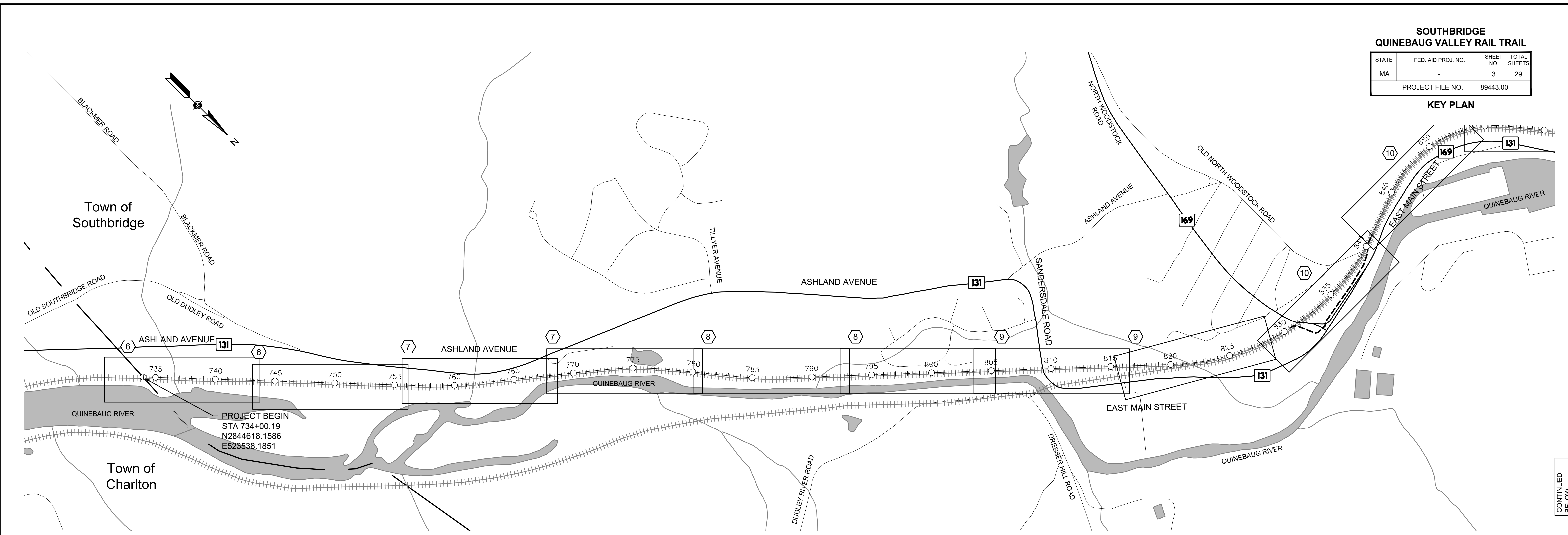
TRAFFIC SIGNAL ABBREVIATIONS

CAB	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
DW	STEADY UPRAISED HAND
FDW	FLASHING UPRAISED HAND
FR	FLASHING CIRCULAR RED
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
FYL	FLASHING YELLOW LEFT ARROW
FYR	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
R	STEADY CIRCULAR RED
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
W	STEADY WALKING PERSON
Y	STEADY CIRCULAR YELLOW
YL	STEADY YELLOW LEFT ARROW

**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	3	29
PROJECT FILE NO.		89443.00	

KEY PLAN



CONTINUED BELOW

CONTINUED ABOVE

**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	4	29
PROJECT FILE NO.		89443.00	

TYPICAL SECTION

PAVEMENT NOTES:

SHARED-USE PATH

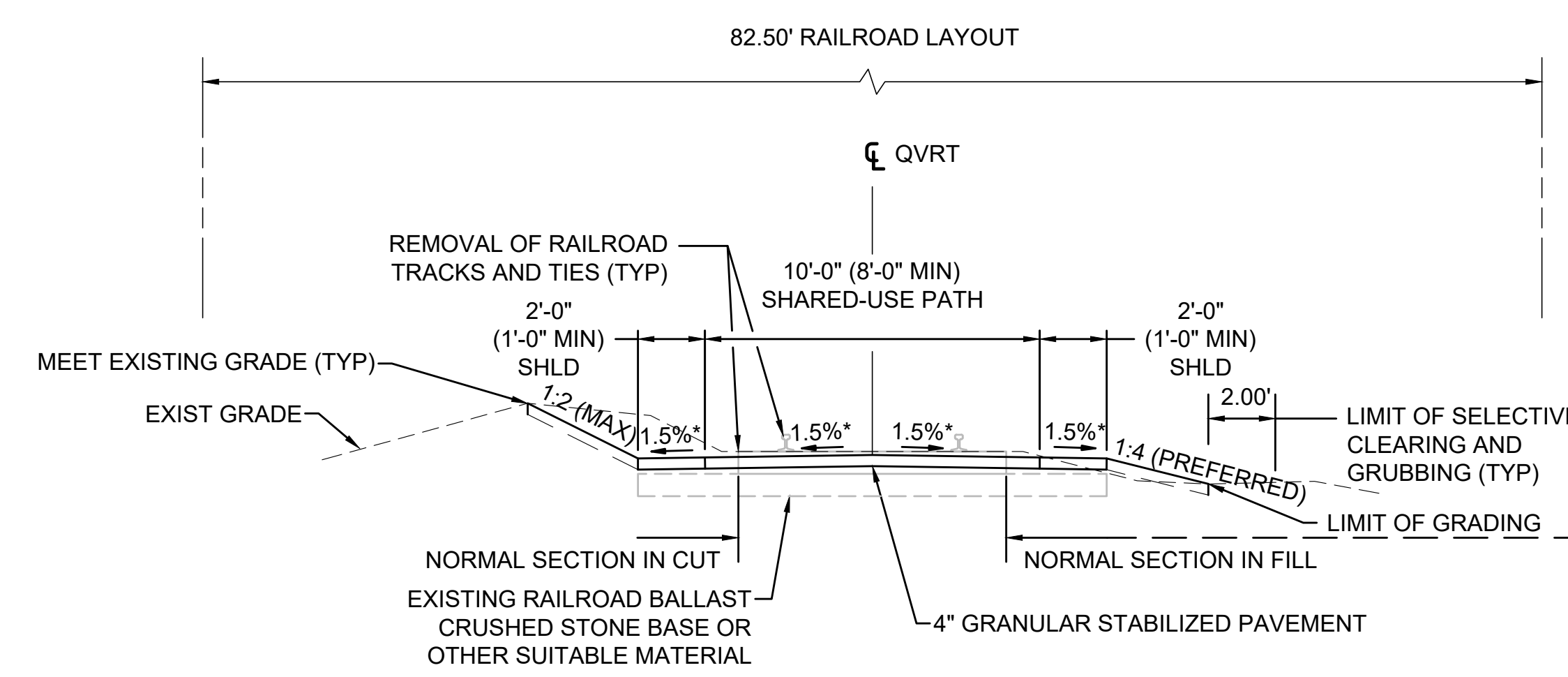
SURFACE: 4" GRANULAR STABILIZED PAVEMENT OVER
GEOTEXTILE FABRIC FOR SEPARATION OVER
SUBBASE: EXISTING RAILROAD BALLAST (SEE NOTE 8)

SHARED-USE PATH PAVEMENT

SURFACE: 1.5" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5) OVER
BASE: 1.5" SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC-12.5) OVER
SUBBASE: EXISTING RAILROAD BALLAST (SEE NOTE 8)

GENERAL NOTES:

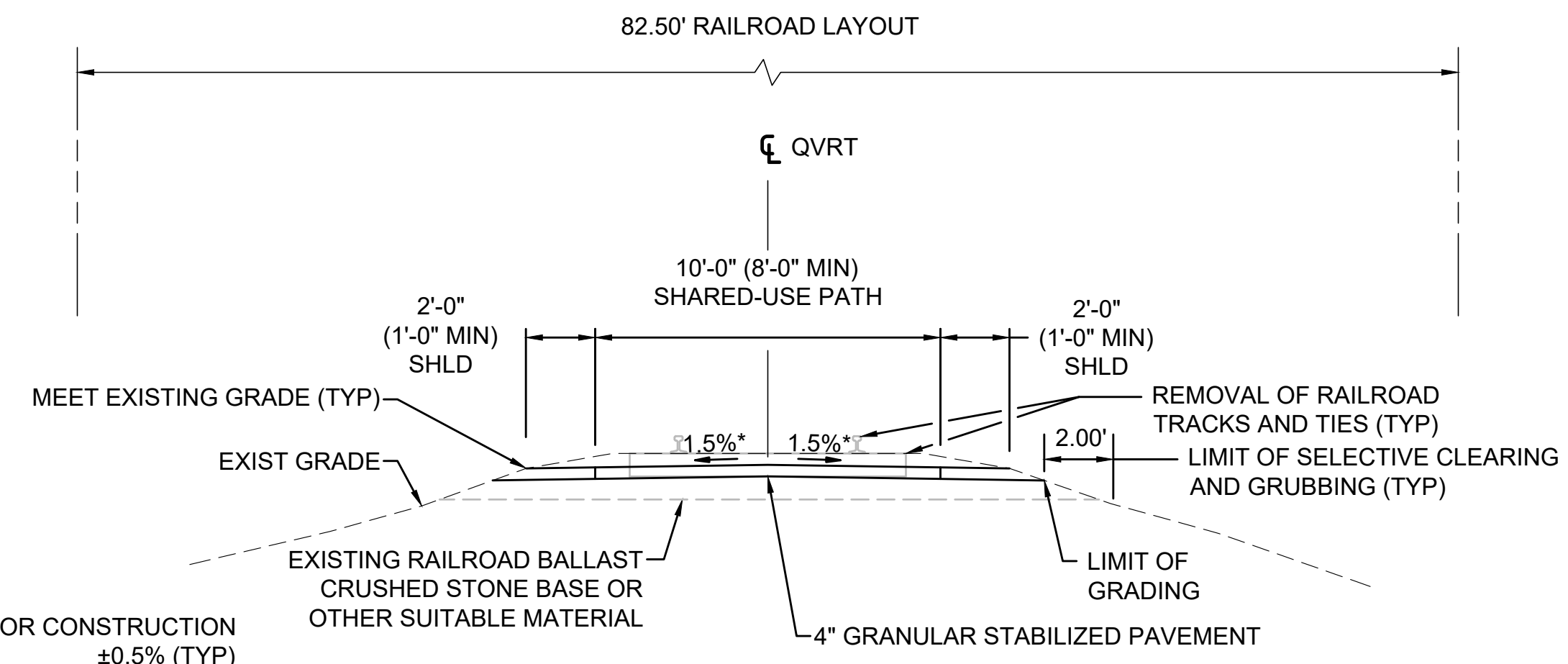
1. ALL DESIGN SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES.
2. ALL RAIL TRAILS, INCLUDING THOSE WITH UNPAVED SURFACES, SHALL MEET THE REQUIREMENTS OF THE US ACCESS BOARD AND ITS GUIDELINES FOR SHARED USE PATHS.
3. FOR UNPAVED RAIL TRAILS, SHOULDER AND LATERAL CLEARANCE WIDTHS MAY BE REDUCED BY 1'-0" IN SITUATIONS WHERE LIMITED RIGHT OF WAY OR ENVIRONMENTAL CONSTRAINTS EXIST.
4. GEOTEXTILE SHALL BE PLACED BETWEEN SUBGRADE AND SUBBASE.
5. ANY TREE ROOTS ENCOUNTERED WITHIN THE EXCAVATION LIMITS SHALL BE SAWCUT AND REMOVED. PAYMENT WILL BE INCIDENTAL TO COMMON EXCAVATION UNLESS OTHERWISE NOTED ON THE PLANS.
6. THE SHOULDER MAY BE CONSTRUCTED USING TOPSOIL AND GRASS OR AGGREGATE.
7. MODIFIED ROCKFILL REQUIRED ON ANY SLOPE STEEPER THAN 1:2. SEE CONSTRUCTION DETAILS FOR DETAILS FOR COMPOST AND SEED OVER MODIFIED ROCKFILL.
8. IF UNSUITABLE MATERIAL IS PRESENT ON TOP OF BALLAST, IT SHALL BE REMOVED PRIOR TO GRADING.
9. EXCESS BALLAST SHALL BE GRADED TO A CONSISTENT GRADE AND CROSS SLOPE.
10. WHEN BIT. CONCRETE PAVEMENT IS USED AS THE WEAR COURSE A 4"(MIN) LIFT OF AGGREGATE SURFACE COURSE SHALL BE PLACED BETWEEN THE BIT. CONCRETE PAVEMENT AND ANY BALLAST MATERIAL.
11. THE OFFSET OF THE PATH CENTERLINE (CL) FROM THE CONSTRUCTION BASELINE (BL) VARIES.



TYPICAL TRAIL SECTION - NORMAL

STA 809+50 TO STA 830+41
STA 841+00 TO STA 868+66
STA 870+75 TO STA 880+00
SCALE: 1"=4'

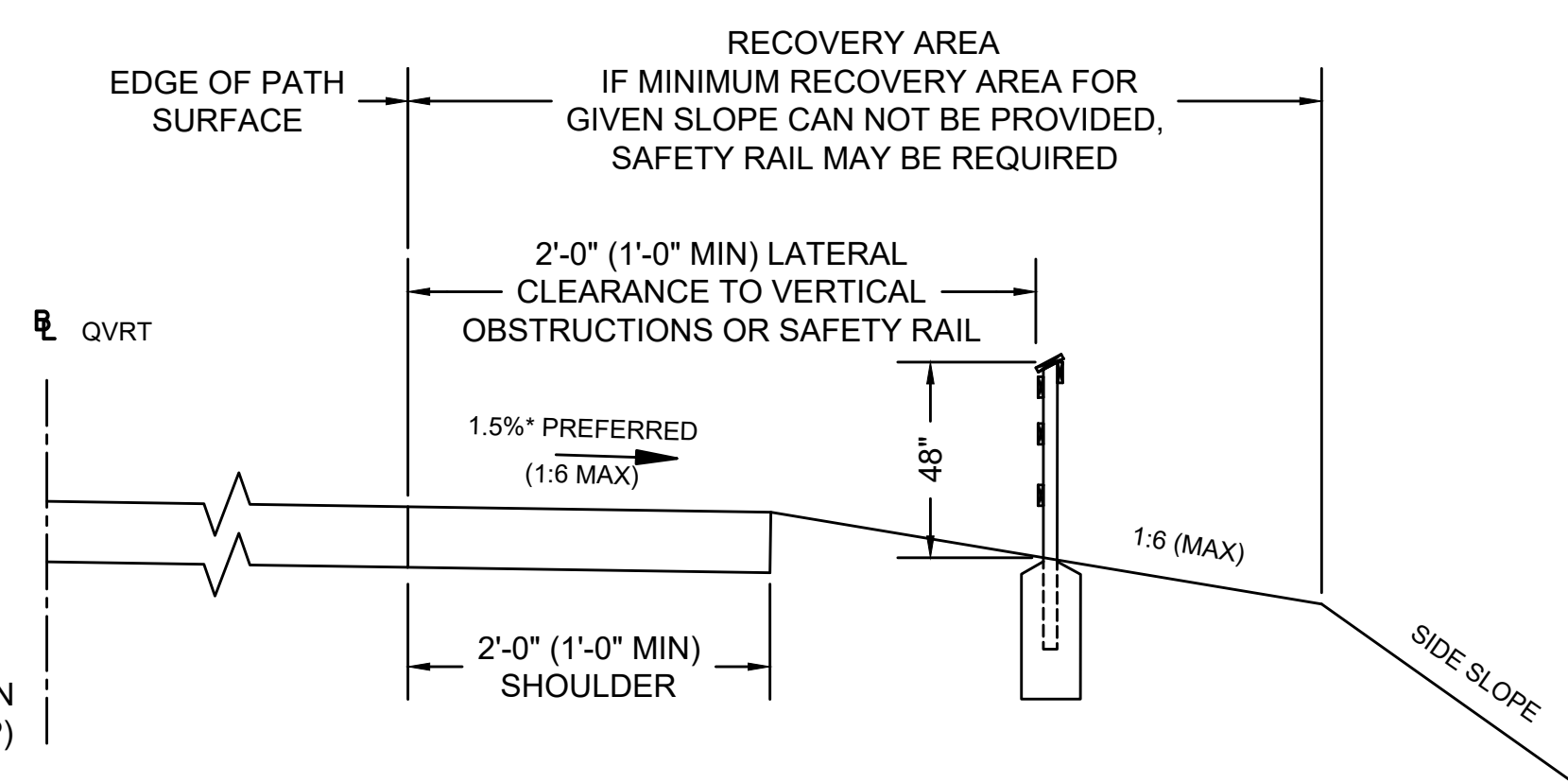
*TOLERANCE FOR CONSTRUCTION
±0.5% (TYP)



TYPICAL TRAIL SECTION

STA 734+00 TO STA 809+08
STA 839+70 TO STA 841+00
STA 880+00 TO STA 887+56
SCALE: 1"=4'

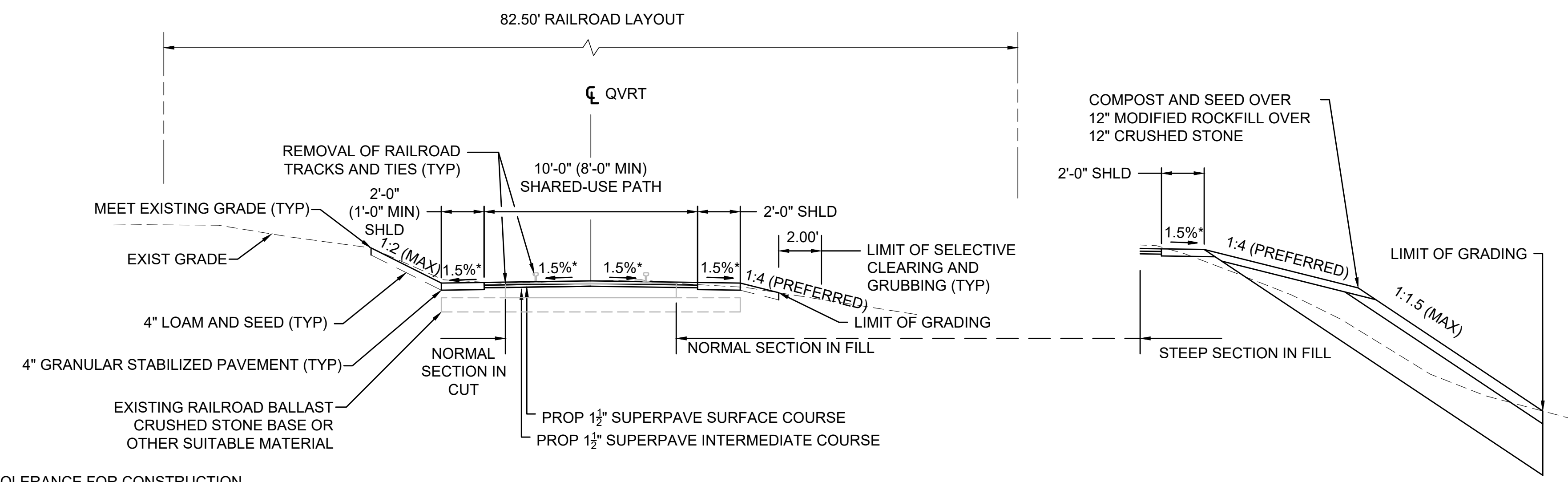
*TOLERANCE FOR CONSTRUCTION
±0.5% (TYP)



SIDE SLOPE TREATMENT

NOT TO SCALE

*TOLERANCE FOR CONSTRUCTION
±0.5% (TYP)



TYPICAL TRAIL SECTION - PAVED

STA 893+50 TO STA 906+91
SCALE: 1"=4'

*TOLERANCE FOR CONSTRUCTION
±0.5% (TYP)

**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	5	29
PROJECT FILE NO.		89443.00	

TYPICAL SECTION

PAVEMENT NOTES:

SHARED-USE PATH

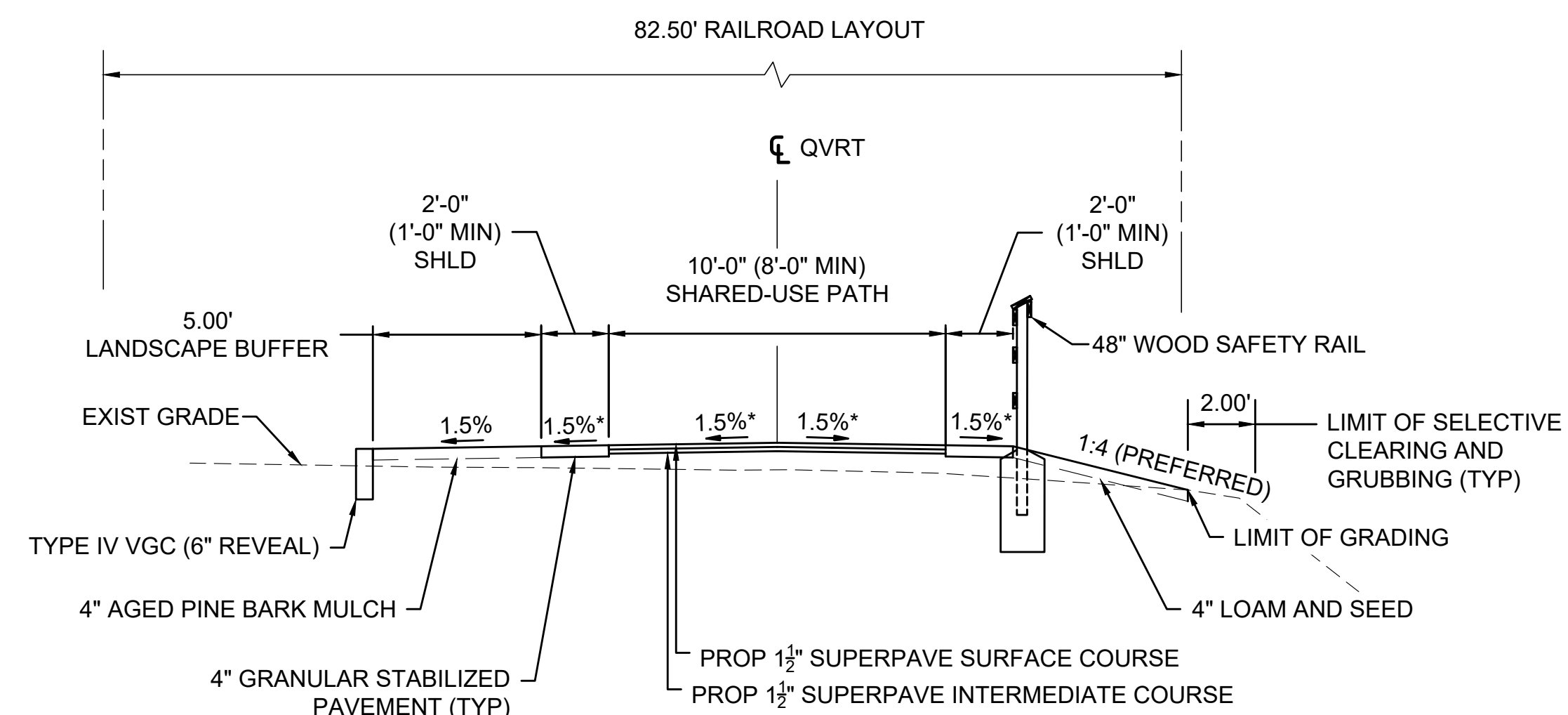
- SURFACE: 4" GRANULAR STABILIZED PAVEMENT OVER
- GEOTEXTILE FABRIC FOR SEPARATION OVER
- SUBBASE: EXISTING RAILROAD BALLAST (SEE NOTE 8)

SHARED-USE PATH PAVEMENT

- SURFACE: 1.5" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5) OVER
- BASE: 1.5" SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC-12.5) OVER
- SUBBASE: EXISTING RAILROAD BALLAST (SEE NOTE 8)

GENERAL NOTES:

1. ALL DESIGN SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES.
2. ALL RAIL TRAILS, INCLUDING THOSE WITH UNPAVED SURFACES, SHALL MEET THE REQUIREMENTS OF THE US ACCESS BOARD AND ITS GUIDELINES FOR SHARED USE PATHS.
3. FOR UNPAVED RAIL TRAILS, SHOULDER AND LATERAL CLEARANCE WIDTHS MAY BE REDUCED BY 1'-0" IN SITUATIONS WHERE LIMITED RIGHT OF WAY OR ENVIRONMENTAL CONSTRAINTS EXIST.
4. GEOTEXTILE SHALL BE PLACED BETWEEN SUBGRADE AND SUBBASE.
5. ANY TREE ROOTS ENCOUNTERED WITHIN THE EXCAVATION LIMITS SHALL BE SAWCUT AND REMOVED. PAYMENT WILL BE INCIDENTAL TO COMMON EXCAVATION UNLESS OTHERWISE NOTED ON THE PLANS.
6. THE SHOULDER MAY BE CONSTRUCTED USING TOPSOIL AND GRASS OR AGGREGATE.
7. MODIFIED ROCKFILL REQUIRED ON ANY SLOPE STEEPER THAN 1:2. SEE CONSTRUCTION DETAILS FOR DETAILS FOR COMPOST AND SEED OVER MODIFIED ROCKFILL.
8. IF UNSUITABLE MATERIAL IS PRESENT ON TOP OF BALLAST, IT SHALL BE REMOVED PRIOR TO GRADING.
9. EXCESS BALLAST SHALL BE GRADED TO A CONSISTENT GRADE AND CROSS SLOPE.
10. WHEN BIT. CONCRETE PAVEMENT IS USED AS THE WEAR COURSE A 4"(MIN) LIFT OF AGGREGATE SURFACE COURSE SHALL BE PLACED BETWEEN THE BIT. CONCRETE PAVEMENT AND ANY BALLAST MATERIAL.
11. THE OFFSET OF THE PATH CENTERLINE (C) FROM THE CONSTRUCTION BASELINE (B) VARIES.



*TOLERANCE FOR CONSTRUCTION
±0.5% (TYP)

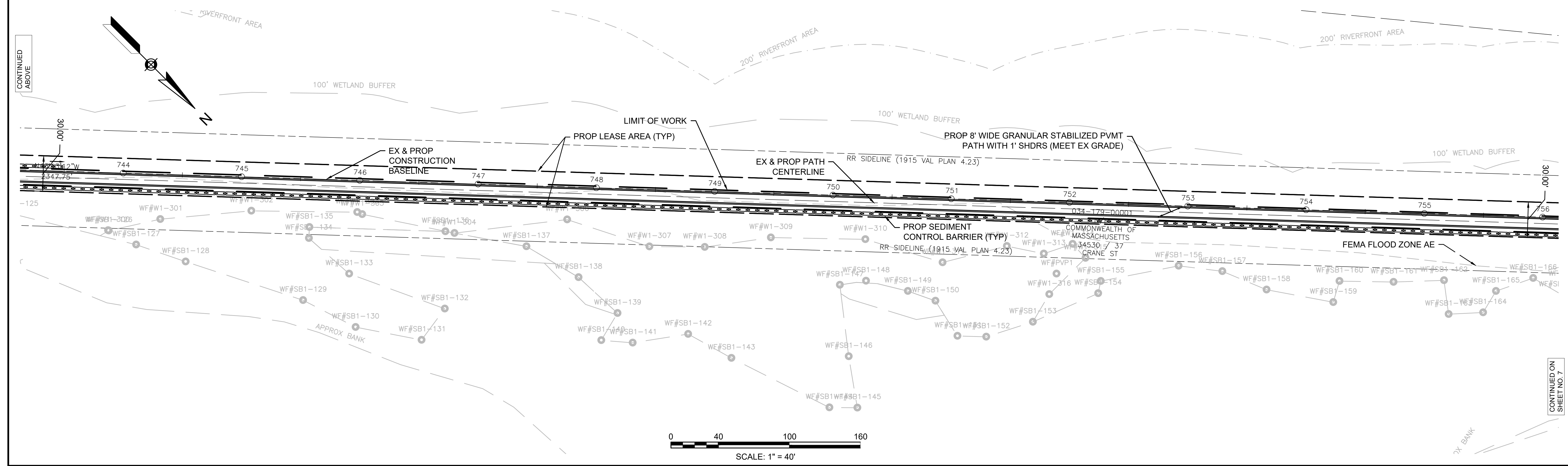
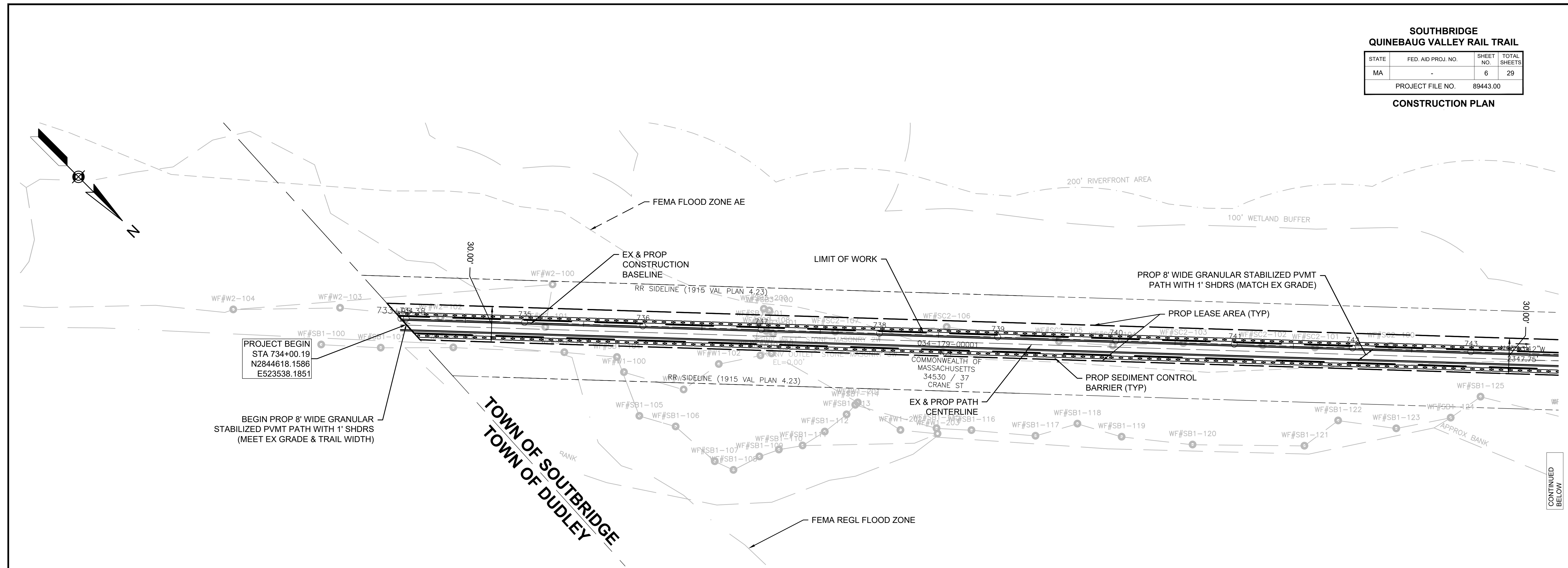
TYPICAL TRAIL SECTION - CRANE STREET

STA 906+91 TO STA 915+62
SCALE: 1"=4'

**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	6	29
PROJECT FILE NO.		89443.00	

CONSTRUCTION PLAN



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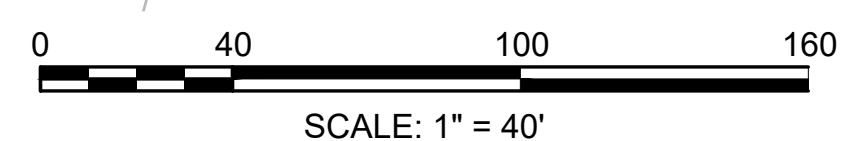
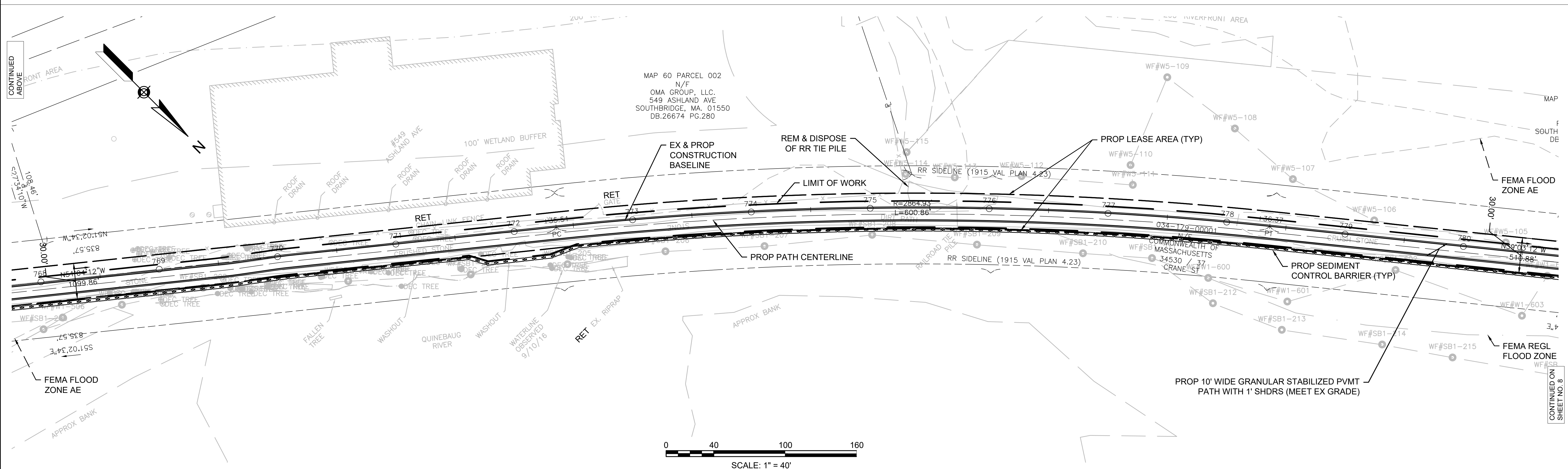
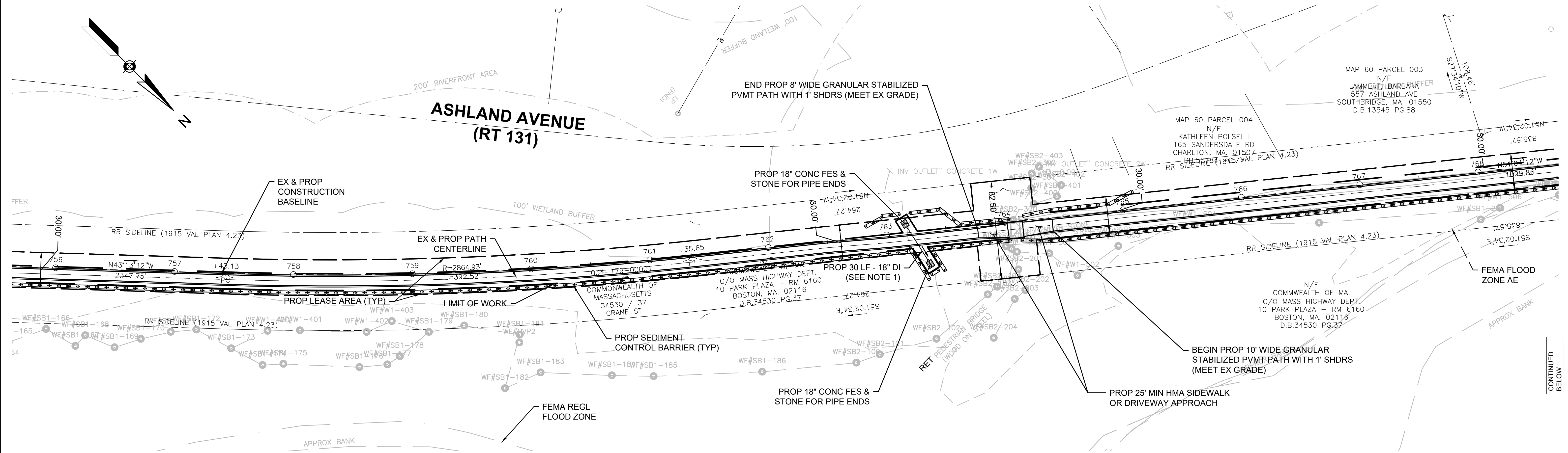
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CONTINUED ON SHEET NO. 7

NOTE 1: INVERT ELEVATIONS (INLET & OUTLET) TO PROVIDE A MINIMUM OF 18" OF COVER & 0.5% SLOPE, MINIMUM (TOWARD QUINEBAUG RIVER).

SOUTHBRIDGE QUINEBAUG VALLEY RAIL TRAIL			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		7	29
PROJECT FILE NO.		89443.00	
CONSTRUCTION PLAN			



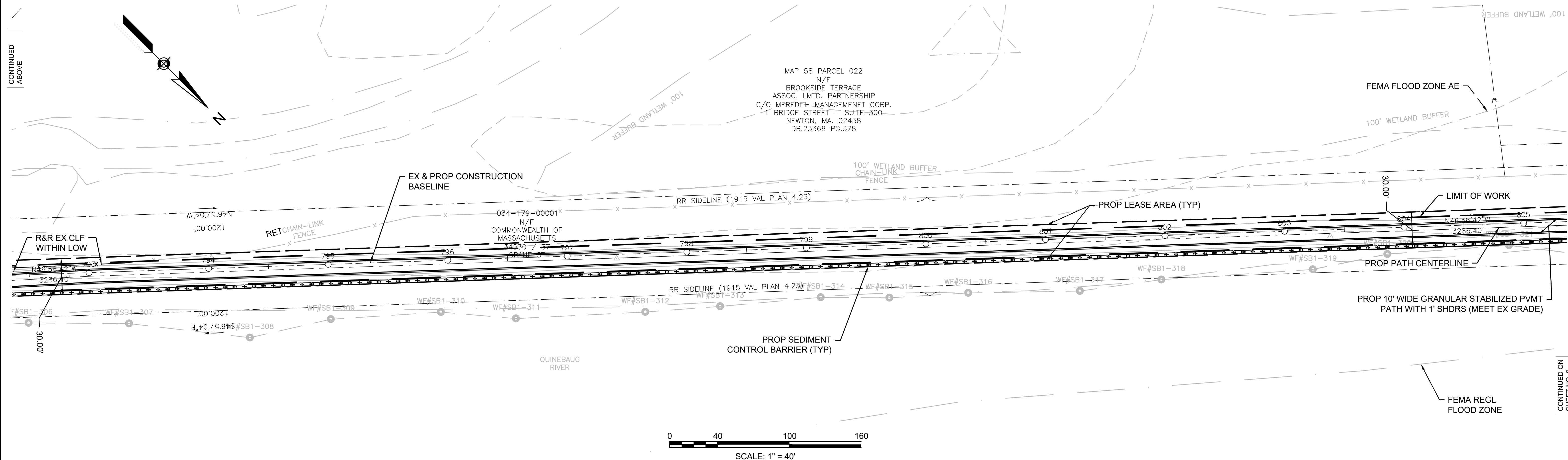
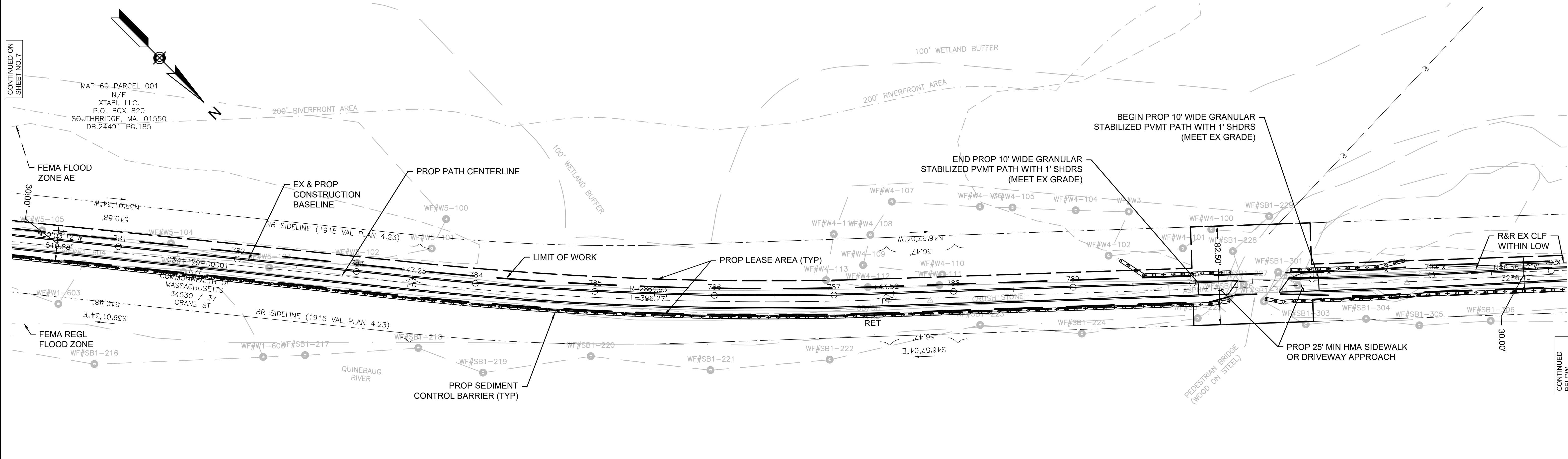
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**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		8	29
PROJECT FILE NO.		89443.00	

CONSTRUCTION PLAN



CONTINUED ON SHEET NO. 7

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CONTINUED BELOW

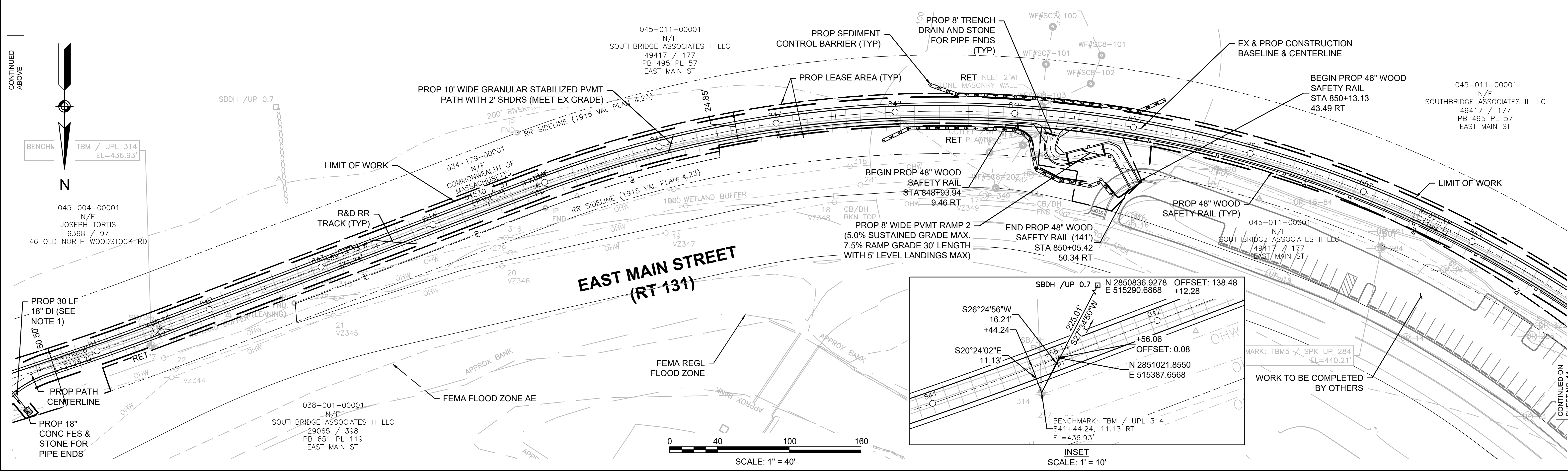
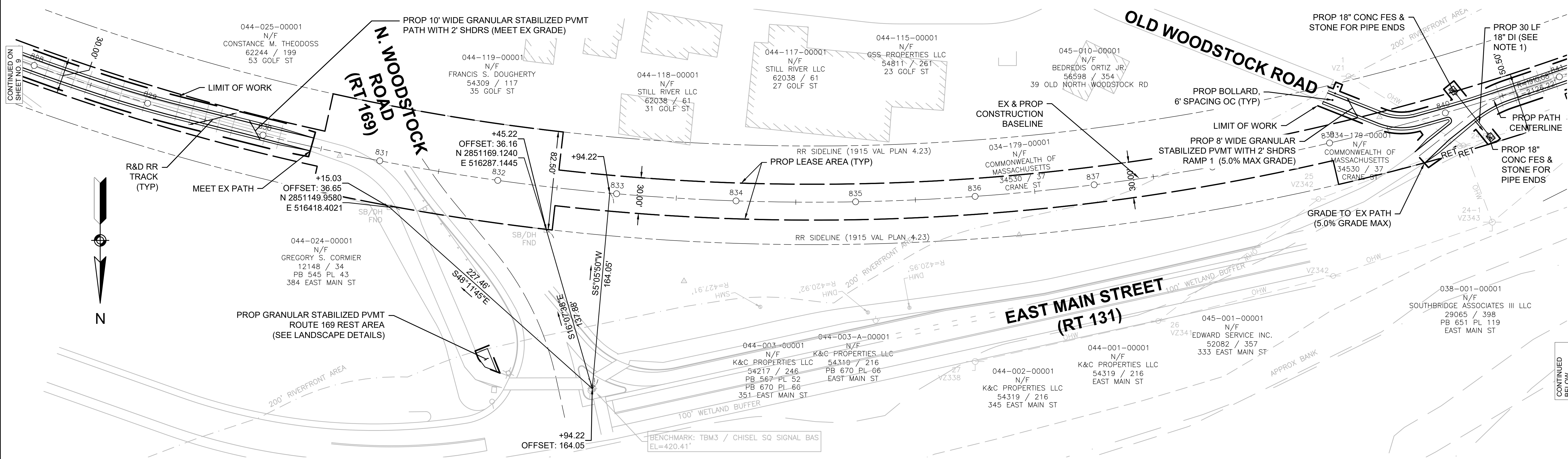
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**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		10	29
PROJECT FILE NO.		89443.00	

CONSTRUCTION PLAN

NOTE 1: INVERT ELEVATIONS (INLET & OUTLET) TO MEET EXISTING 10" DI PIPE OR PROVIDE A MINIMUM OF 18" OF COVER & 0.5% SLOPE, MINIMUM (TOWARD QUINEBAUG RIVER).



8944300_HD(PLANSHEETS).DWG Plotted on 16-Feb-2024 10:49 AM

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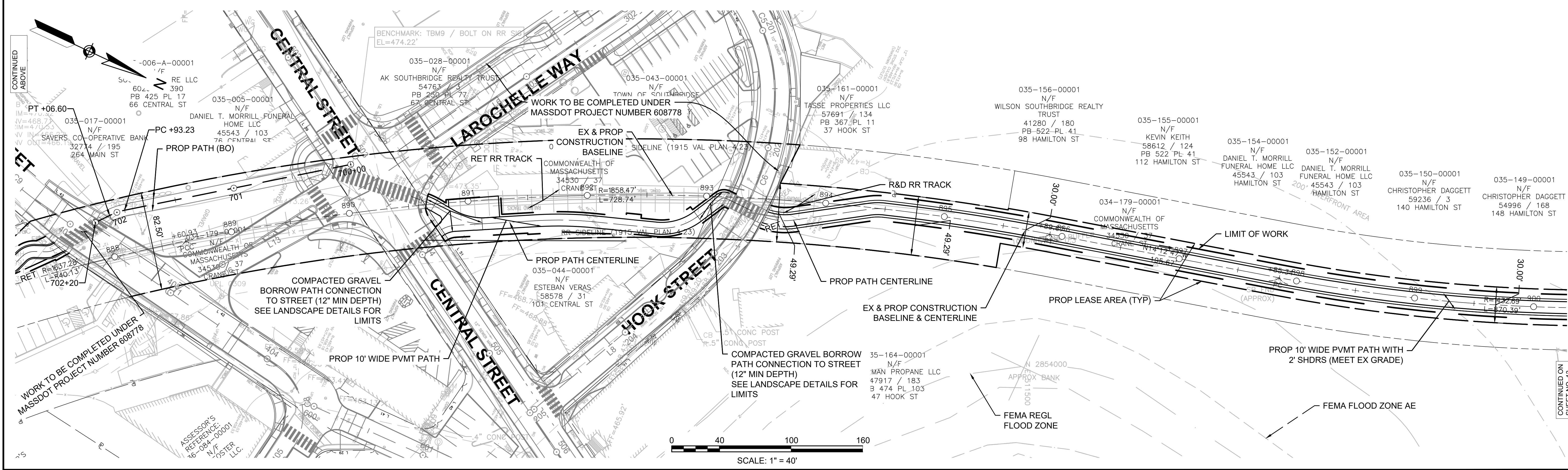
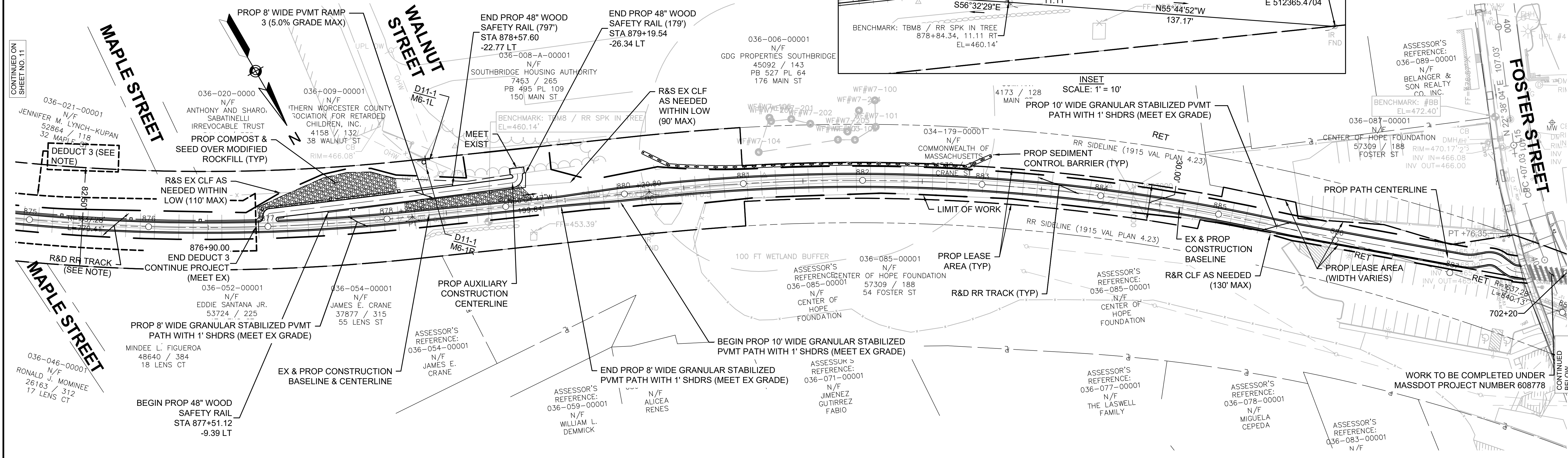
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CONTINUED ON SHEET NO. 11

NOTE:
RAILROAD TRACKS SHALL BE REMOVED AND DISCARDED AS SHOWN WITHIN THE LIMITS OF DEDUCT 2 AND DEDUCT 3 IN THE EVENT THAT TRAIL CONSTRUCTION IN THOSE RESPECTIVE AREAS IS REMOVED FROM CONTRACT.

SOUTHBRIDGE QUINEBAUG VALLEY RAIL TRAIL			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		12	29
PROJECT FILE NO.		89443.00	

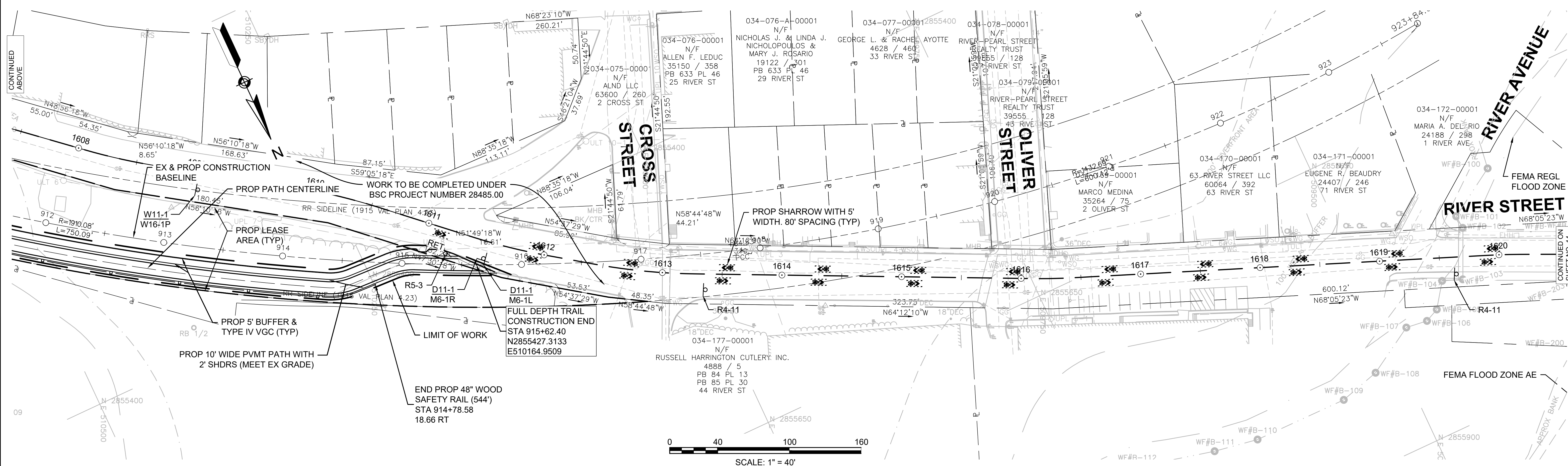
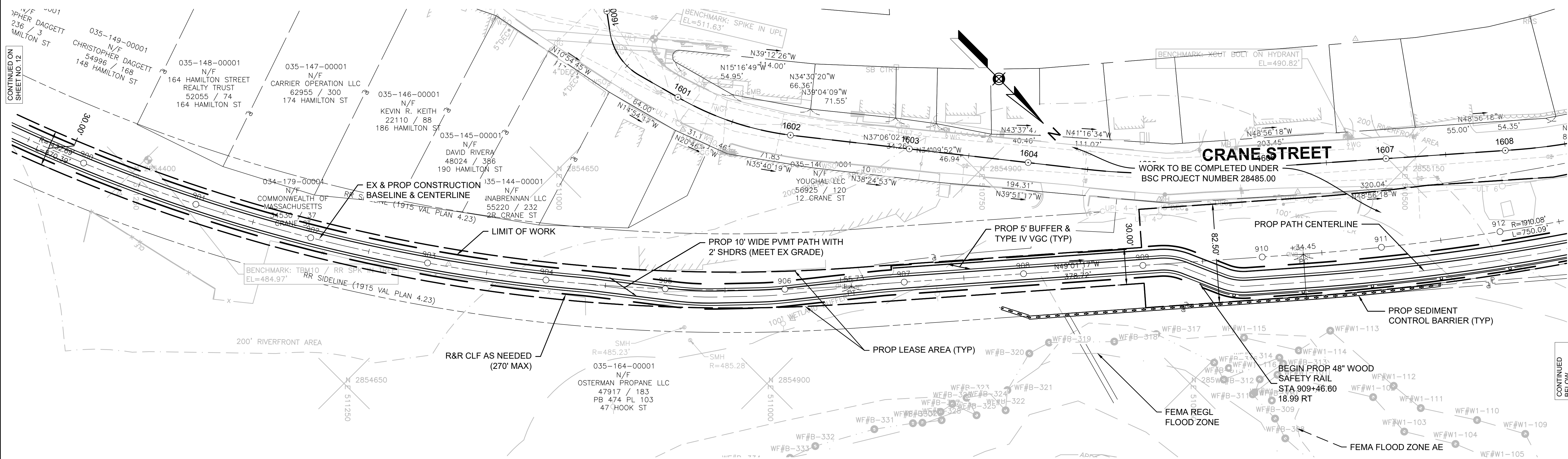
CONSTRUCTION PLAN



**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		13	29
PROJECT FILE NO.		89443.00	

CONSTRUCTION PLAN



CONTINUED ON SHEET NO. 12

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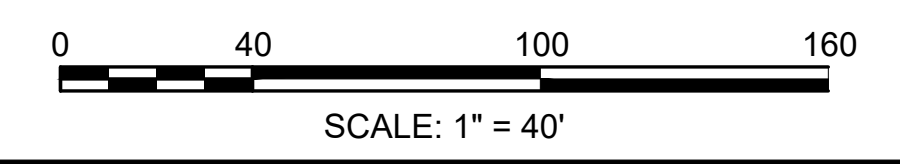
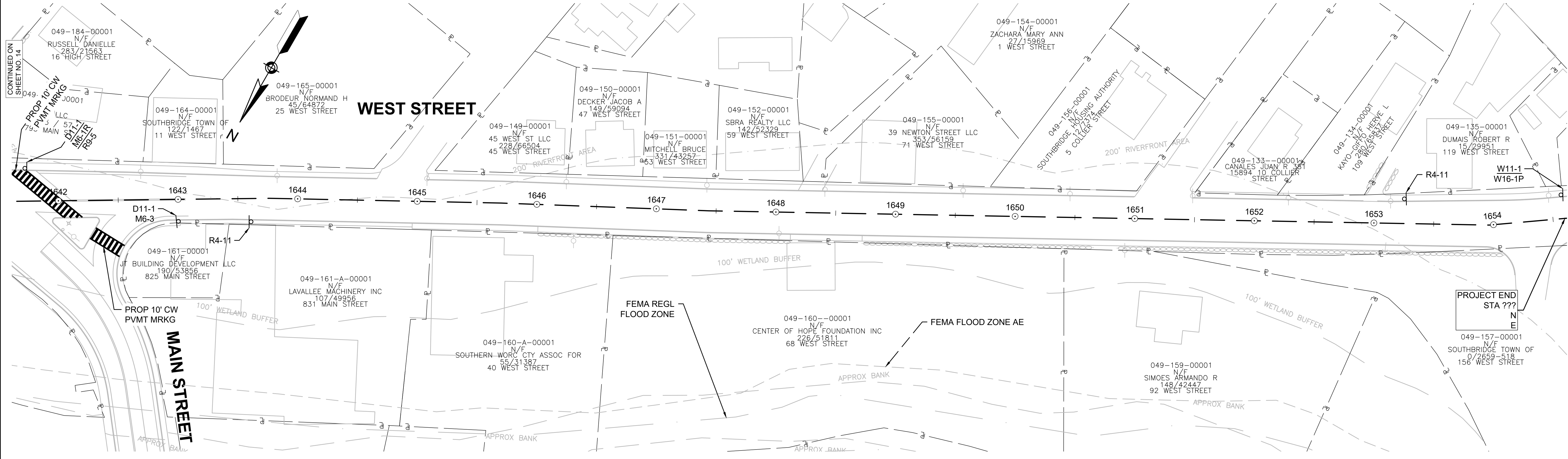
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**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	15	29
PROJECT FILE NO.		89443.00	

CONSTRUCTION PLAN

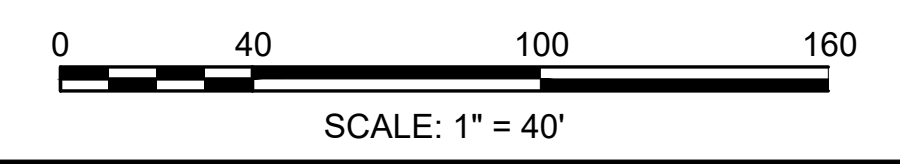
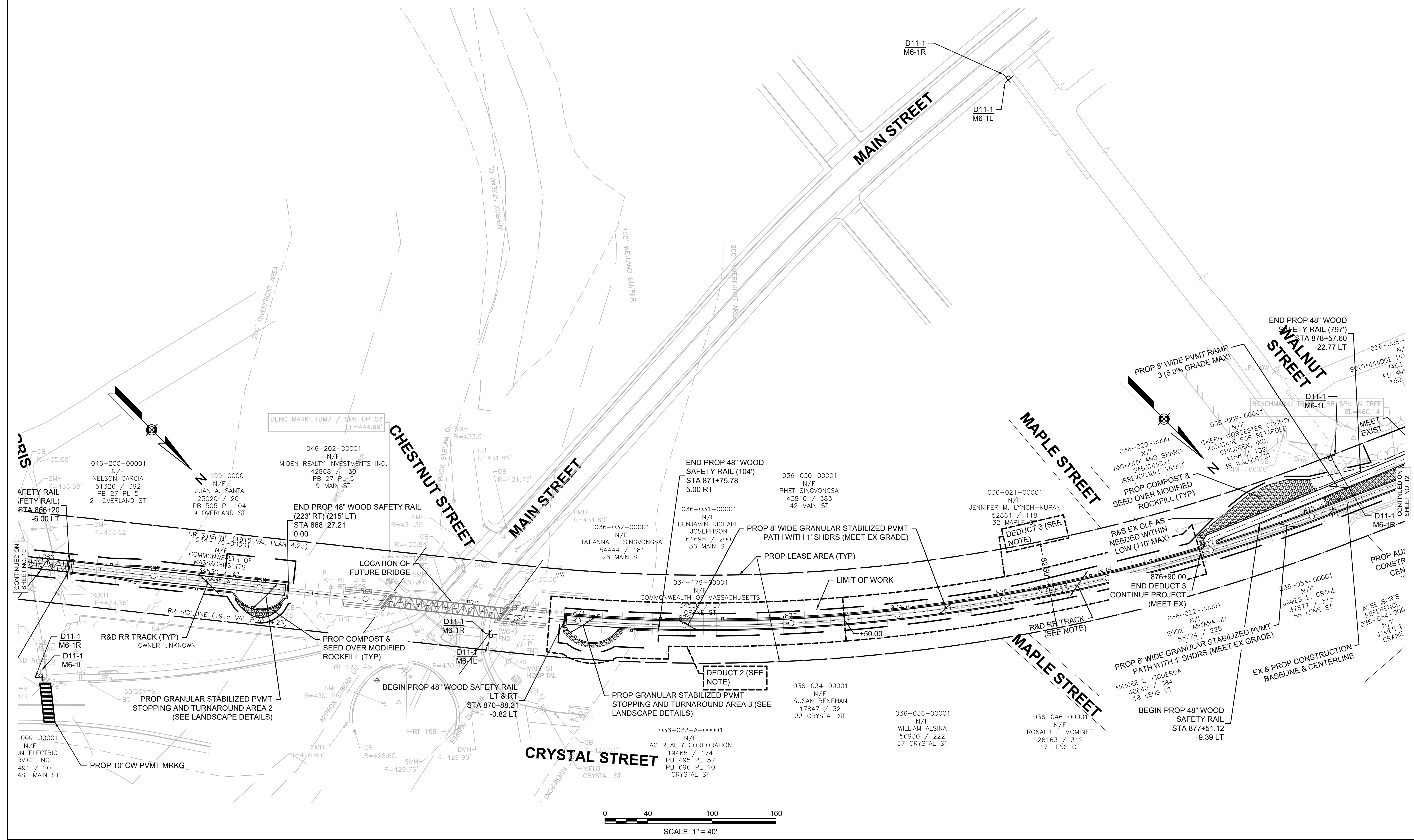


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SHEET NO. 14

**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	16	29
PROJECT FILE NO.		89443.00	

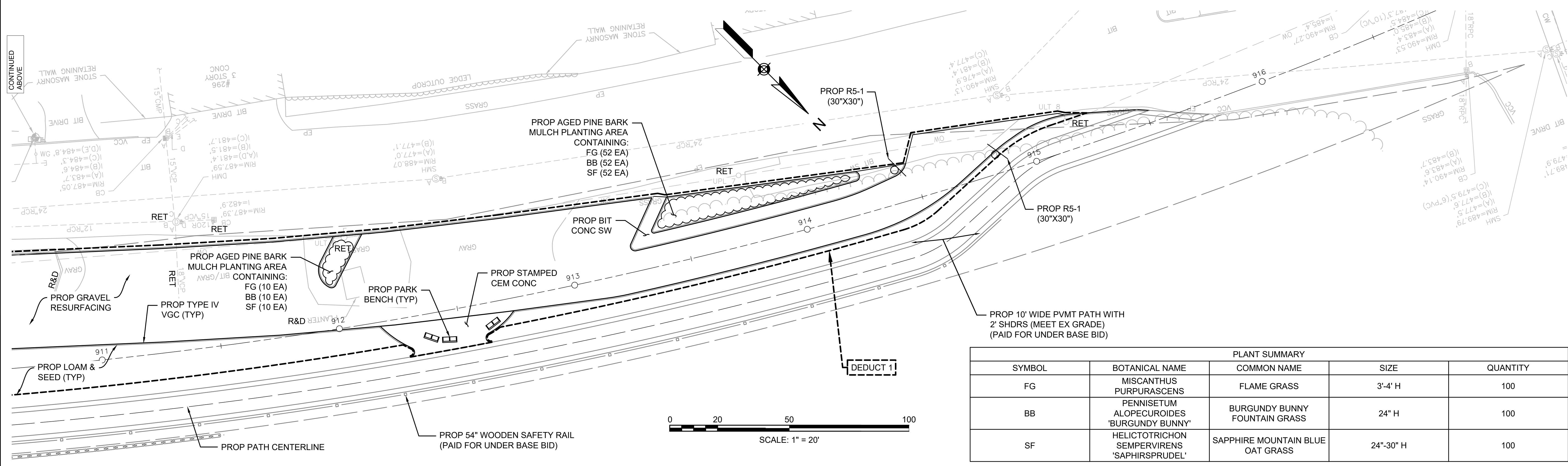
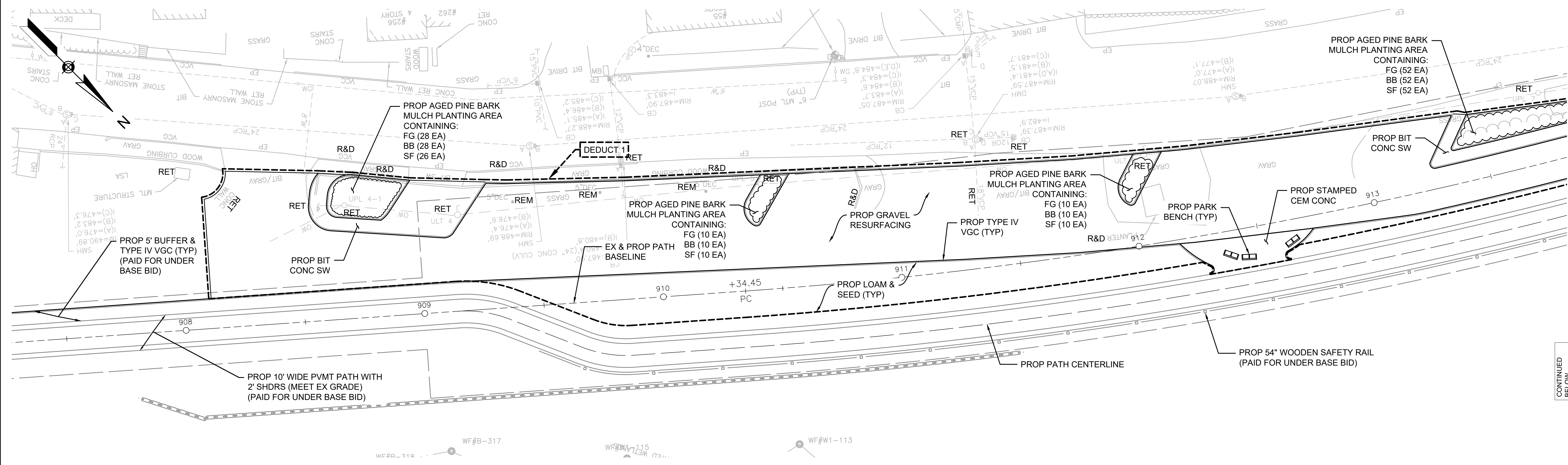
CONSTRUCTION PLAN



**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		17	29
PROJECT FILE NO.		89443.00	

DEDUCT 1 PLAN AREA



PLANT SUMMARY				
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
FG	MISCANTHUS PURPURASCENS	FLAME GRASS	3'-4' H	100
BB	PENNISSETUM ALOPECUROIDES 'BURGUNDY BUNNY'	BURGUNDY BUNNY FOUNTAIN GRASS	24" H	100
SF	HELICTOTRICHON SEMPERVIRENS 'SAPHIRSPRUDEL'	SAPPHIRE MOUNTAIN BLUE OAT GRASS	24"-30" H	100

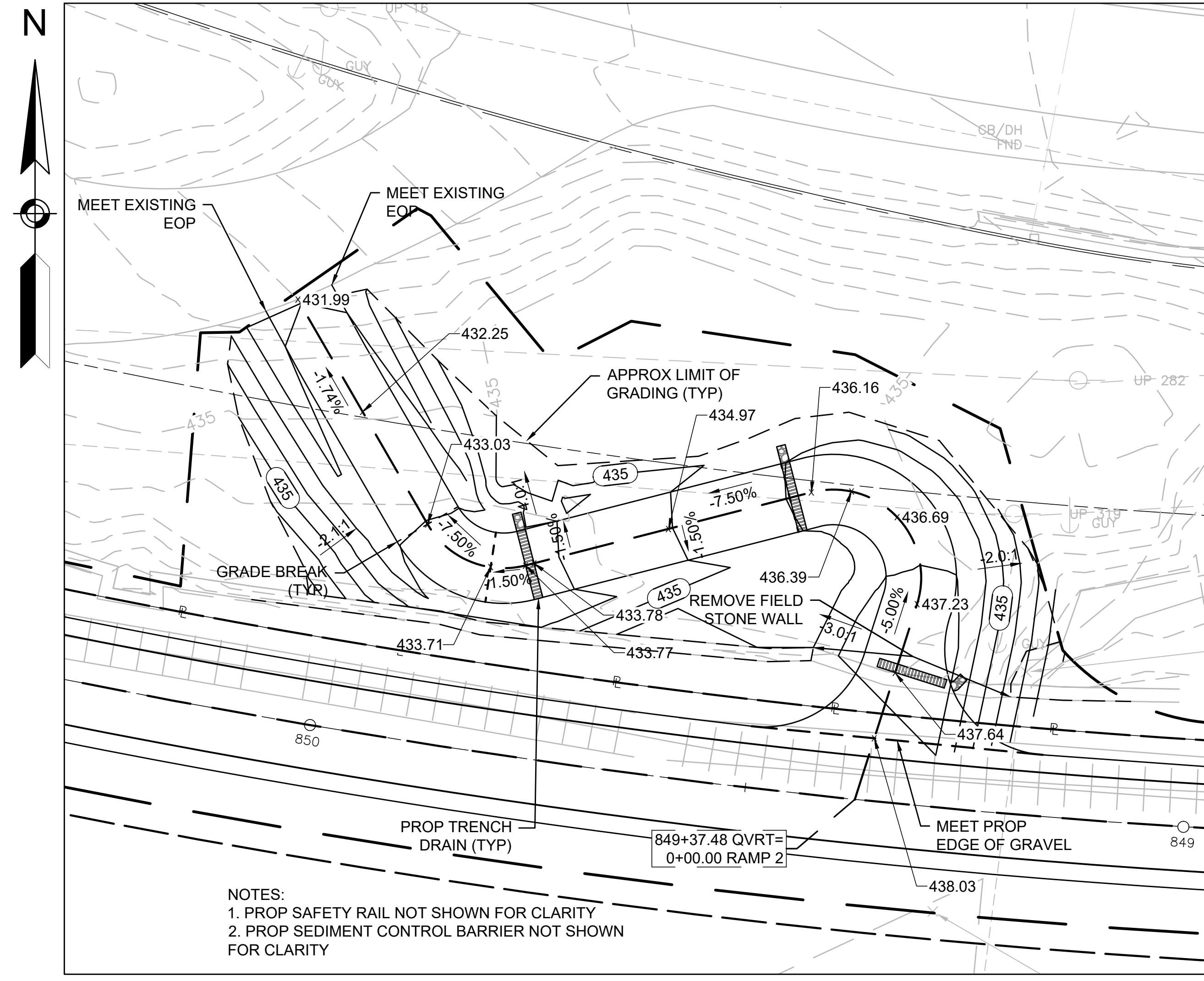


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**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	18	29
PROJECT FILE NO.		89443.00	

GRADING PLAN



- NOTES:
 1. PROP SAFETY RAIL NOT SHOWN FOR CLARITY
 2. PROP SEDIMENT CONTROL BARRIER NOT SHOWN FOR CLARITY

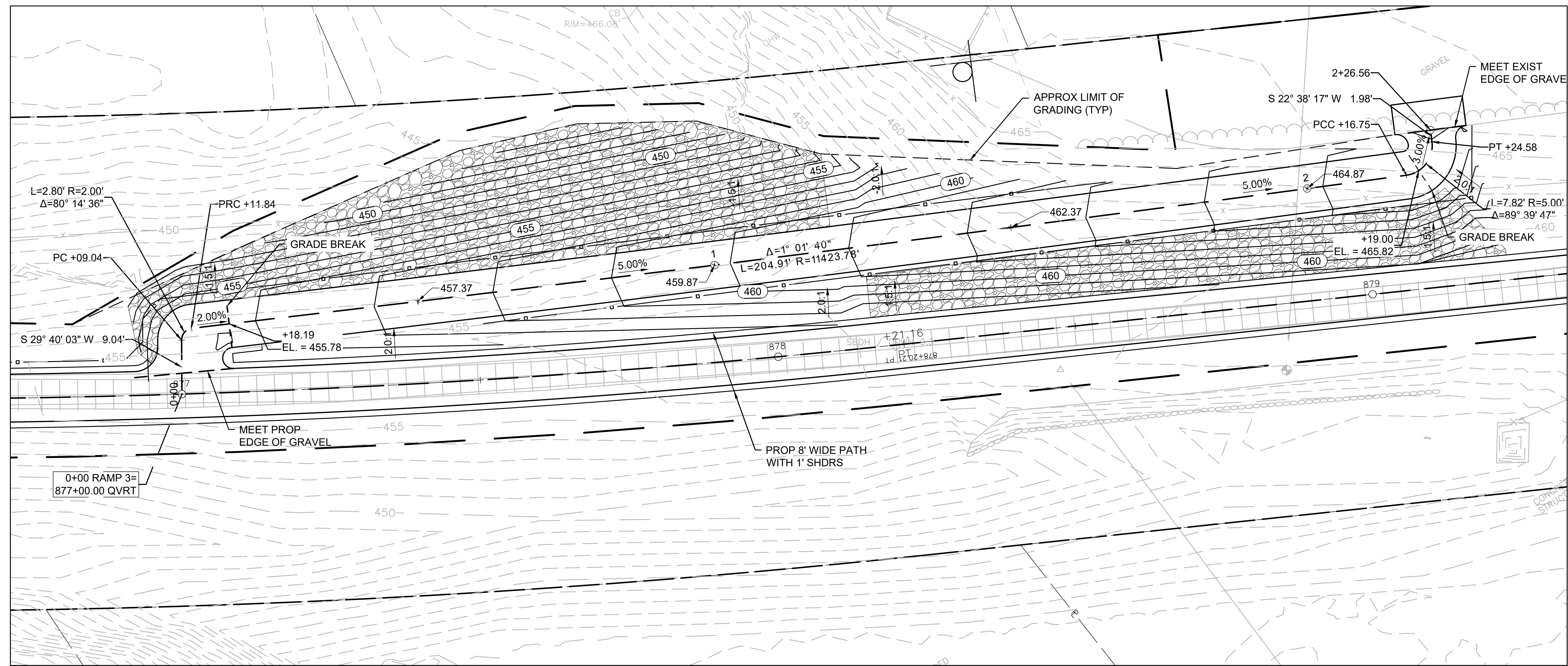
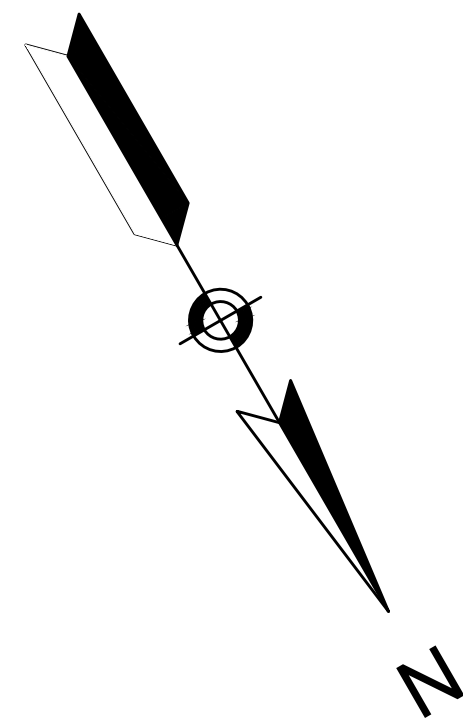
RAMP 2 GRADING PLAN
 SCALE: 1" = 10'



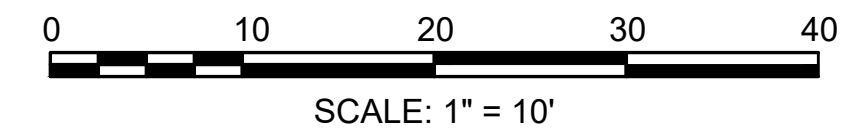
**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	19	29
PROJECT FILE NO.		89443.00	

GRADING PLAN



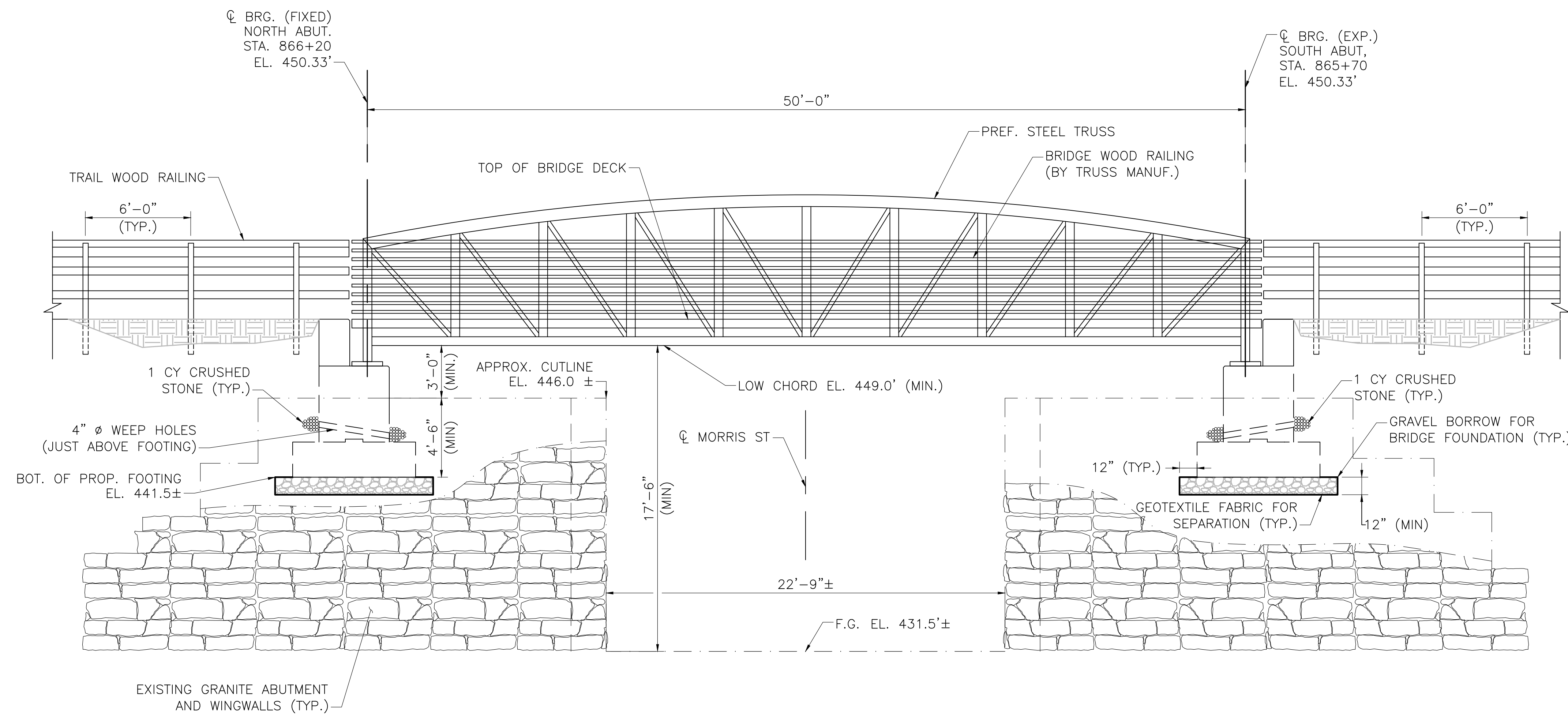
RAMP 3 GRADING PLAN
SCALE: 1" = 10'



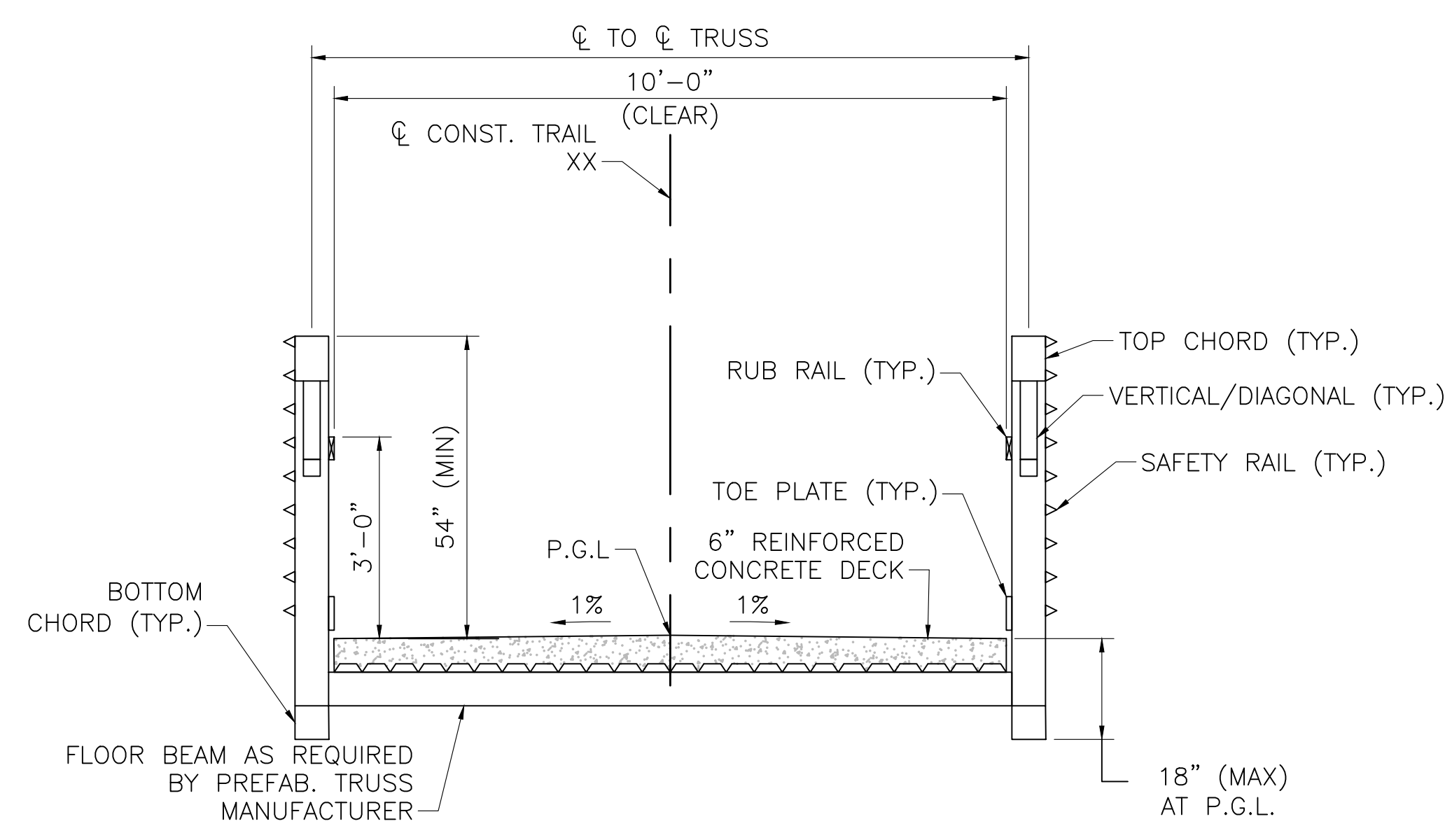
**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N/A	20	29
PROJECT FILE NO.		N/A	

BRIDGE CROSS SECTION & ELEVATION



PEDESTRIAN BRIDGE ELEVATION
SCALE: 1/4" = 1'-0"



TRANSVERSE SECTION
SCALE: 1/2" = 1'-0"

PREFABRICATED BRIDGE NOTES:

- OVERALL WIDTH AND DEPTH OF PREFABRICATED PEDESTRIAN BRIDGE TO BE COORDINATED WITH BRIDGE MANUFACTURER PRIOR TO CONSTRUCTION OF ABUTMENT BRIDGE SEAT AND BACKWALL.
- DEPTH OF BRIDGE SUPERSTRUCTURE TO BE COORDINATED WITH BRIDGE MANUFACTURER PRIOR TO BEAM SEAT CONSTRUCTION. THE DEPTH OF SUPERSTRUCTURE SHALL NOT EXCEED 1'-6". THIS REQUIREMENT IS TO PROVIDE A VERTICAL CLEARANCE ABOVE MORRIS STREET OF AT LEAST 17'-6".
- THE BRIDGE MODEL TYPE SHALL BE A "CROSSBOW" STYLE PEDESTRIAN STEEL TRUSS AS MANUFACTURED BY PIONEER BRIDGES OR APPROVED EQUAL. BRIDGE SELECTION SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL.
- PREFABRICATED BRIDGE SHALL BE DESIGNED IN ACCORDANCE WITH THE 2009 AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES WITH 2015 INTERIM.
- ALL STRUCTURAL STEEL SHALL BE UNPAINTED WEATHERING STEEL GRADE 50.
- THE UNFACTORED PREFABRICATED BRIDGE DEAD LOAD FOR THE FULL 50 FOOT SPAN IS ASSUMED AS 13.0 KIPS, INCLUDING TRUSS, SAFETY RAIL AND MISCELLANEOUS COMPONENTS.
- DELIVERY AND INSTALLATION OF PREFABRICATED PEDESTRIAN BRIDGE AND BEARING ASSEMBLY SHALL BE PER MANUFACTURE'S RECOMMENDATION.

DECK NOTES:

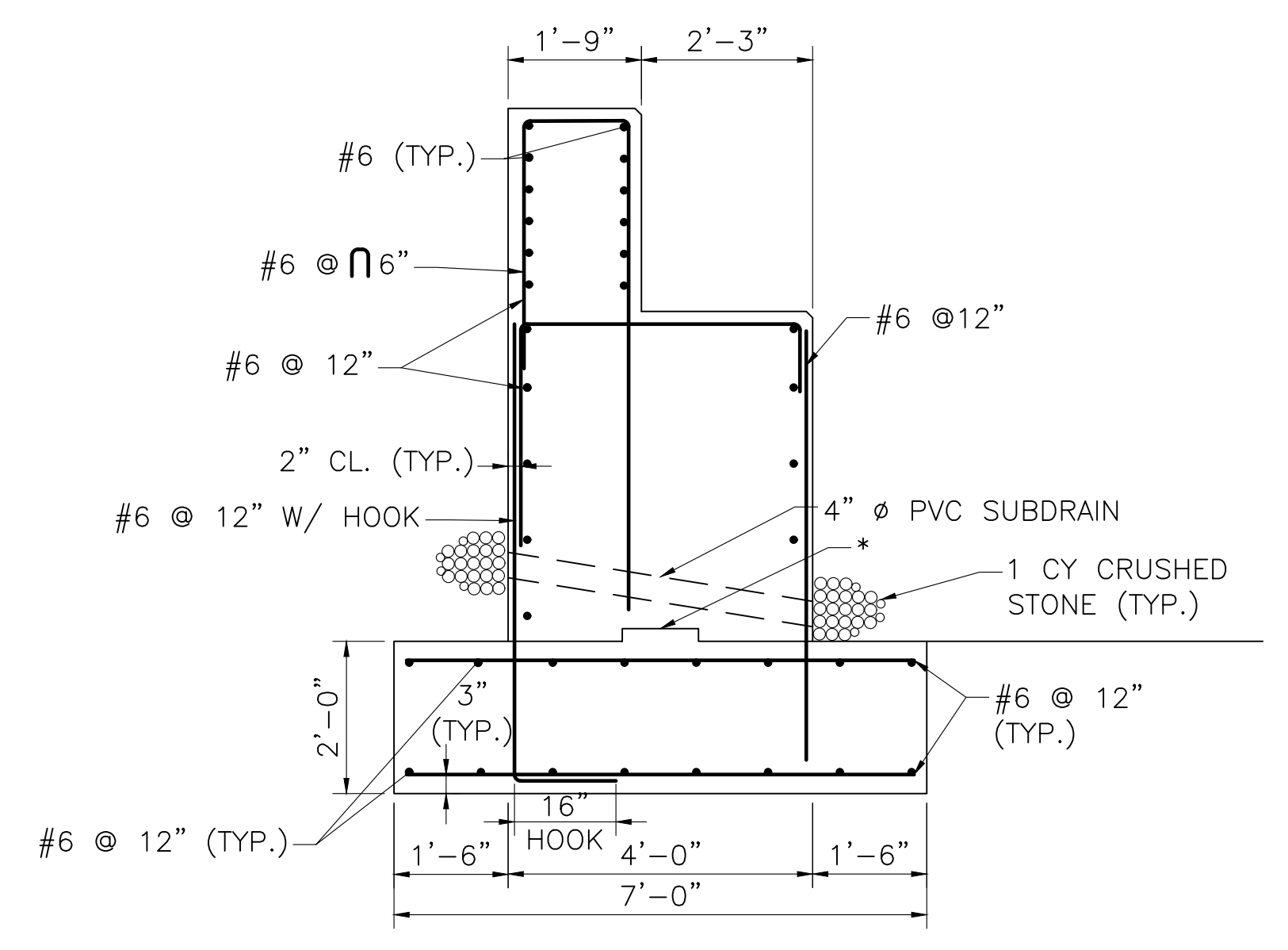
- DECK CONCRETE SHALL BE LIGHTWEIGHT 4000 PSI, 3/4 IN., 585 HP CEMENT CONCRETE.
- ALL REINFORCEMENT AND SUPPORT DEVICES SHALL BE EPOXY COATED.
- AFTER TROWELING DECK SHALL BE BRUSHED FINISHED TO PRODUCE A NON-SLIP FINISH.
- DECK SURFACE AND RAILS SHALL MEET THE REQUIREMENTS OF AMERICANS WITH DISABILITIES ACT (ADA) AND MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (MAAB).

MORRISSTREETELEVATION.DWG
 30-JUNE-2023
 Xxxxxx Structural Submittal (S#)
 Plotted on 16-Feb-2024 10:52 AM

**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

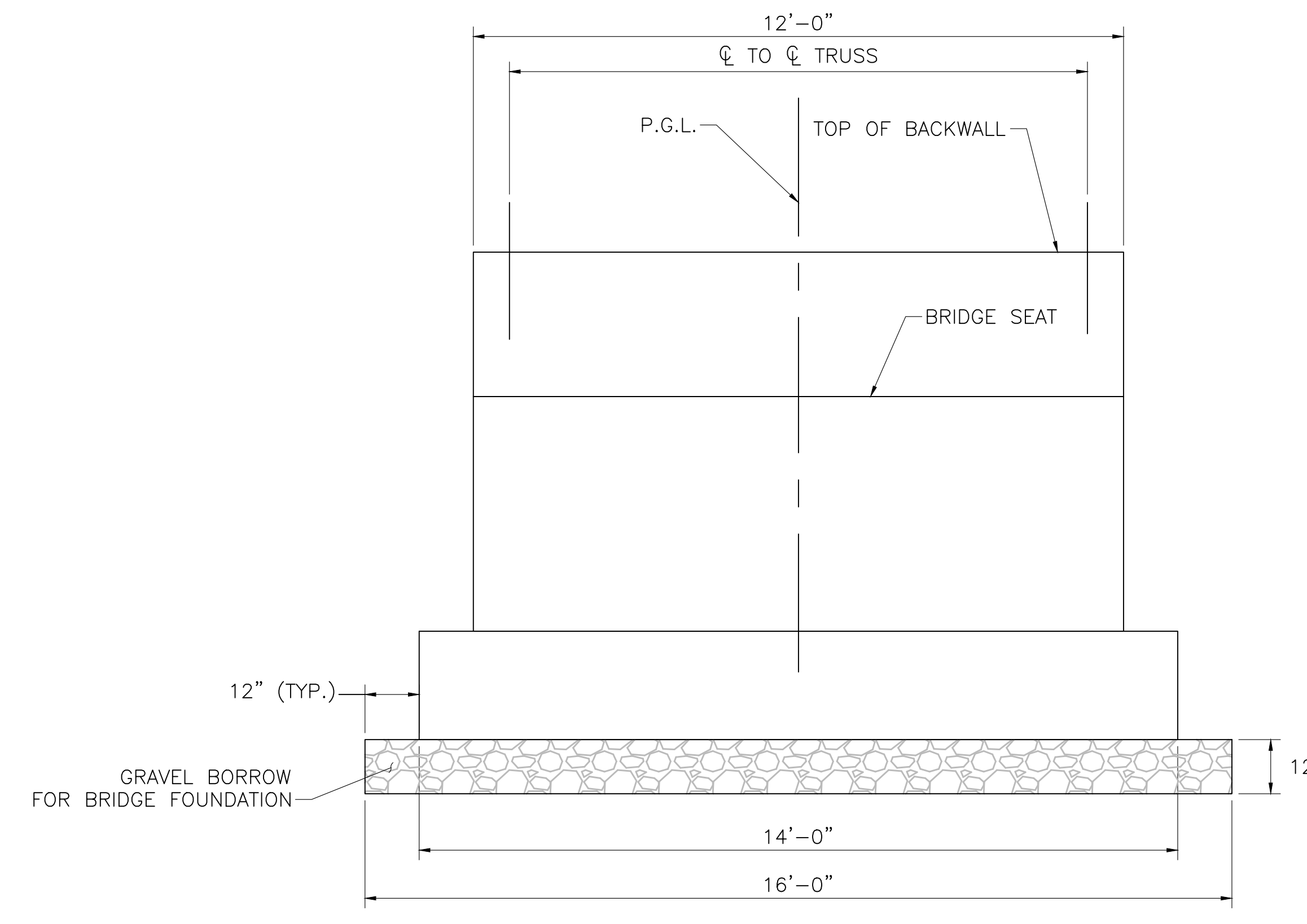
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N/A	21	29
PROJECT FILE NO.		N/A	

ABUTMENT DETAILS



* CONSTRUCTION JOINT WITH 12"X12"X2" SHEAR KEYS @ 3'-0" ON CENTER.

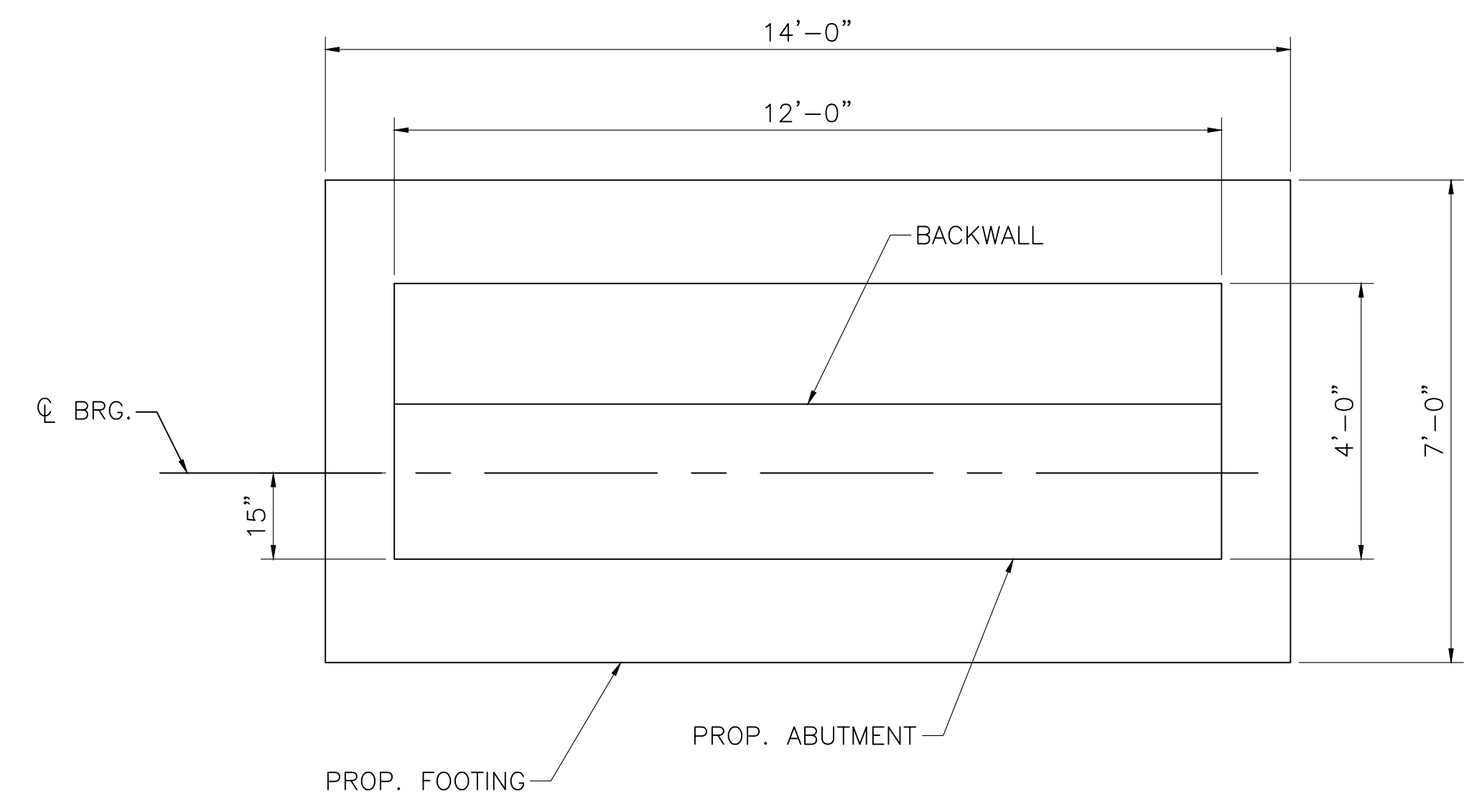
ABUTMENT SECTION
SCALE: 1/2" = 1'-0"



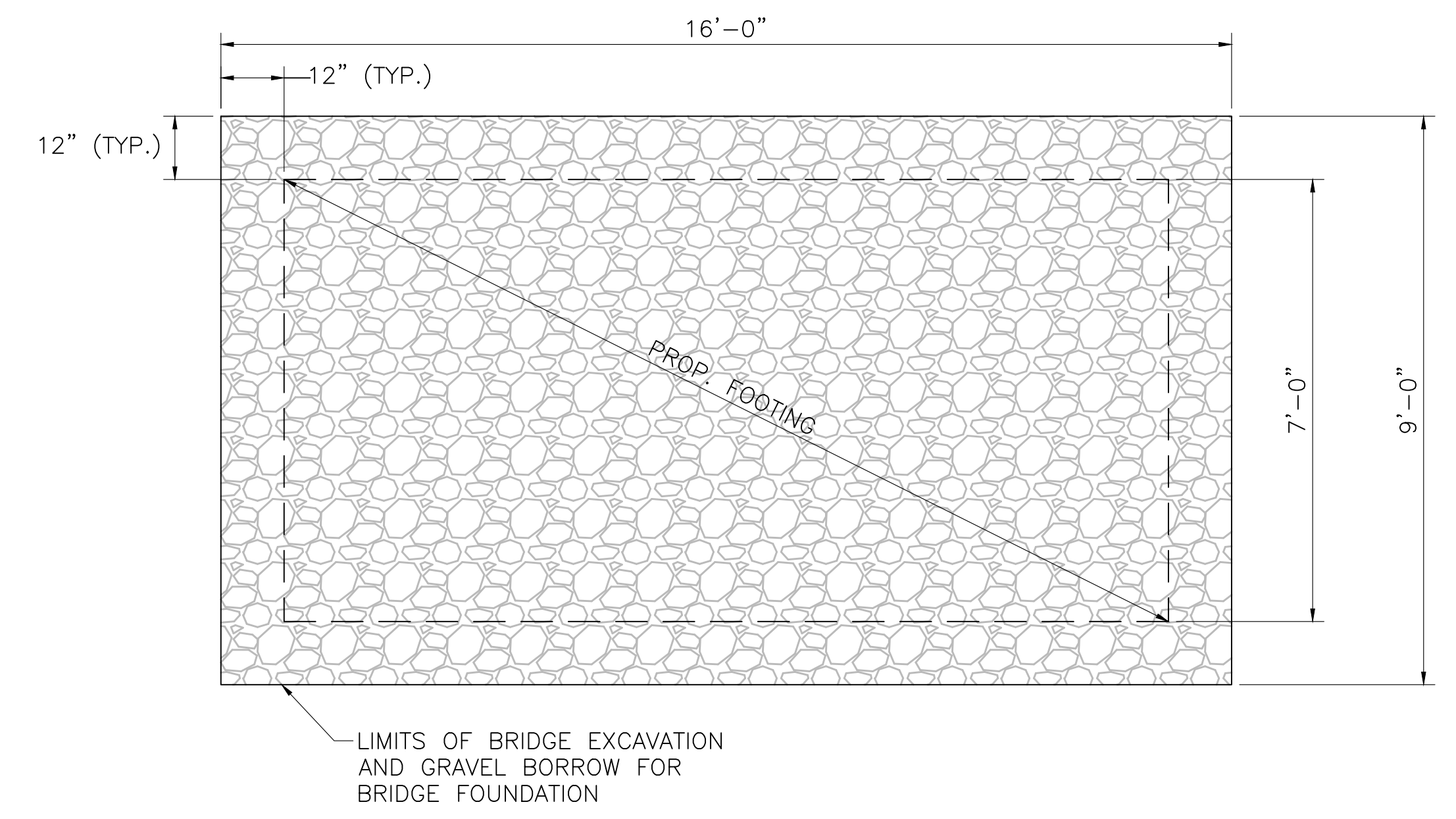
TYPICAL ABUTMENT ELEVATION
SCALE: 1/2" = 1'-0"

ABUTMENT AND FOOTING NOTES:

1. THE SUBSTRUCTURE DESIGN IS BASED ON FACTORED LIVE LOADS AND DEAD LOADS, INCLUDING THE ASSUMED SUPERSTRUCTURE WEIGHT AS NOTED IN NOTE 7 OF THE PREFABRICATED BRIDGE NOTES. THE ABUTMENT AND FOOTING DIMENSIONS ARE SUBJECT TO CHANGE BASED ON FINAL SUPERSTRUCTURE DESIGN. ACTUAL LOADS SHALL BE FURNISHED BY THE PEDESTRIAN BRIDGE MANUFACTURER.
2. THE BRIDGE SEAT ELEVATION AND HEIGHT OF THE ABUTMENT SHALL BE BASED ON THE REQUIRED HEIGHT OF THE BACKWALL. THE DIMENSIONS SHALL BE COORDINATED WITH THE BRIDGE MANUFACTURER.
3. ALL CONCRETE SHALL BE MIX 4000 PSI, 1.5 IN., 565 CEMENT CONCRETE EXCEPT FOR THE BACKWALL.
4. ALL REINFORCEMENT SHALL BE EPOXY COATED.
5. THE BACKWALL CONCRETE SHALL BE 4000 PSI, 3/4-IN. 610 CEMENT CONCRETE. THE CONSTRUCTION JOINT SHALL BE GIVEN A RAKE FINISH WITH A 1/4-IN. AMPLITUDE.
6. THE 4" WEEPHOLE 8'-0" O.C. PROVIDE 1 CUBIC YARD OF CRUSHED STONE AT THE ENDS.
7. THE FACTORED BEARING PRESSURE = 2.5 KSF PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR STRENGTH I LOAD COMBINATION.
8. THE FACTORED BEARING RESISTANCE SHALL BE AT LEAST 3.0 KSF. CONTRACTOR TO PERFORM BORINGS TO VERIFY SUBGRADE AND FACTORED BEARING RESISTANCE.



TYPICAL ABUTMENT PLAN
SCALE: 1/2" = 1'-0"

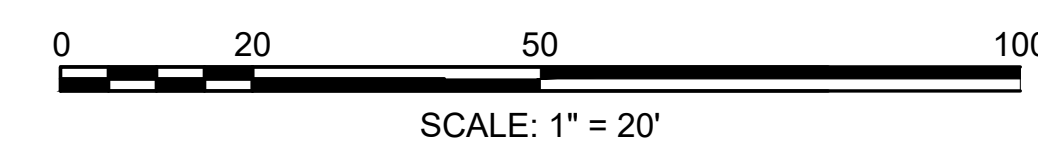
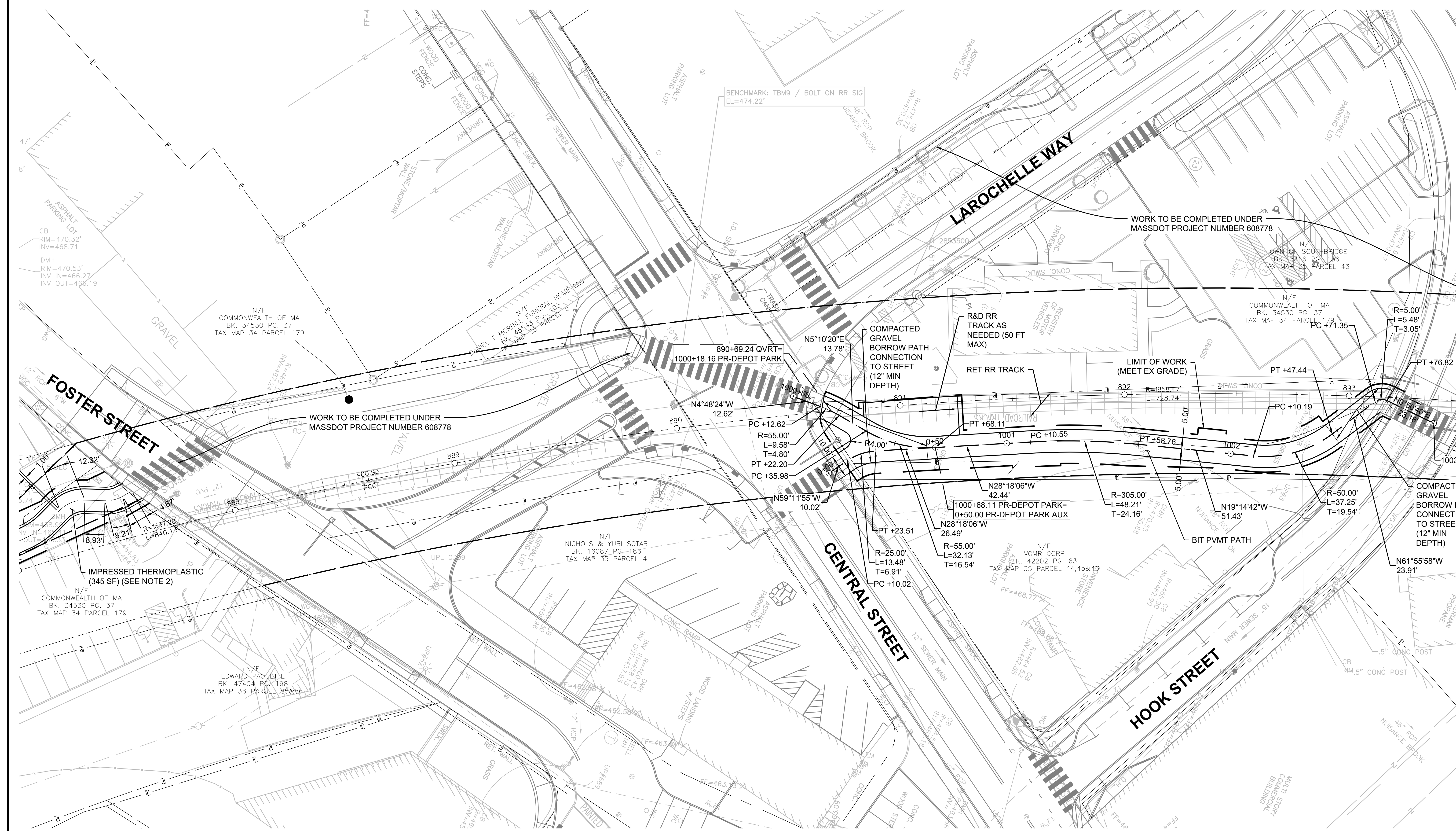


ABUTMENT SUBGRADE PLAN
SCALE: 1/2" = 1'-0"

SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		22	29
PROJECT FILE NO.		89443.00	

LANDSCAPE DETAILS



LANDSCAPE NOTES:

1) FREESIA (FRE-20) BY VICTOR STANLEY OR APPROVED EQUIVALENT
 6 FT LENGTH
 COLOR: RED
 OPTIONS: STEEL SLATS
 INSTALL WITH IN-GROUND FOOTING
 PER MANUFACTURER'S SPECIFICATIONS

2) BRBS-103 BY VICTOR STANLEY OR APPROVED EQUIVALENT
 6 FT LENGTH
 COLOR: RED
 OPTIONS: STEEL SLATS
 INSTALL WITH IN-GROUND FOOTING
 PER MANUFACTURER'S SPECIFICATIONS

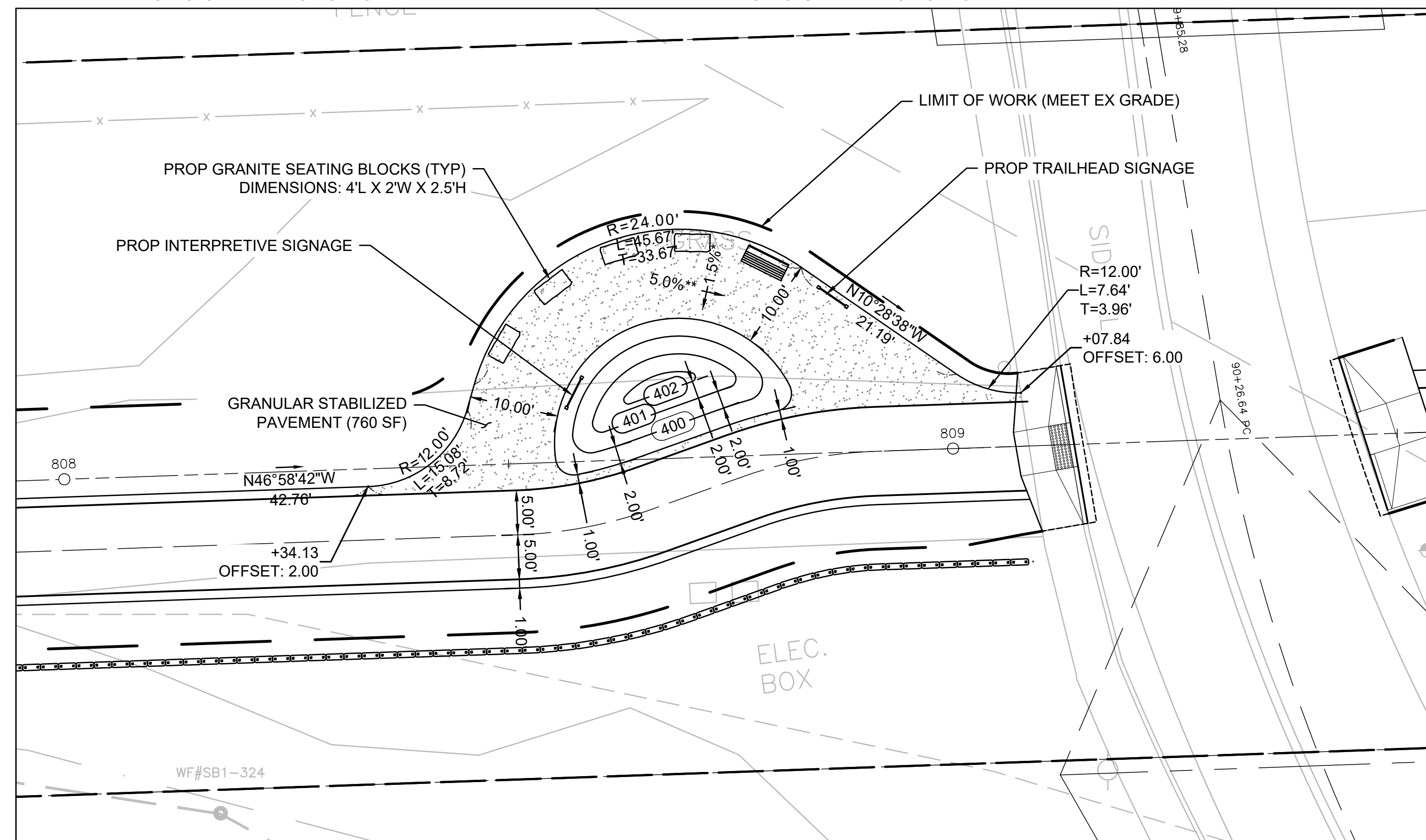
3) FINAL GRADING SHALL SLOPE, AT MAXIMUM, 1.5%* FOR CROSS SLOPES AND 5.0% ALONG PROFILE GRADES.

* ±0.5% CONSTRUCTION TOLERANCE
 ** (MAX)

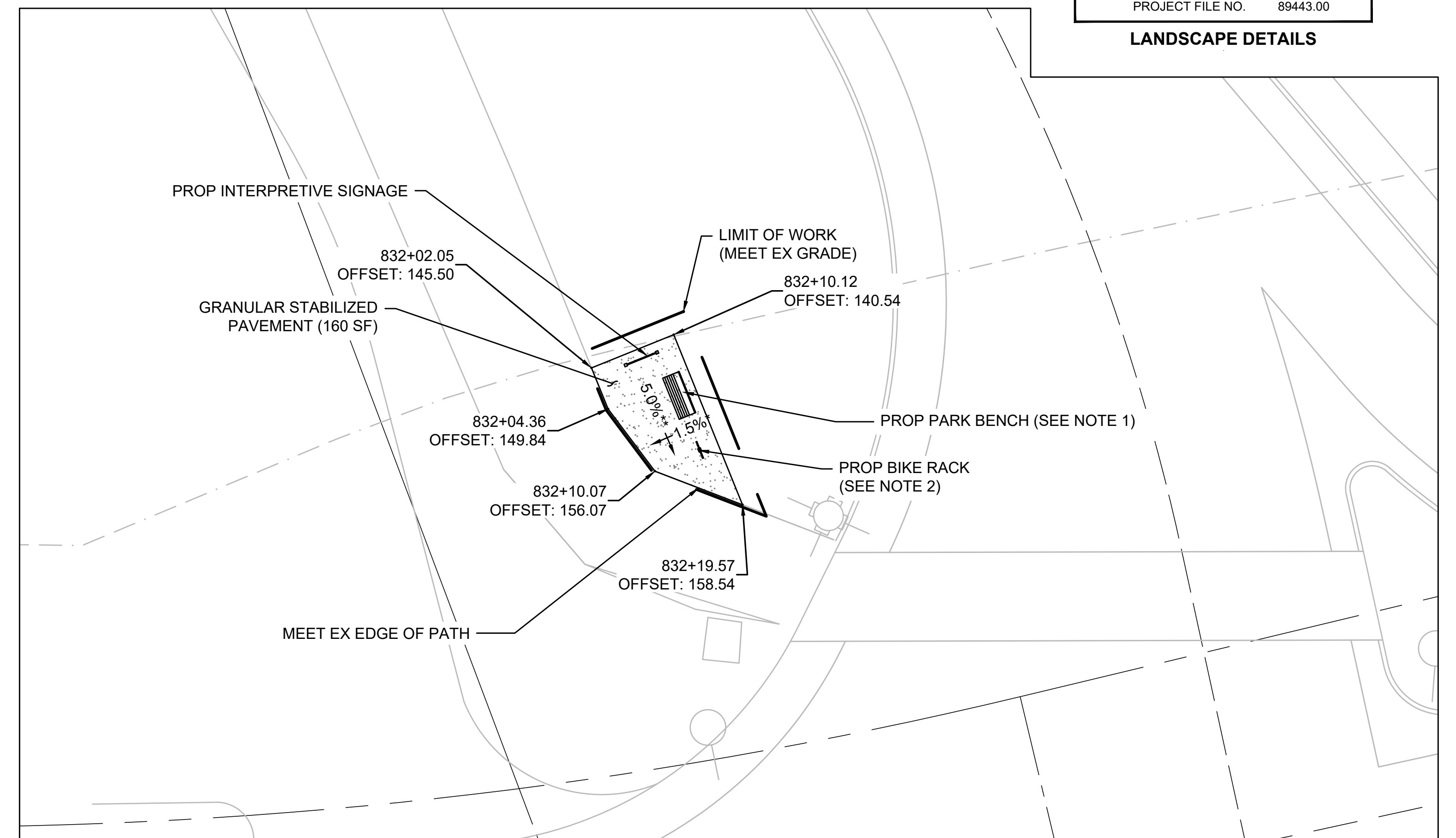
**SOUTHBRIDGE
 QUINEBAUG VALLEY RAIL TRAIL**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	23	29
PROJECT FILE NO.		89443.00	

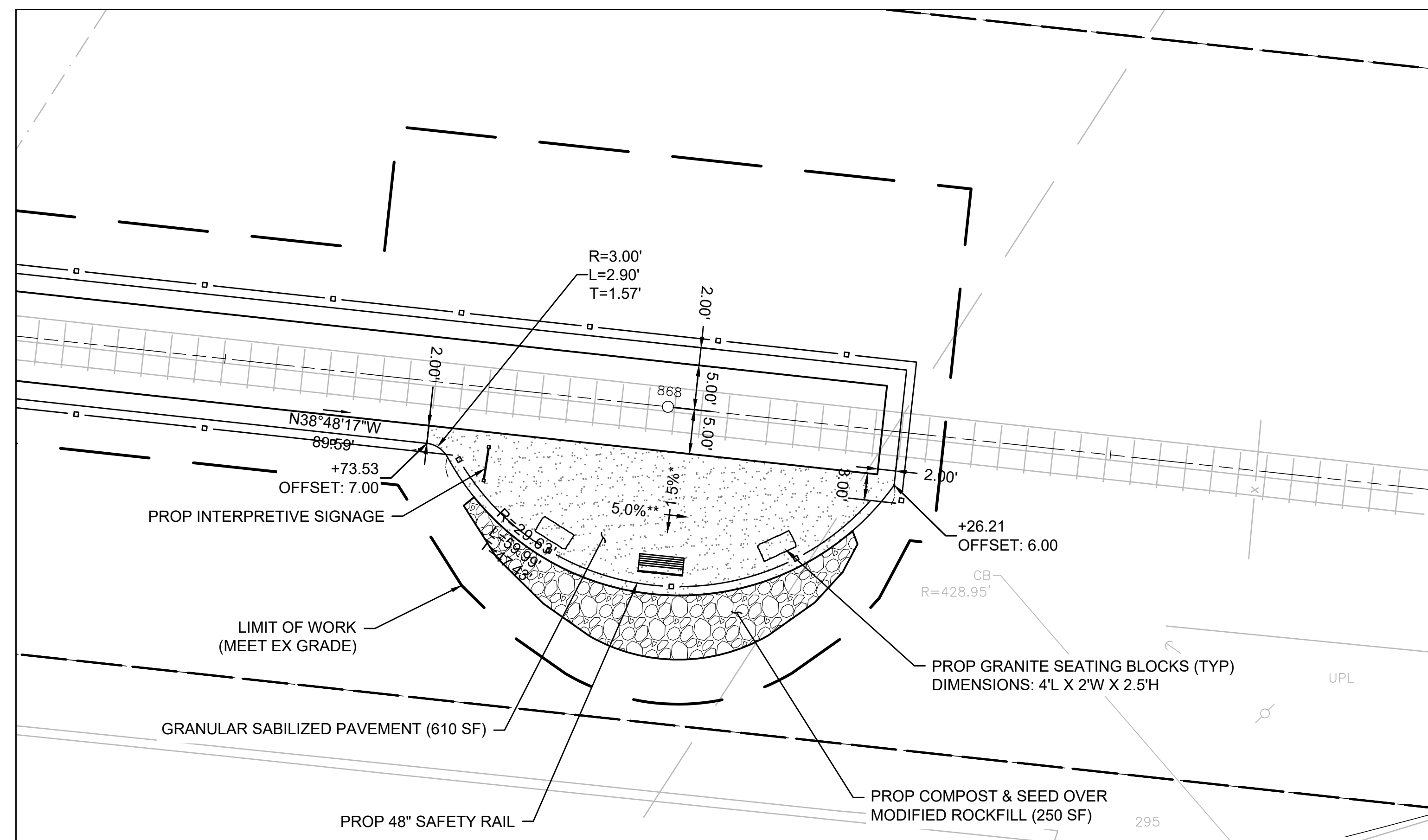
LANDSCAPE DETAILS



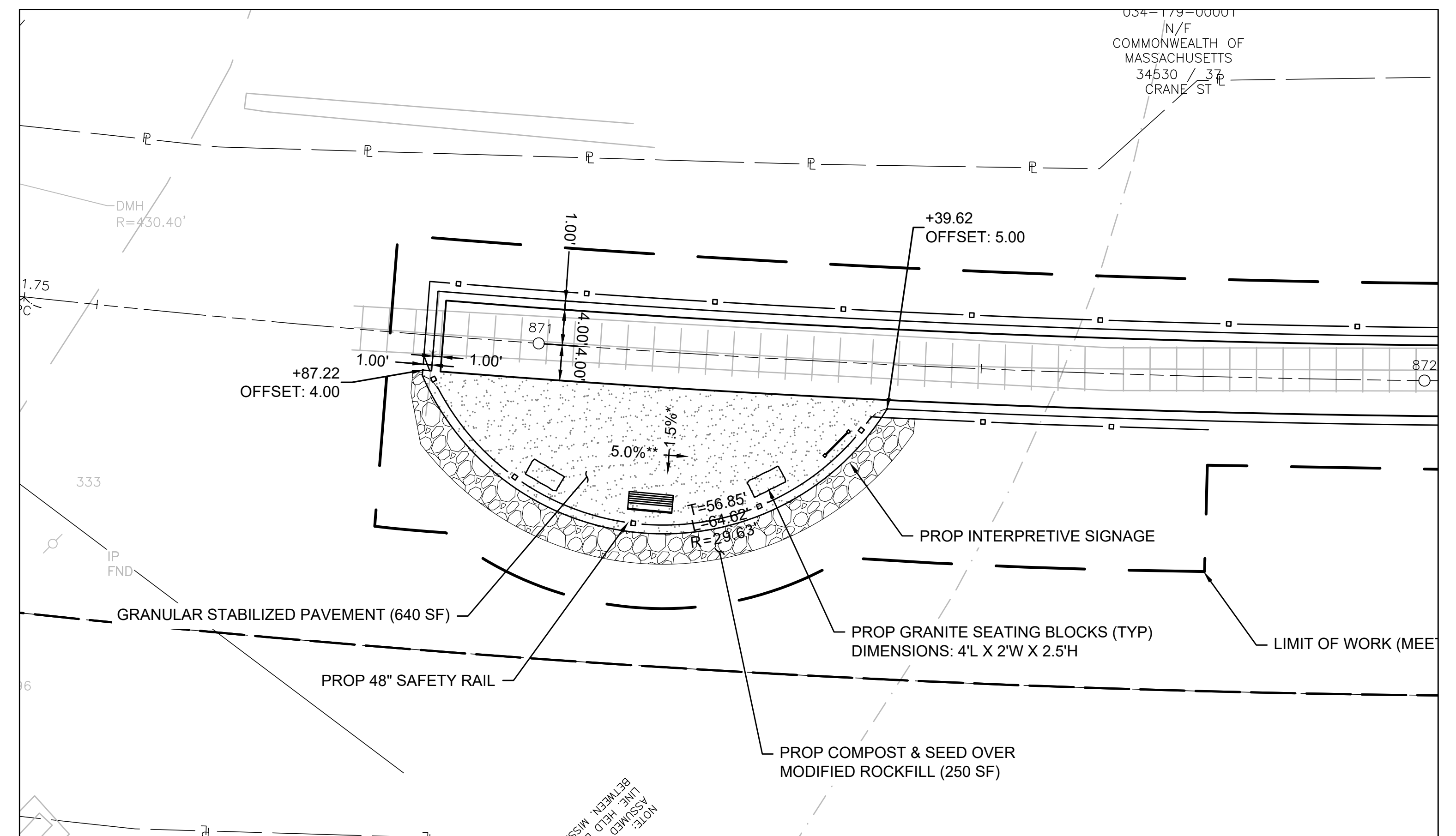
LANDSCAPING DETAIL - STOPPING AND TURNAROUND AREA 1
 SCALE: 1" = 10'



LANDSCAPING DETAIL - ROUTE 169 REST AREA
 SCALE: 1" = 10'



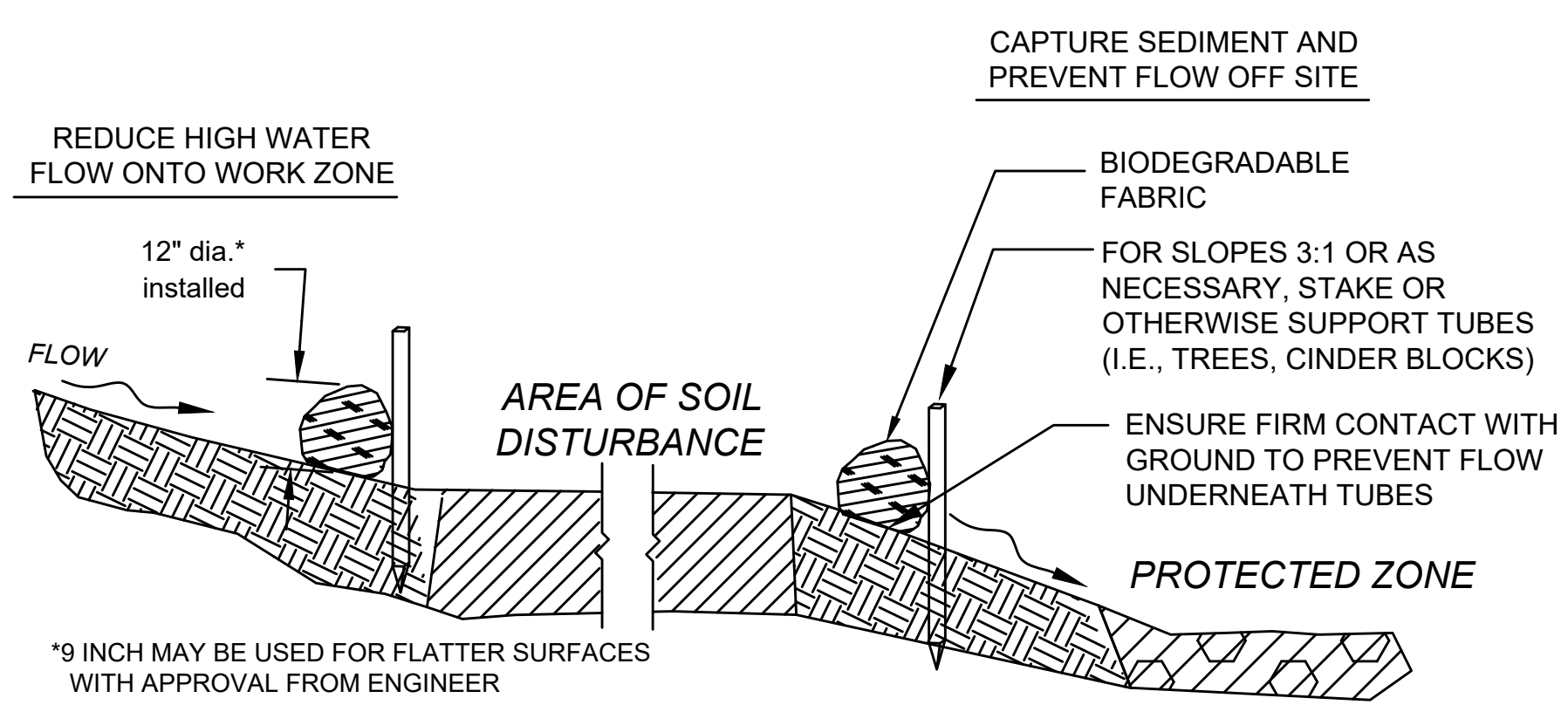
LANDSCAPING DETAIL - STOPPING AND TURNAROUND AREA 2
 SCALE: 1" = 10'



LANDSCAPING DETAIL - STOPPING AND TURNAROUND AREA 3
 SCALE: 1" = 10'

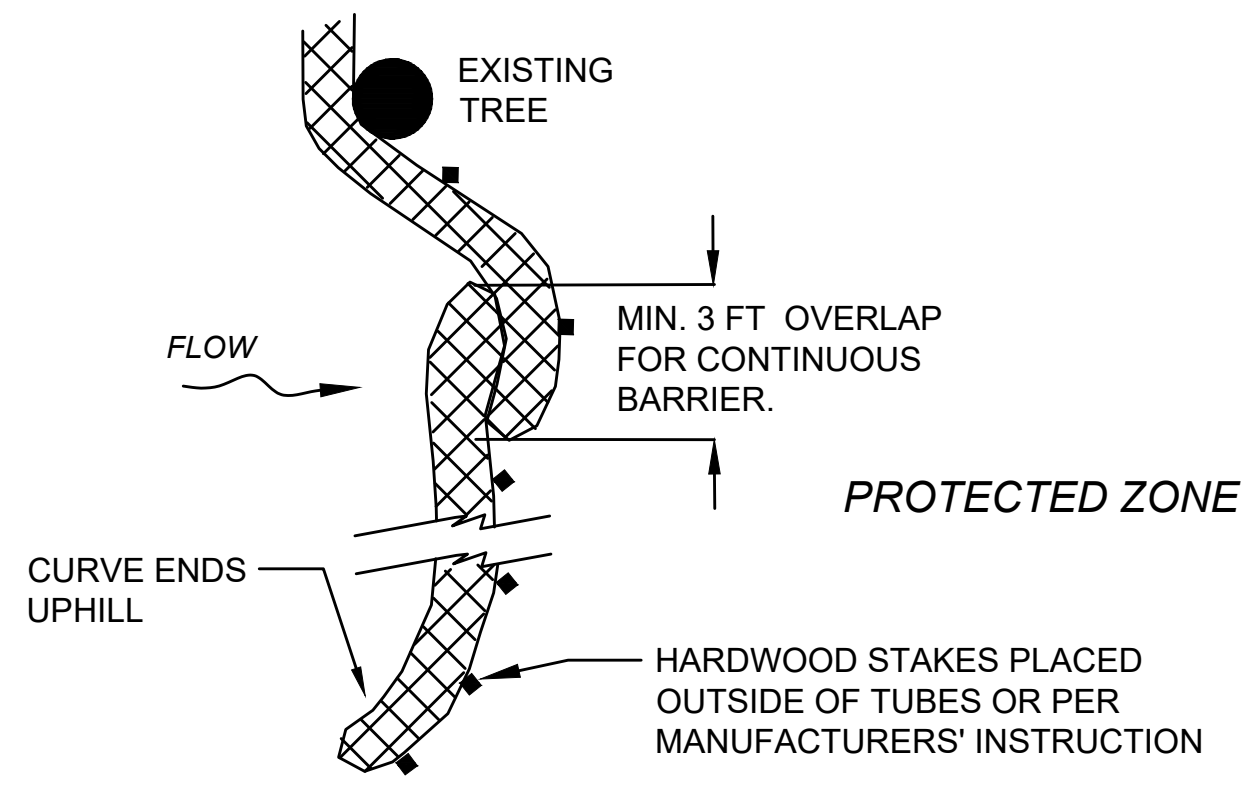


SCALE: 1" = 10'

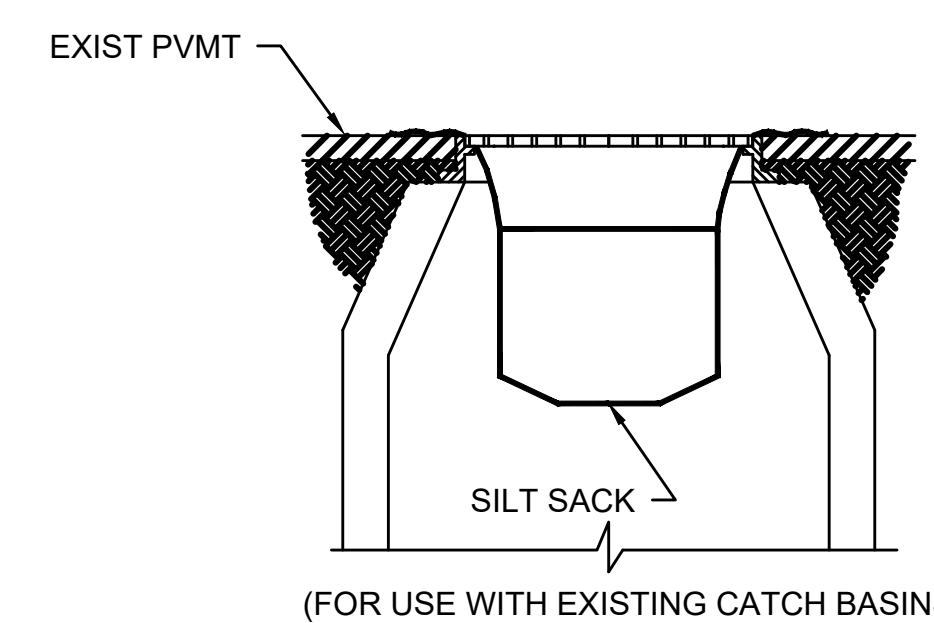


SECTION

SEDIMENT CONTROL BARRIER



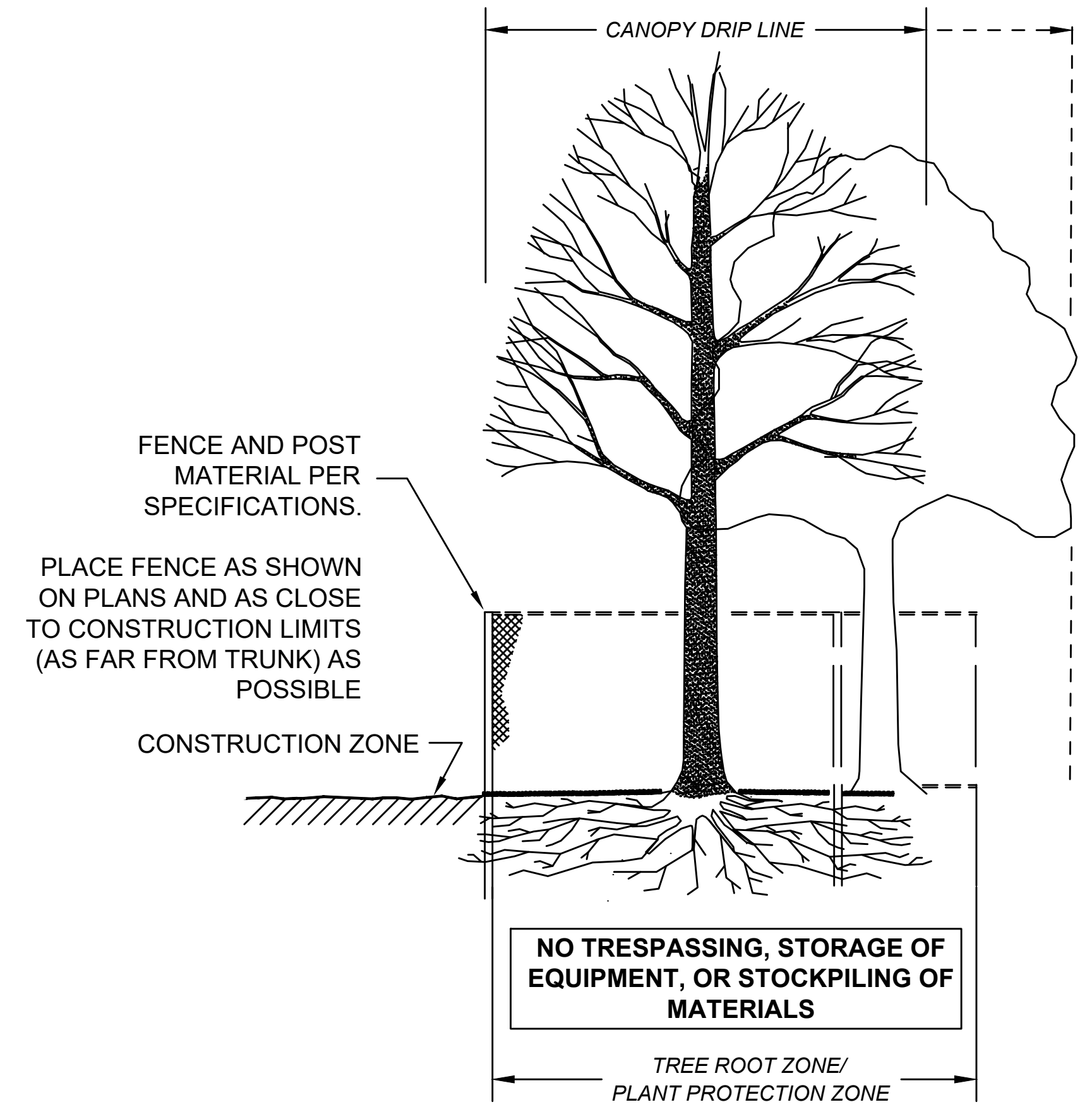
PLAN VIEW



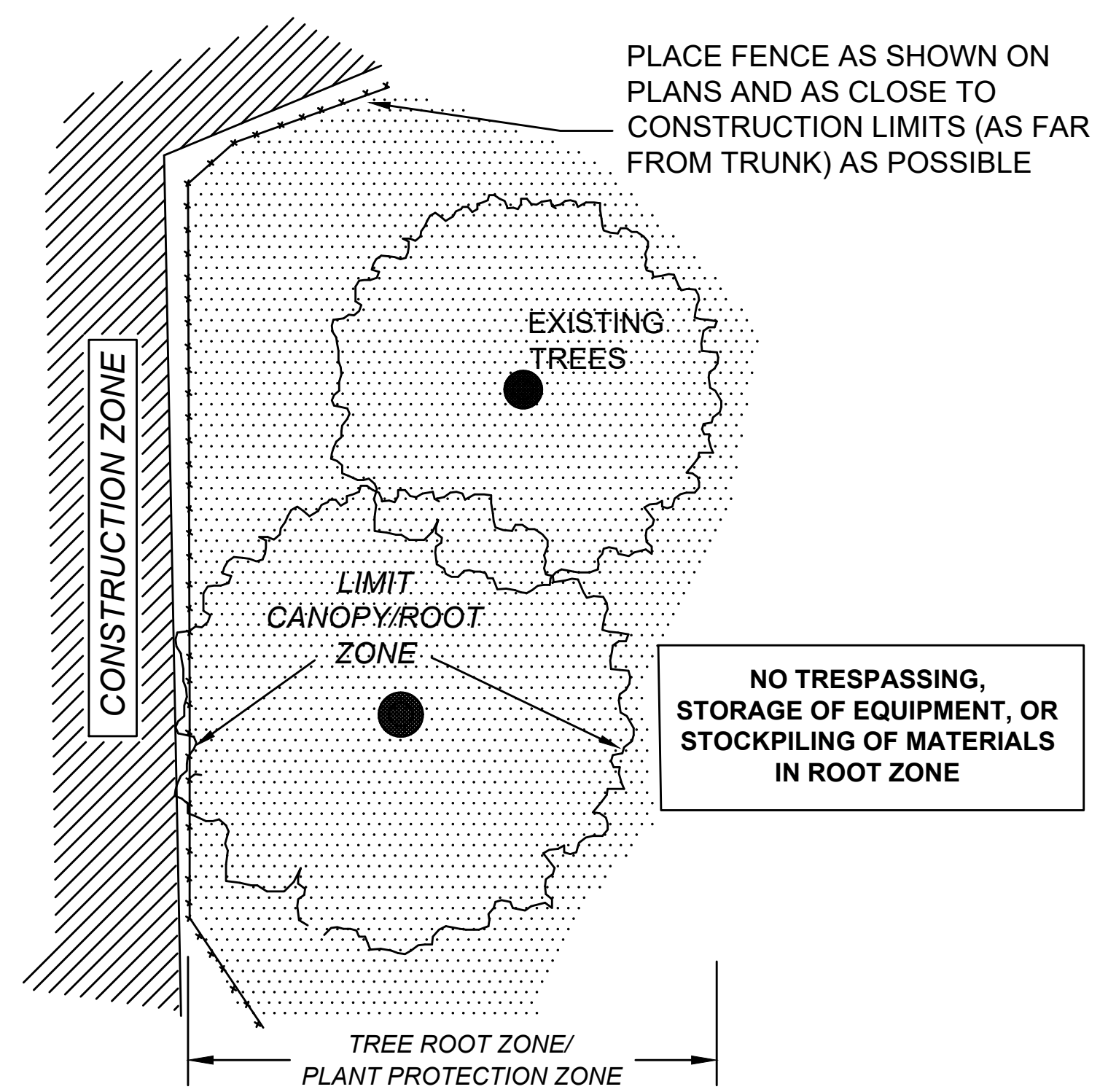
(FOR USE WITH EXISTING CATCH BASINS)

NOTE:
SILT SACKS TO BE PLACED IN ALL CATCH BASINS IN THE VICINITY OF NEW CONSTRUCTION. CATCH BASINS ARE TO BE PROTECTED AS SHOWN, WITH MINIMUM WEEKLY MAINTENANCE, OR AS REQUIRED AND REPLACED IF NECESSARY.

SILT SACK INLET PROTECTION



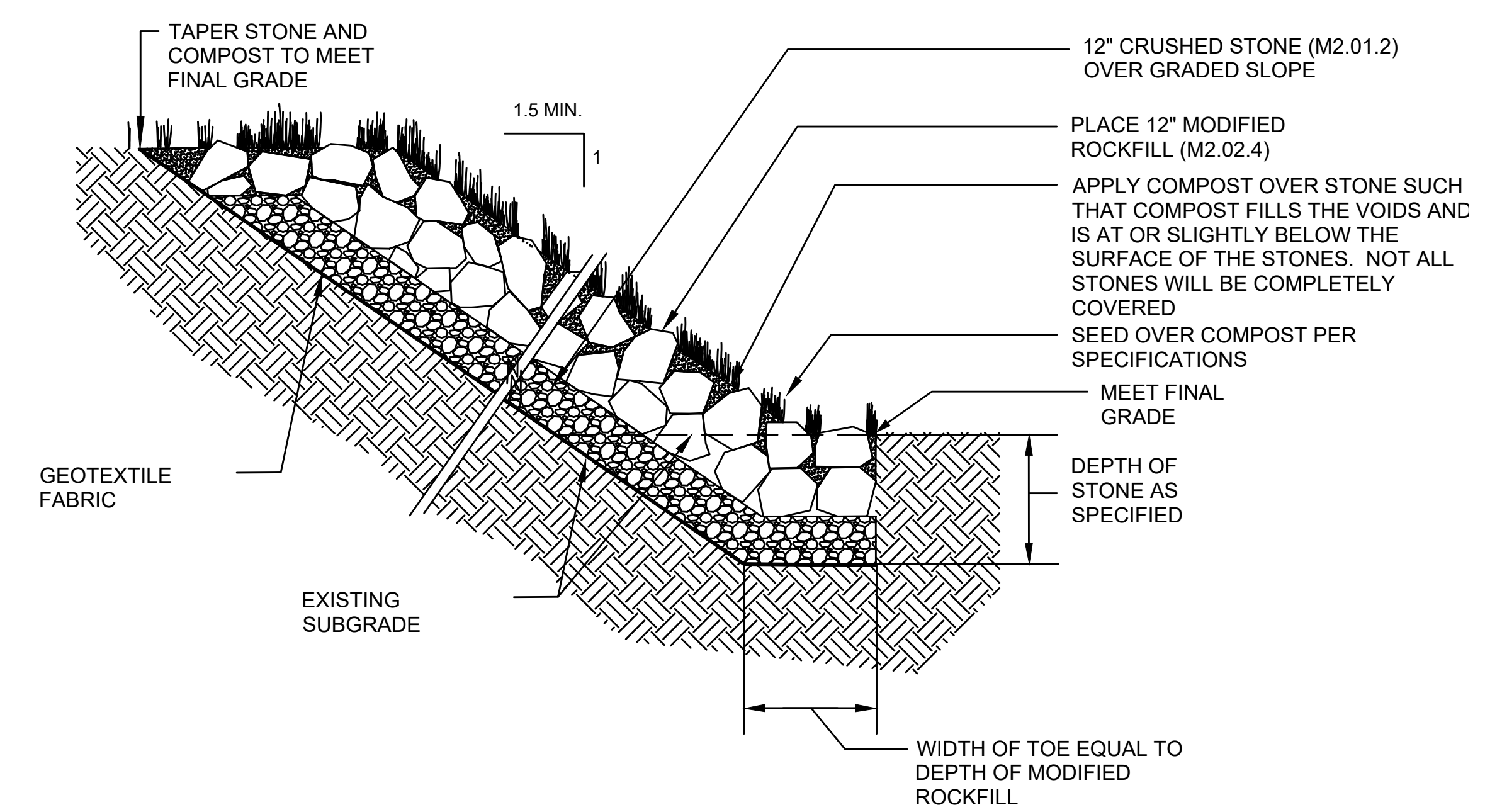
SECTION - FENCE PROTECTION OF ROOT ZONE



PLAN VIEW - FENCE PROTECTION OF ROOT ZONE

TREE PROTECTION - ROOT ZONE

NOT TO SCALE



COMPOST AND SEED OVER MODIFIED ROCKFILL (NON-WATERWAY)

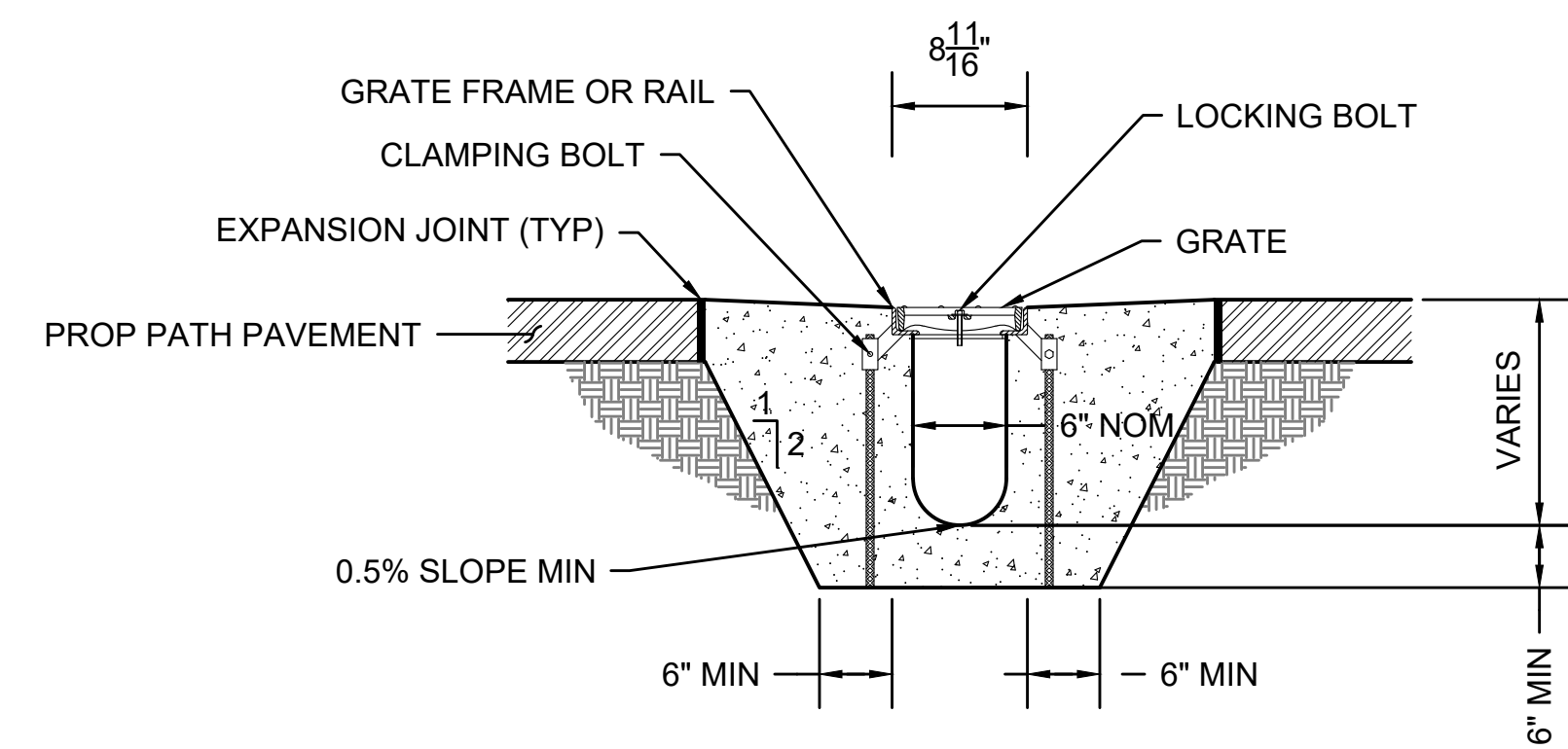
NOT TO SCALE

20160320_MassDOT

**SOUTHBRIDGE
QUINEBAUG VALLEY RAIL TRAIL**

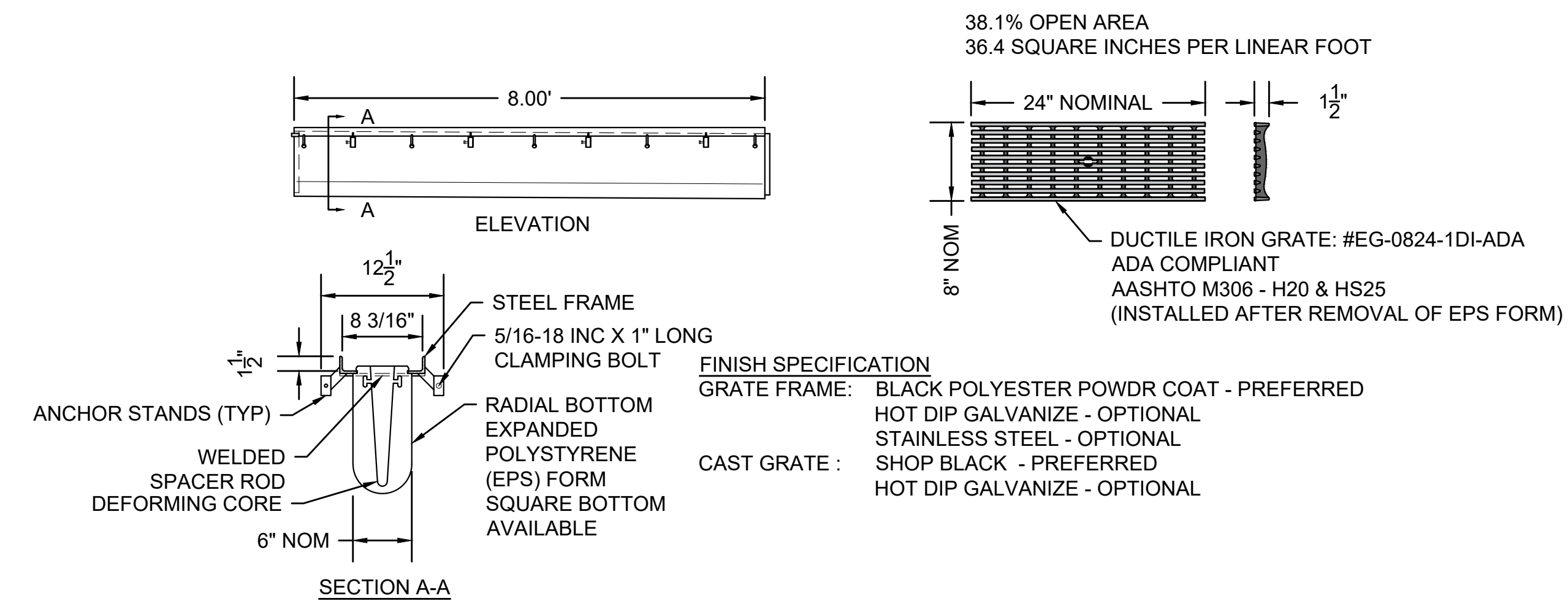
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	25	29
PROJECT FILE NO.		89443.00	

CONSTRUCTION DETAILS



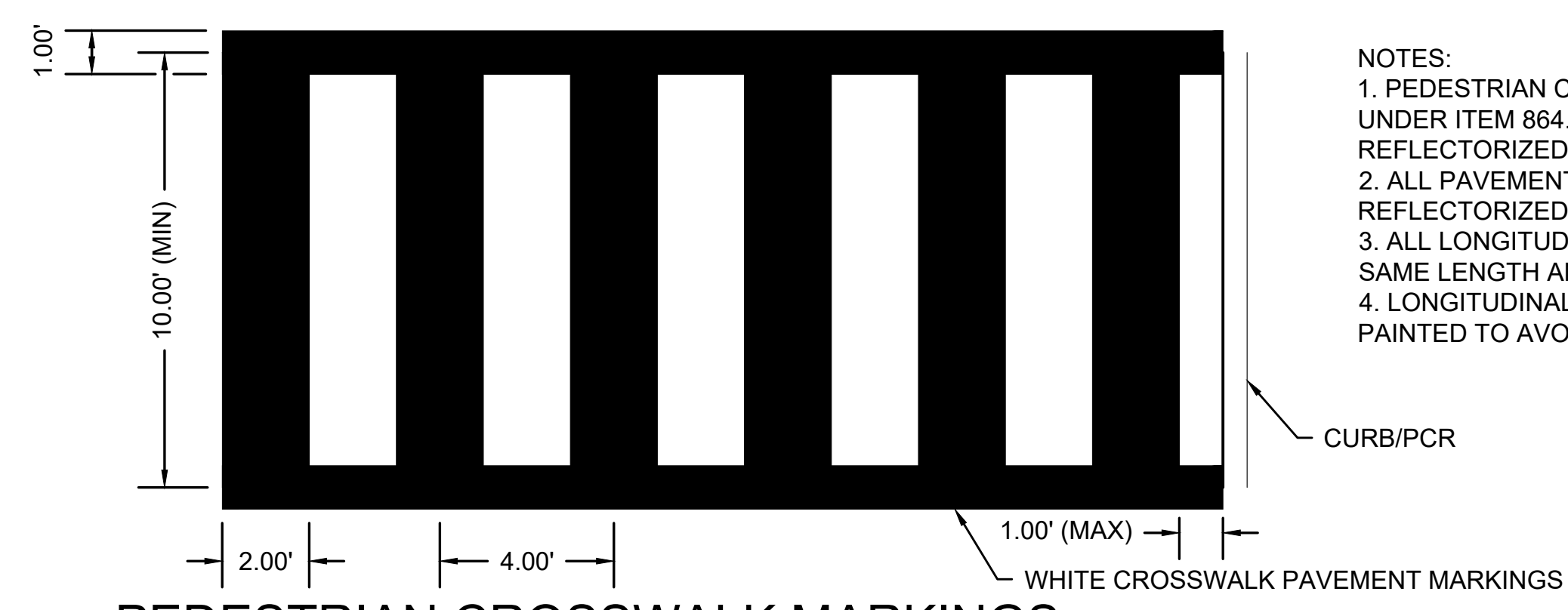
NOTE:
INSTALLATION TO BE COMPLETED IN ACCORDANCE
WITH MANUFACTURER'S SPECIFICATIONS AND
INSTALLATION INSTRUCTIONS.

TRENCH DRAIN INSTALLATION
NOT TO SCALE



TRENCH DRAIN
NOT TO SCALE

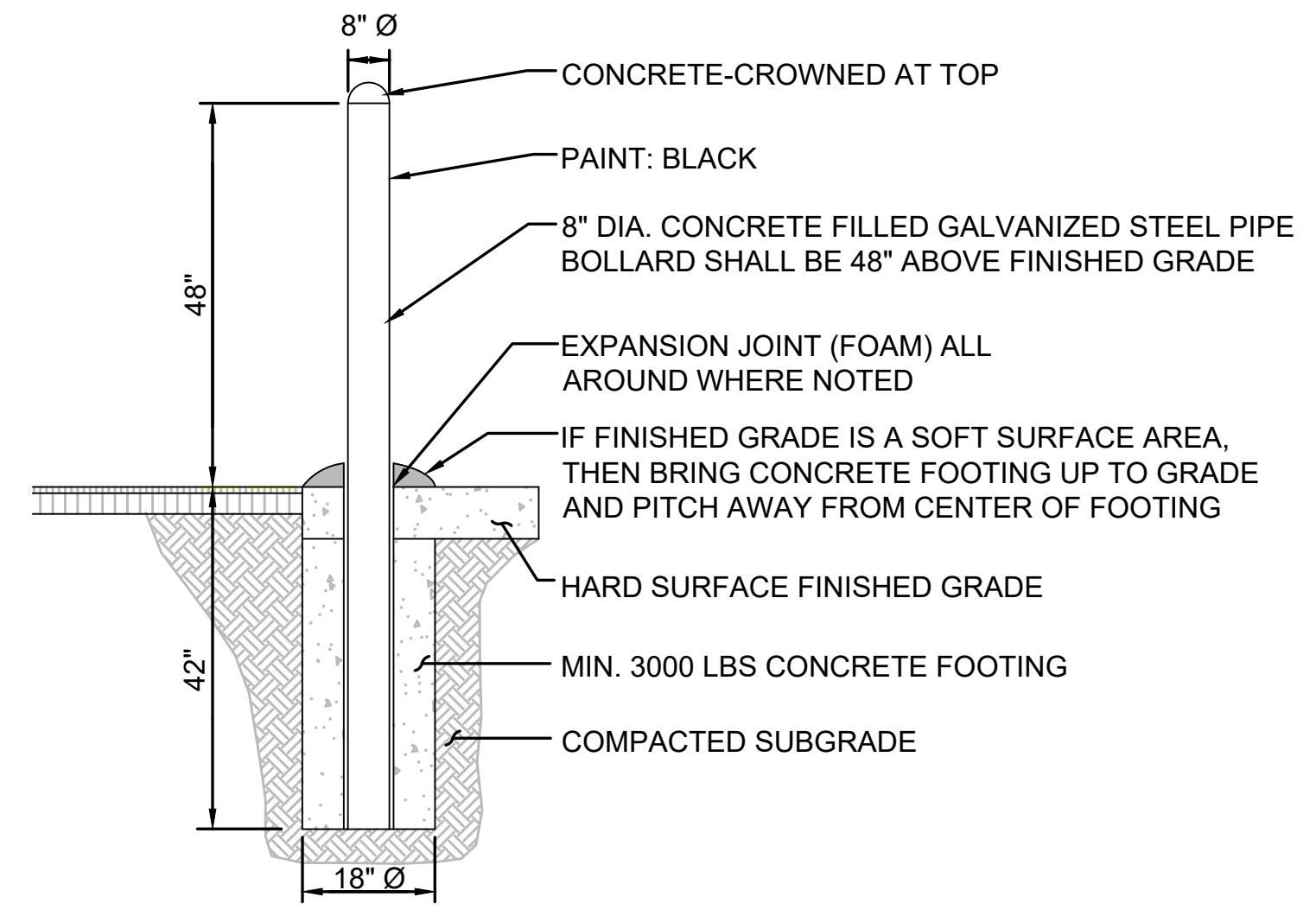
SOUTHBRIDGE QUINEBAUG VALLEY RAIL TRAIL			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	26	29
PROJECT FILE NO.		89443.00	



PEDESTRIAN CROSSWALK MARKINGS

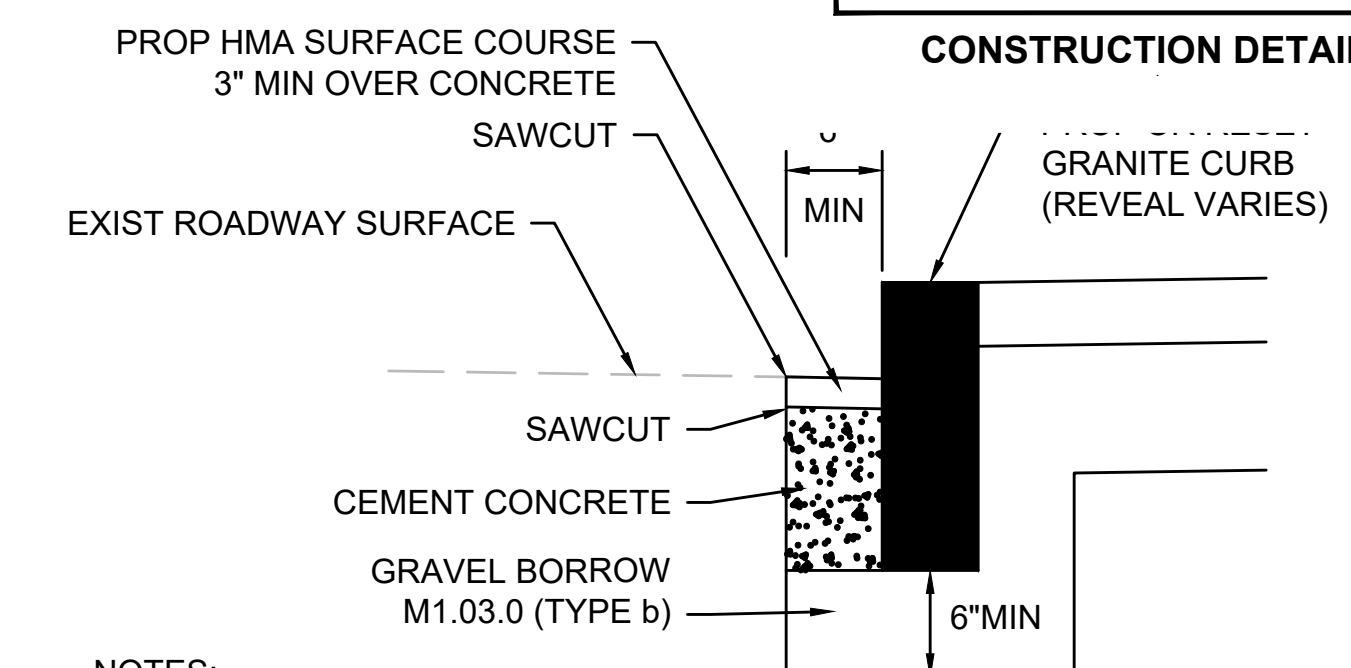
NOT TO SCALE

- NOTES:
1. PEDESTRIAN CROSSWALK MARKINGS TO BE PAID FOR UNDER ITEM 864.04 PAVEMENT ARROWS AND LEGENDS REFLECTORIZED WHITE (THERMOPLASTIC).
 2. ALL PAVEMENT MARKING MATERIALS TO BE REFLECTORIZED WITH GLASS BEADS.
 3. ALL LONGITUDINAL CROSSWALK LINES TO BE THE SAME LENGTH AND PROPERLY DRESSED.
 4. LONGITUDINAL PAVEMENT MARKINGS SHALL BE PAINTED TO AVOID VEHICLE WHEEL PATHS.



CONCRETE FILLED STEEL BOLLARD

NOT TO SCALE

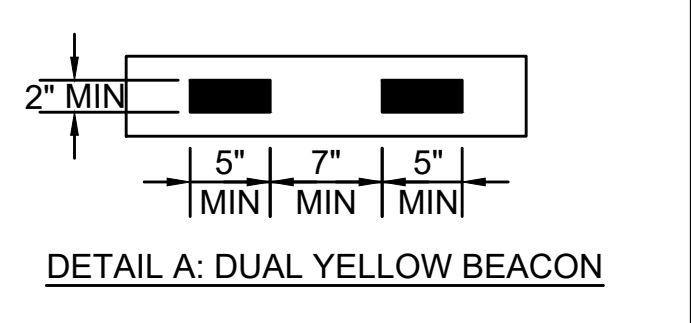
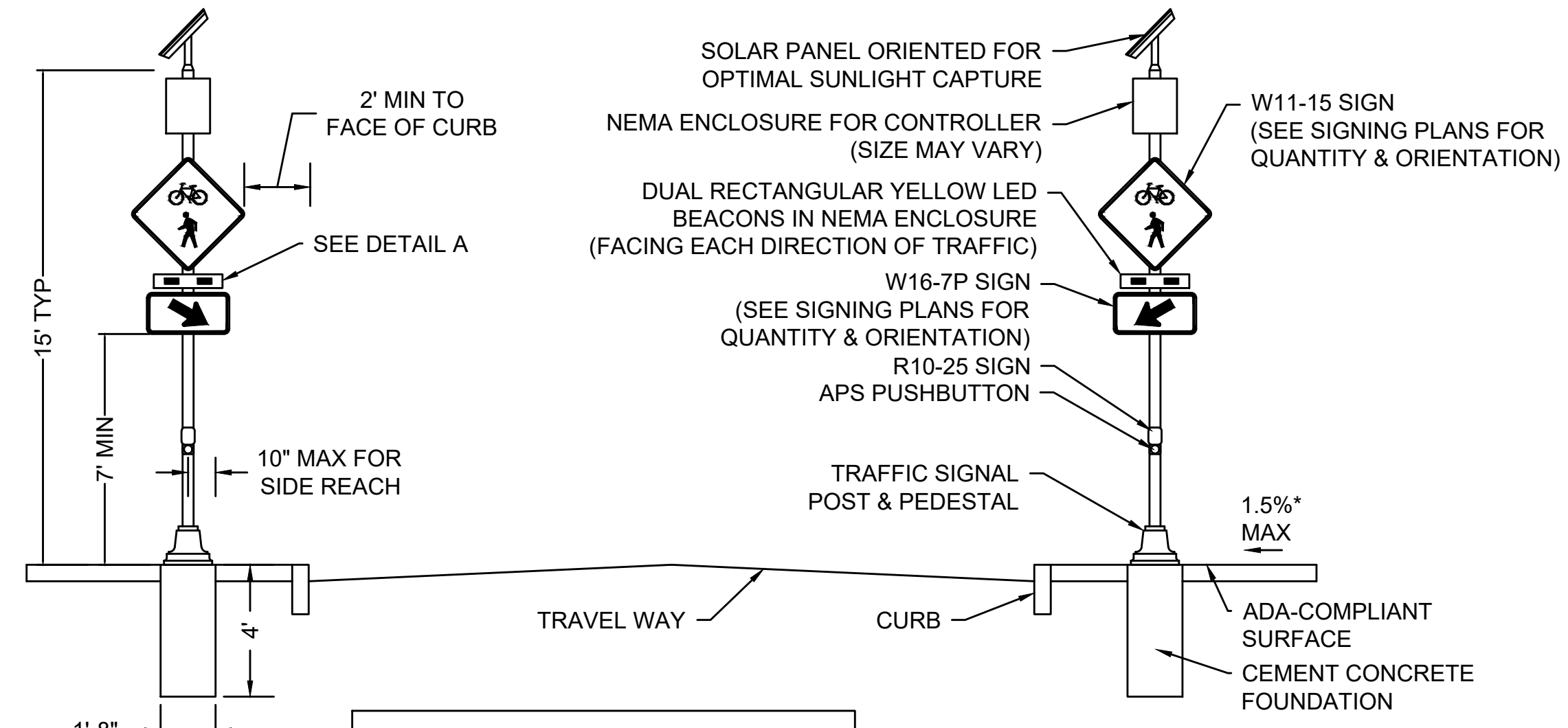


CONSTRUCTION DETAILS

- NOTES:
1. SAWCUT 6" FROM CURB LINE AND REMOVE EXISTING PAVEMENT AND GRAVEL. REPLACE WITH CEMENT CONCRETE.
 2. ANY DESIGNATED CEMENT CONCRETE THAT IS ACCEPTABLE UNDER SECTION M4 OF THE STANDARD SPECIFICATIONS MAY BE USED. HOT MIX ASPHALT SHALL NOT BE USED AS A SUBSTITUTE.

GRANITE CURB INSTALLATION IN EXISTING PAVEMENT AREAS

NOT TO SCALE



- NOTES:
1. CROSSWALK AND ADA COMPLIANT RAMPS NOT SHOWN. SEE PLANS FOR LOCATIONS.
 2. REFER TO THE SIGN SUMMARY FOR SIGN DIMENSIONS.
 3. ACCESS TO ALL PEDESTRIAN ACTUATED CONTROLS SHALL BE ADA/AAB COMPLIANT.
 4. *0.5% CONSTRUCTION TOLERANCE FOR CROSS-SLOPE.
 5. FINISH FOR POST AND PEDESTALS SHALL BE TGIC POLYESTER POWDERCOAT, BLACK

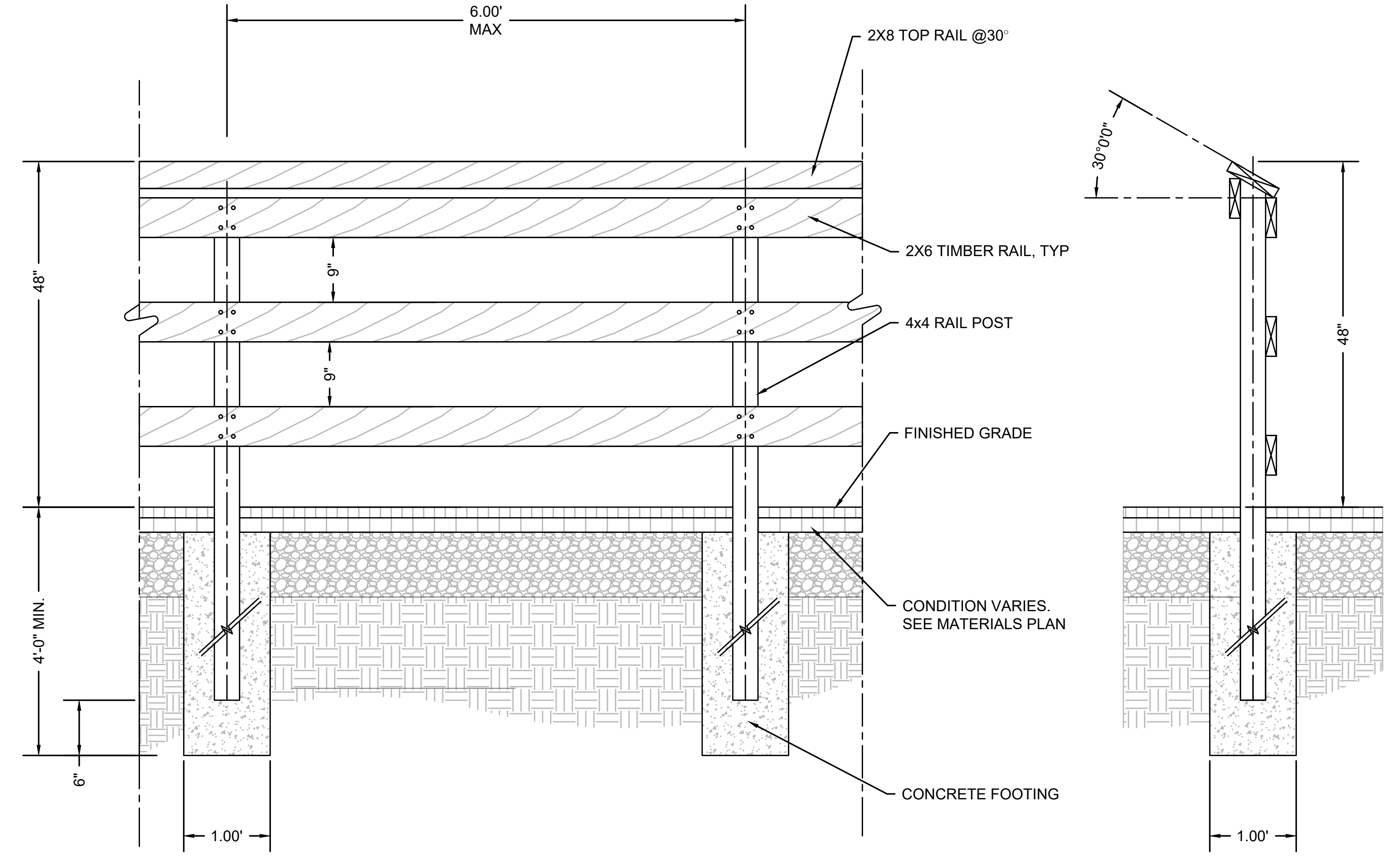
MAJOR ITEMS LIST - LOCATION 1 (ROUTE 131 CROSSING):

QTY	ITEM
2	CEMENT CONCRETE FOUNDATIONS PER 812.30.1
2	15' TRAFFIC SIGNAL POSTS AND PEDESTALS
2	APS PUSH BUTTON SYSTEMS AND R10-25 SIGNS
2	DUAL RECTANGULAR YELLOW LED BEACONS IN NEMA ENCLOSURES
4	W11-15 SIGNS
2	W16-7PR SIGNS
2	W16-7PL SIGNS
2	SOLAR PANEL SYSTEMS
2	NEMA ENCLOSURE AND ALL COMPONENTS NEEDED TO MEET FUNCTIONAL REQUIREMENTS PER SPECIAL PROVISIONS
2	BATTERY SYSTEMS

PLUS ALL MOUNTING AND SUPPORTING HARDWARE AND WIRING NECESSARY TO COMPLETE A WORKING SYSTEM

RECTANGULAR RAPID FLASH BEACON

NOT TO SCALE



PROFILE

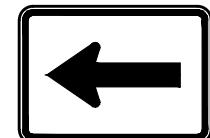
SECTION

48 INCH WOOD SAFETY RAIL

NOT TO SCALE

SOUTHBRIDGE QUINEBAUG VALLEY RAIL TRAIL			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	28	29
PROJECT FILE NO.		89443.00	

SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (IN.)			NUMBER OF SIGNS REQ.	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA (S.F.)
	WIDTH (IN.)	HEIGHT (IN.)		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
R4-11	30	30				SEE 2009 M.U.T.C.D.	7	WHITE	BLACK	BLACK	(7) P-5	6.25	43.75
R5-3	24	24				SEE 2009 M.U.T.C.D.	1	WHITE	BLACK	BLACK	(1) P-5	4.00	4.00
R6-2b	24	12					1	WHITE	BLACK	BLACK	MNTD ON EX R5-1	2.00	2.00
R9-5	12	18				SEE 2009 M.U.T.C.D.	3	WHITE	BLACK	BLACK	MNTD W/D11-1	1.50	4.50
W11-15*	30	30				SEE 2009 M.U.T.C.D.	2	YELLOW	BLACK	BLACK	(2) P5 (4) MNTD ON RRFB	6.25	12.50
W16-7PL*	24	12				SEE 2009 M.U.T.C.D.	0	YELLOW	BLACK	BLACK	MNTD W/ W11-15	2.00	0.00
W16-7PR*	24	12				SEE 2009 M.U.T.C.D.	0	YELLOW	BLACK	BLACK	MNTD W/ W11-15	2.00	0.00
W16-9P	24	12				SEE 2009 M.U.T.C.D.	2	YELLOW	BLACK	BLACK	MNTD W/ W11-15	2.00	4.00
D11-1	24	18				SEE 2009 M.U.T.C.D.	20	GREEN	WHITE	WHITE	(14) P-5 (8) MNTD TOGETHER	3.00	60.00
M6-1L	12	9				SEE 2009 M.U.T.C.D.	9	GREEN	WHITE	WHITE	MNTD W/D11-1	0.75	6.75
M6-1R	12	9				SEE 2009 M.U.T.C.D.	8	GREEN	WHITE	WHITE	MNTD W/D11-1	0.75	6.00
M6-3	12	9				SEE 2009 M.U.T.C.D.	3	GREEN	WHITE	WHITE	MNTD W/D11-1	0.75	2.25
W11-1	30	30				SEE 2009 M.U.T.C.D.	2	YELLOW	BLACK	BLACK	(2) P-5	6.25	12.50
W16-1P	18	24				SEE 2009 M.U.T.C.D.	2	YELLOW	BLACK	BLACK	MNTD W/W11-1	3.00	6.00
W6-3b	30	30					1	YELLOW	BLACK	BLACK	(1) P-5	6.25	6.25

TOTAL 170.50

* SIGNS ACCOUNTED FOR UNDER THE LUMPSUM ITEM FOR THE RRFB SIGNAL POST HAVE BEEN EXCLUDED FROM THE "NUMBER OF SIGNS REQ." COLUMN



GEOSCIENCES TESTING AND RESEARCH, INC.

55 Middlesex Street, Suite 225, North Chelmsford, MA. Phone: (978) 251-9395 www.gtrinc.net

Project Name: Morris St. Bridge Rep Location: Southbridge, MA

Table with columns: Drilling Co., Driller, Start Date, Ground Surface Elev (ft), Boring Location, Note.

Sample Data table with columns: Depth, Casing BPF, No., Pen/Recovery, Depth (ft.), Blows per 6in, Field Test, Description and Classification, Stratum, Additional Data, Notes.

NOTES: 1. Sprocket refusal at 28', rollerbit drill to 29' before coring.

Order of Sample Description (Modified Burmister) and PENETRATION RESISTANCE (N) GUIDE.



GEOSCIENCES TESTING AND RESEARCH, INC.

55 Middlesex Street, Suite 225, North Chelmsford, MA. Phone: (978) 251-9395 www.gtrinc.net

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Sample Data table with columns: Depth, Casing BPF, No., Pen/Recovery, Depth (ft.), Blows per 6in, Field Test, Description and Classification, Stratum, Additional Data, Notes.

NOTES:

Order of Sample Description (Modified Burmister) and PENETRATION RESISTANCE (N) GUIDE.

SOUTHBRIDGE QUINEBAUG VALLEY RAIL TRAIL

Table with columns: STATE, FED. AID PROJ. NO., SHEET NO., TOTAL SHEETS.

BORING LOGS



GEOSCIENCES TESTING AND RESEARCH, INC.

55 Middlesex Street, Suite 225, North Chelmsford, MA. Phone: (978) 251-9395 www.gtrinc.net

Project Name: Morris St. Bridge Rep Location: Southbridge, MA

Table with columns: Drilling Co., Driller, Start Date, Ground Surface Elev (ft), Boring Location, Note.

Sample Data table with columns: Depth, Casing BPF, No., Pen/Recovery, Depth (ft.), Blows per 6in, Field Test, Description and Classification, Stratum, Additional Data, Notes.

NOTES: 1. Cuttings from wash water indicate possible footing. Moved Locations to GTR-2B and GTR-2C. Both borings indicated refusal at 9 feet below grade. Moved to boring GTR-3.

Order of Sample Description (Modified Burmister) and PENETRATION RESISTANCE (N) GUIDE.



GEOSCIENCES TESTING AND RESEARCH, INC.

55 Middlesex Street, Suite 225, North Chelmsford, MA. Phone: (978) 251-9395 www.gtrinc.net

Project Name: Morris St. Bridge Rep Location: Southbridge, MA

Table with columns: Drilling Co., Driller, Start Date, Ground Surface Elev (ft), Boring Location, Note.

Sample Data table with columns: Depth, Casing BPF, No., Pen/Recovery, Depth (ft.), Blows per 6in, Field Test, Description and Classification, Stratum, Additional Data, Notes.

NOTES: 1. Change in strata based on drilling action.

Order of Sample Description (Modified Burmister) and PENETRATION RESISTANCE (N) GUIDE.

ATTACHMENT D: MORRIS STREET
PEDESTRIAN BRIDGE GEOTECH REPORT

PLEASE REFER TO ATTACHMENT D



GEOSCIENCES TESTING AND RESEARCH INC

55 Middlesex Street,
Suite 225, North
Chelmsford, MA.
Phone: (978) 251-9395
www.gtrinc.net

80 Business Park Drive,
Suite 306, Armonk, NY
Phone: (914) 600-8101

GEOTECHNICAL ENGINEERING REPORT MORRIS STREET PEDESTRIAN BRIDGE SOUTHBRIDGE, MASSACHUSETTS

September 21, 2023
Project 23.154

Prepared by:

Geosciences Testing and Research, Inc.
North Chelmsford, MA

Prepared for:

Ms. Alessandra Keller, P.E.
BSC Group
803 Summer St Floor 3
Boston, MA 02127

September 21, 2023
GTR Project #23.154

Ms. Alessandra Keller, P.E.
BSC Group
803 Summer St Floor 3
Boston, MA 03172



Re: **Geotechnical Engineering Report**
Proposed Pedestrian Bridge Construction over Morris Street
Southbridge, Massachusetts

Dear Alie:

Geosciences Testing and Research, Inc. (GTR) is pleased to present this report summarizing the results of our geotechnical engineering study for the above-referenced project. This study was carried out in general accordance with our email dated March 22, 2023. This report is subject to the limitations presented in Appendix A.

We trust this satisfies your current requirements and have appreciated working with you on this project. Please contact the undersigned if you have any questions.

Sincerely,
Geosciences Testing and Research, Inc.

A handwritten signature in black ink that reads "Paul Dion".

Paul D. Dion, EIT
Geotechnical Engineer

A handwritten signature in black ink that reads "Curtis A. George".

Curtis A. George, P.E. (NJ)
Principal

Attachments: Appendices A-C

Table of Contents

GEOTECHNICAL ENGINEERING REPORT.....	1
1. SUMMARY	2
2. INTRODUCTION	2
2.1 Scope of Study	2
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Table 1. Recommended Soil Design Parameters

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1. SUMMARY

This report summarizes Geosciences Testing and Research, Inc. (GTR's) geotechnical study to evaluate the subsurface conditions and develop recommendations for the proposed construction of a pedestrian bridge over Morris Street in Southbridge, Massachusetts (Site). GTR carried out this study in general accordance with the contents of our email sent on March 22, 2023. Our design was performed based on AASHTO 2020 9th Edition Specifications. This report is subject to the limitations in Appendix A.

2. INTRODUCTION

2.1 Scope of Study

This report provides recommendations for the design and construction for the proposed foundations for the proposed culvert replacement. The subsurface investigation and soil profiles are described herein. Based on the subsurface conditions, soil design parameters, seismic design parameters, foundation recommendations, and construction recommendations are provided.

The scope of this study included the following tasks:

1. Perform a subsurface exploration program consisting of three borings.
2. Evaluate the soil conditions, liquefaction potential, soil bearing resistance, settlement, and other soil properties under or in the vicinity of the proposed construction.
3. Summarize the construction recommendations within this report.

The information provided to us to prepare this report included the following:

1. An AutoCAD .dwg file titled "(89443300_BR(BoringLocationPlan).dwg".

Our scope of services did not include an environmental assessment to evaluate the subsurface conditions related to hazardous or toxic materials in the soil, bedrock, surface water, or groundwater around the site. Any statement in this report or on the boring logs regarding odors, suspicious items or conditions is strictly for the information of the client. We recommend engaging a qualified environmental professional, if necessary, to perform environmental services prior to/during construction.

2.2 Existing Conditions

The proposed pedestrian pathway is located parallel to East Main Street with the proposed bridge spanning Morris Street in Southbridge, Massachusetts (see Locus Plan in Figure 1). The existing structure is a former railroad bridge which consists of granite block/boulder abutment and wingwalls. The super-structure of the bridge is composed of built up steel beams which support the former rail lines. The top of pavement of Morris Street is approximately 18 to

20 feet below rail line grade. The elevation of the roadway and the rail way is approximately +430 feet and 450 feet, respectively.

2.3 Proposed Construction

The proposed construction involves removing the superstructure of the existing rail-bridge and leaving the existing abutments and wingwalls in place. The centerline of the proposed abutments will be constructed 15 feet behind the existing abutments resulting in a proposed bridge span of 50 feet. The superstructure is 10 feet wide with the foundation size estimated to be 7 feet x 14 feet. The bottom of the foundation of the pedestrian bridge is at approximately 4 feet below existing grade.

3. SUBSURFACE INFORMATION

3.1 Subsurface Exploration Program

The subsurface exploration program consisted of three primary borings designated as GTR-1 through GTR-3. The subsurface investigation program was conducted on August 8 and August 9, 2023 by Carr-Dee Corp. of Medford, MA. An Acker AD2 ATV rig with an automatic hammer was used to perform the borings. Hollow Stem Augers (HSA) were used to advance the borings to approximately 8 to 10 feet. Drive and wash drilling method using HW casing was used to continue GTR-1 and was subsequently used in the rest of the borings. The borings were advanced to depths ranging from 16 to 28 feet below ground surface (BGS). Refer to Figure 2 for the approximate location of the borings.

The drilling techniques and sampling methods are noted on the logs. Standard Penetration Test (SPT) soil sampling was performed from grade to the bottom of the boring, with samples taken typically in two-foot intervals within the zone of influence of the footings and five-foot intervals elsewhere. The soil samples were collected using a 1-3/8-inch outside diameter, 24-inch long, split-spoon sampler in accordance with ASTM D1586 procedures. The sampler was inserted into the borehole and then advanced 24 inches into undisturbed materials using a 140-pound automatic hammer and a 30-inch drop height. The total number of blows required to advance the sampler the second and third 6-inch intervals is referred to as the SPT N-value, which can be correlated to the shear strength and density of the soil. The bedrock core samples were taken with an NX core barrel. The soil samples and rock cores will be stored at the MassDOT storage facility in Lawrence, MA.

A GTR field representative was on-site during the boring program to observe the drilling activities and log the soil and rock samples. The soil samples were classified according to a modified Burmister soil classification system and subsequently collected in glass jars for further testing and/or identification. Appendix B contains copies of the boring logs prepared by GTR.

3.2 Subsurface Profile

The following subsections summarize the soils encountered during our subsurface investigation. GTR notes that these descriptions are a simplified representation of the site's geology, and that the typed soil boring logs, provided as Appendix B, and should be reviewed for more detailed information. Typically, the subsurface conditions consist of fill overlying glacial till, overlying bedrock.

3.2.1 Granular Fill

The soil identified as granular fill was typically composed of brown, fine to medium sand with varying amounts of gravel and silt. SPT N-Values were typically between 5 and 30 in this layer, indicating a very loose to dense material. The granular fill in the boring locations extended from approximately 4 to 8 feet BGS.

3.2.2 Organic Fill

The soil identified as organic fill was encountered in GTR-1 approximately 5 feet BGS and was approximately 1 foot thick. The SPT N-Value was 10 in this layer, indicating a medium dense material. The organic fill consisted of fine to medium sand and some organic/inorganic silt. This layer was likely natural topsoil that was mixed with granular material during original construction of the railway.

3.2.3 Glacial Till

The soil identified as glacial till was typically composed of brown, fine to medium sand with varying amounts of Gravel and little Silt. The SPT N-Values were typically between 12 and 80 in this layer, indicating a medium dense to very dense material. The elevation of the glacial till varies due to the sloping bedrock outcrops observed and the excavation for the abutments, wingwalls and retaining walls around the site

3.2.4 Bedrock

Five feet of competent bedrock was cored in borings GTR-1 and GTR-2 starting at 28 feet and 11 feet below ground surface, respectively. The cored bedrock in GTR-1 consisted of black and gray, fresh to slightly weathered, moderately to highly fractured, hard, Sulfidic Schist. The Rock Quality Designation (RQD) was 32%. The cored bedrock in GTR-3 consisted of white and gray, fresh to slightly weathered, moderately to highly fractured, very hard, Calcium-Silicate Granofels. The Rock Quality Designation (RQD) was 85%.

3.2.5 Groundwater

Groundwater was encountered in GTR-1 at approximately 8 feet below ground surface and maybe perched above the glacial till. Groundwater was not observed at the time of drilling

in the other borings. The groundwater levels represent conditions during field activities at the time of drilling and, therefore, different levels due to storm events and/or seasonal fluctuations should be anticipated.

3.3 Soil Design Parameters

Table 1 lists the proposed soil parameters recommended for design based on our review of the boring logs and core results. Representative SPT N-values of the soil layers were used to estimate the shear strength.

Table 1. Recommended Soil Design Parameters

Soil Description	Unit Weight (lb/ft ³)	Friction Angle (°)	Active Earth Pressure, Ka	At Rest Earth Pressure, Ko	Passive Earth Pressure, Kp
Existing Granular Fill	120	30	0.30	0.5	5
Structural Fill	135	36	0.25	0.5	6
Glacial Till	135	36	0.25	0.5	6

3.4 Seismic Design Parameters

The recommended seismic design parameters shown in Table 2 are based on the Mass DOT LRFD Bridge Manual and AASHTO Guide Specifications for LRFD Bridge Seismic Design 2011 with 2015 Interim Revisions. Liquefaction is the sudden, temporary loss of soil shear strength due to earthquake motion for soils below the water table. The bridge is a single span and is located in seismic design category (SDC) A based on the $SD1 < 0.15$. Table 3.5-1 - AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2nd Edition.

Table 2. Recommended Seismic Design Parameters

Parameter	Value
Site Class	C
Peak seismic ground acceleration (PGA) coefficient on rock for site class C	0.108 g
Horiz rock response spectral acceleration coefficient at .2 sec period (S _s) for site class D	0.156 g
Horiz rock response spectral acceleration coefficient at 1 sec period (S ₁) for site class D	0.061 g

4. RECOMMENDED FOUNDATION SYSTEMS

4.1 General

Based on the existing subsurface conditions, excavation and replacement of existing granular and organic fill with shallow foundations are recommended. The proposed footings should be set back so that the zone of influence does not add any additional lateral or vertical load on the existing abutments, wingwalls or retaining walls. The zone of influence should be determined as follows:

- (1) offset a distance of one foot from the edge of the footing,
- (2) extend a line at an angle of 1H:1V from the offset until it intersects the subgrade.
- (3) repeat this for every edge of the footing.

The bottoms of the footings should be a minimum of 4 feet below permanent grade. The existing granular and organic fill layers should be excavated to the top of glacial till or 4 feet below the proposed footing and replaced with $\frac{3}{4}$ -inch crushed stone or Mass DOT Gravel Borrow M1.03 Type A specifications (Structural Fill). Based on the borings, excavations of approximately 8 feet below existing ground are expected. If granular fill of greater than 4 feet below the bottom of the proposed abutment is observed, it may be left in place if localized test pits are performed to ensure no organic fill is below the proposed abutments zone of influence.

4.2 Shallow Foundation Bearing Capacity

The footing width is assumed to be seven (7) feet. We recommend a factored bearing resistance of 8.5 ksf. This value assumes that the footings will be placed on the existing granular fill if it is encountered greater than 4 feet below proposed footing depth. A resistance factor of 0.45 was used to determine the above-recommended factored resistance. The resultant of the foundation pressures should fall within $\frac{1}{3}$ of the center of the footing. If inclined loads or eccentricity are significant, we should review these recommended values.

4.3 Shallow Foundation Sliding Resistance

For resistance to sliding, a friction factor (i.e. coefficient of friction) of 0.57 is recommended for cast-in-place concrete on sand or stone fill. A resistance factor of 0.8 (cast concrete on sand) should be applied to the sliding resistance. The passive pressure in front of the proposed foundations below grade can only be used in the analysis of the sliding resistance if the embedment footing depth is considered permanent.

4.4 Shallow Foundation Earth Pressures

For the existing fill or any other compacted backfill acting on the foundation, an equivalent fluid unit weight of 65 lb/ft³ (at-rest conditions) is recommended. Hydrostatic pressure must be included below the water table.

Where the equivalent fluid pressure is less than 300 psf behind the walls, use a pressure of 300 psf to account for compaction induced stresses. Within 4 feet behind the walls, we recommend limiting compaction effort to hand-operated plate compactors. Additional surcharge loads from sloped backfill, vehicle traffic, etc. should also be applied when located within a line extending from the bottom heel of the footing at a slope of 1:1 and extending to the ground surface. To determine the lateral pressure associated with the vertical surcharge loads, multiply the vertical pressure by 0.5 for restrained walls or 0.3 for unrestrained walls allowed to rotate. In accordance with AASHTO and/or the MASS DOT Bridge Manual, the walls should be designed for earthquake loads.

4.5 Shallow Foundation Settlement

For the proposed construction of the footings placed on structural fill, the total settlement is estimated to be less than 1 inch (service state un-factored loading conditions). This settlement is expected to occur mostly during construction. A footing width of 7 feet and a service state un-factored load of 5 ksf was used in the analyses. If higher bearing resistance is needed then indicated in 4.2 or if loads or footing geometry are different than what we have assumed, we may need to verify and/or revise our analyses.

4.6 Slope Stability

Assuming 2H:1V (27 degrees) or flatter slopes for final construction the global slope stability is satisfactory under static and seismic conditions. These slopes are based on dry conditions in the embankment. Any new slopes should be constructed at similar or flatter angles. Permanent slopes should be protected from rain and surface runoff and should be diverted away from the slopes. A protective cover of grass or vegetation should be incorporated into any new permanent slopes as soon as possible to provide erosion protection. If final geometry of the new slopes and grades varies from what we assumed here we can perform a global stability analyses to verify stability.

5. CONSTRUCTION CONSIDERATIONS

5.1 Excavations

Any areas requiring excavation should be performed in accordance with OSHA and local regulations. Excavation support is required for any excavation greater than 4 feet unless the grade is sloped back at a 1.5H:1V angle away from the bottom of the excavation. All excavations should be performed in the dry. Excavations of up to 8 to 10 feet are anticipated for placing of new footings are anticipated to be sloped back due to the shallow rock observed. Excavations should be regularly evaluated for signs of movement or unsafe conditions by a competent person as defined by OSHA. The lateral limits of the excavation under each footing (the zone of influence) should be determined as follows:

- (1) offset a distance of one foot from the edge of the footing,
- (2) extend a line at an angle of 1H:1V from the offset until it intersects the subgrade.
- (3) repeat this for every edge of the footing.

If an excavation support system is required depending on the contractor's means and methods, water control/dewatering system, construction phasing and/or staging. The contractor should submit their chosen excavation procedure (support system, if required,) for review. The submittal should include the assumptions made regarding soil properties, geometry of excavation, lateral earth pressures and surcharge loads, staging and sequencing, and wall design calculations. The submittal should be prepared and stamped by a professional engineer licensed in the Commonwealth of Massachusetts and designed in accordance with Mass DOT and AASHTO requirements.

5.2 Excavation Subgrade

GTR recommends excavating and replacing all in-place fill to the bottom of the organic fill layer, top of glacial till layer or a minimum of 4 feet below the bottom of the proposed footings. The soil should be replaced with structural fill with ¾-inch crushed stone or Mass DOT Gravel Borrow M1.03 Type A specifications (Structural Fill). The exposed footing and pavement subgrades should be excavated with a smooth, flat bucket to minimize the disturbance to the subgrade. The footing subgrade on glacial till should not be proof rolled, as this may disturb the soil. Granular fill subgrades for pavements should be proof-rolled to densify the subgrade soils and detect any areas that may be unsuitable (i.e. organic silt) or soft. The proof rolling activities should be observed by an experienced engineer to determine the acceptability of the subgrade. Subgrade preparation and proof rolling should be performed in accordance with the MassDOT Construction specifications. All footing, utility and pavement subgrades should be protected from frost during construction. Proof rolling should not be performed in wet areas. Surface water from rain events may cause the subgrade to become weak, disturbed and or unacceptable. These "wet" conditions are expected to be worse during the winter/spring periods and extra precautions should be made during these times.

5.3 Backfill

The foundation areas should be backfilled with material that satisfies Massachusetts Department of Transportation (Mass DOT) Gravel Borrow M1.03 Type A specifications. The Gravel Borrow should be placed in layers less than 12 inches in thickness and compacted to not less than 95% of its maximum dry density as determined by ASTM D1557, Method C. The Gravel Borrow should be free of organic material, trash, ice, frozen soil, and other deleterious material. Excavated on-site fill meeting the requirements of compacted Gravel Borrow as described above may be re-used, provided that it is not contaminated. Screening equipment may be necessary to allow the re-use of some of the excavated fill as acceptable backfill. The contractor will need to confirm this by performing selected grain size distribution analyses on the excavated and/or screened material. The results should be submitted to the engineer for review and assessment

of suitability for on-site re-use. Any soil removed from the site should be evaluated, and if necessary, disposed of in accordance with local and federal regulations.

5.4 Construction Monitoring

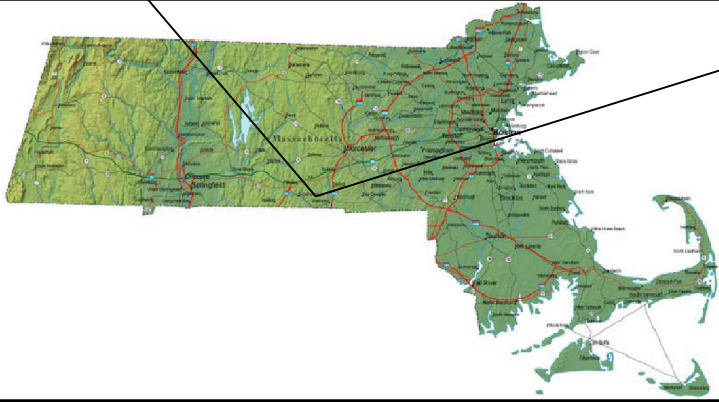
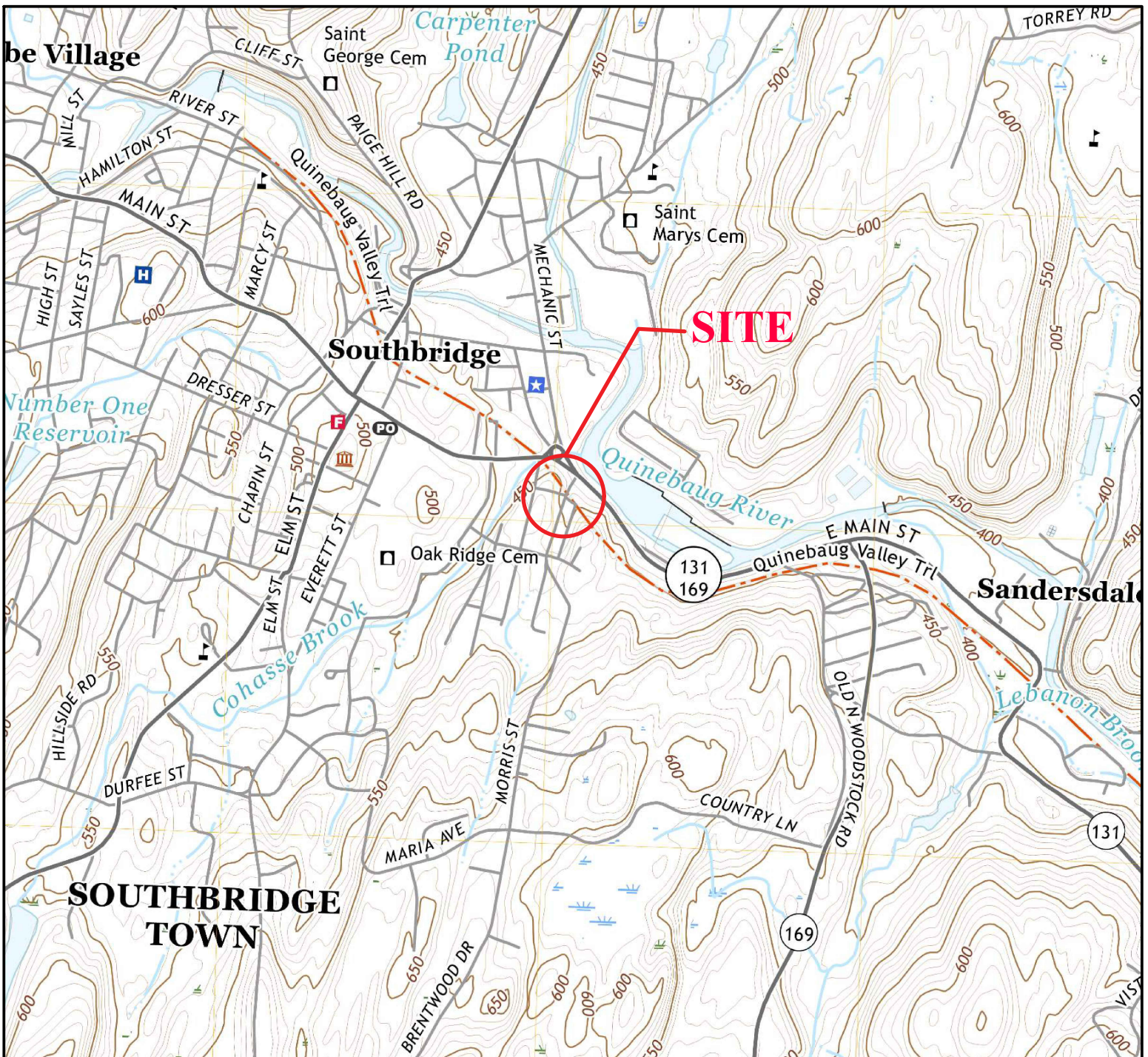
It is recommended that a geotechnical engineer or qualified geotechnical technician be present during construction to:

- Confirm the quality of the bearing material under footings, utilities or pavement,
- Observe proposed test pits if required,
- Observe and confirm that the soils used as fill and backfill and materials proposed for re-use are in accordance with the Mass DOT Standards and Contract Special Provisions,
- Observe and test the placement and compaction of Compacted Gravel Borrow and other compacted fills.

5.5 Final Design, Specifications, and Plan Review

GTR should be given the opportunity to review final plans and specifications for the foundations systems, earthwork, and other items related to our scope to confirm that the recommendations contained in our report are interpreted and implemented as intended.

FIGURES



↑
PROJECT
NORTH

MORRIS ST PEDESTRIAN BRIDGE
SOUTHBRIDGE, MA

Locus Plan

GEOSCIENCES TESTING AND RESEARCH, INC.

55 MIDDLESEX STREET, SUITE 225 (TEL) 978-251-9395
NORTH CHELMSFORD, MA, 01863 (FAX) 978-251-9396




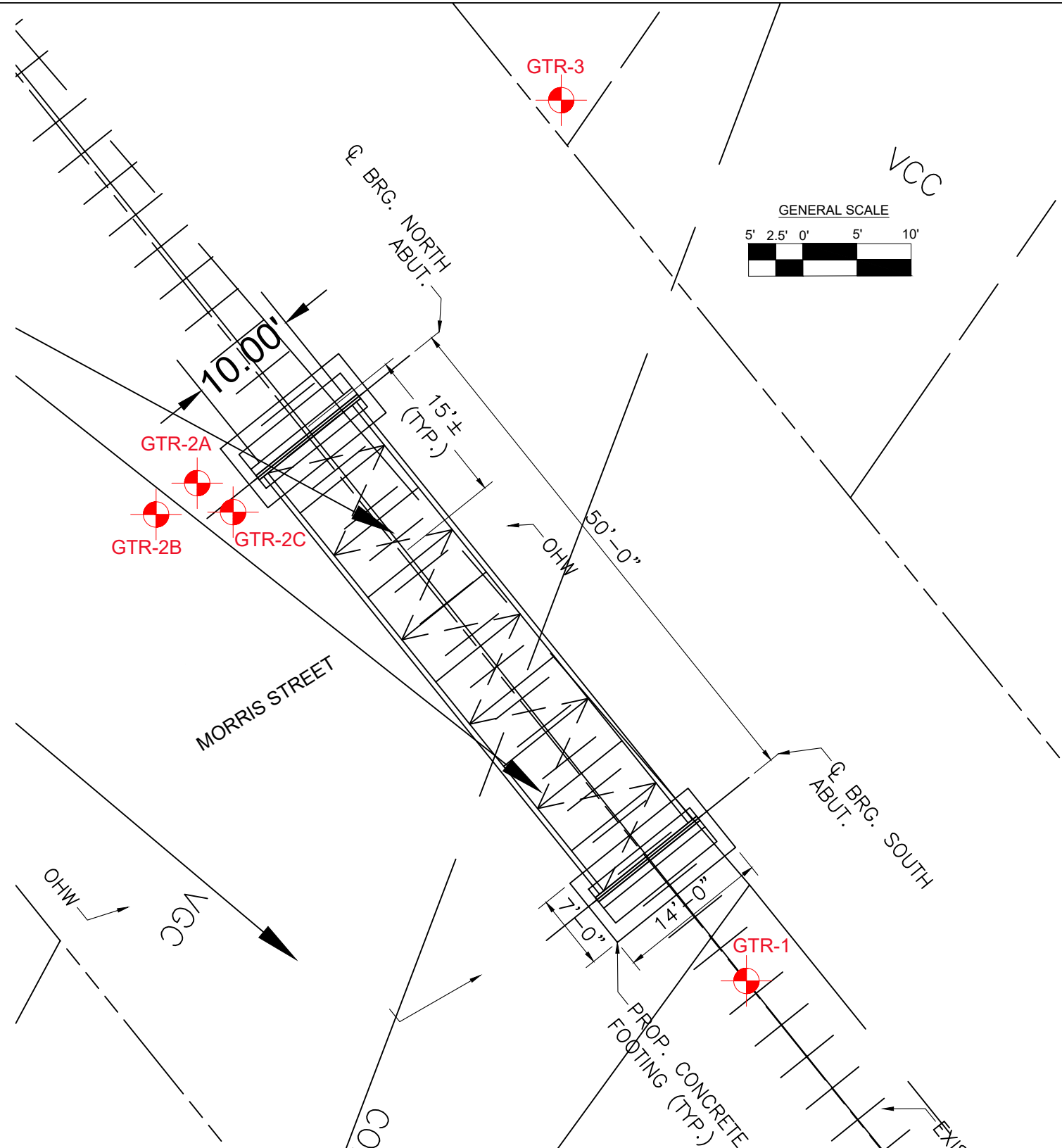
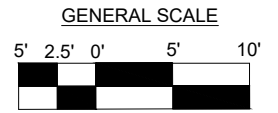
DRAWN BY: YB	SCALE: N/A	DESIGN BY:
CHK BY: CAG	PROJECT NO.: 23.154	
DATE: 08/21/2023	SHEET NO.: FIGURE 1	

NOTES

1. THE LOCATIONS OF THE BORINGS AND EXISTING FEATURES SHOULD BE CONSIDERED APPROXIMATE TO THE DEGREE IMPLIED BY THE METHOD USED TO LOCATE THEM. LOCATIONS WERE DETERMINED BY THE FIELD TAPE MEASUREMENTS DURING SUBSURFACE PROGRAM BY GTR PERSONNEL.

LEGEND

 LOCATIONS AND DESIGNATIONS OF BORINGS PERFORMED BY CARR-DEE CORP. ON AUGUST 8TH, 2023 AND AUGUST 9TH, 2023.



PATH: J:\2023_Jobs\23_154 Morris St Southbridge MA Pedestrian Bridge - Geo\Boring Info\CAD\Boring Locations\Boring Location Plan 2.dwg | PLOTTED ON: 9/19/2023 3:59 PM BY: csale

NO.	REVISION DESCRIPTION	BY	DATE
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-



GEOSCIENCES TESTING AND RESEARCH, INC.

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DESIGNED BY: YB	DRAWN BY: YB	APPROVED BY: CAG
DATE: 08/28/2023	DATE: 08/28/2023	DATE: 08/28/2023

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CLIENT INFO:
SHEET NAME: BORING LOCATIONS
PROJECT NAME: MORRIS ST PEDESTRIAN BRIDGE
PROJECT LOCATION: SOUTHBRIDGE, MA
JOB NO: 23.154
SCALE: N/A
SHEET NO: 1 OF 1

APPENDIX A
GEOTECHNICAL LIMITATIONS

GEOTECHNICAL LIMITATIONS

1. The analyses and recommendations in this report are based in part upon the data obtained from the subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations become evident, we will need to re-assess our recommendations provided in this report.
2. The simplified soil profile described in this report is intended to convey trends in subsurface conditions. Limited data was available. The boundaries between the strata are approximate and are idealized to convey trends in the subsurface information. The actual soil transitions are most likely more erratic than presented.
3. Water level readings from the borings are representative at the time of drilling. The data have been reviewed and interpretations have been made in the report. It must be noted, however, that fluctuations in the groundwater level does occur due to variations in rainfall, temperature, and other factors occurring since the measurements were made.
4. In the event that any changes in the nature, function, design, or location of the proposed construction are planned, then the conclusions of this report may become invalid. Geosciences Testing and Research, Inc. (GTR) personnel must review these changes so that they may be incorporated into our report. It is recommended that GTR be provided the opportunity for a general review of the final design and specifications so that our recommendations are properly interpreted and incorporated in the project documents.
5. It is recommended that GTR be retained to provide soil engineering services during the final design and/or construction phases of the project. This will enable compliance with our recommendations and to allow design changes as they become evident during construction as needed.
6. This report has been prepared for the exclusive use of client as related to this project. The report has been carried out in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.
7. This geotechnical engineering report has been prepared for this project by GTR, is for design purposes only, and is not intended for bidding purposes. Contractors wishing a copy of this report may do so with the understanding that the scope is limited to design issues only.

APPENDIX B
TEST BORING LOGS



GEOSCIENCES TESTING AND RESEARCH, INC.

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Boring No. GTR-1
Page: 1 of 2
GTR Job #: 23.154
GTR Rep: P. Dion
Reviewer: C. George

Project Name: Morris St. Bridge Rep
Location: Southbridge, MA

Drilling Co. Carr-Dee Corp.
Driller: Joe DeSimone Helper(s): Frank Landers
Start Date: 08/08/23 End Date: 08/08/23
Ground Surface Elev (ft): ~+449.79
Boring Location: See Boring Location Plan
Note: Acker AD2 ATV rig w/autohammer

Equipment	Casing	Sampler	Core	Groundwater		Depth (ft)		
Type	HW	SS	NX	Date	Time	Water	Casing	Hole
Size I.D.	4"	1.375"	2.16"	8/28	EOD	8'	29'	34'
Hammer Wt.	300 lb	140 lb	-					
Hammer Fall	30"	30"	-					

Depth	Casing BPF	Sample Data					Description and Classification	Stratum	Additional Data	Notes
		No.	Pen/Recovery	Depth (ft.)	Blows per 6in	Field Test				
0		S-1	24/14	0-2	1-4		Dry, M. dense, brown, f-m SAND and Gravel, little Organic/Inorganic Silt	GRANULAR FILL		
		S-2	24/16	2-4	6-4		Dry, M. dense, tan, f-m SAND, little Gravel, trace Silt			
5					6-7					1
		S-3A	24/6	4-5	6-5		S-3A, Dry, M. dense, tan, f-m SAND, trace Silt			
		S-3B		5-6	5-4		S-3B, Dry, m. dense, black, TOPSOIL	ORGANIC FILL 5'		
		S-4	24/4	6-8	4-4		Moist, Loose, Tan, f-m SAND, some Gravel, trace Silt	6'		
10					5-6					
		S-5	24/11	8-10	24-11		M. Dense, Brown, f-m SAND and Gravel, little Inorganic Silt	8'		
		S-6	24/8	10-12	30-9		M. Dense, Brown, f-m SAND, some Gravel, little Inorganic Silt			
		S-7	24/6	12-14	5-10		M. Dense, Brown, f-m SAND, some Gravel, little Clayey Silt			
15					7-9					
		S-8	24/4	14-16	22-8		M. Dense, Brown, f-m SAND and Gravel, little Inorganic Silt			
		S-9	24/5	16-18	6-8		M. Dense, Brown, f-m SAND, some Gravel, little Inorganic Silt			
		S-10	24/5	18-20	11-6		M. Dense, Brown, f-m SAND, some Gravel, little Inorganic Silt	GLACIAL TILL		
20					6-6					
		S-11	24/8	20-22	21-13		Dense, Brown, f-m SAND, some Gravel, little Inorganic Silt			
		S-12	24/0	22-24	12-9		No Recovery			
25					8-7					
		S-13	0/0	28	50/0		No Recovery	28'		
		C-1	60/53	29-30	9:20			BEDROCK		2 3

- NOTES:
1. Topsoil consists of Black f-m SAND, some Organic Silt/Inorganic Silt
 2. Splitspoon refusal at 28', rollerbit drill to 29' before coring
 3. Values in Blows per 6in column represent core time in minutes per foot

- Order of Sample Description (Modified Burmister)**
1. Moisture Content: Dry, Moist, Wet
 2. Soil Relative Density or Consistency
 3. Color
 4. Major Component: Should be capitalized
 5. Minor Component: "and" - 35% to 50% minor grain size
"some" - 20% to 35% minor grain size
"little" - 10% to 20% minor grain size
"trace" - < 10% of minor grain size

PENETRATION RESISTANCE (N) GUIDE	
Cohesionless Soils (Sands)	Cohesive Soils (Clays)
Relative Density / Blows per Foot	Consistency / Blows per Foot
Very Loose >> 0 - 4	Very Soft >> Below 2
Loose >> 4 - 10	Soft >> 2 - 4
Medium Dense >> 10 - 30	Medium Stiff >> 4 - 8
Dense >> 30 - 50	Stiff >> 8 - 15
Very Dense >> Over 50	Very Stiff >> 15 - 30
	Hard >> Over 30



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Boring No. GTR-1
 Page: 2 of 2
 GTR Job #: 23.154
 GTR Rep: P. Dion
 Reviewer: C. George

Project Name: Morris St. Bridge Rep
 Location: Southbridge, MA

Drilling Co.	Carr-Dee Corp.		Equipment	Casing	Sampler	Core	Groundwater	Depth (ft)				
Driller:	Joe DeSimone	Helper(s):	Frank Landers	Type	HW	SS	NX	Date	Time	Water	Casing	Hole
Start Date:	08/08/23	End Date:	08/08/23	Size I.D.	4"	1.375"	2.16"	8/28	EOD	8'	29'	34'
Ground Surface Elev (ft):				Hammer Wt.	300 lb	140 lb	-					
Boring Location:	See Boring Location Plan			Hammer Fall	30"	30"	-					
Note:	Acker AD2 ATV rig w/autohammer											

Depth	Casing BPF	Sample Data						Stratum	Additional Data	Notes
		No.	Pen/ Recovery	Depth (ft.)	Blows per 6in	Field Test	Description and Classification	Description		
30				30-31	7:15	RQD = 32%	C-1: SCHIST, black and gray, medium to fine grained, fresh to slightly weathered, moderately to highly fractured, hard, sulfidic schist	BEDROCK		
			31-32	8:30						
			32-33	8:30						
			33-34	13:45						
35							Bottom of Boring at 34 feet below ground surface with 5 ft rock core	34'		
40										
45										
50										
55										

NOTES:

- Order of Sample Description (Modified Burmister)**
- Moisture Content: Dry, Moist, Wet
 - Soil Relative Density or Consistency
 - Color
 - Major Component: Should be capitalized
 - Minor Component: "and" - 35% to 50% minor grain size
 "some" - 20% to 35% minor grain size
 "little" - 10% to 20% minor grain size
 "trace" - < 10% of minor grain size

PENETRATION RESISTANCE (N) GUIDE			
Cohesionless Soils (Sands)		Cohesive Soils (Clays)	
Relative Density / Blows per Foot		Consistency / Blows per Foot	
Very Loose	>> 0 - 4	Very Soft	>> Below 2
Loose	>> 4 - 10	Soft	>> 2 - 4
Medium Dense	>> 10 - 30	Medium Stiff	>> 4 - 8
Dense	>> 30 - 50	Stiff	>> 8 - 15
Very Dense	>> Over 50	Very Stiff	>> 15 - 30
		Hard	>> Over 30



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Phone: (978) 251-9395 www.gtrinc.net

Boring No. GTR-2A
Page: 1 of 1
GTR Job #: 23.154
GTR Rep: P. Dion
Reviewer: C. George

Project Name: Morris St. Bridge Rep
Location: Southbridge, MA

Drilling Co.:	Carr-Dee Corp.		Equipment:	Casing:	Sampler:	Core:	Groundwater:	Depth (ft):				
Driller:	Joe DeSimone	Helper(s):	Frank Landers	Type:	HW	SS	-	Date:	Time:	Water:	Casing:	Hole:
Start Date:	08/09/2023	End Date:	08/09/2023	Size I.D.:	4"	1.375"	-	6/29	EOD	N/A	N/A	8'
Ground Surface Elev (ft):	~+429.79		Hammer Wt.:	300 lb	140 lb	-	-					
Boring Location:	See Boring Location Plan		Hammer Fall:	30"	30"	-	-					
Note:	Acker AD2 ATV rig w/autohammer											

Depth	Casing BPF	Sample Data					Description and Classification	Stratum	Additional Data	Notes
		No.	Pen/Recovery	Depth (ft.)	Blows per 6in	Field Test				
0		S-1A	24/22	0-2	1-1		Dry, V. Loose Black, f-m SAND and Organic Silt, trace Roots	TOPSOIL		
		S-1B			2-3			1'		
		S-2	24/5	2-4	7-3		Dry, Loose, Brown, GRAVEL, some f-m Sand, trace Silt			
					3-2					
5		S-3	24/8	4-6	3-3		Dry, M. Dense, Brown, f-m SAND, trace Gravel, trace Silt	GRANULAR FILL		
					7-21					
		S-4	20/7	6-8	32-18		Dry, Dense, Brown, f-c SAND, little Silt, trace Gravel			
					12-50/2					
		S-5	12/8	7-8	10-9					
10					50/0		Bottom of boring at 8 feet below grade with rollerbit refusal.	8'		1
15										
20										
25										

NOTES:
1. Cuttings from wash water indicate possible footing. Moved Locations to GTR-2B and GTR-2C. Both borings indicated refusal at between 8 and 9 feet below grade. Moved to boring GTR-3

Order of Sample Description (Modified Burmister) 1. Moisture Content: Dry, Moist, Wet 2. Soil Relative Density or Consistency 3. Color 4. Major Component: Should be capitalized 5. Minor Component: "and" - 35% to 50% minor grain size "some" - 20% to 35% minor grain size "little" - 10% to 20% minor grain size "trace" - < 10% of minor grain size	PENETRATION RESISTANCE (N) GUIDE	
	Cohesionless Soils (Sands)	
	Relative Density / Blows per Foot	
	Very Loose >> 0 - 4	Very Soft >> Below 2
	Loose >> 4 - 10	Soft >> 2 - 4
	Medium Dense >> 10 - 30	Medium Stiff >> 4 - 8
	Dense >> 30 - 50	Stiff >> 8 - 15
Very Dense >> Over 50	Very Stiff >> 15 - 30	
	Hard >> Over 30	



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Boring No. GTR-1
Page: 1 of 1
GTR Job #: 23.154
GTR Rep: P. Dion
Reviewer: C. George

Project Name: Morris St. Bridge Rep
Location: Southbridge, MA

Drilling Co.	Carr-Dee Corp.			Equipment	Casing	Sampler	Core	Groundwater	Depth (ft)			
Driller:	Joe DeSimone	Helper(s):	Frank Landers	Type	HW	SS	-	Date	Time	Water	Casing	Hole
Start Date:	08/09/2023	End Date:	08/09/2023	Size I.D.	4"	1.375"	-	6/29	EOD	N/A	N/A	9'
Ground Surface Elev (ft):	~+429.79			Hammer Wt.	300 lb	140 lb	-					
Boring Location:	See Boring Location Plan			Hammer Fall	30"	30"	-					
Note:	Acker AD2 ATV rig w/autohammer											

Depth	Casing BPF	Sample Data					Description and Classification	Stratum	Additional Data	Notes
		No.	Pen/ Recovery	Depth (ft.)	Blows per 6in	Field Test				
0										
5										
10						Bottom of Boring at 9 feet below grade with splitspoon refusal				1
15										
20										
25										

NOTES:
1. Probed down with splitspoon, refusal at 9', moved to location.

Order of Sample Description (Modified Burmister)

- Moisture Content: Dry, Moist, Wet
- Soil Relative Density or Consistency
- Color
- Major Component: Should be capitalized
- Minor Component: "and" - 35% to 50% minor grain size
"some" - 20% to 35% minor grain size
"little" - 10% to 20% minor grain size
"trace" - < 10% of minor grain size

PENETRATION RESISTANCE (N) GUIDE	
Cohesionless Soils (Sands)	Cohesive Soils (Clays)
Relative Density / Blows per Foot	Consistency / Blows per Foot
Very Loose >> 0 - 4	Very Soft >> Below 2
Loose >> 4 - 10	Soft >> 2 - 4
Medium Dense >> 10 - 30	Medium Stiff >> 4 - 8
Dense >> 30 - 50	Stiff >> 8 - 15
Very Dense >> Over 50	Very Stiff >> 15 - 30
	Hard >> Over 30



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Boring No. GTR-1
Page: 1 of 1
GTR Job #: 23.154
GTR Rep: P. Dion
Reviewer: C. George

Project Name: Morris St. Bridge Rep
Location: Southbridge, MA

Drilling Co.	Carr-Dee Corp.			Equipment	Casing	Sampler	Core	Groundwater	Depth (ft)			
Driller:	Joe DeSimone	Helper(s):	Frank Landers	Type	HW	SS	-	Date	Time	Water	Casing	Hole
Start Date:	08/09/2023	End Date:	08/09/2023	Size I.D.	4"	1.375"	-	6/29	EOD	N/A	N/A	9'
Ground Surface Elev (ft):	~+429.79			Hammer Wt.	300 lb	140 lb	-					
Boring Location:	See Boring Location Plan			Hammer Fall	30"	30"	-					
Note:	Acker AD2 ATV rig w/autohammer											

Depth	Casing BPF	Sample Data					Description and Classification	Stratum Description	Additional Data	Notes
		No.	Pen/ Recovery	Depth (ft.)	Blows per 6in	Field Test				
0										
5										
10							Bottom of Boring at 9 feet below grade with splitspoon refusal			
15										
20										
25										

NOTES:
1. Probed down with splitspoon, refusal at 9', moved to location.

Order of Sample Description (Modified Burmister)

1. Moisture Content: Dry, Moist, Wet
2. Soil Relative Density or Consistency
3. Color
4. Major Component: Should be capitalized
5. Minor Component: "and" - 35% to 50% minor grain size
"some" - 20% to 35% minor grain size
"little" - 10% to 20% minor grain size
"trace" - < 10% of minor grain size

PENETRATION RESISTANCE (N) GUIDE	
Cohesionless Soils (Sands)	Cohesive Soils (Clays)
Relative Density / Blows per Foot	Consistency / Blows per Foot
Very Loose >> 0 - 4	Very Soft >> Below 2
Loose >> 4 - 10	Soft >> 2 - 4
Medium Dense >> 10 - 30	Medium Stiff >> 4 - 8
Dense >> 30 - 50	Stiff >> 8 - 15
Very Dense >> Over 50	Very Stiff >> 15 - 30
	Hard >> Over 30



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55 Middlesex Street, Suite 225, North Chelmsford, MA.
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Boring No. GTR-3
Page: 1 of 1
GTR Job #: 23.154
GTR Rep: P. Dion
Reviewer: C. George

Project Name: Morris St. Bridge Rep
Location: Southbridge, MA

Drilling Co.	Carr-Dee Corp.			Equipment	Casing	Sampler	Core	Groundwater	Depth (ft)			
Driller:	Joe DeSimone	Helper(s):	Frank Landers	Type	HW	SS	NX	Date	Time	Water	Casing	Hole
Start Date:	08/09/2023	End Date:	08/09/2023	Size I.D.	4"	1.375"	2.16"	4'	EOD	6.5'	11'	16'
Ground Surface Elev (ft):	~+429.79			Hammer Wt.	300 lb	140 lb	-					
Boring Location:	See Boring Location Plan			Hammer Fall	30"	30"	-					
Note:	Acker AD2 ATV rig w/autohammer											

Depth	Casing BPF	Sample Data					Description and Classification	Stratum Description	Additional Data	Notes
		No.	Pen/ Recovery	Depth (ft.)	Blows per 6in	Field Test				
0										1
							GRANULAR FILL			
5							4'			
		S-1	24/15	7-9	18-30		Dense, Brown, f-c SAND and Gravel, trace Silt	GLACIAL TILL		
					21-20					
10		S-2	20/0	9-10.2	30-37		V. Dense, Brown, GRAVEL and f-c Sand, trace Silt			
					43-50/2			10.2'		
		C-1	60/53	11-12	11:30	RQD = 85%	C-1: CALCIUM-SILICATE, white and gray, medium to fine grained, fresh to slightly weathered, moderately to highly fractured, very hard, calcium silicate granofels	BEDROCK		2
				12-13	9:45					
				13-14	12:15					
15				14-15	10:45					
				15-16	10:00					
							Bottom of Boring at 16 feet below ground surface with 5 ft rock core.	16'		
20										
25										

NOTES:

- Stratum description of the upper 7 feet gathered from borings GTR-2A through GTR-2C
- Values in Blows per 6in column represent core time in minutes per foot

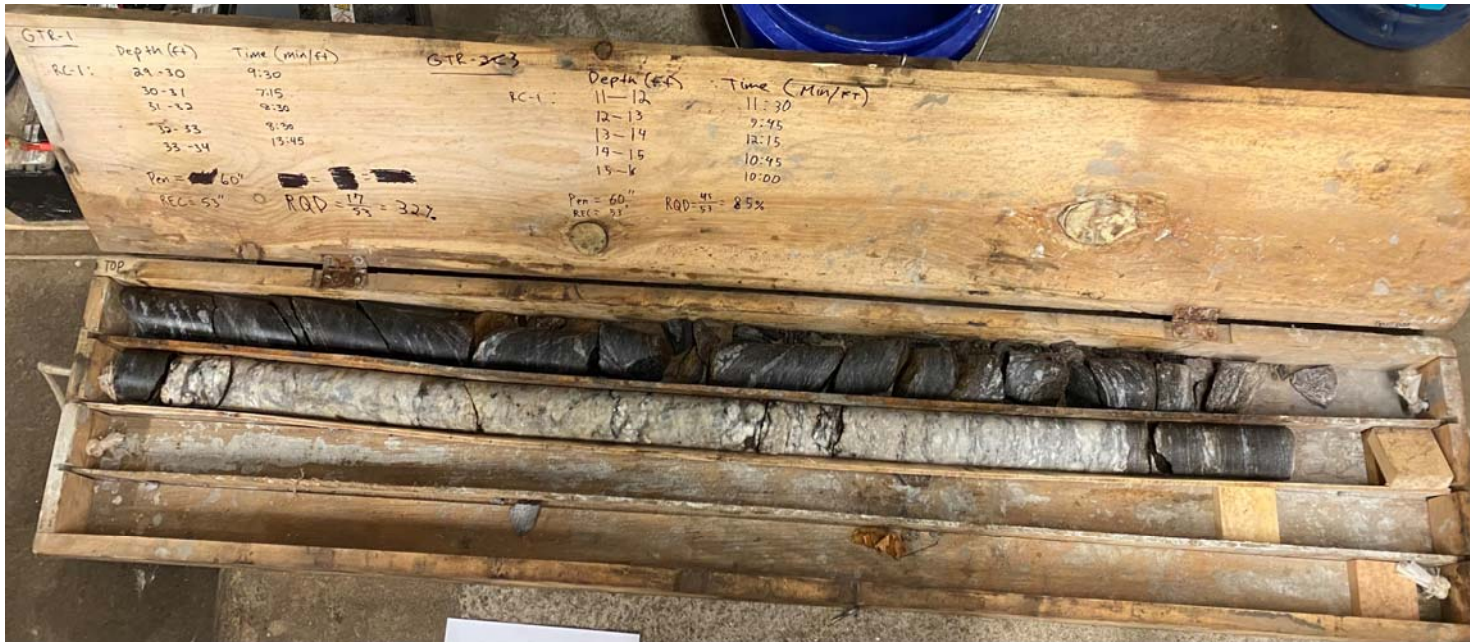
Order of Sample Description (Modified Burmister)	PENETRATION RESISTANCE (N) GUIDE	
1. Moisture Content: Dry, Moist, Wet	Cohesionless Soils (Sands)	Cohesive Soils (Clays)
2. Soil Relative Density or Consistency	Relative Density / Blows per Foot	Consistency / Blows per Foot
3. Color	Very Loose >> 0 - 4	Very Soft >> Below 2
4. Major Component: Should be capitalized	Loose >> 4 - 10	Soft >> 2 - 4
5. Minor Component: "and" - 35% to 50% minor grain size	Medium Dense >> 10 - 30	Medium Stiff >> 4 - 8
"some" - 20% to 35% minor grain size	Dense >> 30 - 50	Stiff >> 8 - 15
"little" - 10% to 20% minor grain size	Very Dense >> Over 50	Very Stiff >> 15 - 30
"trace" - < 10% of minor grain size		Hard >> Over 30

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ROCK CORE PHOTO LOG



GTR-1 | RC-1
GTR-3 | RC-1

Project: Morris Street Pedestrian Bridge
 Project Number: 23.154
 Drawn By: P. Dion
 Date: 09/19/2023

**APPENDIX C
CALCULATIONS**



ENGINEERING SINCE 1995

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JOB 23.154 Morris St. Southbridge

SHEET NO. 1 OF 1

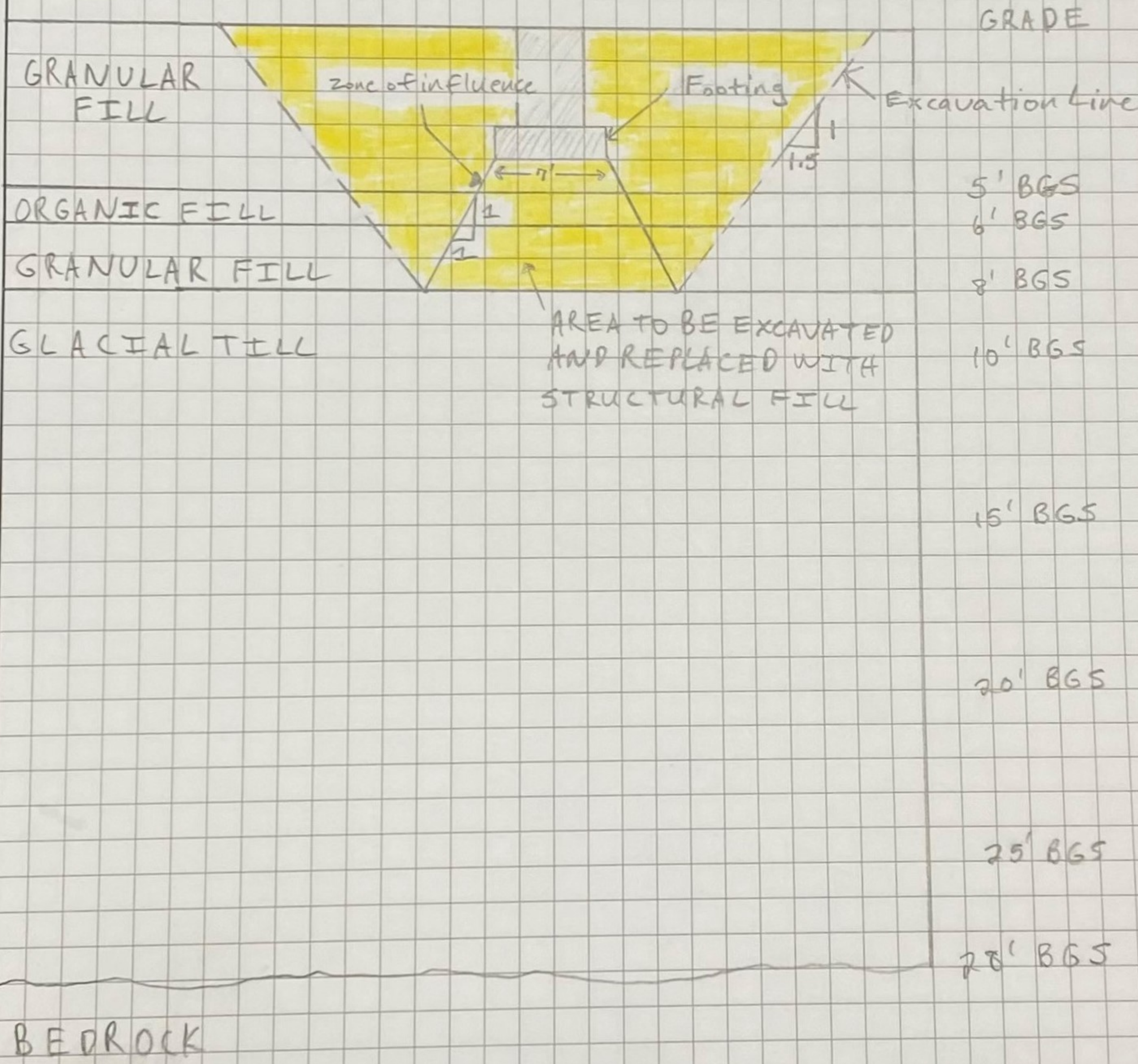
CALCULATED BY PDD DATE 9/21/23

CHECKED BY CAG DATE 9/21/23

SCALE _____

Subsurface Profile From GTR-1

SCALE: $\frac{1'}{0.5'}$



GRANULAR FILL

zone of influence

Footing

Excavation Line

ORGANIC FILL

GRANULAR FILL

GLACIAL TILL

AREA TO BE EXCAVATED AND REPLACED WITH STRUCTURAL FILL

5' BGS

6' BGS

8' BGS

10' BGS

15' BGS

20' BGS

25' BGS

28' BGS

BEDROCK



**23.154 PEDESTRIAN BRIDGE CONSTRUCTION
SOUTHBRIDGE, MASSACHUSETTS
AASHTO LRFD (9th Ed.)
RECOMMENDED SOIL DESIGN PARAMETERS**

Material	γ_t (pcf)	ϕ' (°)	Interface Friction Angle (°)
Existing Granular Fill	120	30	17
Structural Fill	135	36	17
Glacial Till	135	36	17

Table C3.11.5.3-1 Friction Angle for Dissimilar Materials

Interpolated Active and Passive Coefficients with Wall Friction				
Material	Fig 5 K_p	Interpolated Reduction Factor	Actual K_p	Calculated K_a
Existing Granular Fill	6.5	0.690	4.5	0.299
Structural Fill	11.5	0.637	7.3	0.237
Glacial Till	11.5	0.637	7.3	0.237

Figure 3.11.5.4-2 Computational Procedures for Passive Earth Pressures for Vertical Wall With Sloping Backfill

Recommended Values	Coefficients of At-Rest Lateral Earth Pressure		
	K_p	K_a	K_o
Existing Granular Fill	5.0	0.30	0.5
Structural Fill	6.0	0.25	0.5
Glacial Till	6.0	0.25	0.5

Determine Coefficient of Friction

Resistance Factor = 0.8 from Table 10.5.5.2.2-1 Cast in place on sand
 $\tan\delta = 0.57$ for cast concrete footing on Sand from Table C3.11.5.3-1



**23.154 PEDESTRIAN BRIDGE CONSTRUCTION
SOUTHBRIDGE, MASSACHUSETTS
AASHTO LRFD (9th Ed.)
SEISMIC SITE CLASS CALCULATIONS**

Peck et al.
AASHTO C3.10.3.1-1: Method B

Existing Gran. Fill		Structural Fill		Glacial Till		Bedrock				
Boring Number	Blow Count	Boring Number	Blow Count	Boring Number	Blow Count	Boring Number	Blow Count			
GTR-1	10	-	40	GTR-1	18	GTR-1	100			
	15				28	GTR-2	100			
	10				17					
	9				16					
GTR-2	3							20		
	6							12		
	10							40		
	30							17		
							GTR-2	51		
								80		
Avg N ₁	12	Avg N ₂	40	Avg N ₂	30	Avg N ₂	100			
d ₁	2	d ₂	10	d ₂	13		75			
d/N	0.17	d/N	0.25	d/N	0.43	d/N	0.75			

The avg \bar{N} for the top 100 ft

\bar{N}	62
-----------	----

$$\bar{N} = \frac{\sum_{i=1}^n d_i}{\sum_{i=1}^n \frac{d_i}{N_i}}$$

Seismic Site Class C: Very dense soil and rock with $\bar{N} > 50$ blows/ft



**23.142 CULVERT REPLACEMENT
AMESBURY, MASSACHUSETTS
AASHTO LRFD (9th Ed.)
CORRECTED SPT N VALUES**

Boring GTR-1 N value Correction								
Layer	DEPTH	FIELD N VALUE	Unit Weight (pcf)	Effective Unit Weight (pcf)	Effective Stress (ksf)	C_N	N_{60}	N_{160}
GRAN. FILL	1	10	120	120	0.12	1.94	13	26
	3	15	120	120	0.36	1.58	20	32
	5	10	120	120	0.60	1.40	13	19
	7	9	120	120	0.84	1.29	12	16
GLACIAL TILL	9	18	135	72.6	0.80	1.31	24	31
	11	28	135	72.6	0.94	1.25	37	47
	13	17	135	72.6	1.09	1.21	23	27
	15	16	135	72.6	1.23	1.16	21	25
	17	20	135	72.6	1.38	1.13	27	30
	19	12	135	72.6	1.52	1.09	16	17
	21	40	135	72.6	1.67	1.06	53	57
23	17	135	72.6	1.81	1.03	23	23	

Boring GTR-2A Through GTR-3 N value Correction								
Layer	DEPTH	FIELD N VALUE	Unit Weight (pcf)	Effective Unit Weight (pcf)	Effective Stress (ksf)	C_N	N_{60}	N_{160}
TOPSOIL	1	3	120	120	0.12	1.94	4	8
GRANULAR FILL	3	6	120	57.6	0.17	1.82	8	15
	5	10	120	57.6	0.29	1.65	13	22
GLACIAL TILL	7	30	135	72.6	0.51	1.46	40	58
	9	80	135	72.6	0.65	1.38	107	147

ER (hammer efficiency) = 0.8 for automatic trip hammer

Where: $N_1 = C_N N$ (10.4.6.2.4-1)

$C_N = [0.77 \log_{10}(40/\sigma'_v)]$, and $C_N < 2.0$

$N_{60} = (ER / 60\%)N$ (10.4.6.2.4-2)

Approximately ranges for N_{160} values :

Layer	N_{160}	N_{160} Avg	Recomm. Φ_f values
Ex. Fill	8-32	21	30
Glacial Till	17-147	46	36

N_{160}	Φ_f	
<4	25-30	
4	27-32	← Silt
10	30-35	← Fill
30	35-40	← gravel/Till
50	38-43	



23.154 PEDESTRIAN BRIDGE CONSTRUCTION
SOUTHBRIDGE, MASSACHUSETTS
AASHTO LRFD (9th Ed.)
RECOMMENDED SEISMIC DESIGN PARAMETERS

Mass DOT LRFD Bridge Manual and AASHTO Bridge Specifications for LRFD Seismic Bridge Design

Parameter	Value
Site Class	C
Peak seismic ground acceleration (PGA) coefficient on rock for site class B	0.060 g
Horiz rock response spectral acceleration coefficient at .2 sec period (S_s) for site class B	0.131 g
Horiz rock response spectral acceleration coefficient at 1 sec period (S_1) for site class B	0.037 g
Site factor for converting PGA from site class B to site class C	1.2
Site factor for converting S_s from site class B to site class C	1.2
Site factor for converting S_1 from site class B to site class C	1.7
Peak seismic ground acceleration (PGA) coefficient on rock for site class C	0.072 g
Horiz rock response spectral acceleration coefficient at .2 sec period (S_s) for site class C	0.157 g
Horiz rock response spectral acceleration coefficient at 1 sec period (S_1) for site class C	0.063 g

Table 3.5-1—Partitions for Seismic Design Categories A, B, C, and D

Value of $S_{D1} = F_v S_1$	SDC
$S_{D1} < 0.15$	A
$0.15 \leq S_{D1} < 0.30$	B
$0.30 \leq S_{D1} < 0.50$	C
$0.50 \leq S_{D1}$	D



23.154 PEDESTRIAN BRIDGE CONSTRUCTION
SOUTHBRIDGE, MASSACHUSETTS
AASHTO LRFD (8th Ed.)
BEARING CAPACITY FOR CULVERT REPLACEMENT

$$q_n = cN_c s_c i_c + \gamma D_f N_q s_q d_q i_q C_{wq} + 0.5 \gamma B N_g s_g i_g C_{wg} \quad \text{AASHTO 10.6.3.1.2a}$$

$$q_R = q_n * f_b$$

q_n = nominal bearing resistance - psf

q_R = factored bearing resistance - psf

f_b = resistance factor = 0.45 - dimensionless

c = cohesion of soil - psf

γ = total unit weight of soil - pcf

D_f = Depth to bottom of footing - ft

B = footing width - ft

L = footing width - ft

ϕ = soil friction angle - degrees

N_c, N_q, N_γ = bearing capacity factors - non dimensional

s_c, s_q, s_g = shape factors - non-dimensional

d_q = depth shearing resistance factor - non dimensional

i_c, i_q, i_g = inclination factors - typically = 1 as horizontal loads are usually unknown - non dimensional

C_{wq}, C_{wg} = groundwater location factors - non dimensional

$c = 0$	$\phi = 36$	$s_c = 1.37$	$i_c = 1$
$\gamma = 135$	$N_c = 50.6$	$s_q = 1.36$	$i_q = 1$
$D_f = 4$	$N_q = 37.8$	$s_\gamma = 0.80$	$i_g = 1$
$B = 7$	$N_\gamma = 56.3$	$d_q = 1$	
$L = 14$	$C_{wq} = 0.5$	$C_{wg} = 1$	
$q_n = 0$	psf	(cohesion term)	
$q_n = 13914$	psf	(embedment term)	
$q_n = 21281$	psf	(footing width term)	
$q_n = 35195$	psf	(total nominal resistance)	
			Resistance factor - $f_b = 0.45$ SPT in sand
$q_R = 15838$	psf =	15.84 ksf	(factored bearing resistance)

$$q = q_R = 15.84 \text{ ksf} = 7.92 \text{ tsf} \quad \text{In-place Sand and Gravel}$$

Recommend $q_n = 15.84 \text{ ksf}$
 $= 7.92 \text{ tsf}$

Notes:

1. Footing on Structural Fill



23.154 PEDESTRIAN BRIDGE CONSTRUCTION
SOUTHBRIDGE, MASSACHUSETTS
AASHTO LRFD (8th Ed.)
BEARING CAPACITY FOR CULVERT REPLACEMENT

$$q_n = cN_c s_c i_c + \gamma D_f N_q s_q d_q i_q C_{wq} + 0.5 \gamma B N_g s_g i_g C_{wg} \quad \text{AASHTO 10.6.3.1.2a}$$

$$q_R = q_n * f_b$$

q_n = nominal bearing resistance - psf

q_R = factored bearing resistance - psf

f_b = resistance factor = 0.45 - dimensionless

c = cohesion of soil - psf

γ = total unit weight of soil - pcf

D_f = Depth to bottom of footing - ft

B = footing width - ft

L = footing width - ft

ϕ = soil friction angle - degrees

N_c, N_q, N_γ = bearing capacity factors - non dimensional

s_c, s_q, s_g = shape factors - non-dimensional

d_q = depth shearing resistance factor - non dimensional

i_c, i_q, i_g = inclination factors - typically = 1 as horizontal loads are usually unknown - non dimensional

C_{wq}, C_{wg} = groundwater location factors - non dimensional

$c = 0$	$\phi = 30$	$s_c = 1.31$	$i_c = 1$
$\gamma = 120$	$N_c = 30.1$	$s_q = 1.29$	$i_q = 1$
$D_f = 8$	$N_q = 18.4$	$s_\gamma = 0.80$	$i_g = 1$
$B = 7$	$N_\gamma = 22.4$	$d_q = 1$	
$L = 14$	$C_{wq} = 0.5$	$C_{wg} = 1$	
$q_n = 0$	psf	(cohesion term)	
$q_n = 11382$	psf	(embedment term)	
$q_n = 7526$	psf	(footing width term)	
$q_n = 18908$	psf	(total nominal resistance)	
			Resistance factor - $f_b = 0.45$ SPT in sand
$q_R = 8509$	psf =	8.51 ksf	(factored bearing resistance)

$$q = q_R = 8.51 \text{ ksf} = 4.25 \text{ tsf} \quad \text{In-place Sand and Gravel}$$

Recommend $q_n = 8.51 \text{ ksf}$
 $= 4.25 \text{ tsf}$

Notes:

1. Footing on Existing Granular Fill



**23.154 PEDESTRIAN BRIDGE
SOUTHBRIDGE, MASSACHUSETTS
AASHTO LRFD (9th Ed.)
ELASTIC SETTLEMENT OF STRIP FOOTING**

$S_e = \sum DH_i$ AASHTO 10.6.2.4.3

$DH_i = H_c * 1/C' * \log[(s_o' + Ds_v)/s_o'] * 12$

S_e = Immediate elastic settlement - inches

DH_i = elastic settlement of layer - inches

H_c = initial height of layer - ft

s_o' = initial vertical effective stress at midpoint of layer - ksf

Ds_v = vertical stress increase at midpoint of layer - ksf - Fig 10.6.2.4.1-1a

C' = bearing capacity index from Figure 10.6.2.4.2-1 - dimensionless

Material K_p

Check Settlement at Center Footing

$q_o = q_R =$ 5 ksf water depth = 8
 footing size = 7 ft footing depth = 4

Depth Below Grade (ft)	Depth Below Footing (ft)	Depth Below Footing to midpoint (B)	Layer Width H_c (feet)	N_{160}	C'	Ds_v (ksf)	g (kcf)	s_o' (ksf)	S_e (in)
4	0	-					0.135	0.540	-
8	4	2	4	40	125	4.5	0.135	1.080	0.27
10	4	5	2	21	55	3	0.135	1.080	0.25
28	24	19.00	22	46	170	1.50	0.135	2.638	0.30
Total Settlement =									0.83

Notes:

1. Footing on structural fill overlying 2 feet of existing fill overlying glacial till.

ATTACHMENT E
PROJECT SIGN

PLEASE REFER TO ATTACHMENT E



Variations and Usage




There is one approved mark associated with the Investing In America logo. To preserve the integrity of the Investing In America logo mark, make sure to apply them correctly. Altering, distorting, or recreating the 'marks' in any way weakens the power of the image and what it represents. Layout and design of signs and communication materials will vary, so care must be taken when applying the logo mark.

Primary Logo Mark

INVESTING IN AMERICA

Colors

The colors, graphics, and fonts used should conform to graphic standards.

COLOR	CMYK	RGB	HEX	PMS
 Blue	83, 48, 0, 48	22 / 68 / 132	#164484	PMS 7687 C
 Red	0, 100, 81, 0	255 / 0 / 49	#FF0031	PMS 185 C
 White	2, 2, 0, 3	242 / 244 / 248	#F2F4F8	Bright White

Logos

SIGN SHALL HAVE WHITE BACKGROUND
WITH LOGO IN RED AND BLUE



White background: logo in red and blue



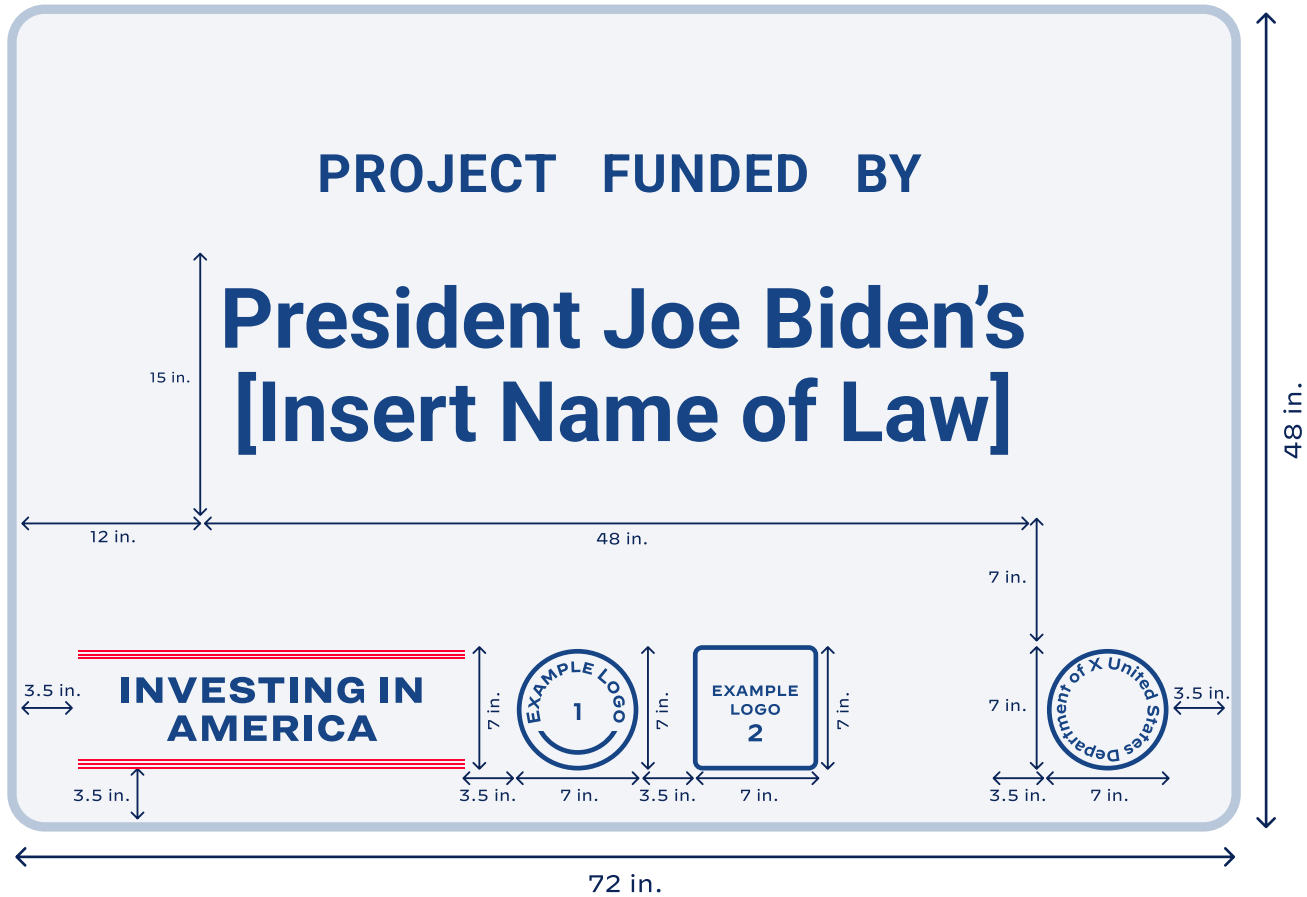
Gray background: logo in red and blue



Blue background: logo in all white

Investing In America General Guidelines for Logo Applications

CONTRACTOR TO USE THIS SIZE AND LAYOUT OF SIGN ELEMENTS



Sign Colors

4. The American Rescue Plan

SIGN COLORS TO BE AS SHOWN ON THE "WHITE" VERSION



White



Gray



Blue



Red Border

State, City, and County Logo Variations



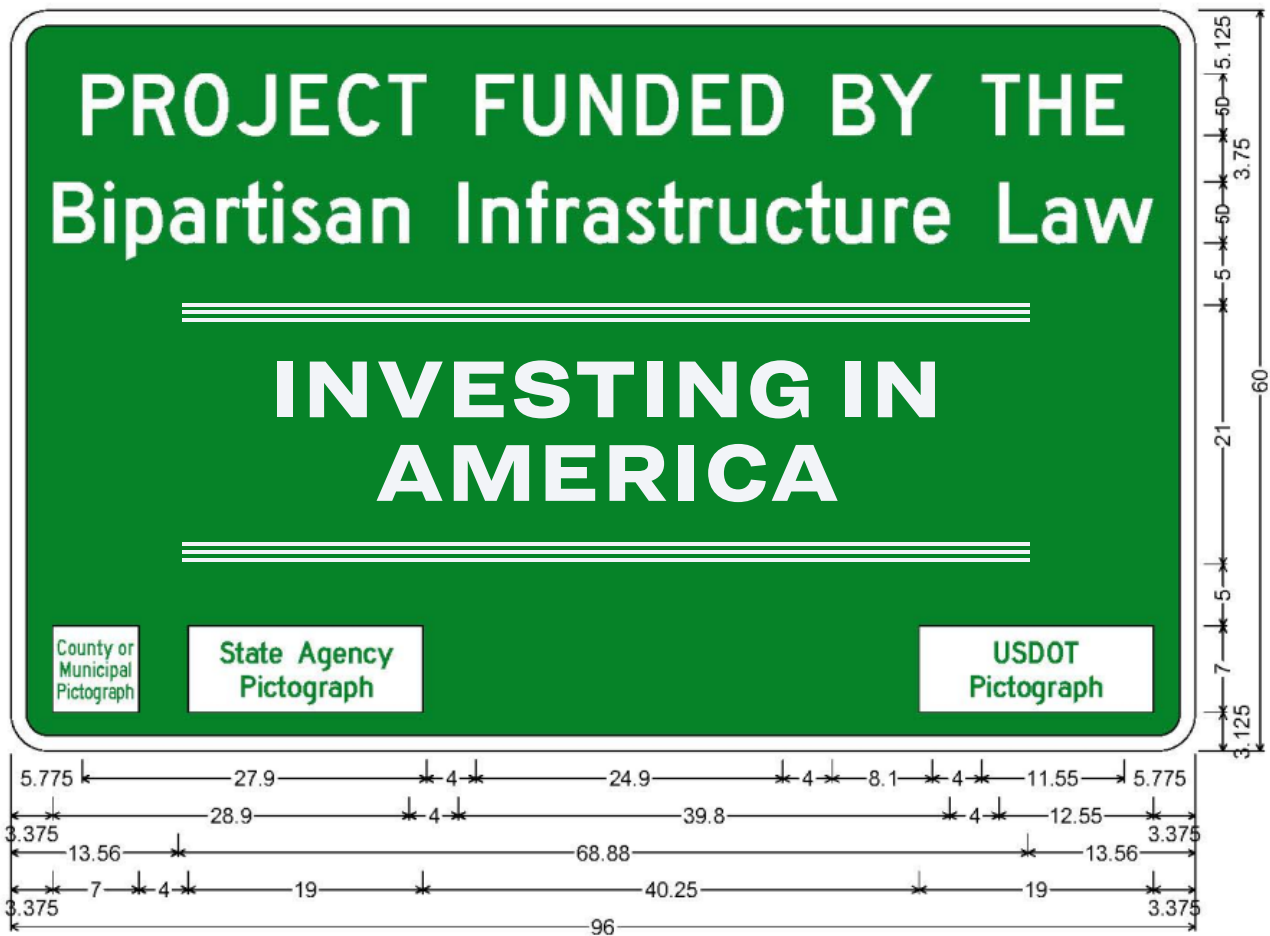
Square or Circular State Logo: 7x7 in.



Rectangular or Oval State Logo: **not** to exceed 17.5 x 7 in.

THE TOWN SHALL
SUPPLY LOGO OF
THE TOWN AND
MASSDOT TO BE
ADDED TO THE
BOTTOM OF THE
SIGN IN THE
LOCATIONS AS
SHOWN

Rules for Highway Right of Way Signage 8 Feet NA



Rules for Highway Right of Way Signage 6 Feet NA

